GPRANDINA®
BUILDING SYSTEMS SINCE 1965

Operator manual
GP-10 System

GPRANDINA®
BUILDING SYSTEMS SINCE 1965

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OPERATOR MANUAL
GP-10 SYSTEM

This manual describes the operations for a correct assembly of the GP-10 system.
GPrandina invites you to observe all the provisions and regulations listed.
In case of incorrect use and installation of GPrandina products, we decline all responsibility in case of accidents and / or breakages.

The assembly must be carried out by qualified personnel under the control of the site manager and / or a technician in charge of GPrandina.

The operations listed in this manual must be carried out in a workmanlike manner and in compliance with the safety regulations regarding construction sites.

GPrandina SRL Building System

Wishes you a good job.

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1.0.0
GENERAL PROVISIONS

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

GENERAL PROVISION

The operations concerning the preparation, assembly, handling and disassembly of the ground system must be carried out by competent personnel and under the control of the site manager or a GPRANDINA technician (at the client's request) who must make sure that:

- The above mentioned operations are carried out in a workmanlike manner, in compliance with all the rules concerning safety on construction sites and also with the instructions reproduced in the drawings delivered with the supply of the material;
- All lifting and transport systems, supplied and not supplied by GPRANDINA, must be suitable for handling the equipment;
- All the supplied accessories have been checked before their use in order to eliminate those which, in the presence of cracks, deformation and corrosion, do not have sufficient guarantees of reliability;
- The support surface is perfectly flat, before the single side wall system is put into operation;
- All connecting and anchoring accessories are tightened before pouring the concrete;
- The operators in charge of the operations listed above have suitable tools and, according to the specific risks to which they are exposed, make use of one or more personal protective equipment such as: safety belts, work gloves, protection items, work shoes and jackets high visibility where it is required.

GPRANDINA SRL BUILDING SYSTEM declines all responsibility for improper use of the equipment and / or its incorrect assembly and / or different from as illustrated in this manual.

SYMBOLOGY LEGEND:

In this manual you will find some captions preceded by the following symbols:

Warning
Safety prescription.

Warning
Additional explanations.

PRE-ASSEMBLY INSTRUCTIONS

Before assembly, make sure that:
- The frame of the formworks has no deformation and the welds are in good condition (absence of detachments, cracks, etc.);
- The plywood of the formwork is clean and without obvious signs of wear;
- The accessories for use are functional and do not present serious differences (clamps, plates, bolts in general, service shelves, etc.);
- The lifting and handling systems are in good condition and fully functional;
- All the parts in direct contact with the cement have been well oiled with special disarming oil to facilitate the disarming and to preserve the integrity of each item.

For detailed explanations on the assembly, distances and quantities to be respected, please follow the instructions in this manual scrupulously.

DISASSEMBLY INSTRUCTIONS

Before total disassembly, make sure that:
- Before the formworks have been removed, the days of maturation indicated by the works management have passed and the cement has completely hardened;
- All persons present on the construction site are at a minimum safety distance when lifting the disassembled part;
- It is mandatory to raise and lower the formworks, the single side wall system and all the related accessories on the ground with suitable means for lifting;
- It is strictly forbidden to launch the components (even the smallest ones) from above to avoid accidents, breakages and / or deformations of the articles.

MAINTENANCE

Ordinary maintenance must be carried out every time you finish using the material and / or whenever it is deemed necessary: it is recommended to clean all the components from the concrete residues, paying particular attention to threads and bolts in general. Once cleaning is finished, it is advisable to oil all the elements to protect them from the elements.
Extraordinary maintenance must be carried out by GPRANDINA staff at its facilities with specific equipment.

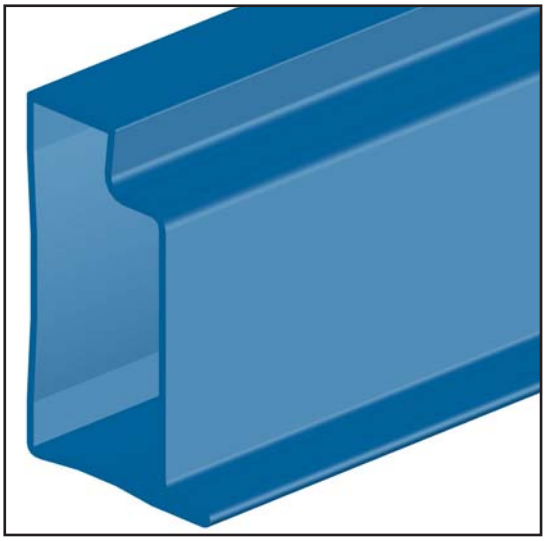
MATERIAL STORAGE

The storage of material on site should take place in a large area so as not to create an obstacle. This area should be placed as close as possible to the area of use.
The storage of the material at the end of the construction site must take place, if possible, in a covered area: the formworks and the single side wall systems must be raised by means of wooden walls, tied and laid in a stable position.

STRUCTURAL FEATURES OF THE ELEMENTS

THE STEEL PANEL

The perimeter of the panels consists of the “T2096” profile in carbon steel S 275 JO with the following characteristics:

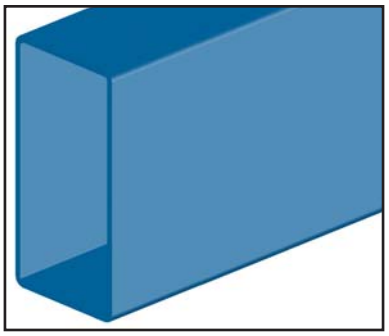


PROFILE “T2096” in carbon steel UNI EN 10025-S275JO

THICKNESS =	2,3 mm
A=	7,70 cm^2
Jx=	89,067 cm
Jy=	33,172 cm
Wx=	15,525 cm^3
Wy=	8,587 cm^3
Rx=	3,611 cm
Ry=	2,060 cm

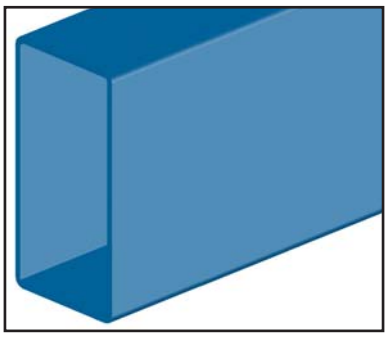
THICKNESS =	1,8 mm
A=	5,574 cm^2
Jx=	70,942 cm
Jy=	26,752 cm
Wx=	12,354 cm^3
Wy=	6,879 cm^3
Rx=	3,631 cm
Ry=	2,082 cm

The metal crosspieces are all made of tubes with rectangular section 40x80x2 mm in UNI EN 10025-S275JO steel with the following characteristics:



THICKNESS =	2,0 mm
A=	4,46 cm^2
Jx=	36,26 cm
Jy=	12,42 cm
Wx=	9,06 cm^3
Wy=	6,21 cm^3
I=	1,68 cm

The metal crosspieces are all made of tubes with rectangular section 40x80x3 mm in UNI EN 10025-S275JO steel with the following characteristics:

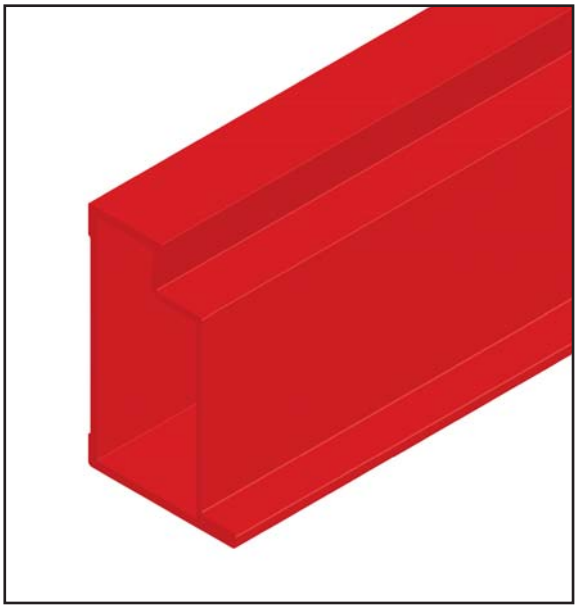


THICKNESS =	3,0 mm
A=	6,84 cm^2
Jx=	55,85 cm
Jy=	18,43 cm
Wx=	13,96 cm^3
Wy=	9,21 cm^3
I=	2,86 cm

STRUCTURAL FEATURES OF THE ELEMENTS

THE ALUMINIUM PANEL

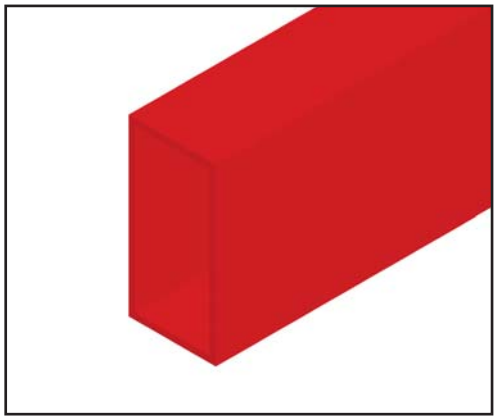
The perimeter of the panels consists of the “vzFN1424” profile in aluminum EN AW-6005A T6 with the following characteristics:



“vzFN1424” in aluminium EN AW-6005A T6

THICKNESS =	3,00mm
A=	9,60 cm^2
Jx=	128,23 cm^4
Jy=	42,26 cm^4

The aluminum crosspieces are all made of tubes with rectangular section 40x80x3 mm in aluminum EN AW-6060 T5 with the following characteristics:

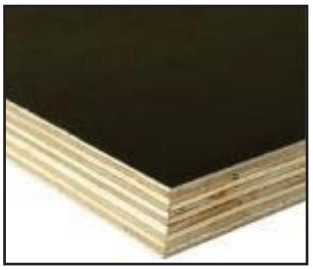


THICKNESS =	3,0 mm
A=	6,84 cm^2
Jx=	18,40 cm^4
Jy=	55,80 cm^4

STRUCTURAL FEATURES OF THE ELEMENTS

The plywood consists of “PLYWOOD” with phenolic gluing exclusively made of birch wood and surfaces coated with a phenol film.

CHARACTERISTICS	RULES	UNITS	VALUE
Thickness	EN 315	mm	18
Layers	-	-	13
Weight	EN 324.1	Kg/m^2	12,08
Classification	External use		
Resistance	EN 310	Mpa	60 x
Flexion	EN 310	Mpa	55 y
Form	EN 310	Mpa	8700 x
Elasticity	EN 310	Mpa	6300 y
Mass volume	EN 323	Kg/m^3	700
Thermal conduction	UNI 7745	W/mK	0,15
Humidity	EN 322	%	max 15%
Gluing	EN 314	-	Classe 3
Abrasion	UNI 9116	RA	400
Dimensional tolerance	Thickness	mm	min. 17,1 / max 18,1
	Length/Width	mm	± 3
	Orthogonality	mm/m	1,0



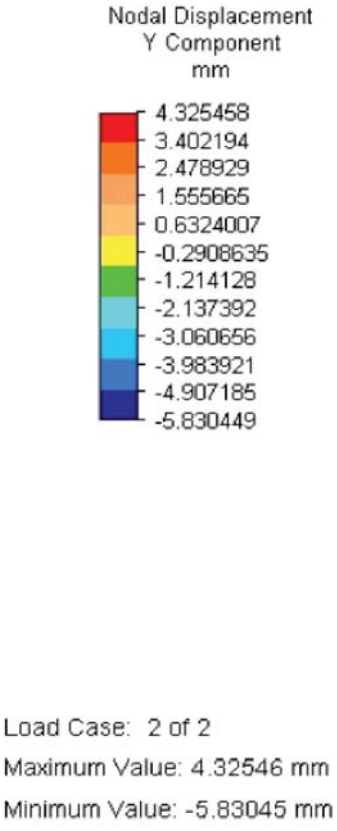
WARNING:
GPrandina srl Building Systems ensures that the multilayer used can guarantee a smooth finish for multiple uses.
The number of uses can vary from 30 to 100 and these depend on: use of the multilayer, requirements of the finished concrete, the quality and quantity of the used disarming oil, the maintenance of the multilayer, the handling and the place of storage.

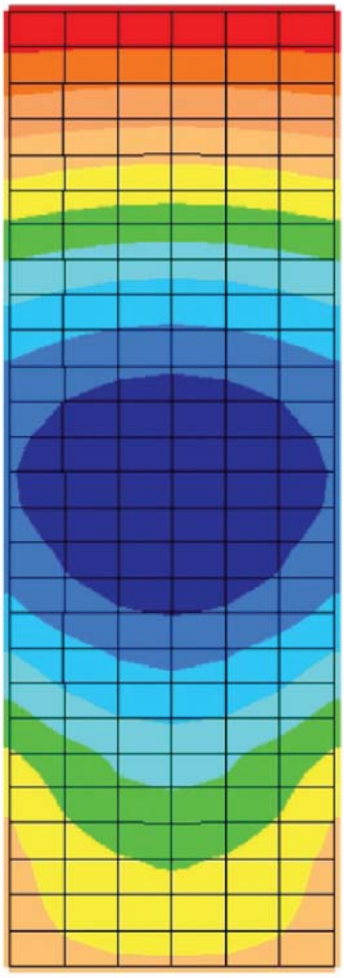
Compared to current standards, our panel offers a guarantee of more than 20%, as the formwork was calculated for a triangular pressure maximum admissible amount of 70 KN / m2.

STRUCTURAL FEATURES OF THE ELEMENTS

The panels have been sized to withstand pressures up to:

SERIES	MATERIAL	PRESSURE
GP-10 H300	Acciaio	70 Kn / m^2
GP-10 H150	Acciaio	70 Kn / m^2
GP-10 H270	Acciaio	70 Kn / m^2
GP-10 H135	Acciaio	70 Kn / m^2
GP-10 H330	Acciaio	70 Kn / m^2
GP-10 H165	Acciaio	70 Kn / m^2
GP-10 H300	Alluminio	60 Kn / m^2
GP-10 H150	Alluminio	60 Kn / m^2
GP-10 H270	Alluminio	60 Kn / m^2
GP-10 H135	Alluminio	60 Kn / m^2





STRUCTURAL FEATURES OF THE ELEMENTS

SERVICE CONSOLE TABLE

The service console table consists of a series of commercial profiles with the following characteristics:

SQUARE TUBE 40X40X3 mm in steel S 275 JR

A=	405,0 mm^2
J=	8,66 cm^4
W=	4,30 cm^3
i=	1,52 cm

SQUARE TUBE 30X30X3 mm in steel S 275 JR

A=	285,0 mm^2
J=	3,13 cm^4
W=	2,09 cm^3
i=	1,11 cm

SQUARE TUBE 50X50X3 mm in steel S 275 JR

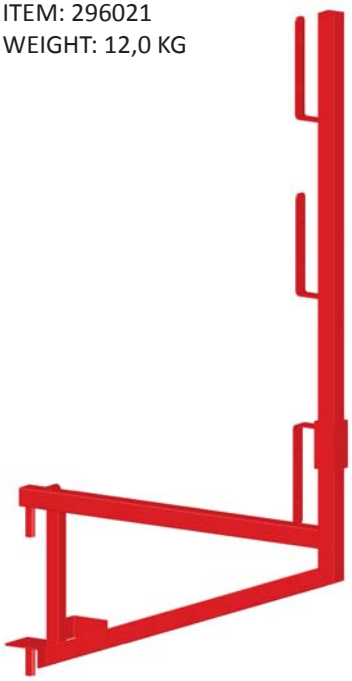
A=	564,0 mm^2
J=	20,85 cm^4
W=	8,34 cm^3
i=	192 cm

VARIOUS THICKNESS PLATE made of steel S 275 JR

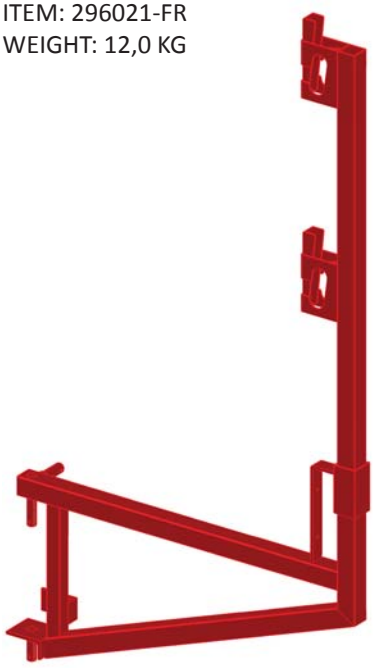
PINS diameter 20x100 mm in steel S 275 JR

ITEM: 296021
ITEM: 296021-FR
WEIGHT: 12,0 KG

ITEM: 296021
WEIGHT: 12,0 KG



ITEM: 296021-FR
WEIGHT: 12,0 KG



LOADS	
OF SERVICE	150 Kg/m^2
CONCENTRATES	150 Kg
WIND	20 Kg/m^2
PUSH ON PARAPET	50 Kg/m^2
WIND OUT OF SERVICE	80 Kg/m^2

STRUCTURAL FEATURES OF THE ELEMENTS

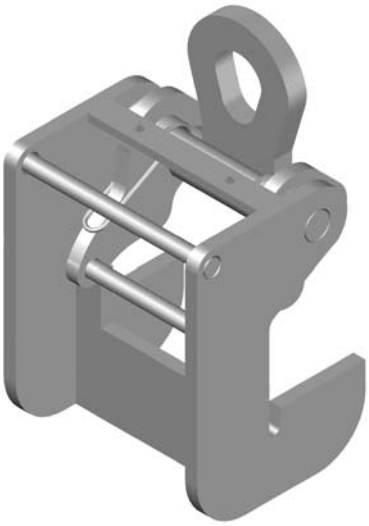
LIFTING HOOK

The lifting hoof CE - mat. 7417/04 is used to lift the building formworks. The lifting hook can be used only with the Formworks produced by gprandina building systems S.R.L.
The lifting hoof catch the patented profle “T2096” (see page 6) and it’s constituited by a Steel profle with a special form in order to allow the lifting hook hardware to catch safely the profle.
The lifting hook has a special design with a spring loaded system to assure the good fitting operation is done with forceps, the combined load to a system of levers that is created while lifting, it guarantees a perfect grip and safety on the profle board. The increase of the load, the higher the pressure exerted on the profle itself. The spring function is to call the hook to rest.

For more information, refer to the lifting hook certificate delivered together with this manual.

MAX CAPACITY: 1140 KG.

ITEM: 291002
WEIGHT: 7,0 KG



The “CAMPANELLA EN 1677-4 A22” CE hook is made of alloy steel.
Especially used for moving the modular backstop.
Request, if necessary, the certificate from GPRANDINA SRL BUILDING SYSTEM.

MAX CAPACITY: 5300 KG.

ITEM: 310021
WEIGHT: 1,6 KG

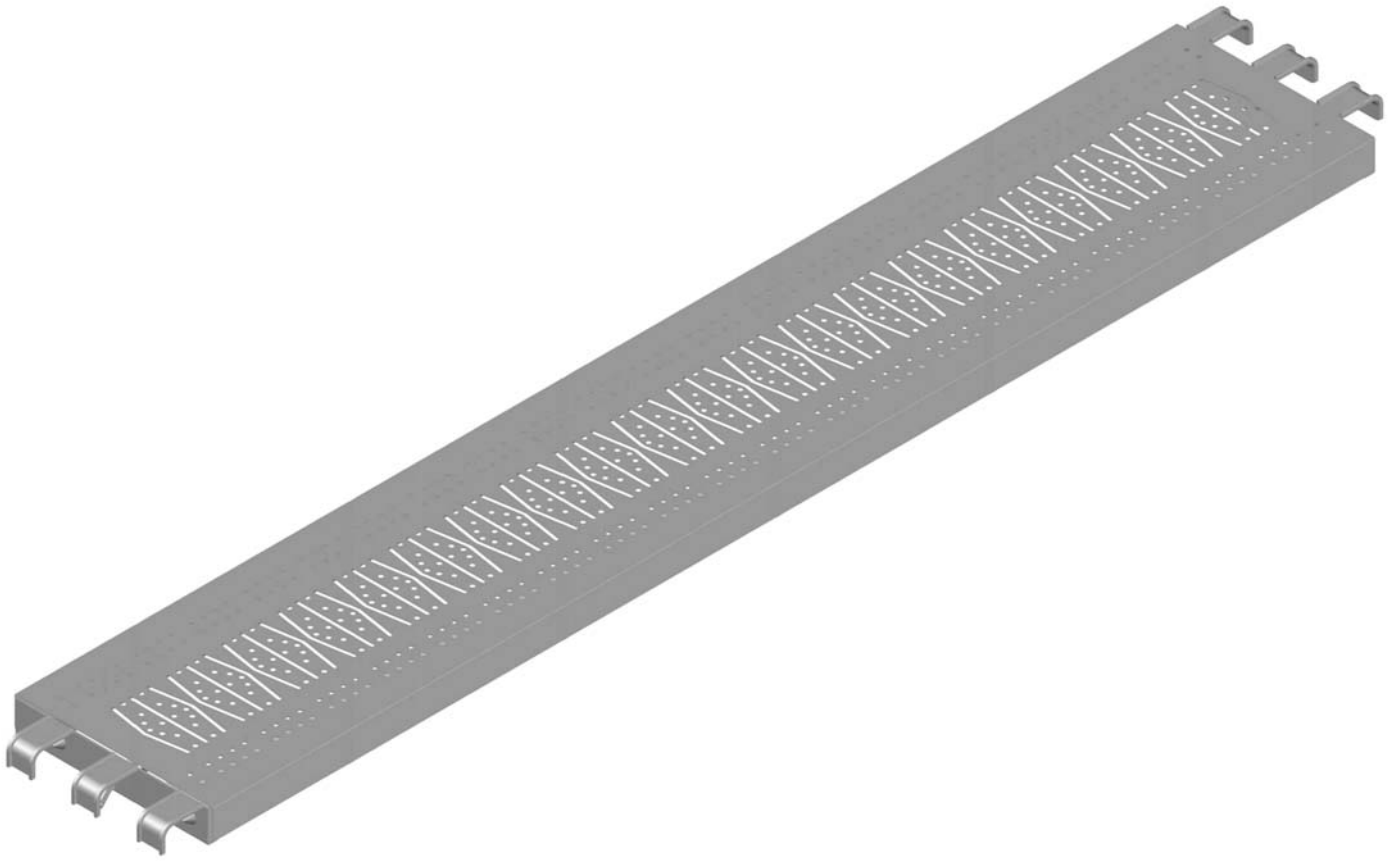
STRUCTURAL FEATURES OF THE ELEMENTS

PLATFORM 200X33

The platform 200x33 consists of a series of profiles with the following features:

GALVANIZED STEEL SHEET S 275 JR

ITEM: 296030
WEIGHT: 12,0 KG



LOADS	
CLASS	4
UNIFORMLY DIVIDED	3,00 KN/ m^2
CONCENTRATED ON SURFACE 500x500 mm	3,00 KN
CONCENTRATED ON SURFACE 500x500 mm	1,00 KN

STRUCTURAL FEATURES OF THE ELEMENTS

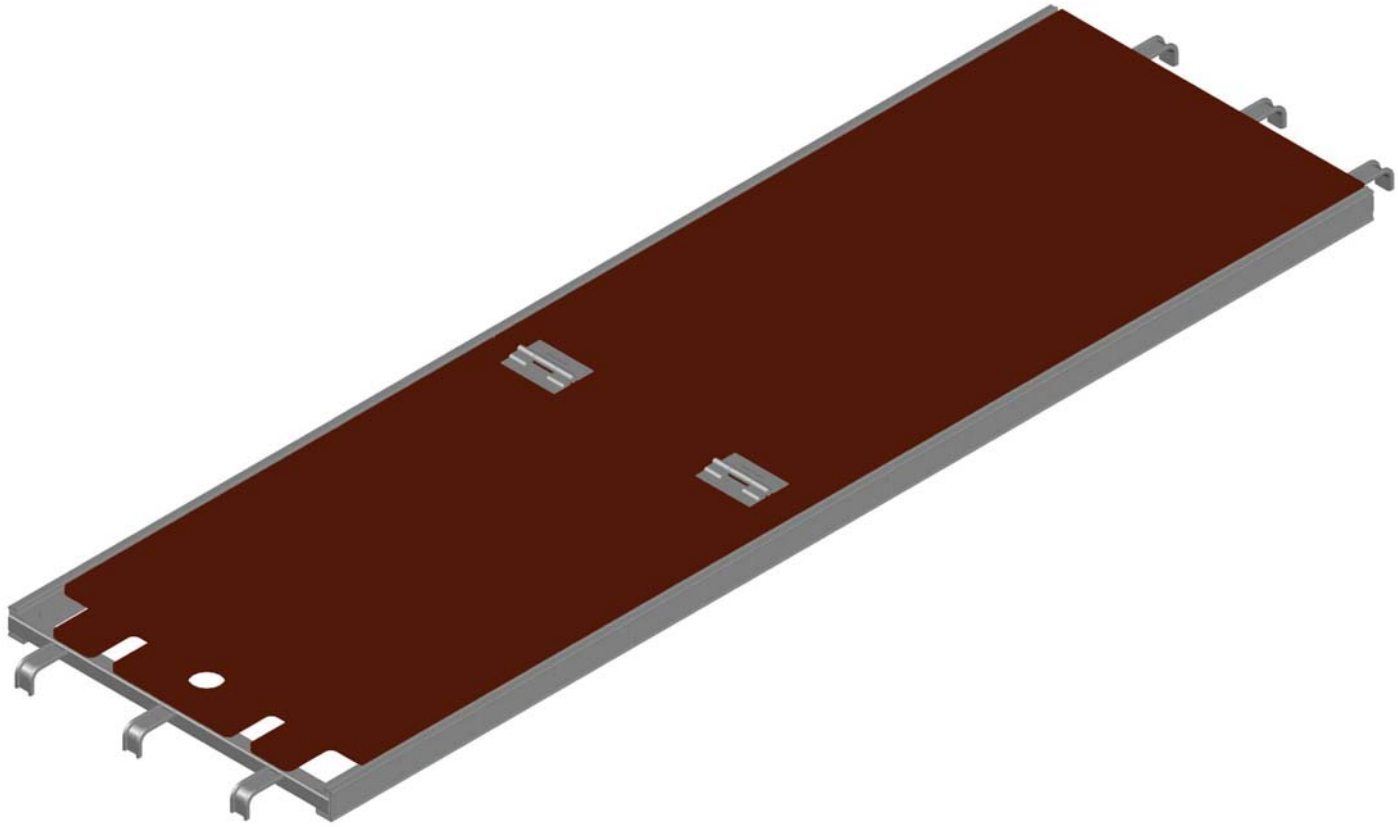
PLATFORM WITH HATCH 200X61

The platform with hatch 200x33 consists of a series of profiles with the following features:

ALUMINIUM

PLYWOOD SP. 9 mm

ITEM: 296040
WEIGHT: 26,0 KG



LOADS	
CLASS	4
UNIFORMLY DIVIDED	3,00 KN/ m^2
CONCENTRATED ON SURFACE 500x500 mm	3,00 KN
CONCENTRATED ON SURFACE 500x500 mm	1,00 KN

STRESSES

The stresses to which the formworks are subjected are caused by:

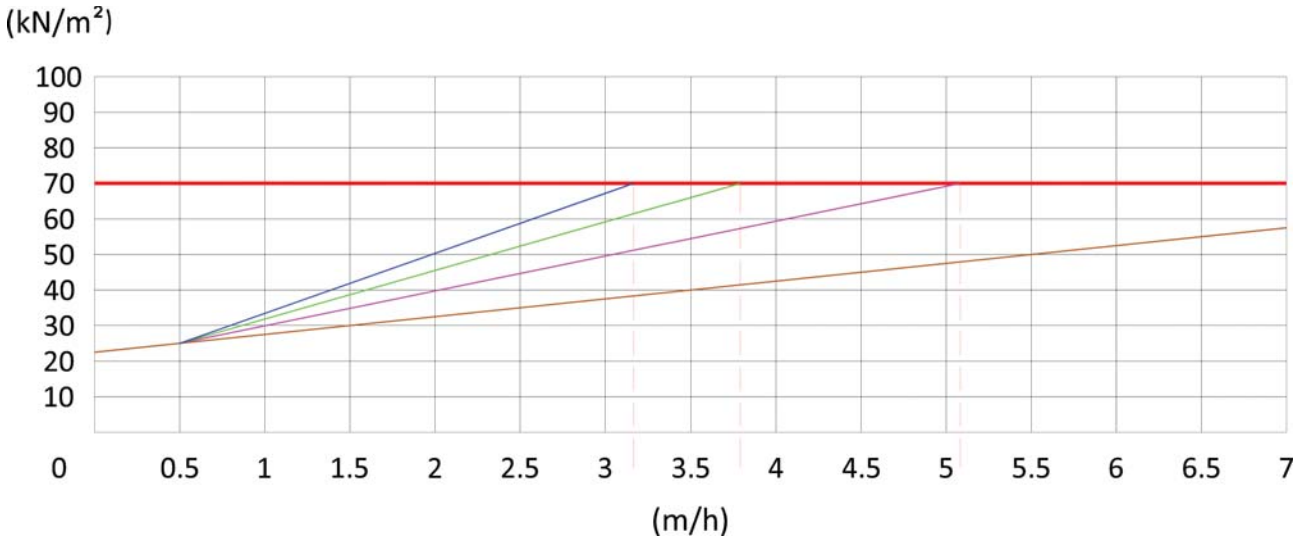
- Concrete fluidity: percentage of water evaluated in S-slump;
- Quantity of concrete: speed with which the level of the jet rises inside the formwork;
- Possible use of the vibrator;

N.B.: the above characteristics are strongly conditioned by both the environmental and the jet temperatures.
The pressure of the wet concrete distributed over the entire surface respecting the normal flatness tolerances, is summarized alongside:

RULES CNR 10027-85	RULES DIN
Concrete H= 300 cm P°= 0,0 upper level Pmax= 57,5 KN/m^2 Pb= 57,5 KN/m^2 Catwalk overload Pmax= 150 Kg Mmax= 60 Kgm	Concrete H= 300 cm P°= 0,0 upper level Pmax= 70 KN/m^2 Pb= 70 KN/m^2 Catwalk overload Pmax= 150 Kg Mmax= 60 Kgm

In order not to exceed the safety limits with which the GP-10 formworks have been designed and built with the relative accessories, reference is made to precise and specific tables and graphs (shown below) with the most frequent situations of concrete casting.

In **TABLE 1** the values for raising the jet (m / h) are indicated; starting from this value and following the corresponding line up to the external temperature indicated above, the depth in which the jet will reach the maximum pressure on the walls of the formworks is displayed.
Then check the **TABLE 2** of the maximum pressure (KN / m2) of the concrete in case it is normal (CLS-N) or vibrated (CLS-V).



Wet concrete
Plastic concrete
Fluid concrete
Superfluid concrete

VALIDITY FIELD:
- specific weight of the concrete: 25 KN/m^3
- concrete setting time: 5 h
- waterproof formwork
- internal vibration of the concrete
- concrete temperature: + 15 ° C

ATTENTION:
GPrandina srl Building System declines all responsibility for incorrect casting speed.

TABLE 1: referred to a total casting height of 5 ml.					
V	Hm				
	25°	20°	15°	10°	5°
0,50	1,22	1,34	1,50	1,68	2,02
1,00	1,55	1,70	1,90	2,15	2,55
1,50	1,80	2,00	2,20	2,50	3,00
2,00	2,00	2,20	2,45	2,75	3,30
2,50	2,15	2,40	2,70	3,00	3,60
3,00	2,30	2,55	2,85	3,20	3,90
3,50	2,45	2,70	3,00	3,40	4,10
4,00	2,55	2,85	3,15	3,60	4,30
4,50	2,70	2,95	3,30	3,75	4,50
5,00	2,80	3,10	3,40	3,90	4,70

V = speed of raising of the concrete (m/h)

Hm= depth measured from the free surface of the jet in which the maximum pressure occurs.

Pm = maximum pressure exerted by the concrete against the walls.

TABLE 2: indicates the maximum pressures exerted by normal and vibrated concrete at various depths.					
Hm (m)	Pm (KN/m²)		Hm (m)	Pm (KN/m²)	
	CLS N	CLS V		CLS N	CLS V
1,25	21,50	29,50	2,55	44,00	60,75
1,30	22,50	31,00	2,60	45,00	62,00
1,35	23,25	32,25	2,65	45,76	63,00
1,40	24,00	33,50	2,70	46,50	64,00
1,45	24,75	34,50	2,75	47,25	65,00
1,50	25,75	35,50	2,80	48,00	66,00
1,55	26,75	36,75	2,85	49,00	67,50
1,60	27,50	38,00	2,90	49,75	68,50
1,65	28,50	39,25	2,95	50,75	70,00
1,70	29,25	40,50	3,00	51,25	71,00
1,75	30,25	41,50	3,10	53,00	74,00
1,80	31,00	42,75	3,20	55,00	76,00
1,85	32,00	44,00	3,30	56,75	78,00
1,90	32,75	45,00	3,40	58,00	80,75
1,95	33,50	46,25	3,50	60,00	83,00
2,00	34,00	47,50	3,60	62,00	85,00
2,05	35,00	49,00	3,70	64,00	88,00
2,10	36,00	50,00	3,80	65,50	90,00
2,15	37,00	51,00	3,90	67,00	92,50
2,20	38,00	52,25	4,00	68,75	95,00
2,25	39,00	53,50	4,20	72,00	100,00
2,30	39,75	54,75	4,40	75,50	105,00
2,35	40,50	56,00	4,60	79,00	110,00
2,40	41,25	57,00	4,80	82,00	115,00
2,45	42,25	58,50	5,00	84,50	120,00
2,50	43,00	59,50			

EXAMPLE:

With a maximum casting speed of 3.00 m / h and an ambient temperature of 15 °, the maximum pressure depth (Hm) is around 2.85 m (see table 1) which in turn has a corresponding maximum pressure (Pm) of 49.90 KN / m2 in the case of normal concrete (CLS-N) and 67.50 KN / m2 in the case of vibrated concrete (CLS-V) (see Table 2).

Since the formwork supports the pressure of wet concrete with a maximum push of 70.00 KN / m2 (see structural certificate), it is noted that the example fully falls within the rules of safe operating situation.

NORMATIVE REQUIREMENTS

The structural calculations are performed with the usual method of construction science to the tensions in relation to the following standards:

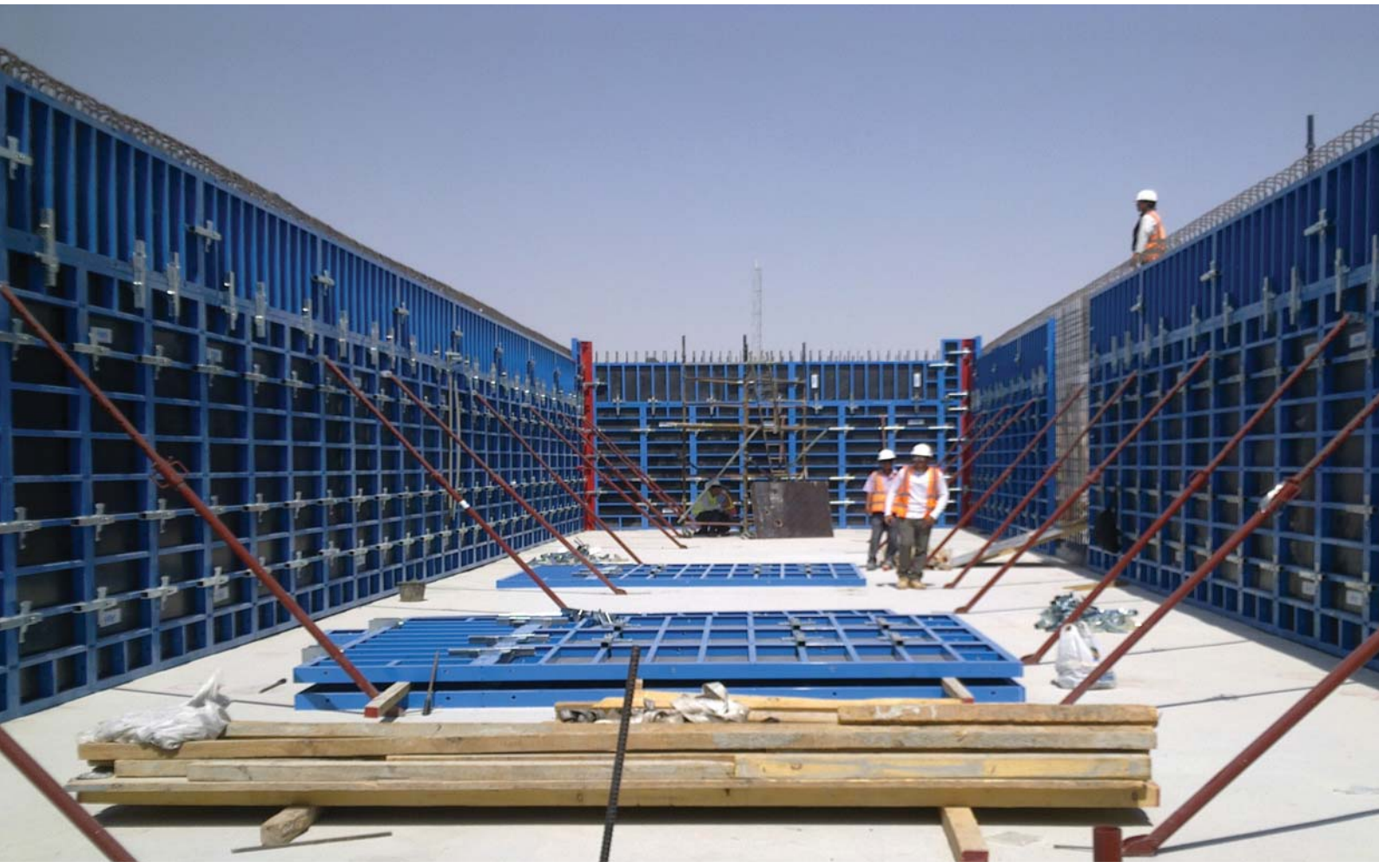
CNR-UNI 10011/85 steel constructions;
CNR-UNI 10012/85 actions on constructions ;
CNR-UNI 10027/85 steel structures for provisional works
CNR-UNI 10029/87 high strength steel constructions
DPR N° 547 dated 27/04/55;
DPR N° 164 dated L 07/01/56;
CIRC. N° 80 dated 07/07/86 Ministry of Work;
CIRC. N° 15 dated 19/03/90 Ministry of Work;
D.M. dated 09/01/1996 Technical Rules;
CIRC. N° 65/AA.GG. dated 10/04/1997 Instructions for the application of the technical standards of the D.M. dated 16/01/1996.

The aforementioned rules can be found in EU:

DIN 1050 Requirements for steel constructions;
DIN 1055 Official provisions on load hypotheses;
DIN 1912 Welding with filler material;
DIN 4100 Welding standards;
DIN 4114 Calculation criteria;
DIN 4420 Scaffold and scaffolding;
DIN 17100 Steels for construction, quality requirements.

For the calculation of the single side wall frames the following rules have been followed:

UNI EN 1990-2006 General criteria of structural design;
UNI EN 1993-1-: 2005 Design of steel structures. Part 1-1: General rules and rules for buildings;
UNI EN 1993-1-8: 2005 Design of steel structures. Part 1-8: design of connections;
MINISTERIAL DECREE 14/01/2008 - Technical standards for buildings;
PrEN 12811-1 “Temporary works equipment – Part 1: Scaffolds – Performance requirements and general design;
PrEN 13374 “Temporary edge protection systems – Product specification, test methods”.

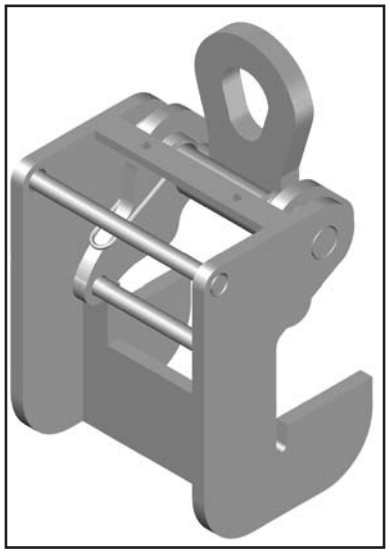


2.0.0
GP-10 WALL SYSTEM

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

CRANE HOOK - ART. 291002 - KG. 7,00



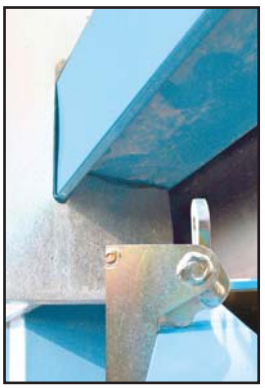
CE

GPRANDINA
PORTATA KG. 1140
MATRICOLA 7417/04
GARANZIA CICLI DI UTILIZZO 50.000
ZINCATO A FREDDO

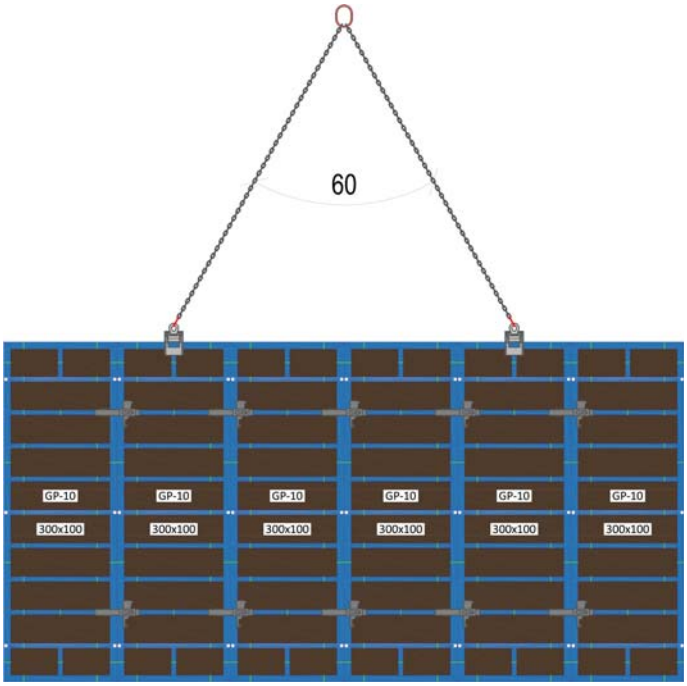
STEP 1:
Lift the hook by forcing the return spring applying the force at the back of the hook.

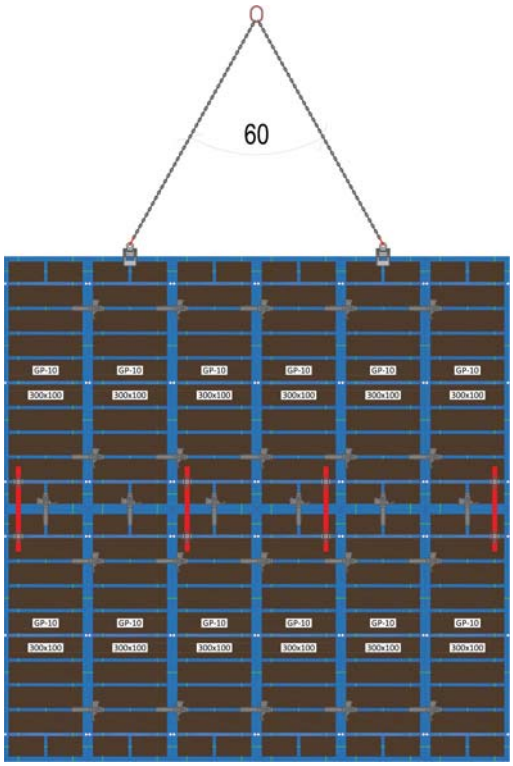
STEP 2:
Insert the lifting hook into the GPrandina “T2096” steel profile or in the “vzFN1424” aluminum profile. Ensure perfect coupling between the hook plates and the steel or aluminum GP-10 profile.

STEP 3:
Once the hook has been inserted, carefully release the return handle. Make sure the springs are in tension.



STEP 4:
Before lifting the formwork, make sure that the hook is perfectly inserted and coupled with the”T2096” steel profile or with the “vzFN1424” aluminum profile.





LIFTING:
Do not exceed 60 ° as amplitude of the angle created between one chain and the other (see drawing).

LIFTING:
Do not exceed 60 ° as amplitude of the angle created between one chain and the other (see drawing).
If you raise and / or move walls over 3 meters in height, it is mandatory to stiffen the panels using the aligner tubes and the aligning bracket (see page 100).

ATTENTION:
It is recommended:

- to use original GPrandina items in combination with each other;
- not to use articles of various brands for the combination of the elements;
- to check the hook before each use;
- to check the weldings and the various components: there must be no signs of wear and deformation, there must not be any signs of rust;
- in case of breakages, do not weld and / or repair. Contact a GPrandina technician who will evaluate the possible repair or replacement;
- At the time of demolition all the regulations in force concerning the protection and health of the environment are respected.

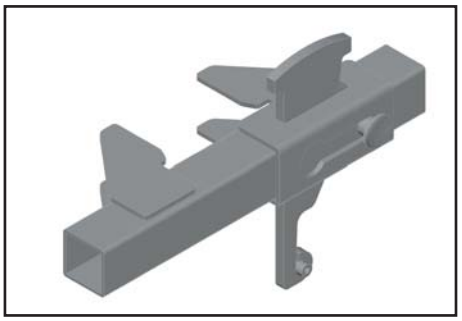
We advise:

- to store the hook in a dry place protected from atmospheric agents;
- not to throw, hit or deform the hook.

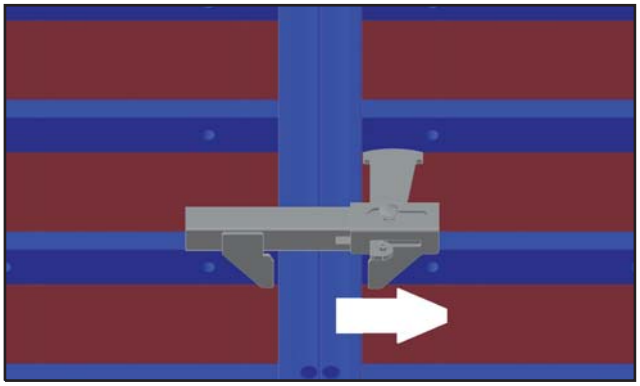
GPrandina srl will not respond in case of malfunctions if the above recommendations are not respected.

Otherwise, contact our technical office to evaluate the combination of GPrandina products with other brands.

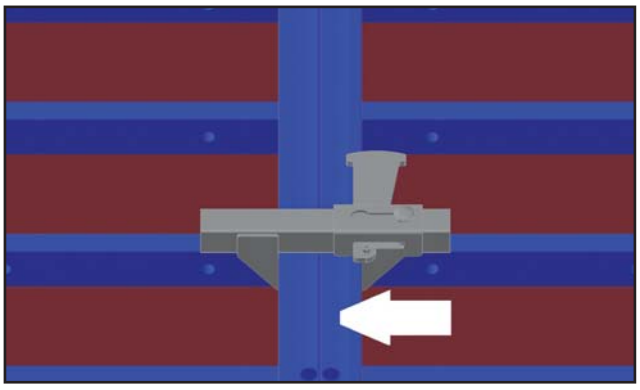
ALIGNMENT CLAMP - ART. 291012 - KG. 5,0



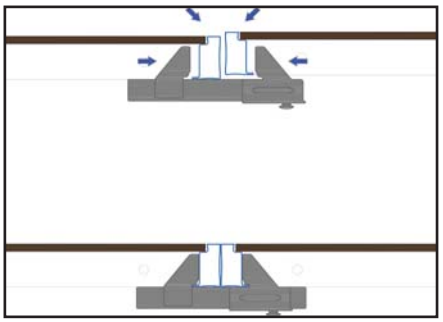
Description:
The alignment clamp is made of S 275 JO steel profiles and covered with a layer of cold galvanizing that protects against corrosion.
This accessory allows the union between the steel and aluminum GP-10 panels and the union between GP-10 panels and internal corners.
It can connect the panels on both sides, both vertically and horizontally.
The alignment clamp works only and exclusively with the GPrandina “T2096” profile.

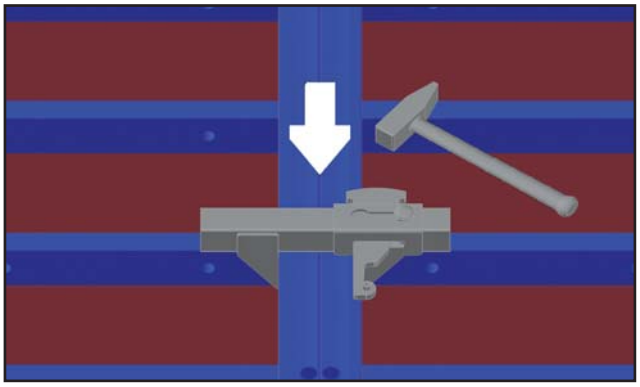


STEP 1:
Open the GP-10 alignment vice by sliding the wedge up and moving the jaw box to the right.



STEP 2:
Position the alignment clamp in correspondence with the reinforcing crossbars of the panel.
Call the clamping box to the left. Then slide the wedge downwards.





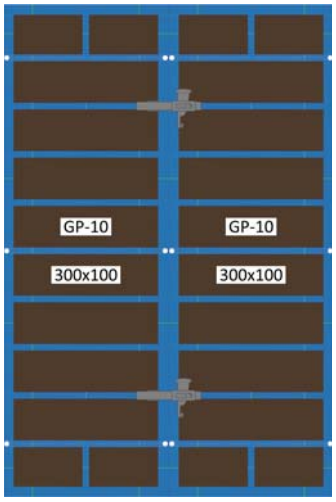
STEP 3:
Tighten the wedge with the hammer making sure that:
- the two panels match perfectly
- the fixing plates match the profile of the G profile “T2096”.

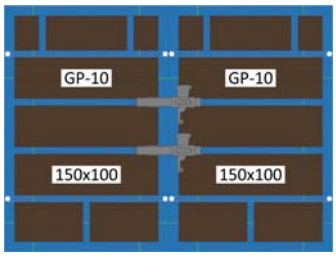
See picture

Description:

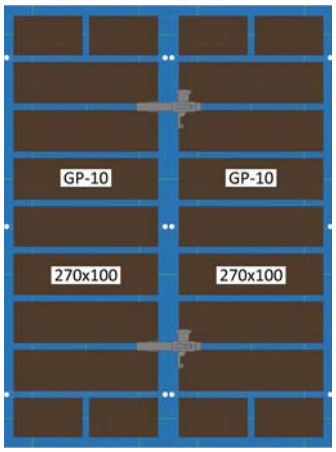
Position of alignment clamps according to the serie used. Always install at least 2 alignment clamps to join two panels.

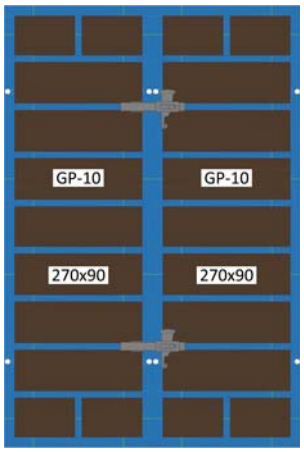
RANGE H300 - H150

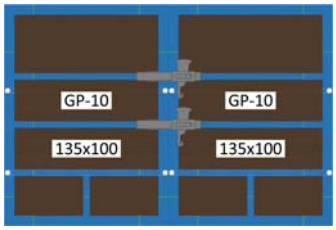




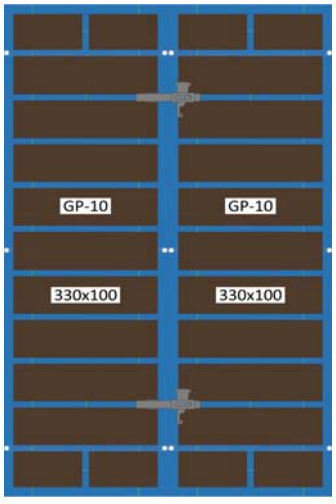
RANGE H270 - H135

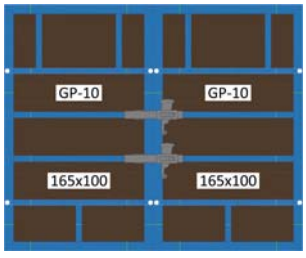




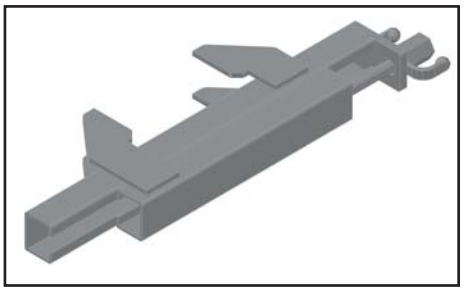


RANGE H330 - H165





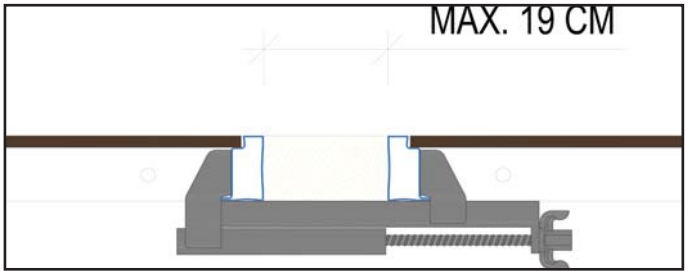
ADJUSTABLE CLAMP

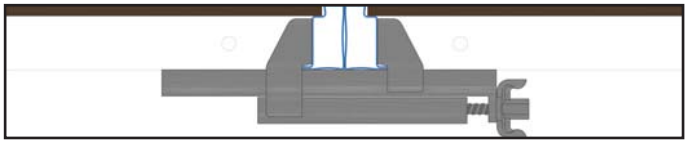


Description:
The variable vice (standard and long) consists of S 275 JO steel profiles and covered with a layer of cold galvanizing that protects against corrosion.
This accessory allows the union between the steel and aluminum GP-10 panels and the union between the GP-10 panels and internal corners.
It allows the union between panel, wooden and / or steel and compensation in wood (filler).
It can connect the formworks on both sides, both vertically and horizontally.
The alignment clamp works only and exclusively with the GPrandina “T2096” profile.

Description:
Adjustable clamp GP-10
Article: 291022
Weight: Kg. 5,20

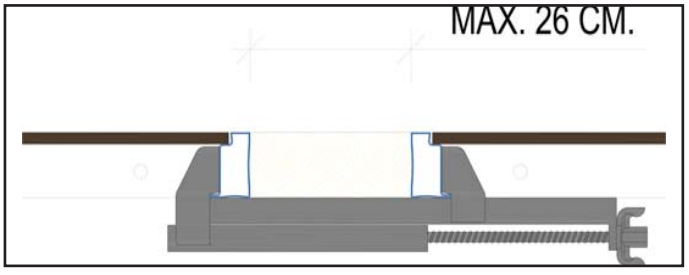
It allows the union between panel and panel.
It allows the union between panel, compensation (from 0,00 to 19,00 cm.) and panel.

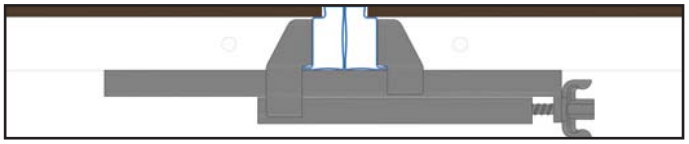


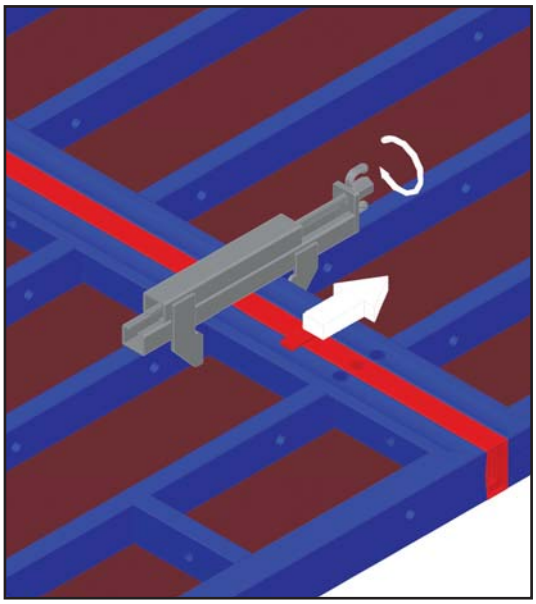


Description:
Adjustable long clamp GP-10
Article: 291032
Weight: Kg. 5,50

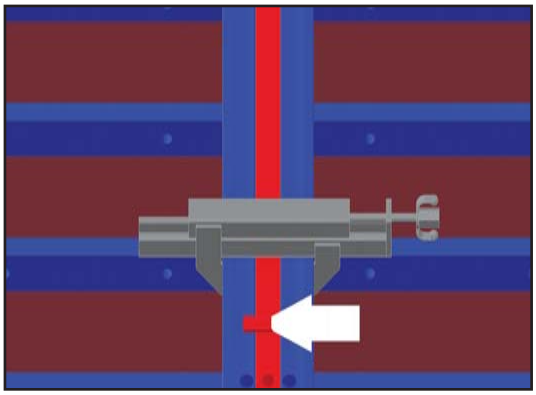
It allows the union between panel and panel.
It allows the union between panel, compensation (from 0,00 to 26,00 cm.) and panel.



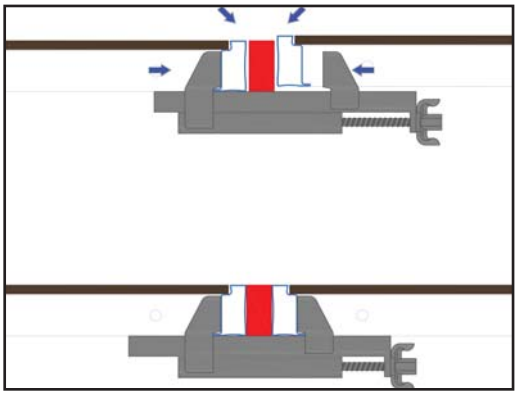


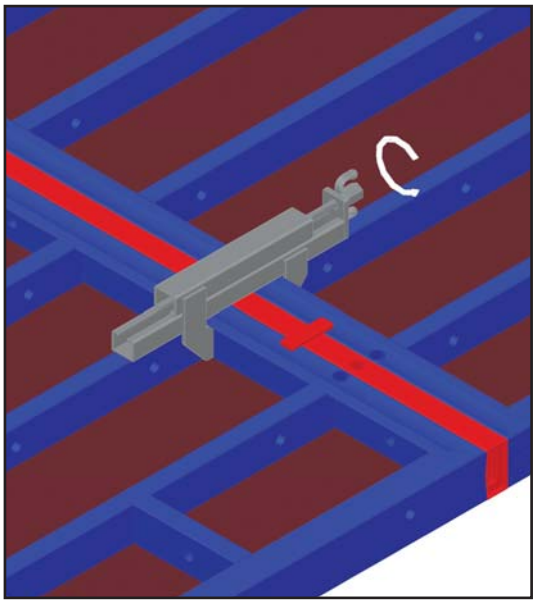


STEP 1:
Open the GP-10 adjustable clamp by unscrewing the big screw and sliding the lower profile to the right.



STEP 2:
Position the adjustable clamp in correspondence with the reinforcing crossbars of the panel.
Call up the lower profile to the left.



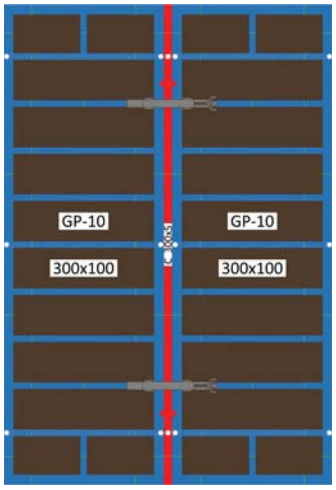


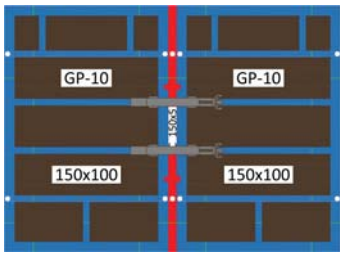
STEP 3:
Tighten the big screw with a lever making sure that:
- the two panels match perfectly
- the fixing plates match the profile of the G profile “T2096”. See picture

ADJUSTABLE CLAMP

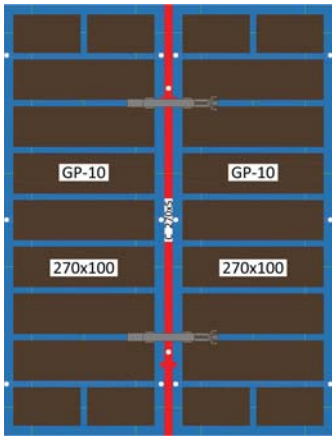
Description:
Position of adjustable clamps according to the serie used. Always install at least 2 adjustable clamps to join two panels.

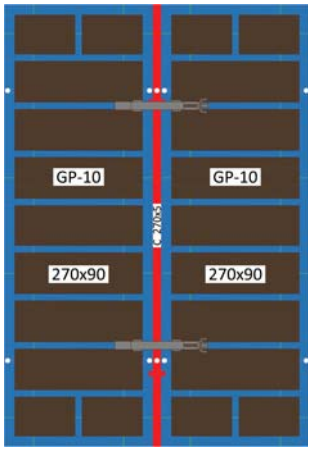
RANGE H300 - H150

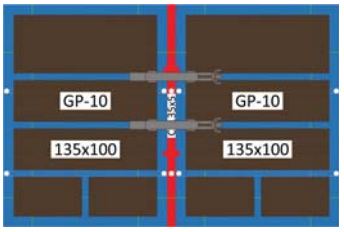




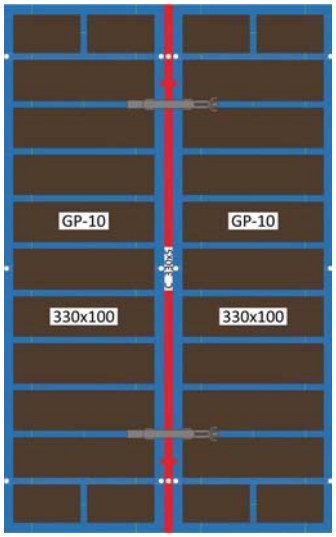
RANGE H270 - H135

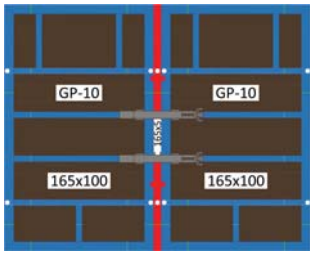






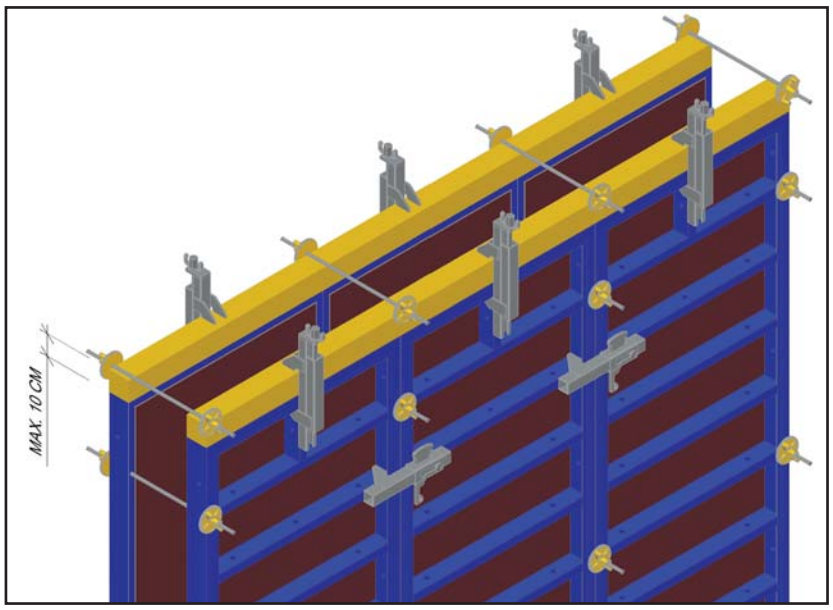
RANGE H330 - H165

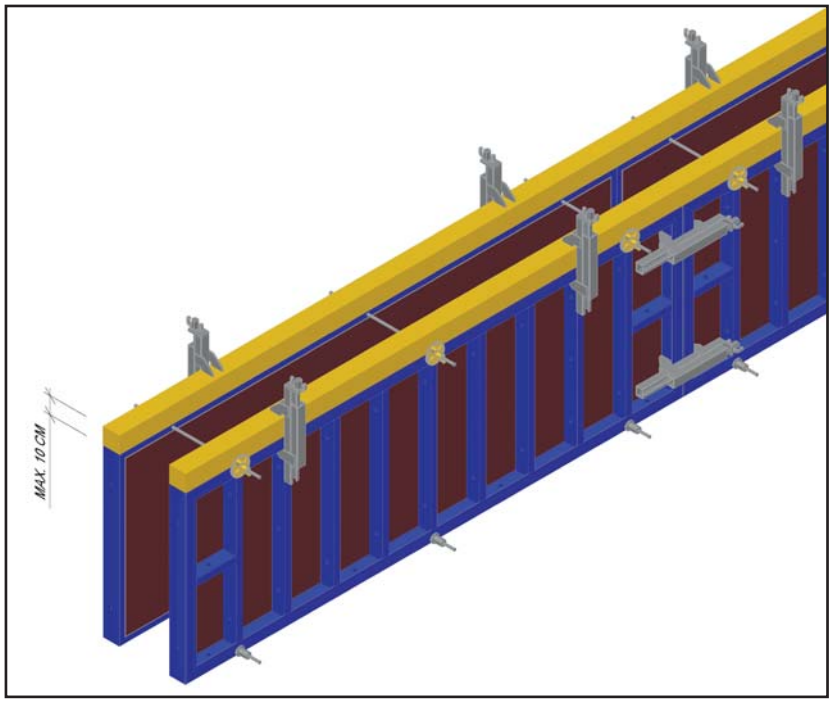




Other uses of adjustable clamp:

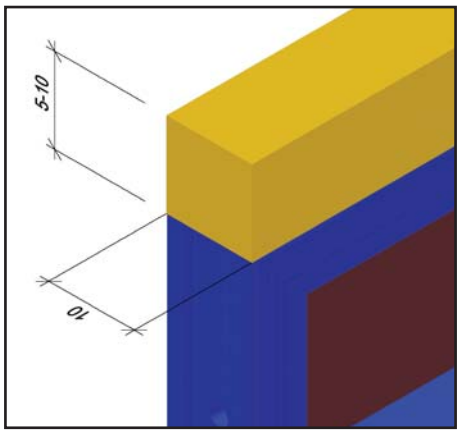
The adjustable clamp can be used as a bracket to extend the formwork from a minimum size of 5 cm. to a maximum size of 10 cm., matching the formwork with a wooden wall with the same thickness as the GPrandina panel (10 cm.).
Use and install the clamp as shown below.



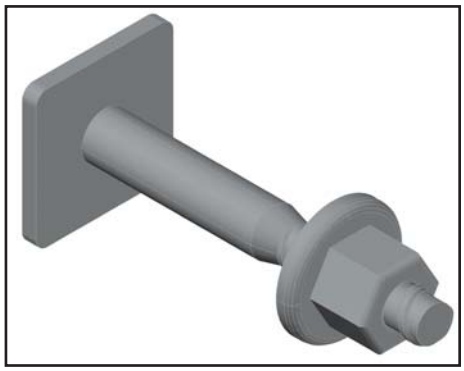


ATTENTION:

The wooden mural is charged to the user.
Always check the condition of the wood before casting.
It is mandatory to respect the measures shown in the figure.
GPrandina declines all responsibility for an incorrect and improper use of the adjustable clamp.



PIN WITH NUT



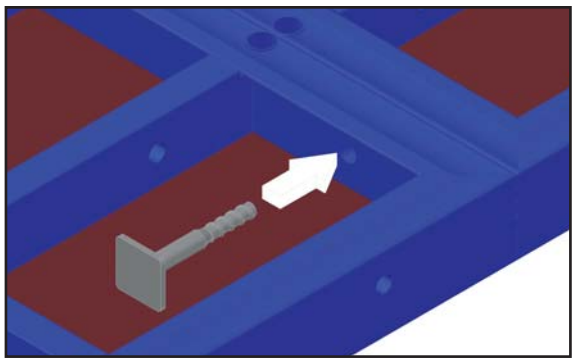
Description:
Long pin L. 140 mm
Article: 291186
Weight: 0,5 kg.

Nut for pin
Article: 291211
Weight: 0,1

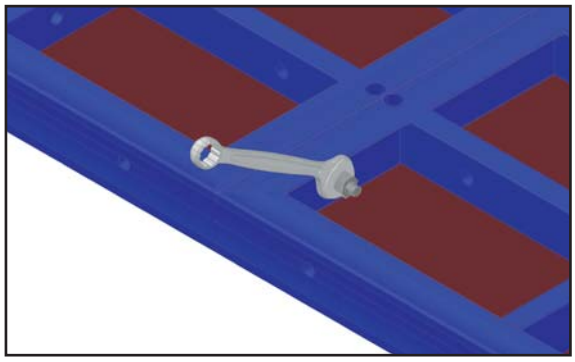
The long pin L.140 mm is made of steel S 275 JO and covered by a layer of cold galvanizing.

The nut for pin is made of steel S 275 JO and covered by a layer of cold galvanizing.

These two matching items are used to link panel with panel and corner panel. They connect the GP-10 series H300 - H150 and H270 - H135 steel panels both in a vertical position and in a horizontal position.



STEP 1:
Place two GP-10 panels side by side and matching the holes on the outside of the GPrandina “T9026” profile.
Insert the long L. 140 plug into the hole. (see image alongside).

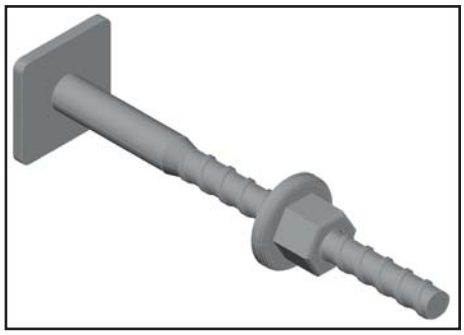


STEP 2:
Tighten the M30 nut and fasten with the key.
Repeat the operation for all the holes in the panel edge.

ATTENTION:
When using the plugs with nut it is mandatory to take advantage of all the holes on the panel profile.

It is recommended not to use items from other brands and / or damaged and worn items. Gprandina declines all responsibility for the improper use of this article. Observe the images above to install these pieces.

VARIABLE PIN WITH NUT



Descrizione:
Variable complete pin
Article: 291191
Weight: 0,7 Kg.

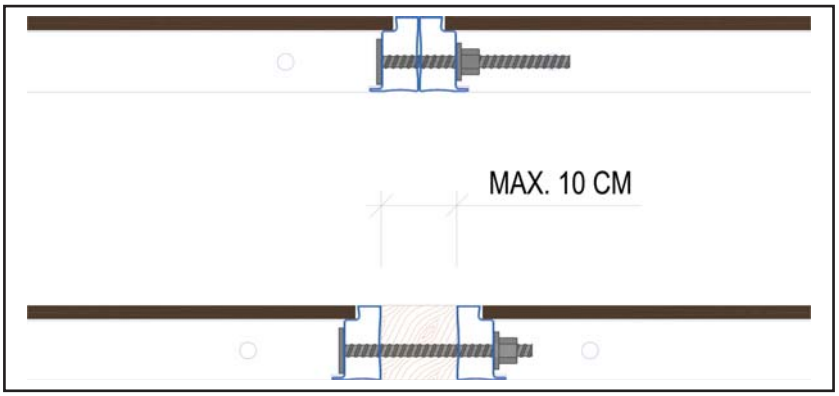
Nut for pin
Article: 291211
Weight: 0,1

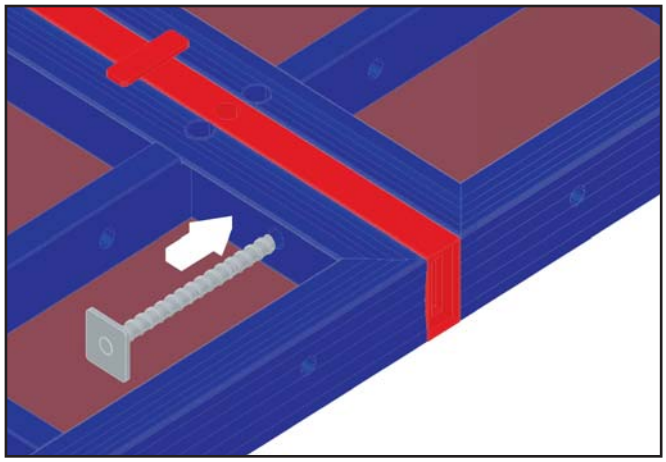
The variable pin is made of S 275 JO steel and is coated with a cold galvanizing layer.

The nut for pins is made of S 275 JO steel and is coated with a cold galvanizing layer.

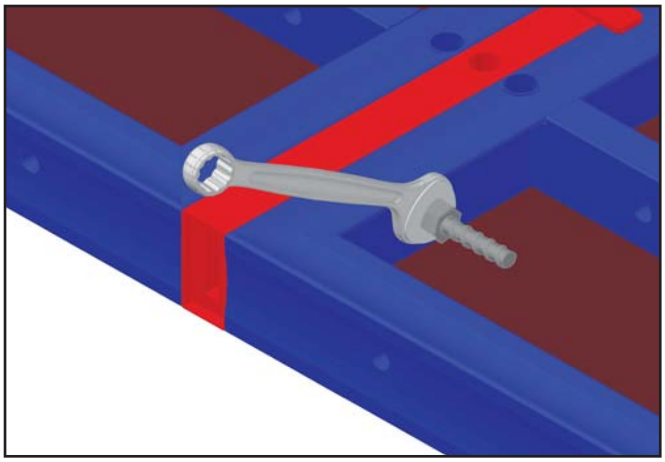
The wedge for pins is made of S 275 JO steel and is coated with a cold galvanizing layer.

This article serves to connect panel with panel, panel with angle, panel - max. 10 cm. with panel.
It connects the GP10 series H300 panels - H150 and H270 - H135 steel panels both in a vertical position and in a horizontal position.



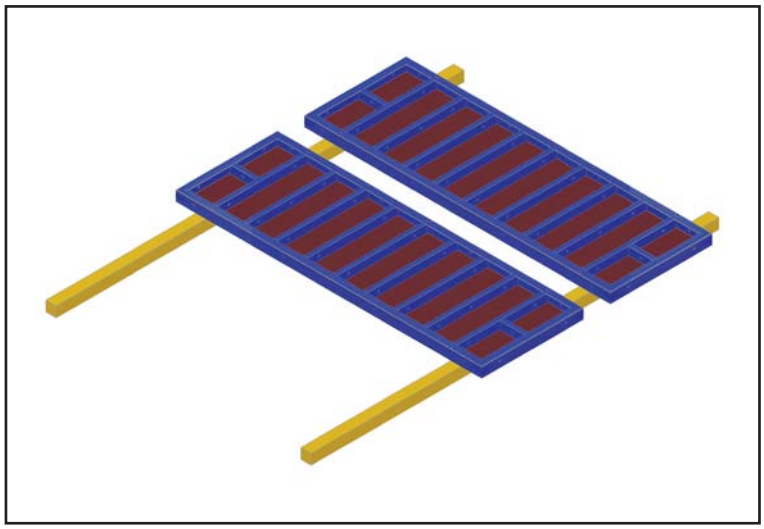


STEP 1:
Insert the variable pin into the hole in the profile.



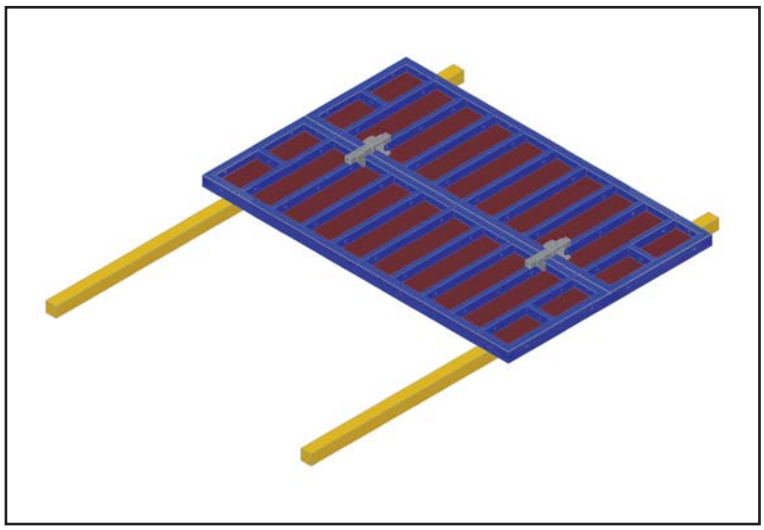
STEP 2:
Tighten the M30 nut and fasten it with the M30 key.

WALL ASSEMBLY



STEP 1:

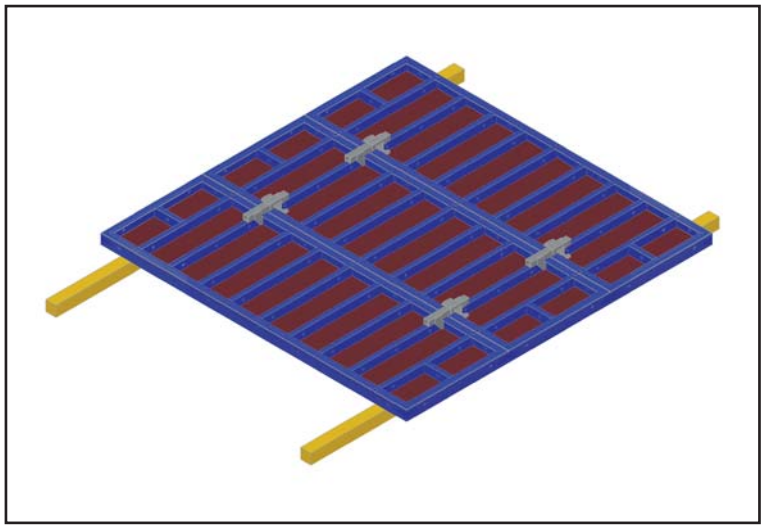
Place two murals on a flat surface at a distance of about 2 linear meters from each other, these will serve to facilitate the coupling of several panels.
Place two panels on the previously arranged murals, lay 2 panels with the multilayer facing down: this step will allow the installation of the clamps and / or plugs easily and in total safety.



STEP 2:

Connect the two panels in the following ways:

- 2 alignment clamps (see page 24)
- 2 adjustable clamp (see page 24)
- 4 long pins L. 140 with wedge (see page 28)

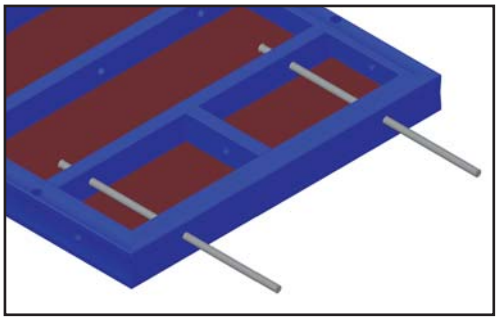


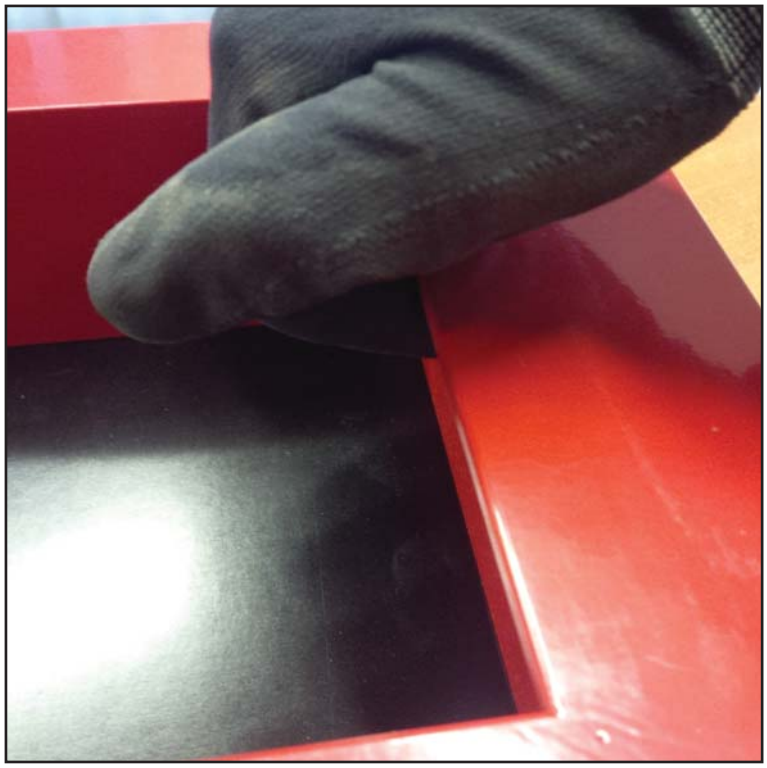
STEP 3:

Repeat the phase no. 1 and n. 2 as previously described.

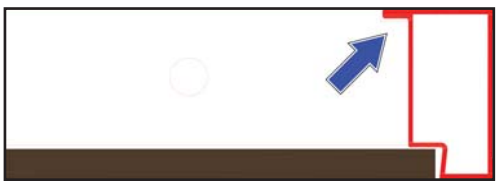
Repeat the operation until the total weight of the panels does not exceed the capacity of the lifting hooks (see page 20).

MANUAL HANDLING:
To move the steel panels use n. 2 round bars d. 20 mm to be inserted in the holes on the head profile.





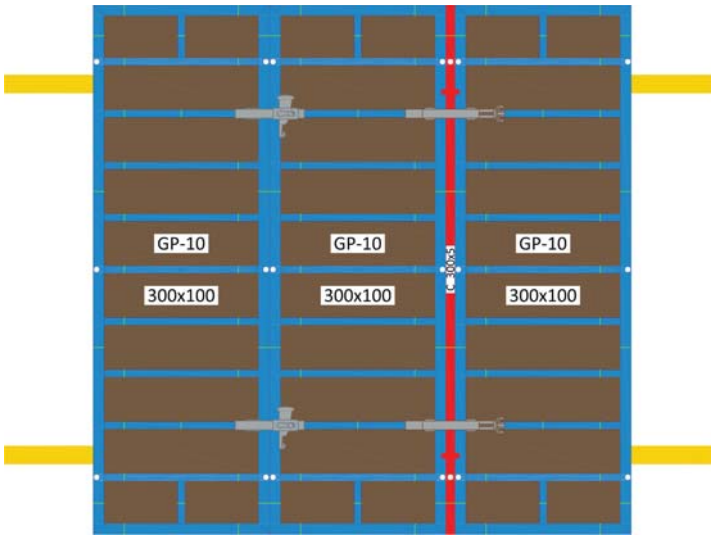
MANUAL HANDLING:
Use the protrusion of the profile to move the aluminum panels.



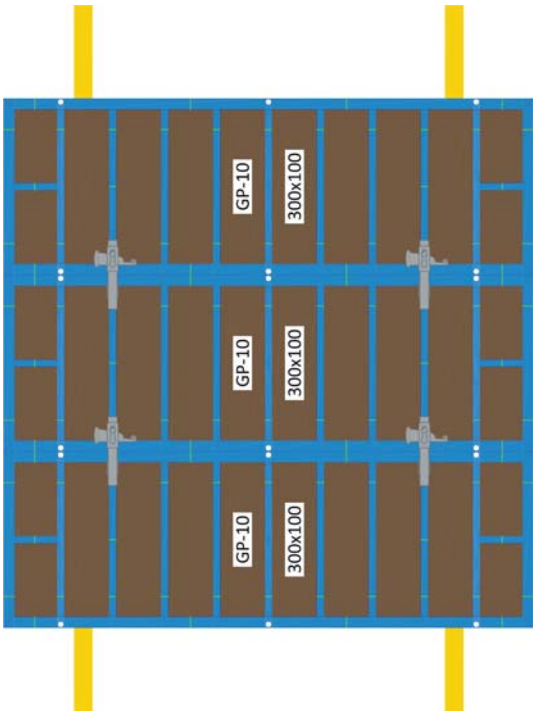
ATTENTION:
For manual movement of the panels, scrupulously comply with the regulations that regulate safety on site.
The permitted weight for manual handling in optimal conditions is 25 kg. by operator.
If this value is exceeded, it is mandatory to use the lifting hook.

WALL ASSEMBLY
EXAMPLES - RANGE H300

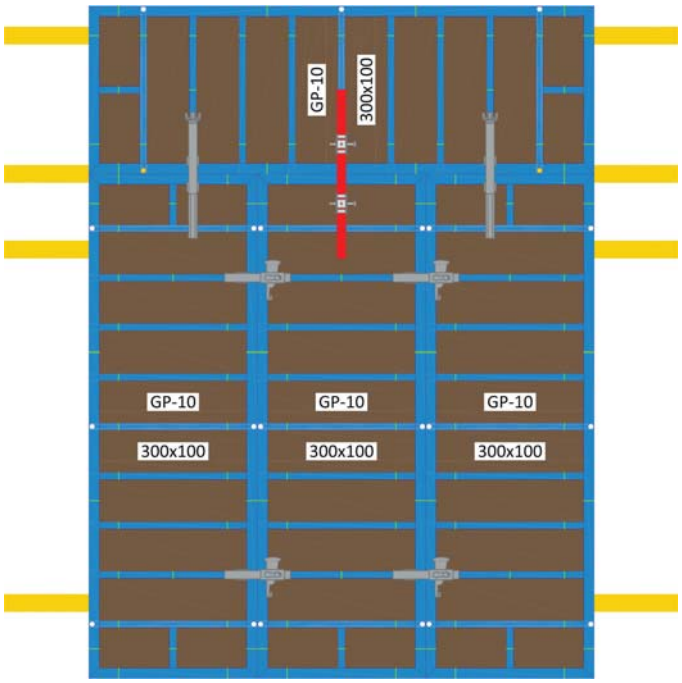
H300



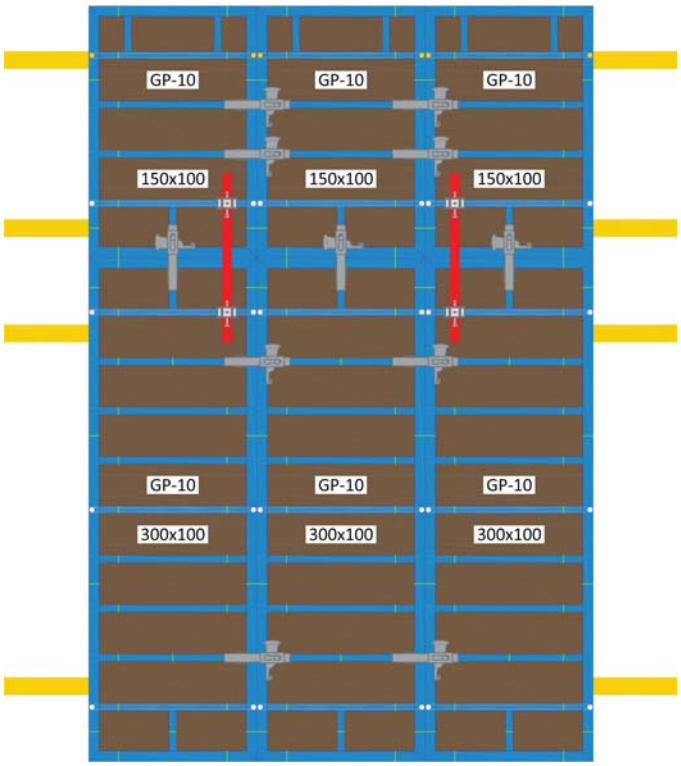
H300



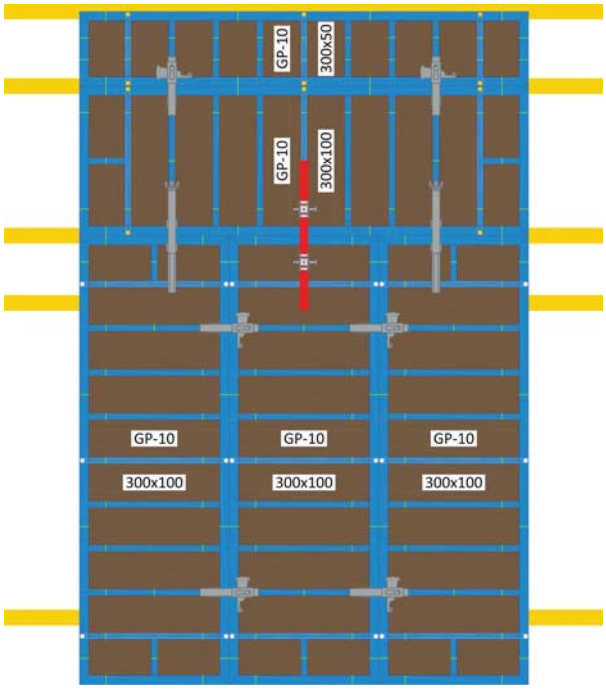
H400



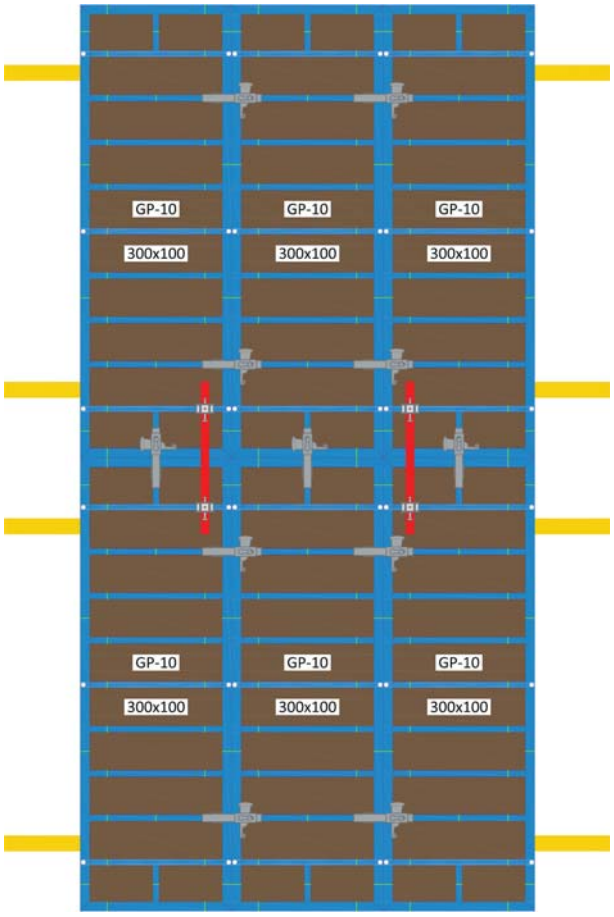
H450

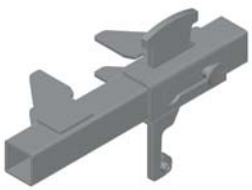


H450



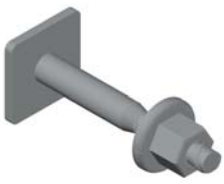
H600





UNION:
For joining the panels use the alignment clamp.
For detailed instructions see pag. 22 of this manual.

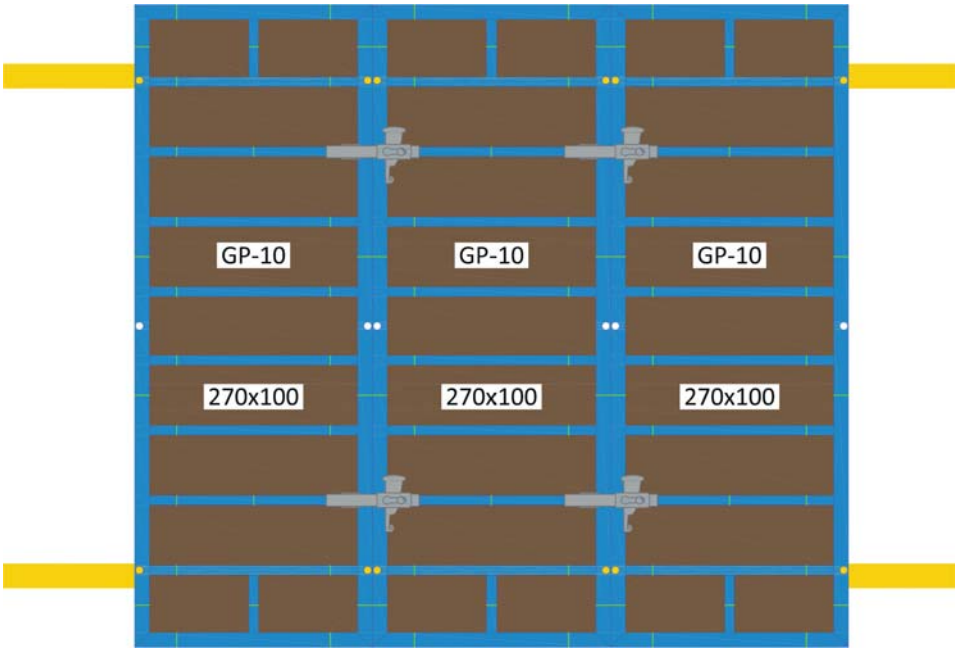
UNION:
For joining the panels use the adjustable clamp.
For detailed instructions see pag. 24 of this manual.



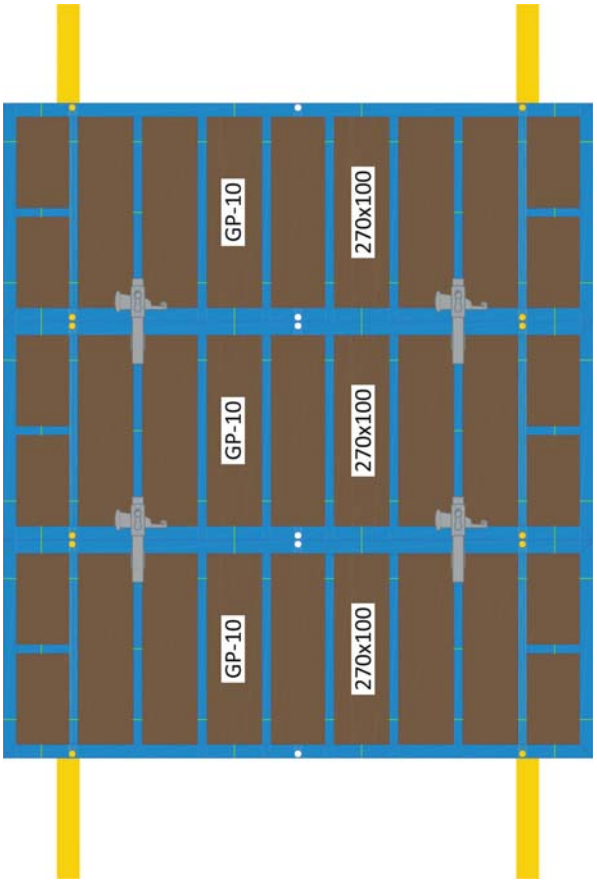
UNION:
For joining the panels use the pin with nut..
For detailed instructions see pag. 28 of this manual.
da pag. 34 a pag. 39

WALL ASSEMBLY
EXAMPLES - RANGE H270

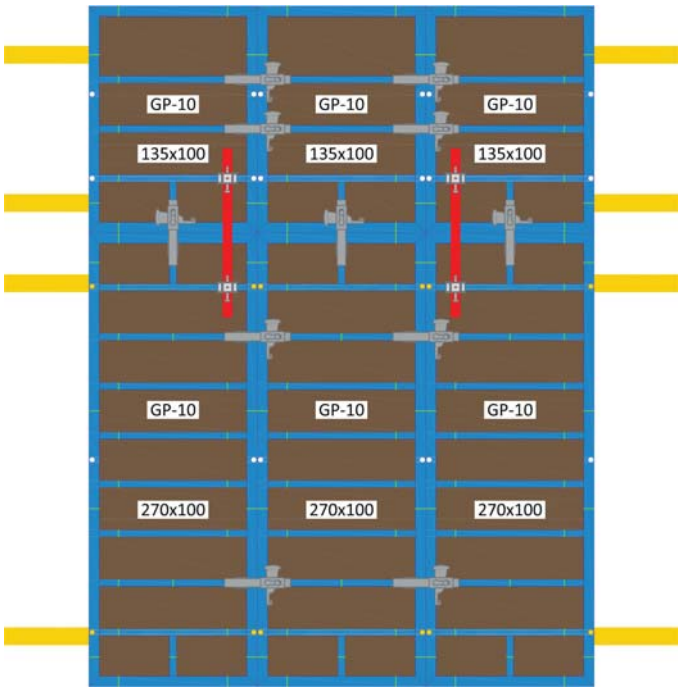
H270



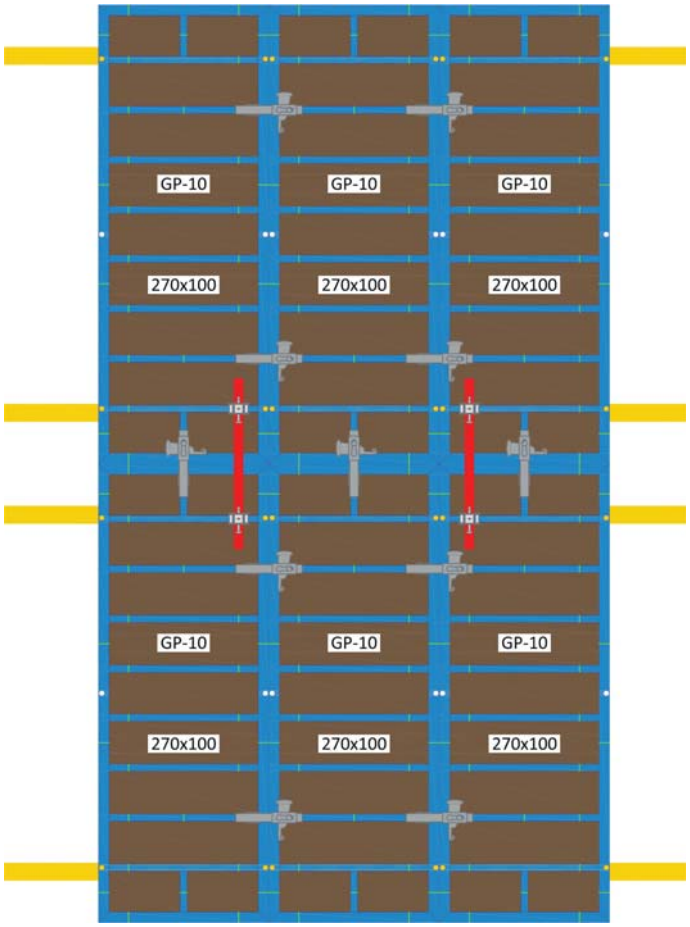
H300

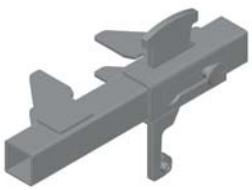


H405



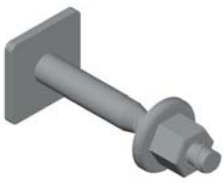
H540





UNION:
For joining the panels use the alignment clamp.
For detailed instructions see pag. 22 of this manual.

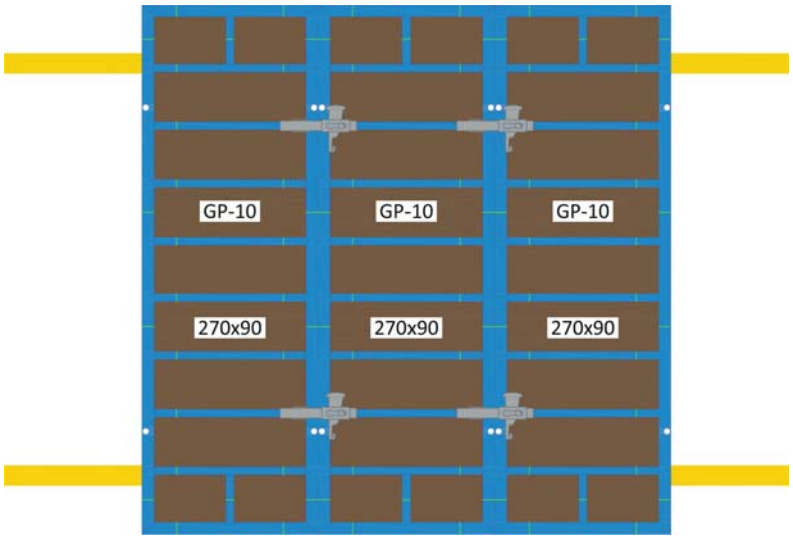
UNION:
For joining the panels use the adjustable clamp.
For detailed instructions see pag. 24 of this manual.



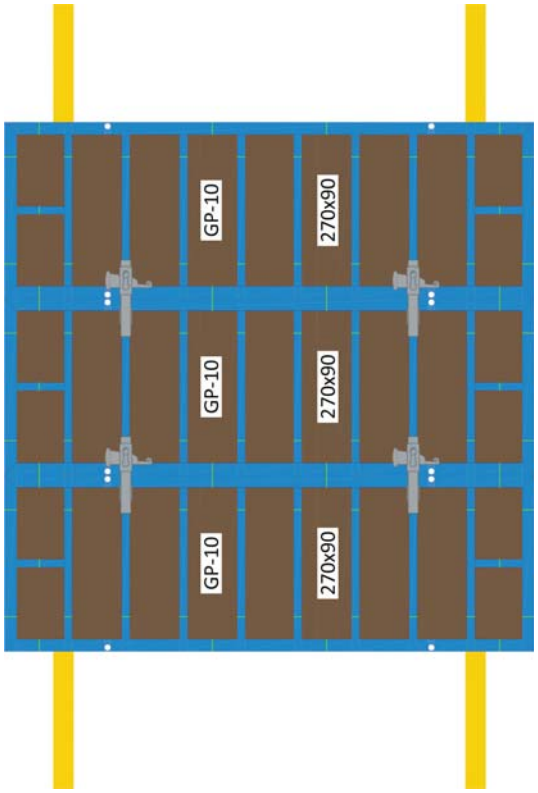
UNION:
For joining the panels use the pin with nut..
For detailed instructions see pag. 28 of this manual.
da pag. 34 a pag. 39

WALL ASSEMBLY
EXAMPLES - RANGE H270

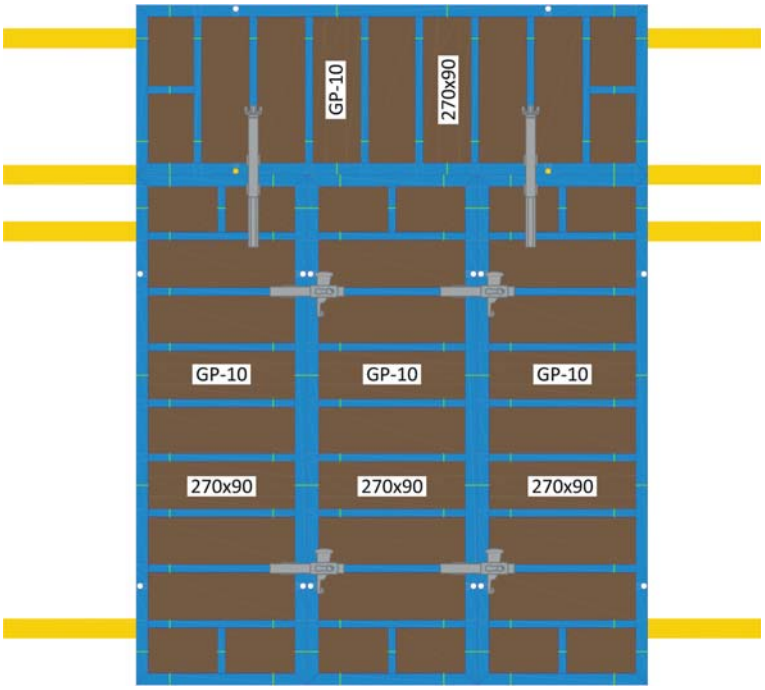
H270



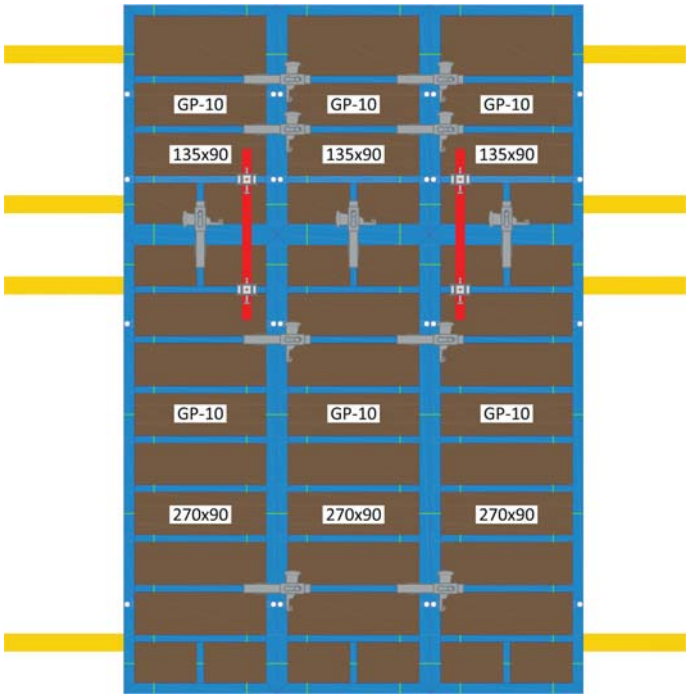
H270



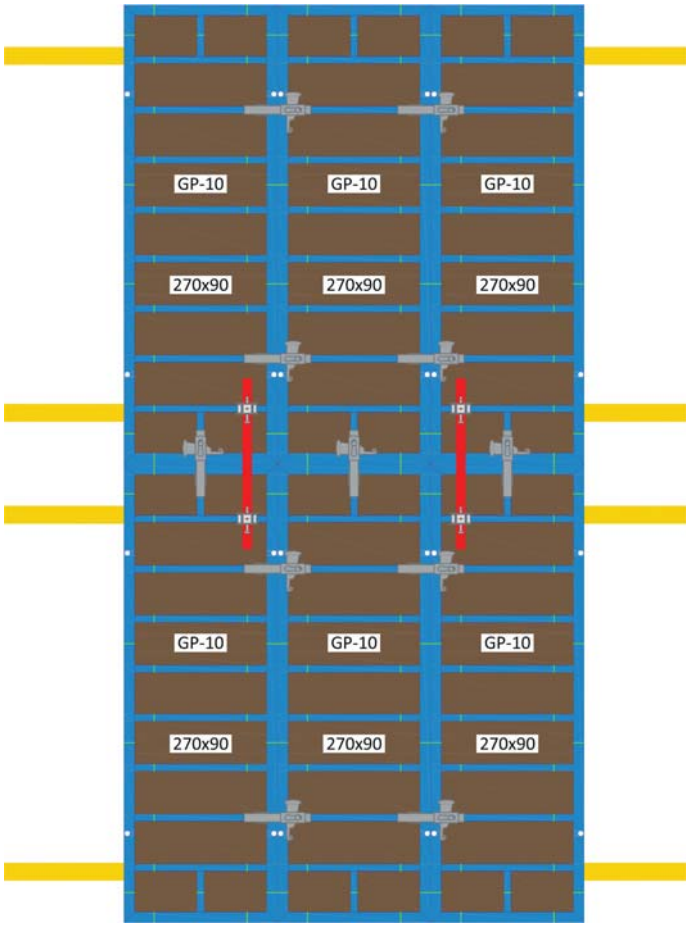
H360

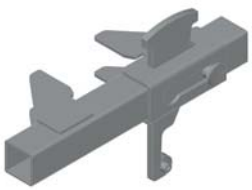


H405



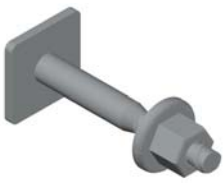
H540





UNION:
For joining the panels use the alignment clamp.
For detailed instructions see pag. 22 of this manual.

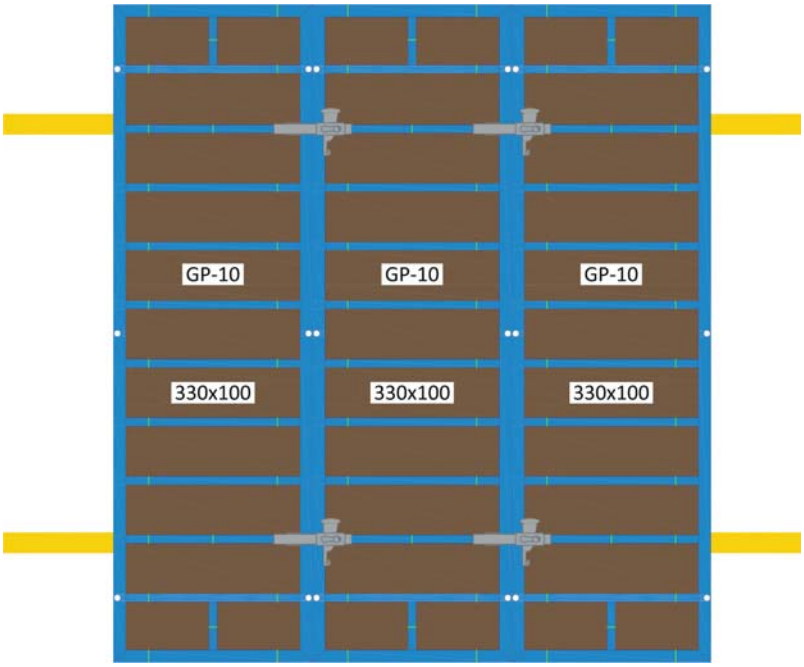
UNION:
For joining the panels use the adjustable clamp.
For detailed instructions see pag. 24 of this manual.



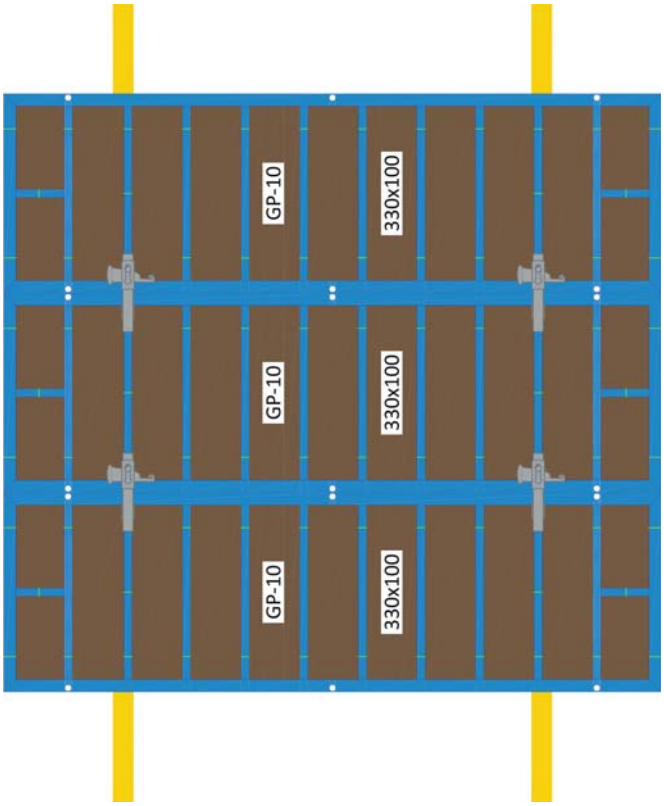
UNION:
For joining the panels use the pin with nut..
For detailed instructions see pag. 28 of this manual.
da pag. 34 a pag. 39

WALL ASSEMBLY
EXAMPLES - RANGE H330

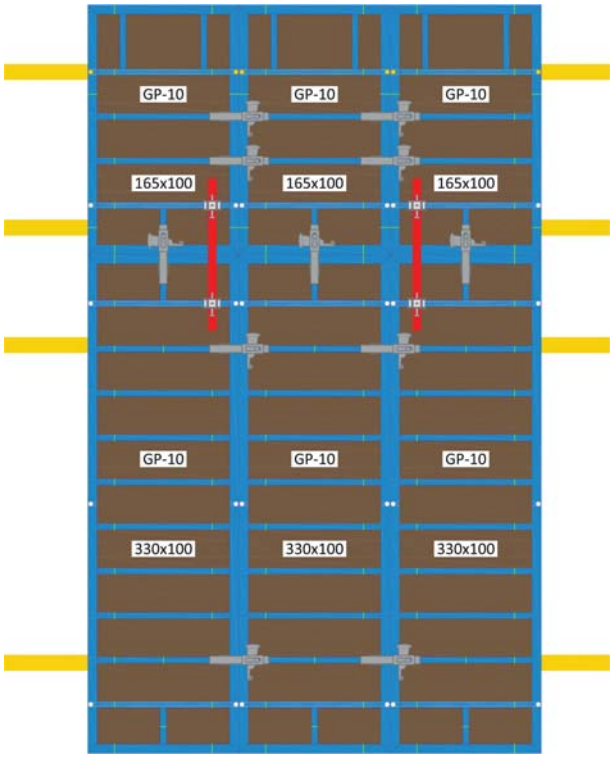
H330



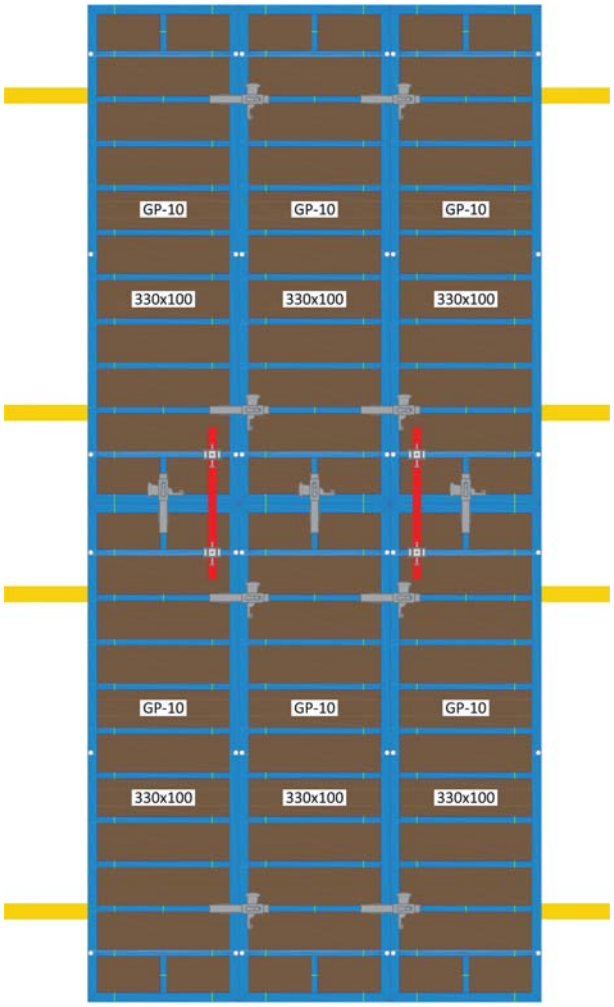
H300

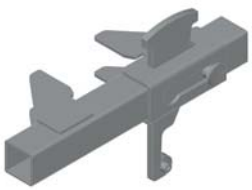


H495



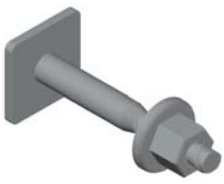
H660





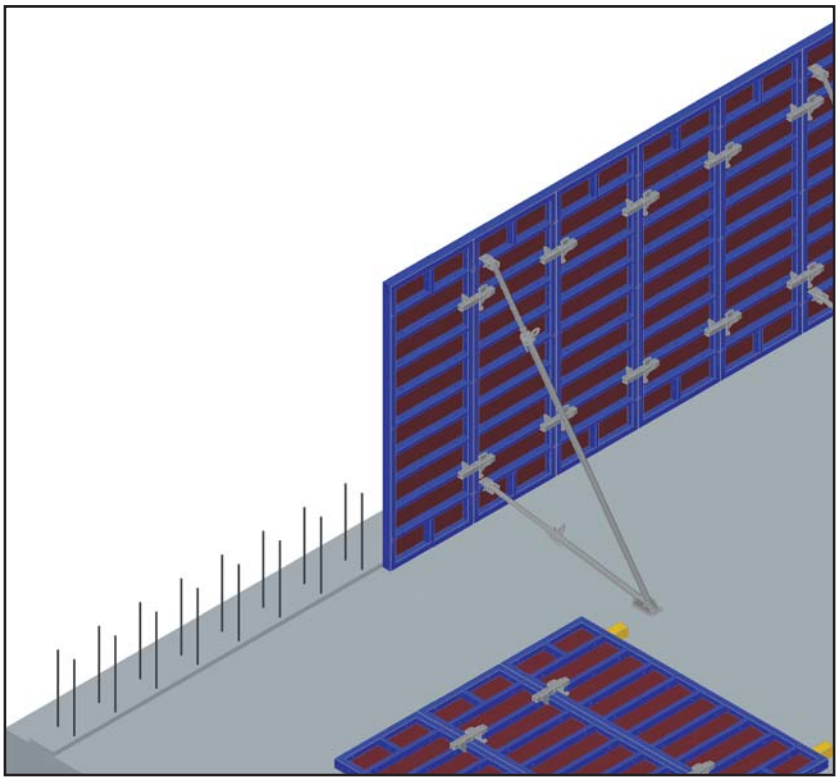
UNION:
For joining the panels use the alignment clamp.
For detailed instructions see pag. 22 of this manual.

UNION:
For joining the panels use the adjustable clamp.
For detailed instructions see pag. 24 of this manual.

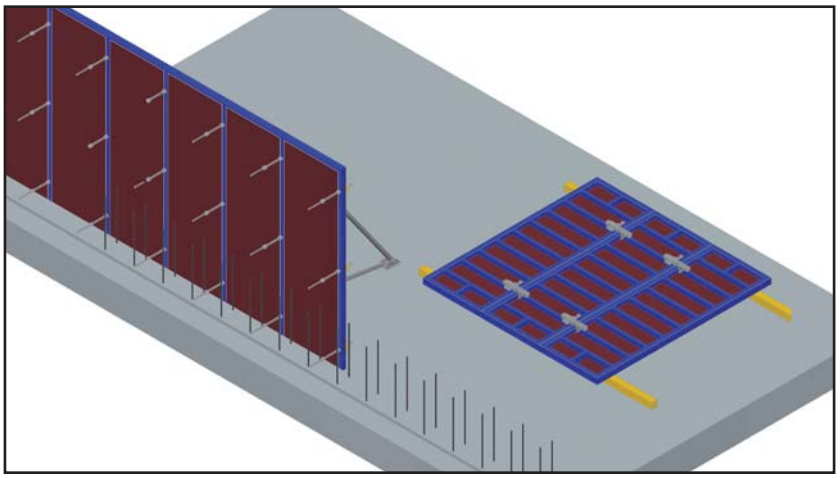


UNION:
For joining the panels use the pin with nut..
For detailed instructions see pag. 28 of this manual.
da pag. 34 a pag. 39

WALL ASSEMBLY



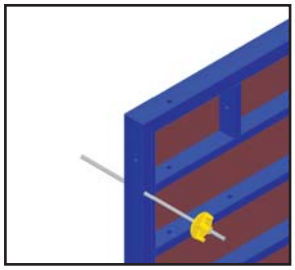
STEP 1:
Place the panels previously connected with the clamps, move the panels with the lifting hook.
Lay the panels in correspondence with the treatment previously carried out.
Once the panels are in place, install the adjustable plunger by attaching it to the floor. (see plumbing instructions on page 176 - 203)
Remove the lifting hooks and repeat this step.



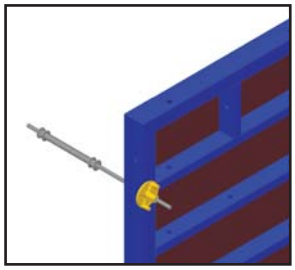
STEP 2:
After positioning the first panel façade, proceed with assembly by inserting the DW15 bars into the holes on the GPrandina “T9026” profile.
Inside, provide a plastic spacer or any other type of spacer.

N.B. plastic material to be used by the user.

STEP A

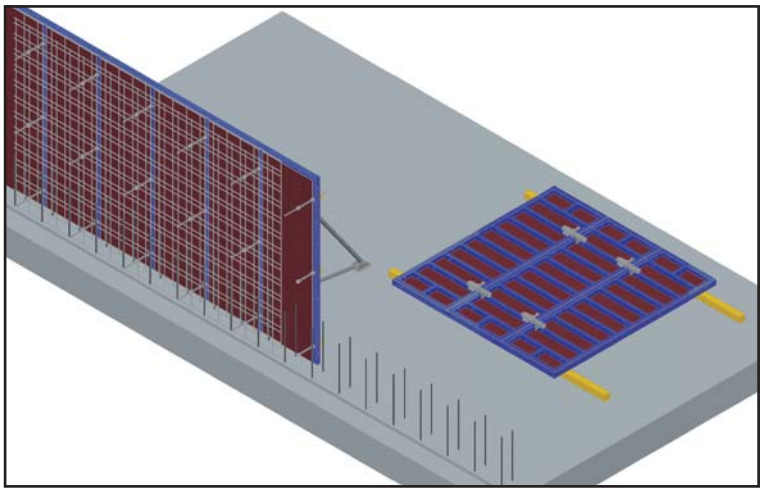


STEP B

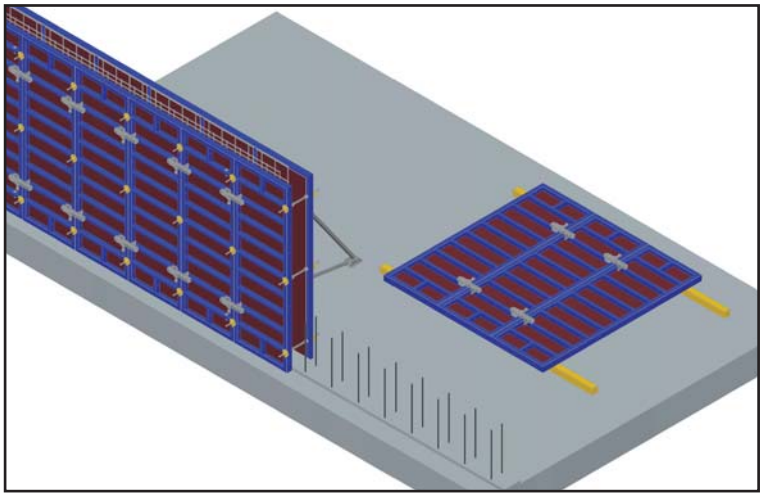


STEP A:
Insert a DW15 bar into the conical bushing as shown in the figure.

STEP B:
Insert the plastic spacer or any other type of spacer.

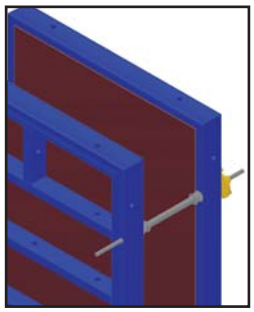


STEP 3:
The user will then install the iron cage.



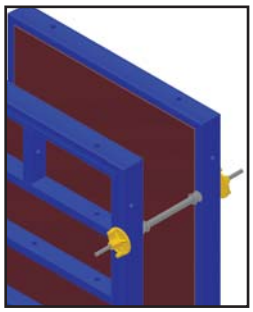
STEP 4:
Close the assembly by positioning the second panel façade ensuring the DW bar and the panel itself with another DW15 nut plate.

STEP C



STEP C:
Close the wall with a panel of measurement equal to the one in front.

STEP D

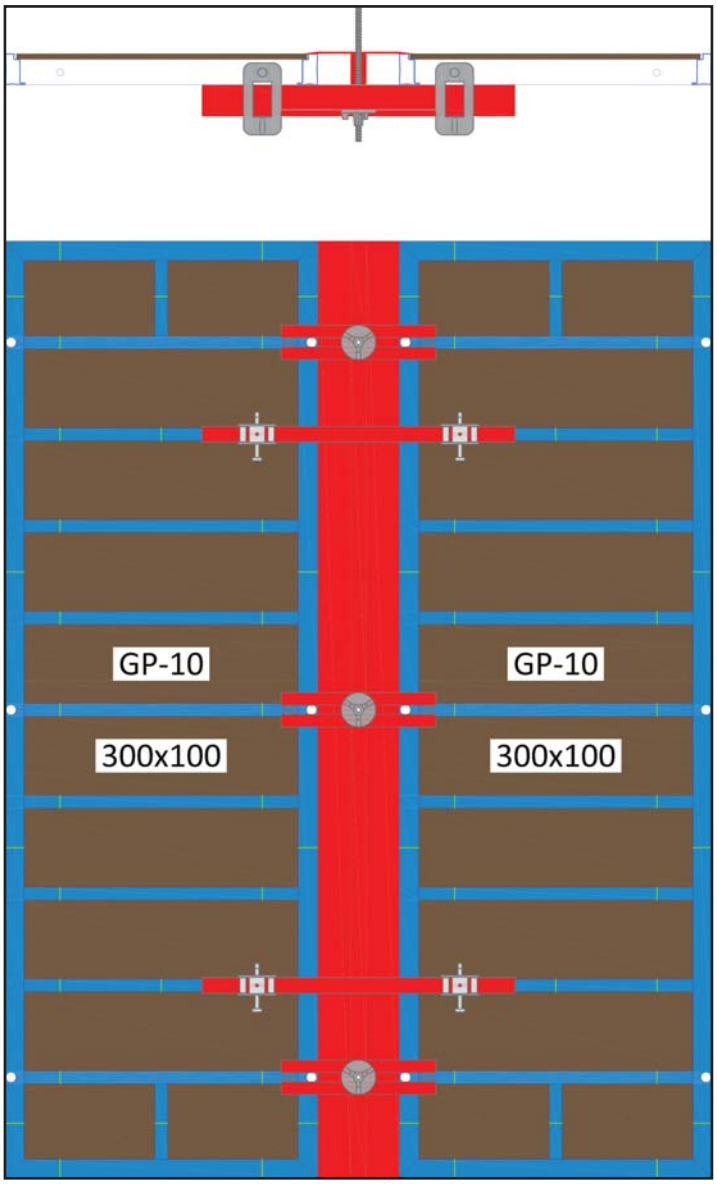


STEP D:
Fix the system with a DW15 bar ensuring perfect tightening.

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

FILLER PLATE 30



DESCRIPTION:

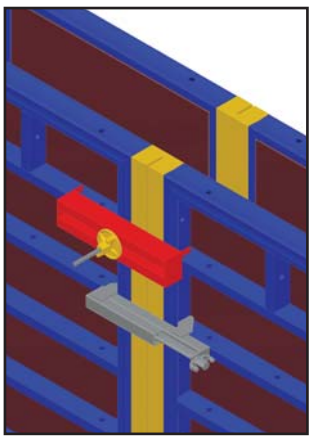
This piece allows you to compensate for the extra space from 6 cm. up to max. 30 cm.

USED MATERIAL:

223151	Filler plate 30 H300	Pcs. 2
223251	Filler plate 30 H150	Pcs. 2
223351	Filler plate 30 H270	Pcs. 2
223451	Filler plate 30 H135	Pcs. 2
223551	Filler plate 30 H330	Pcs. 2
223651	Filler plate 30 H165	Pcs. 2
291142	Alignement braket	Pcs. 8
291143	Alignement pipe cm. 100	Pcs. 4
	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811101	Joint plate 50	Pcs. 6

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

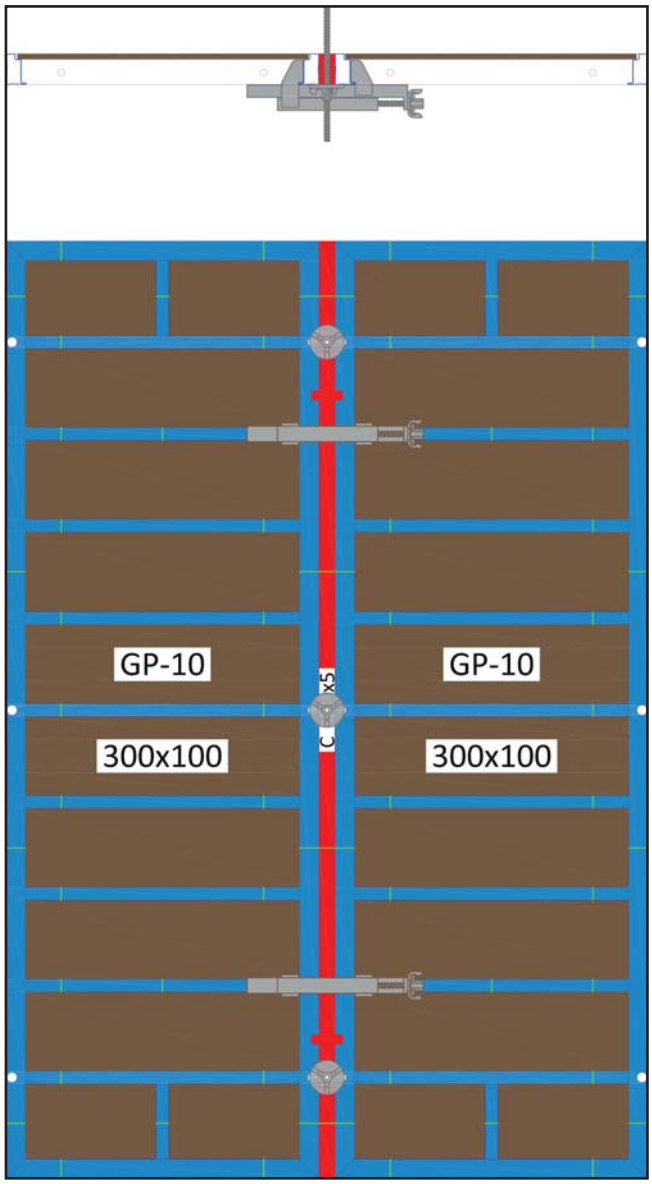


Antirotation system of the filler crosspiece.

ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

FILLER PROFILE 5



DESCRIPTION:
This piece allows you to fill up to max 5 cm.

USED MATERIAL:

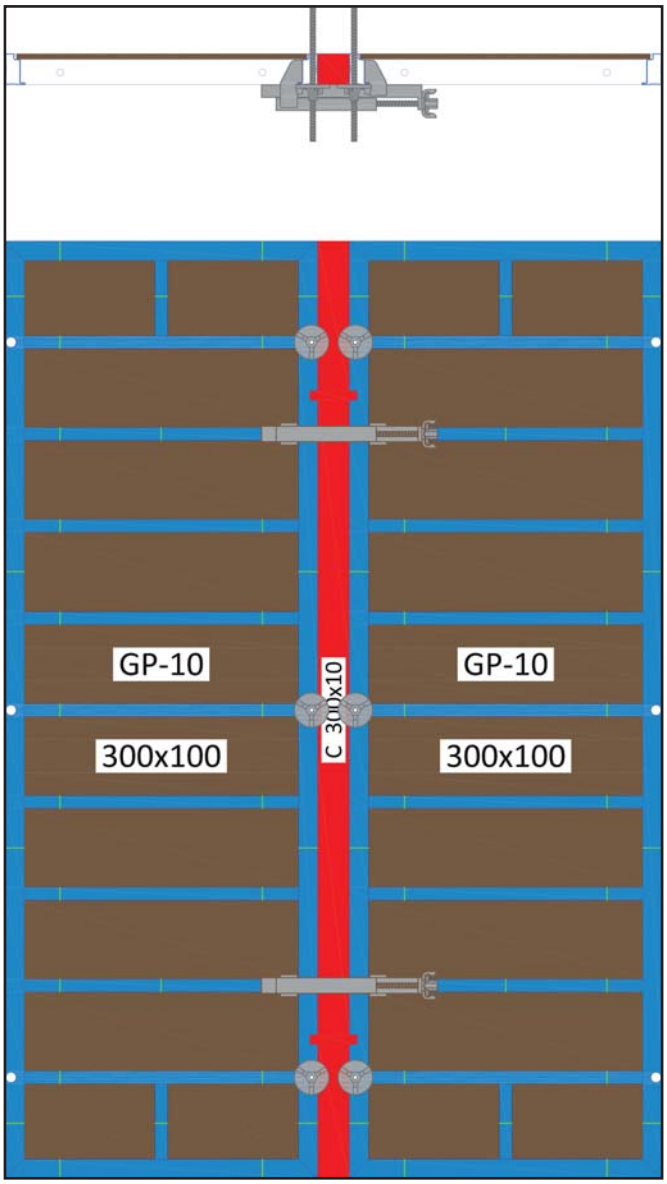
223111	Filler profile 5 H300	Pcs. 2
223211	Filler profile 5 H150	Pcs. 2
223311	Filler profile 5 H270	Pcs. 2
223411	Filler profile 5 H135	Pcs. 2
223511	Filler profile 5 H330	Pcs. 2
223611	Filler profile 5 H165	Pcs. 2
291022	Adjustable clamp	Pcs. 4
	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

ATTENTION:
In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

FILLER PROFILE 10



DESCRIPTION:
This piece allows you to fill up to max 10 cm.

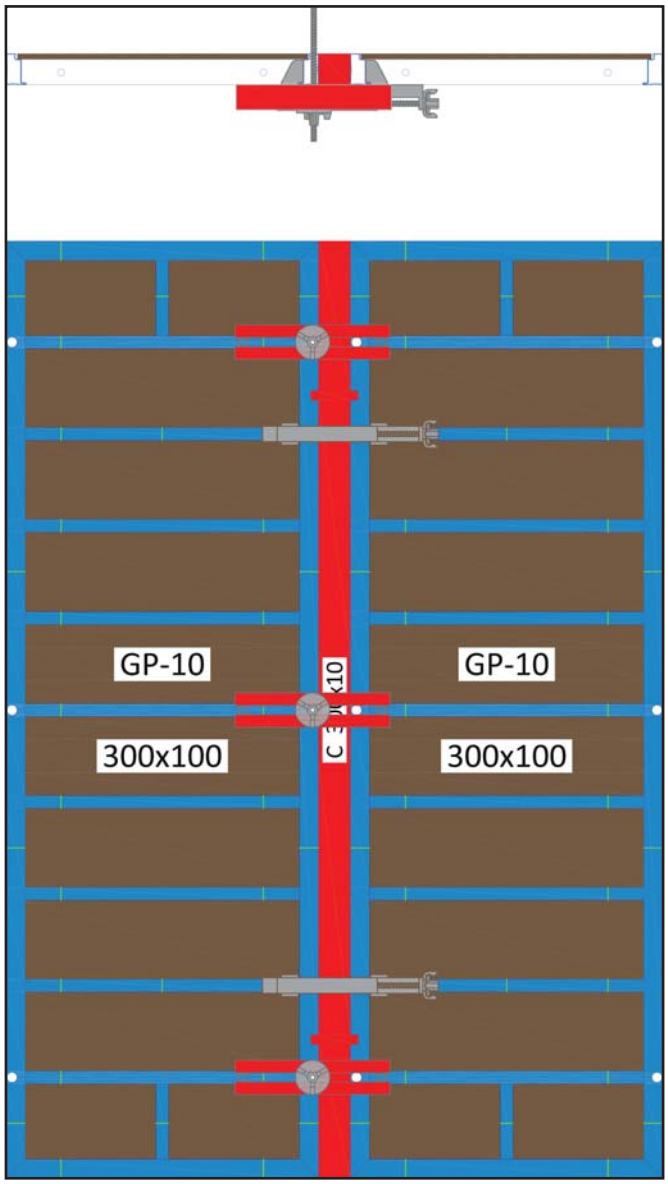
USED MATERIAL:

223101	Filler profile 10 H300	Pcs. 2
223201	Filler profile 10 H150	Pcs. 2
223301	Filler profile 10 H270	Pcs. 2
223401	Filler profile 10 H135	Pcs. 2
223501	Filler profile 10 H330	Pcs. 2
223601	Filler profile 10 H165	Pcs. 2
291022	Adjustable clamp	Pcs. 4
	Tie rod DW15	Pcs. 6
811051	Wing nut DW15	Pcs. 12

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

ATTENTION:
In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.



DESCRIPTION:

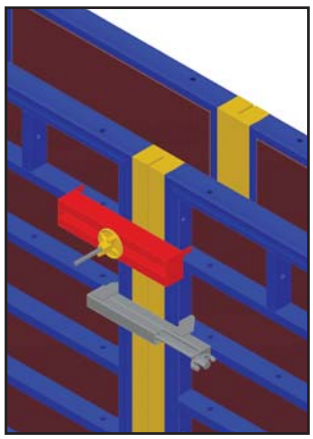
This piece allows you to fill up to max 10 cm.

USED MATERIAL:

223101	Filler profile 10 H300	Pcs. 2
223201	Filler profile 10 H150	Pcs. 2
223301	Filler profile 10 H270	Pcs. 2
223401	Filler profile 10 H135	Pcs. 2
223501	Filler profile 10 H330	Pcs. 2
223601	Filler profile 10 H165	Pcs. 2
291022	Adjustable clamp	Pcs. 4
	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811101	Joint plate 50	Pcs. 6

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

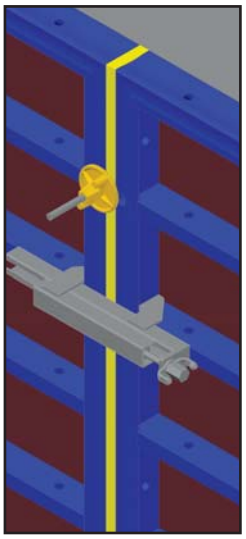


Antirotation system of the filler crosspiece.

ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

WOOD FILLER

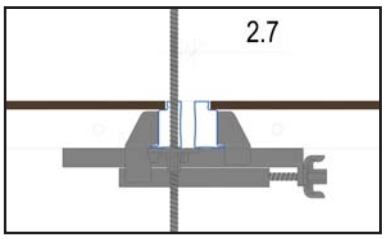


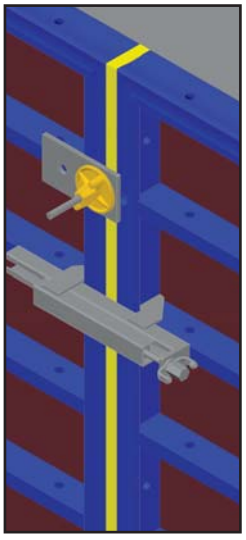
DESCRIPTION:

This system allows to compose a filler charged to the customer with a maximum size of 2,7 cm.

USED MATERIAL:

291022	Adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6



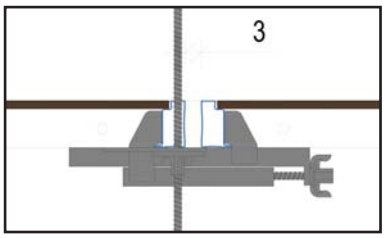


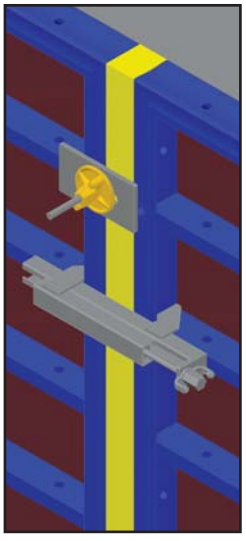
DESCRIPTION:

This system allows to compose a filler charged to the customer with a maximum size of 3,0 cm.

USED MATERIAL:

291022	Adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811111	Base plate 220x120x10	Pcs. 6



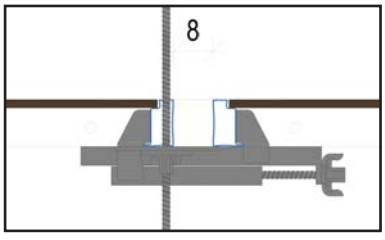


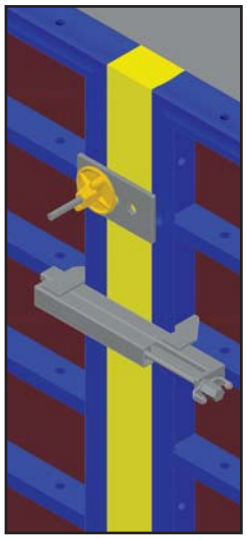
DESCRIPTION:

This system allows to compose a filler charged to the customer with a maximum size of 8,0 cm.

USED MATERIAL:

291022	Adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811111	Base plate 220x120x10	Pcs. 6



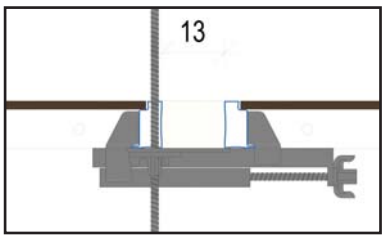


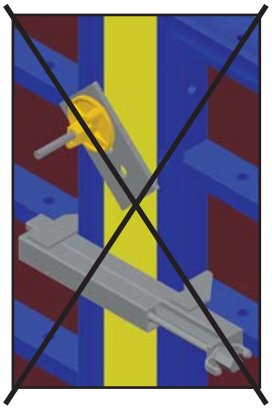
DESCRIPTION:

This system allows to compose a filler charged to the customer with a maximum size of 13,0 cm.

USED MATERIAL:

291022	Adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811111	Base plate 220x120x10	Pcs. 6





ATTENTION:

Before, during and after casting the concrete, always check the correct position of the abutment plate: it must not rotate as shown in the figure, it must absolutely remain in a horizontal position.

GPrandina declines all responsibility for the improper use of this article.

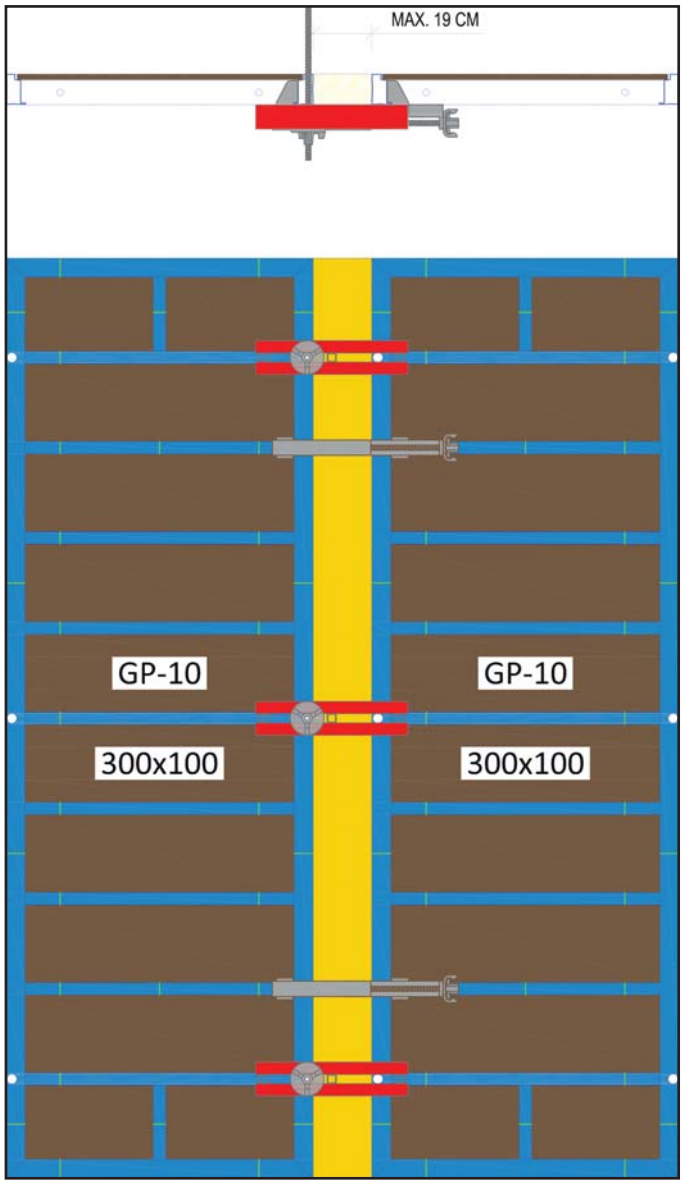
ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

WOOD FILLER



DESCRIPTION:

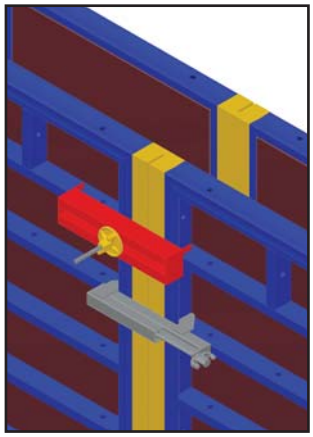
This system allows to compose a filler charged to the customer with a maximum size of 19,0 cm.

USED MATERIAL:

291022	Adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811101	Joint plate 50	Pcs. 6

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

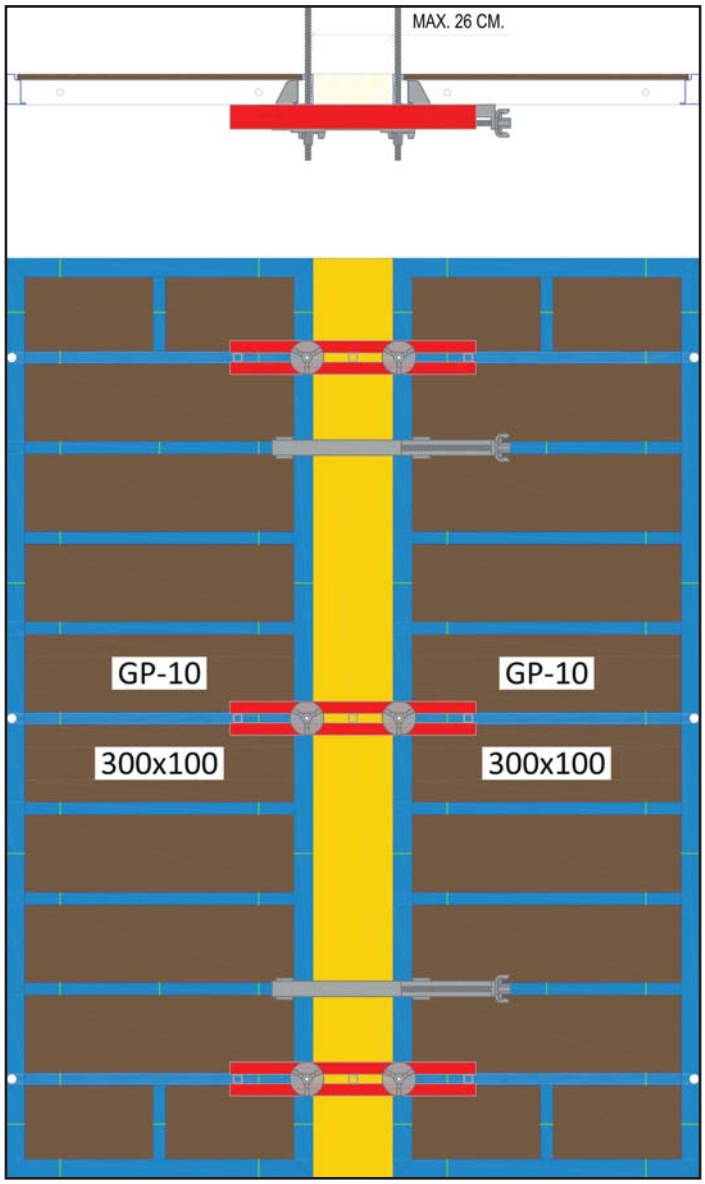
ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550



Antirotation system of the filler crosspiece.

ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.



DESCRIPTION:

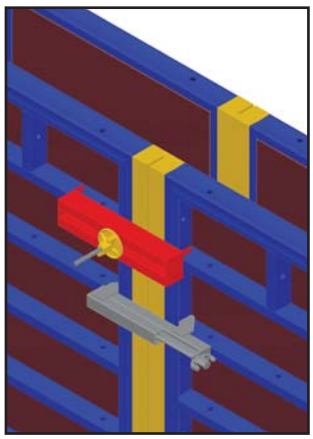
This system allows to compose a filler charged to the customer with a maximum size of 26,0 cm.

USED MATERIAL:

291032	Long adjustable clamp	Pcs. 4
☞	Tie rod DW15	Pcs. 3
811051	Wing nut DW15	Pcs. 6
811102	Joint plate 80	Pcs. 6

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550



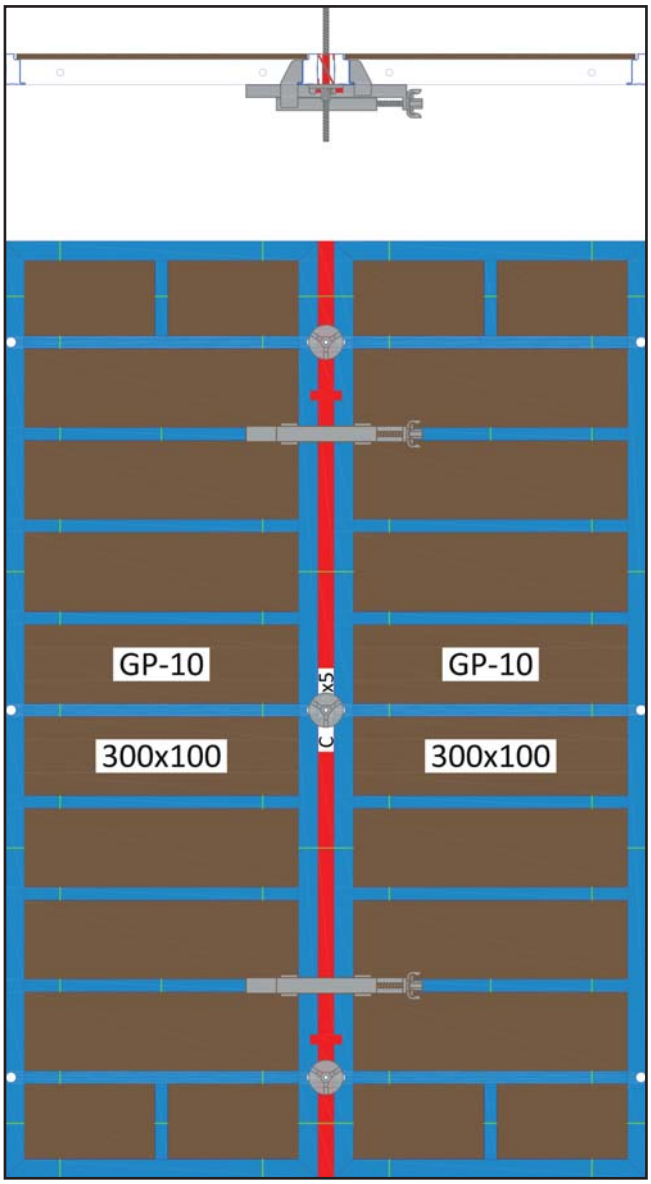
Antirotation system of the filler crosspiece.

⚠

ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

STRIKING FILLER PLATE 5



DESCRIPTION:

This piece allows to compensate max. 5 cm. and facilitates the dismantling of formworks used in confined spaces.

USED MATERIAL:

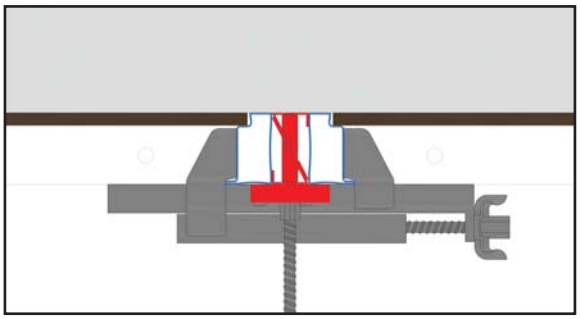
223131	Striking filler plate 5 H300	Pcs. 2
223231	Striking filler plate 5 H150	Pcs. 2
223331	Striking filler plate 5 H270	Pcs. 2
223431	Striking filler plate 5 H135	Pcs. 2
223531	Striking filler plate 5 H330	Pcs. 2
223631	Striking filler plate 5 H165	Pcs. 2
291022	Adjustable clamp	Pcs. 4
	Tie rod DW15	Pcs. 6
811051	Wing nut DW15	Pcs. 12

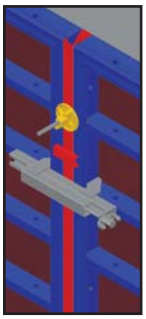
CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

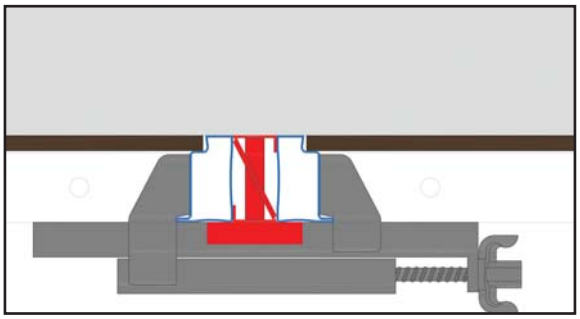
ATTENTION:

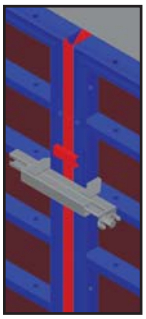
In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.



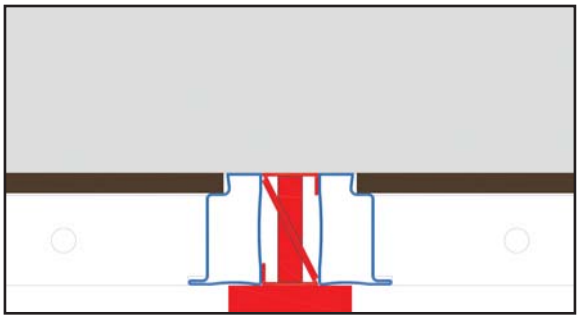


STEP 1:
The disassembly filler is in place together with the formwork and the connection and anchorage accessories.

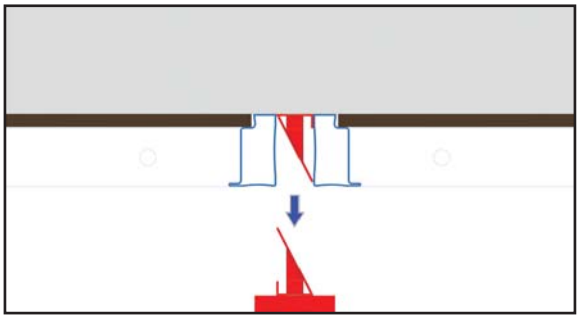


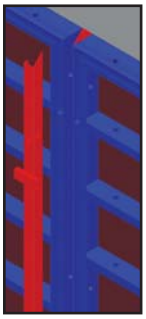


STEP 2:
Remove the DW15 nut plate and remove the DW15 bar from the wall and from the disassembly filler.

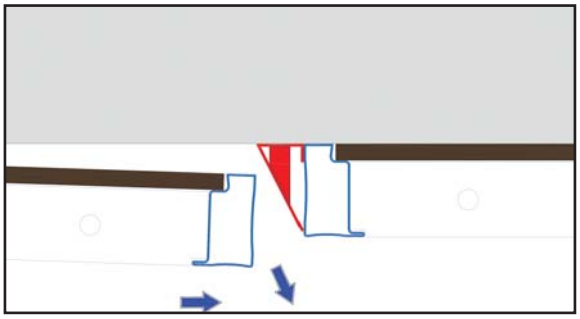


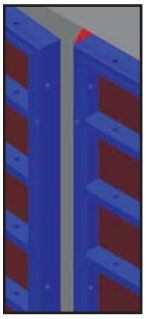
STEP 3:
Remove the variable GP-10 clamp that tightened the GP-10 panels and the disassembly filler.
Unscrew the large screw so as to loosen the clamp clamping force.





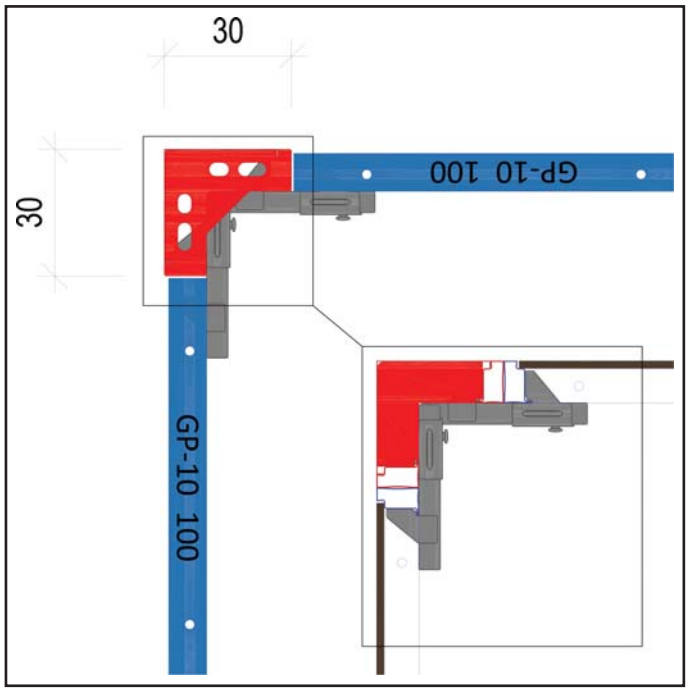
STEP 4:
Extract the first piece of the disassembly filler levering between the formwork and the U-shaped iron on the compensation.





STEP 5:
Remove the GP-10 panel and consequently the other pieces that made up the frontal face.

INTERNAL CORNER 30x30

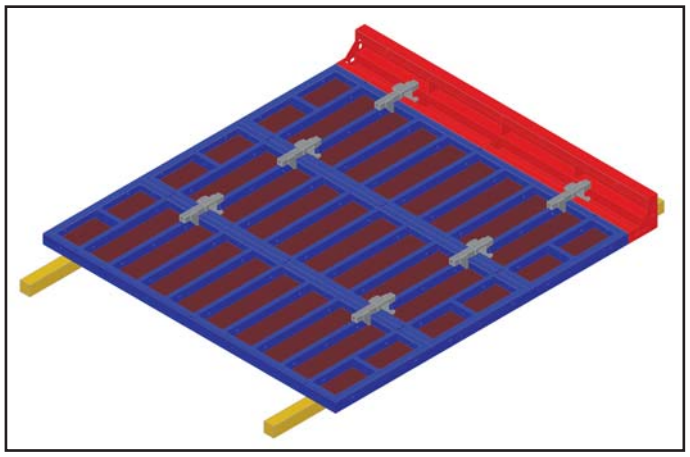


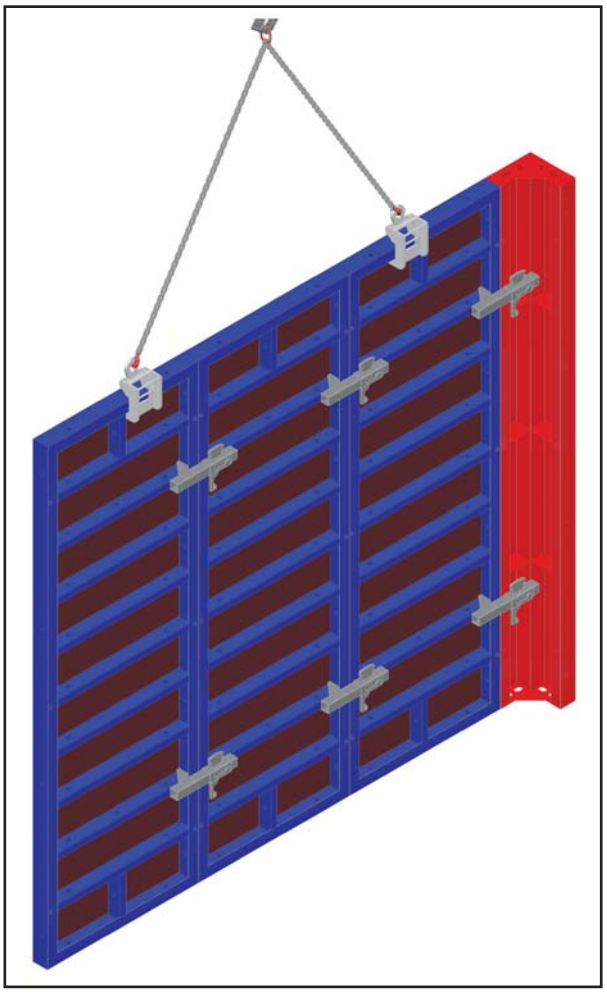
DESCRIPTION:

This article allows you to create 90 ° internal corners. It must be connected to the GP-10 panels by means of clamps and / or plugs.
The internal corner is made entirely of S275JR steel.
The external finish is composed of powder coating and / or hot galvanizing.

USED MATERIAL:

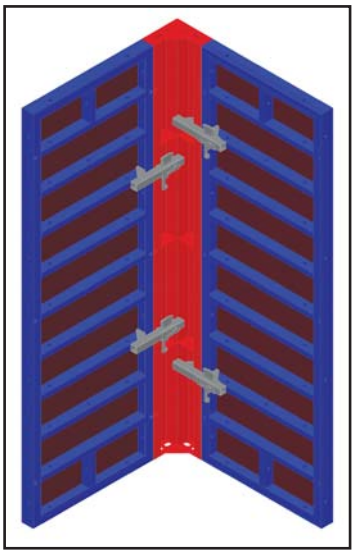
222111	Internal corner 30x30 H300	Pcs. 1
222211	Internal corner 30x30 H150	Pcs. 1
222311	Internal corner 30x30 H270	Pcs. 1
222411	Internal corner 30x30 H135	Pcs. 1
222511	Internal corner 30x30 H330	Pcs. 1
222611	Internal corner 30x30 H165	Pcs. 1





ATTENTION:

Use only original accessories GPrandina srl.
Gprandina srl declines all responsibility for incorrect use of the system.

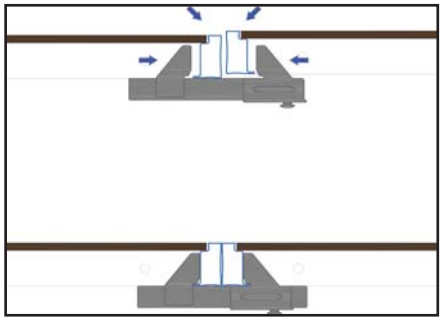


UNION WITH ALIGNMENT CLAMP:

To connect the 30X30 internal corner to the GP-10 panels, use the alignment clamps to match the GPrandina “T2096” steel profile or the aluminum “vzFN1424” profile.

USED MATERIAL:

291012 Alignement clamp GP-10 Pcs. 4

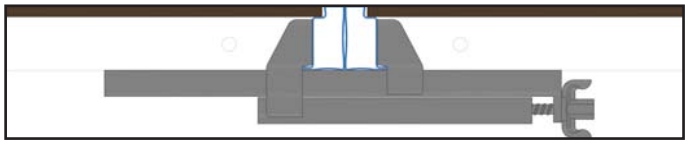


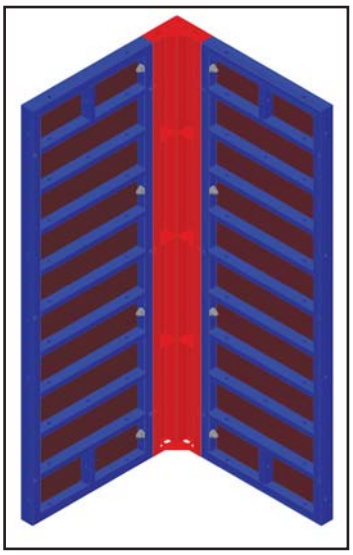
UNION WITH ADJUSTABLE CLAMP:

To connect the 30X30 internal corner to the GP-10 panels, use the adjustable clamps to match the GPrandina “T2096” steel profile or the aluminum “vzFN1424” profile

USED MATERIAL:

291022 Adjustable clamp GP-10 Pcs. 4



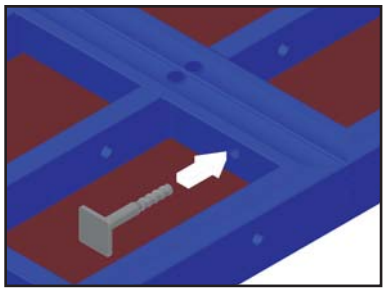


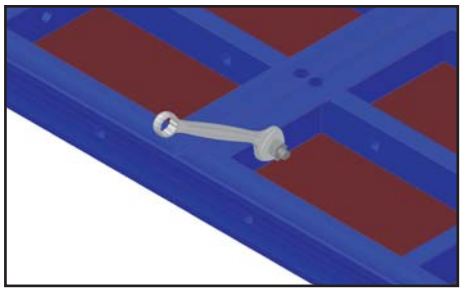
UNION WITH PIN AND WEDGE:

To connect the 30X30 internal corner to the GP-10 panels, use the pins and wedges to match the GPrandina “T2096” steel profile.

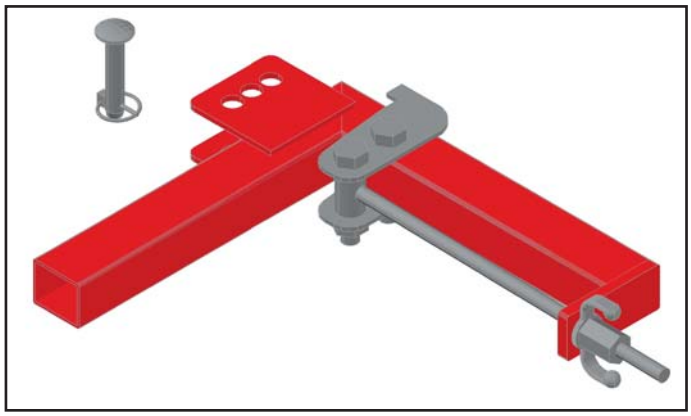
USED MATERIAL:

291186 Spina fissa lunga L.140 mm Pcs. 8





CLAMP FOR INTERNAL CORNER - ART. 291052 - KG. 9,0



DESCRIPTION:

This article allows you to create 90 ° internal corners.
It connects to the GP-10 panels using a L.90 mm plug and the special mechanism consisting of a fixing bar and two shaped plates.
The internal angle clamp is made entirely of S275JR steel.
The external finish is composed of powder coating and / or hot galvanizing.

USED MATERIAL WITH PANEL RANGE H300:

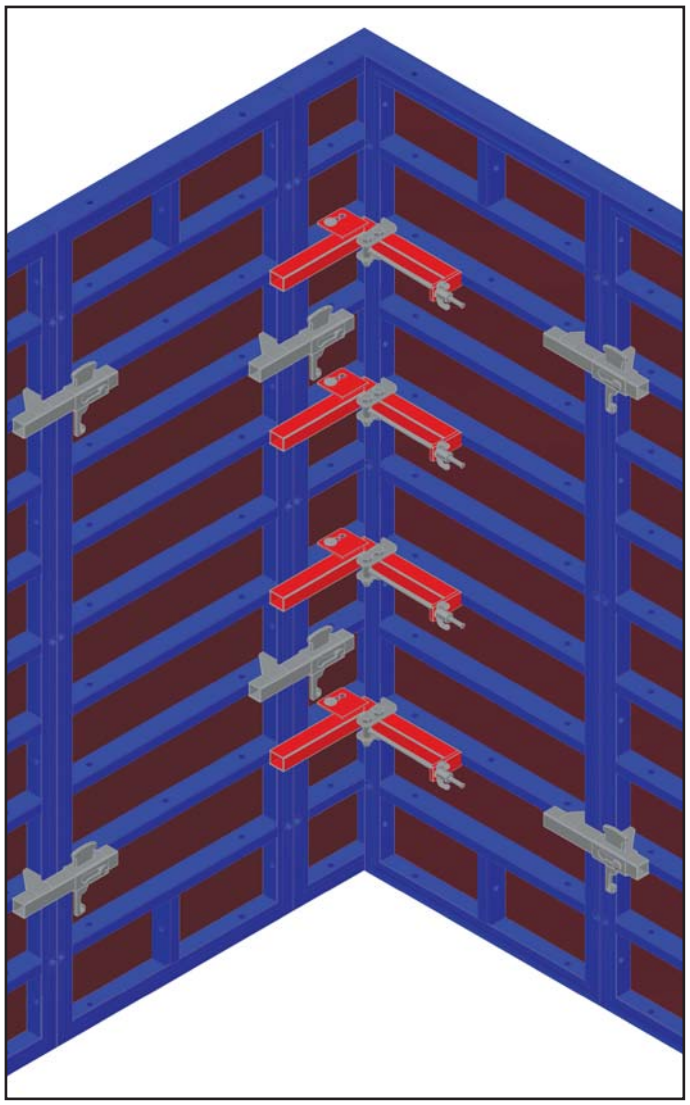
291052 Morsa angolo interno Pcs. 4

USED MATERIAL WITH PANEL RANGE H150:

291052 Morsa angolo interno Pcs. 2

USED MATERIAL WITH PANEL RANGE H270:

291052 Morsa angolo interno Pcs. 4



USED MATERIAL WITH PANEL RANGE H135:

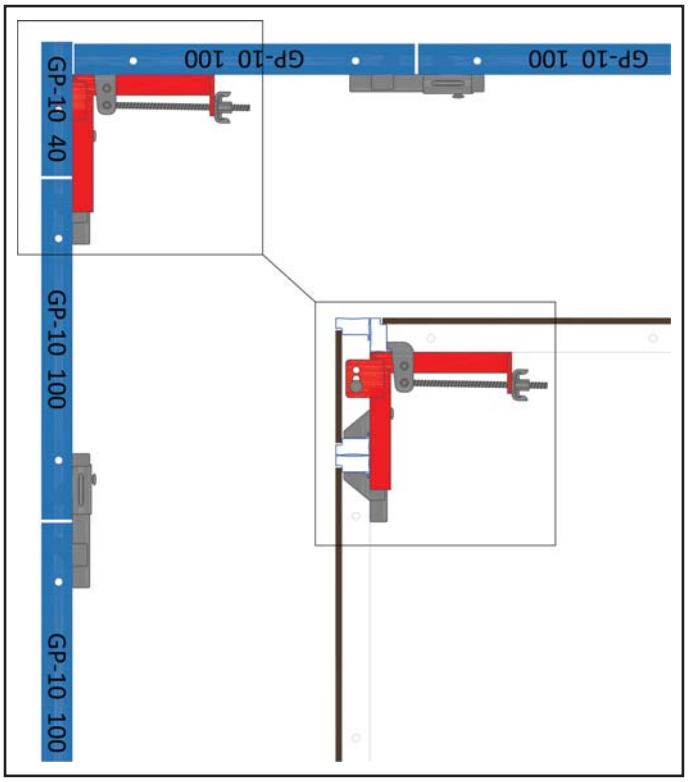
291052 Morsa angolo interno Pcs. 2

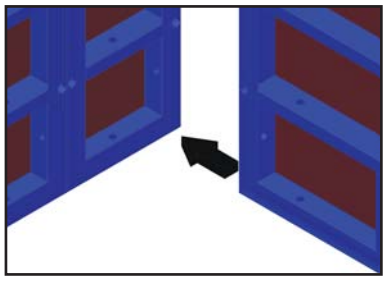
USED MATERIAL WITH PANEL RANGE H330:

291052 Morsa angolo interno Pcs. 5

USED MATERIAL WITH PANEL RANGE H165:

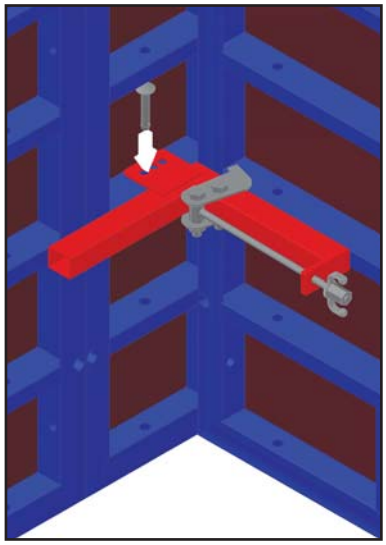
291052 Morsa angolo interno Pcs. 2





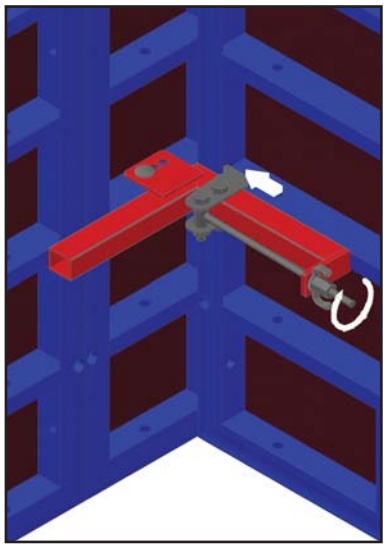
STEP 1:

Arrange the GP-10 panels perpendicular to each other; they must form a 90 ° angle.
The edge profile 10 cm thick. a GP-10 panel must rest on the face where the reinforcements of the other GP-10 panel are present.
Externally, the two panels must perfectly match.



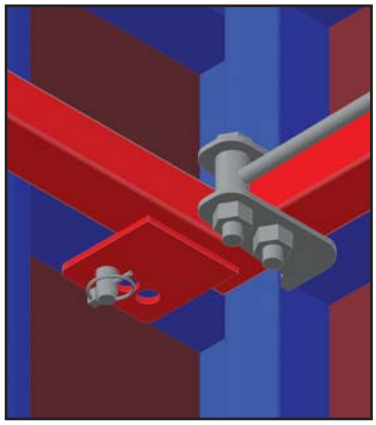
STEP 2:

Open the GP-10 internal corner clamp mechanism by unscrewing the wing nut until it stops.
Position the GP-10 internal corner clamp at the reinforcement bars of the GP-10 panels.
Insert the supplied L.90 mm plug in correspondence with the hole on the plate and on the hole in the reinforcing crosspiece.



STEP 3:

Screw the wing nut until the perfect tightening between the panels is reached.

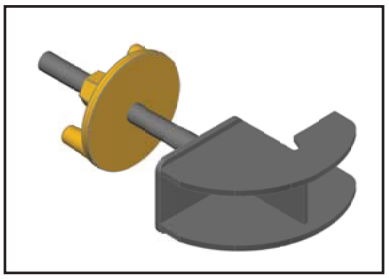


ATTENTION:

The GP-10 internal corner clamp has limited resistance.
Use the internal corner clamp GP-10 only to compose internal angles in exceptional cases and / or in the absence of space.
If possible always use the internal 30x30 corner to compose internal angles.

The minimum size of panels GP-10 usable with this system is 40 cm.

OUTSIDE CORNER WITH PANEL PILLAR

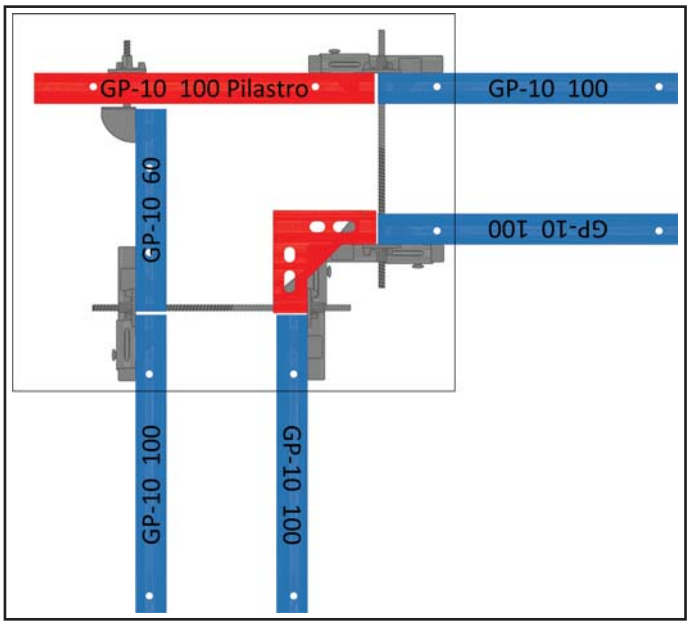


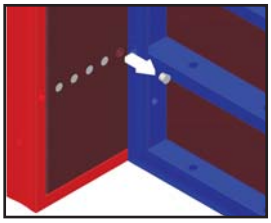
DESCRIPTION:

In order to compose the external angles, the pillar panel and the pillar clamp can be used in combination with each other. In the pillar panel there are holes every 5 cm. which allow various wall thicknesses.

USED MATERIAL:

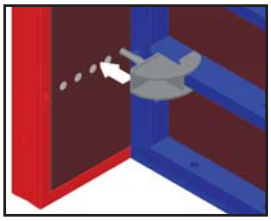
	Panel pilar forated	Pcs. 1
291102	Tie clamp complete	Pcs. ...





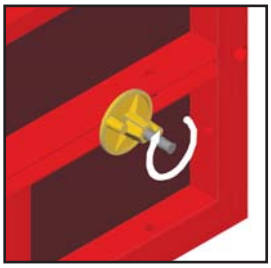
STEP 1:

Remove the PVC plug in correspondence with the required hole.



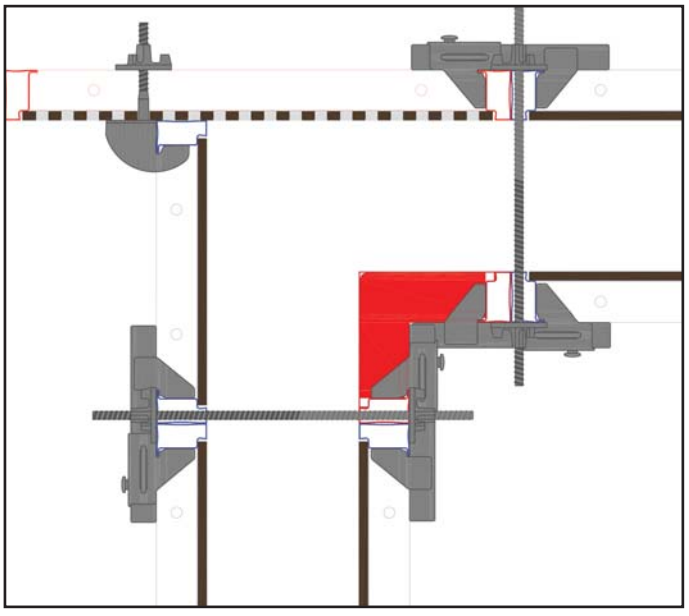
STEP 2:

Insert the pillar clamp in correspondence with the hole on the multilayer making sure that the plates fit perfectly with the profile GPrandina.



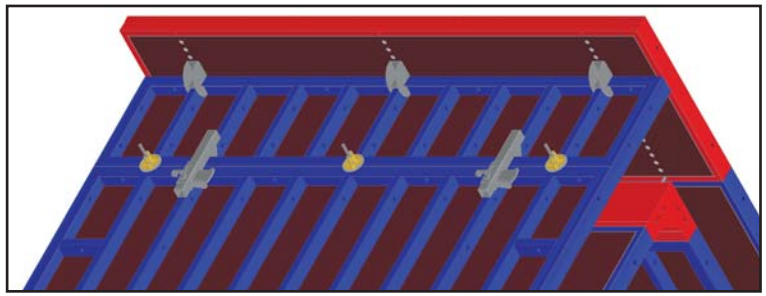
STEP 3:

Screw the DW15 nut plate and tighten with a lever.



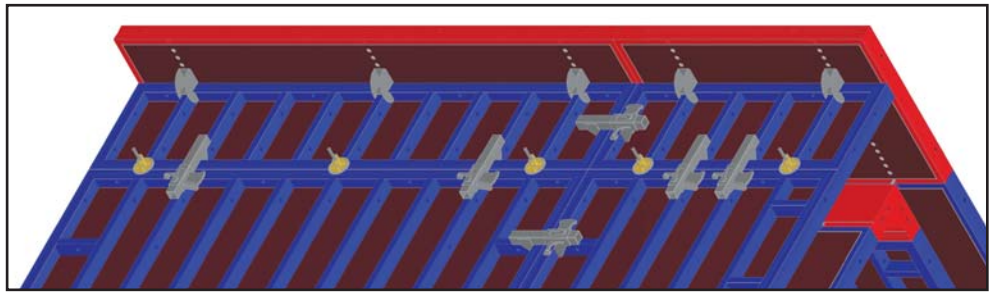
ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.



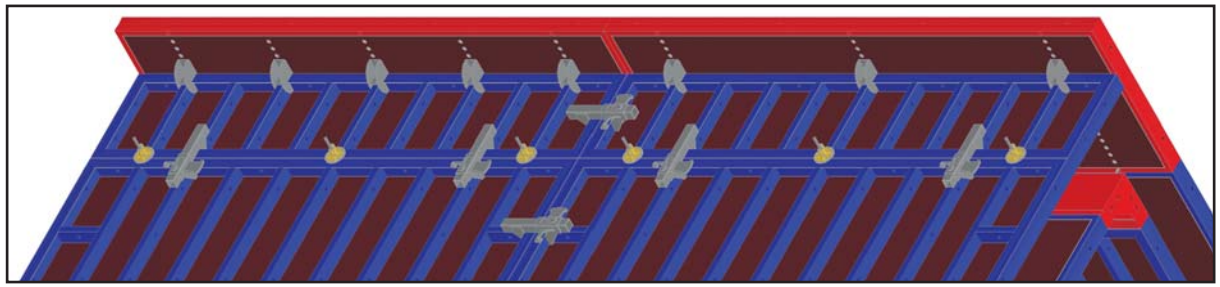
CORNER H300:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 3



CORNER H450:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 5



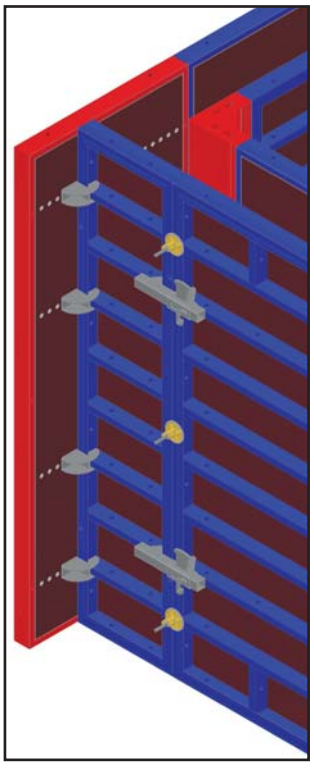
CORNER H600:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 8

OUTSIDE CORNER WITH PANEL PILLAR

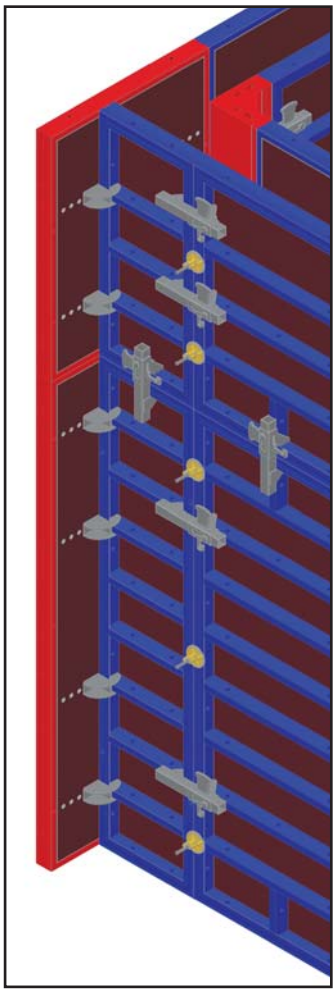
CORNER H270:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 4



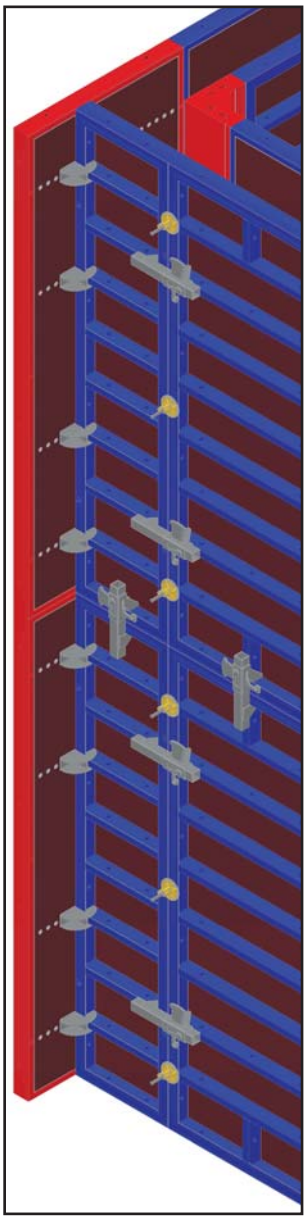
CORNER H405:
Respect the assembly as shown in the drawing

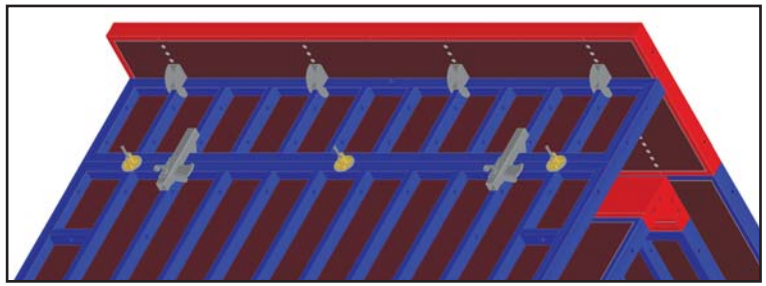
USED MATERIAL:
291102 Tie clamp complete Pcs. 6



CORNER H540:
Respect the assembly as shown in the drawing

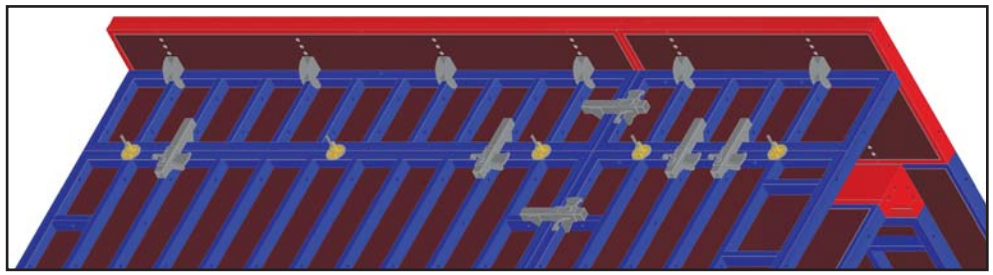
USED MATERIAL:
291102 Tie clamp complete Pcs. 8





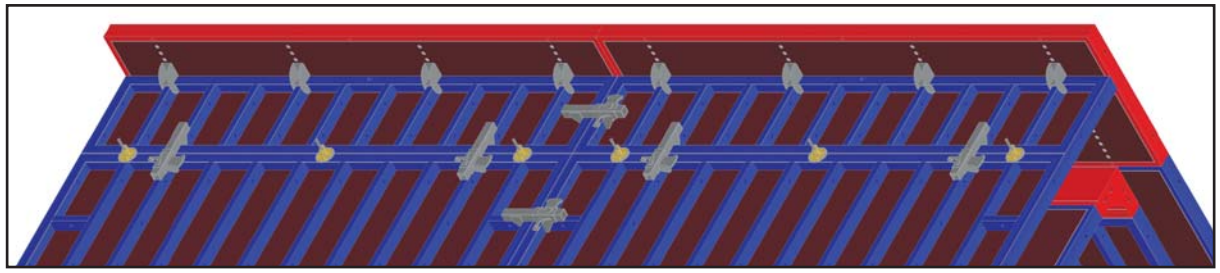
CORNER H330:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 4



CORNER H495:
Respect the assembly as shown in the drawing

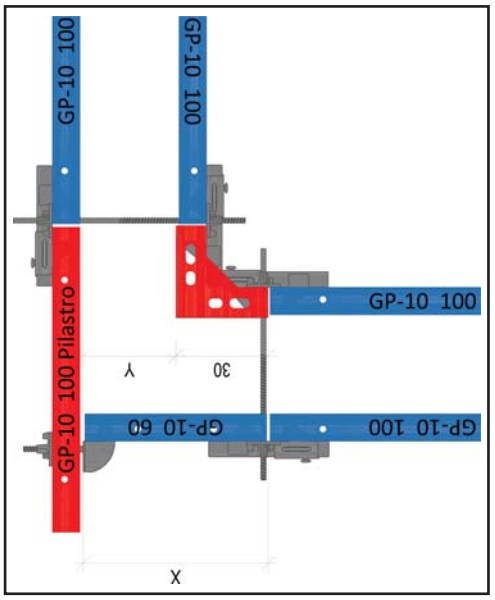
USED MATERIAL:
291102 Tie clamp complete Pcs. 6



CORNER H660:
Respect the assembly as shown in the drawing

USED MATERIAL:
291102 Tie clamp complete Pcs. 8

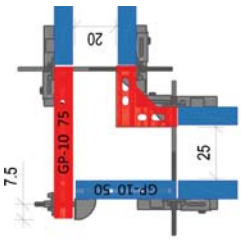
OUTSIDE CORNER WITH PANEL PILLAR

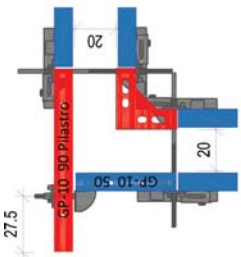


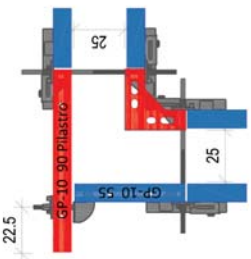
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

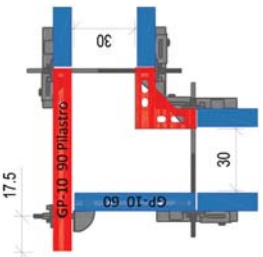
X = Y + 30

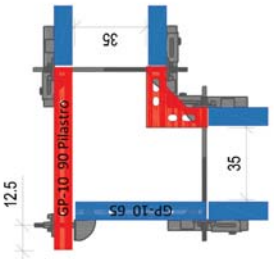
X = panel size to be obtained
Y = wall thickness
30 = fixed internal angle size

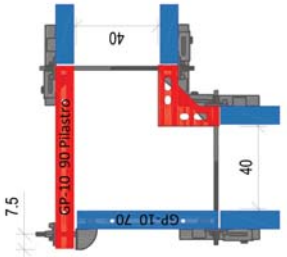


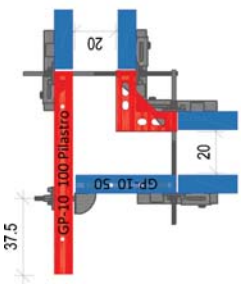


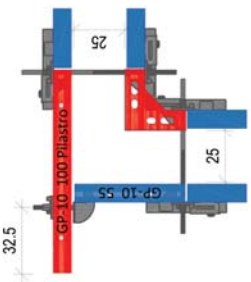


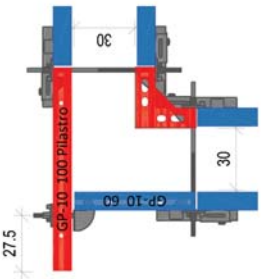


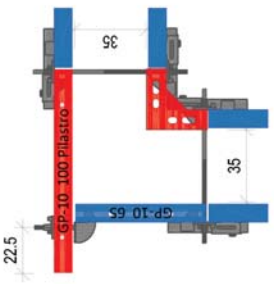


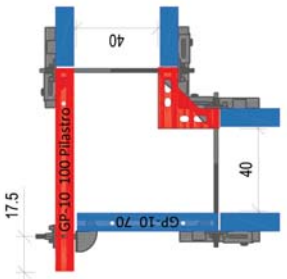


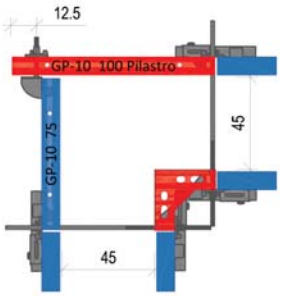


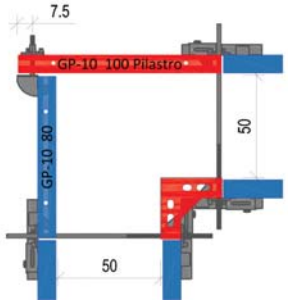


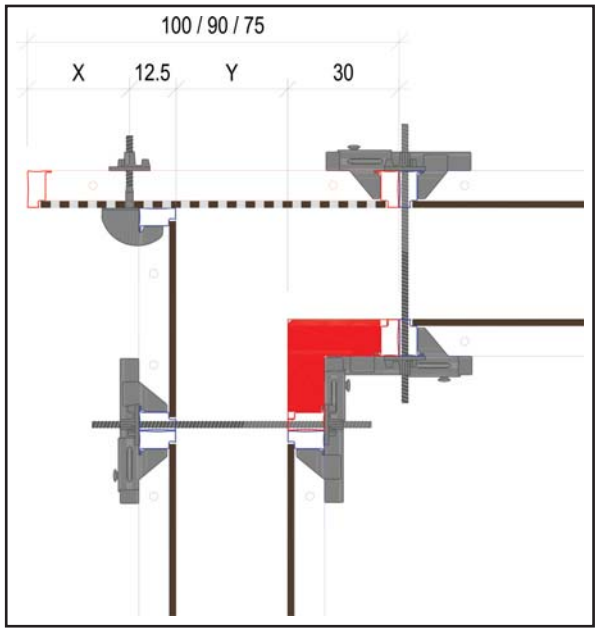












SELECT HOLE ON THE PILLAR PANEL:

To select the hole on the pillar panel where to remove the cap and insert the pillar clamp, perform this simple operation:

If you have a pillar panel 100 cm wide 100 cm

X = 100 - 12.5 - 30 - Y

If you have a pillar panel 100 cm wide 90 cm

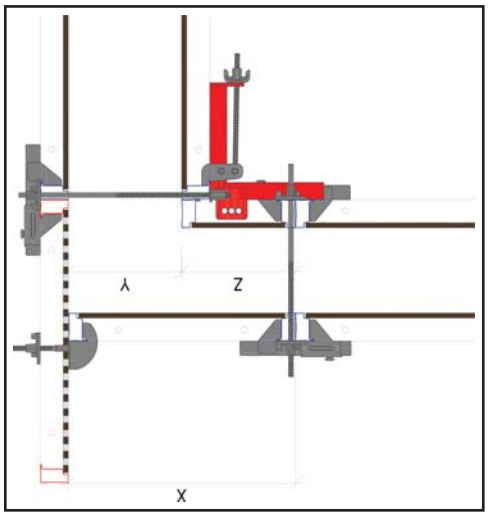
X = 90 - 12.5 - 30 - Y

If you have a pillar panel 100 cm wide 70 cm

X = 75 - 12.5 - 30 - Y

X = hole size to select
Y = wall thickness
30 = fixed internal angle measurement
12.5 = panel thickness + distance between holes
100/90/75 = available panel size

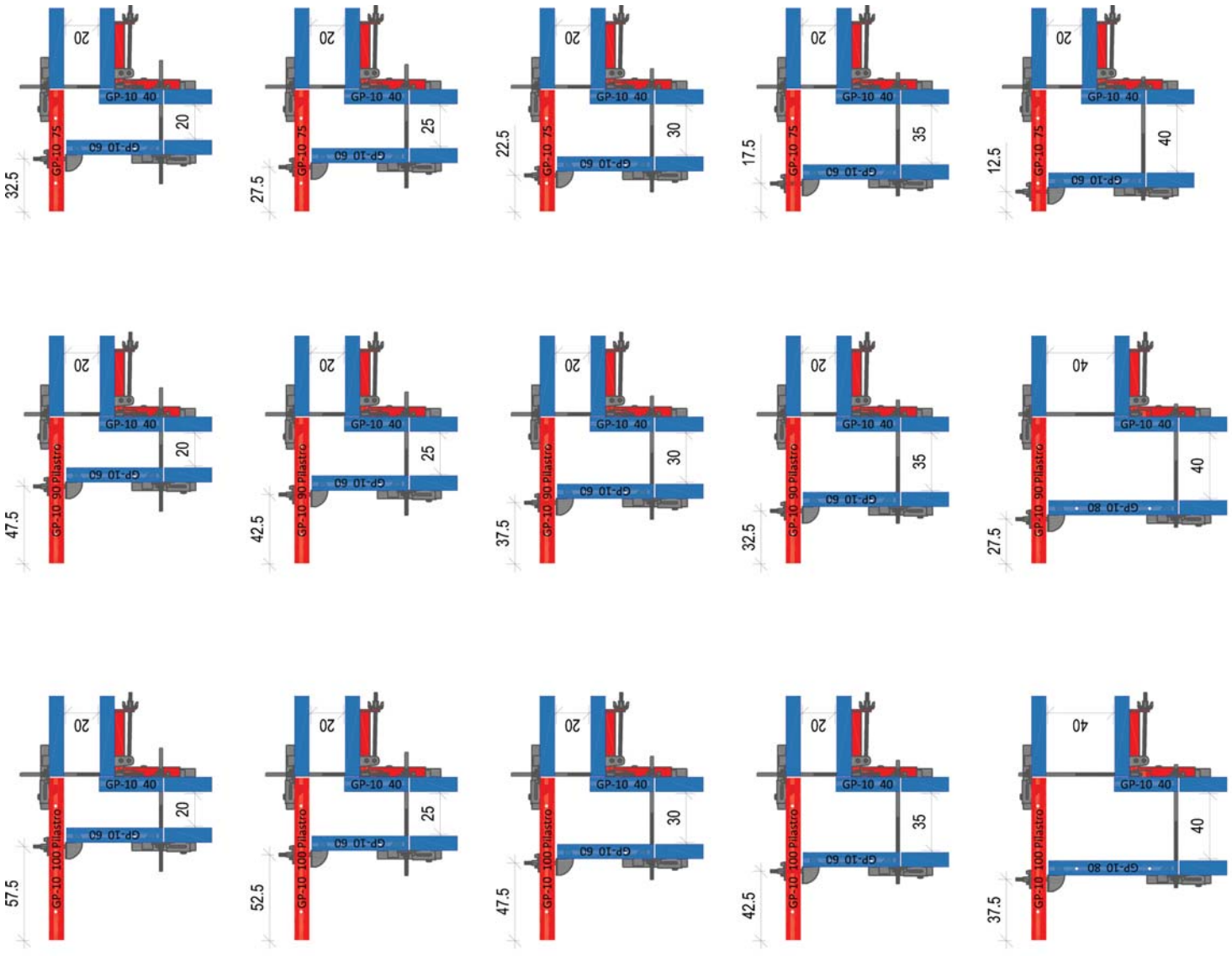
OUTSIDE CORNER WITH PANEL PILLAR

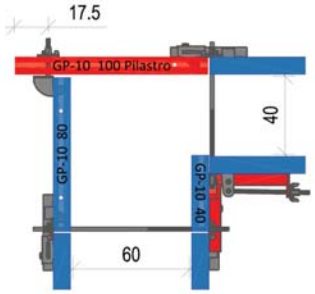


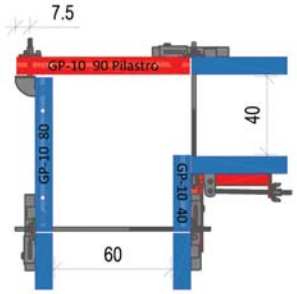
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

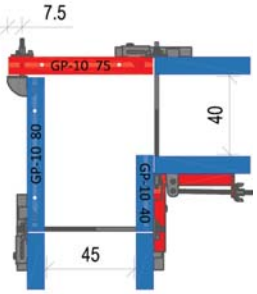
X = Y + Z

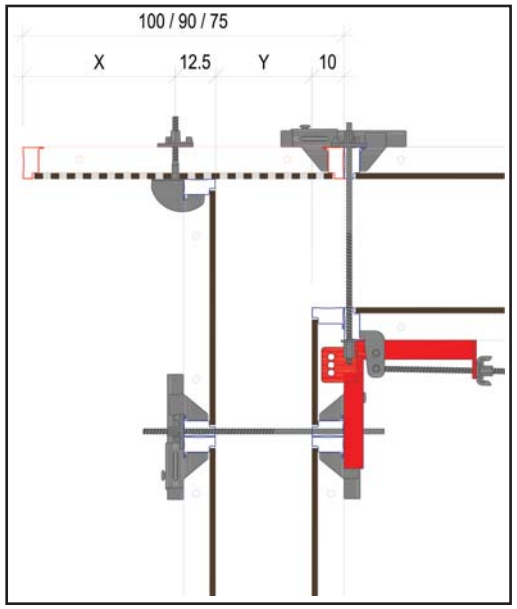
X= panel size to be obtained
Y= wall thickness
Z= panel size (minimum 40 cm.)

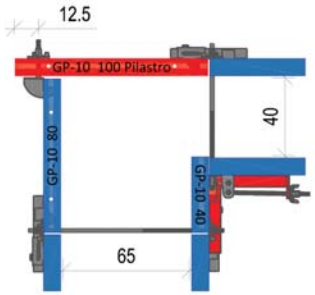


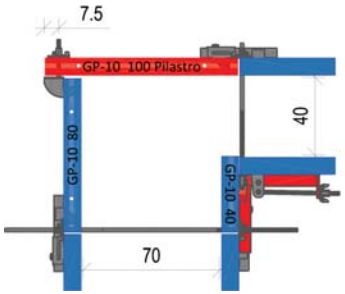












SELECT HOLE ON THE PILLAR PANEL:

To select the hole on the pillar panel where to remove the cap and insert the pillar clamp, perform this simple operation:

If you have a pillar panel 100 cm wide

X = 100 - 12.5 - 10 - Y

If you have a pillar panel 90 cm wide

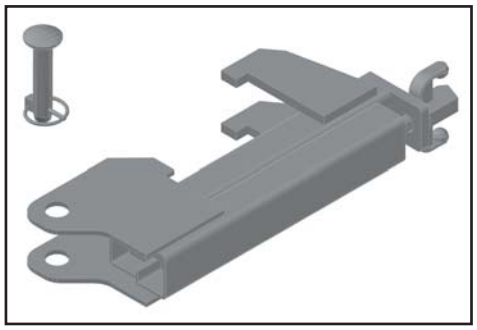
X = 90 - 12.5 - 10 - Y

If you have a pillar panel 70 cm wide

X = 75 - 12.5 - 10 - Y

X=	**hole size to select**
Y=	**wall thickness**
10=	**fixed size of the pillar panel GP-10**
12.5=	**panel thickness + distance between holes**
100/90/75=	**available panel size**

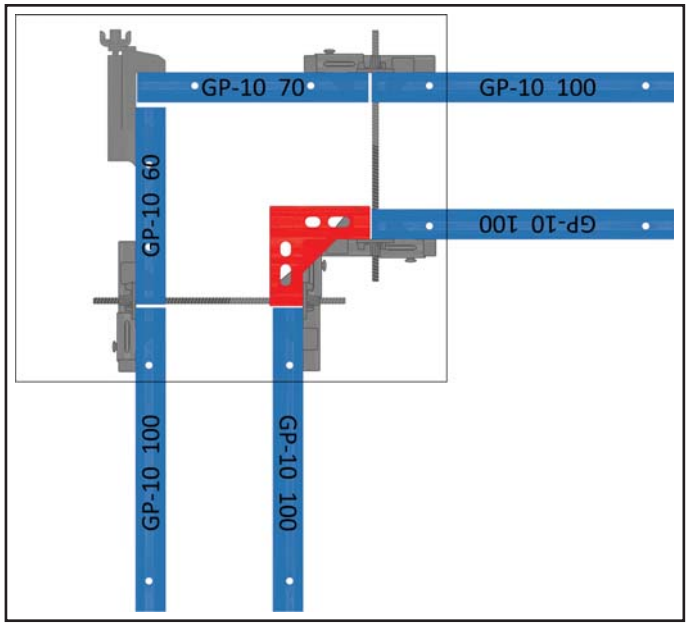
OUTSIDE CORNER WITH OUTSIDE CORNER CLAMP

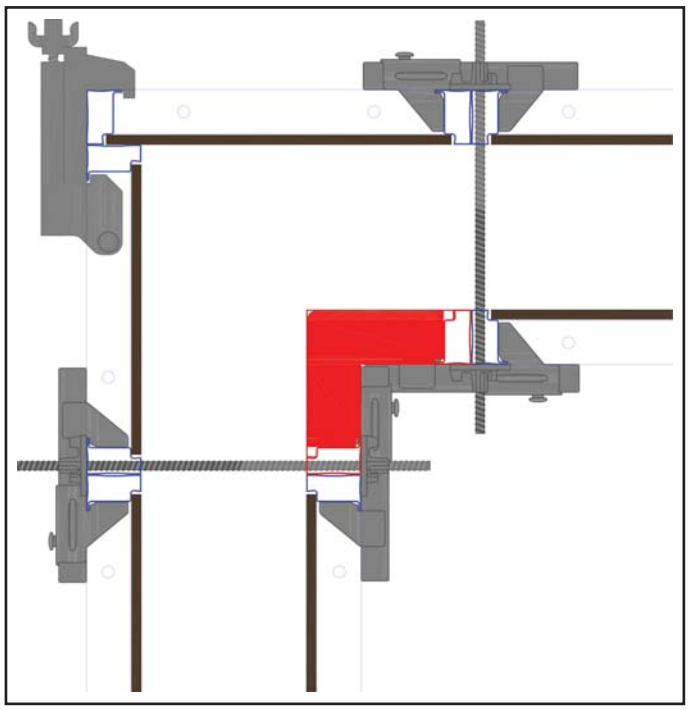


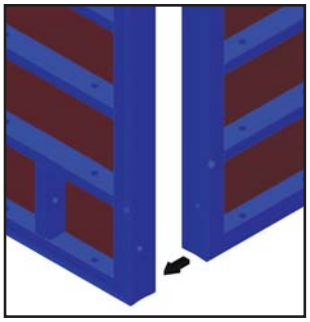
DESCRIPTION:
In order to compose the external angles, the panels GP-10 can be used in combination with each other.

USED MATERIAL:

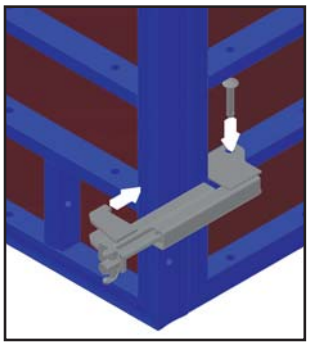
291042	Adjustable clamp for ext. corner	Pcs. ...



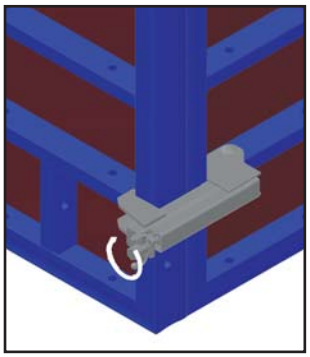




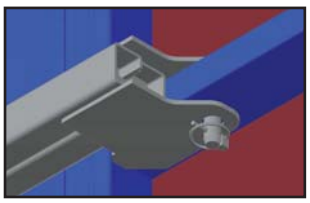
STEP 1:
Place n. 2 GP-10 panels perpendicular to each other.



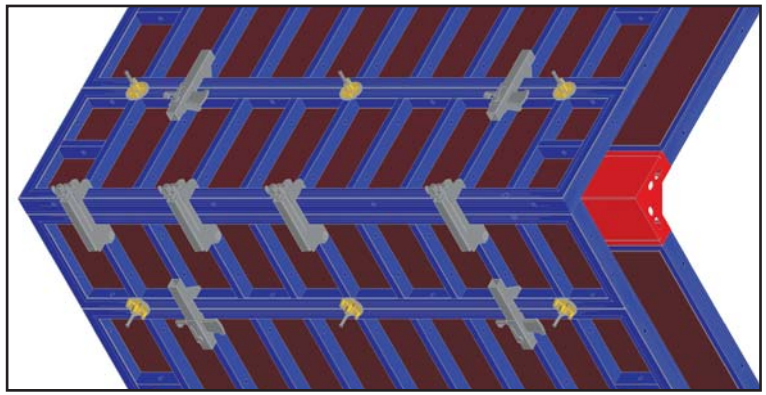
STEP 2:
Place the previously opened clamp at the reinforcement bars. Insert the appropriate plug into the hole in the plate and into the crosspiece of the panel.



STEP 3:
Screw the clamping bar of the outer corner clamp and secure with a lever.

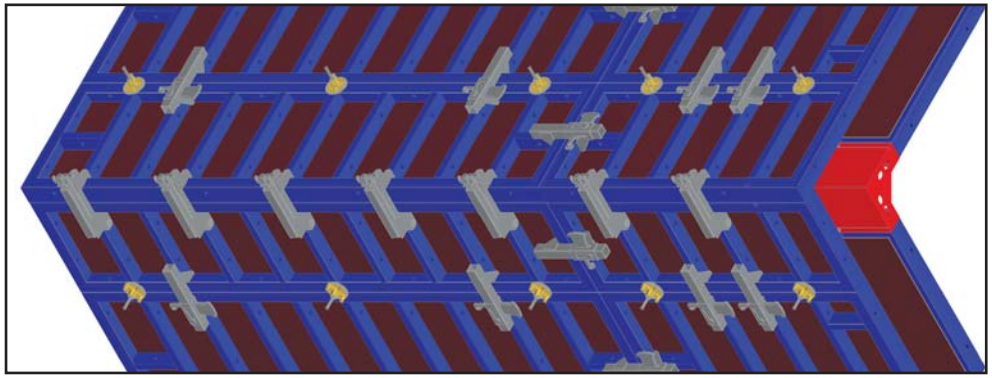


STEP 4:
Install the safety pin into the plug.



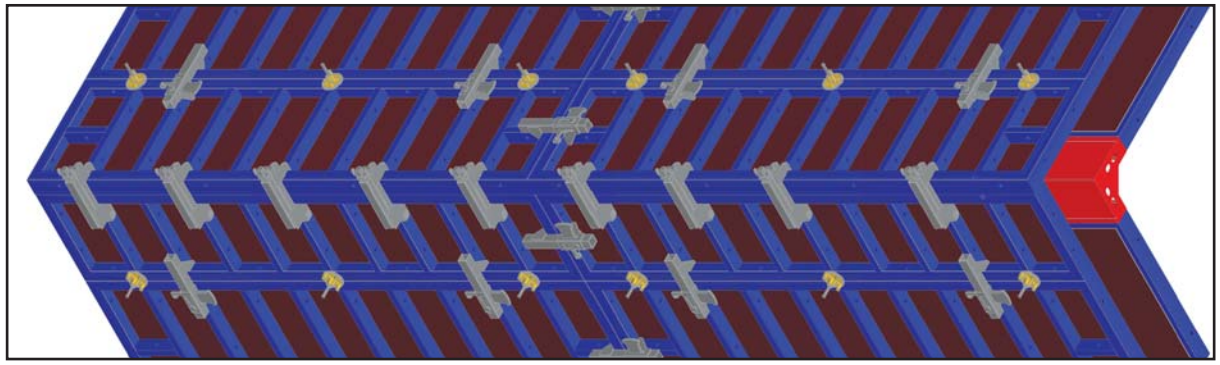
CORNER H300:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 4



CORNER H450:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 7



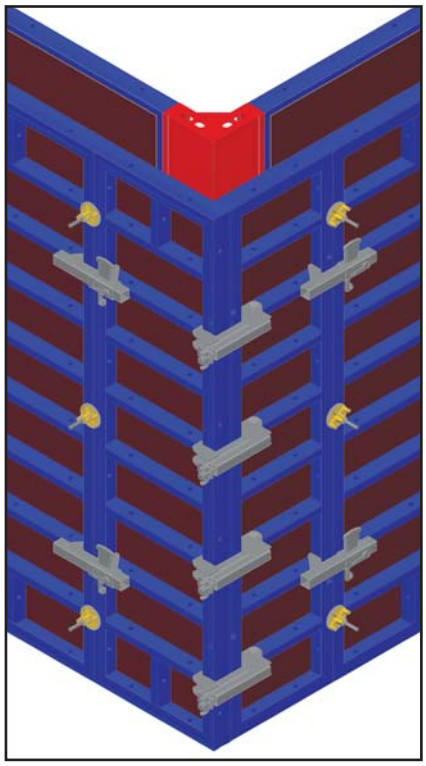
CORNER H600:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 10

OUTSIDE CORNER WITH OUTSIDE CORNER CLAMP

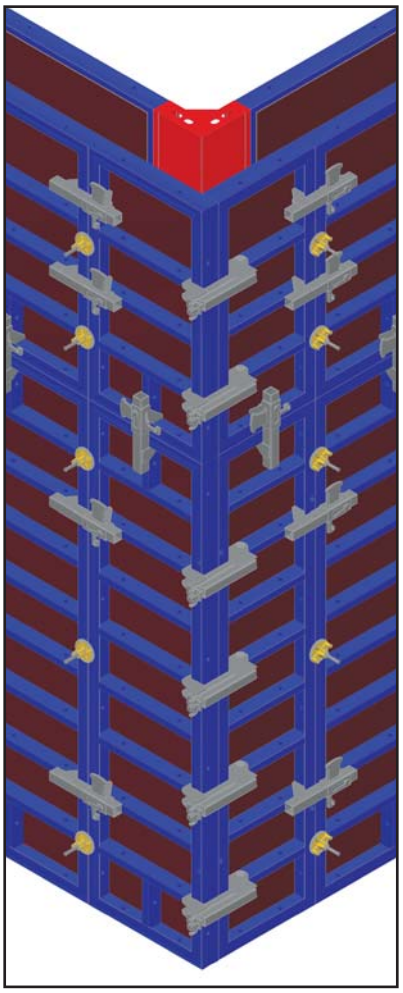
CORNER H270:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 4



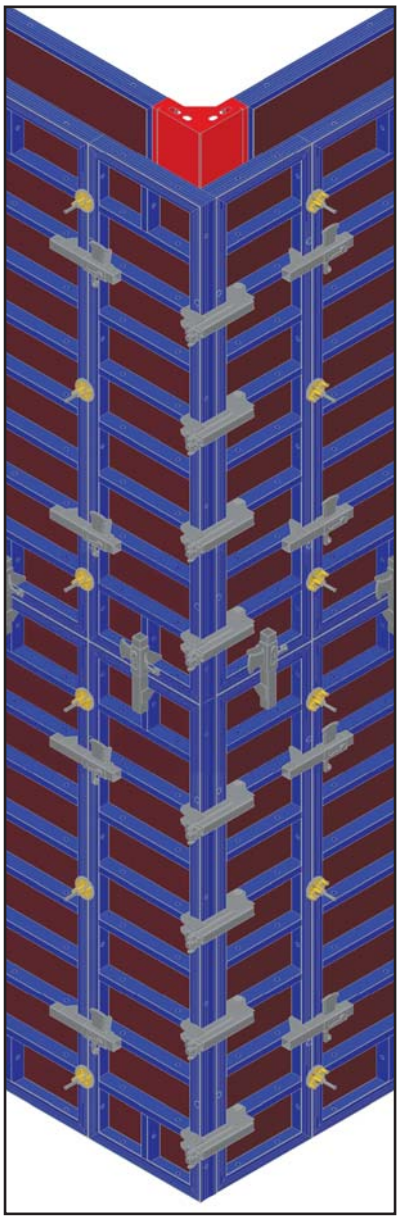
CORNER H405:
Respect the assembly as shown in the drawing

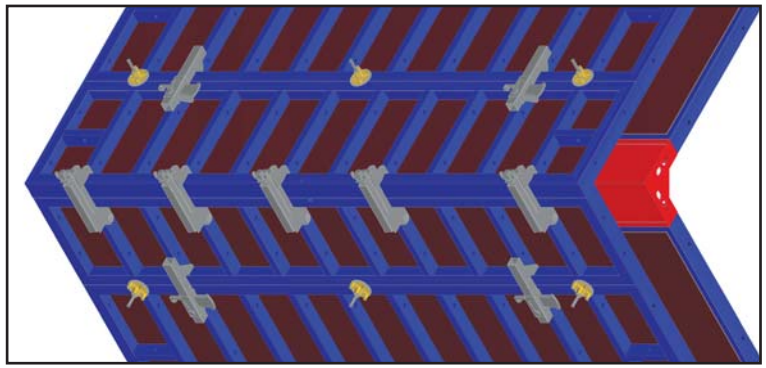
USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 6



CORNER H540:
Respect the assembly as shown in the drawing

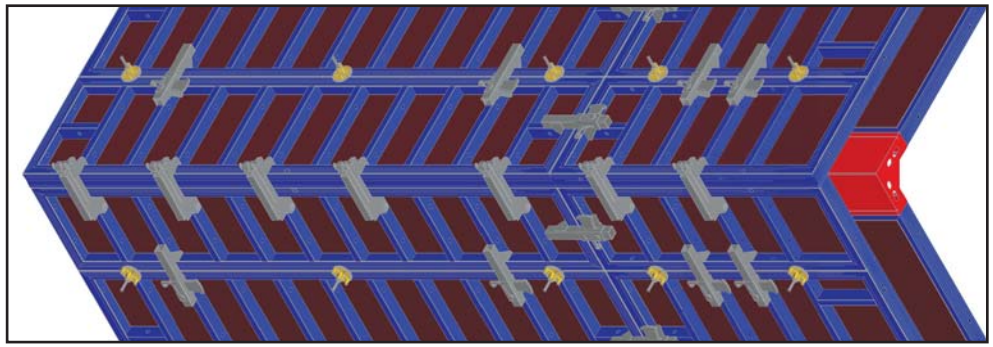
USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 8





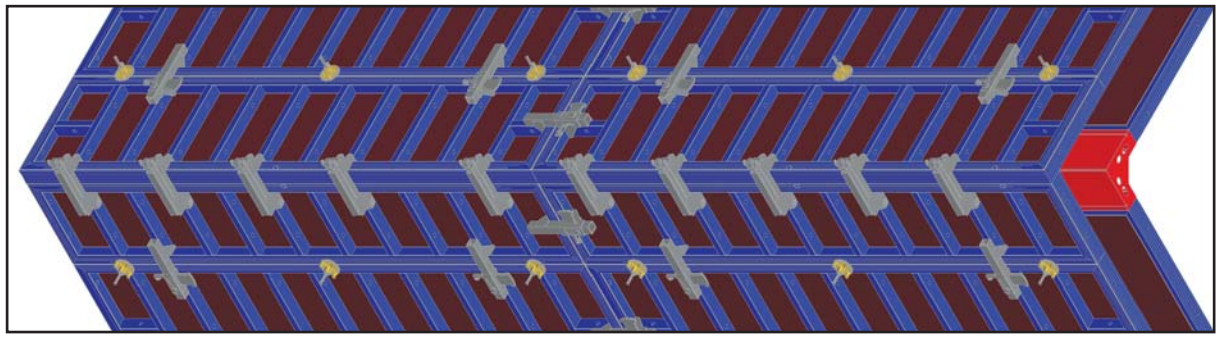
CORNER H330:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 5



CORNER H495:
Respect the assembly as shown in the drawing

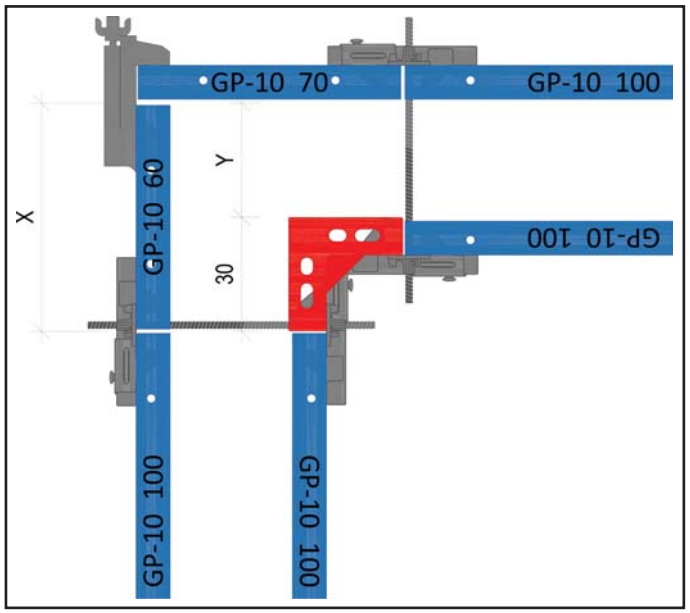
USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 7



CORNER H660:
Respect the assembly as shown in the drawing

USED MATERIAL:
291042 Adjustable clamp for ext. corner Pcs. 10

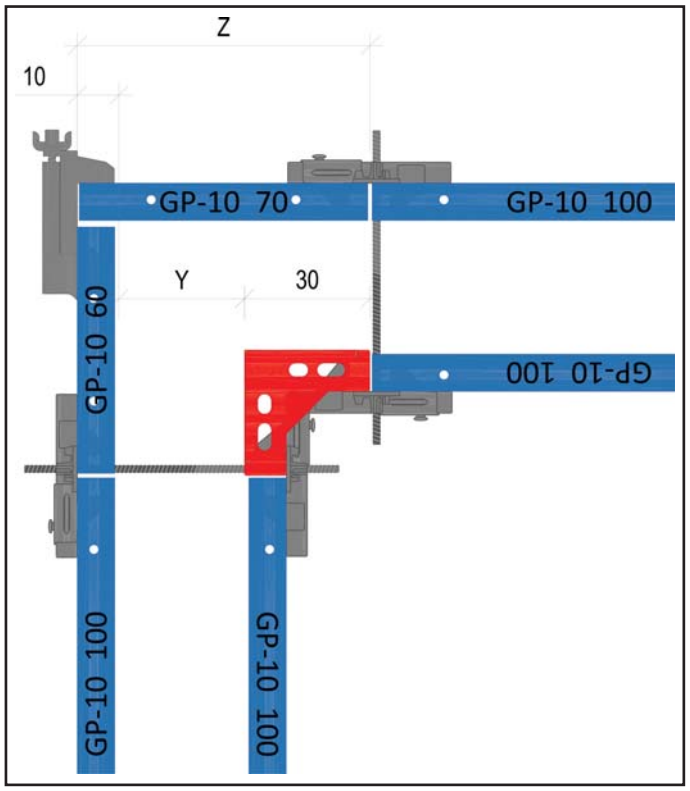
OUTSIDE CORNER WITH OUTSIDE CORNER CLAMP



DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

X = Y + 30

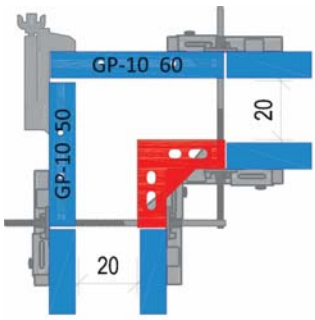
X= **panel size to be obtained**
Y= **wall thickness**
30= **fixed size of the internal corner**

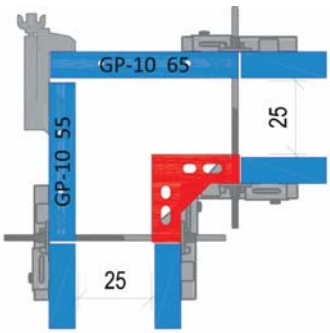


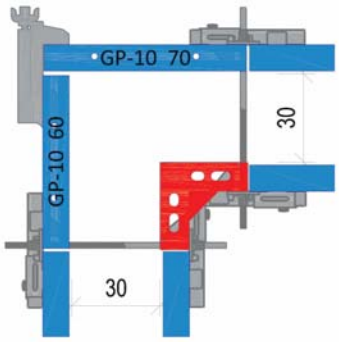
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

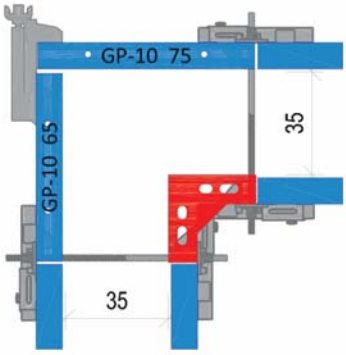
Z = Y + 30 + 10

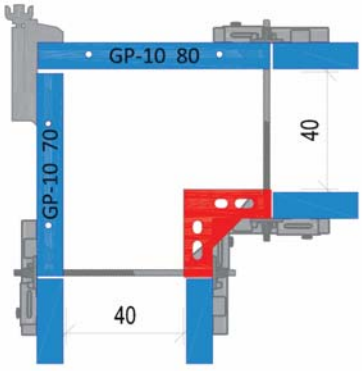
Z= **panel size to be obtained**
Y= **wall thickness**
30= **fixed size of the internal corner**
10= **panel thickness**

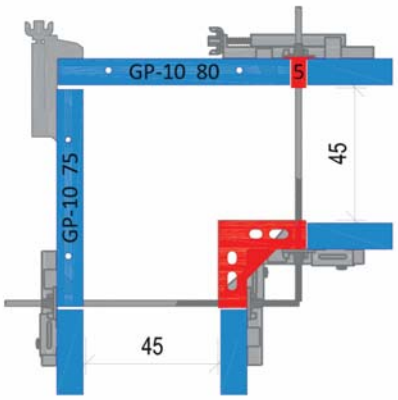

GP-10 60
GP-10 50
20
20

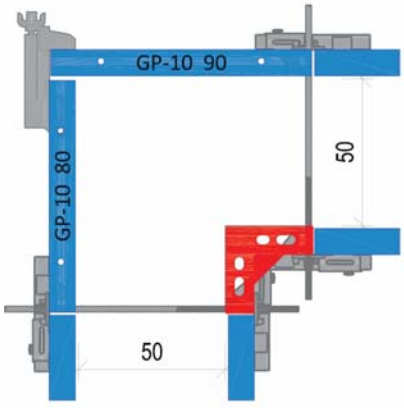

GP-10 65
GP-10 55
25
25

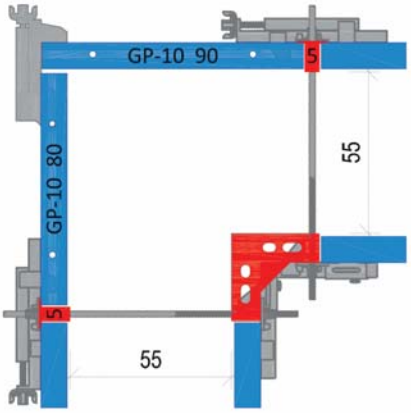

GP-10 70
GP-10 60
30
30

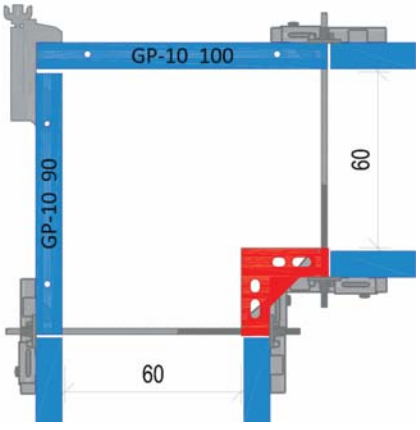

GP-10 75
GP-10 65
35
35


GP-10 80
GP-10 70
40
40

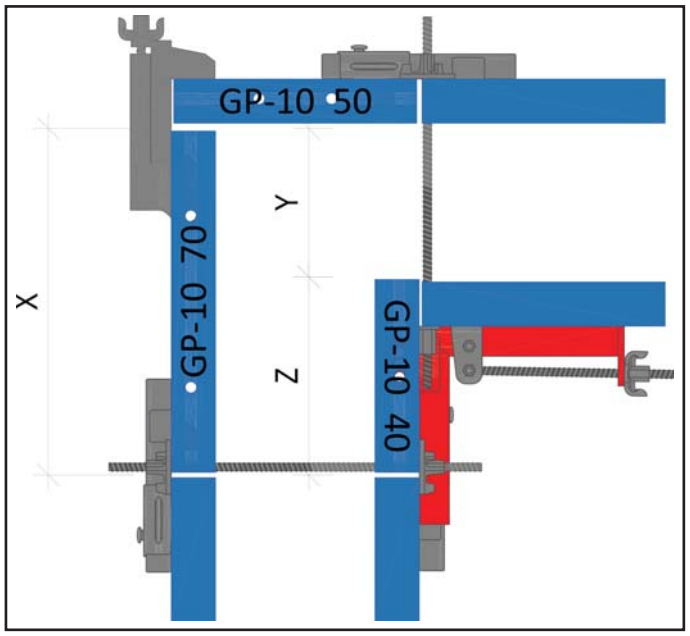

GP-10 80
5
GP-10 75
45
45


GP-10 90
GP-10 80
50
50


GP-10 90
5
GP-10 80
5
55
55


GP-10 100
GP-10 90
60
60

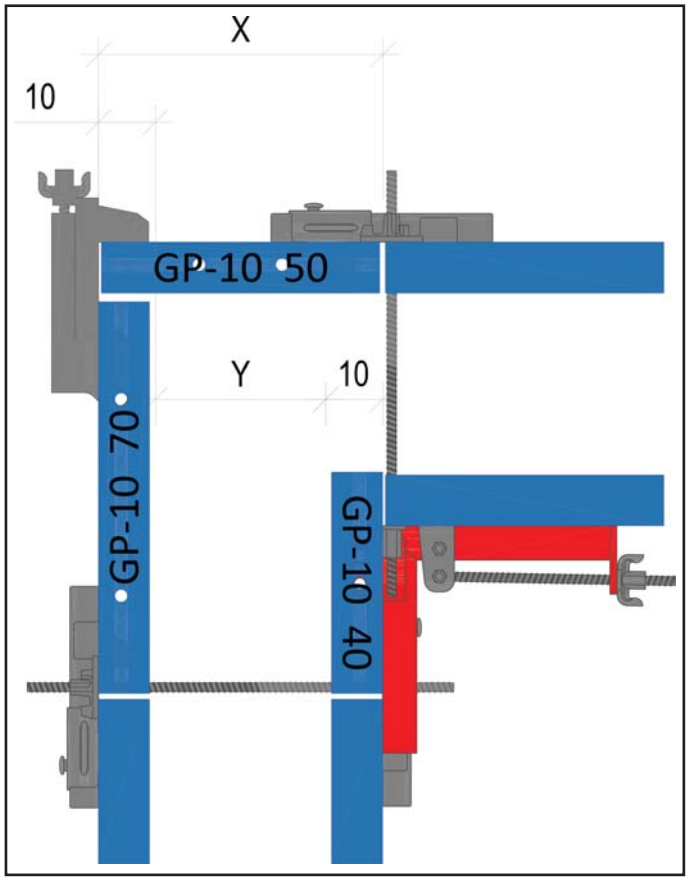
OUTSIDE CORNER WITH OUTSIDE CORNER CLAMP



DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

X = Y + Z

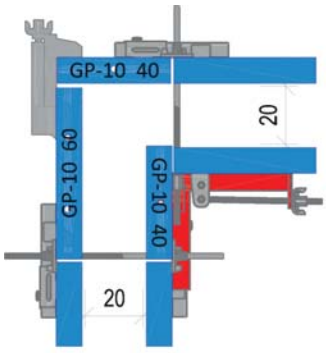
X= panel size to be obtained
Y= wall thickness
Z= panel size (minimum 40 cm.)

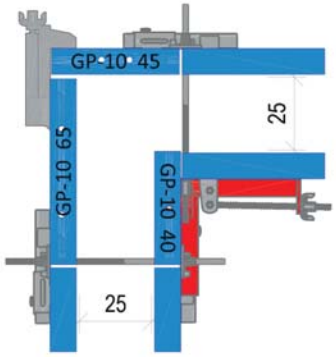


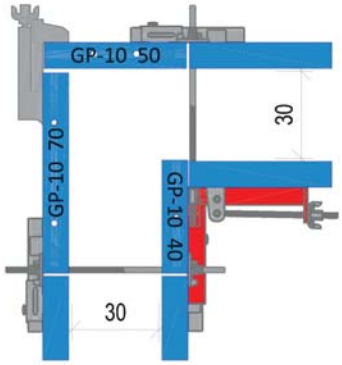
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

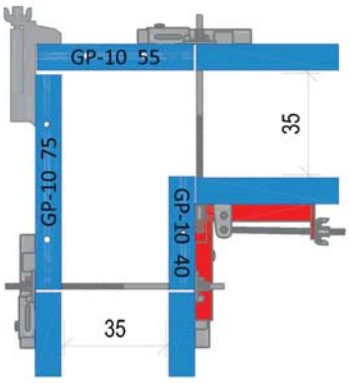
X = Y + 10 + 10

X= panel size to be obtained
Y= wall thickness
10= panel thickness
10= panel thickness


GP-10 40
GP-10 60
GP-10 40
20
20


GP-10 45
GP-10 65
GP-10 40
25
25


GP-10 50
GP-10 70
GP-10 40
30
30


GP-10 55
GP-10 75
GP-10 40
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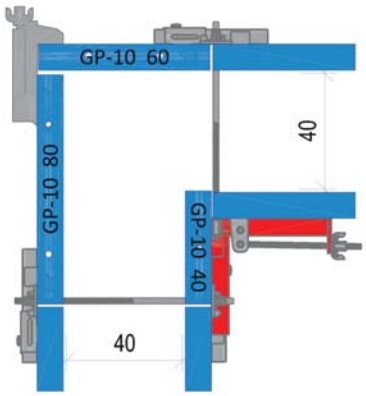
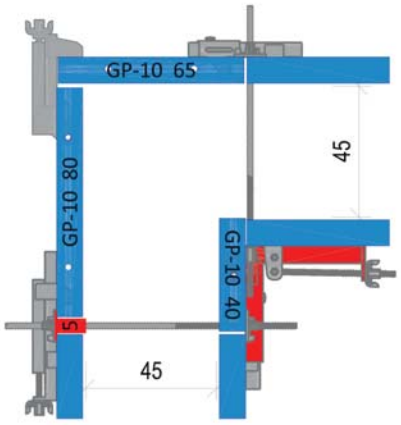
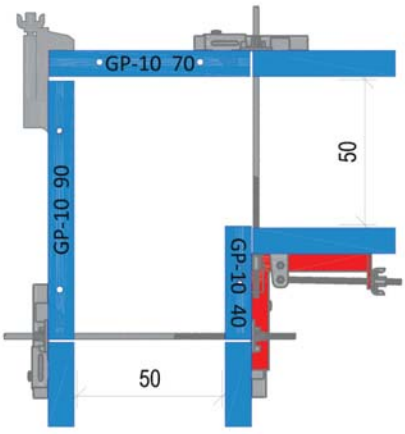
35


GP-10 60
GP-10 80
GP-10 40
40
40


GP-10 65
GP-10 80
GP-10 40
5
45
45


GP-10 70
GP-10 90
GP-10 40
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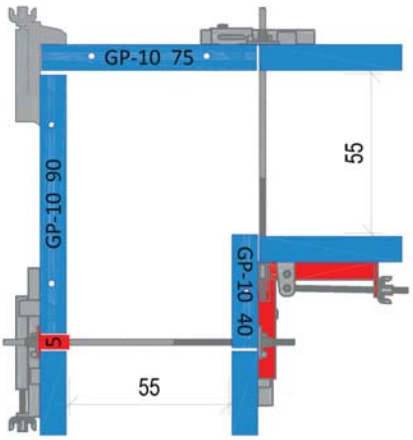
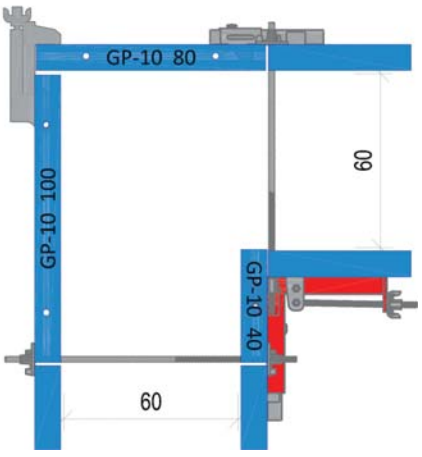
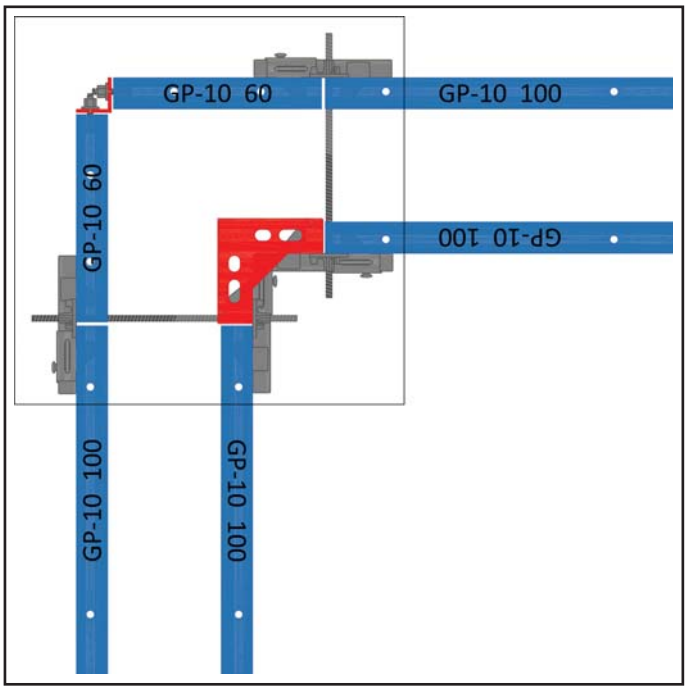
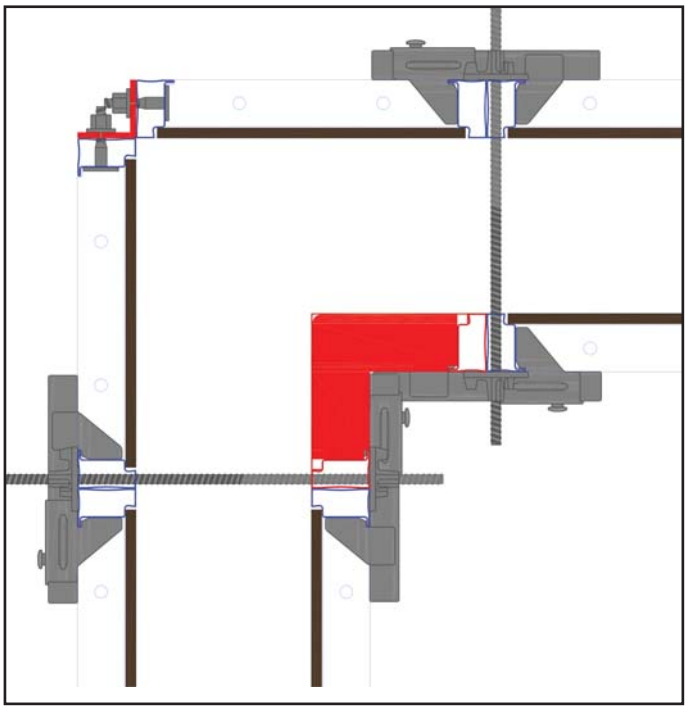

GP-10 75
GP-10 90
GP-10 40
5
55
55


GP-10 80
GP-10 100
GP-10 40
60
60

OUTSIDE CORNER WITH OUTSIDE CORNER 10X10





DESCRIPTION:

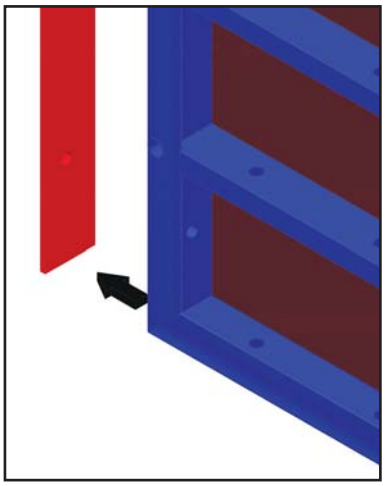
To compose the external angles, the GP-10 panels and the 10x10 external corner can be used together.

USED MATERIAL:

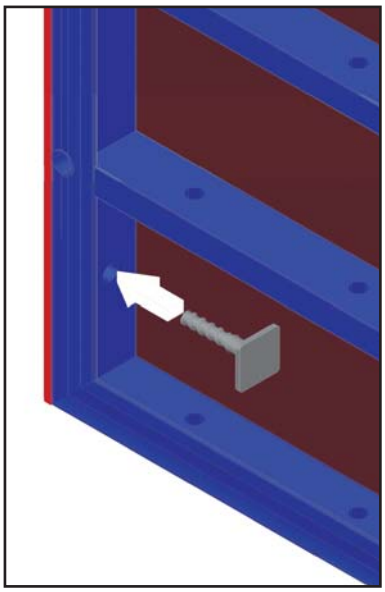
222101	External corner 10x10 H300	Pcs. ...
222201	External corner 10x10 H150	Pcs. ...
222301	External corner 10x10 H270	Pcs. ...
222401	External corner 10x10 H135	Pcs. ...
222501	External corner 10x10 H330	Pcs. ...
222601	External corner 10x10 H165	Pcs. ...
222701	External corner 10x10 H100	Pcs. ...
291183	Small fix pin L.90 mm	Pcs. ...
291211	Nut for pin	Pcs. ...

ATTENTION:

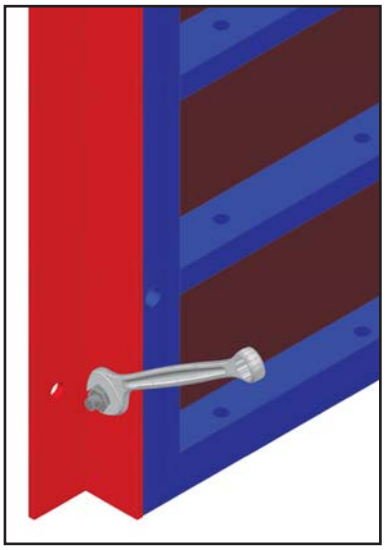
In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.



STEP 1:
Place n. 1 GP-10 panel and n. 1 external corner 10x10 of the same height.
Make sure the holes on the top are 10 cm. of both the pieces match to perfection to facilitate the subsequent insertion of the plug.



STEP 2:
Insert the fixed pin L. 90 mm respecting the direction shown in the image alongside.



STEP 3:
Screw the M30 data and fasten with the M30 key.
Repeat the operation in all the holes to ensure perfect sealing of the corner.

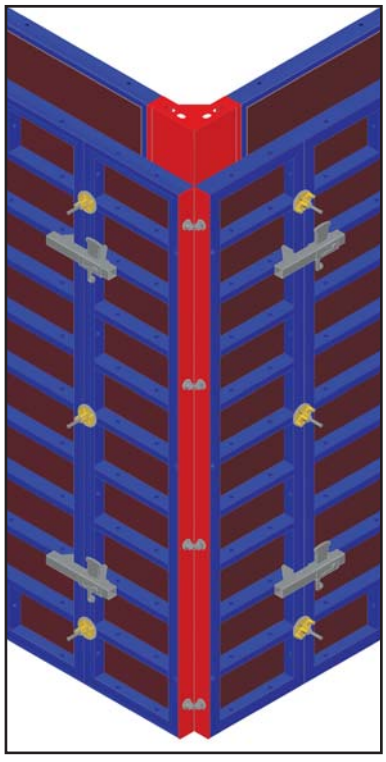
OUTSIDE CORNER WITH OUTSIDE CORNER 10X10

CORNER H300:

Respect the assembly as shown in the drawing

USED MATERIAL:

222101	External corner 10x10 H300	Pcs. 01
291183	Small fix pin L.90 mm	Pcs. 08
291211	Nut for pin	Pcs. 08

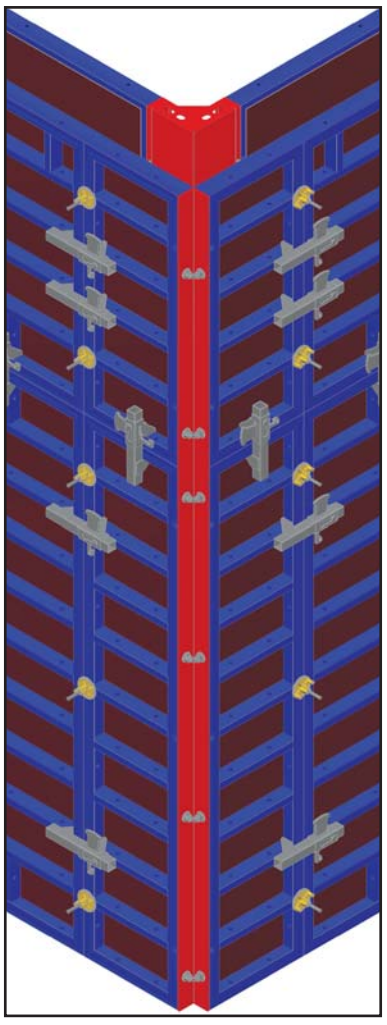


CORNER H450:

Respect the assembly as shown in the drawing

USED MATERIAL:

222101	External corner 10x10 H300	Pcs. 01
222201	External corner 10x10 H150	Pcs. 01
291183	Small fix pin L.90 mm	Pcs. 12
291211	Nut for pin	Pcs. 12

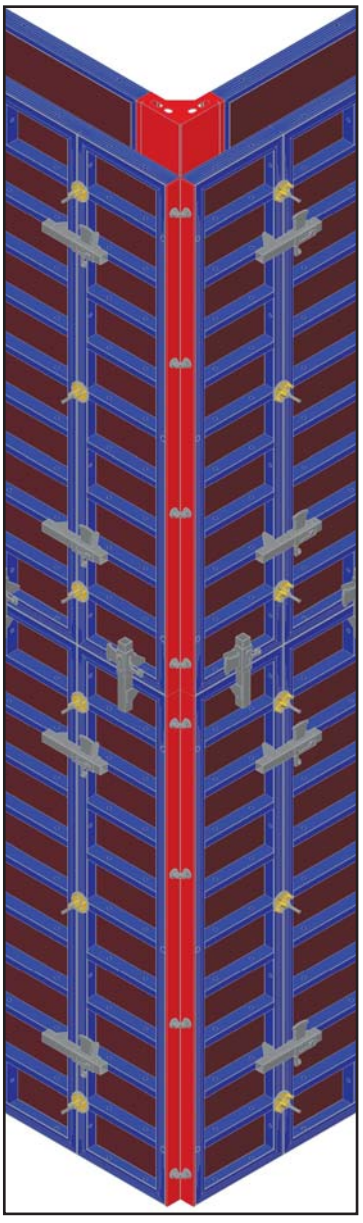


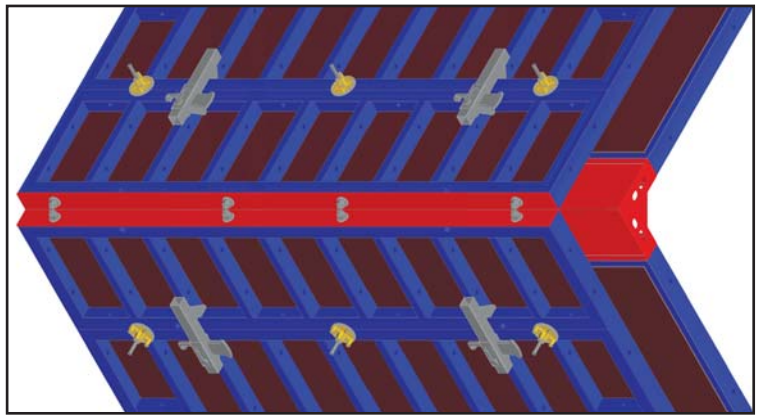
CORNER H600:

Respect the assembly as shown in the drawing

USED MATERIAL:

222101	External corner 10x10 H300	Pcs. 02
291183	Small fix pin L.90 mm	Pcs. 16
291211	Nut for pin	Pcs. 16



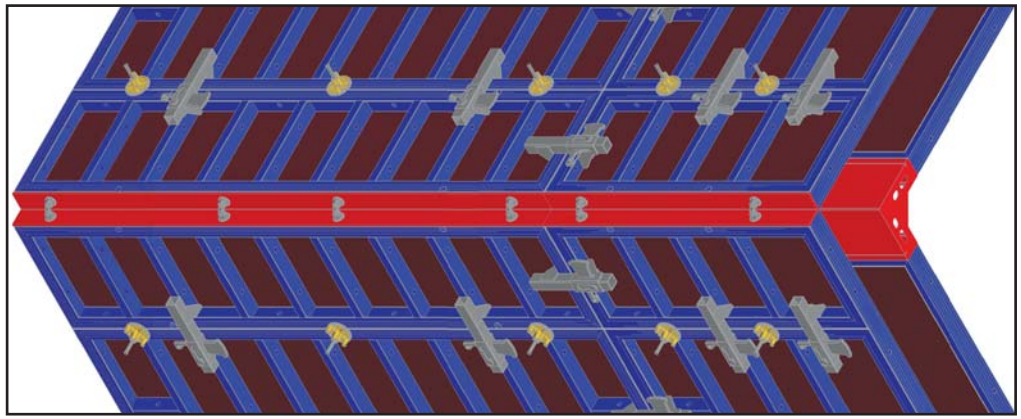


CORNER H270:

Respect the assembly as shown in the drawing

USED MATERIAL:

222301	External corner 10x10 H270	Pcs. 01
291183	Small fix pin L.90 mm	Pcs. 08
291211	Nut for pin	Pcs. 08

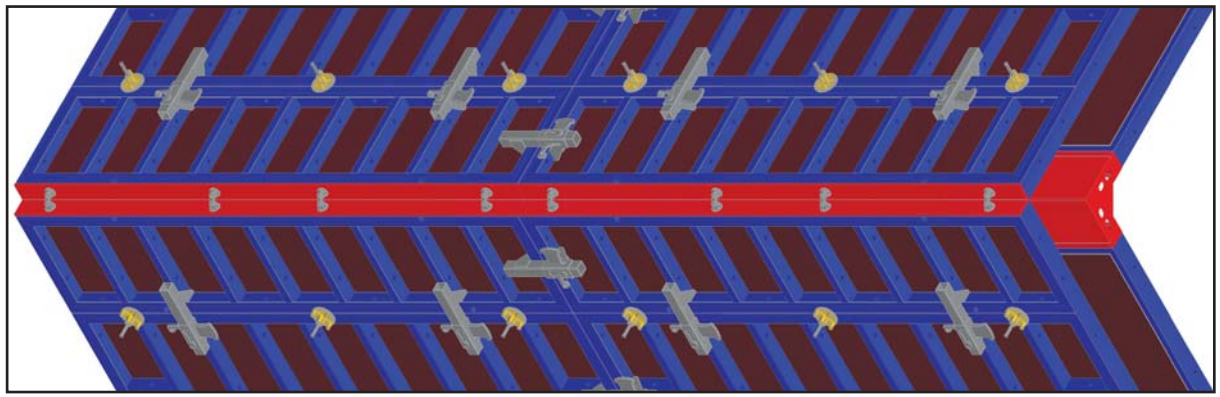


CORNER H405:

Respect the assembly as shown in the drawing

USED MATERIAL:

222301	External corner 10x10 H270	Pcs. 01
222401	External corner 10x10 H135	Pcs. 01
291183	Small fix pin L.90 mm	Pcs. 12
291211	Nut for pin	Pcs. 12



CORNER H540:

Respect the assembly as shown in the drawing

USED MATERIAL:

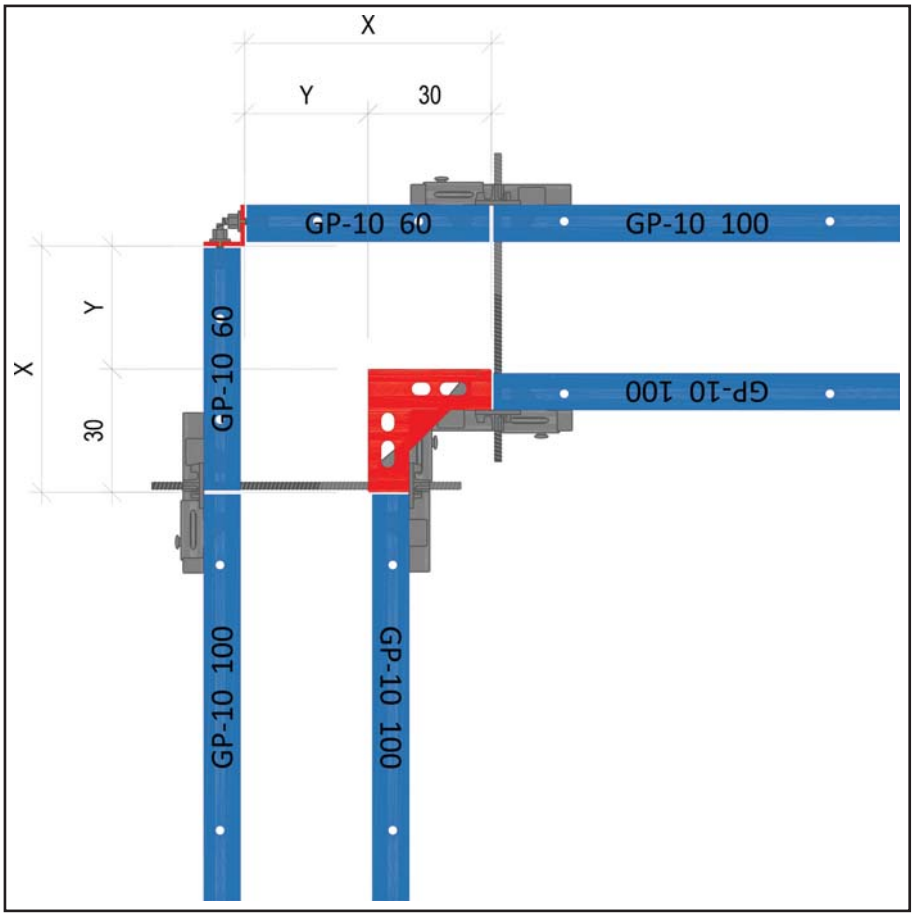
222301	External corner 10x10 H270	Pcs. 02
291183	Small fix pin L.90 mm	Pcs. 16
291211	Nut for pin	Pcs. 16

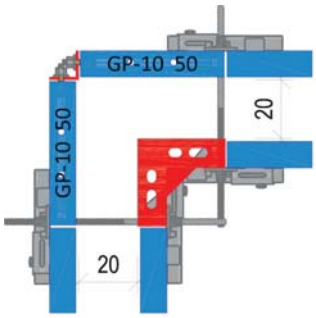
OUTSIDE CORNER WITH OUTSIDE CORNER 10X10

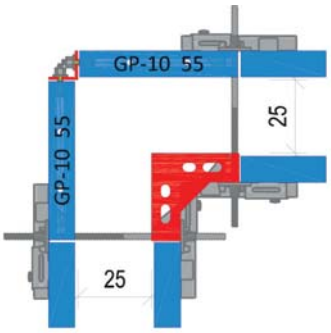
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

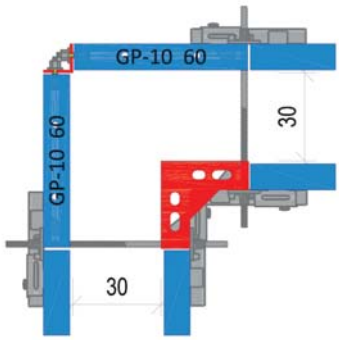
X = Y + 30

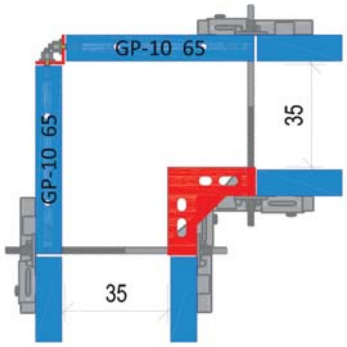
X= **panel size to be obtained**
Y= **wall thickness**
30= **fixed size of the internal corner**

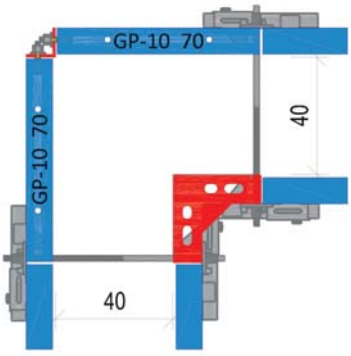



GP-10 50
GP-10 50
20
20


GP-10 55
GP-10 55
25
25


GP-10 60
GP-10 60
30
30


GP-10 65
GP-10 65
35
35


GP-10 70
GP-10 70
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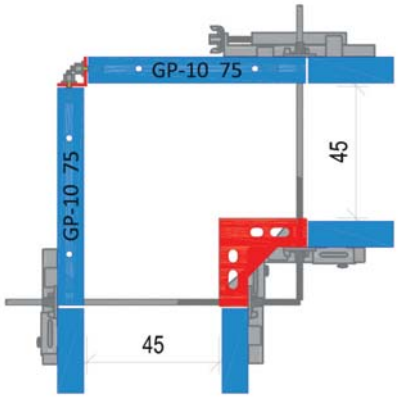
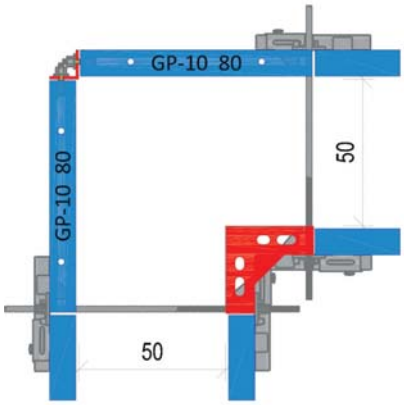
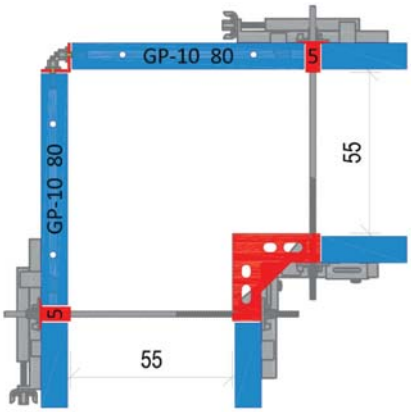
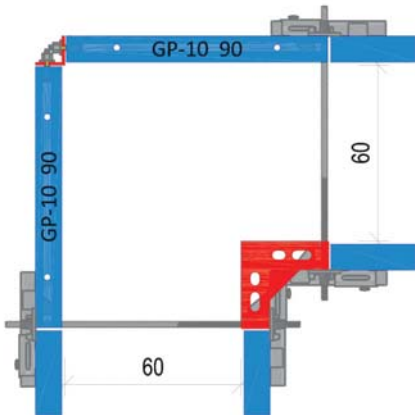
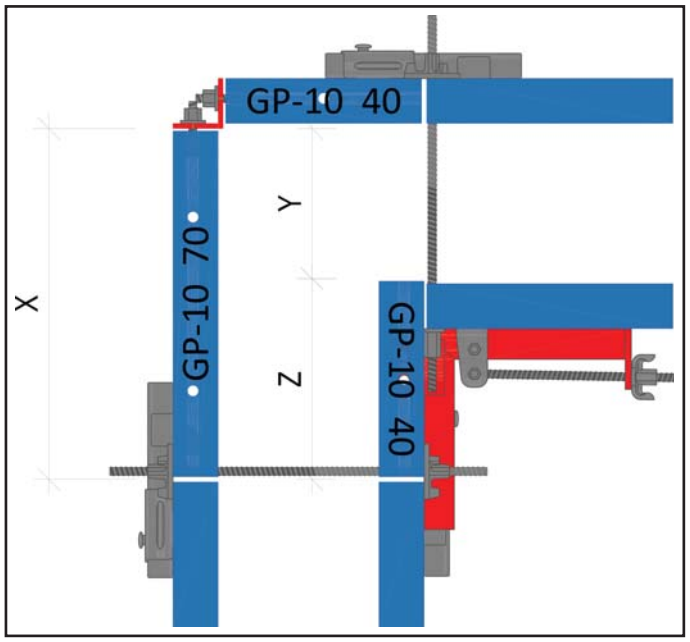

GP-10 75
GP-10 75
45
45


GP-10 80
GP-10 80
50
50


GP-10 80
5
GP-10 80
55
5
55


GP-10 90
GP-10 90
60
60

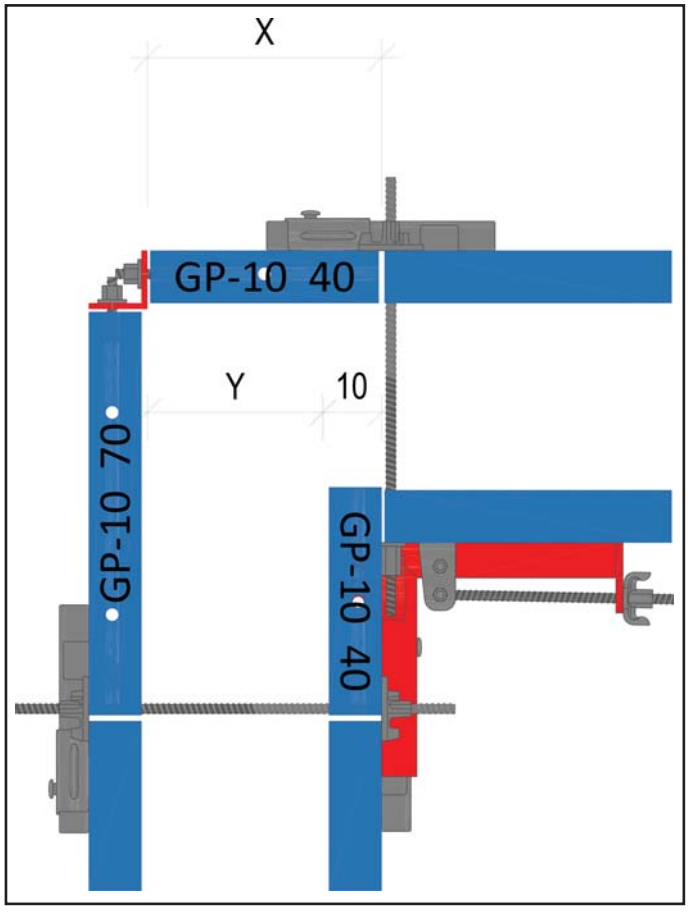
OUTSIDE CORNER WITH OUTSIDE CORNER 10X10



DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

X = Y + Z

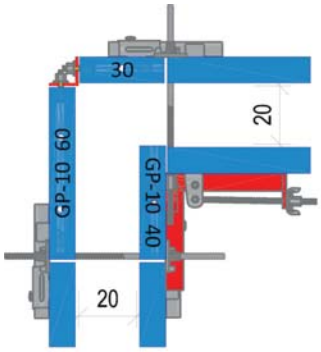
X= **panel size to be obtained**
Y= **wall thickness**
Z= **panel size (minimum 40 cm.)**

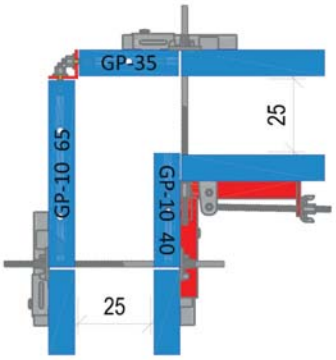


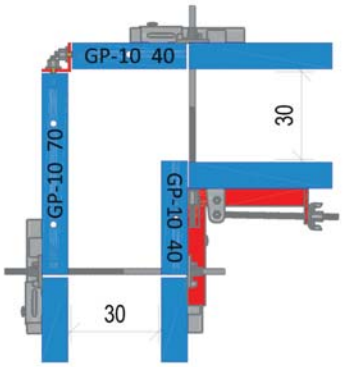
DIMENSIONING FITTING PANEL:
To size the external GP-10 connection panel, perform this simple operation:

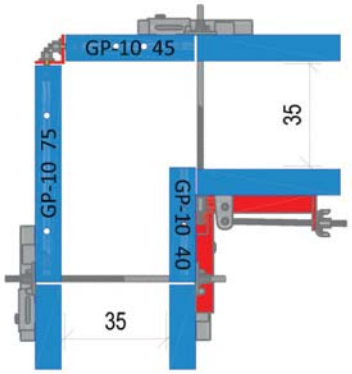
X = Y + 10

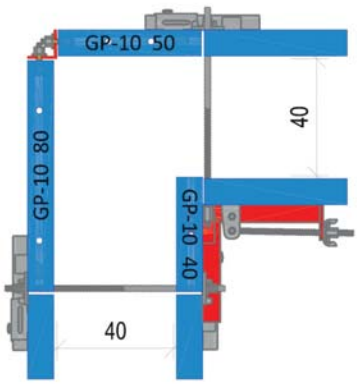
X= **panel size to be obtained**
Y= **wall thickness**
10= **panel thickness**

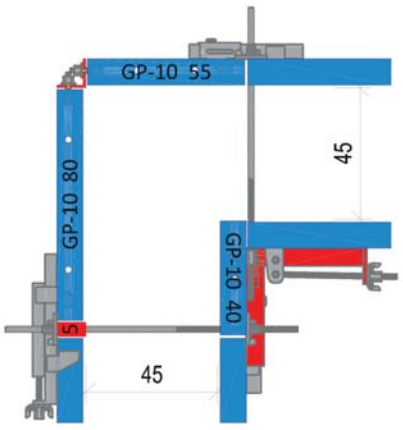

30
20
GP-10 60
GP-10 40
20

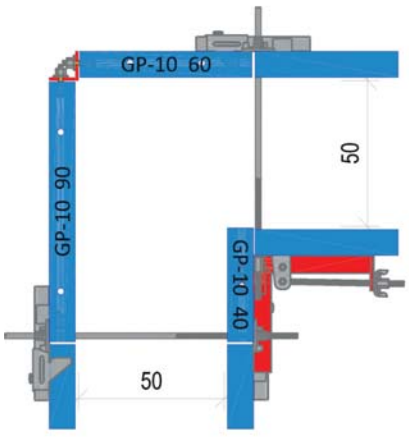

GP-35
25
GP-10 65
GP-10 40
25

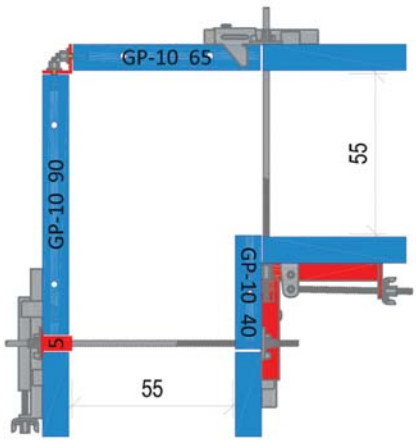

GP-10 40
30
GP-10 70
GP-10 40
30

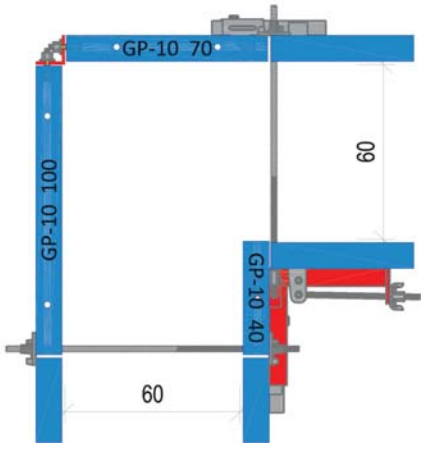

GP-10 45
35
GP-10 75
GP-10 40
35


GP-10 50
40
GP-10 80
GP-10 40
40

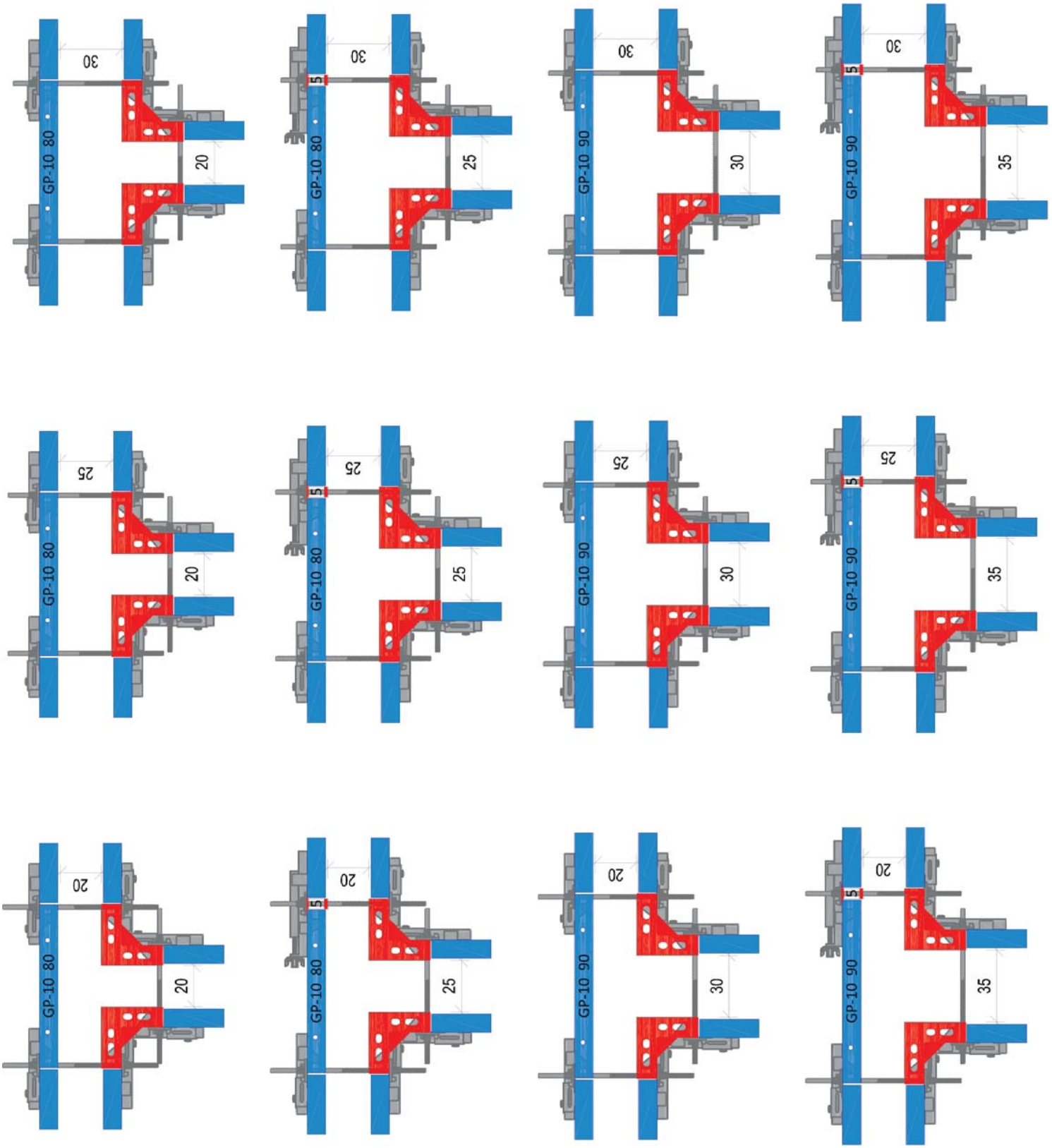

GP-10 55
45
GP-10 80
GP-10 40
5
45

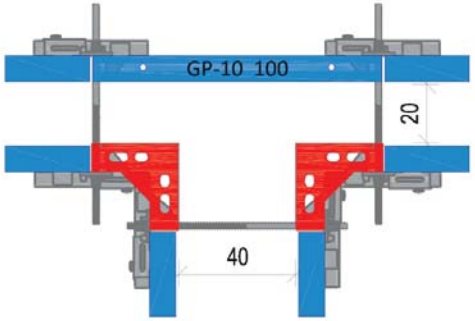

GP-10 60
50
GP-10 90
GP-10 40
50

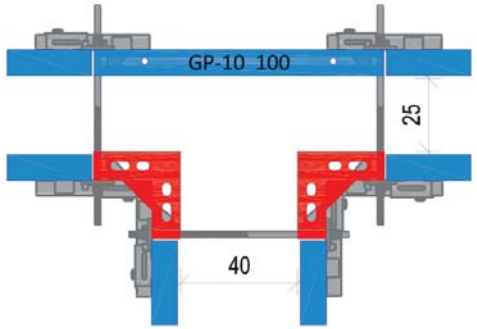

GP-10 65
55
GP-10 90
GP-10 40
5
55

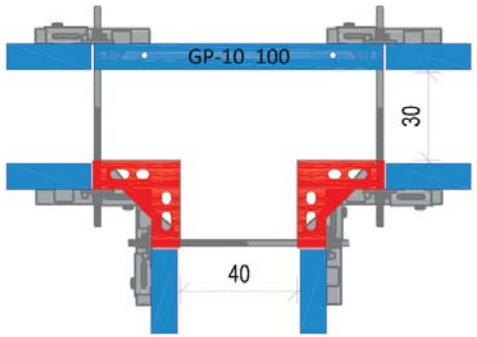

GP-10 70
60
GP-10 100
GP-10 40
60

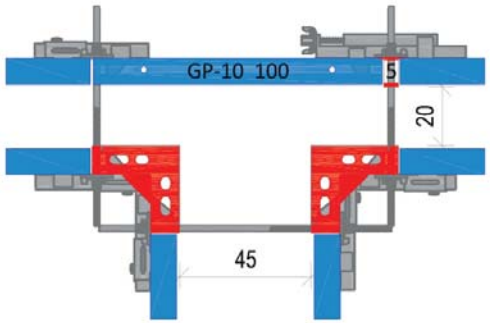
“T” WALL FITTINGS WITH INTERNAL CORNER

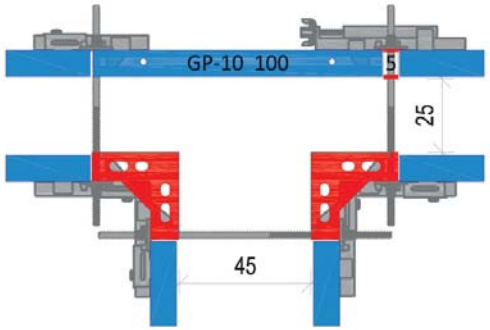


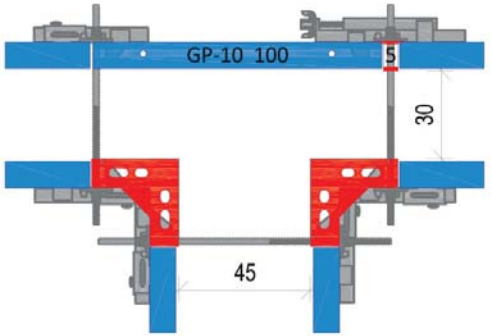


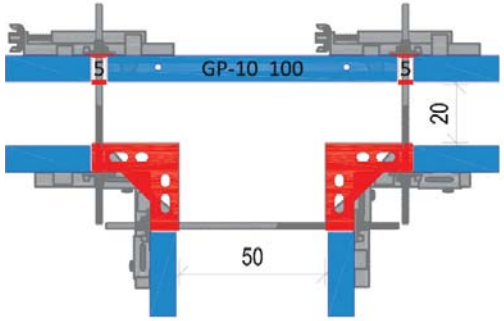


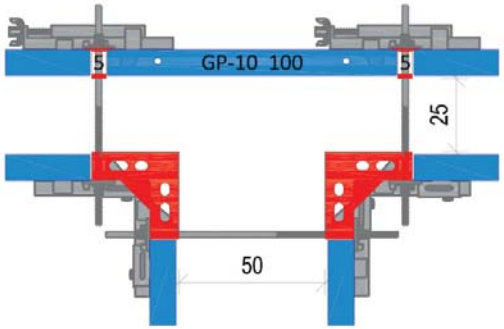


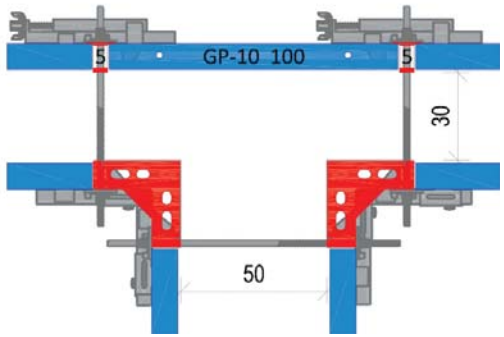


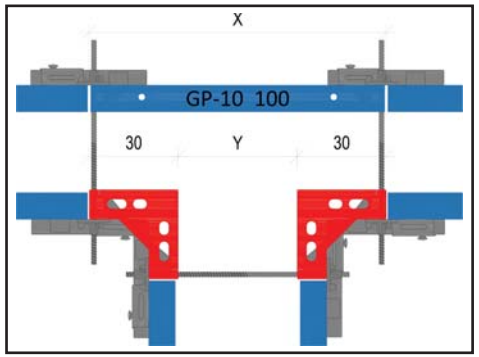












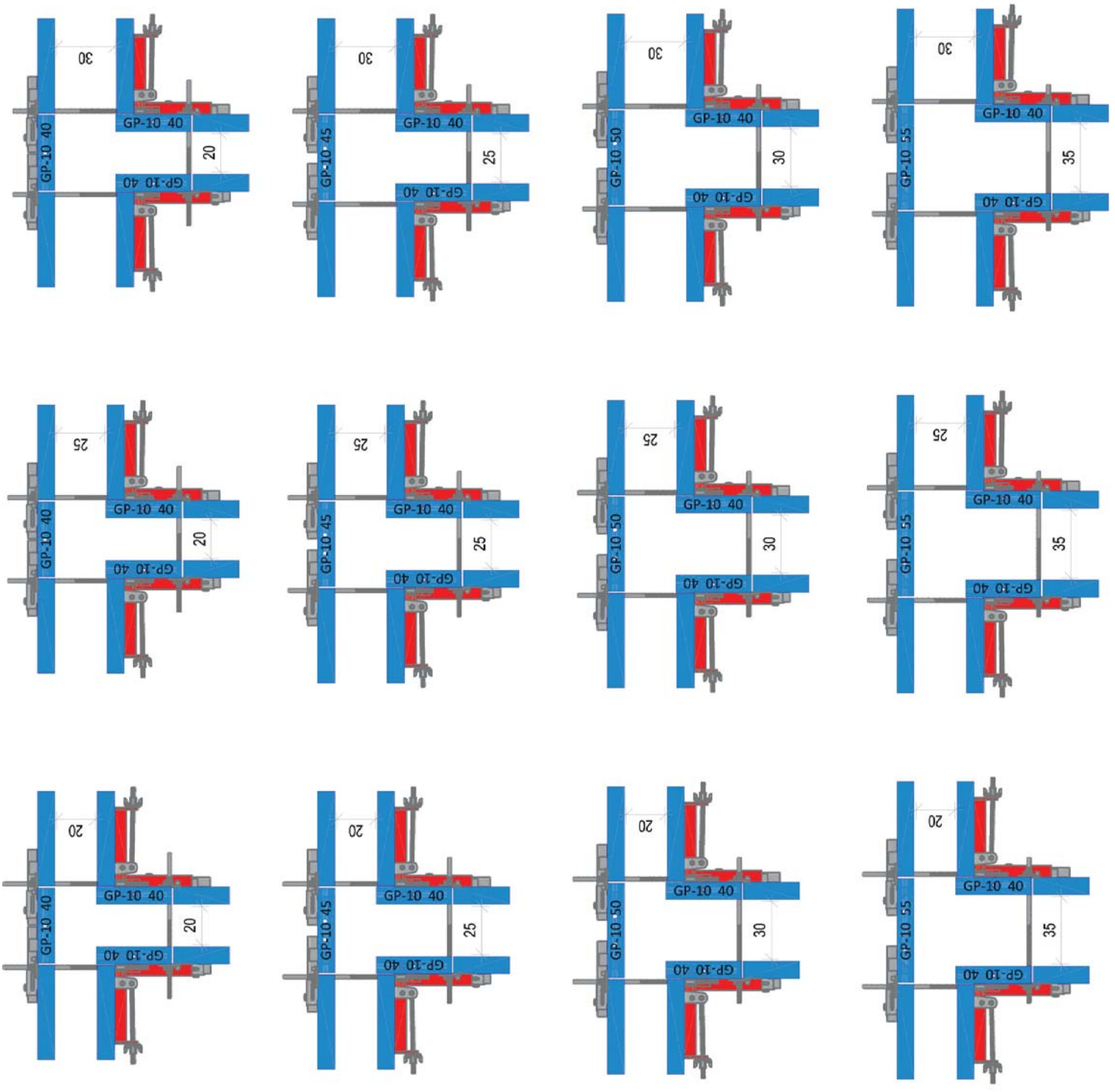
DIMENSIONING FITTING PANEL:

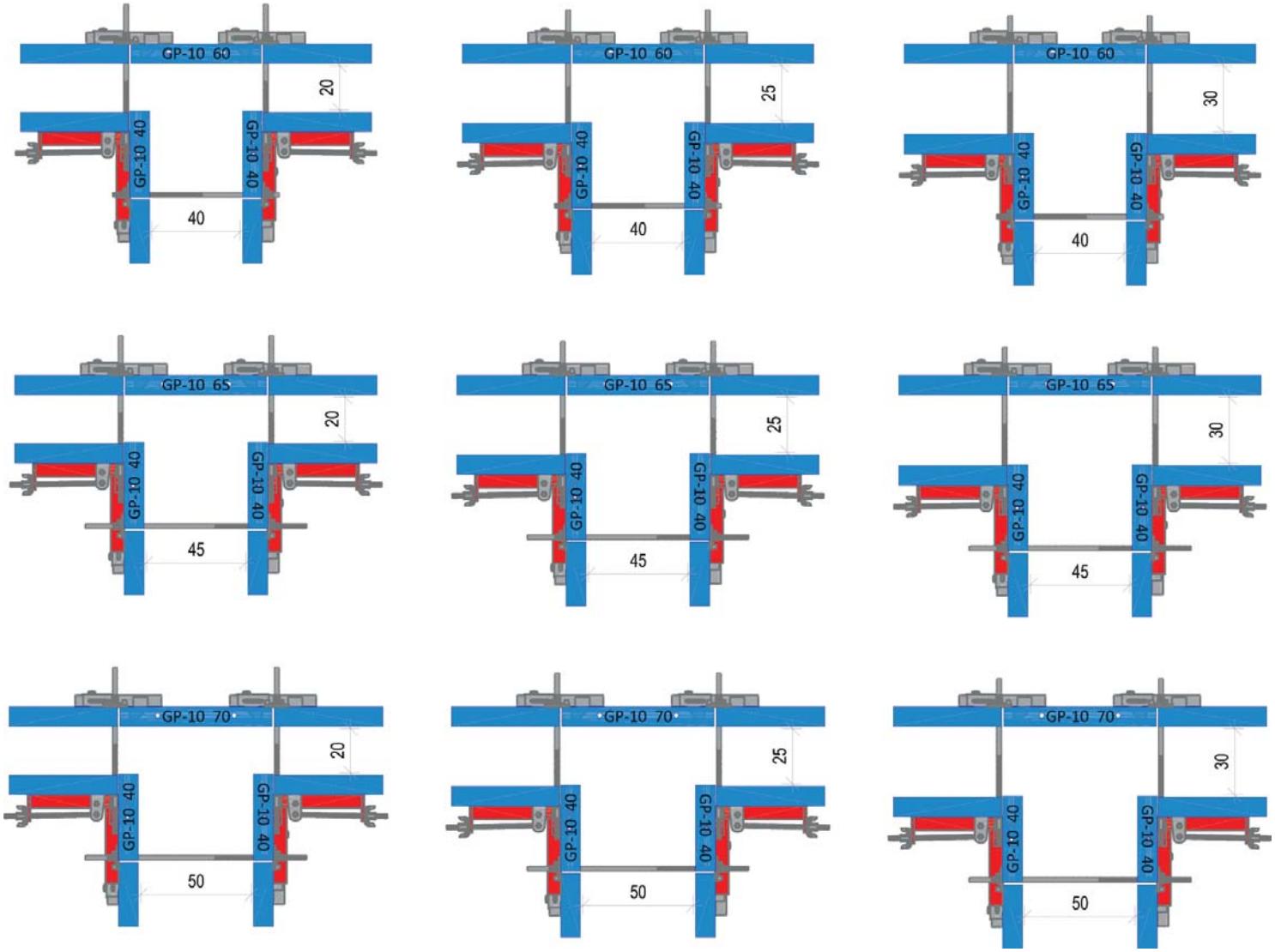
To size the external GP-10 connection panel, perform this simple operation:

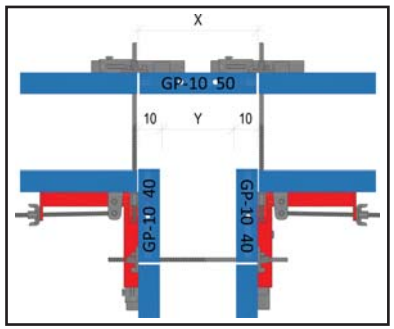
X = Y + 30 + 30

X = panel size to be obtained
Y= wall thickness
30= fixed size of the internal corner

“T” WALL FITTINGS WITH CLAMP FOR INTERNAL CORNER







DIMENSIONING FITTING PANEL:

To size the external GP-10 connection panel, perform this simple operation:

X = Y + 10 + 10

X = panel size to be obtained
Y= wall thickness
10= panel thickness

ARTICULATED CORNER

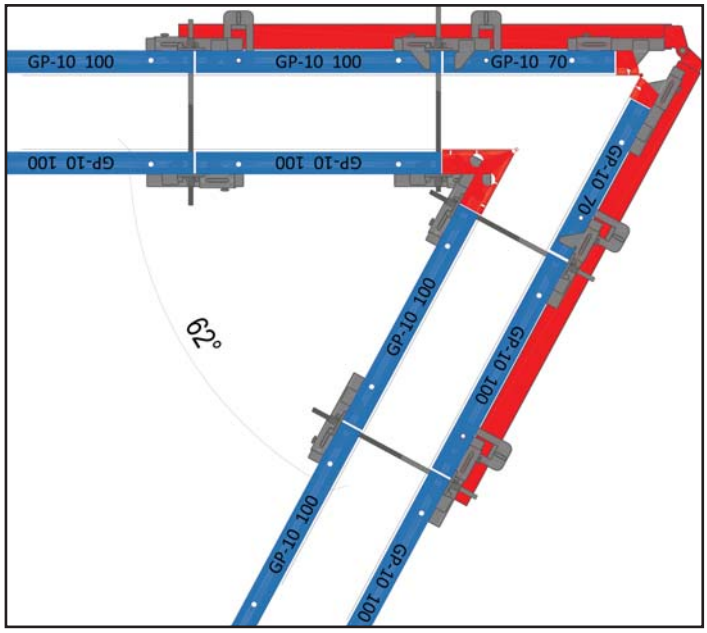
DESCRIPTION:

With the GP-10 system you can compose articulated angle different from 90 °.
Using the articulated corners (internal and external) connecting them with the GP-10 panels using an alignment clamp, you can compose angles with a minimum width of 62 °.

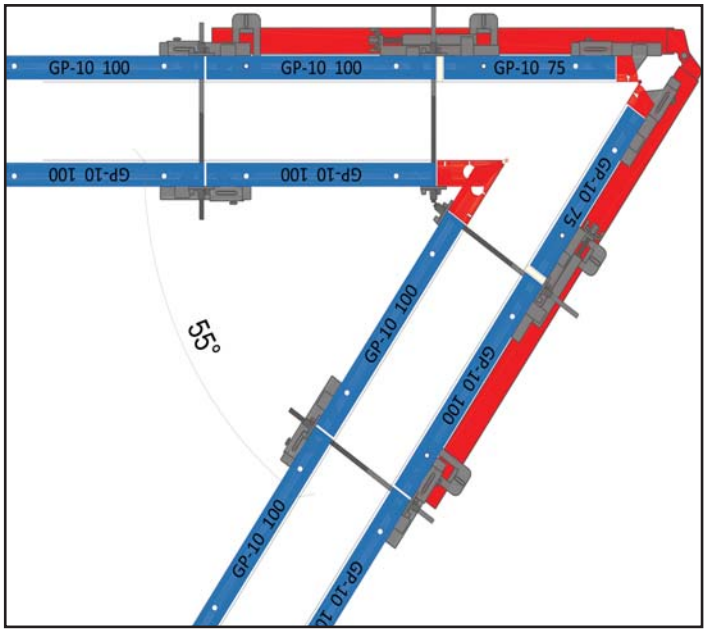
USED MATERIAL:

222131	External hinge corner 10x10 H300	Pcs. 1
222231	External hinge corner 10x10 H150	Pcs. 1
222331	External hinge corner 10x10 H270	Pcs. 1
222431	External hinge corner 10x10 H135	Pcs. 1
222531	External hinge corner 10x10 H330	Pcs. 1
222631	External hinge corner 10x10 H165	Pcs. 1
222141	External hinge corner 10x10 H300	Pcs. 1
222241	External hinge corner 10x10 H150	Pcs. 1
222341	External hinge corner 10x10 H270	Pcs. 1
222441	External hinge corner 10x10 H135	Pcs. 1
222541	External hinge corner 10x10 H330	Pcs. 1
222641	External hinge corner 10x10 H165	Pcs. 1
291012	Alignement clamp	Pcs. 12
291142	Alignement braket	Pcs. 8
291162	Hinge stiffing pipe	Pcs. 2
☞	Tie rod DW15	Pcs. 6
811051	Wing nut DW15	Pcs. 12

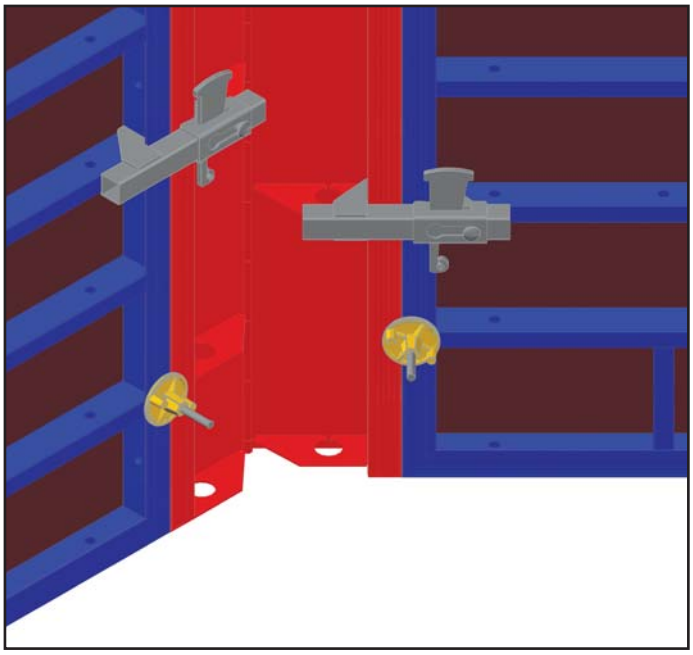
MINIMUM CORNER WITH ALIGNMENT CLAMP



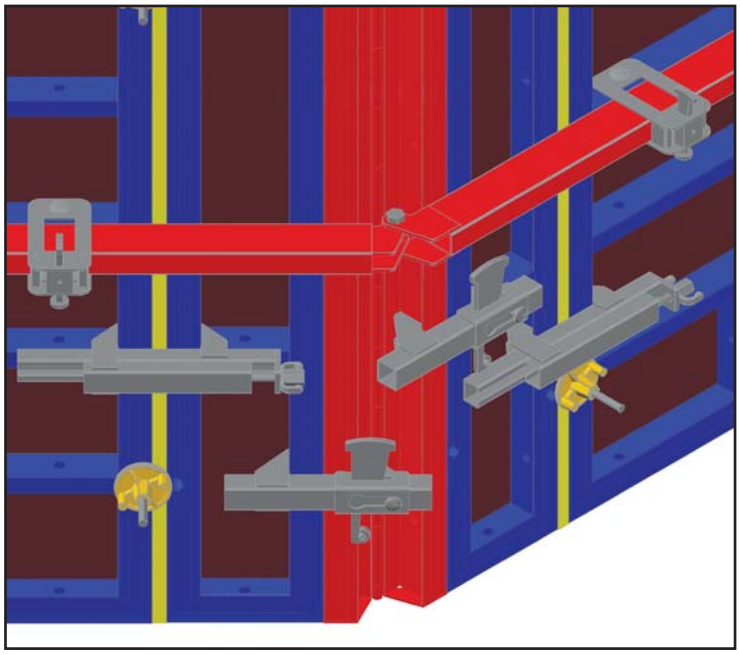
MINIMUM CORNER WITH PIN L. 140



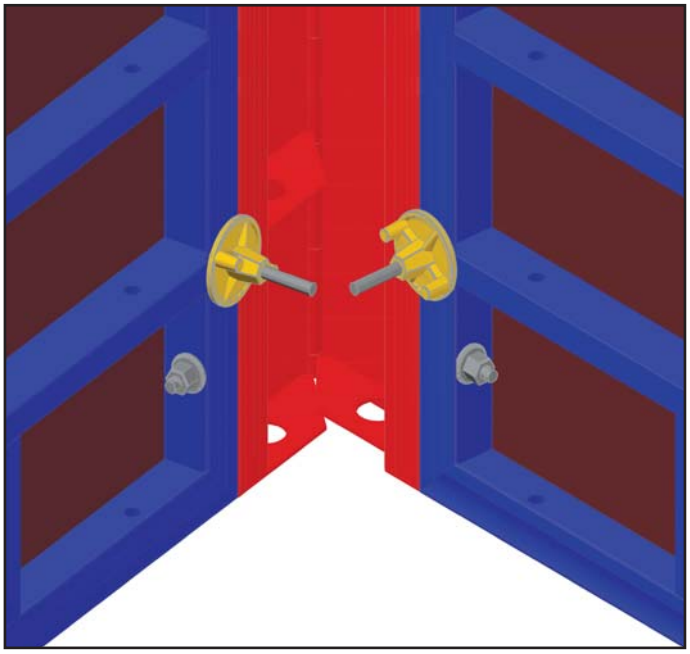
ARTICULATED INTERNAL CORNER:
Ideal position for aligning clamps for the linkage between an articulated corner and GP-10 panels.



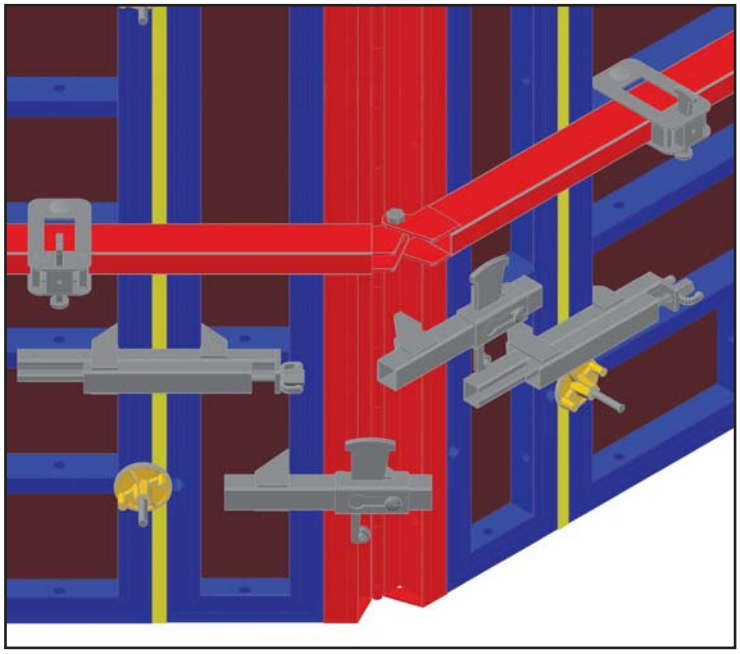
ARTICULATED OUTSIDE CORNER:
Ideal position for aligning clamps and adjustable clamps for the linkage between an articulated corner and GP-10 panels.
Hinge stiffening tube position.



ARTICULATED INTERNAL CORNER:
Linkage with pin l. 140 mm and nut for pin.

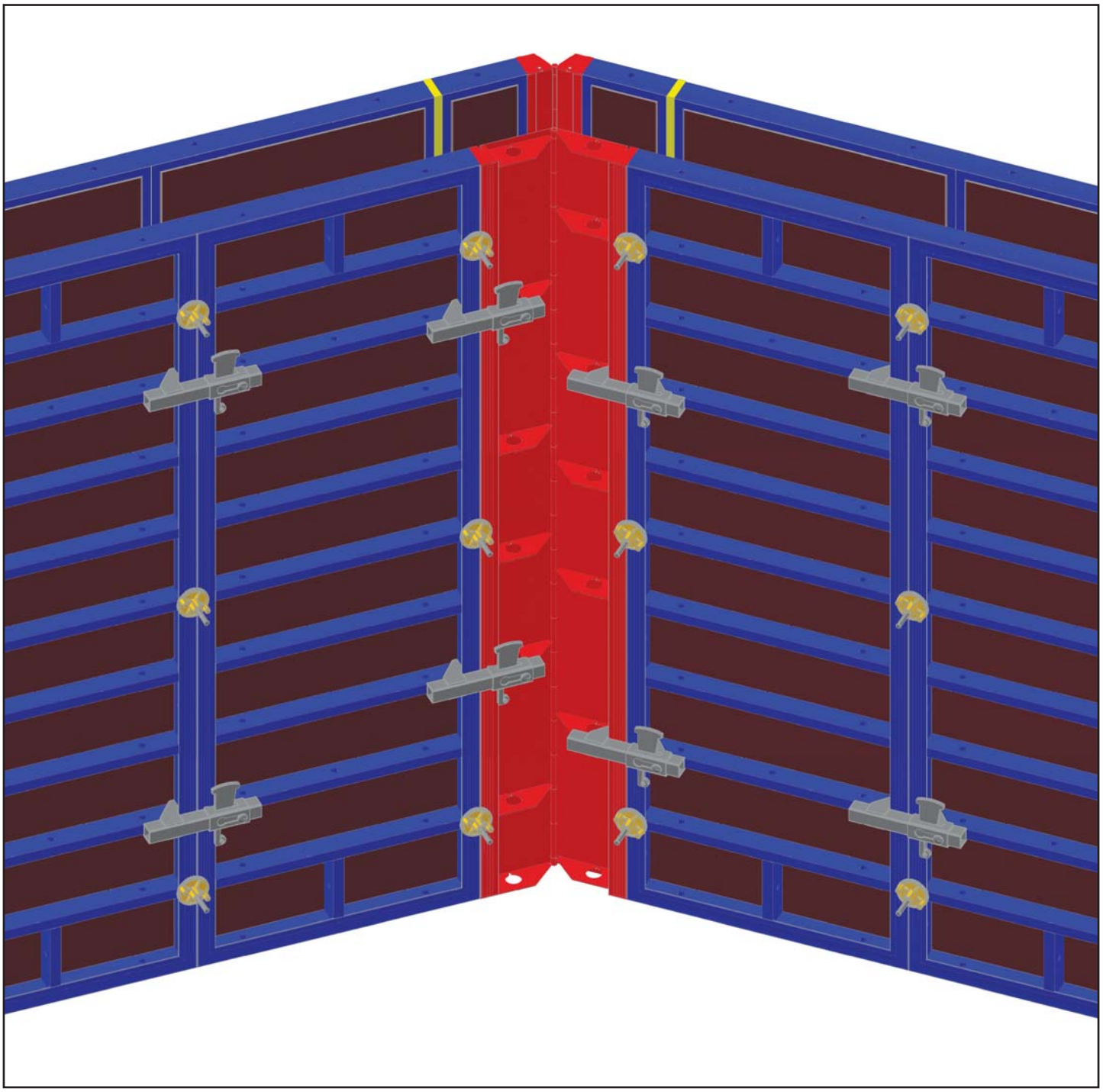


ARTICULATED OUTSIDE CORNER:
Ideal position for aligning clamps and adjustable clamps for the linkage between an articulated corner and GP-10 panels.
Hinge stiffening tube position.



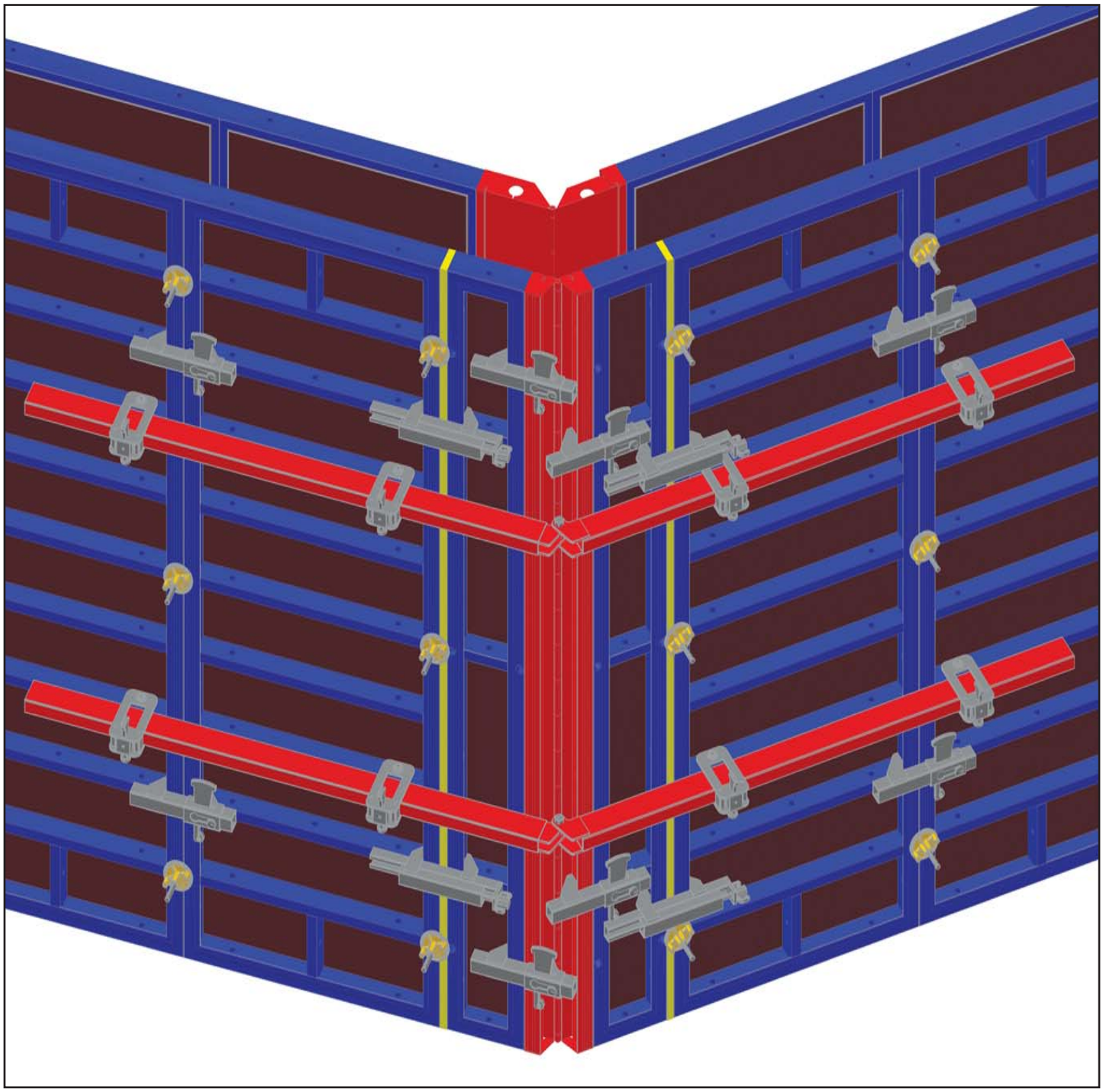
ARTICULATED CORNER

INTERNAL ARTICULATER ANGLE JOINT VIEW:
Observe this image for the correct position of all the accessories to guarantee the solidity of the articulated corner system.

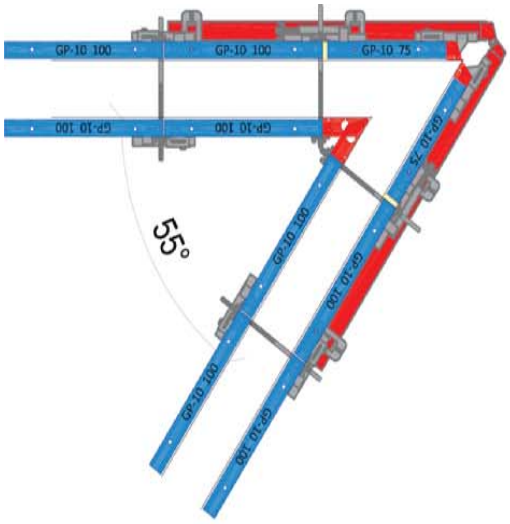


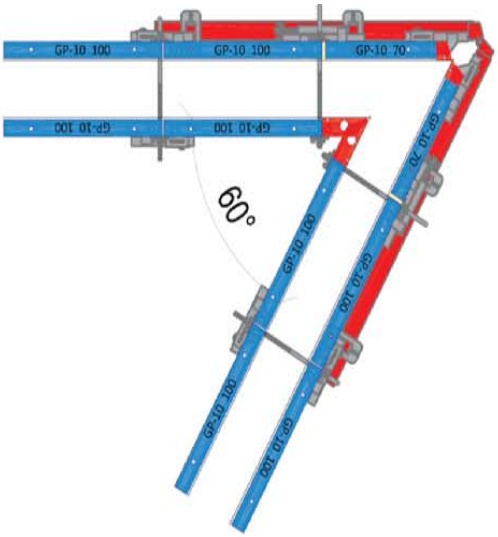
OUTSIDE CORNER ANGLE JOINT VIEW:

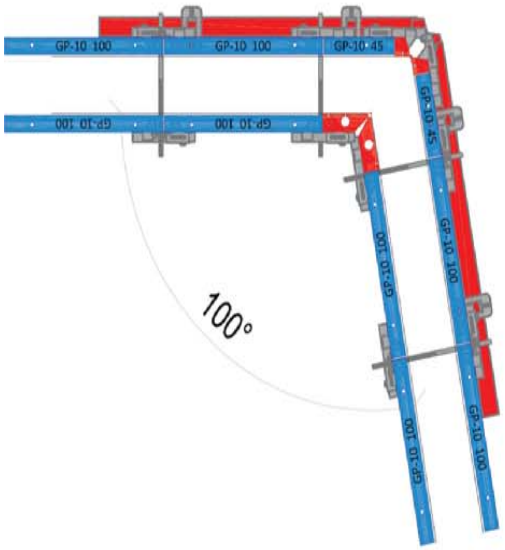
Observe this image for the correct position of all the accessories to guarantee the solidity of the articulated corner system.

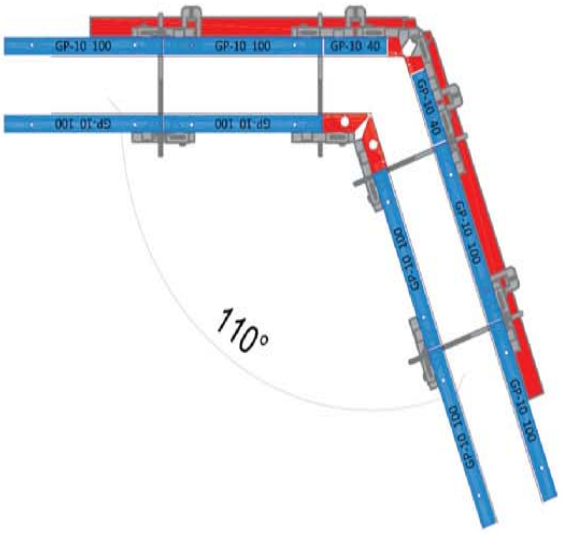


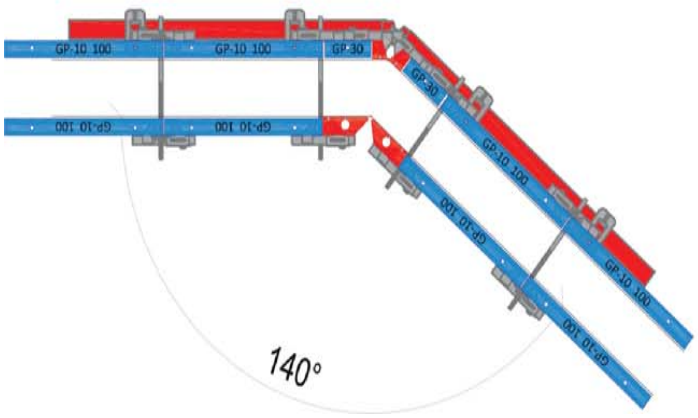
ARTICULATED CORNER

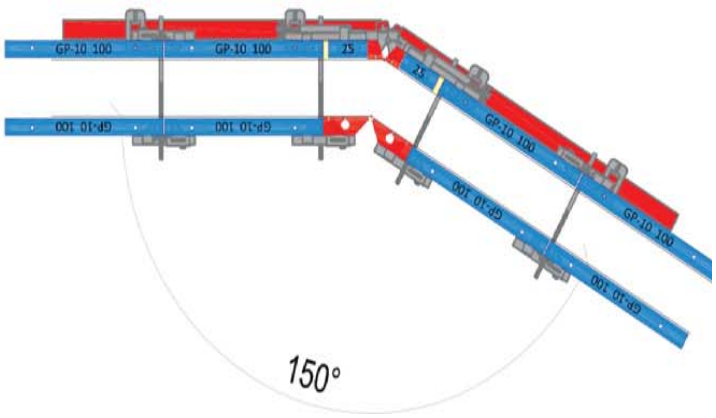


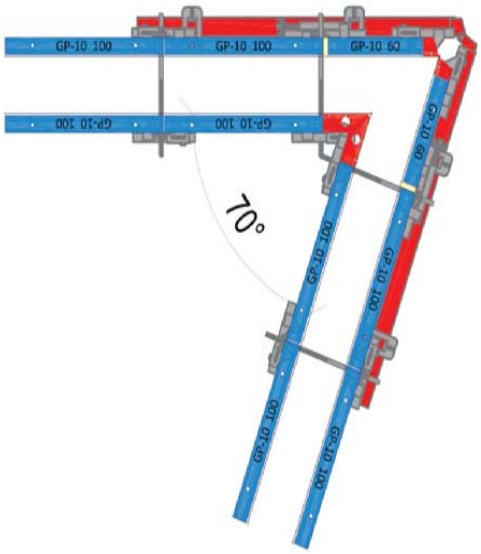


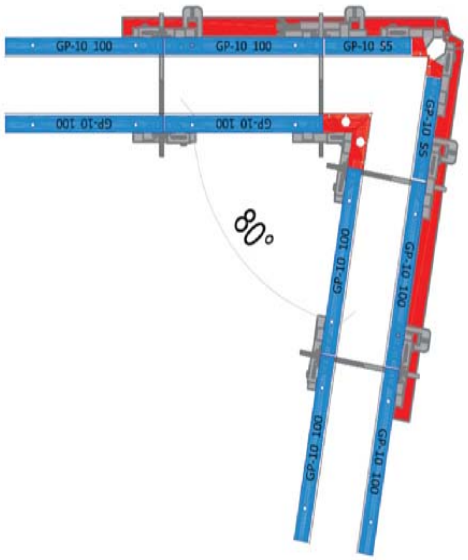


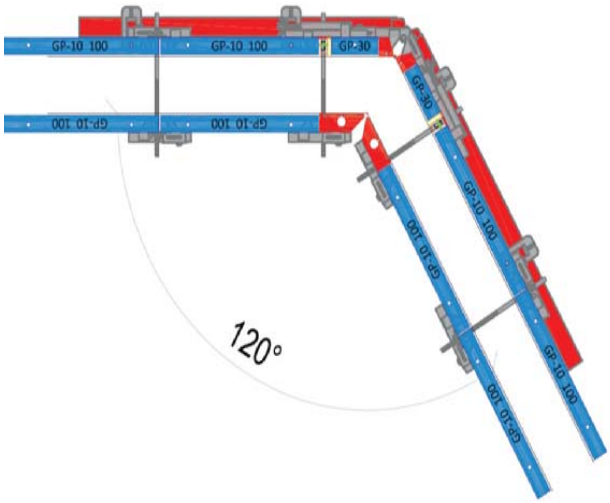


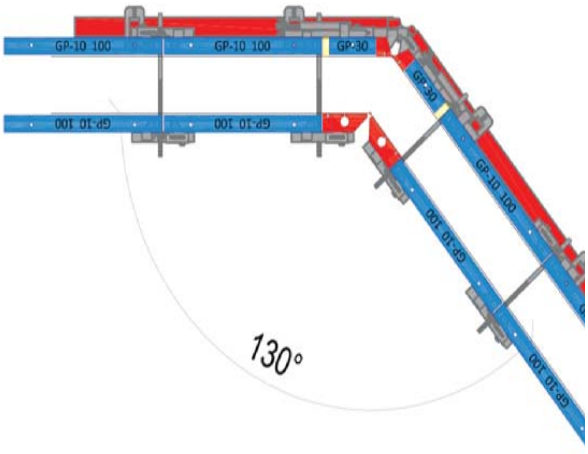


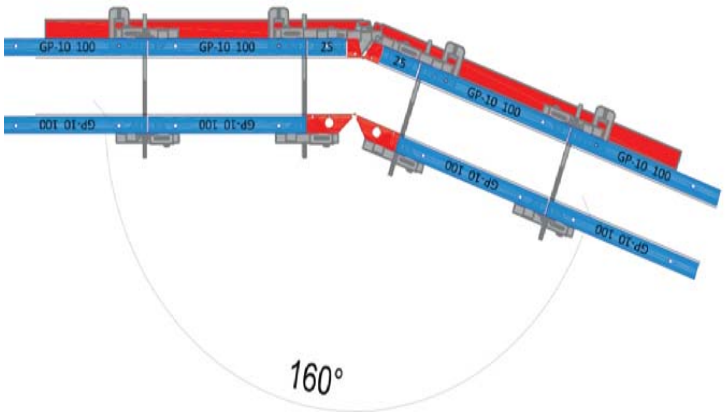


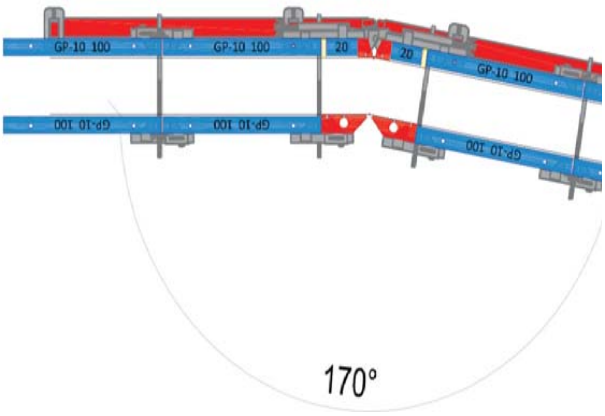

GP-10 100
GP-10 100
GP-10 60
GP-10 100
GP-10 60
GP-10 100
GP-10 100
70°


GP-10 100
GP-10 100
GP-10 55
GP-10 100
GP-10 55
GP-10 100
GP-10 100
80°


GP-10 100
GP-10 100
GP-30
GP-10 100
GP-30
GP-10 100
GP-10 100
120°


GP-10 100
GP-10 100
GP-30
GP-10 100
GP-30
GP-10 100
GP-10 100
130°


GP-10 100
GP-10 100
25
25
GP-10 100
GP-10 100
GP-10 100
GP-10 100
160°


GP-10 100
GP-10 100
20
20
GP-10 100
GP-10 100
GP-10 100
170°

ARTICULATED CORNER

DIMENSIONING FITTING PANEL:

To size the external GP-10 connection panel look at the following tables:

LEGEND:

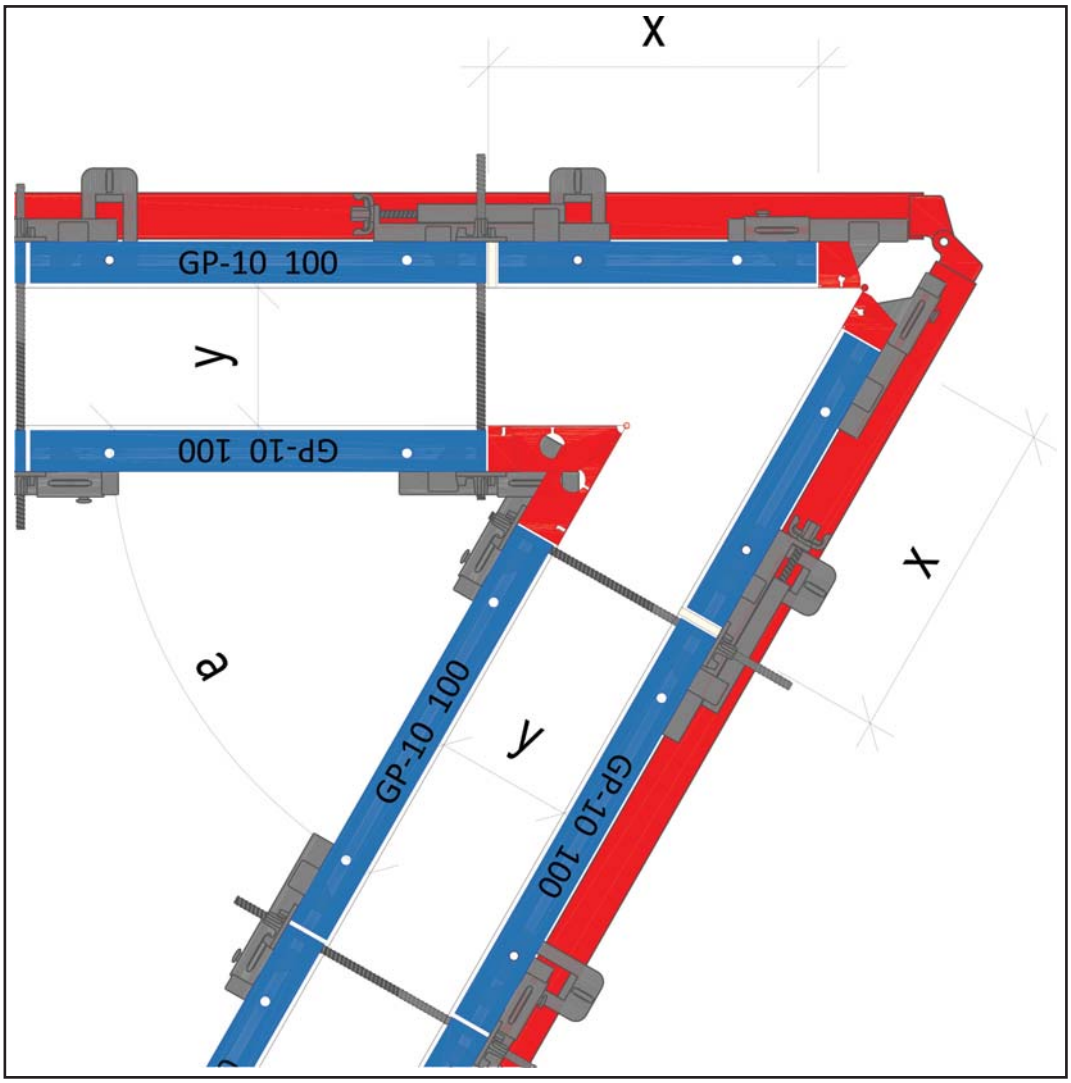
X = panel size to be obtained
Y= wall thickness
a= angle amplitude

ACUTE / RIGHT ANGLES

	a							
	55°	60°	65°	70°	75°	80°	85°	90°
y	**x**							
10	39	37	36	35	33	32	31	30
15	49	46	44	41	40	38	36	35
20	58	55	51	49	46	44	42	40
25	68	63	59	56	53	50	47	45
30	78	72	67	63	59	56	53	50
35	87	81	75	70	66	62	58	55
40	97	89	83	77	72	68	64	60
45	106	98	91	84	79	74	69	65
50	116	106	98	91	85	80	75	70

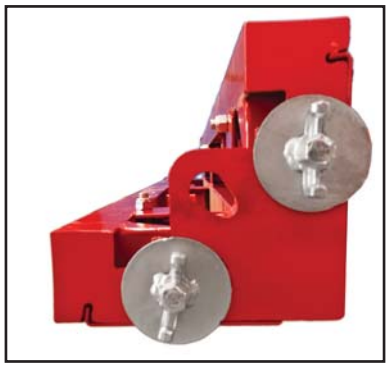
OTTUSIAN CORNERS

	95°	100°	105°	110°	115°	120°	125°	130°
y								
10	29	28	28	27	26	26	25	25
15	34	33	32	31	30	29	28	27
20	38	37	35	34	33	32	30	29
25	43	41	39	38	36	34	33	32
30	47	45	43	41	39	37	36	34
35	52	49	47	45	42	40	38	36
40	57	54	51	48	45	43	41	39
45	61	58	55	52	49	46	43	41
50	66	62	58	55	52	49	46	43



a								
135°	140°	145°	150°	155°	160°	165°	170°	175°
x								
24	24	23	23	22	22	21	21	20
26	25	25	24	23	23	22	21	21
28	27	26	25	24	24	23	22	21
30	29	28	27	26	24	23	22	21
32	31	29	28	27	25	24	23	21
35	33	31	29	28	26	25	23	22
37	35	33	31	29	27	25	24	22
39	36	34	32	30	28	26	24	22
41	38	36	33	31	29	27	24	22

LIFT SHAFT - ASSEMBLY

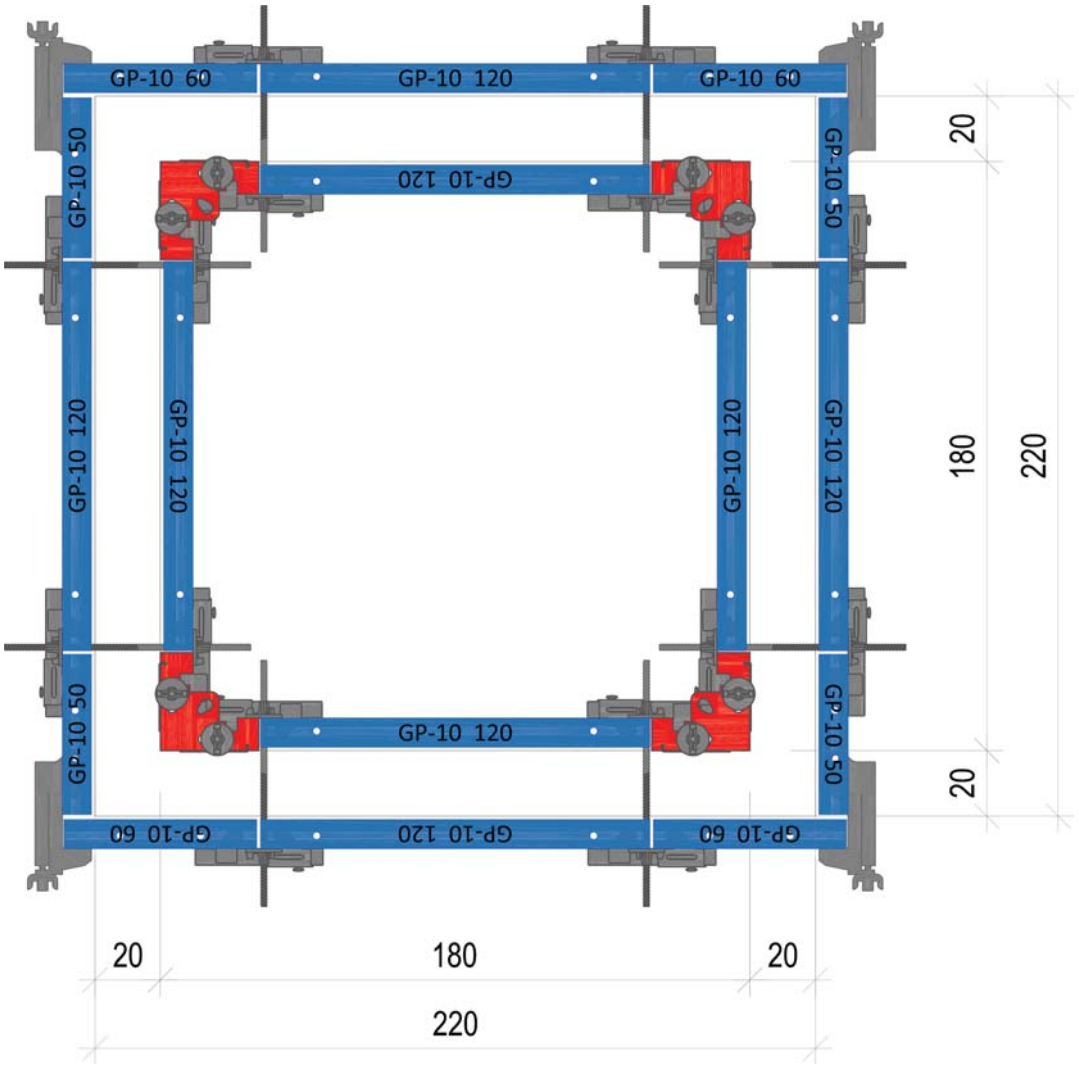


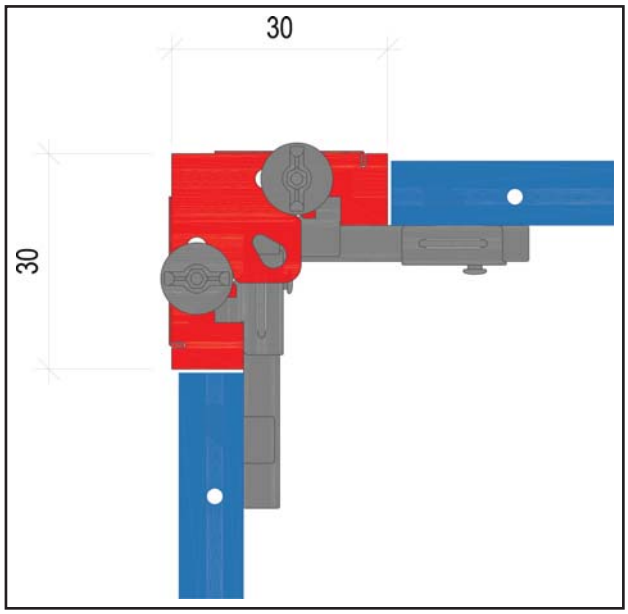
DESCRIPTION:

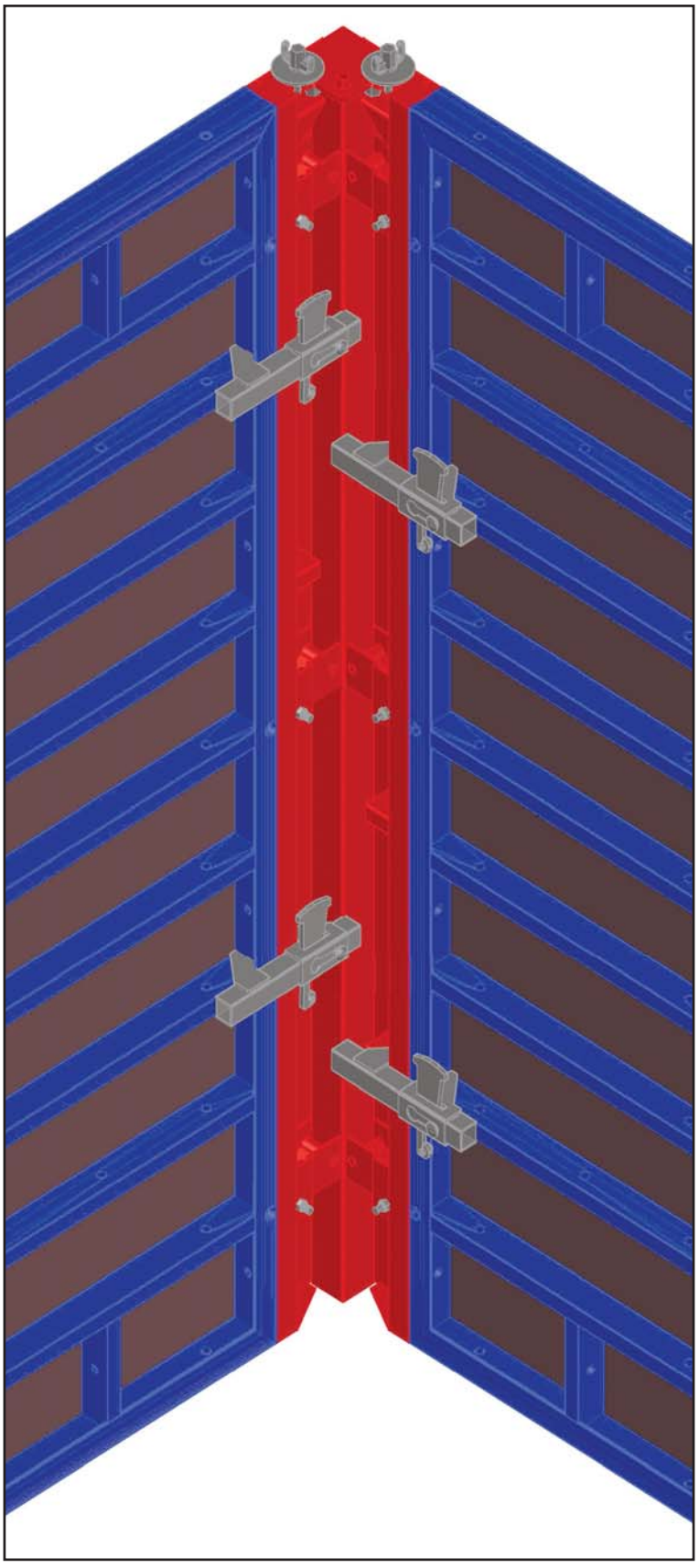
With the GP-10 system you can compose elevator compartments of different sizes. By installing n°04 disarming angles, the system allows the disassembly of the entire central body so as to be ready for the next phase.
By actuating the disarming angles, the central body narrows about 8 cm on each side.

USED MATERIAL:

222121	Striking corner 30x30 H300	Pcs. 4
222221	Striking corner 30x30 H150	Pcs. 4
222321	Striking corner 30x30 H270	Pcs. 4
222421	Striking corner 30x30 H135	Pcs. 4
222521	Striking corner 30x30 H330	Pcs. 4
222621	Striking corner 30x30 H165	Pcs. 4
291012	Alignement clamp	Pcs. 12
	Tie rod DW15	Pcs. 6
811051	Wing nut DW15	Pcs. 12



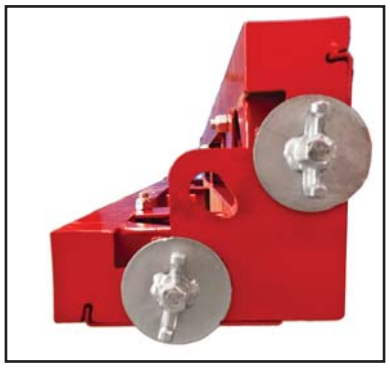


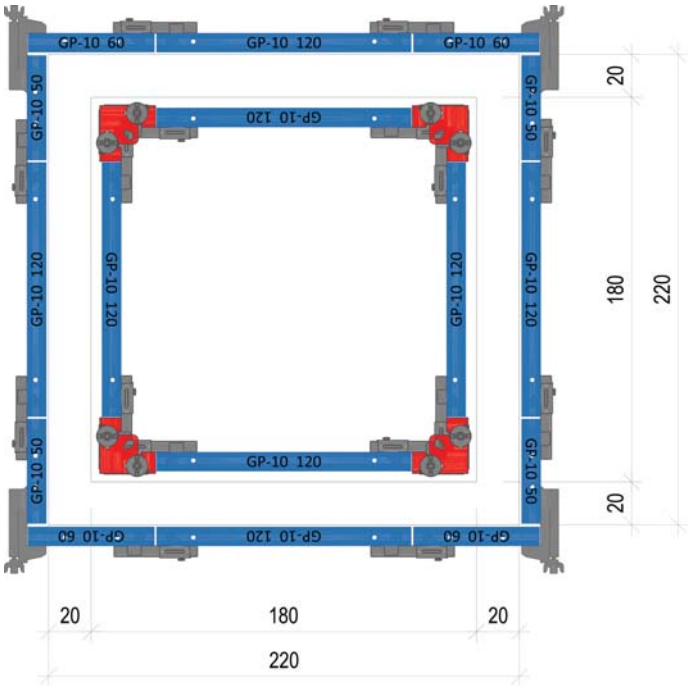


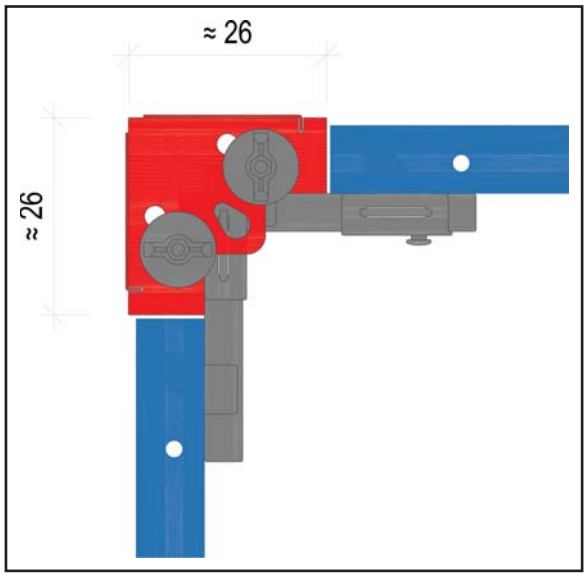
CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

LIFT SHAFT – DISASSEMBLY





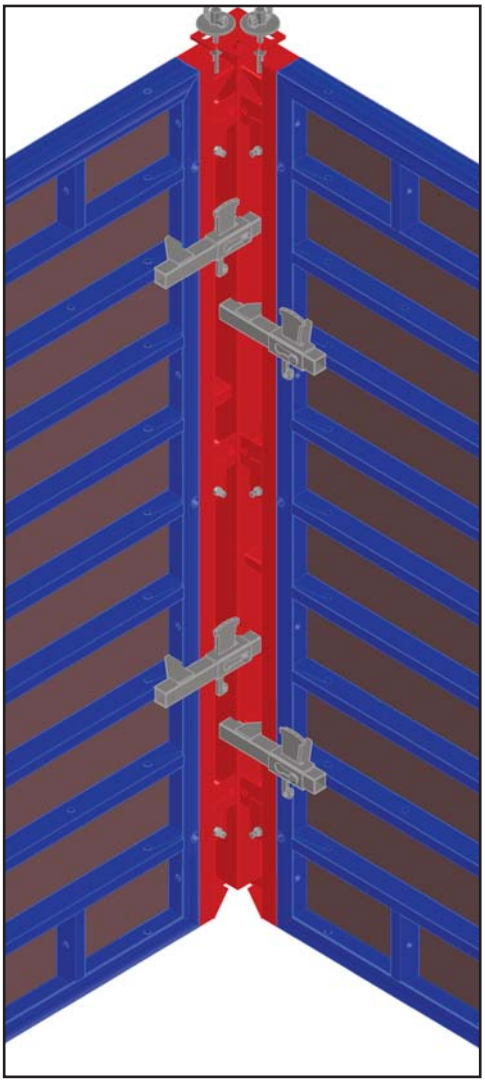


DESCRIPTION:

With the GP-10 system you can compose elevator compartments of different sizes.
By installing n°04 disarming angles, the system allows the disassembly of the entire central body so as to be ready for the next phase.
By actuating the disarming angles, the central body narrows about 8 cm on each side.

USED MATERIAL:

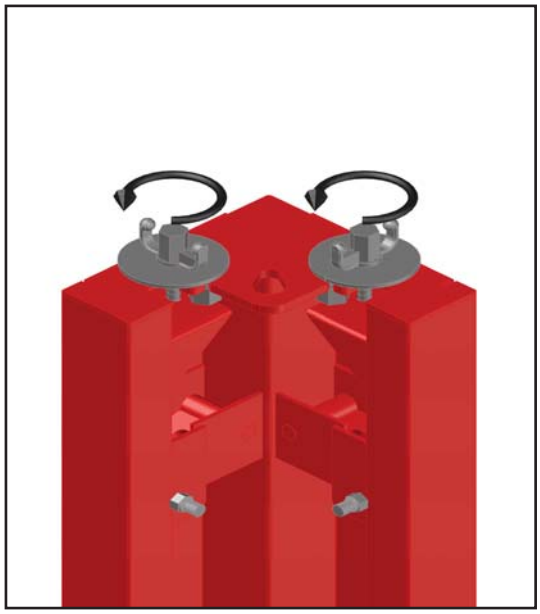
222121	Striking corner 30x30 H300	Pcs. 4
222221	Striking corner 30x30 H150	Pcs. 4
222321	Striking corner 30x30 H270	Pcs. 4
222421	Striking corner 30x30 H135	Pcs. 4
222521	Striking corner 30x30 H330	Pcs. 4
222621	Striking corner 30x30 H165	Pcs. 4
291012	Alignement clamp	Pcs. 32
291042	Adjustable clamp for ext. corner	Pcs. 16



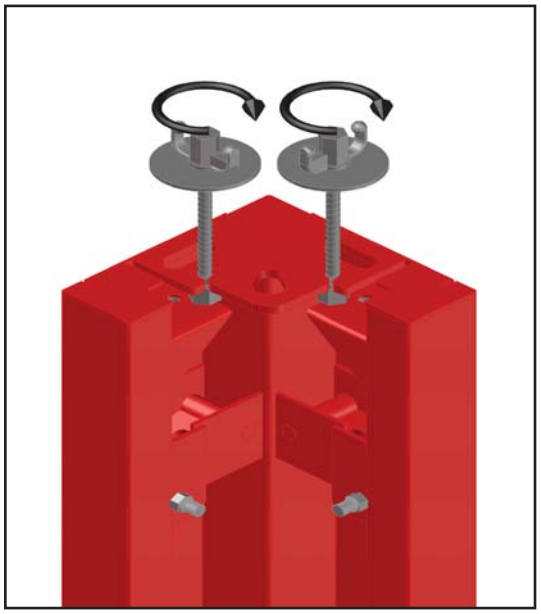
DESCRIPTION:

After disarming all the DW15 bars, proceed with the disarming of the corner as shown below:

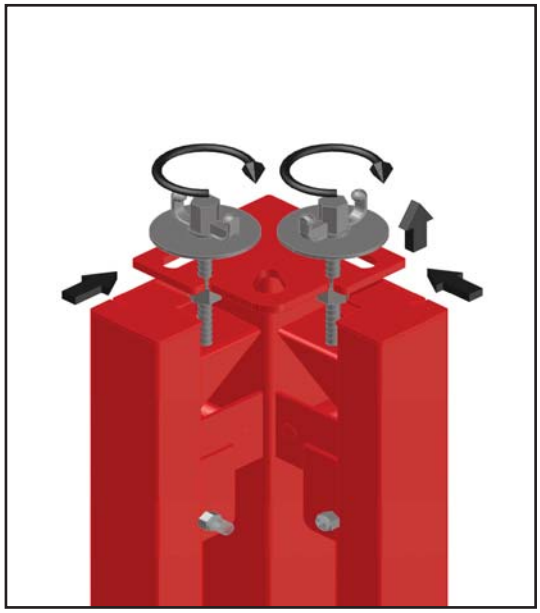
A



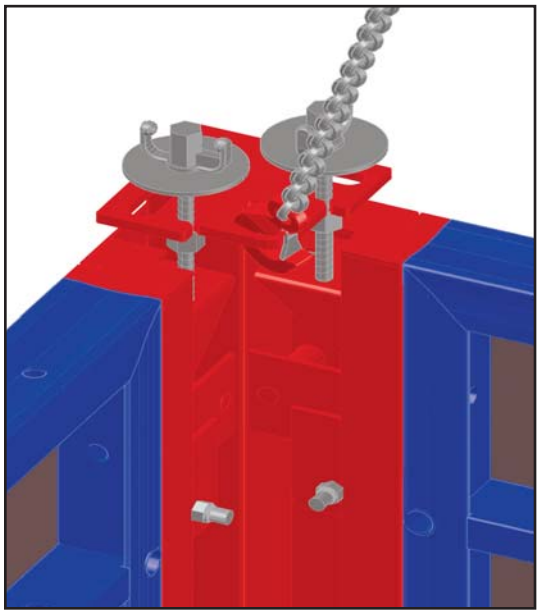
B



C



D

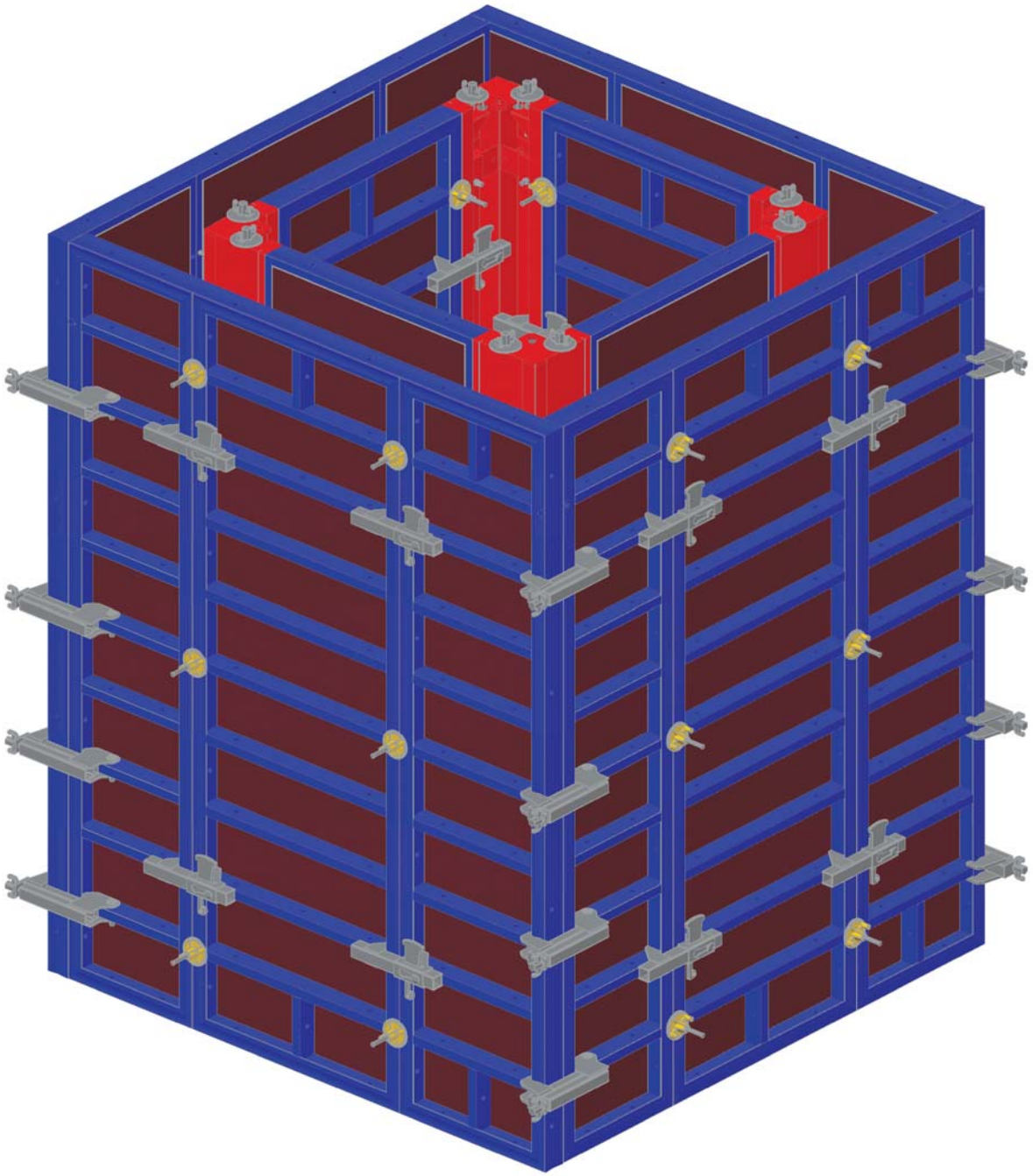


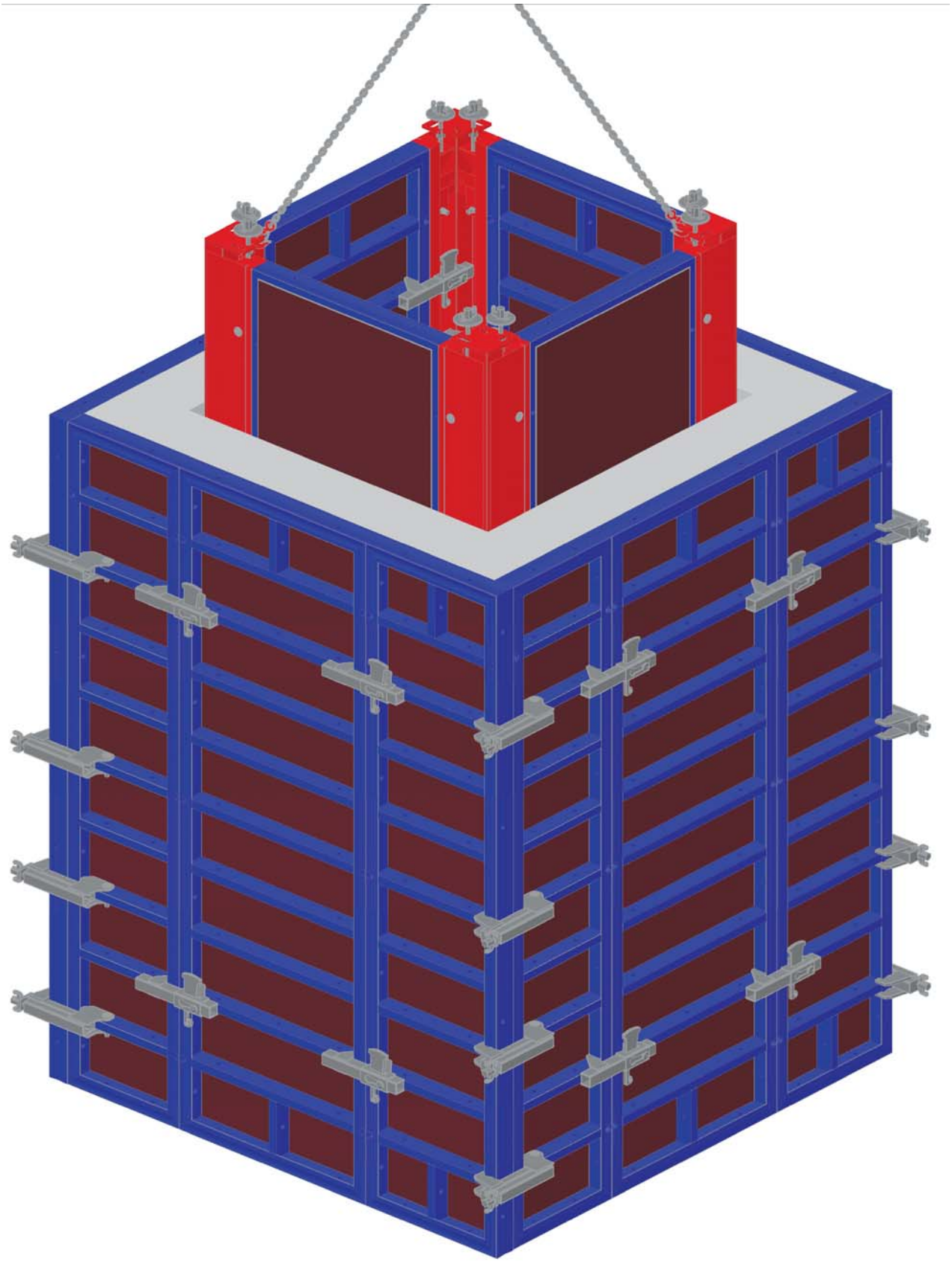
ATTENTION:

In order to prevent the concrete pressure from blocking the mechanism for disarming, act on the vines already after about 10 hours of the end of the casting. Lift a couple of cm. to unlock the central body.
For complete disarmament, observe the images on p. 94.

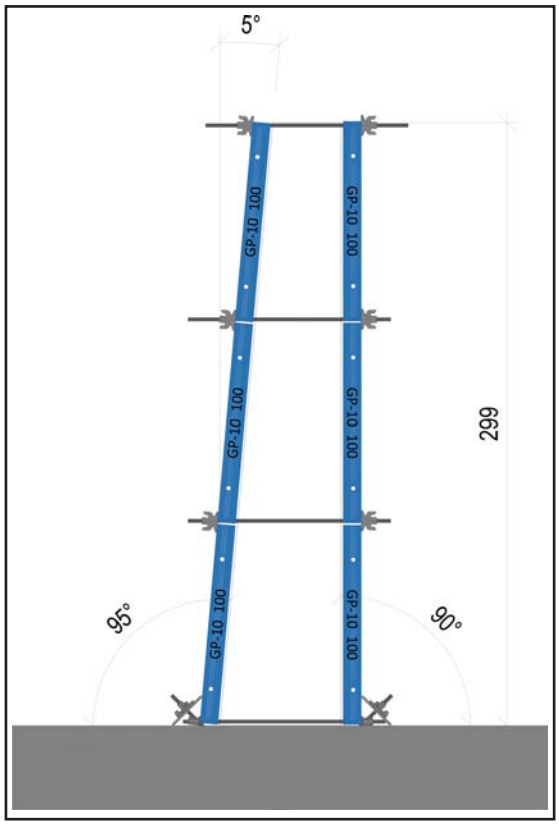
It is recommended to keep the connecting rod system clean and oiled inside the disarming corner.

LIFT SHAFT: ARMING – DISARMING





INCLINED WALL



DESCRIPTION:

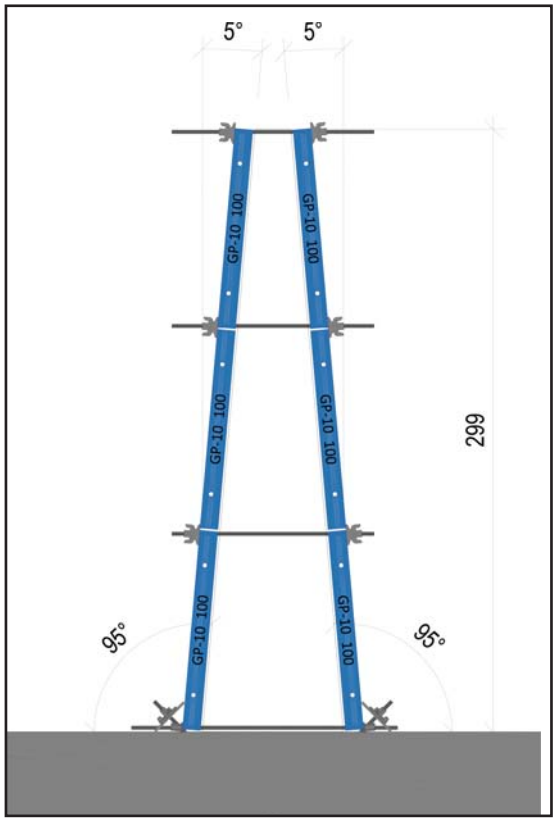
With the GP-10 system it is possible to create inclined walls both with horizontal and vertical panels using the conical bushing and the articulated plate DW15.
The maximum inclination that can reach the wall is: 5 ° (8.7%) compared to the vertical.
In the event that the customer uses the GP-10 panels in a horizontal position, replace the swivel plate with the nut with washer to secure the DW bars in the vicinity of the floor.

USED MATERIAL:

811052 Anchor plate DW15
811054 Nut avec washer DW15

TIGHTENING OF THE TIE ROD DW15:

To compose inclined walls, use the articulated plates DW15.

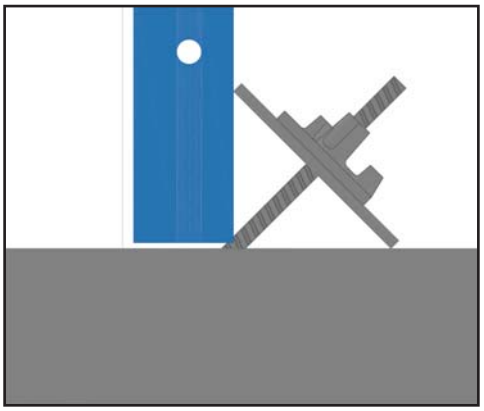


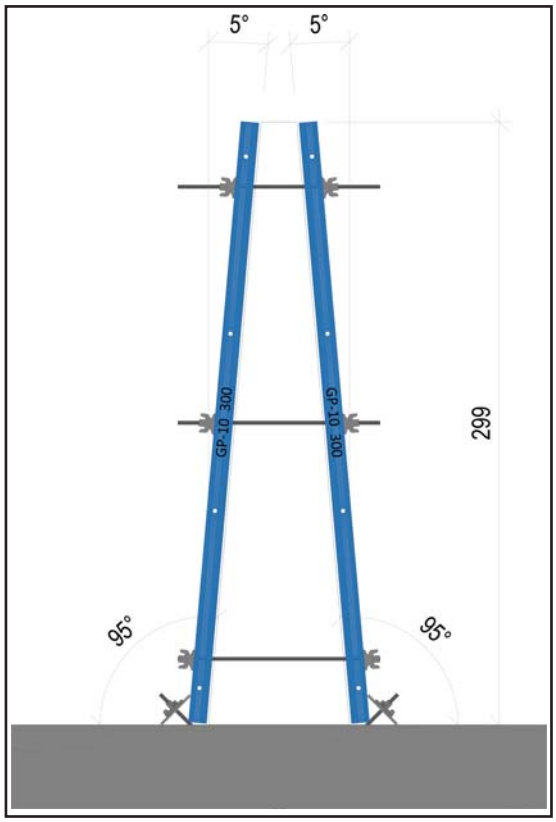
TIGHTENING OF THE TIE ROD DW15:

Near the floor, where the reduced space does not allow the use of the nut plate, use the datum with washer DW15.

ATTENTION:

Mandatory anchoring by the user.



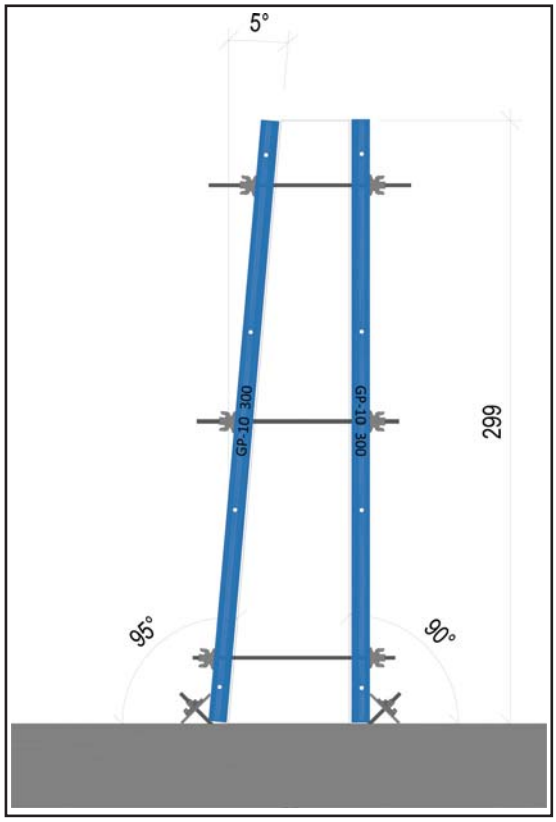


DESCRIPTION:

With the GP-10 system it is possible to create inclined walls both with horizontal and vertical panels using the conical bushing and the articulated plate DW15.
The maximum inclination that can reach the wall is: 5 ° (8.7%) compared to the vertical.

USED MATERIAL:

811052 Anchor plate DW15

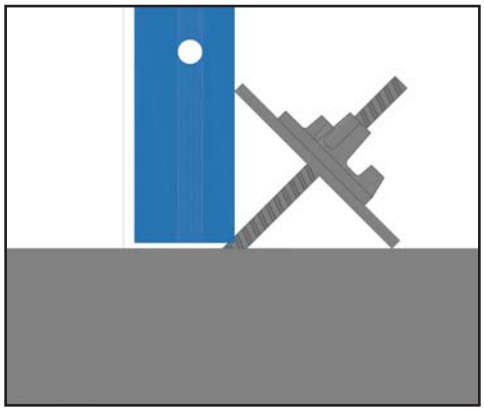


TIGHTENING OF THE TIE ROD DW15:

To compose inclined walls, use the articulated plates DW15.

ATTENTION:

Mandatory anchoring by the user.



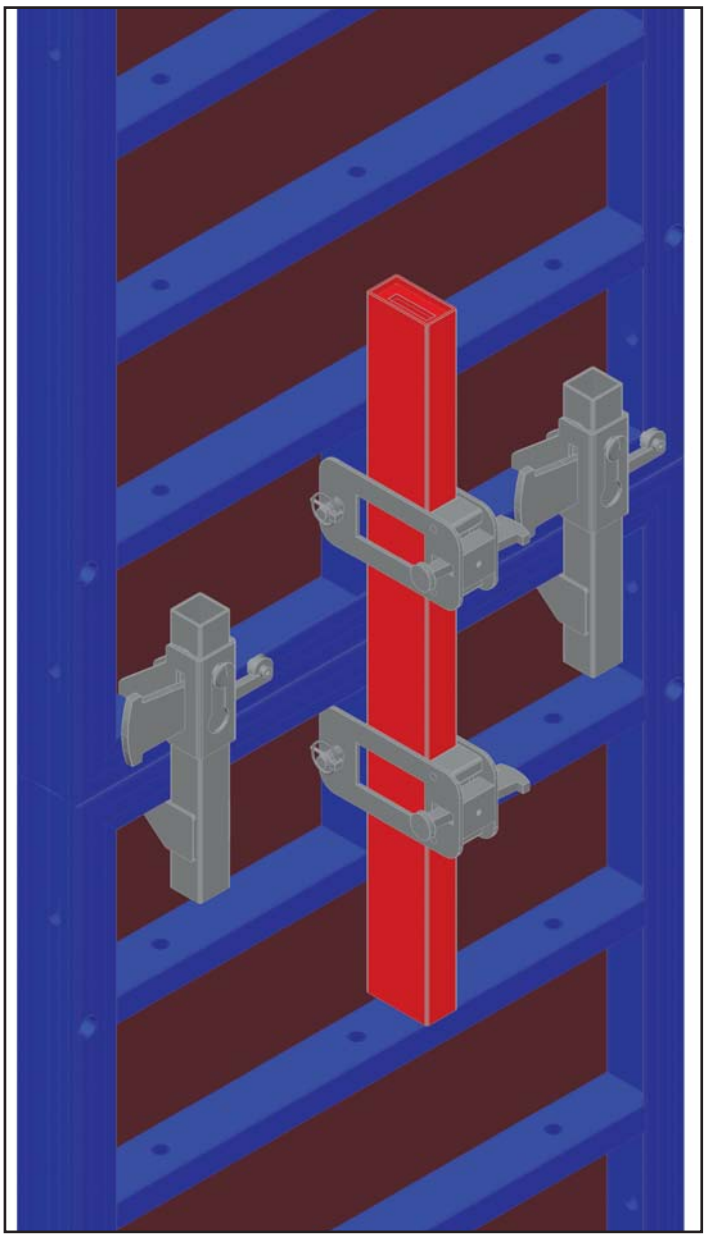
ALIGNEMENT PIPE CM.100 GP-10 - ART. 291142 - KG. 5,0

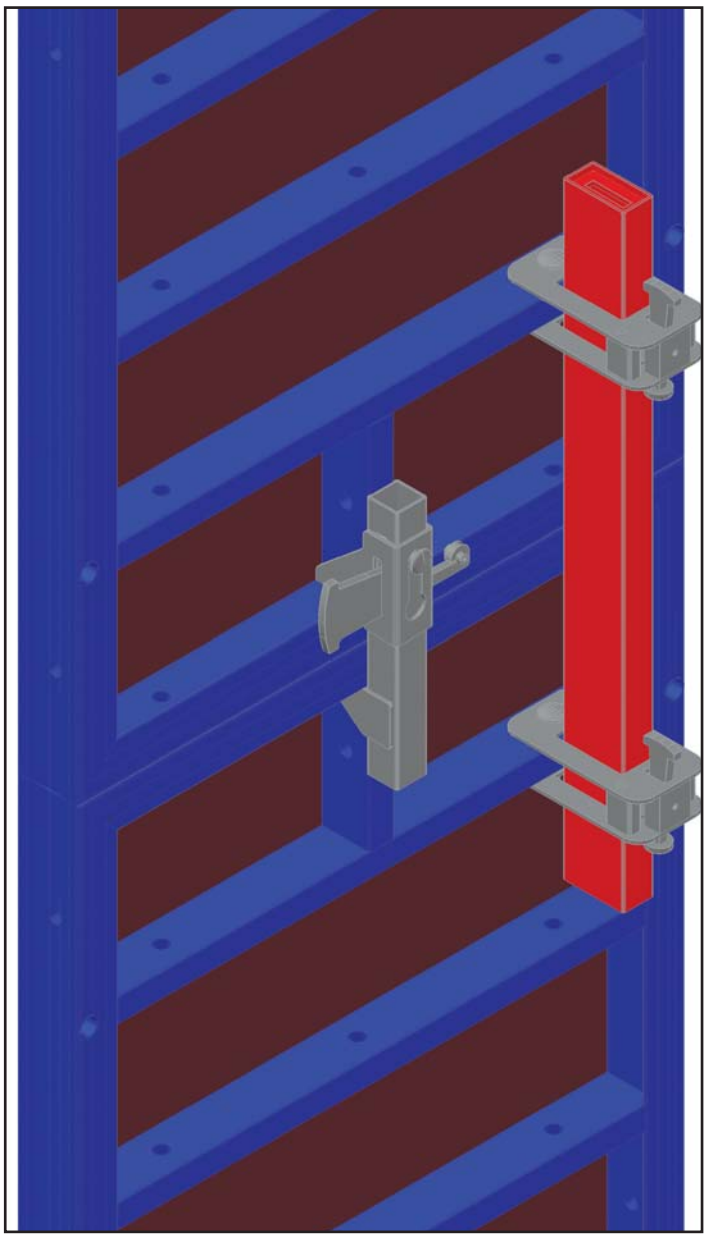
DESCRIPTION:

The aligner tube is used compulsorily when the formworks are stacked vertically; it serves to make the union between the two formworks integral and to perfectly align the panels.
The pipe is fixed to the formworks by means of aligning bracket to the central reinforcements of the formworks.

USED MATERIAL:

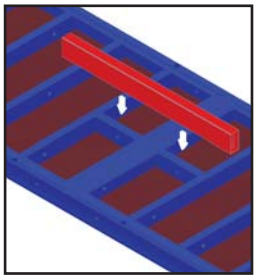
291142	Alignement braket	Pcs. 02
291143	Alignement pipe CM.100 GP-10	Pcs. 01



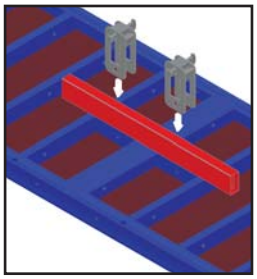


MOUNTING ALIGNEMENT PIPE CM.100 GP-10:

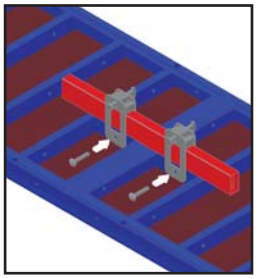
STEP 1:
Place the aligning tube CM. 100 GP-10 in correspondence of the formwork cross-pieces. Lay the tube on the side of 5 cm.



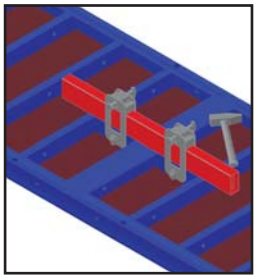
STEP 2:
Install n. 2 alignment brackets in correspondence of the holes on the head crosspieces.



STEP 3:
Insert the galvanized L.90 mm plugs into the holes in the alignment brackets.

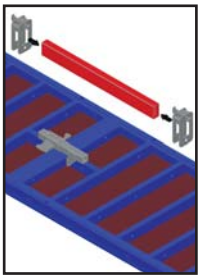


STEP 4:
Secure the formwork brackets by securing the wedge with the hammer. Insert the safety pin.

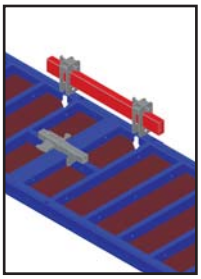


MOUNTING ALIGNEMENT PIPE CM.100 GP-10:

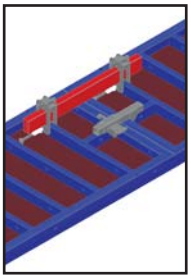
STEP 1:
Insert the aligner tube into the hole in the aligning brackets.



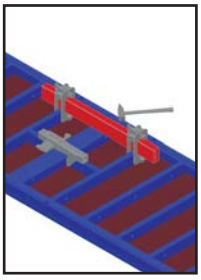
STEP 2:
Position the tube and the aligning brackets in correspondence with the hole of the formwork reinforcement beam.

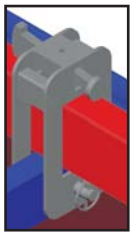


STEP 3:
Insert the galvanized L.90 mm plugs into the holes in the alignment brackets.

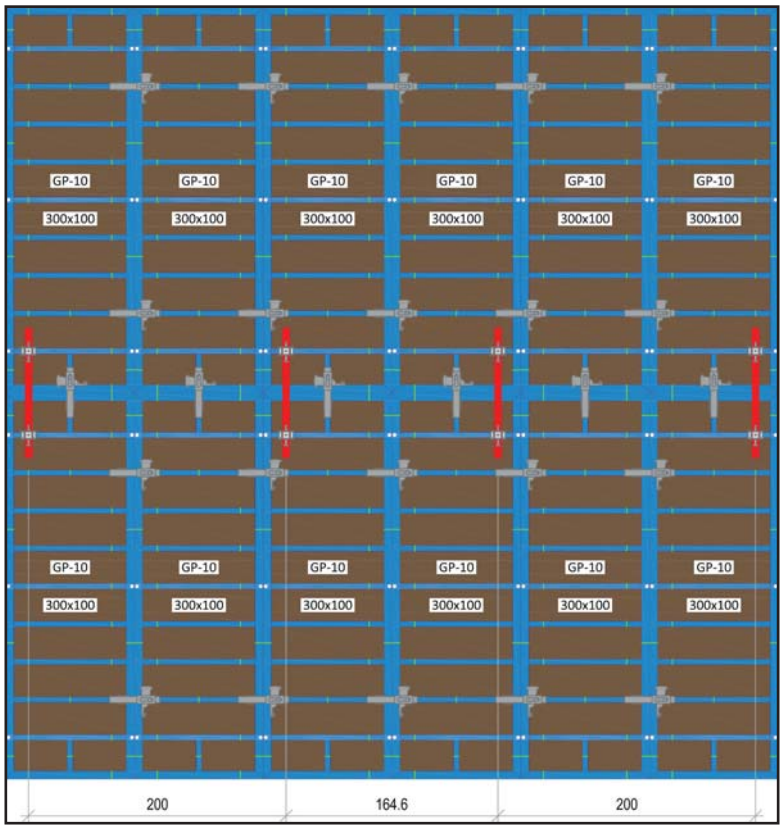


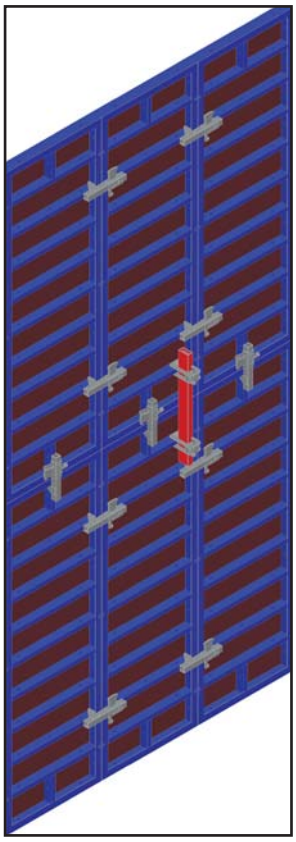
STEP 4:
Secure the formwork brackets by securing the wedge with the hammer. Insert the safety pin.

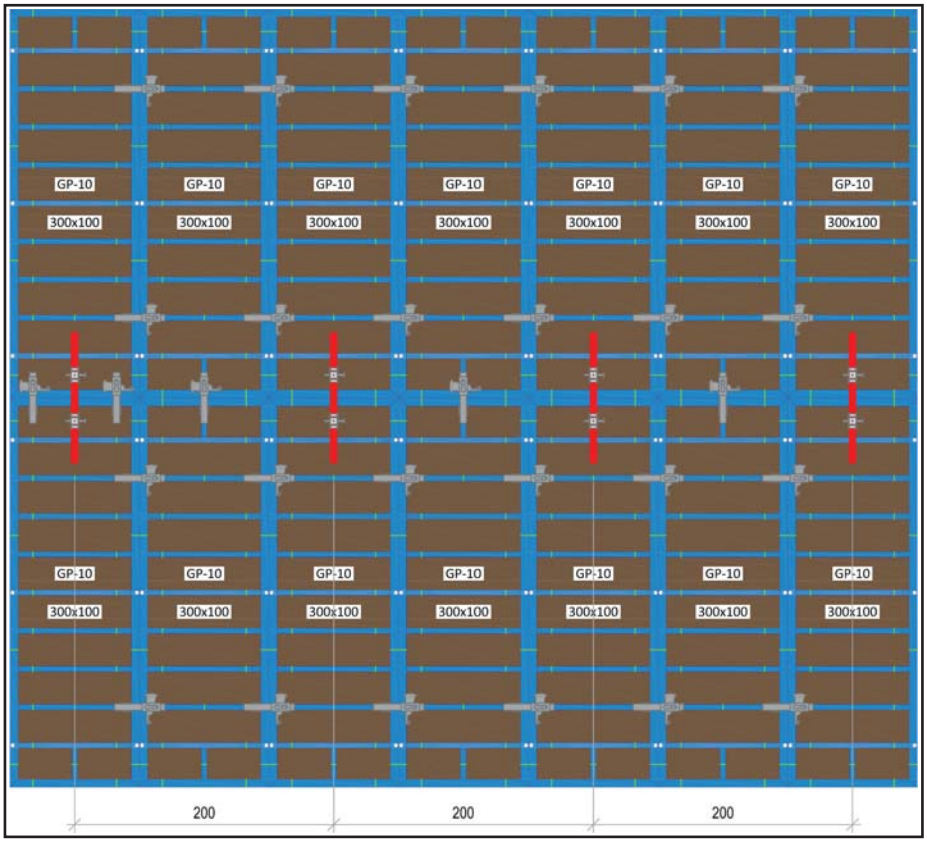


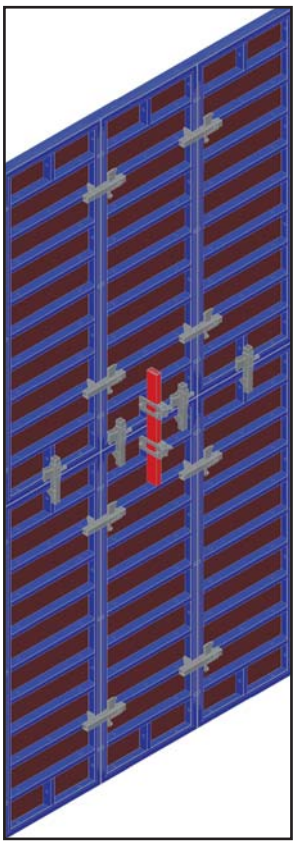


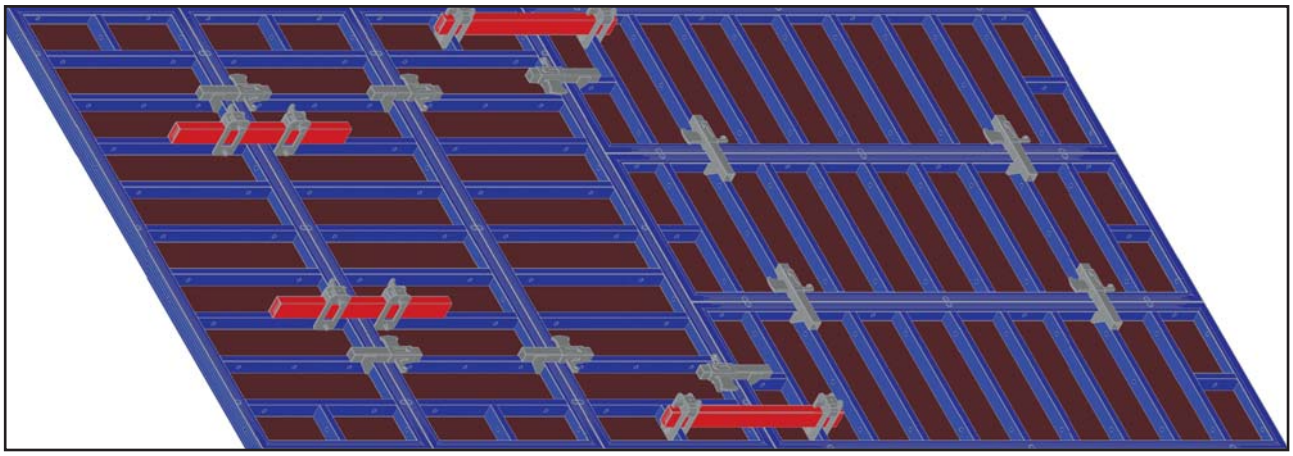
ALIGNEMENT PIPE CM.100 GP-10 - ART. 291142 - KG. 5,0

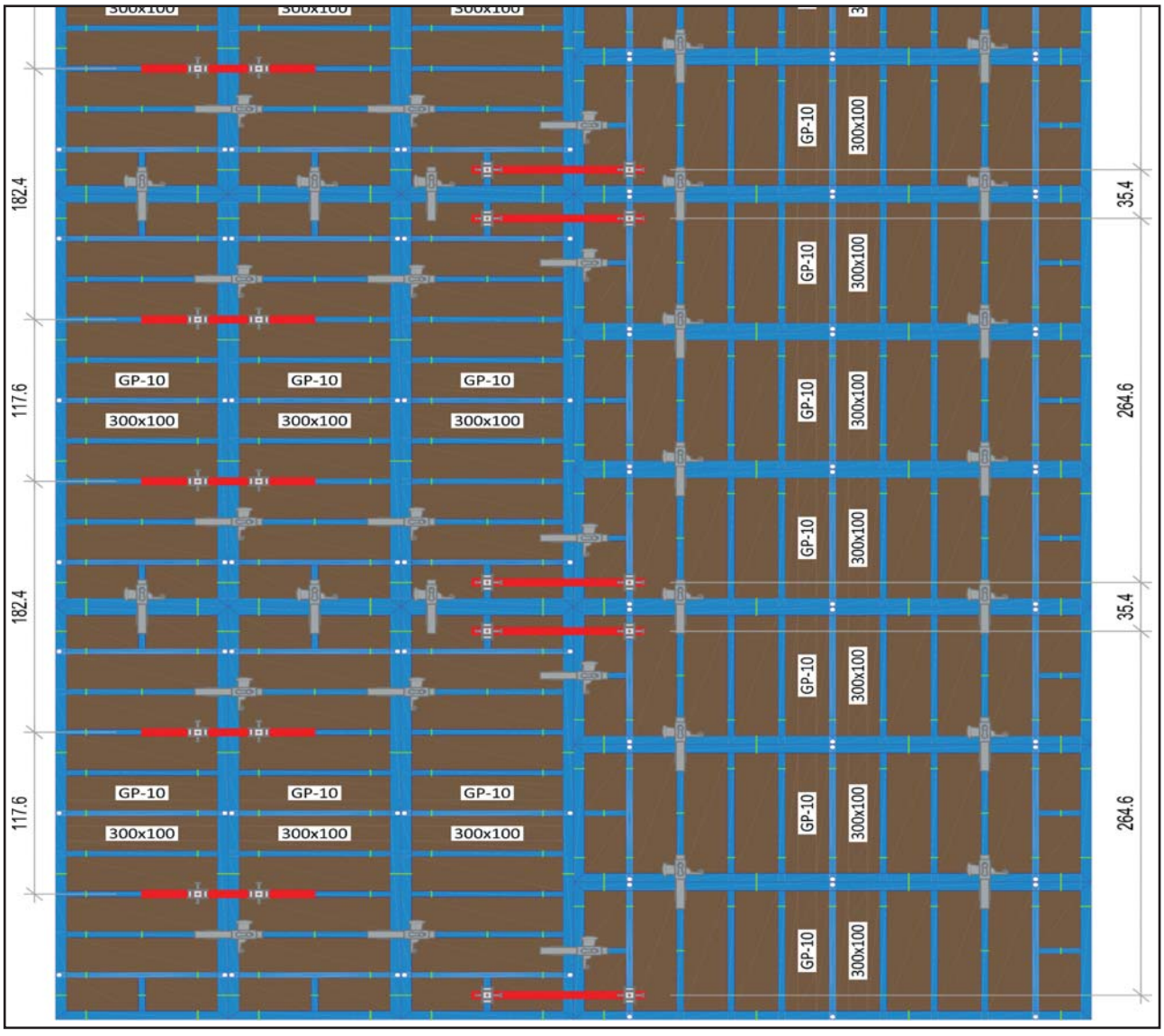











182.4
117.6
182.4
117.6
35.4
264.6
35.4
264.6
GP-10
300x100

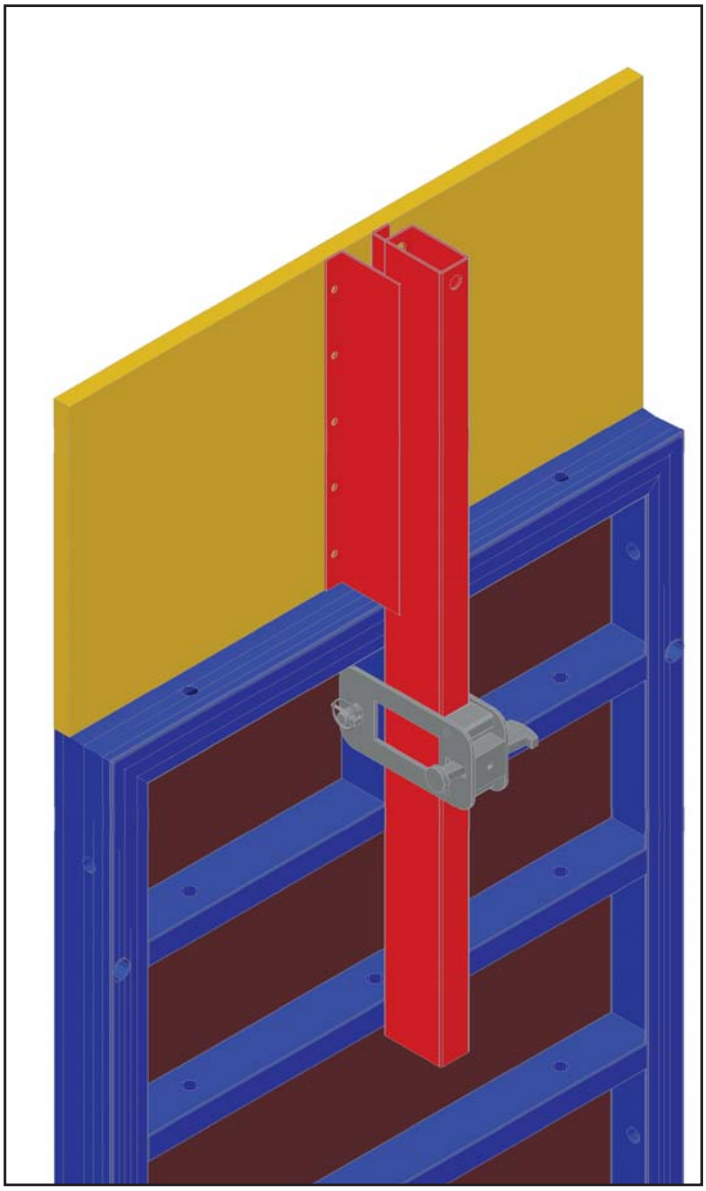
EXTENSION BRACKET CM.50 GP-10 - ART. 291152 - KG. 12,5

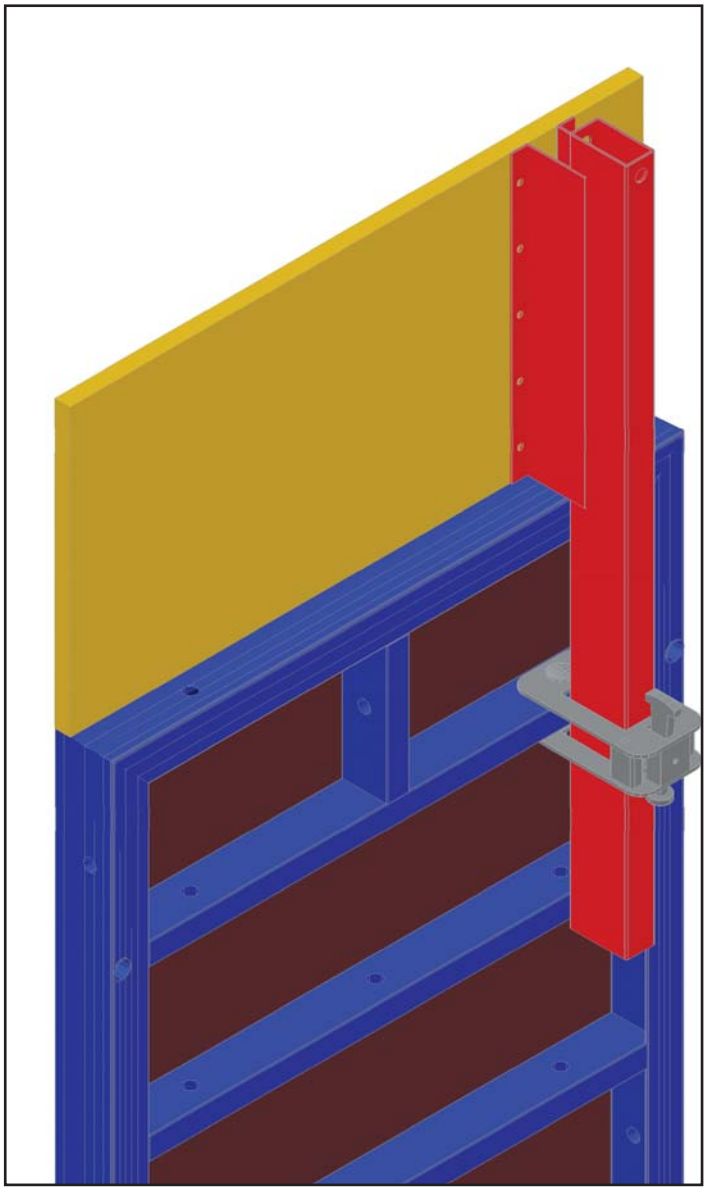
DESCRIPTION:

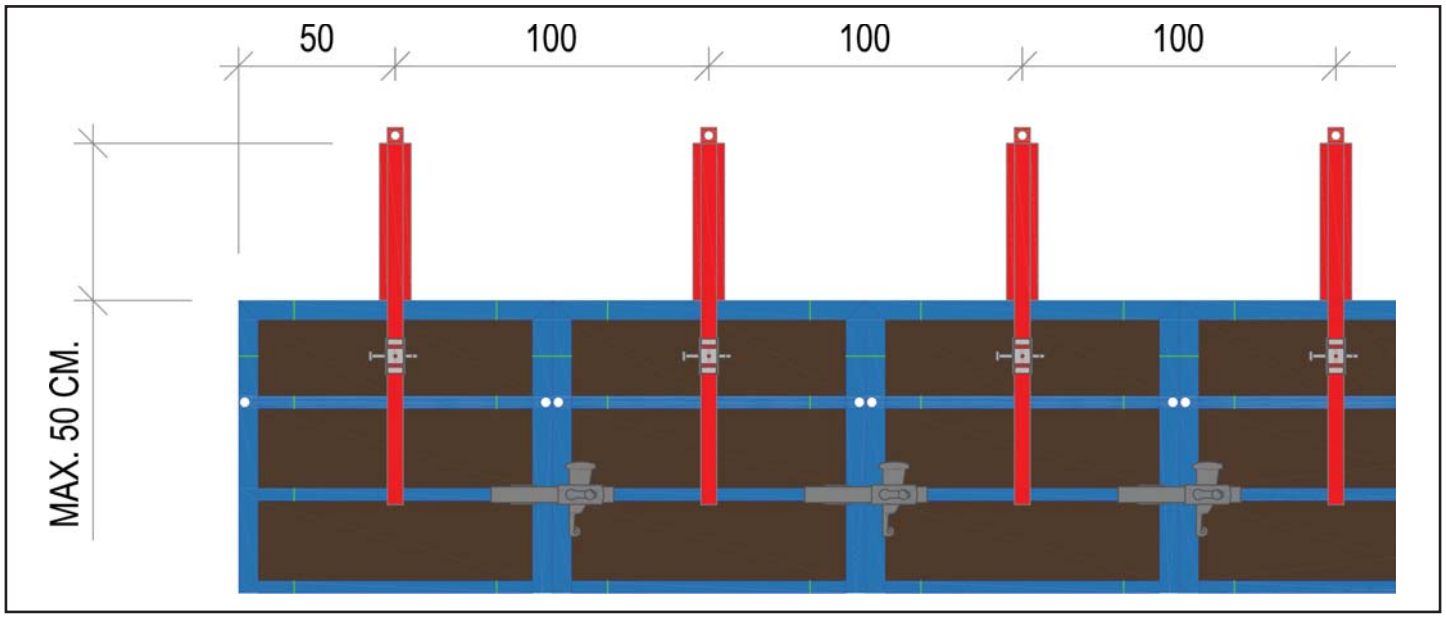
The extension bracket cm. 50 GP-10 fixed to the GP-10 formwork with the aligning bracket, serves to extend the formwork up to a maximum of 50 cm. The wood that is used is borne by the user.

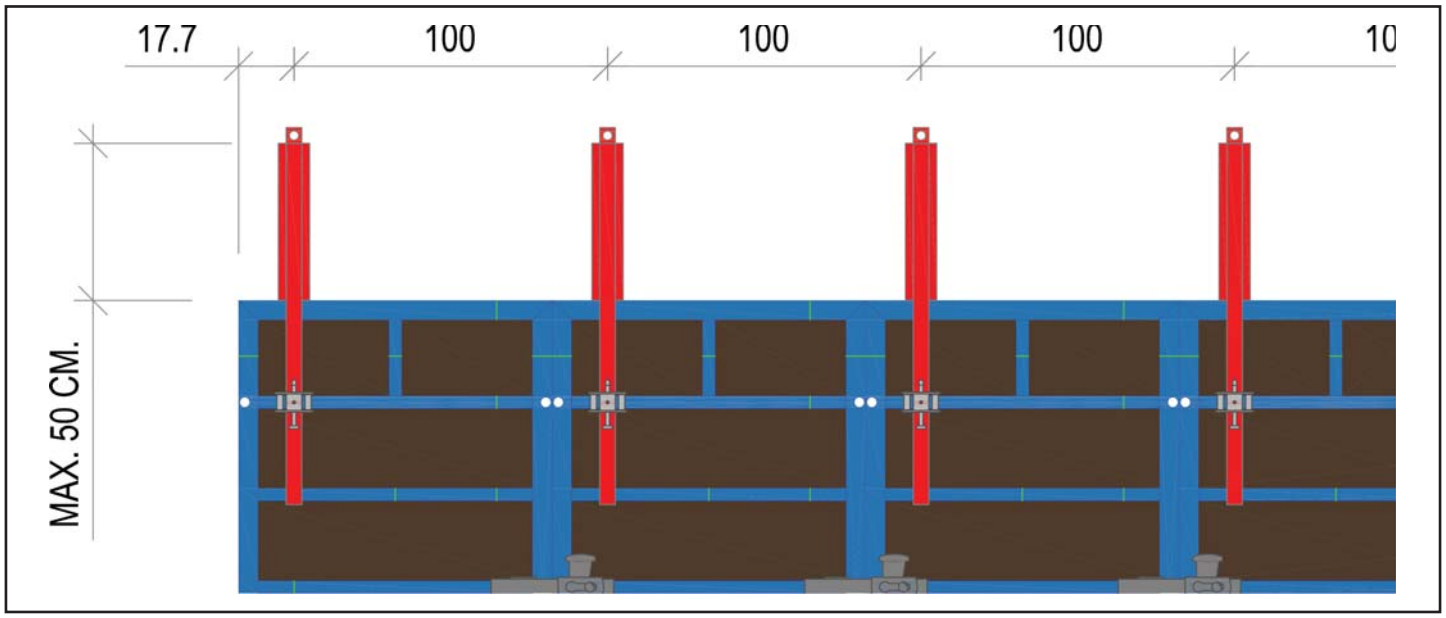
USED MATERIAL:

291142	Alignement bracket	Pcs. 01
291145	Extension bracket cm.50 GP-10	Pcs. 01





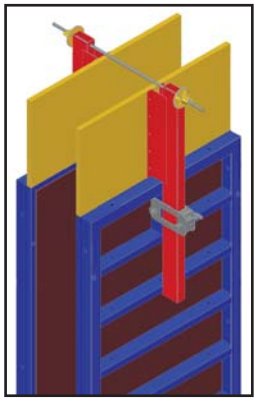




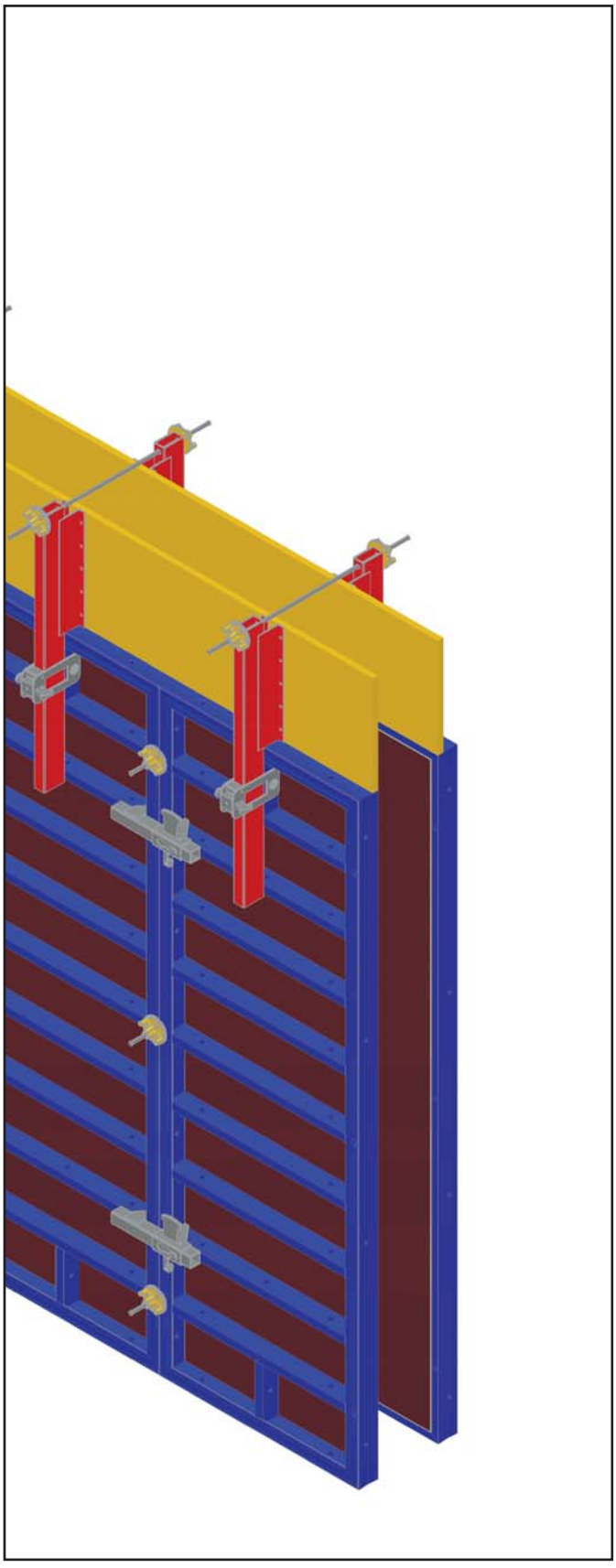
ATTENTION:

GPrandina srl declines all responsibility in the event that wood in bad condition or in the presence of evident signs of damage is used. The user is obliged to use wood in good condition.

It is mandatory to anchor the raising elements with the DW15 bars when they exceed 25 cm. extension.

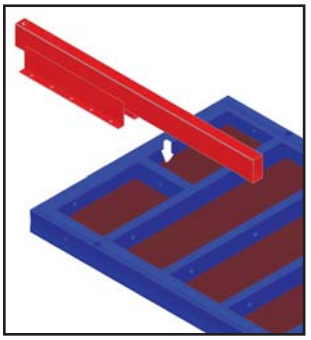


EXTENSION BRACKET CM.50 GP-10 - ART. 291152 - KG. 12,5

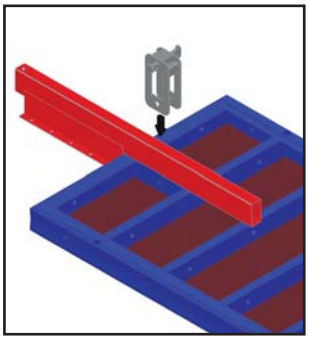


MOUNTING EXTENSION BRACKET CM.50 GP-10:

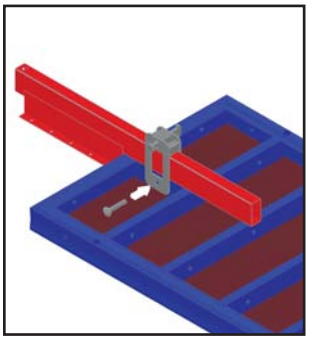
STEP 1:
Place the rising part CM. 50 GP-10 in correspondence with the crossbars of the formwork headers. Lay the tube on the side of 5 cm.



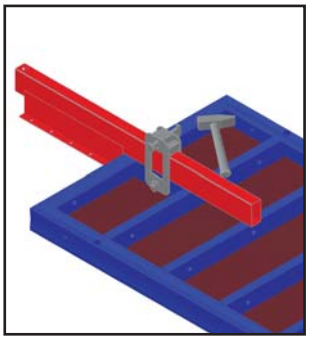
STEP 2:
Install n. 1 aligning bracket in correspondence of the holes on the head crosspieces.



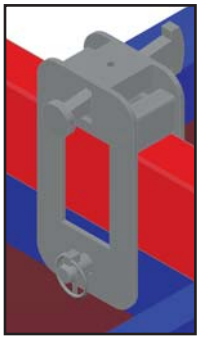
STEP 3:
Insert the galvanized L.90 mm plug into the alignment bracket hole.



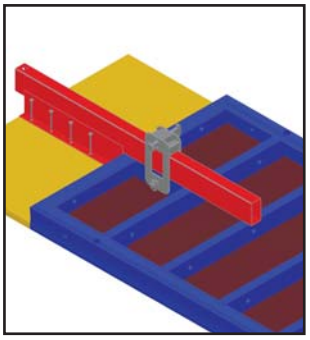
STEP 4:
Secure the brackets to the formworks by fixing the wedge with the hammer.

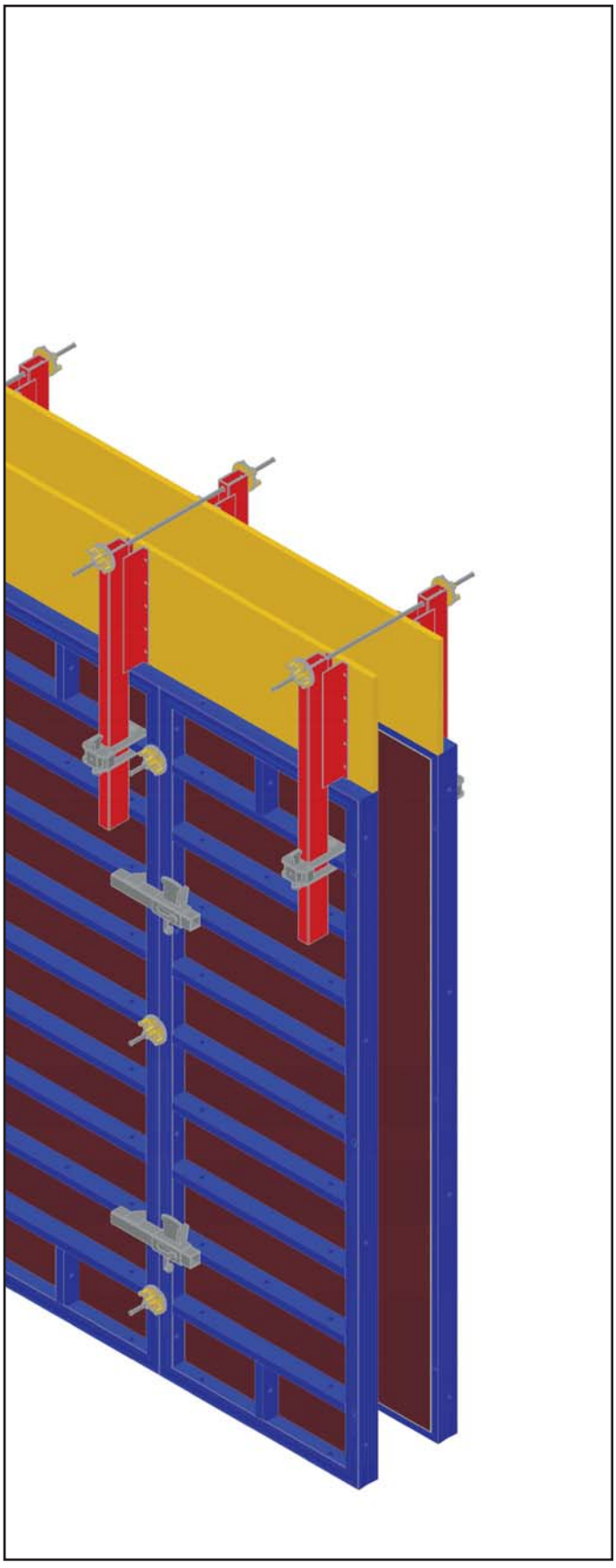


STEP 5:
Insert the safety pin.



STEP 6:
Fix the wood to the rising elements with nails.

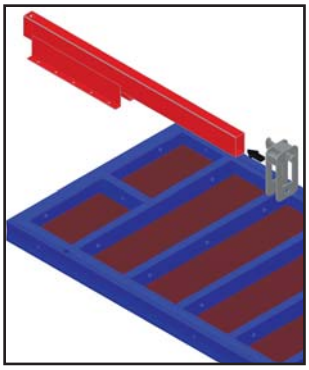


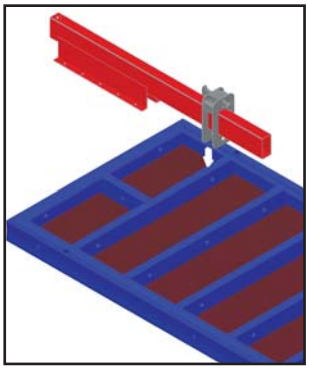


MOUNTING EXTENSION BRACKET CM.50 GP-10:

STEP 1:
Insert the rising element into the hole in the aligning brackets.

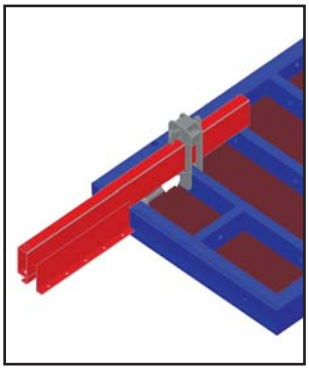
STEP 2:
Position the raisin element and the aligning bracket in correspondence with the hole in the reinforcement crossbar of the formwork.

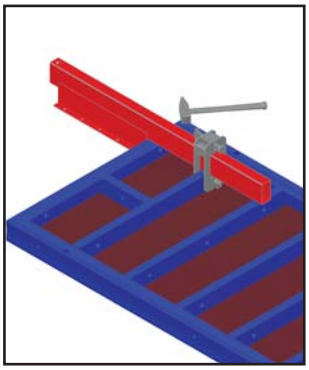




STEP 3:
Insert the galvanized L.90 mm plug into the ali-gnment bracket hole.

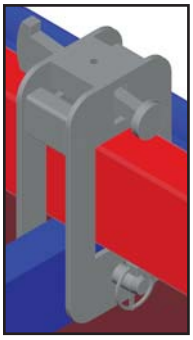
STEP 4:
Secure the brackets to the formworks by fixing the wedge with the hammer.

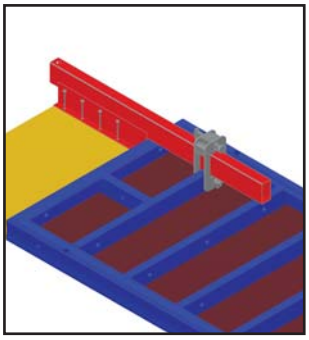




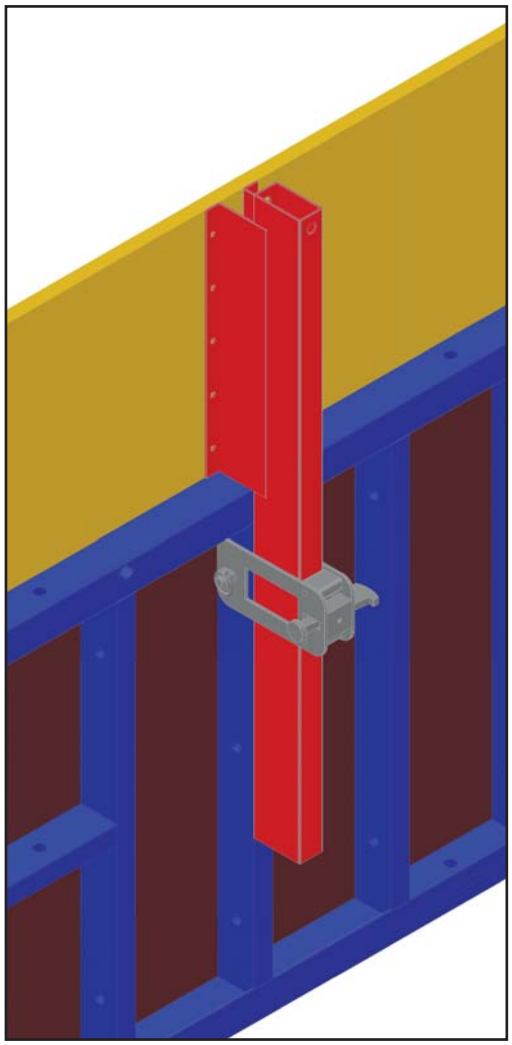
STEP 5:
Insert the safety pin.

STEP 6:
Fix the wood to the rising elements with nails.





EXTENSION BRACKET CM.50 GP-10 - ART. 291152 - KG. 12,5



DESCRIPTION:

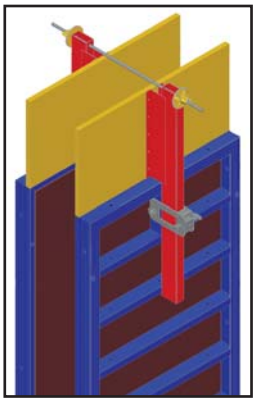
The extension bracket cm. 50 GP-10 fixed to the GP-10 formwork with the aligning bracket, serves to extend the formwork up to a maximum of 50 cm. The wood that is used is borne by the user.

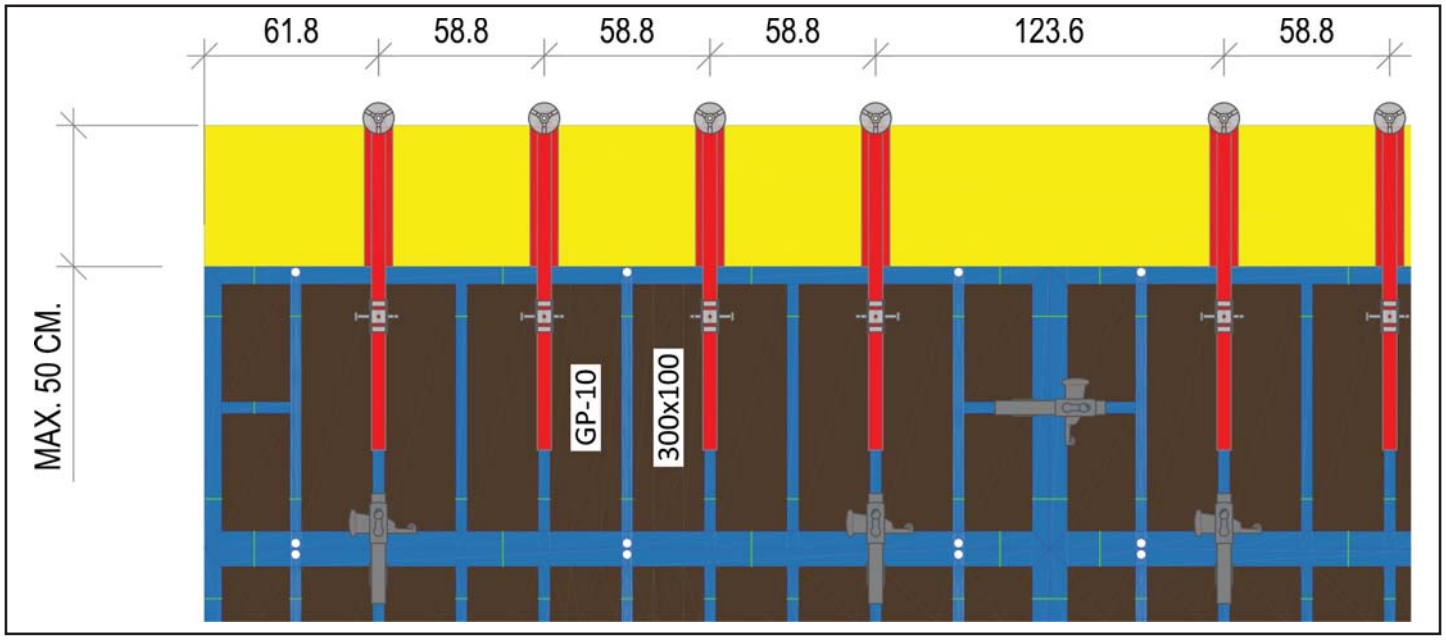
USED MATERIAL:

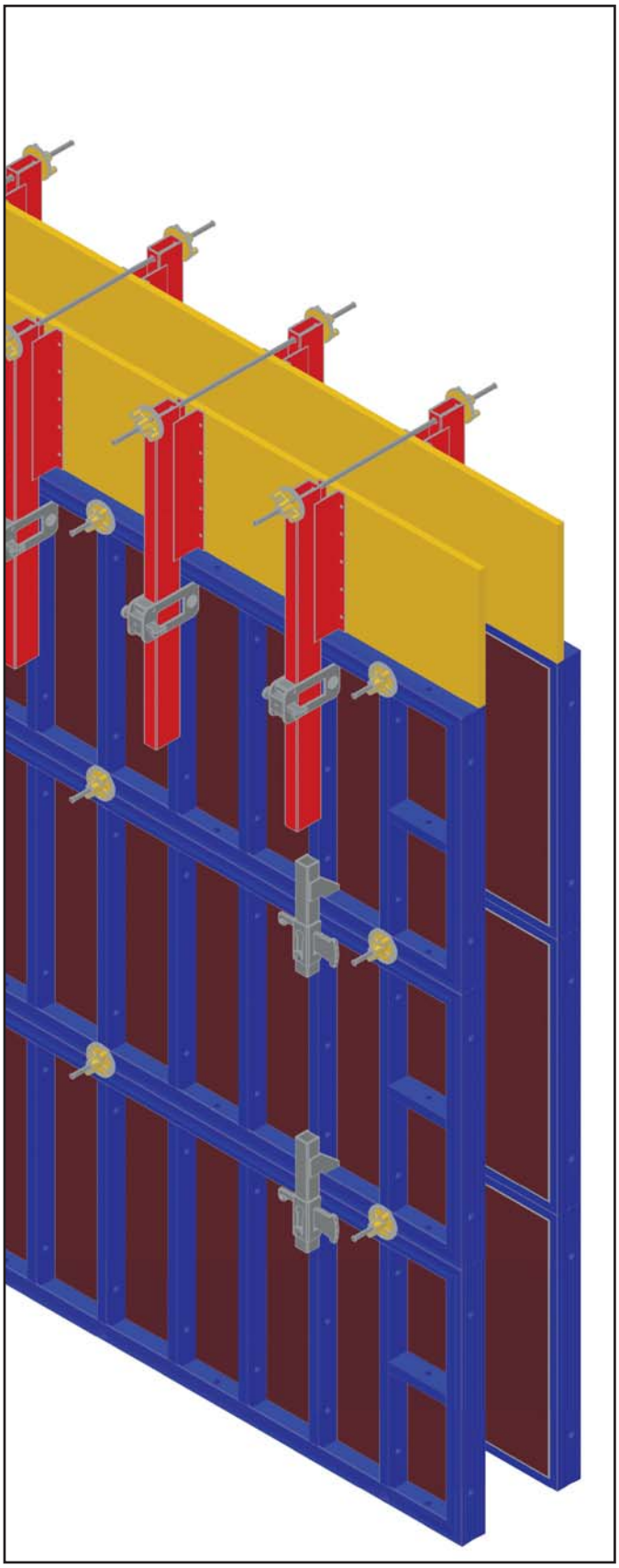
291142	Alignement bracket	Pcs. 01
291145	Extension bracket cm.50 GP-10	Pcs. 01

ATTENTION:

GPrandina srl declines all responsibility in the event that wood in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
It is mandatory to anchor the raising elements with the DW15 bars when they exceed 25 cm. extension.

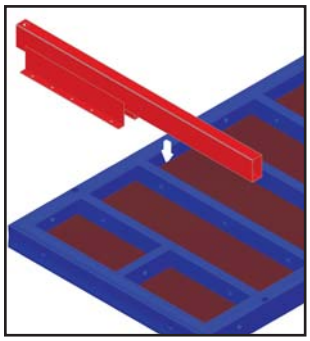




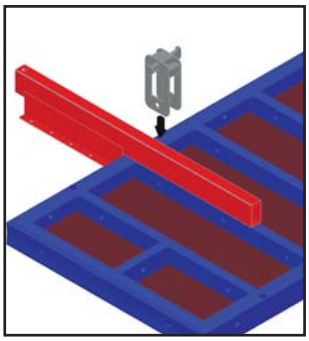


MOUNTING EXTENSION BRACKET CM.50 GP-10:

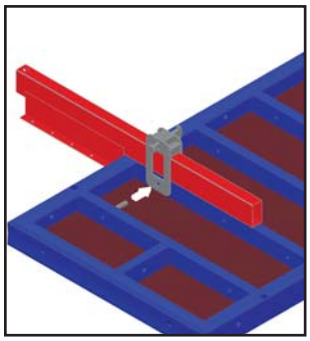
STEP 1:
Place the rising part CM. 50 GP-10 in correspondence with the crossbars of the formwork headers. Lay the tube on the side of 5 cm.



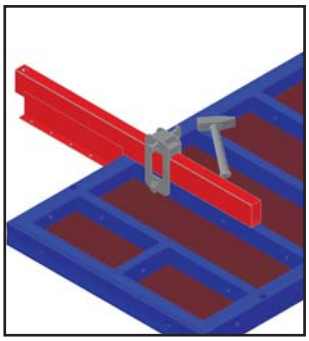
STEP 2:
Install n. 1 aligning bracket in correspondence of the holes on the head crosspieces.



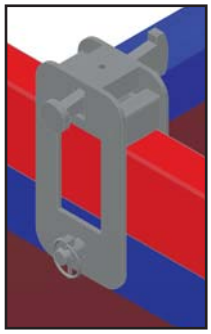
STEP 3:
Insert the galvanized L.90 mm plug into the aligNment bracket hole.



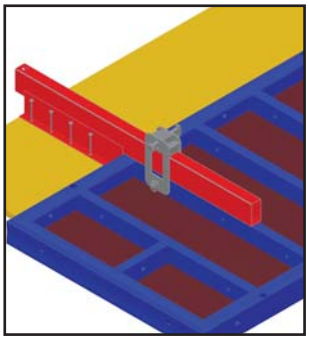
STEP 4:
Secure the brackets to the formworks by fixing the wedge with the hammer.



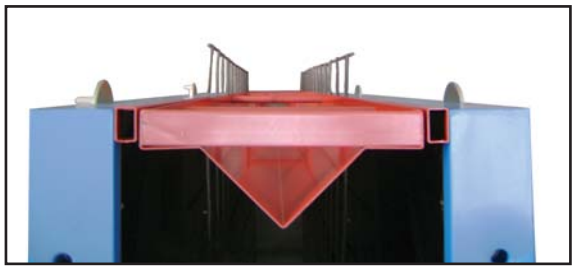
STEP 5:
Insert the safety pin.



STEP 6:
Fix the wood to the rising elements with nails.



POURING STOP
STOP END ELECTROWELDED

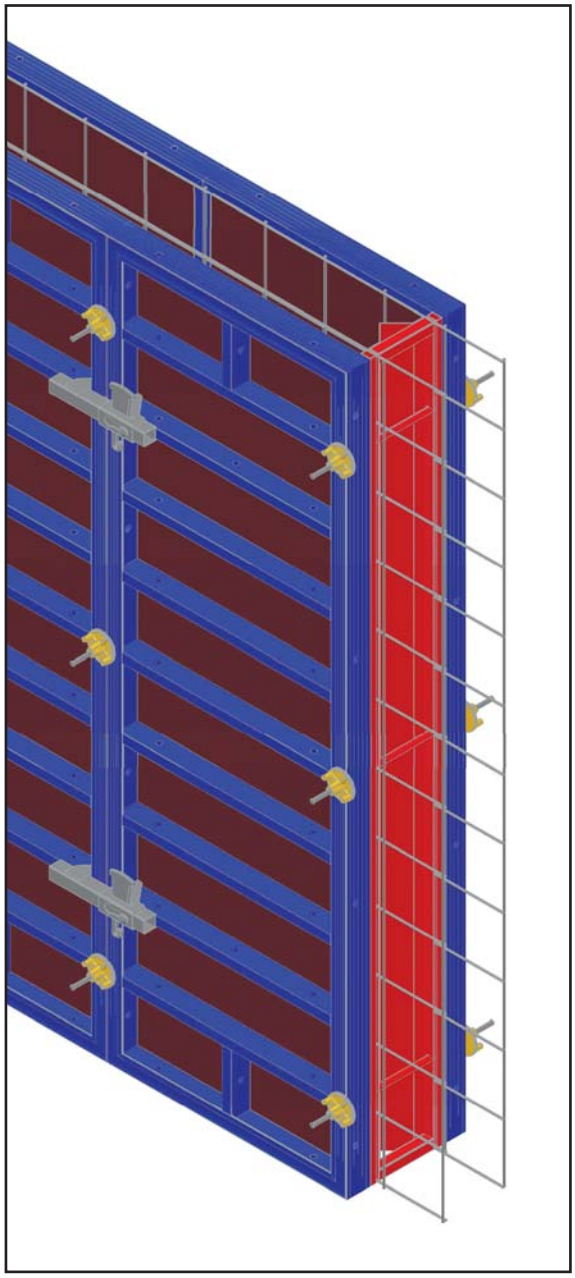


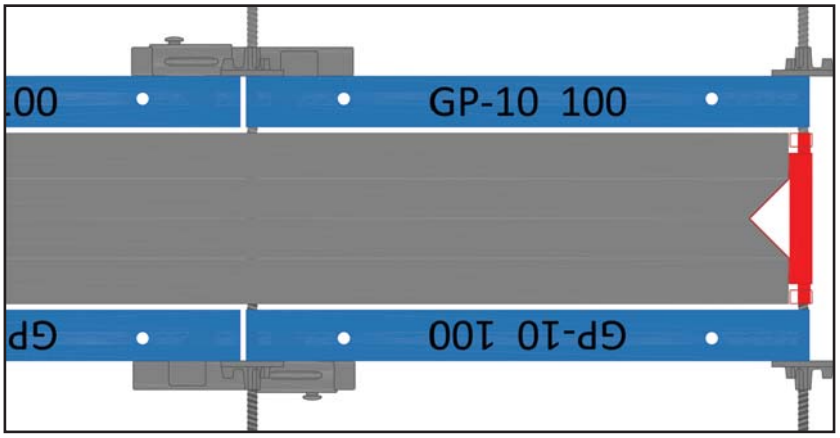
DESCRIPTION:

With the GP-10 system the jet can be interrupted using various solutions. In this case, using the electromagnetic welded net for jet closure, the casting can be interrupted by passing the cage to facilitate the resumption of the next casting and to guarantee a better structural solidity of the wall.

USED MATERIAL:

224103	Stop end electrowelded L. 40 H300	Pcs. 1
224203	Stop end electrowelded L. 40 H150	Pcs. 1
224303	Stop end electrowelded L. 40 H270	Pcs. 1
224403	Stop end electrowelded L. 40 H135	Pcs. 1
224503	Stop end electrowelded L. 40 H330	Pcs. 1
224603	Stop end electrowelded L. 40 H165	Pcs. 1
224104	Stop end electrowelded L. 30 H300	Pcs. 1
224204	Stop end electrowelded L. 30 H150	Pcs. 1
224304	Stop end electrowelded L. 30 H270	Pcs. 1
224404	Stop end electrowelded L. 30 H135	Pcs. 1
224504	Stop end electrowelded L. 30 H330	Pcs. 1
22460	Stop end electrowelded L. 30 H165	Pcs. 1
224105	Stop end electrowelded L. 25 H300	Pcs. 1
224205	Stop end electrowelded L. 25 H150	Pcs. 1
224305	Stop end electrowelded L. 25 H270	Pcs. 1
224405	Stop end electrowelded L. 25 H135	Pcs. 1
224505	Stop end electrowelded L. 25 H330	Pcs. 1
224605	Stop end electrowelded L. 25 H165	Pcs. 1
224106	Stop end electrowelded L. 20 H300	Pcs. 1
224206	Stop end electrowelded L. 20 H150	Pcs. 1
224306	Stop end electrowelded L. 20 H270	Pcs. 1
224406	Stop end electrowelded L. 20 H135	Pcs. 1
224506	Stop end electrowelded L. 20 H330	Pcs. 1
224606	Stop end electrowelded L. 20 H165	Pcs. 1

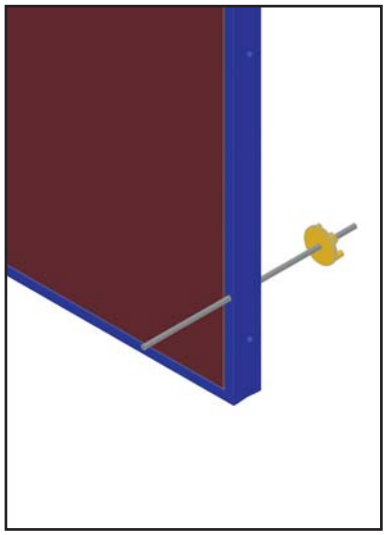




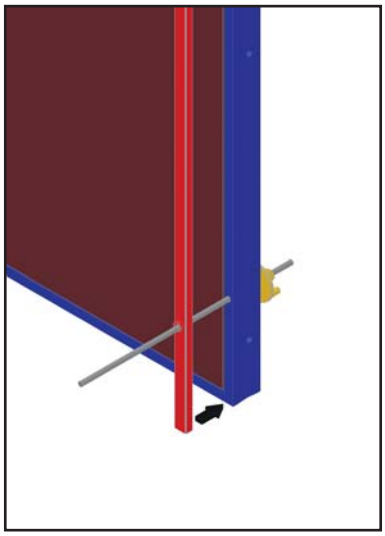
ASSEMBLY STEPS:

To install the electrowelded net for jet closure, respect the assembly order shown in the figures below. Depending on the thickness of the wall, choose the corresponding jet closure element.

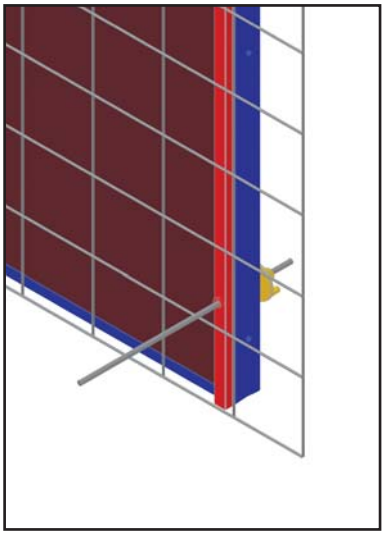
A



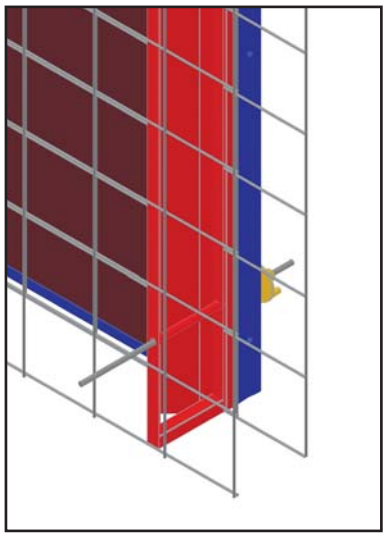
B



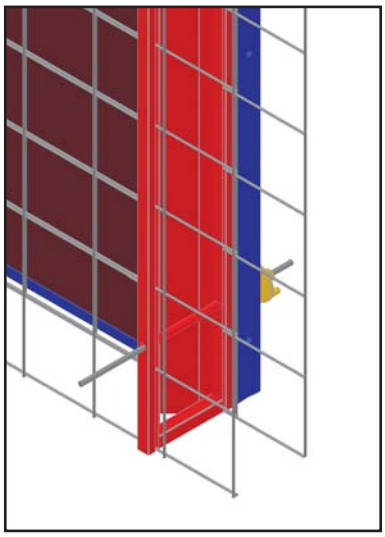
C



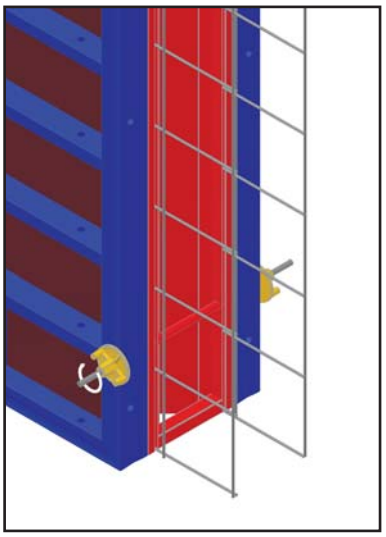
D



E



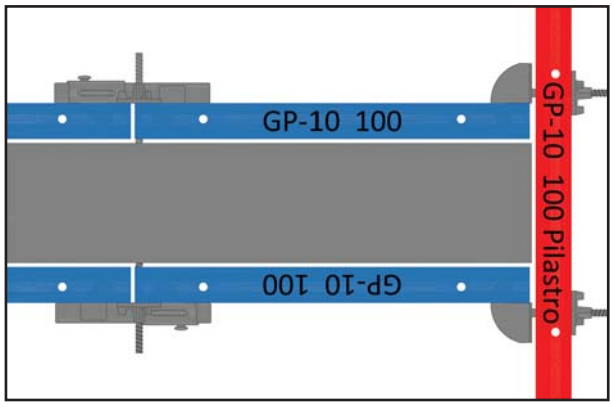
F

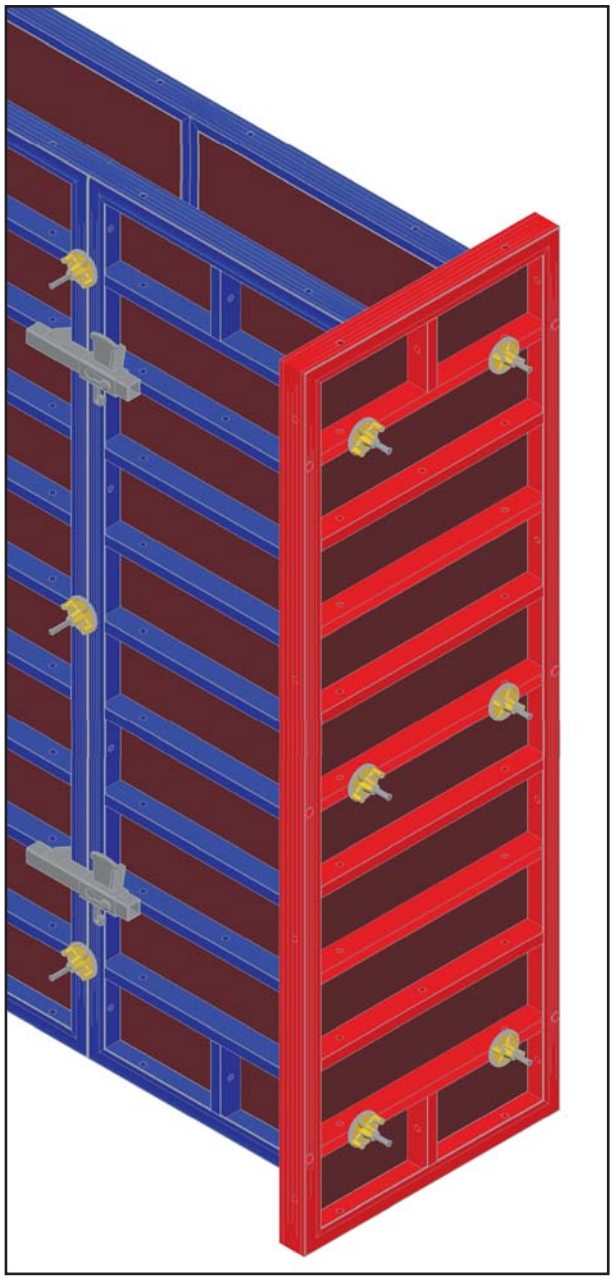


ATTENTION:

In order to support the forces generated by the concrete casting, use only nut plates and certified steel DW bars.
GPrandina declines all responsibility if the user does not respect these warnings.

POURING STOP
PILLAR PANEL



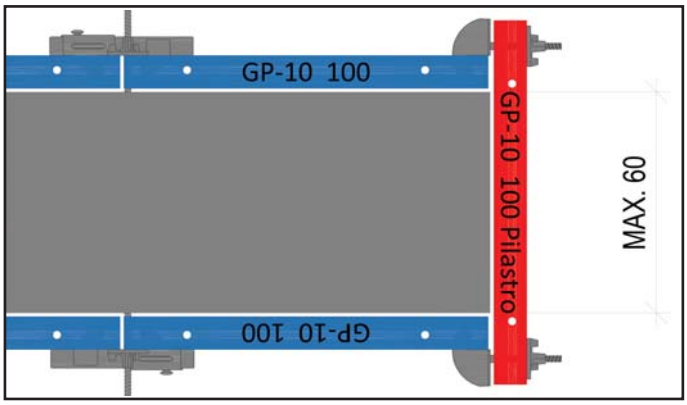


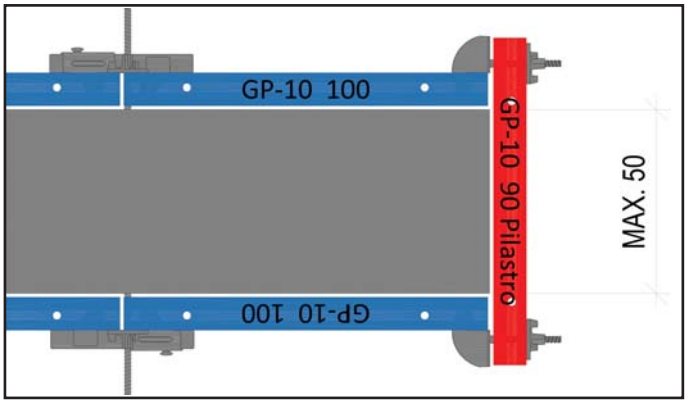
DESCRIZIONE:

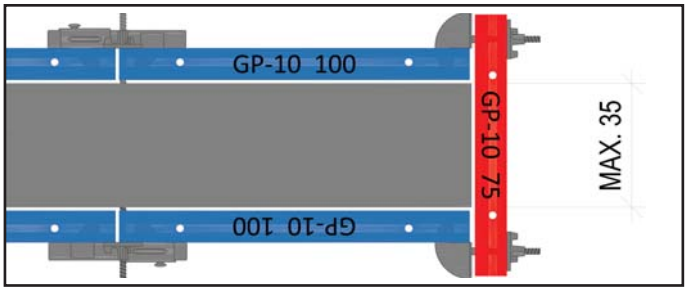
With the GP-10 system the jet can be interrupted using standard panels and accessories on site.
In this case, by using a GP-10 pillar panel and fixing it by means of the pillar clamps to other panels, we can close the casting ensuring excellent solidity.

USED MATERIAL:

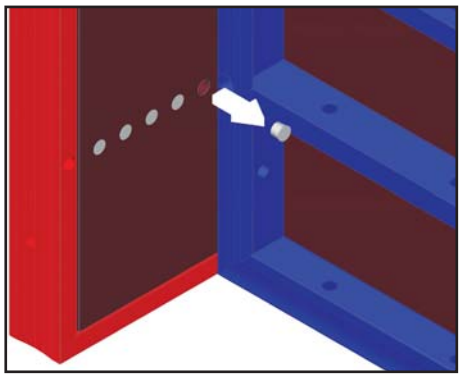
221154F	Panel GP-10 pillar 300x100 forated	Pcs. 1
221160F	Panel GP-10 pillar 300x75 forated	Pcs. 1
221254F	Panel GP-10 pillar 150x100 forated	Pcs. 1
221260F	Panel GP-10 pillar 150x75 forated	Pcs. 1
221354F	Panel GP-10 pillar 270x100 forated	Pcs. 1
221356F	Panel GP-10 pillar 270x90 forated	Pcs. 1
221260F	Panel GP-10 pillar 270x75 forated	Pcs. 1
221454F	Panel GP-10 pillar 135x100 forated	Pcs. 1
221456F	Panel GP-10 pillar 135x90 forated	Pcs. 1
221460F	Panel GP-10 pillar 135x75 forated	Pcs. 1
221554F	Panel GP-10 pillar 330x100 forated	Pcs. 1
221560F	Panel GP-10 pillar 330x75 forated	Pcs. 1
221654F	Panel GP-10 pillar 165x100 forated	Pcs. 1
221660F	Panel GP-10 pillar 165x75 forated	Pcs. 1
291102	Tie clamp complete	Pcs. ...



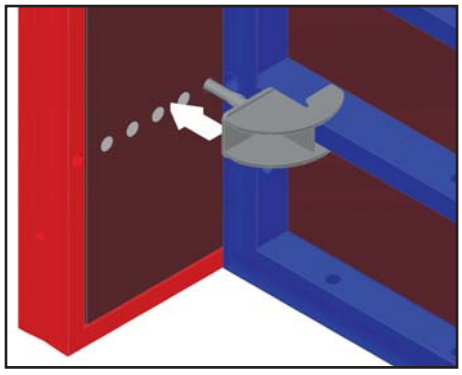




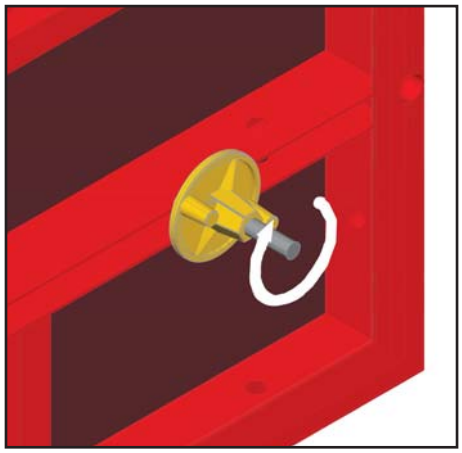
STEP 1:
Remove the PVC plug at the required hole.



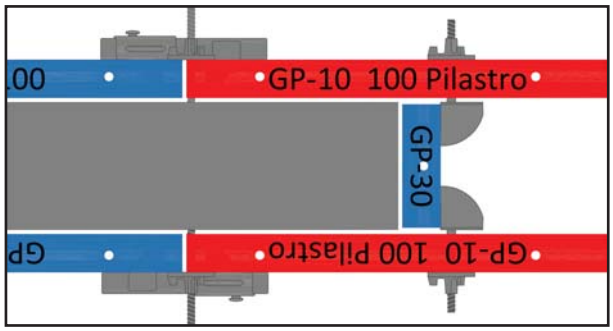
STEP 2:
Insert the clamp for pillar in correspondence with the hole on the multilayer making sure that the plates match perfectly with the profile GPrandina.

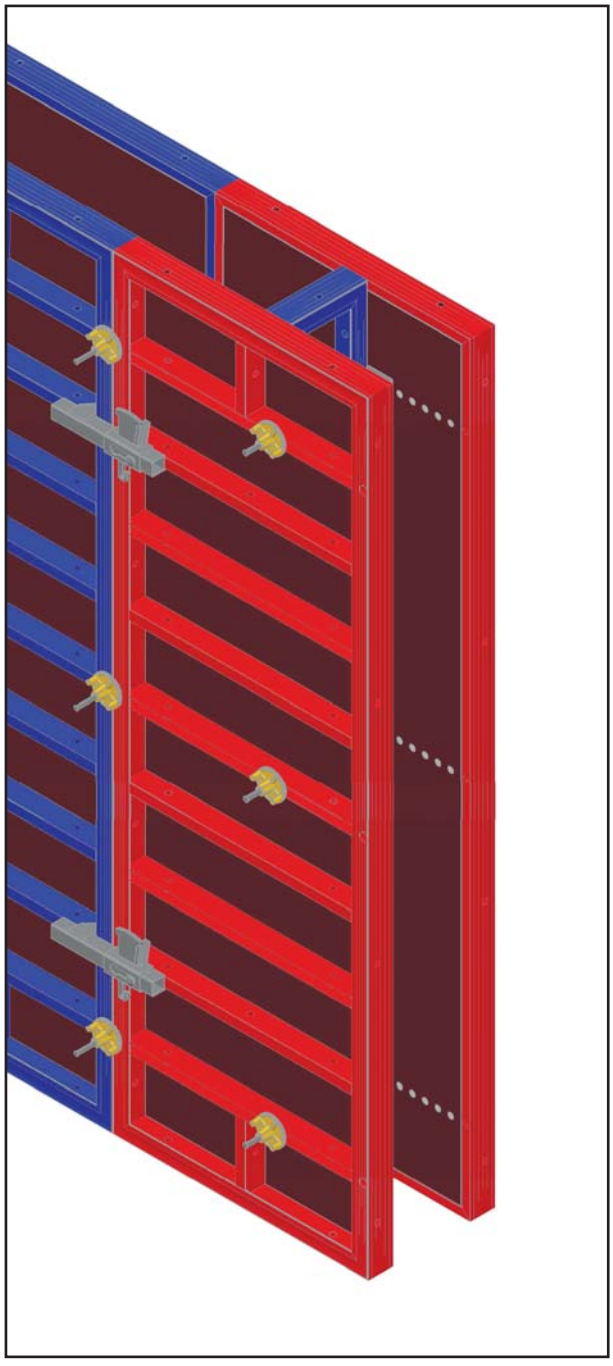


STEP 3:
Screw the DW15 nut plate and tighten with a lever.



POURING STOP
PILLAR PANEL





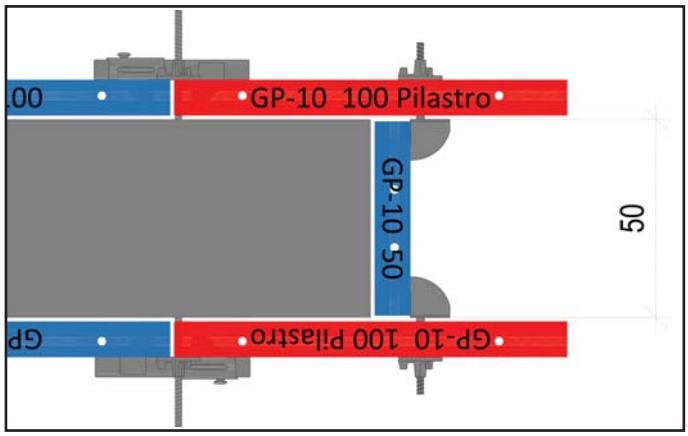
DESCRIPTION:

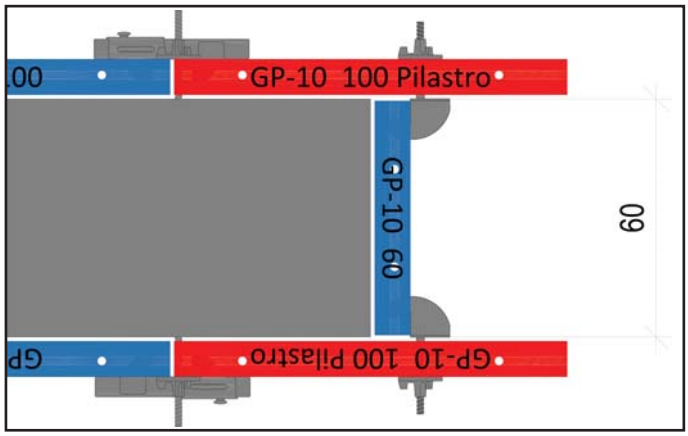
With the GP-10 system the jet can be interrupted using standard panels and accessories on site.
In this case, by using two GP-10 pillar panels and fixing them by means of the pillar clamps to the central panel sized according to the thickness of the wall.

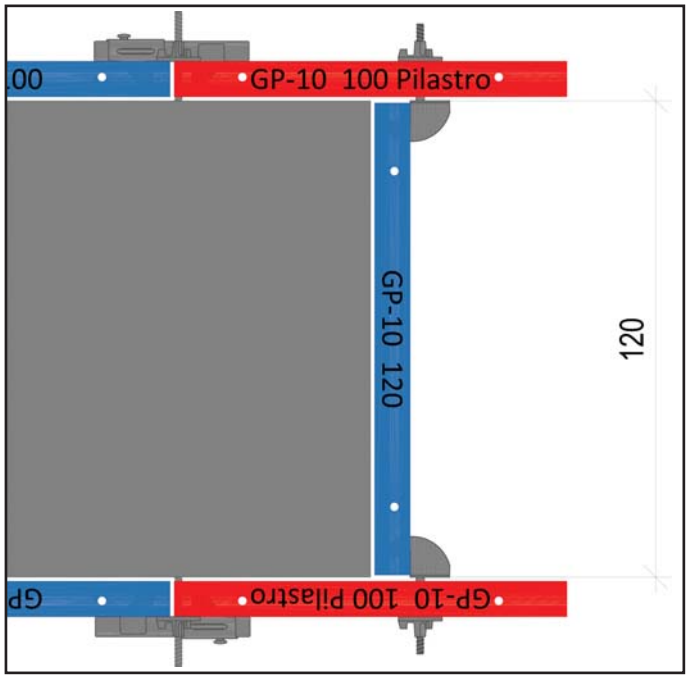
Example:
- if the wall thickness is equal to 30 cm., use a 30 cm wide GP-10 panel.
- if the wall thickness is equal to 50 cm., use a 50 cm wide GP-10 panel.

USED MATERIAL:

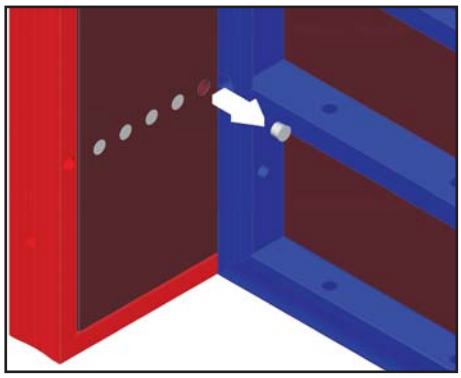
221154F	Panel GP-10 pillar 300x100 forated	Pcs. 2
221160F	Panel GP-10 pillar 300x70 forated	Pcs. 2
221254F	Panel GP-10 pillar 150x100 forated	Pcs. 2
221260F	Panel GP-10 pillar 150x70 forated	Pcs. 2
221354F	Panel GP-10 pillar 270x100 forated	Pcs. 2
221356F	Panel GP-10 pillar 270x90 forated	Pcs. 2
221260F	Panel GP-10 pillar 270x70 forated	Pcs. 2
221454F	Panel GP-10 pillar 135x100 forated	Pcs. 2
221456F	Panel GP-10 pillar 135x90 forated	Pcs. 2
221460F	Panel GP-10 pillar 135x70 forated	Pcs. 2
221554F	Panel GP-10 pillar 330x100 forated	Pcs. 2
221560F	Panel GP-10 pillar 330x70 forated	Pcs. 2
221654F	Panel GP-10 pillar 165x100 forated	Pcs. 2
221660F	Panel GP-10 pillar 165x70 forated	Pcs. 2
291102	Tie clamp complete	Pcs. ...



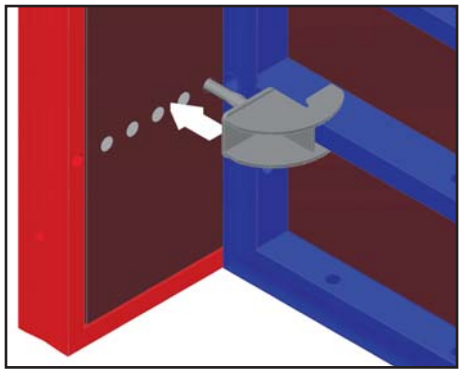




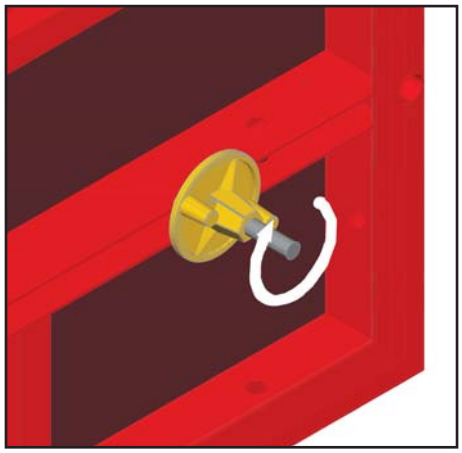
STEP 1:
Remove the PVC plug at the required hole.



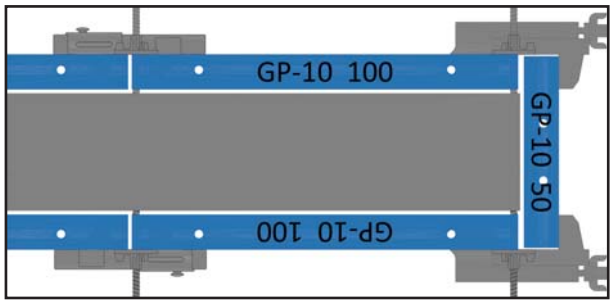
STEP 2:
Insert the clamp for pillar in correspondence with the hole on the multilayer making sure that the plates match perfectly with the profile GPrandina.



STEP 3:
Screw the DW15 nut plate and tighten with a lever.



POURING STOP
PANEL TO MEASURE

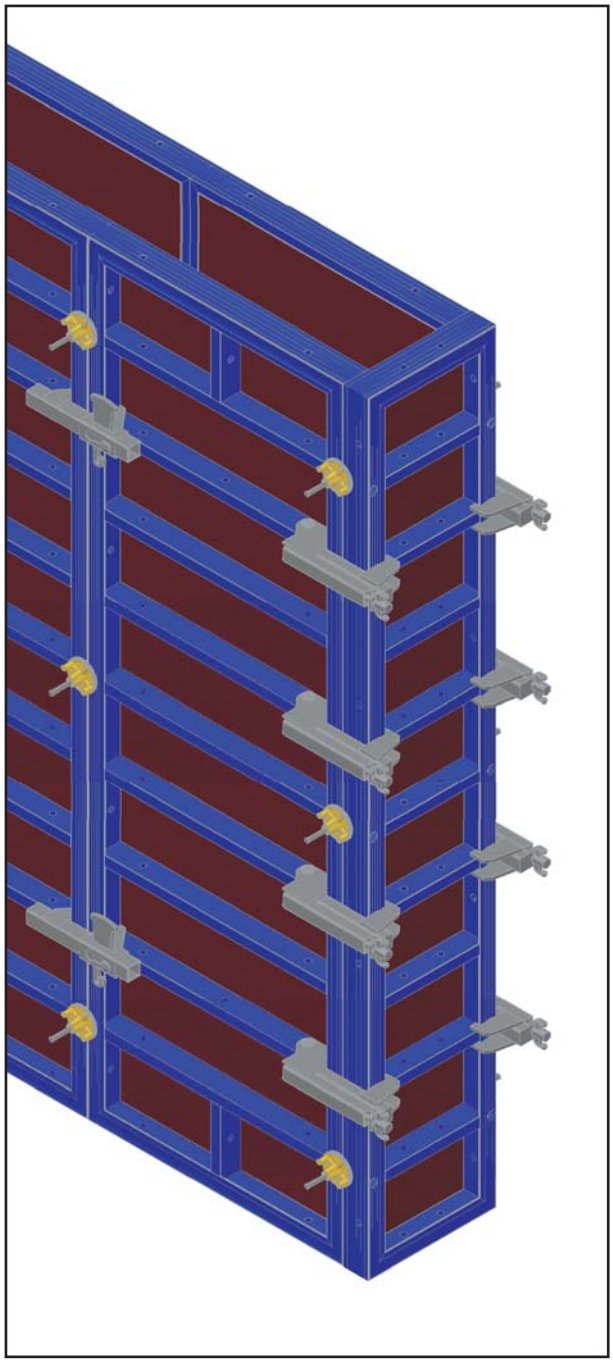


DESCRIPTION:

With the GP-10 system the jet can be interrupted using standard panels and accessories on site.
In this case, by using one customized panel sized according to the thickness of the wall.
Fasten the panels using the adjustable clamps for outside corner.

USED MATERIAL:

291042	Adjustable clamp fo external corner	Pcs. ...

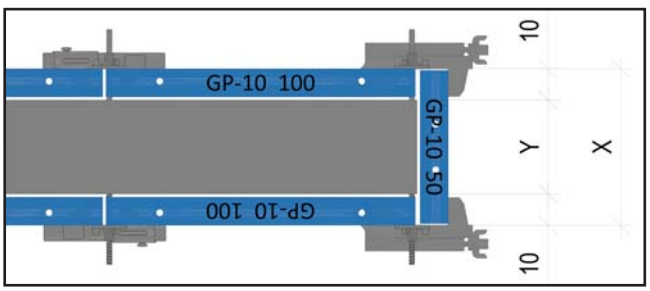


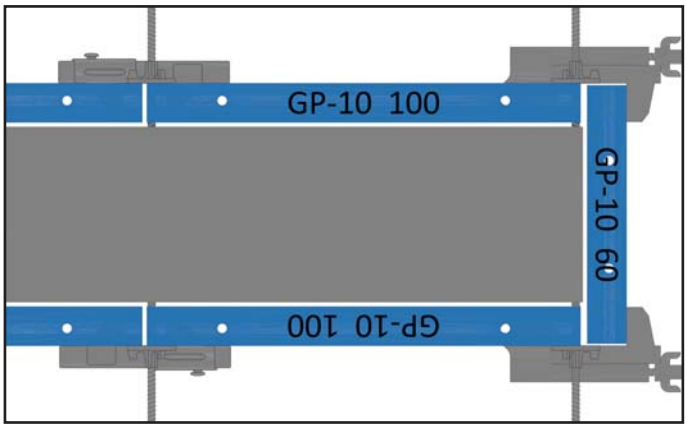
DIMENSIONING FITTING PANEL:

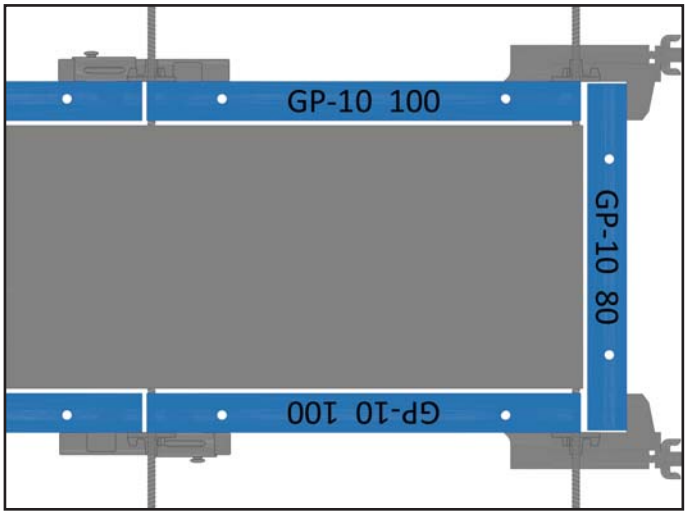
To size the external GP-10 connection panel, perform this simple operation:

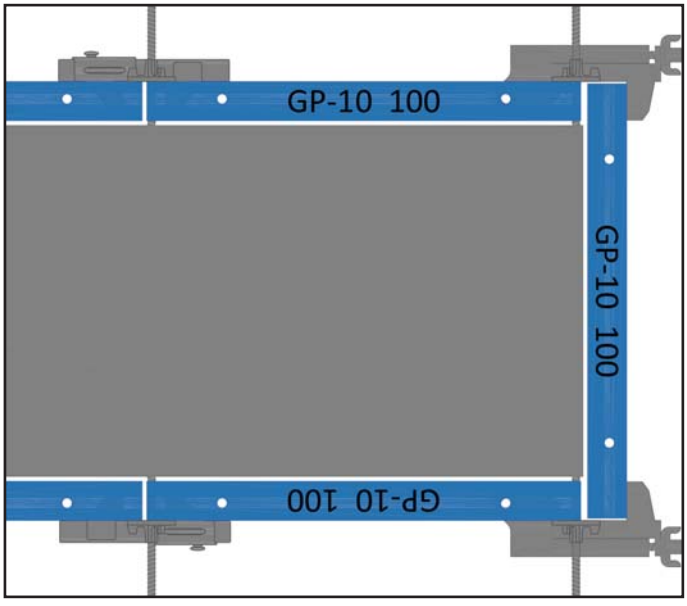
$$X = Y + 10 + 10$$

X= **panel size to be obtained**
Y= **wall thickness**
10= **panel thickness**

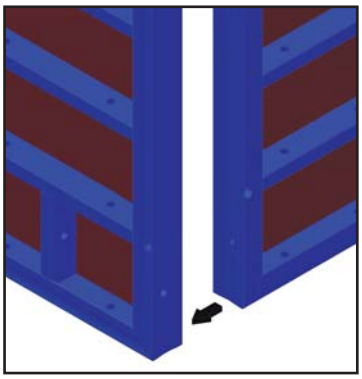




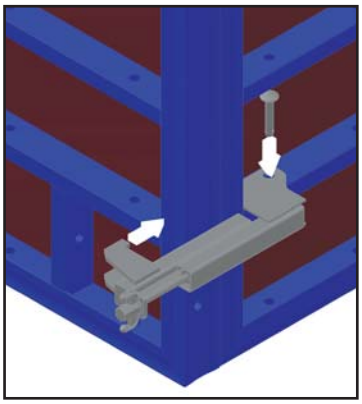




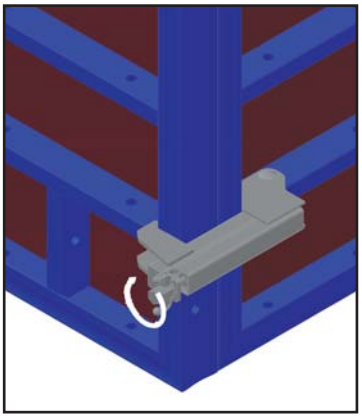
STEP 1:
Place n. 2 GP-10 panels perpendicular to each other.



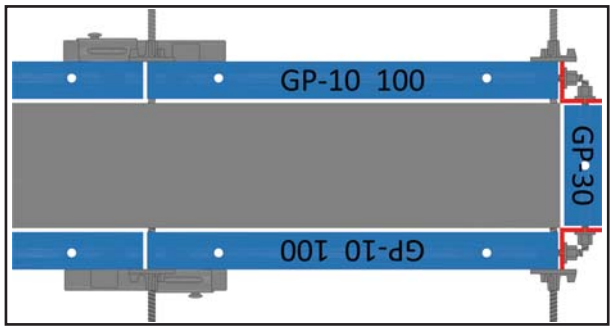
STEP 2:
Place the previously opened clamp at the reinforcement bars. Insert the appropriate plug into the hole in the plate and into the crosspiece of the panel.

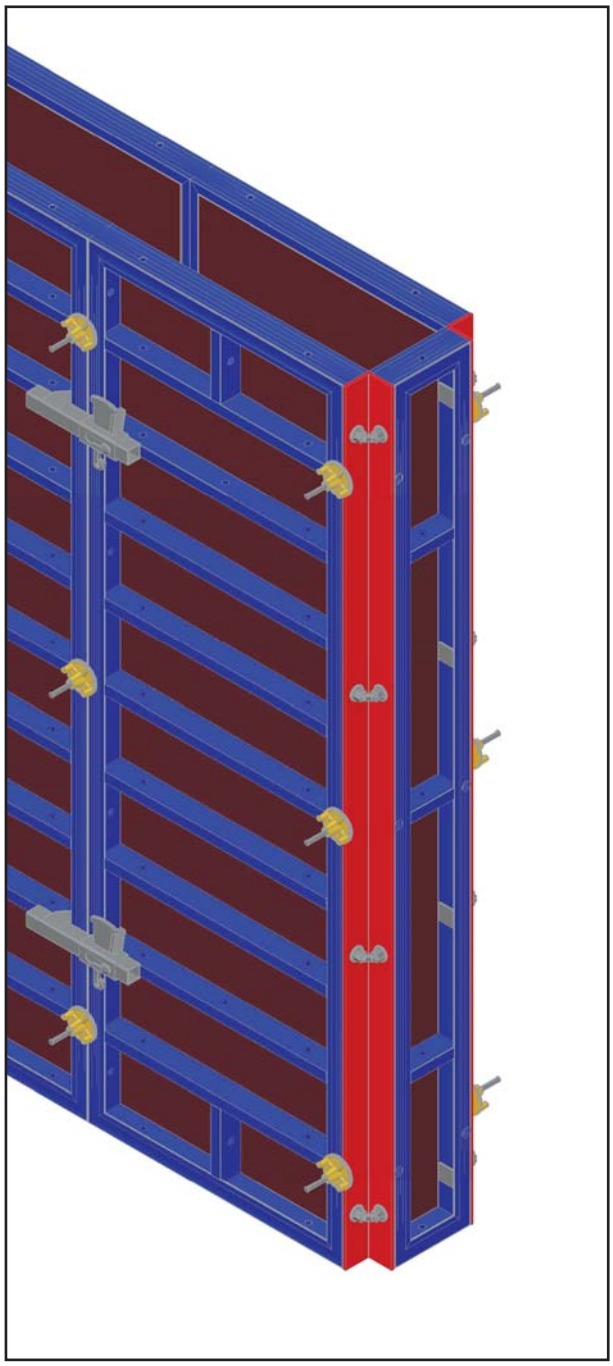


STEP 3:
Screw the clamping bar of the outer corner clamp and secure with a lever.



POURING STOP
EXTERNAL CORNER 10x10





DESCRIPTION:

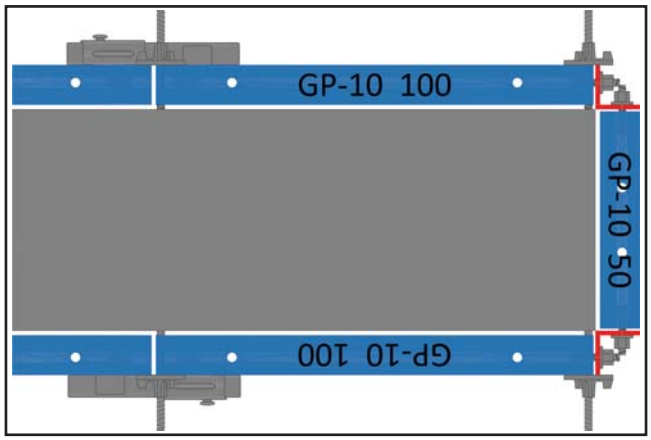
With the GP-10 system the jet can be interrupted using standard panels and accessories on site.
In this case, by using two fixed outside corners 10x10 and fixing them by means of pin and wedge to the central panel sized according to the thickness of the wall.

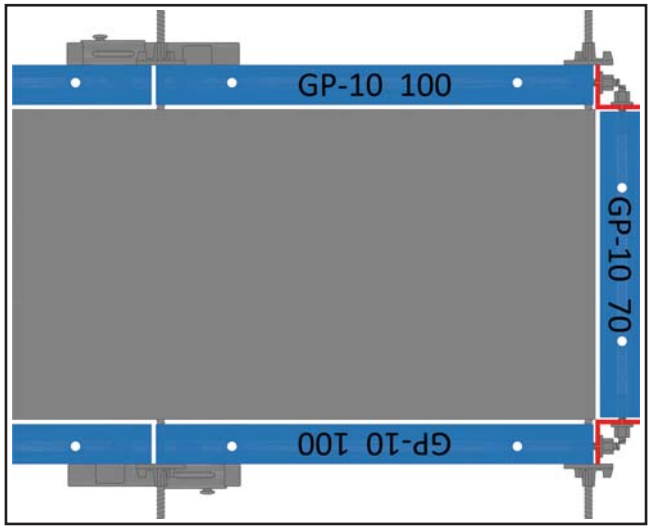
Example:

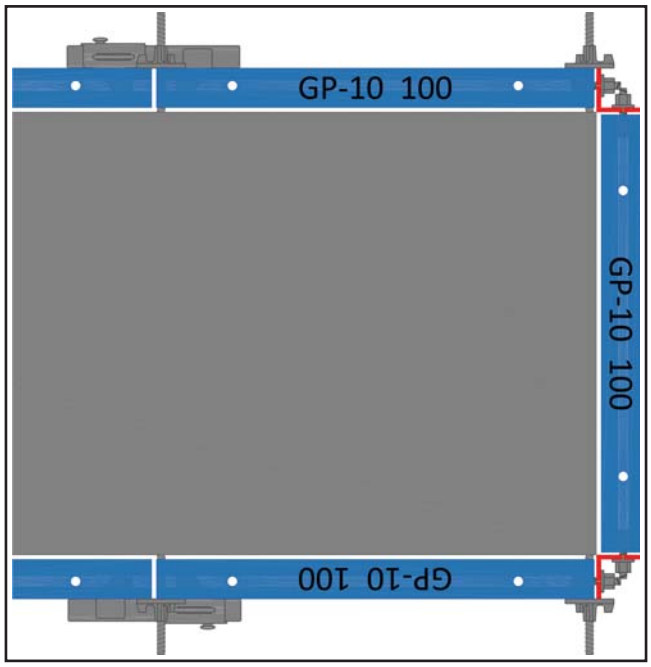
- if the wall thickness is equal to 30 cm., use a 30 cm wide GP-10 panel.
- if the wall thickness is equal to 50 cm., use a 50 cm wide GP-10 panel.

USED MATERIAL:

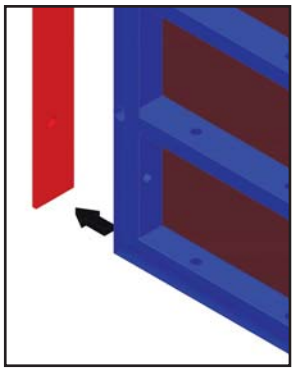
222101	External corner 10X10 H300	Pcs. 2
222201	External corner 10X10 H150	Pcs. 2
222301	External corner 10X10 H270	Pcs. 2
222401	External corner 10X10 H135	Pcs. 2
222501	External corner 10X10 H330	Pcs. 2
222601	External corner 10X10 H165	Pcs. 2
291183	Small fix pin L.90 mm	Pcs. ...
291211	Nut for pin	Pcs. ...



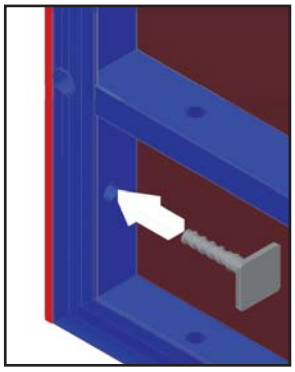




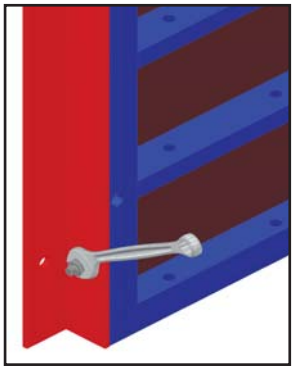
STEP 1:
Place n. 1 GP-10 panel and n. 1 external corner 10x10 of the same height. Make sure that the holes on the 10 cm side of both pieces match perfectly to facilitate the subsequent insertion of the plug.



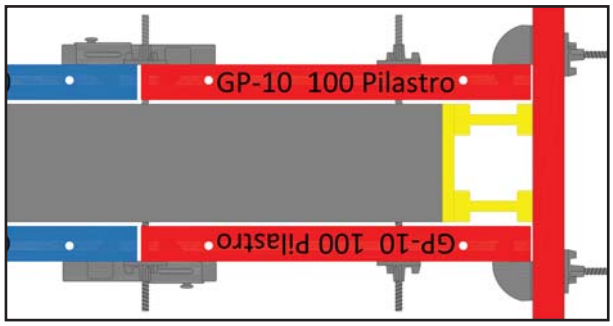
STEP 2:
Insert the fixed plug L.90 mm respecting the direction shown in the image alongside.

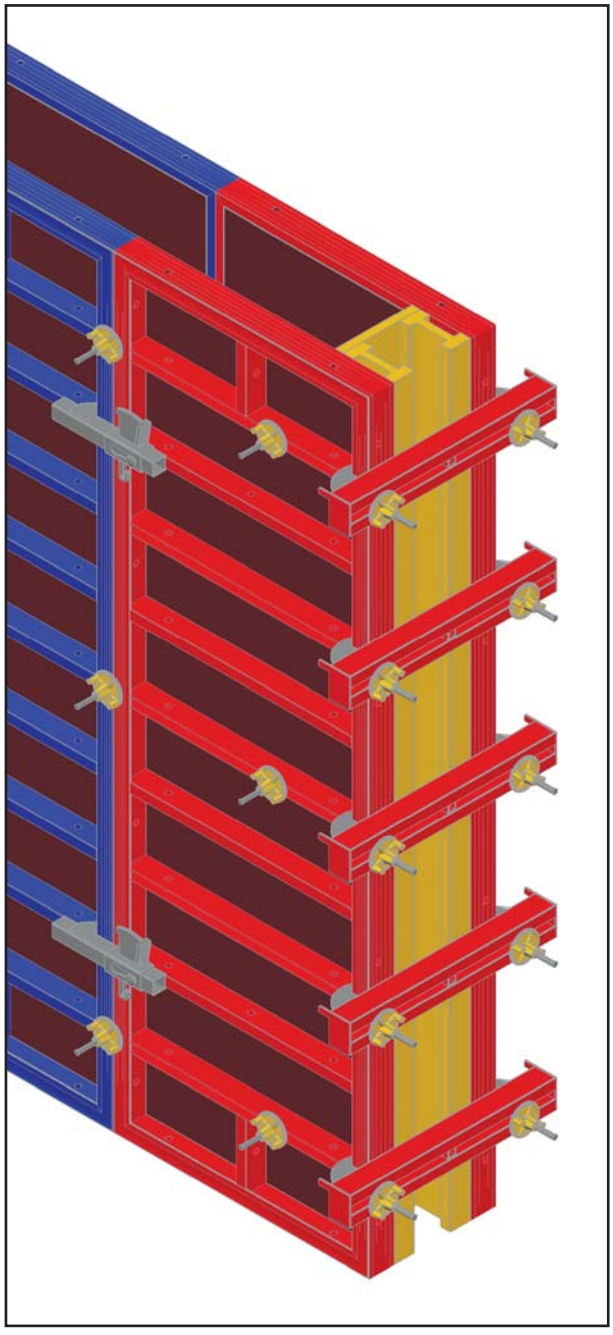


STEP 3:
Tighten the M30 nut and fix everything with the M30 key. Repeat for all holes to ensure perfect sealing of the angle.



POURING STOP
JOINT PLATE





DESCRIPTION:

With the GP-10 system the jet can be interrupted using standard panels and accessories on site.
In this case, filler profiles and pillar clamps are used in combination with the wood usually existing in the site.

The jet closure has to be seized according to the thickness of the wall.

USED MATERIAL:

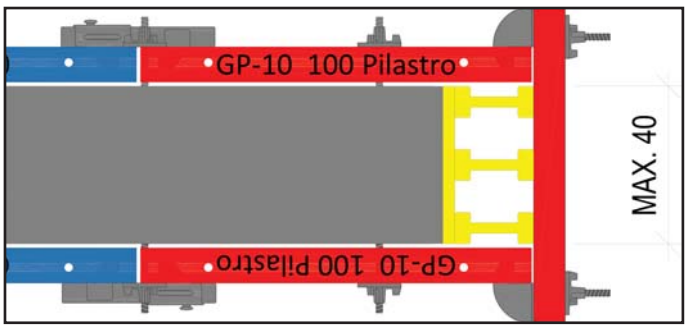
811056	Joint plate 50	Pcs. ...
811101	Joint plate 80	Pcs. ...
291102	Tie clamp complete	Pcs. ...

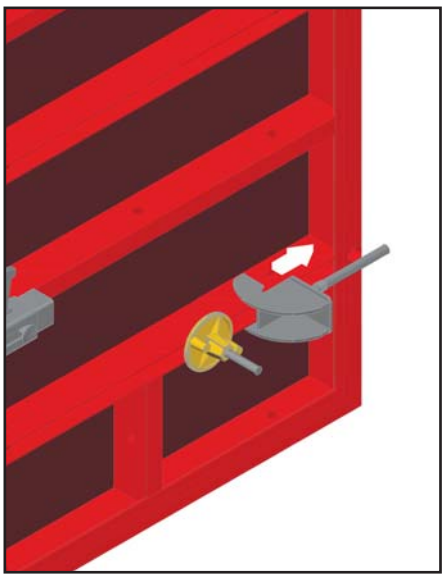
ATTENTION:

GPrandina srl declines all responsibility in the event that wood in bad condition or in the presence of evident signs of damage is used. The user is obliged to use wood in good condition.

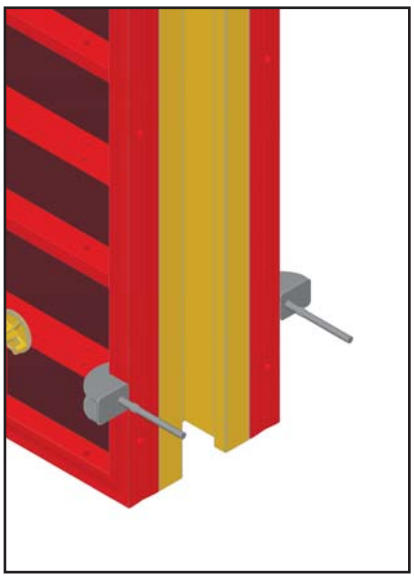
ATTENZIONE:

Use this closing system with walls that do not exceed 40 cm. thick. Otherwise stop the jet with the previously seen systems or contact our technical office.

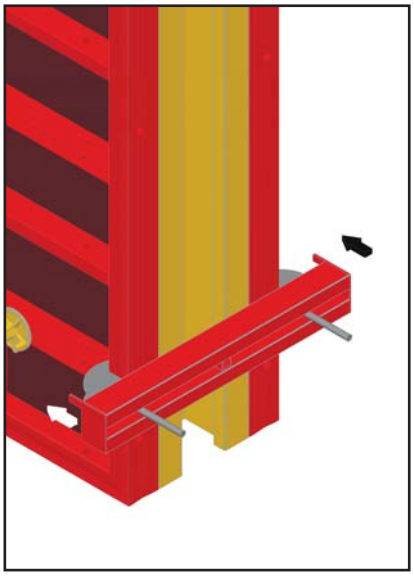




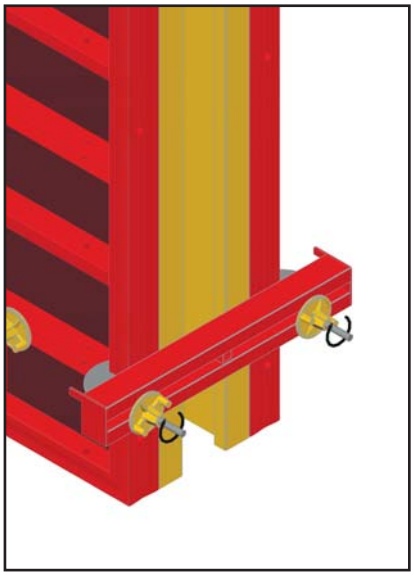
STEP 1:
Interrupt the jet with n. 2 pillar panels, this allows the passage of the bar even in the center of the panel.
Position the abutment clamps in correspondence of the reinforcing beams of the formworks.



STEP 2:
Position the 2nd pillar clamp specularly to the first installed.
Make sure that the clamp fits securely in the profile.

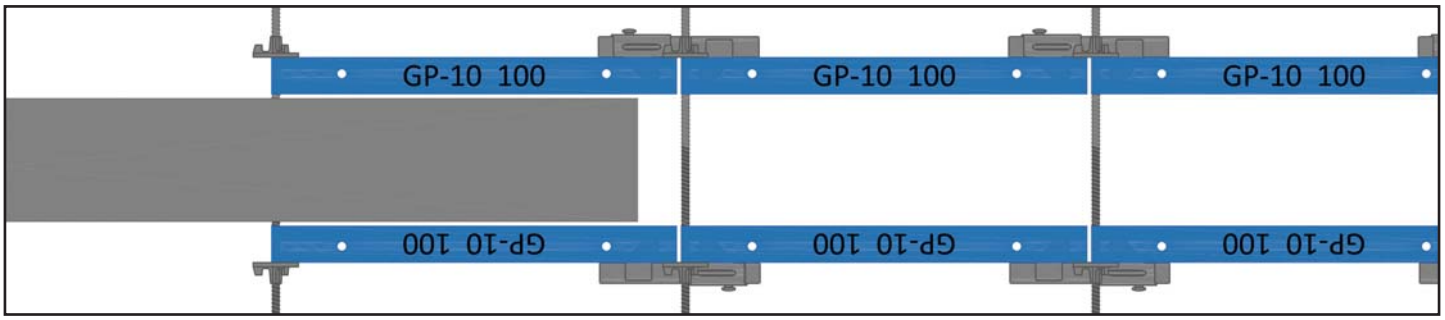


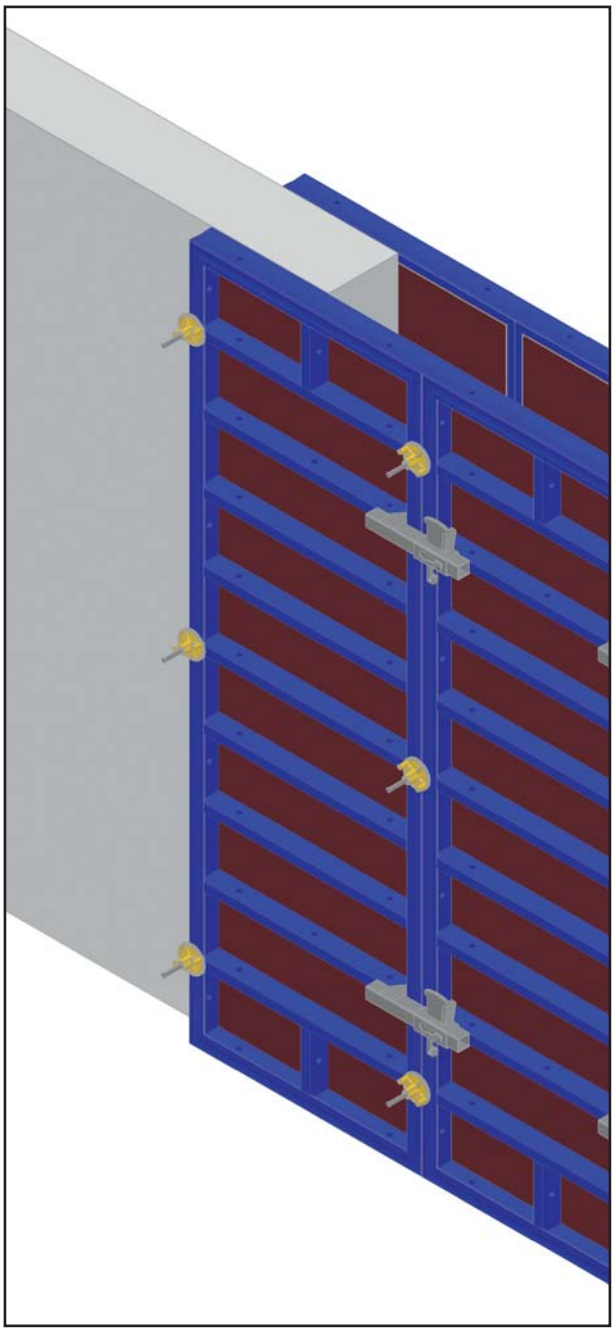
STEP 3:
Install the filler profile by positioning the threaded bars of the clamps between the two 80x40 tubes.



STEP 4:
Tighten the pilar clamps with the nut plates and fix them with the hammer.
Repeat the operation on all the clamps to make sure that the jet is closed.

RESETTING OF POURING
TYPE A





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case the casting is resumed by fixing the formworks using the bar passage hole existing from the previous casting.

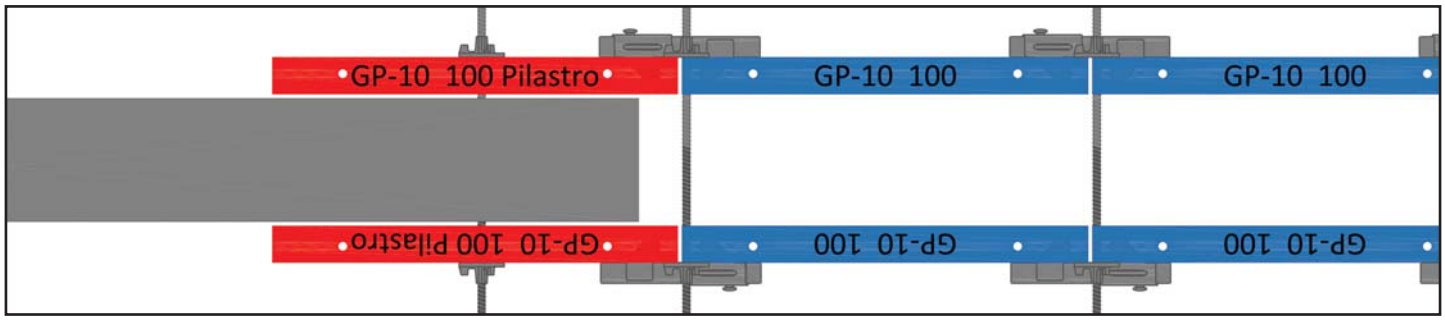
USED MATERIAL:

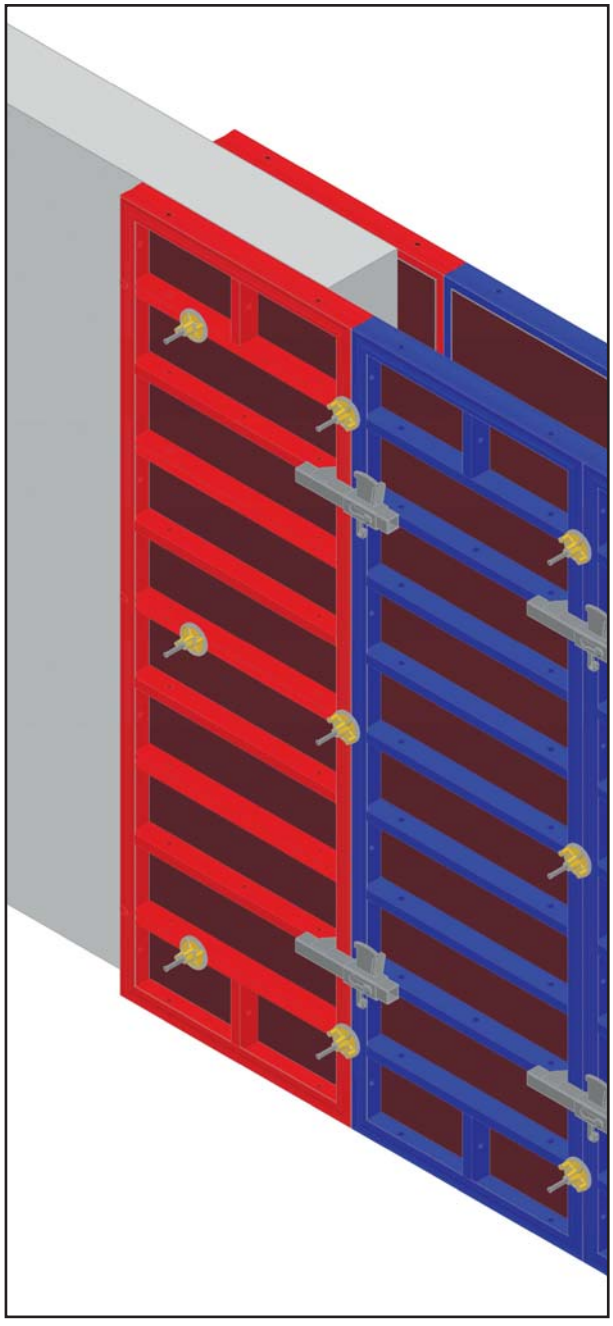
	Panel GP-10	Pcs. 02
☞	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING
TYPE B





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case the casting is resumed by fixing the formworks using the bar passage hole existing from the previous casting.
The pillar panel allows the adjustment of the recovery every 5 cm.

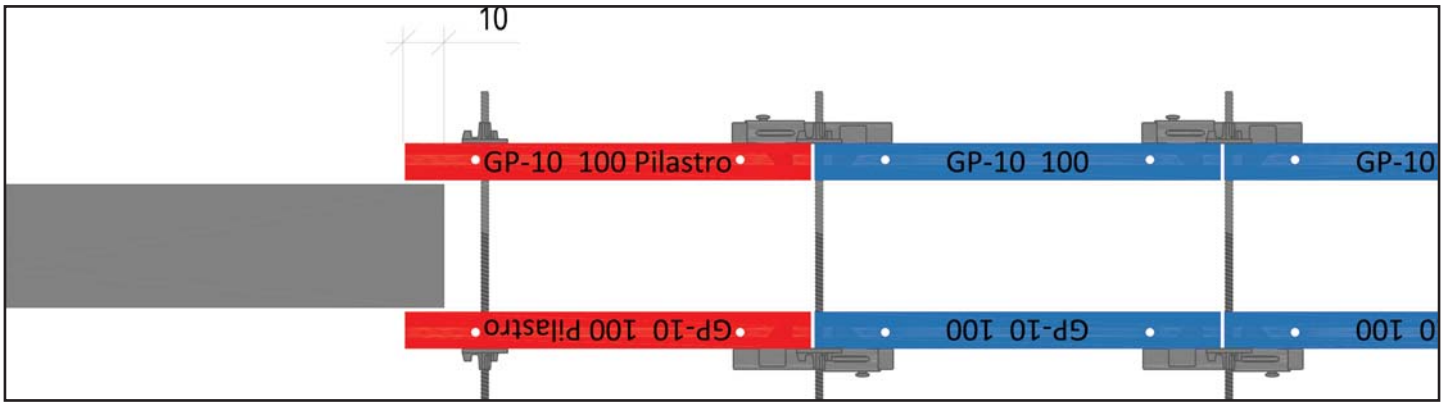
USED MATERIAL:

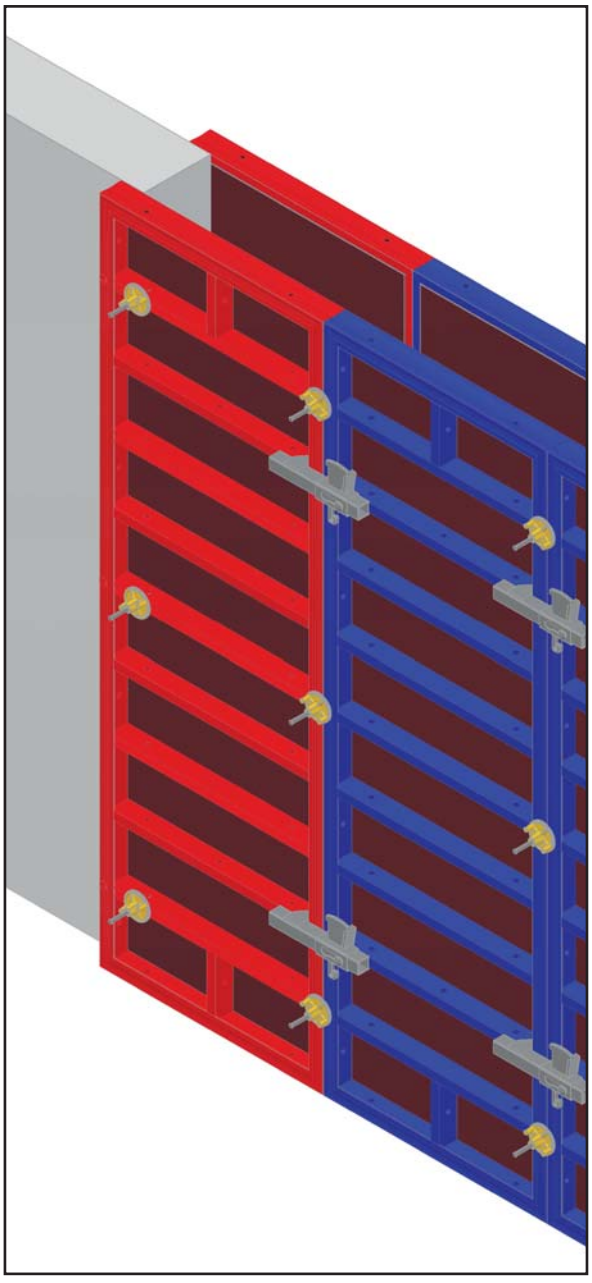
	Panel GP-10 Pillar Forated	Pcs. 02
	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING
TYPE C





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case the jet is begun again using the pillar GP-10 panel that allows to place the DW15 bar near the previous casting.
Place the formwork on the previous casting for at least 10 cm to prevent the concrete from casting into the next casting.

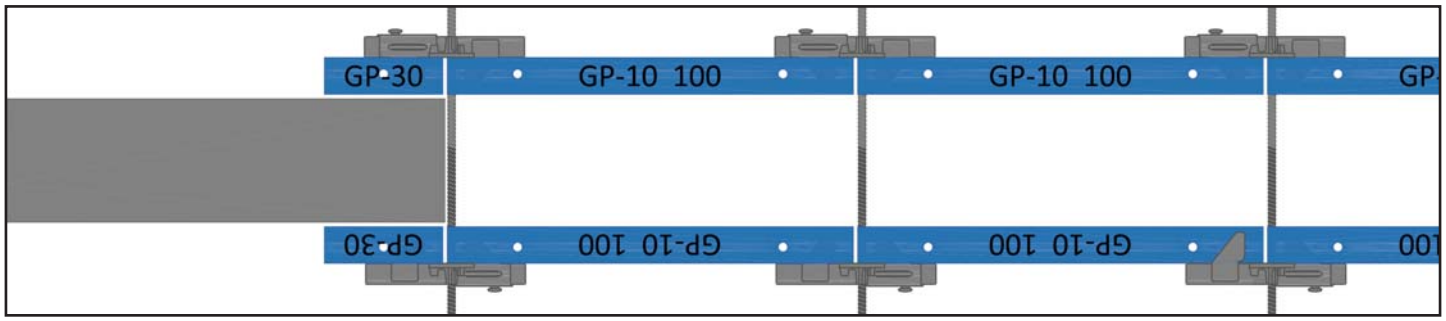
USED MATERIAL:

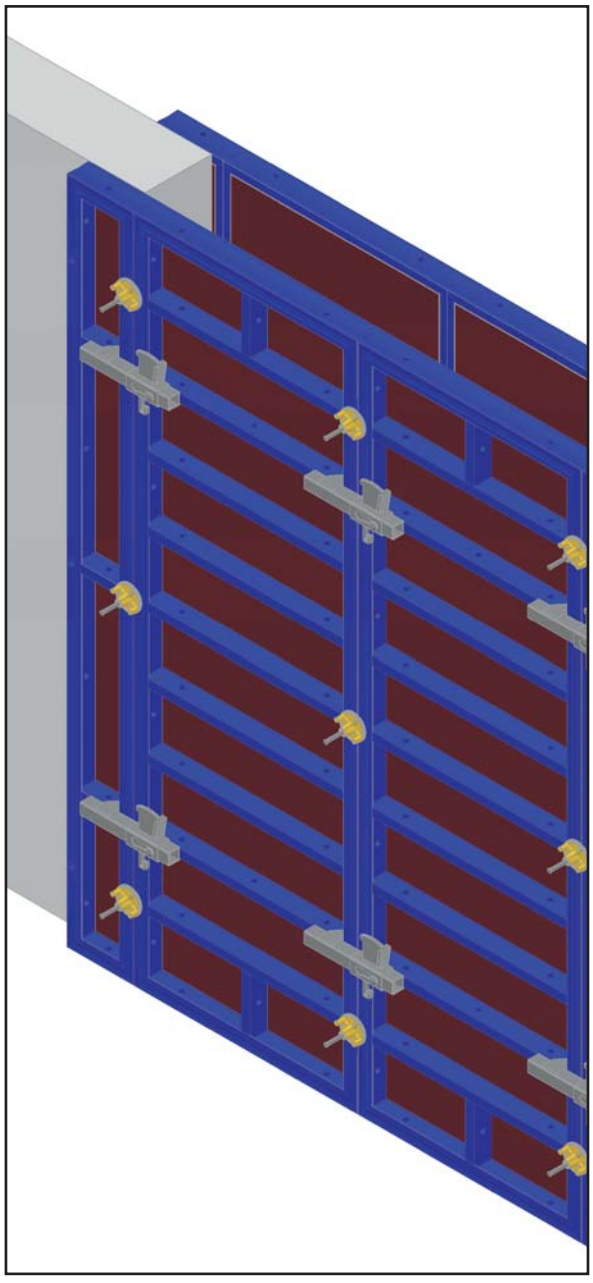
	Panel GP-10 pillar forated	Pcs. 02
☞	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING
TYPE D





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case, the casting is resumed by positioning the formworks near the previous casting; to prevent the concrete from escaping, fix another panel to the formworks; the resistance to thrust is guaranteed by the DW15 bar complete with DW15 nut plates.

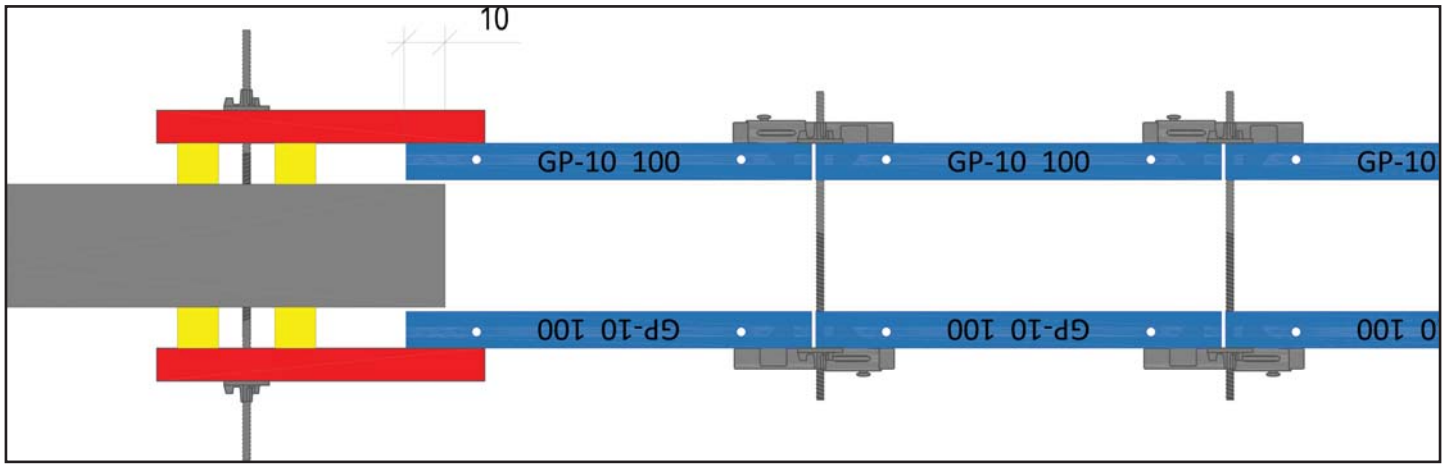
USED MATERIAL:

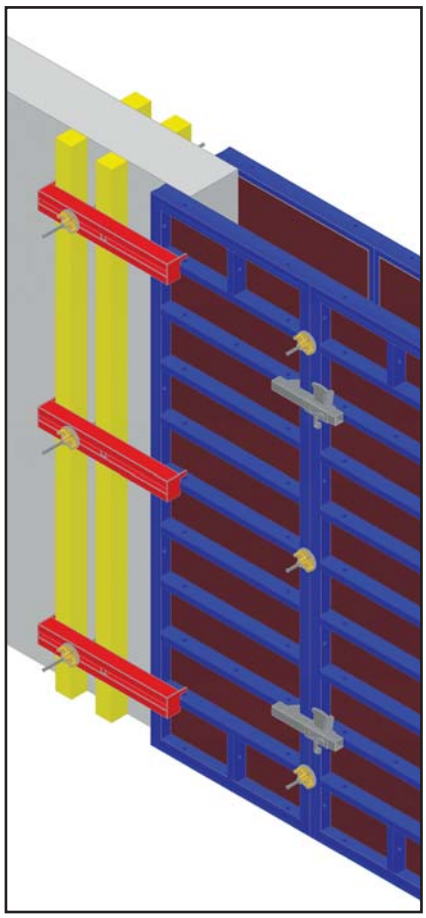
	Panel GP-10	Pcs. 02
☞	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING
TYPE E





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case, the casting resumed by fixing the formworks using the 80 cm filler crosspieces passing the bar DW15 in the existing hole from the previous casting.
Between the filler crosspiece and the existing wall, provide a 10 cm thick wooden mural (charged to the user) to fill the gap between the wall and the formwork.
Place the formwork on the previous casting for at least 10 cm. to prevent the concrete from leaking into the next casting.

USED MATERIAL:

	Panel GP-10	Pcs. 02
811102	Joint plate 80	Pcs. ...
	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

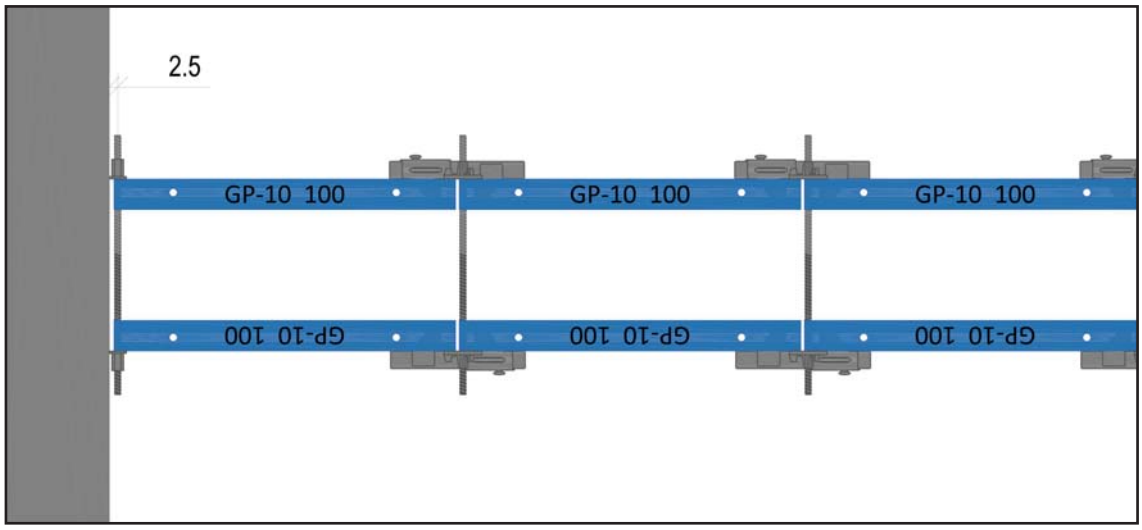
CHOOSE THE RIGHT TIE ROD DW15:

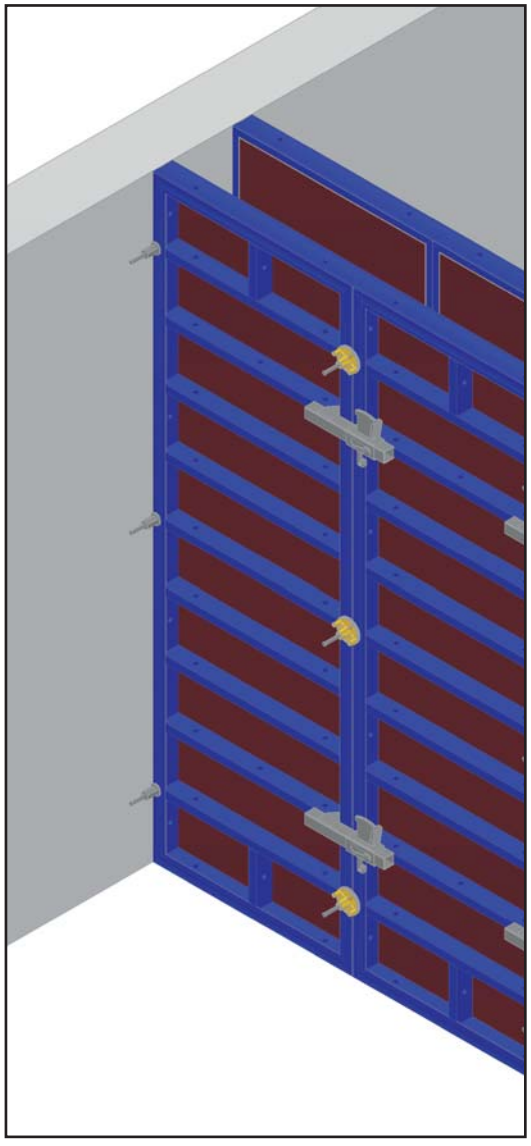
ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 25
811004	CM. 100	CM. 50
811005	CM. 120	CM. 70
811006	CM. 150	CM. 100
811007	CM. 200	CM. 150
811008	CM. 250	CM. 200
811009	CM. 300	CM. 250
811010	CM. 400	CM. 350
811011	CM. 500	CM. 450
811012	CM. 600	CM. 550

ATTENTION:

GPrandina srl declines all responsibility in the event that wood in bad condition or in the presence of evident signs of damage is used. The user is obliged to use wood in good condition.

RESETTING OF POURING
TYPE F





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case, the casting is taken back by leaning the formworks against the existing wall.
To fix the DW15 bar, use the nut with washer DW15; in this case it is not possible to use the nut plate as the lack of space does not allow assembly.

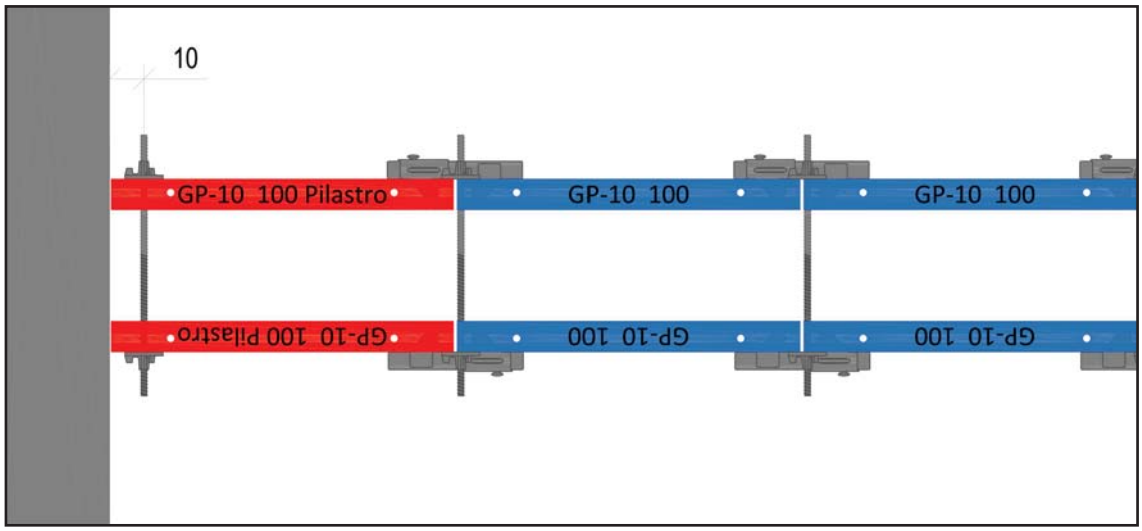
USED MATERIAL:

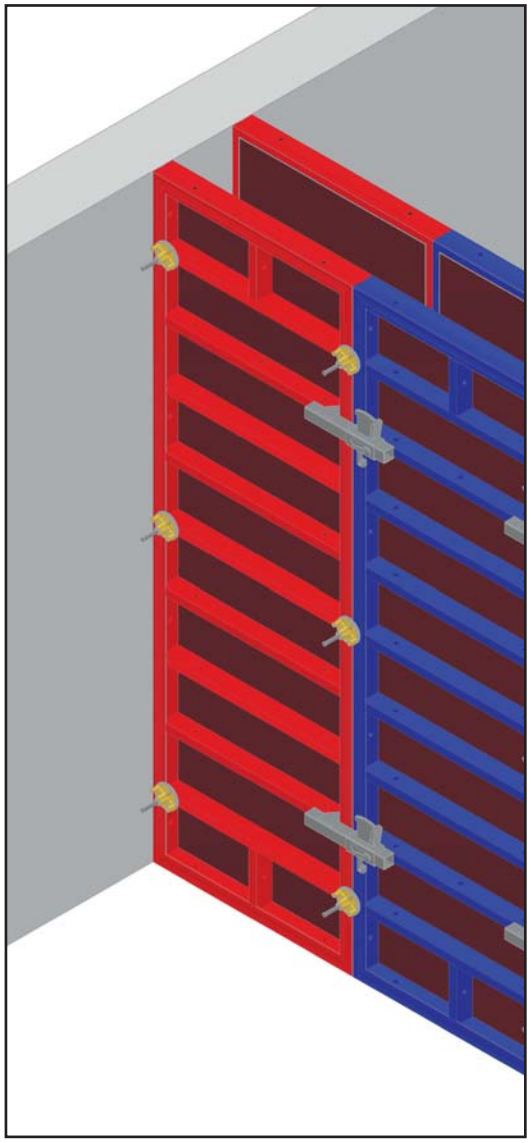
	Panel GP-10	Pcs. 02
	Tie rod DW-15	Pcs. ...
811054	Nut with welded washer DW-15	Pcs. ...

CHOOSE THE RIGHT TIE ROD DW15:

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING
TYPE G





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case, the casting is taken back by leaning the pillar panels against the existing wall.
Thanks to the multi-hole crossbars, the DW15 nut plates can be used to fix the DW15 bars.

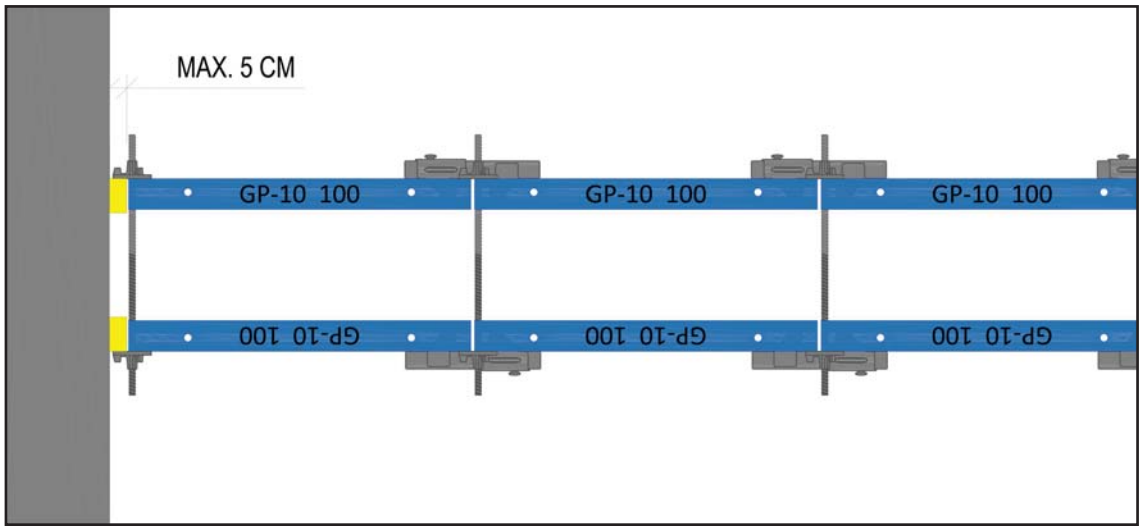
USED MATERIAL:

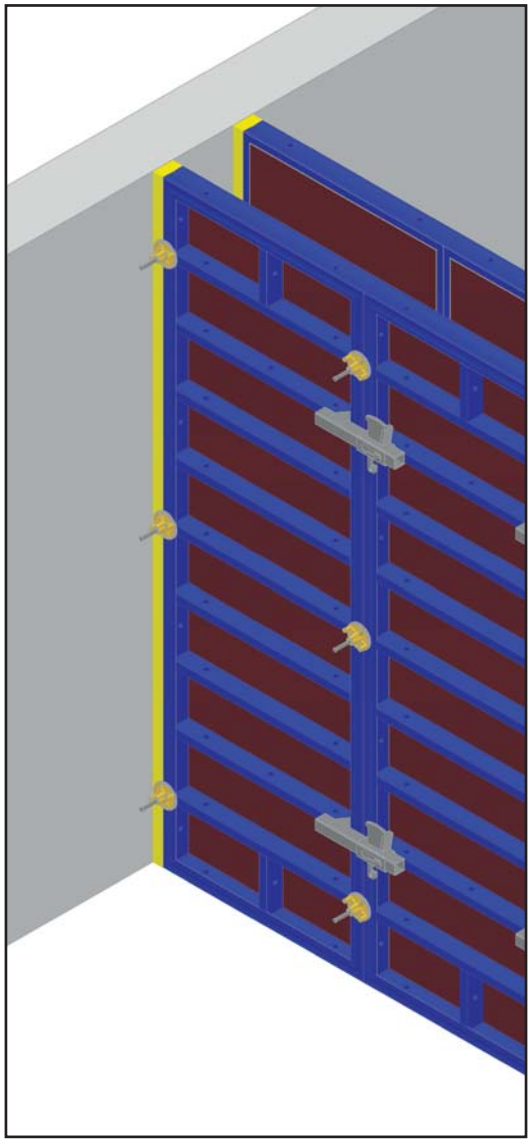
	Panel GP-10	Pcs. 02
☞	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

RESETTING OF POURING TYPE H





DESCRIPTION:

With the GP-10 system the jet can be resumed using the standard parts on site.
In this case the jet is taken back to the wall with the 5 cm wooden boards and then the GP-10 panels.

USED MATERIAL:

	Panel GP-10	Pcs. 02
☞	Tie rod DW-15	Pcs. ...
811051	Wing nut DW-15	Pcs. ...

☞ **CHOOSE THE RIGHT TIE ROD DW15:**

ARTICLE	LENGTH TIE ROD DW15	MAX. WALL THICKNESS
811003	CM. 75	CM. 40
811004	CM. 100	CM. 65
811005	CM. 120	CM. 85
811006	CM. 150	CM. 115
811007	CM. 200	CM. 165
811008	CM. 250	CM. 215
811009	CM. 300	CM. 265
811010	CM. 400	CM. 365
811011	CM. 500	CM. 465
811012	CM. 600	CM. 565

3.0.0
GP-10 SYSTEM PILLAR

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

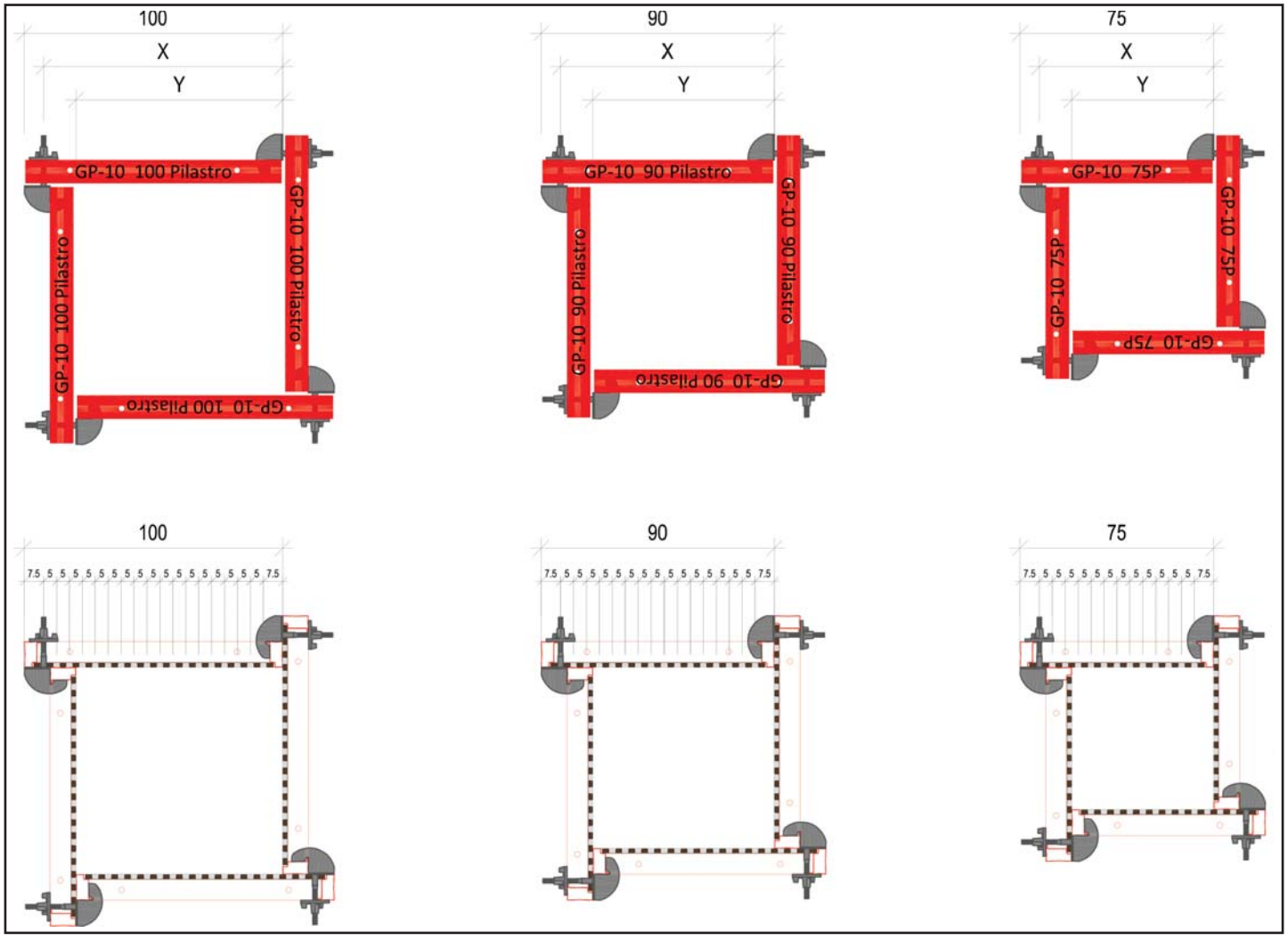
VARIABLE PILLAR WITH GP-10 PILLAR PANELS

DESCRIPTION:

With the GP-10 system you can compose pillars of various sizes and heights.
In this case, using the GP-10 Pillar panels positioned like the mill's wings, pillars of variable dimensions are made up using the same articles.
Sizes:
- pillar panel GP-10 100: max 80x80 cm - min. 10x10 cm;
- pillar panel GP-10 90: max. 70x70 cm - min. 10x10 cm;
- pillar panel GP-10 75: max. 55x55 cm - min. 10x10 cm;

USED MATERIAL:

	Panel GP-10 pillar	Pcs. 04
291102	Tie clamp complete	Pcs. ...



Panels GP-10 dimensions (cm)			Y Pillar measure (cm)	X Hole measure (cm)
GP-10 100	GP-10 90	GP-10 75	10	22,5
GP-10 100	GP-10 90	GP-10 75	15	27,5
GP-10 100	GP-10 90	GP-10 75	20	32,5
GP-10 100	GP-10 90	GP-10 75	25	37,5
GP-10 100	GP-10 90	GP-10 75	30	42,5
GP-10 100	GP-10 90	GP-10 75	35	47,5
GP-10 100	GP-10 90	GP-10 75	40	52,5
GP-10 100	GP-10 90	GP-10 75	45	57,5
GP-10 100	GP-10 90	GP-10 75	50	62,5
GP-10 100	GP-10 90	GP-10 75	55	67,5
GP-10 100	GP-10 90		60	72,5
GP-10 100	GP-10 90		65	77,5
GP-10 100	GP-10 90		70	82,5
GP-10 100			75	87,5
GP-10 100			80	92,5

PROCEDURE FOR DRILLING THE PILLAR PANELS WITH THE PILLAR KIT:

1

2

3

4

5

DESCRIZIONE:

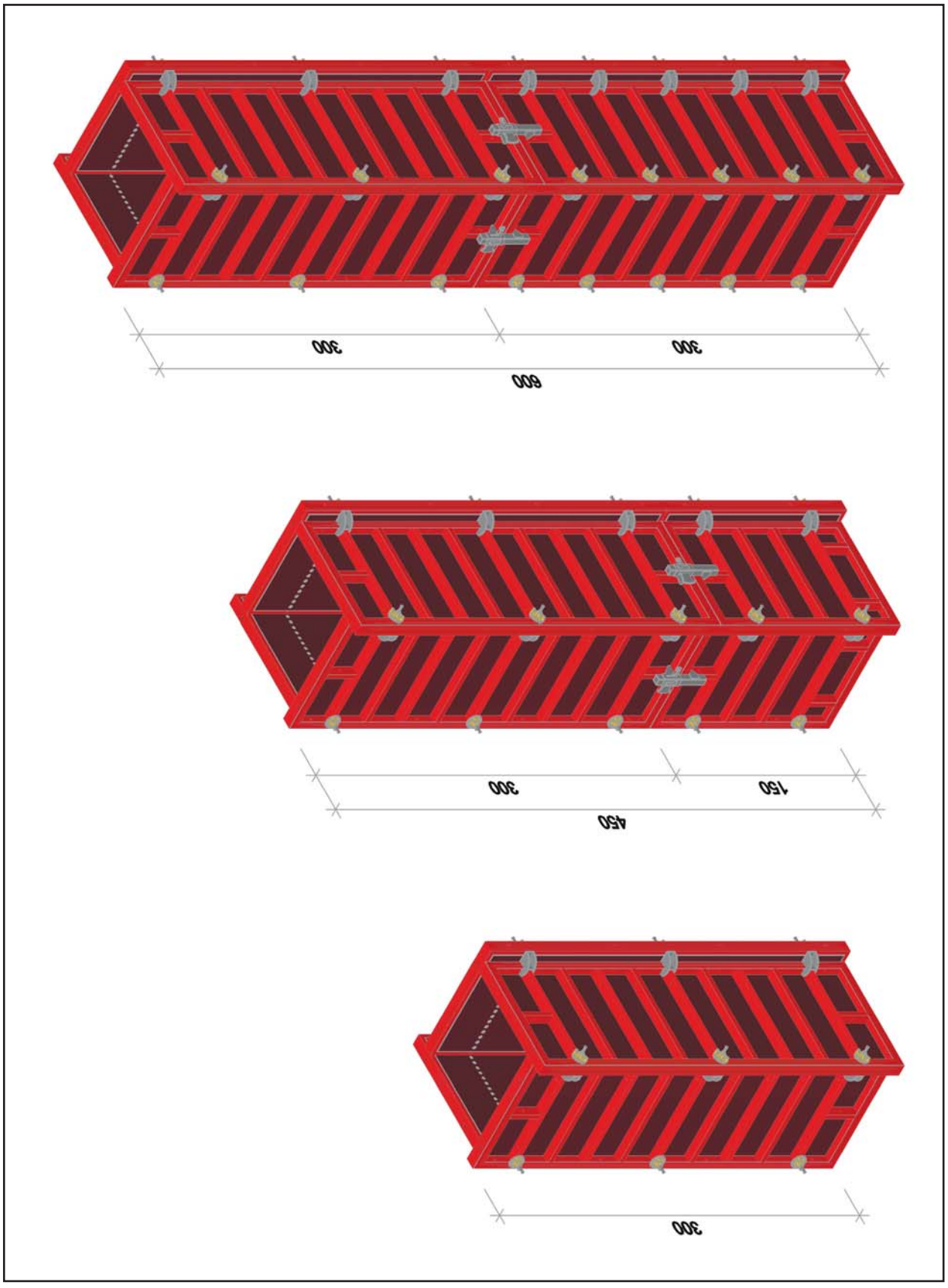
1 - Turn the GP-10 panel with the reinforcement bars upward.
Using the tip supplied with the kit, make the hole that will serve as a guide for the next steps.

2 - Turn the GP-10 panel with the multilayer upwards;
Using the tip supplied with the kit (cup milling machine), make the seat where the next tip will be positioned;

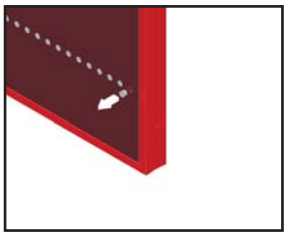
3 - Use the tip Ø 22 mm supplied with the kit to make the through hole.
Make sure the tip has pierced all the plywood;

4 - Close the holes with conical caps Ø 22 mm PVC supplied or can be purchased at the GPrandina srl plants.

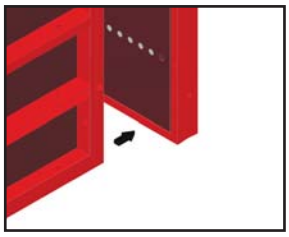
VARIABLE PILLAR WITH GP-10 PILLAR PANELS



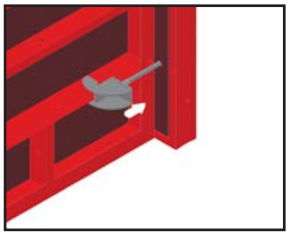
Panels GP-10 dimensions (cm)			Y Pillar measure (cm)	X Hole measure (cm)
GP-10 100	GP-10 90	GP-10 75	10	22,5
GP-10 100	GP-10 90	GP-10 75	15	27,5
GP-10 100	GP-10 90	GP-10 75	20	32,5
GP-10 100	GP-10 90	GP-10 75	25	37,5
GP-10 100	GP-10 90	GP-10 75	30	42,5
GP-10 100	GP-10 90	GP-10 75	35	47,5
GP-10 100	GP-10 90	GP-10 75	40	52,5
GP-10 100	GP-10 90	GP-10 75	45	57,5
GP-10 100	GP-10 90	GP-10 75	50	62,5
GP-10 100	GP-10 90	GP-10 75	55	67,5
GP-10 100	GP-10 90		60	72,5
GP-10 100	GP-10 90		65	77,5
GP-10 100	GP-10 90		70	82,5
GP-10 100			75	87,5
GP-10 100			80	92,5



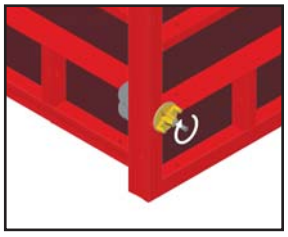
STEP 1:
Remove the PVC plug according to the size determined by the size of the abutment.
(see table above).



STEP 2:
Approach the panel perpendicular to the previously prepared panel.
Leave free the hole where the PVC cap has been removed.

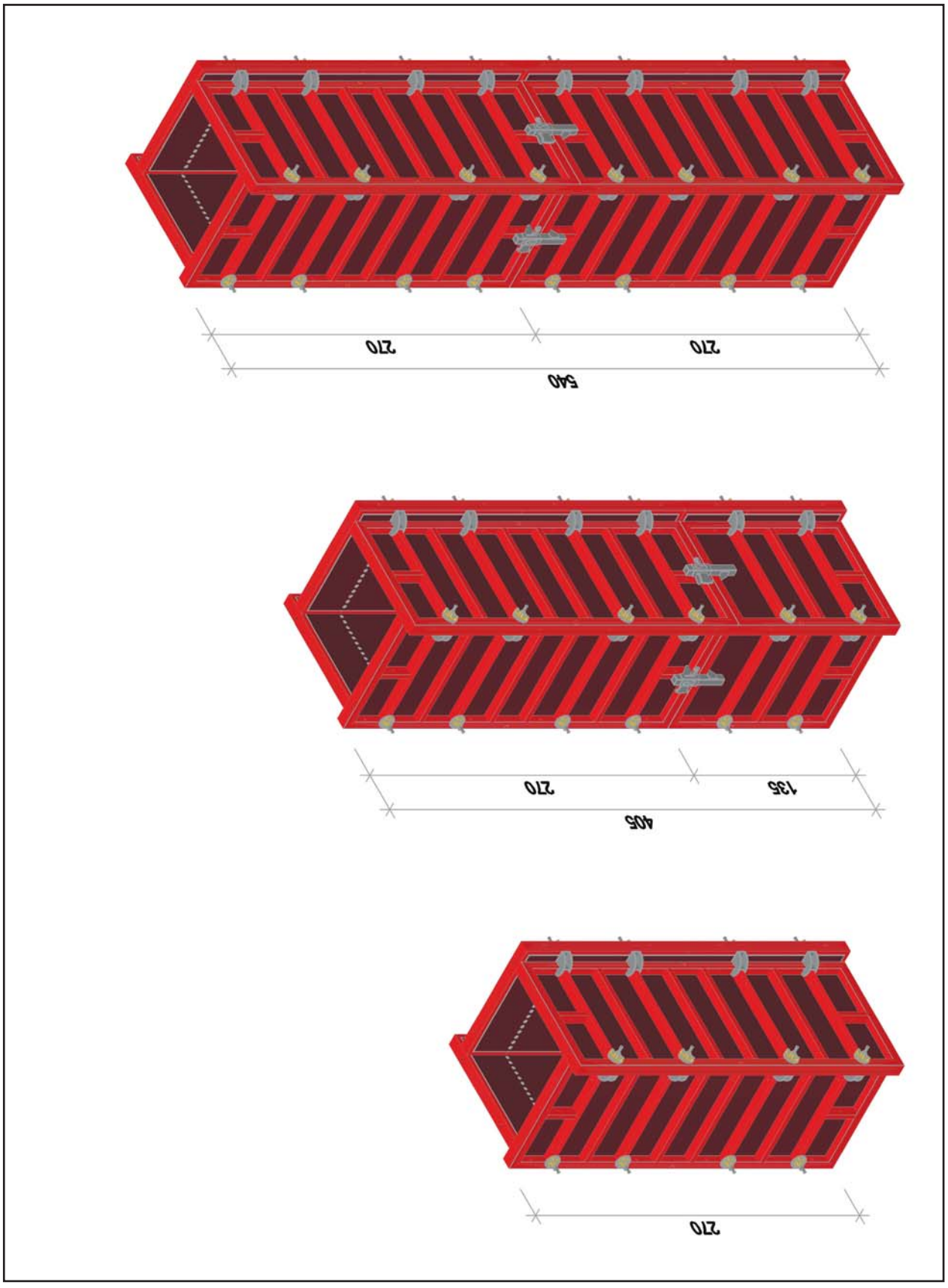


STEP 3:
Install the pillar clamp inserting the threaded bar in correspondence with the hole and the reinforcing crossbar of the panel.

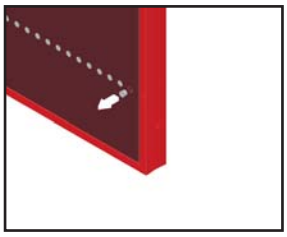


STEP 4:
Tighten the abutment clamp with the supplied DW15 nut plate.

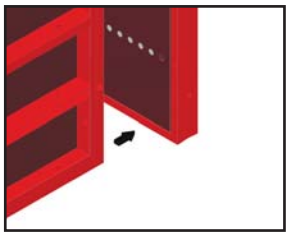
VARIABLE PILLAR WITH GP-10 PILLAR PANELS



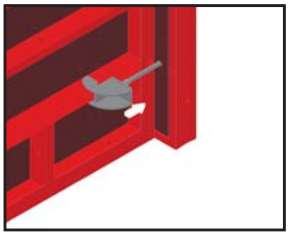
Panels GP-10 dimensions (cm)			Y Pillar measure (cm)	X Hole measure (cm)
GP-10 100	GP-10 90	GP-10 75	10	22,5
GP-10 100	GP-10 90	GP-10 75	15	27,5
GP-10 100	GP-10 90	GP-10 75	20	32,5
GP-10 100	GP-10 90	GP-10 75	25	37,5
GP-10 100	GP-10 90	GP-10 75	30	42,5
GP-10 100	GP-10 90	GP-10 75	35	47,5
GP-10 100	GP-10 90	GP-10 75	40	52,5
GP-10 100	GP-10 90	GP-10 75	45	57,5
GP-10 100	GP-10 90	GP-10 75	50	62,5
GP-10 100	GP-10 90	GP-10 75	55	67,5
GP-10 100	GP-10 90		60	72,5
GP-10 100	GP-10 90		65	77,5
GP-10 100	GP-10 90		70	82,5
GP-10 100			75	87,5
GP-10 100			80	92,5



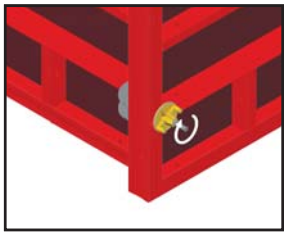
STEP 1:
Remove the PVC plug according to the size determined by the size of the abutment.
(see table above).



STEP 2:
Approach the panel perpendicular to the previously prepared panel.
Leave free the hole where the PVC cap has been removed.

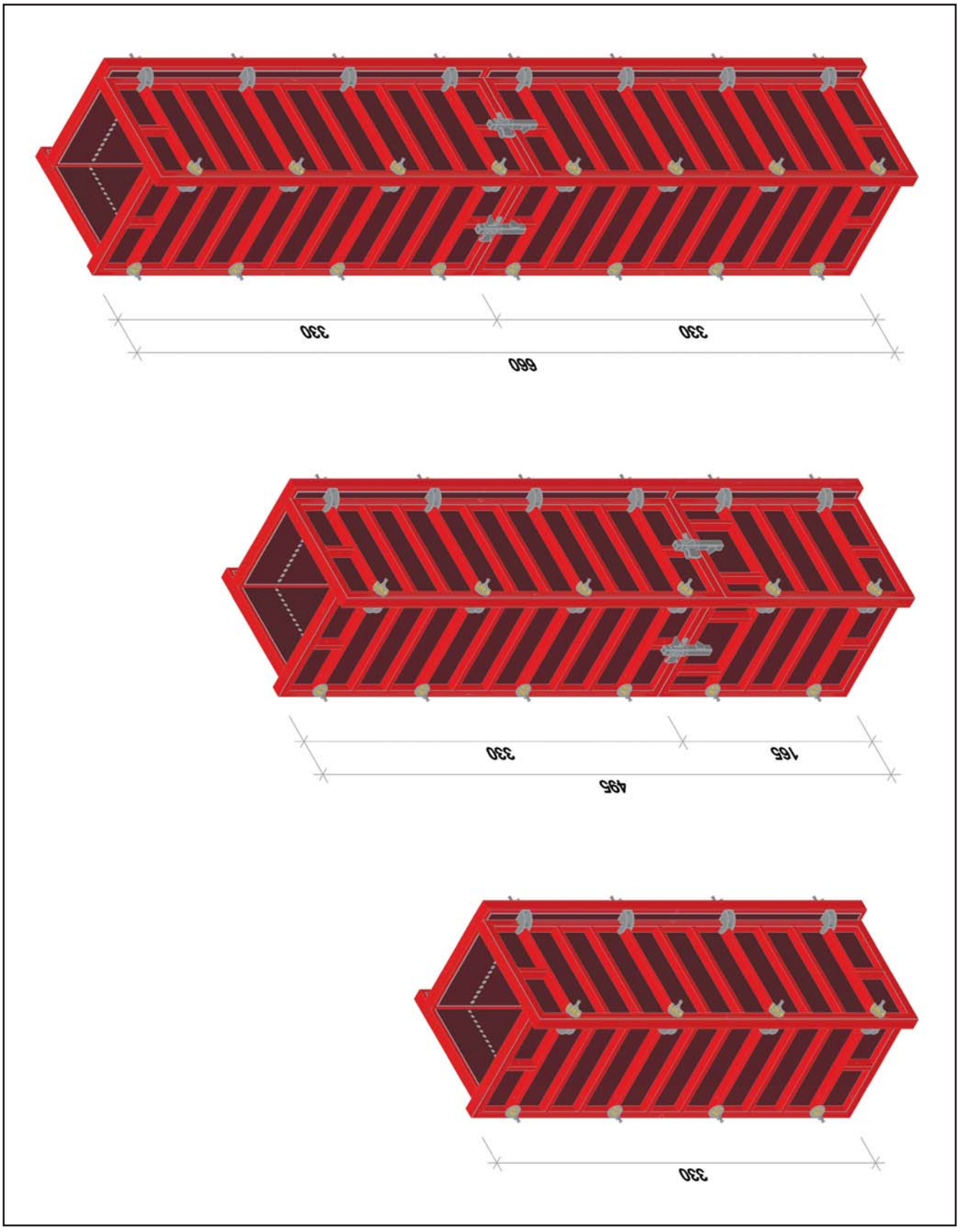


STEP 3:
Install the pillar clamp inserting the threaded bar in correspondence with the hole and the reinforcing crossbar of the panel.

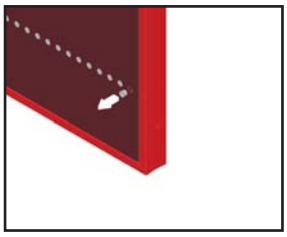


STEP 4:
Tighten the abutment clamp with the supplied DW15 nut plate.

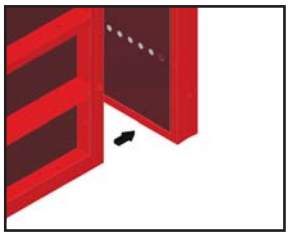
VARIABLE PILLAR WITH GP-10 PILLAR PANELS



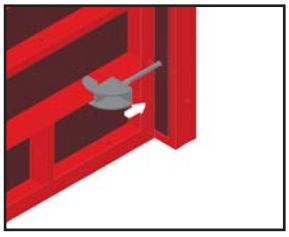
Panels GP-10 dimensions (cm)			Y Pillar measure (cm)	X Hole measure (cm)
GP-10 100	GP-10 90	GP-10 75	10	22,5
GP-10 100	GP-10 90	GP-10 75	15	27,5
GP-10 100	GP-10 90	GP-10 75	20	32,5
GP-10 100	GP-10 90	GP-10 75	25	37,5
GP-10 100	GP-10 90	GP-10 75	30	42,5
GP-10 100	GP-10 90	GP-10 75	35	47,5
GP-10 100	GP-10 90	GP-10 75	40	52,5
GP-10 100	GP-10 90	GP-10 75	45	57,5
GP-10 100	GP-10 90	GP-10 75	50	62,5
GP-10 100	GP-10 90	GP-10 75	55	67,5
GP-10 100	GP-10 90		60	72,5
GP-10 100	GP-10 90		65	77,5
GP-10 100	GP-10 90		70	82,5
GP-10 100			75	87,5
GP-10 100			80	92,5



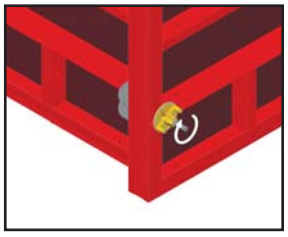
STEP 1:
Remove the PVC plug according to the size determined by the size of the abutment.
(see table above).



STEP 2:
Approach the panel perpendicular to the previously prepared panel.
Leave free the hole where the PVC cap has been removed.

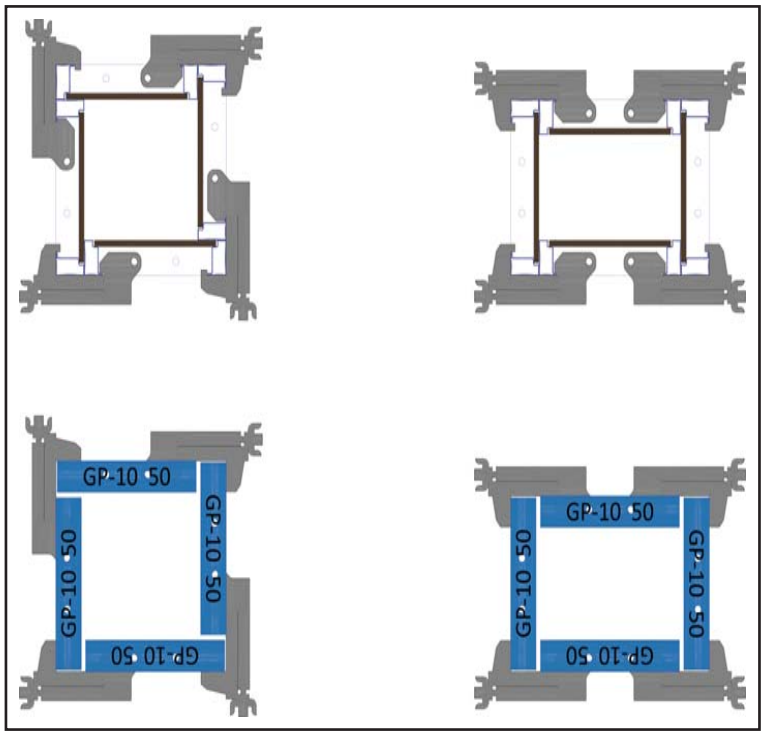


STEP 3:
Install the pillar clamp inserting the threaded bar in correspondence with the hole and the reinforcing crossbar of the panel.



STEP 4:
Tighten the abutment clamp with the supplied DW15 nut plate.

PILLAR WITH PANELS GP-10 TO SIZE

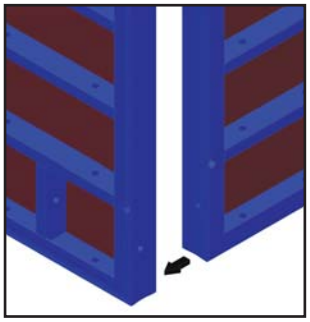


DESCRIPTION:

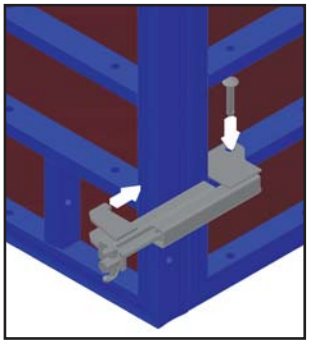
With the GP-10 system you can compose pillars of various sizes and heights.
In this case, using the GP-10 panels to measure and combining them together we can compose all the types of rectangular and square pillars.
They are fixed to each other by means of a variable external corner full clamp.

USED MATERIAL:

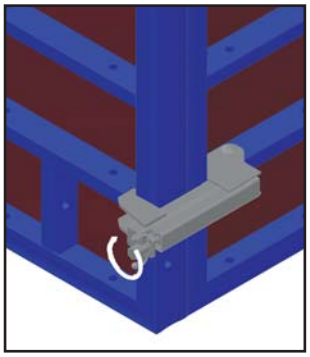
	Panel GP-10	Pcs.04
291042	Adjustable clamp for external corner	Pcs. ...



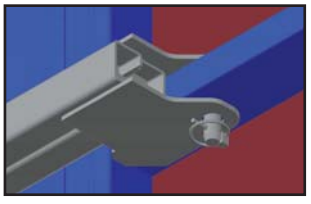
STEP 1:
Place n. 2 GP-10 panels perpendicular to each other.



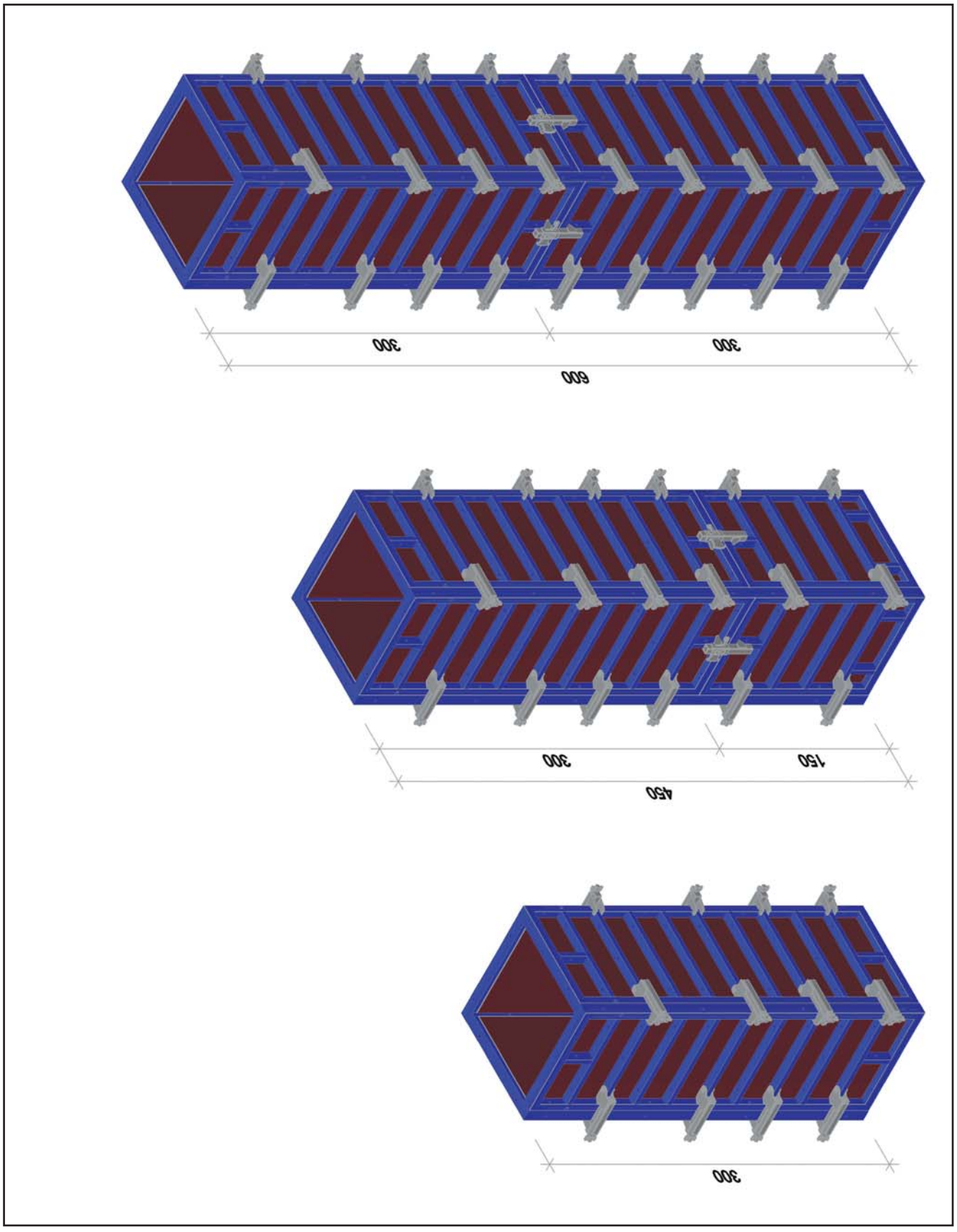
STEP 2:
Place the previously open clamp at the reinforcement bars.
Insert the appropriate plug into the hole in the plate and into the crosspiece of the panel.



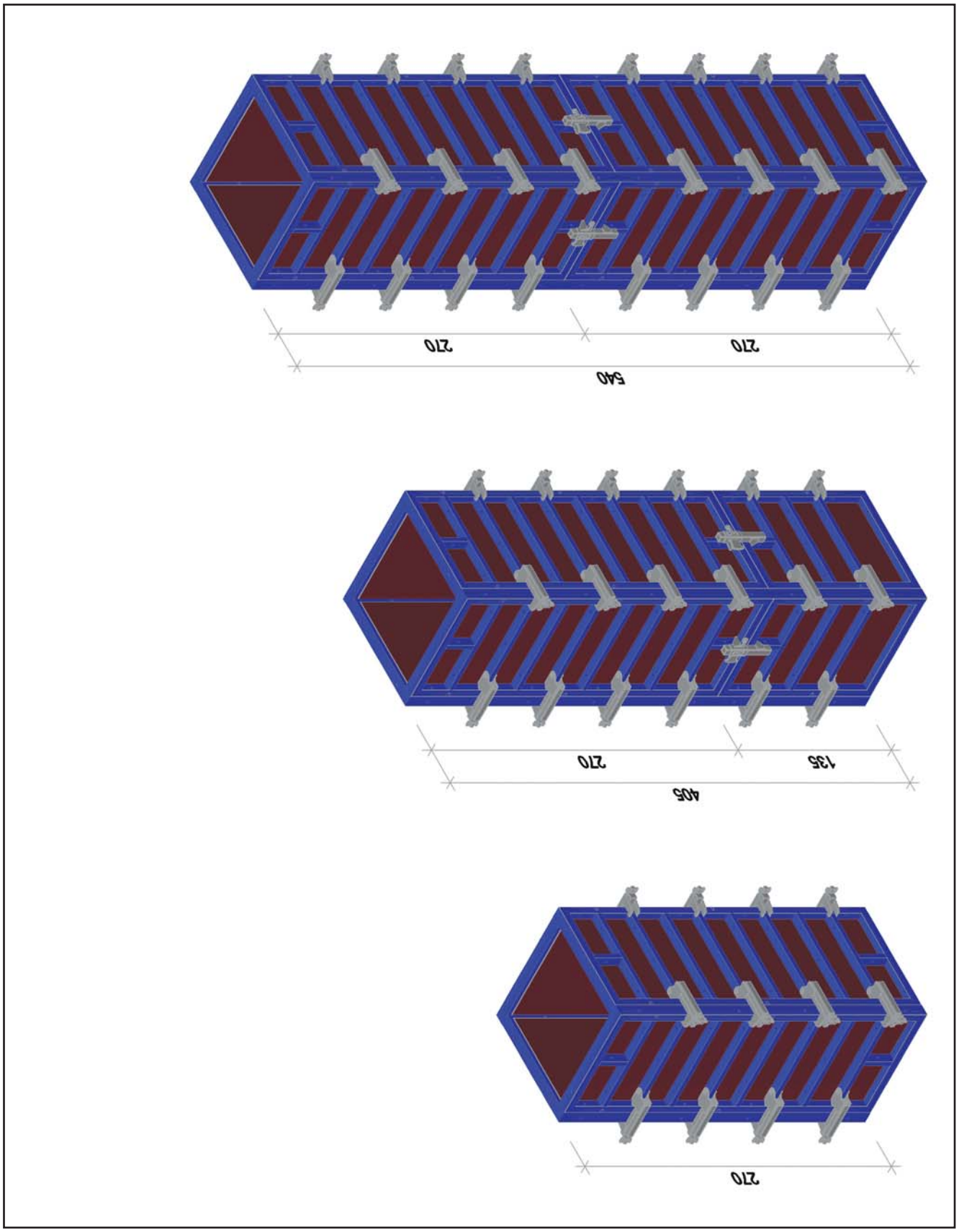
STEP 3:
Screw the outer corner clamping bar and secure with a lever.

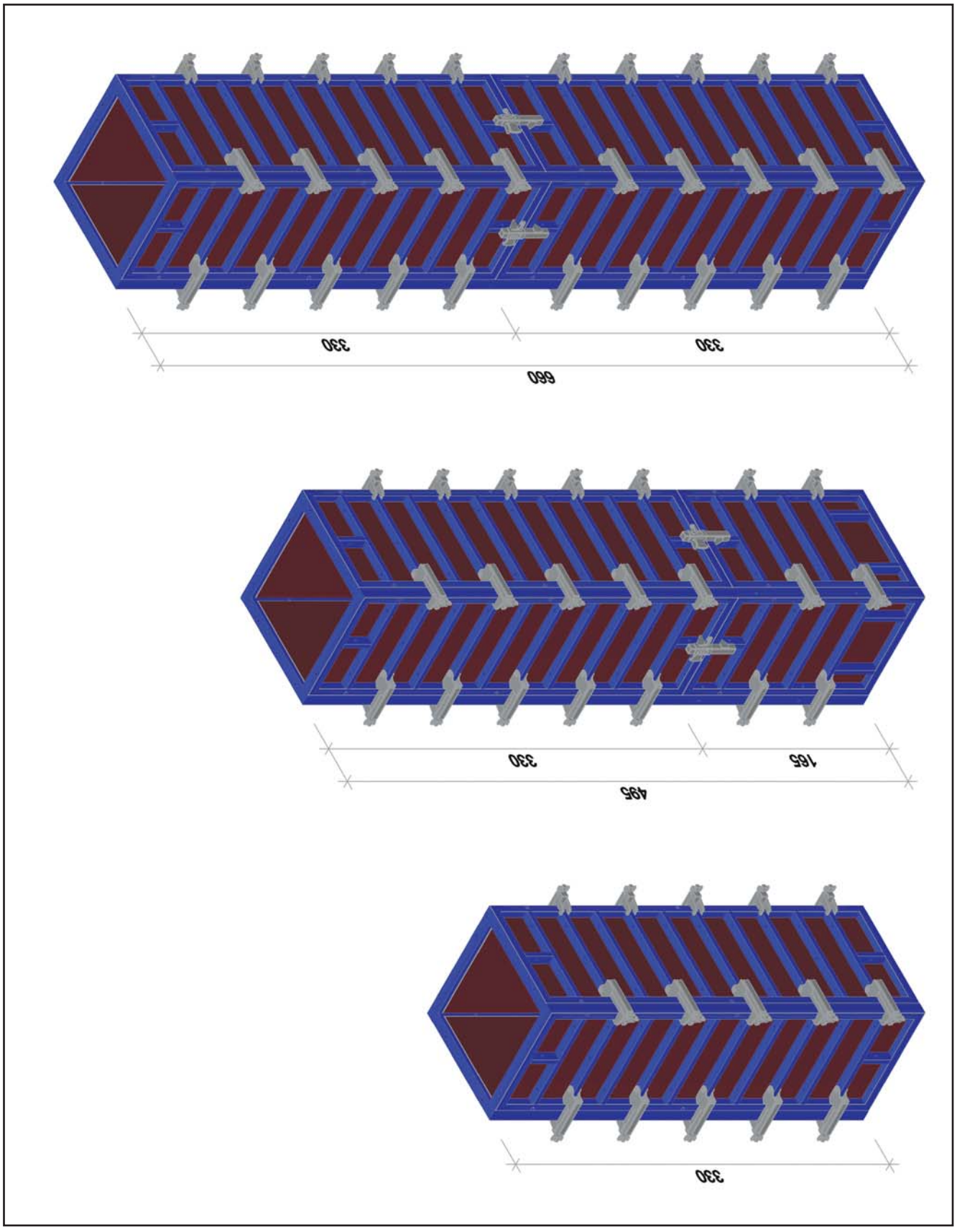


STEP 4:
Install the safety pin into the plug.

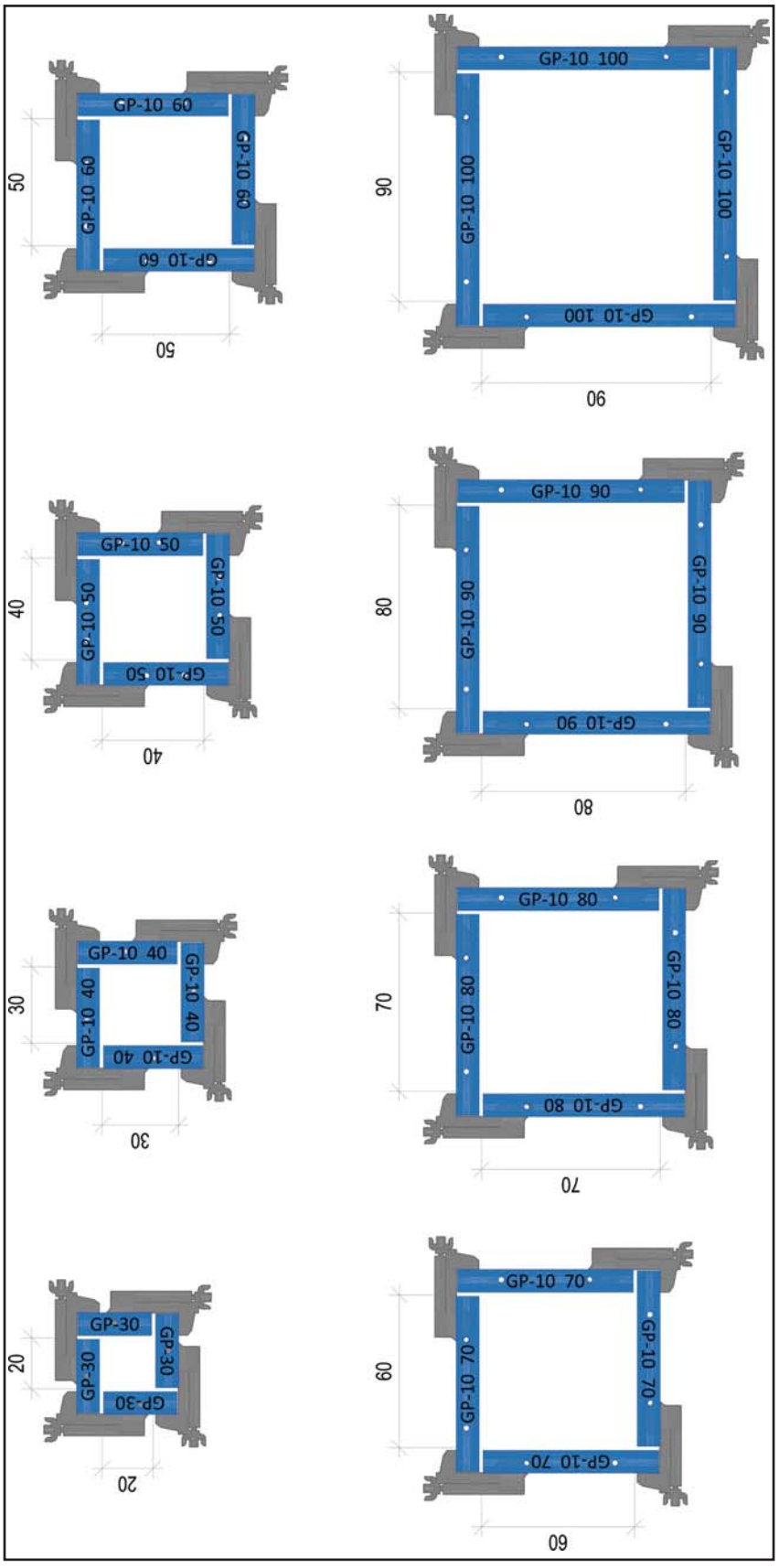

300
300
600
300
150
450
300

PILLAR WITH PANELS GP-10 TO SIZE




330
330
660
330
165
495
330

PILLAR WITH PANELS GP-10 TO SIZE

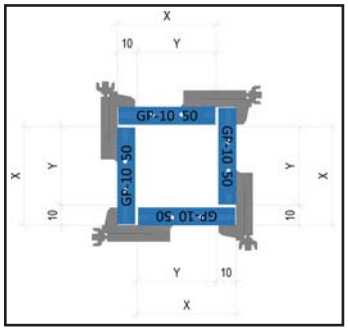


DIMENSIONING FITTING PANEL:

To size the external GP-10 connection panel, perform this simple operation:

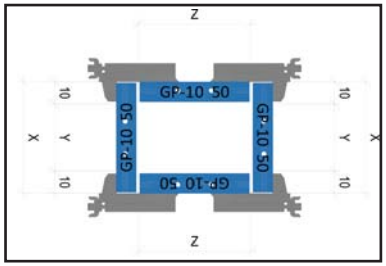
X = Y + 10

X = panel size to be obtained
Y= pillar size
10= fixed thickness of the panel



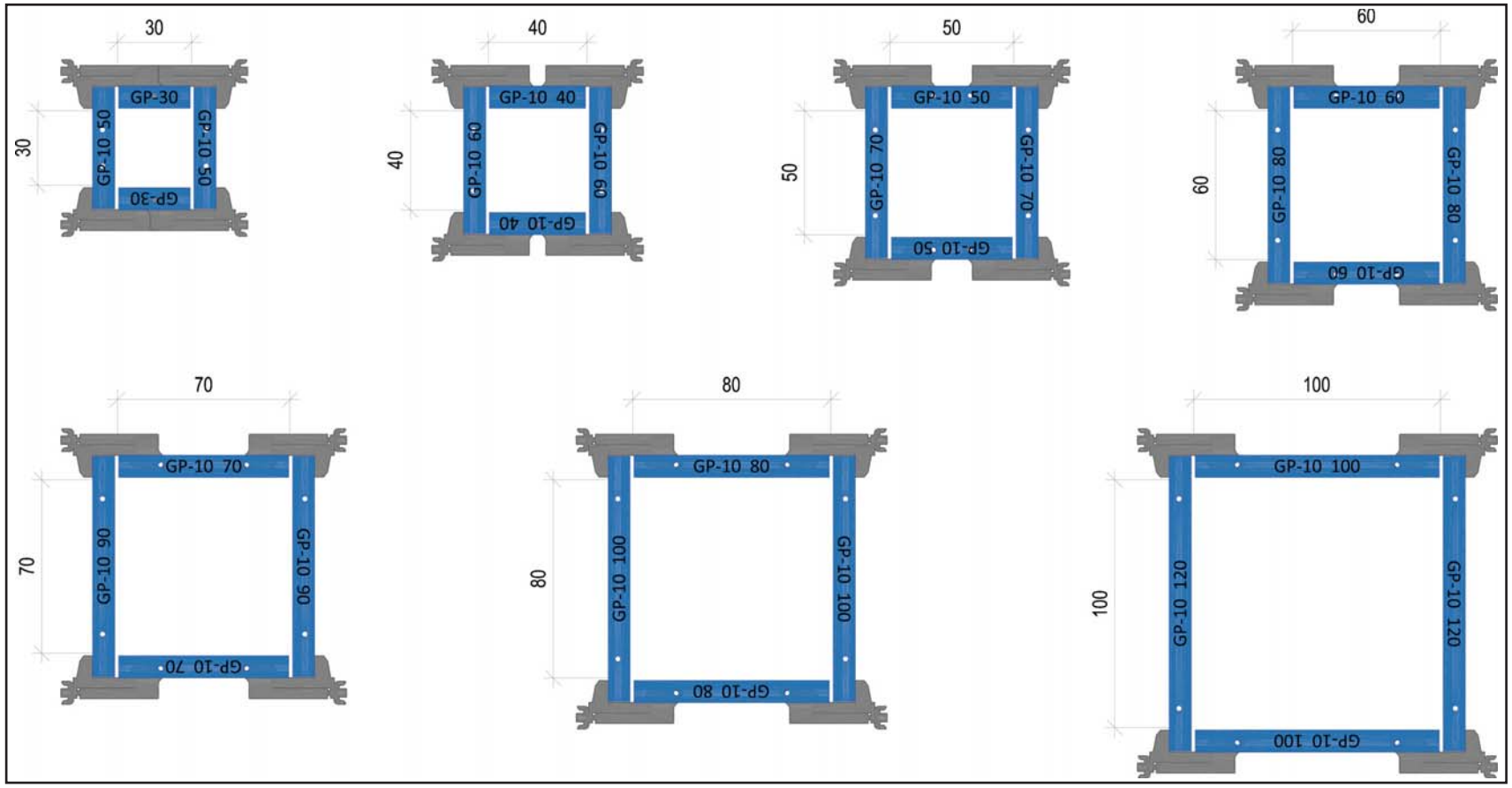
DIMENSIONING FITTING PANEL:

To size the external GP-10 connection panel, perform this simple operation:



X = Y + 10 + 10

X = panel size to be obtained
Y = pillar size
Z = fixed panel size
10= fixed thickness of the panel



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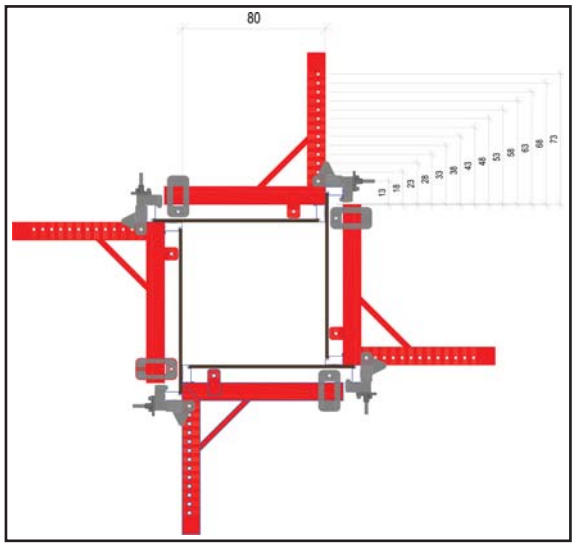
VARIABLE PILLAR WITH GP-10 PILLAR SQUARE

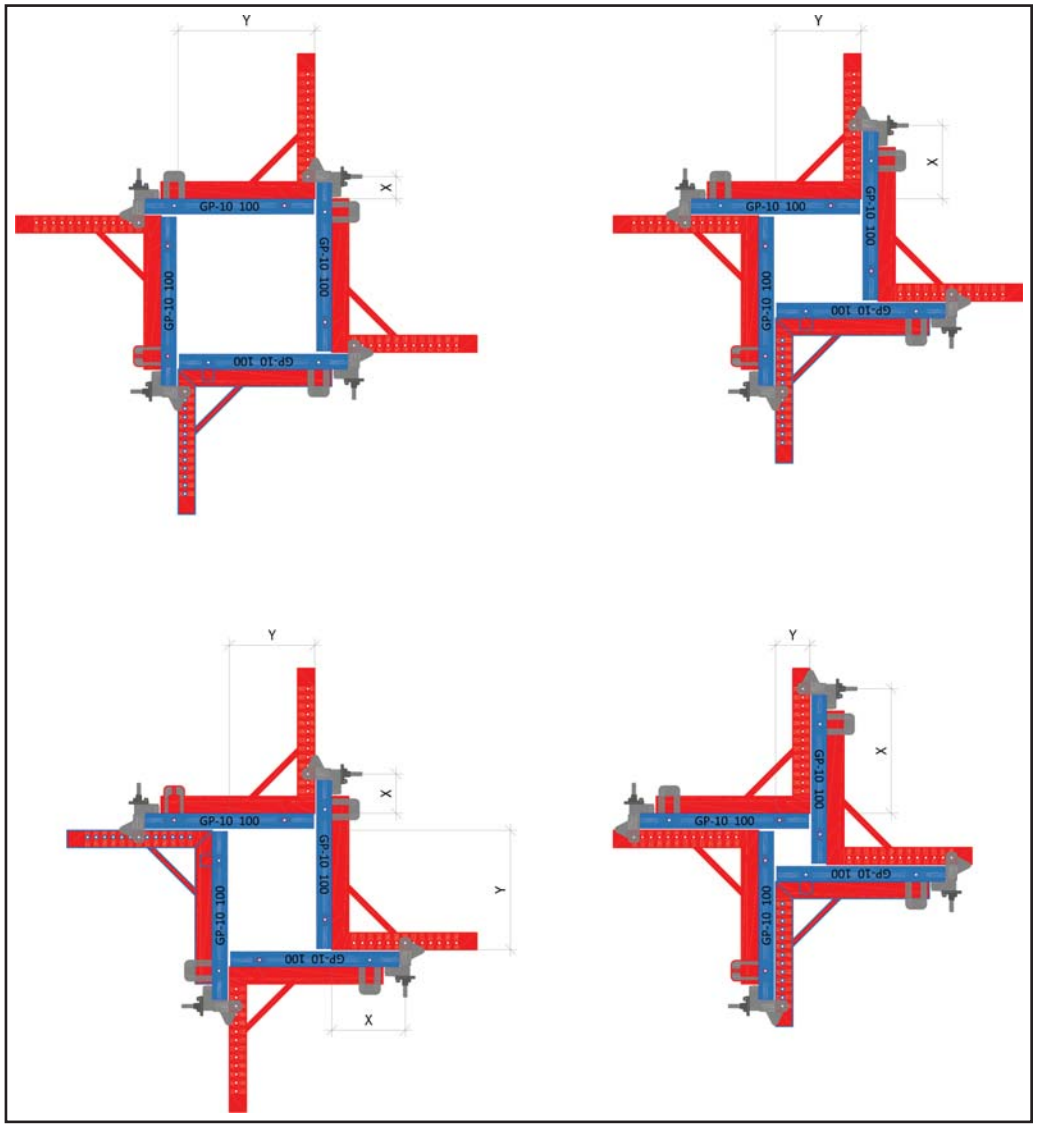


DESCRIPTION:

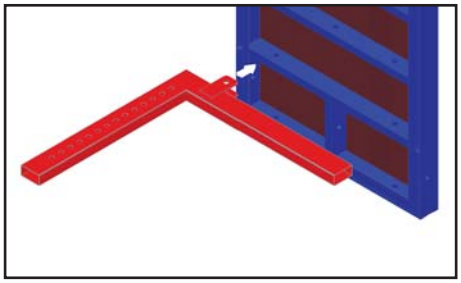
With the GP-10 system you can compose pillars of various sizes and heights.
In this case, using the GP-10 panels positioned like the mill's wings, connected to each other by the pillar square, pillar bracket and aligning bracket are made up of pillars of variable dimensions always using the same articles.
Size:
- max. 80x80 cm
- min. 20x20 cm

USED MATERIAL:

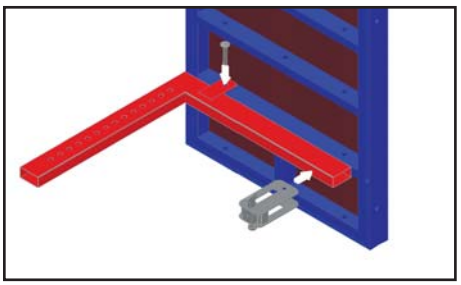
	Panel GP-10	Pcs. ...
291112	Squadra pilastro GP-10	Pcs. ...
291122	Staffa per squadra pilastro GP-10	Pcs. ...
291142	Staffa allineatrice	Pcs. ...



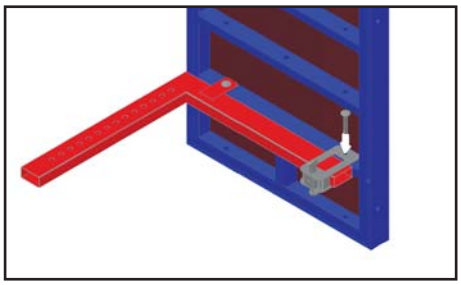
Y Pillar size (cm)	X Hole measure (cm)
20	73,0
25	68,0
30	63,0
35	58,0
40	53,0
45	48,0
50	43,0
55	38,0
60	33,0
65	28,0
70	23,0
75	18,0
80	13,0



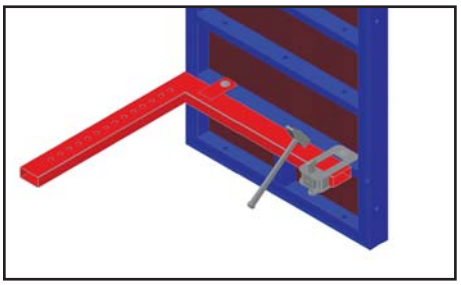
STEP 1:
Place the GP-10 pillar square at the first reinforcement beam.



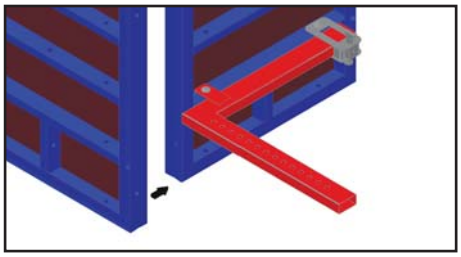
STEP 2:
Insert the safety pin into the appropriate hole on the square and position the aligning bracket.



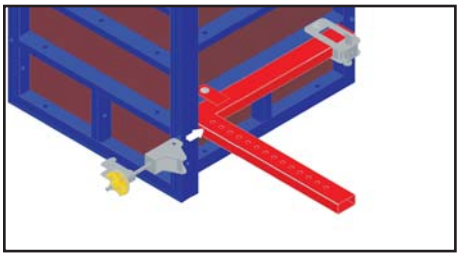
STEP 3:
Insert the safety pin to secure the alignment bracket.



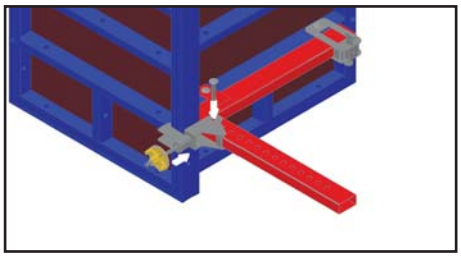
STEP 4:
Tighten the wedge of the aligning bracket using a hammer.



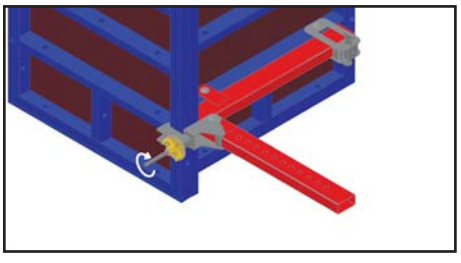
STEP 5:
Place the second panel perpendicular to the first, respecting the measures given by the dimensions of the pillar.



STEP 6:
Place the bracket for pillar square in the appropriate hole.

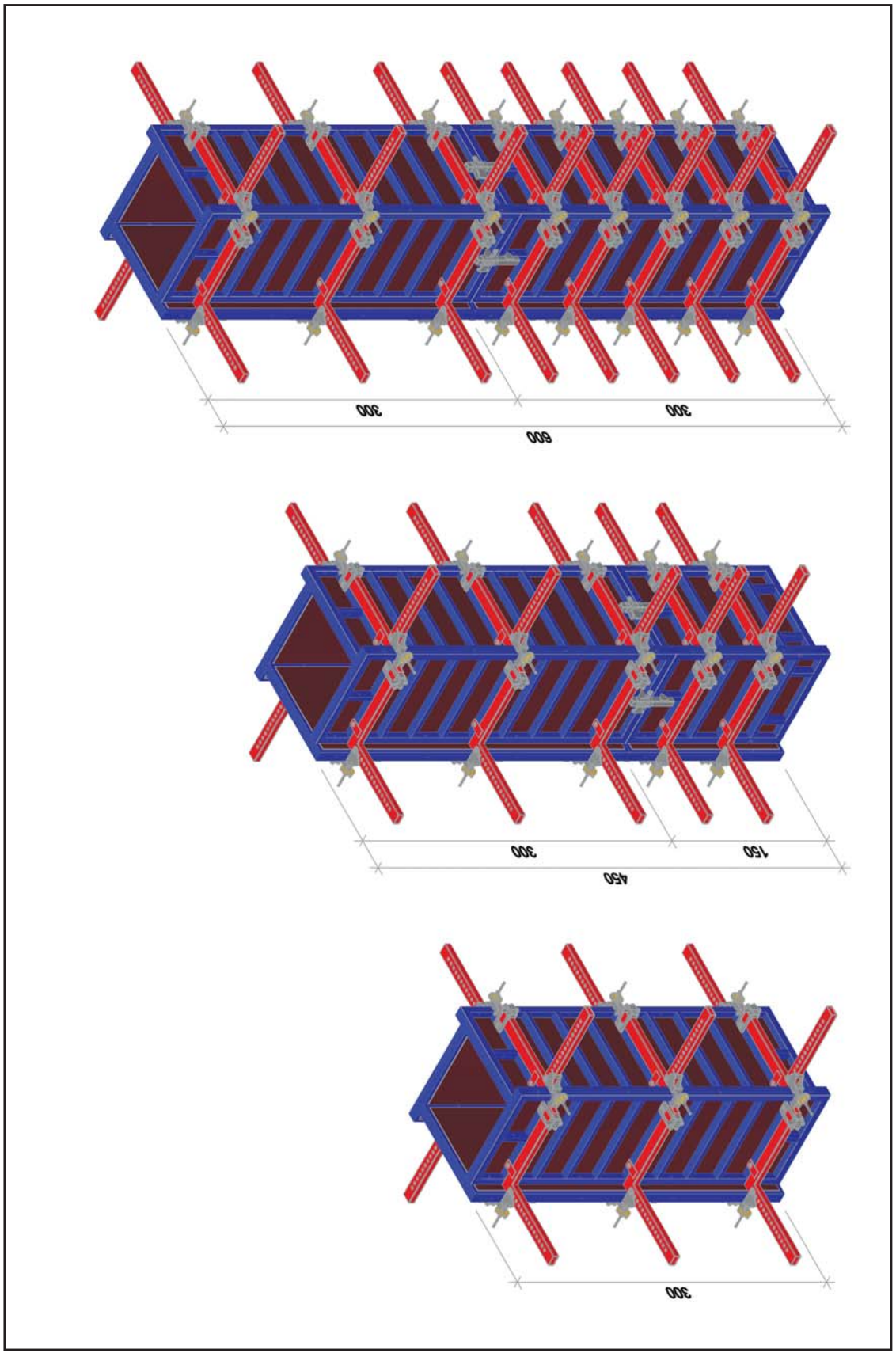


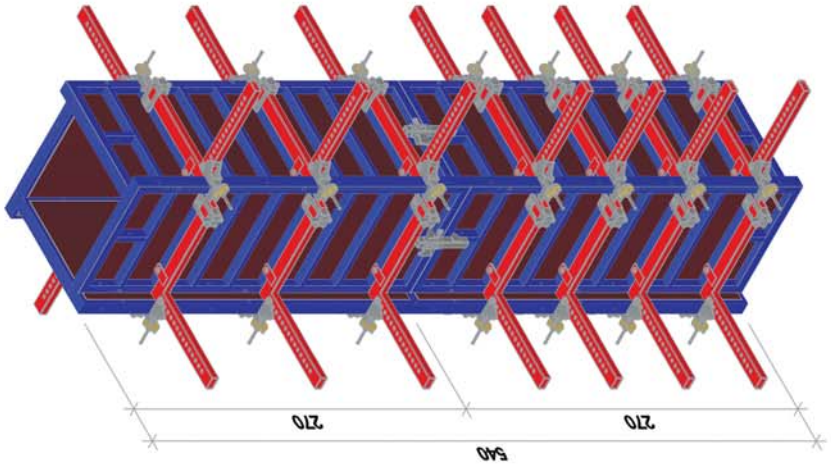
STEP 7:
Insert the safety pin and proceed with tightening the bracket for pillar square.

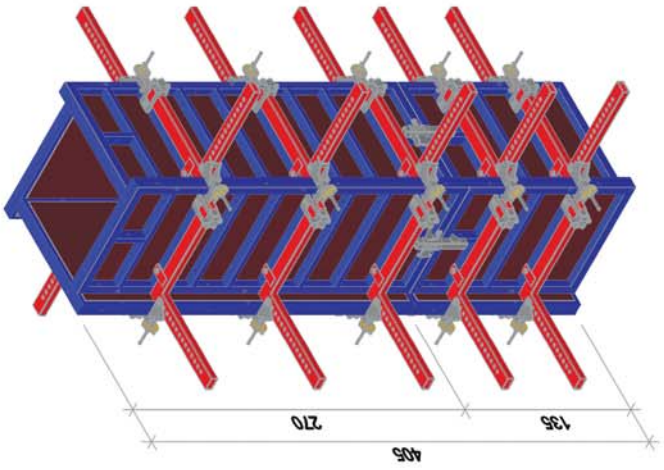


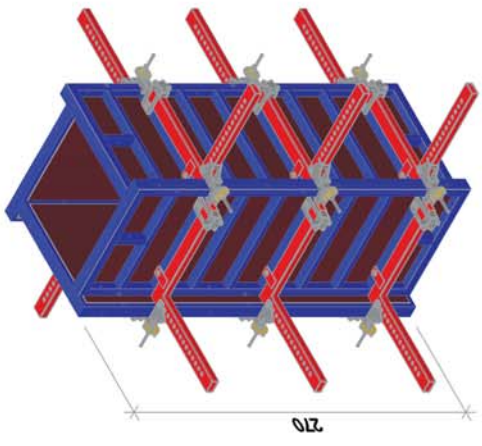
STEP 8:
Tighten the DW15 nut plate to ensure closure of the bracket for pillar square.

VARIABLE PILLAR WITH GP-10 PILLAR SQUARE

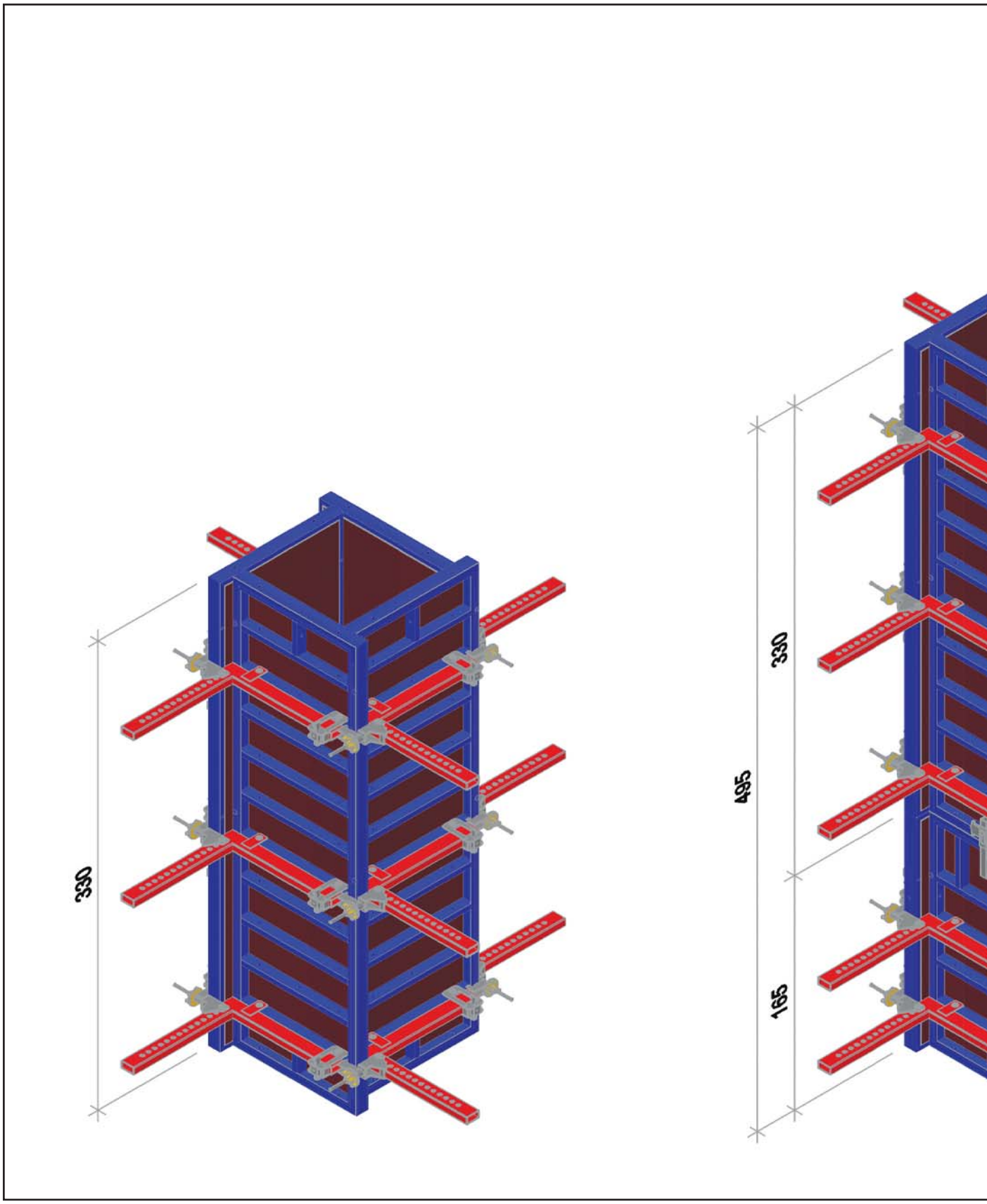


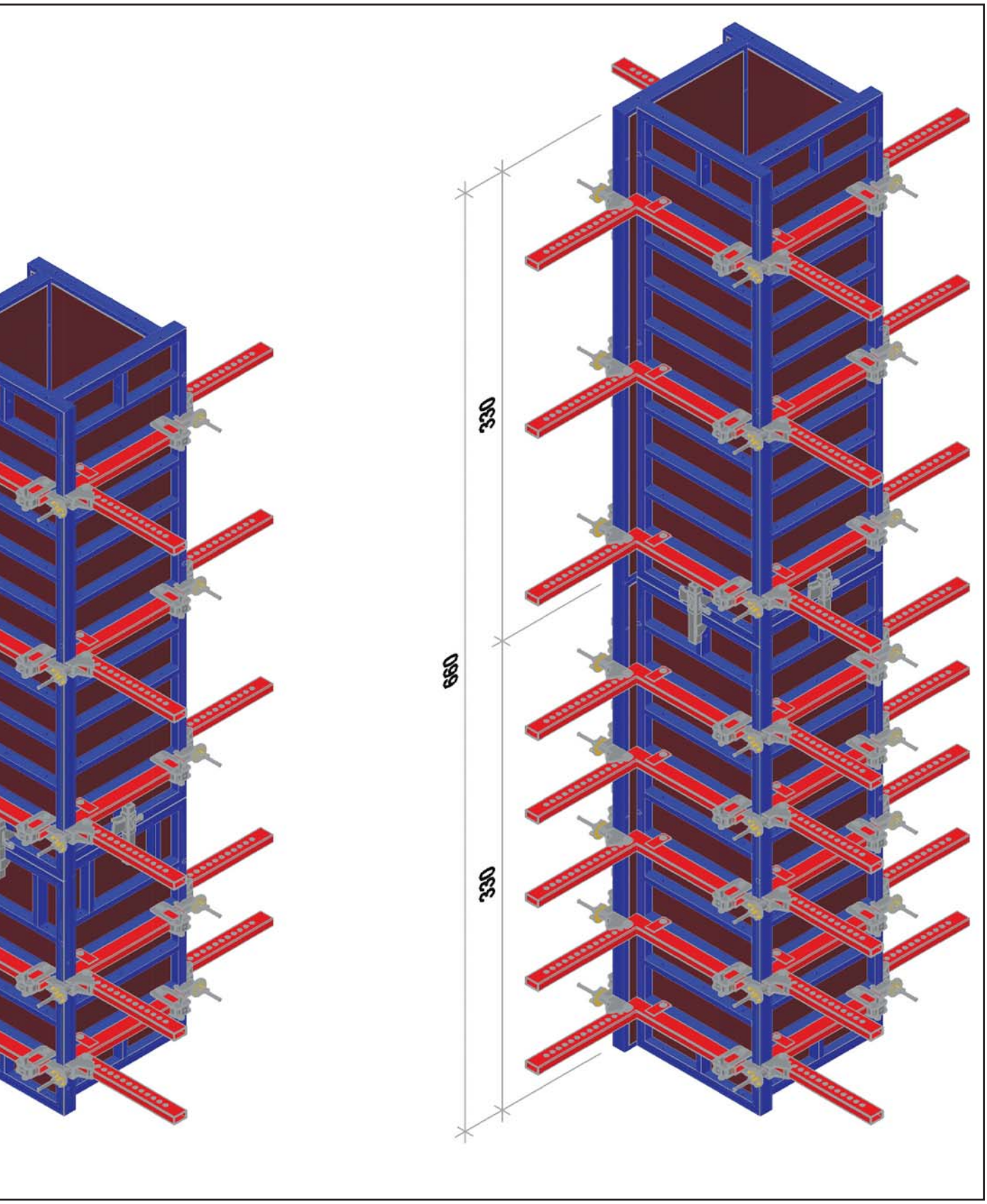

270
270
540


270
135
405


270

VARIABLE PILLAR WITH GP-10 PILLAR SQUARE




330
660
330

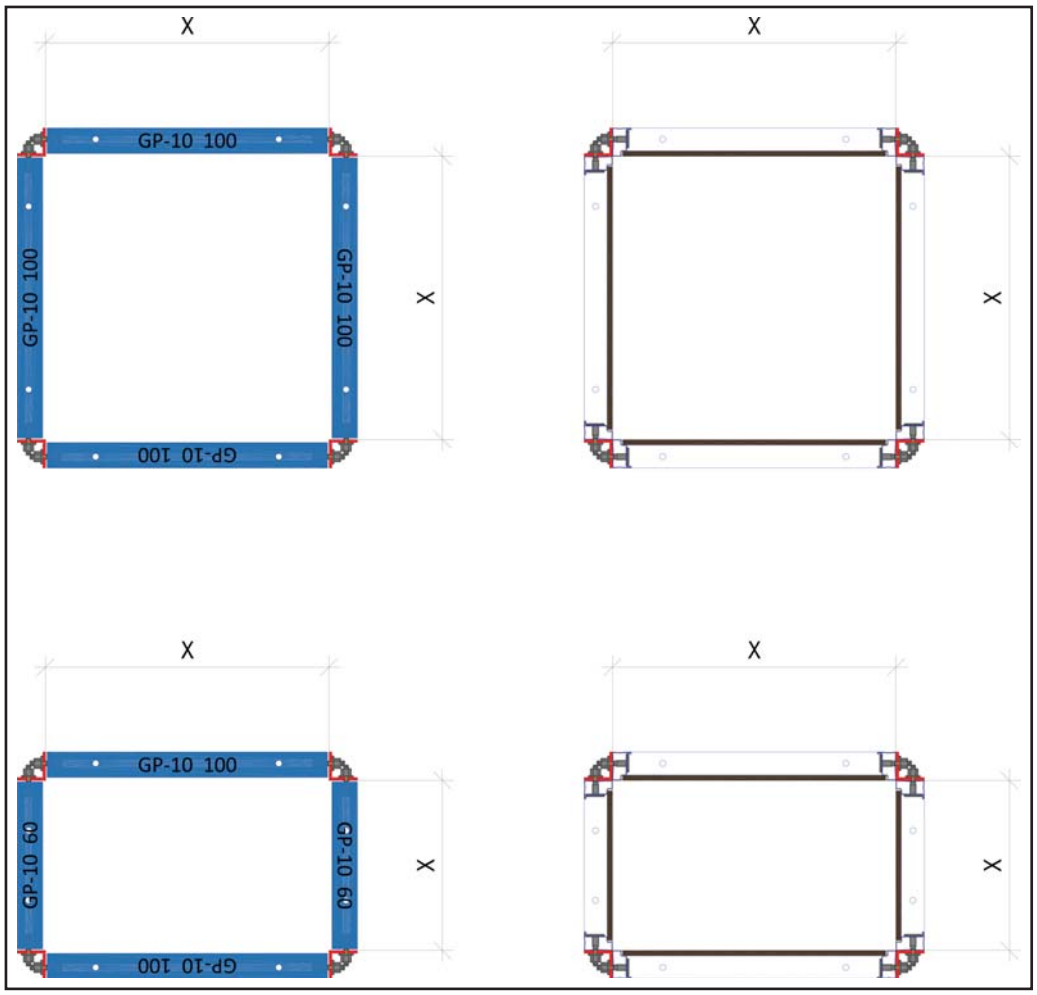
FIXED PILLAR WITH EXTERNAL CORNERS 10X10

DESCRIPTION:

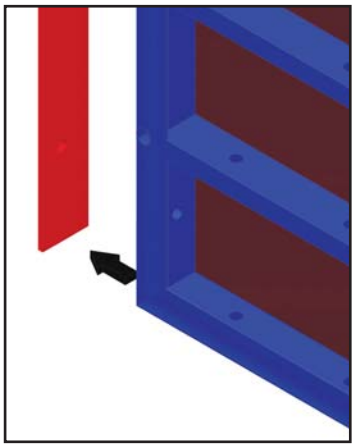
With the GP-10 system you can compose pillars of various sizes and heights.
In this case, using the GP-10 panels and the 10x10 external corner connected to each other by means of a fixed L.90 mm pin and wedge, pillars of different sizes can be formed, both with a square or rectangular base.
Dimensions.
- maximum 120x120 cm
- minimum 20x20 cm.

USED MATERIAL:

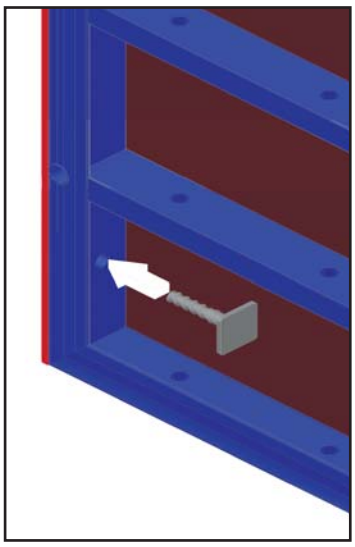
	Panel GP-10	Pcs. ...
	External corner 10x10	Pcs. ...
291183	Small fix pin L.90 mm	Pcs. ...
291211	Nut for pin	Pcs. ...



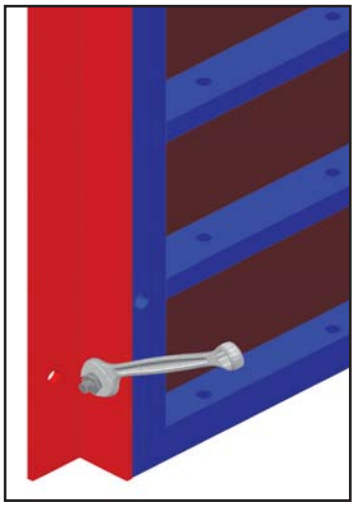
X Pillar size (cm)	Corresponding panel size (cm)
120	120
100	100
90	90
80	80
75	75
70	70
65	65
60	60
55	55
50	50
45	45
40	40
35	35
30	30
25	25
20	20



STEP 1:
Place n. 1 GP-10 panel and n. 1 external corner 10x10 of the same height. Make sure that the holes on the 10 cm side of both pieces match perfectly to facilitate the subsequent insertion of the plug.

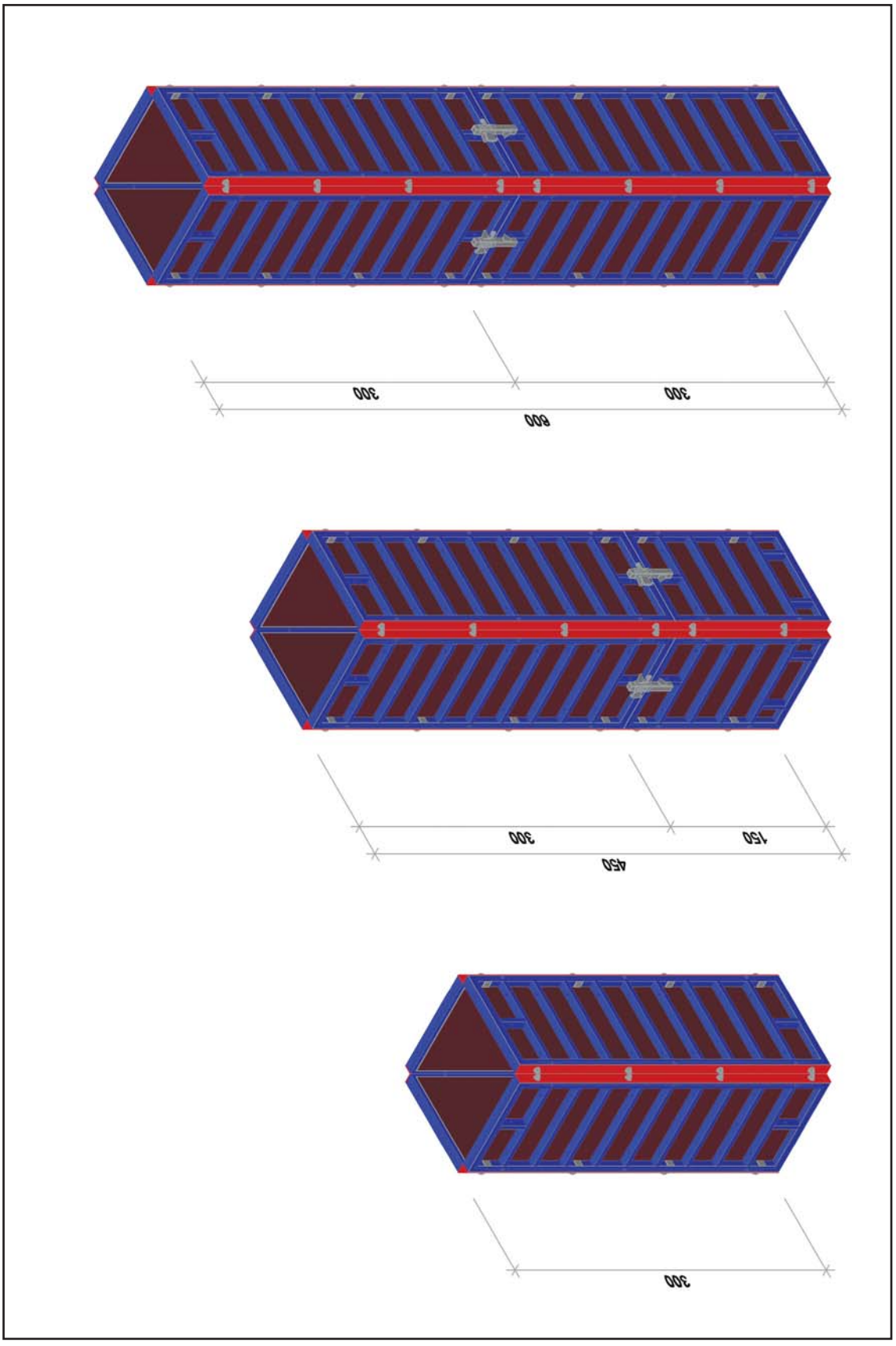


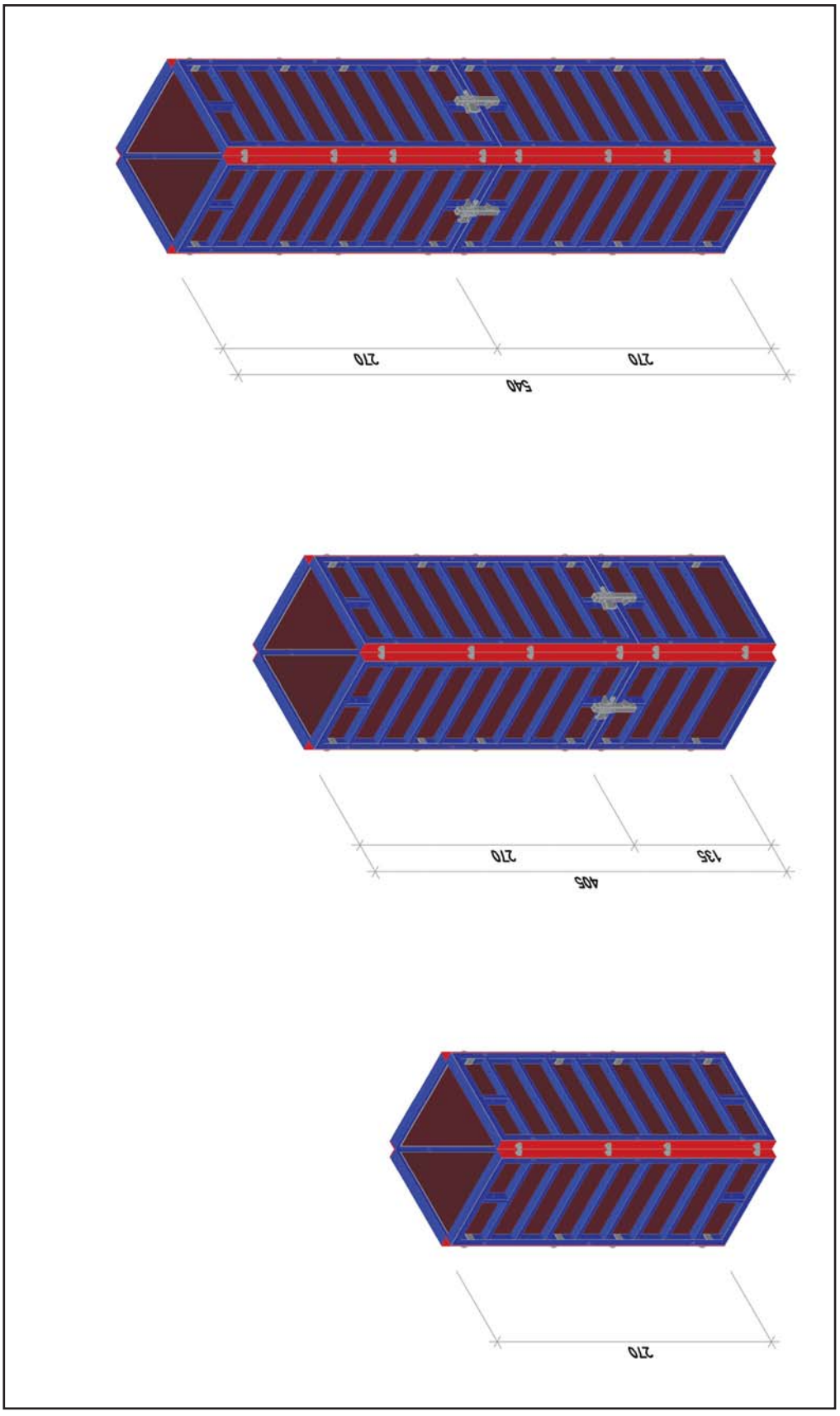
STEP 2:
Insert the fixed plug L. 90 mm respecting the direction shown in the image alongside.



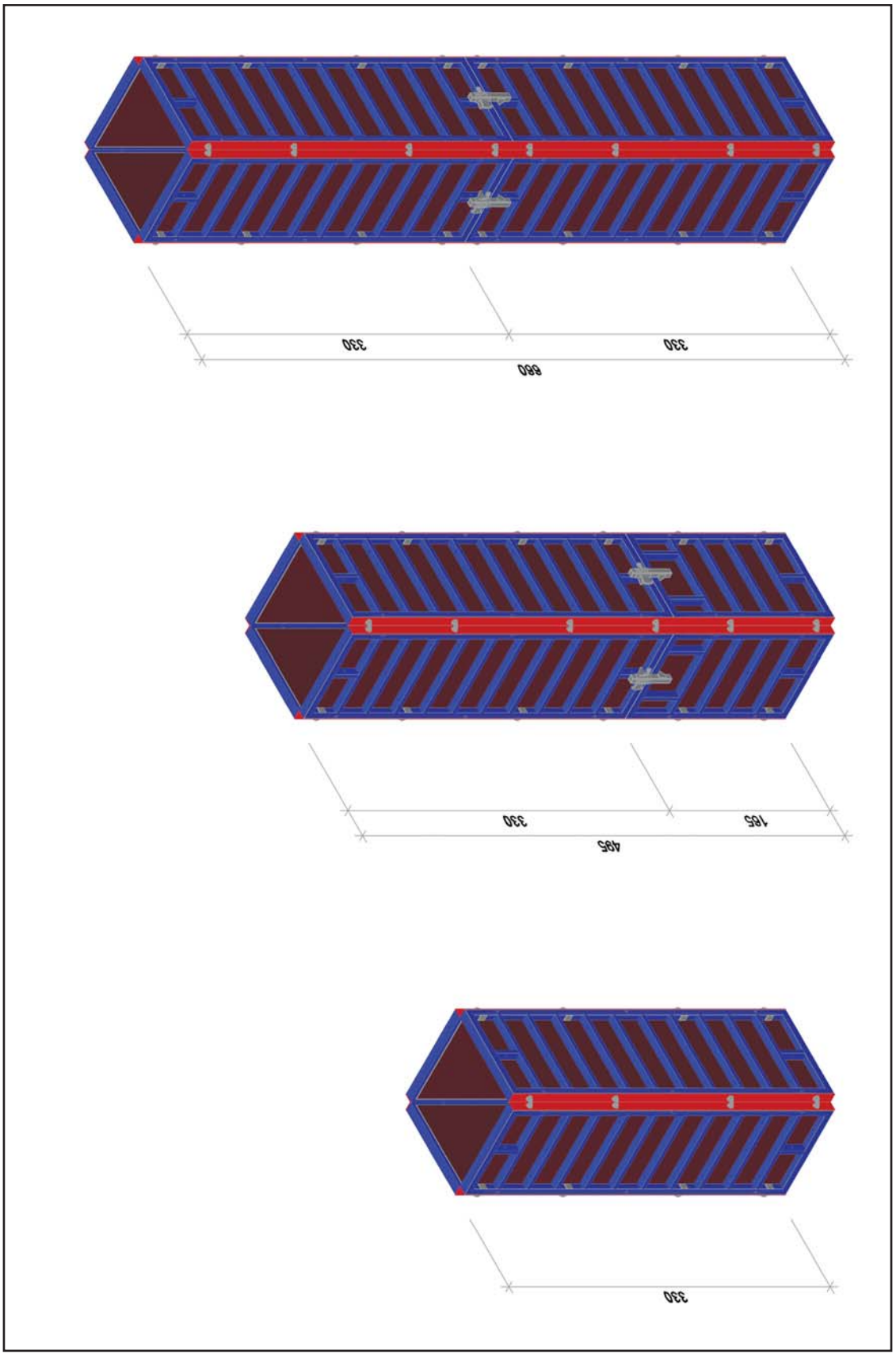
STEP 3:
Tighten the M30 nut and fix everything with the M30 key.
Repeat the operation in all the holes to ensure perfect sealing of the corner.

FIXED PILLAR WITH EXTERNAL CORNERS 10X10




210
210
540
210
135
405
210

FIXED PILLAR WITH EXTERNAL CORNERS 10X10

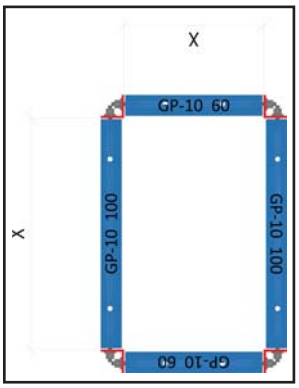


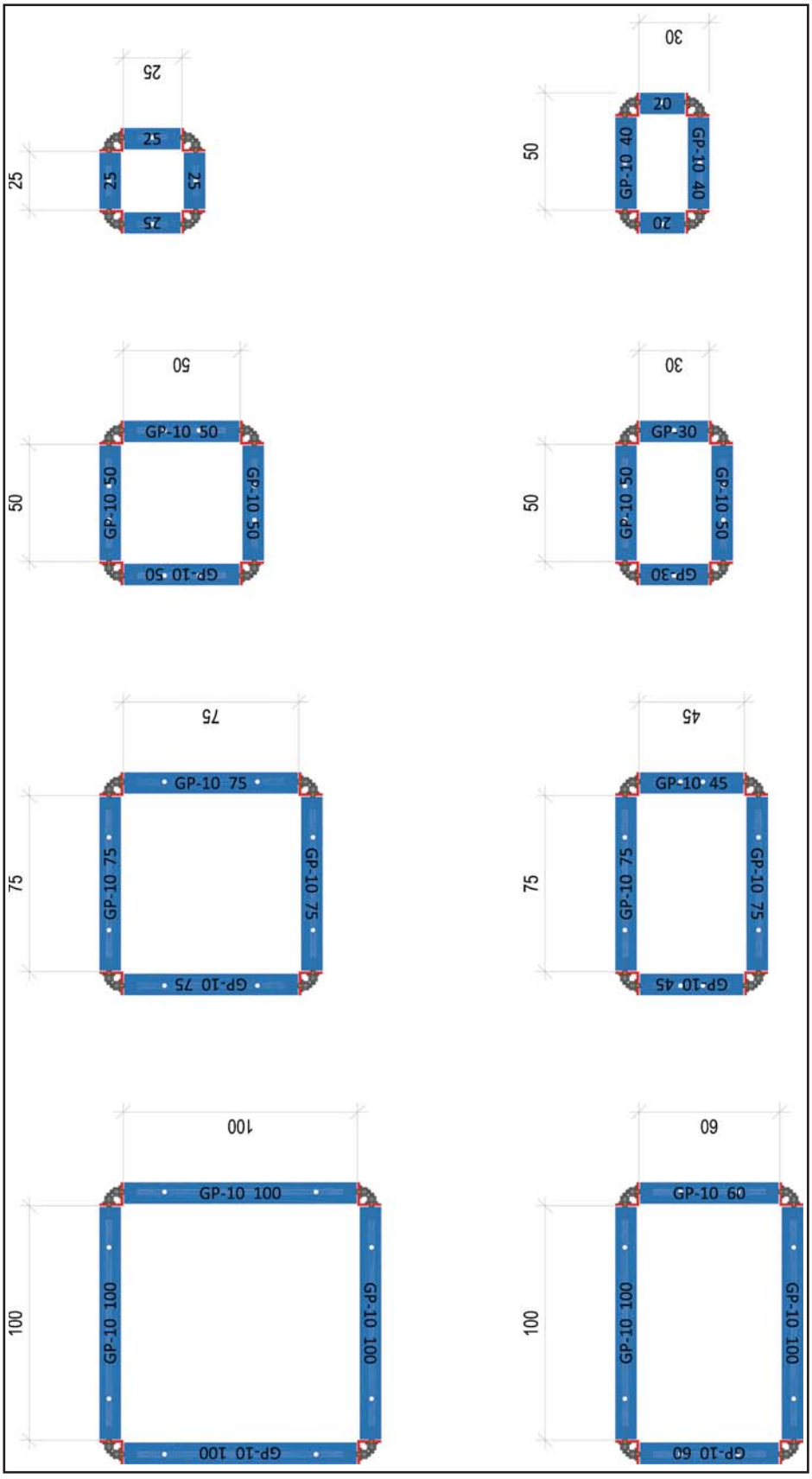
DIMENSIONING FITTING PANEL:

To size the external GP-10 connection panel, perform this simple operation:

X = Y

X = panel size to be obtained
Y = pillar size



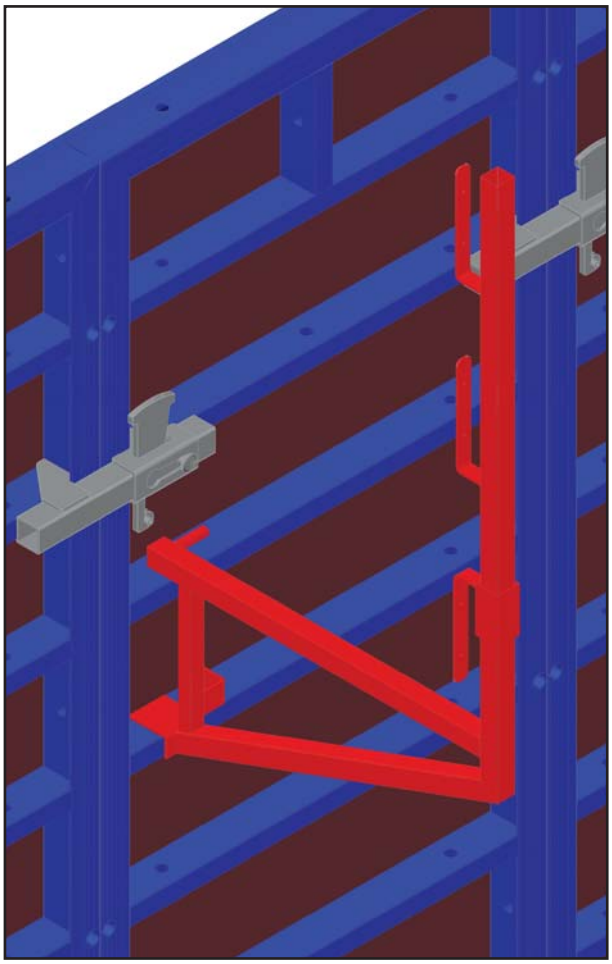


4.0.0
CONSOLE AND PARAPETS

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

CONSOLE SERVICE TABLE - ART. 296021 - KG. 12,0



DESCRIPTION:

The service shelf fixed to the GP-10 formworks serves to create a useful walkway for safe working.
The wood that is utilized is borne by the user.

USED MATERIAL:

291021	Service console table	Pcs. 01
296024	Split pin	Pcs. 02

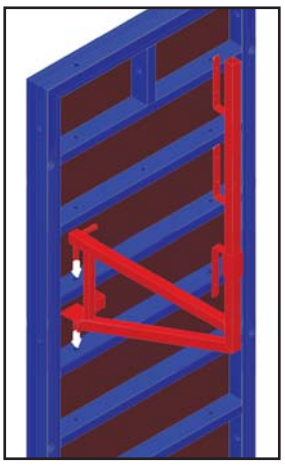
ATTENTION:

CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

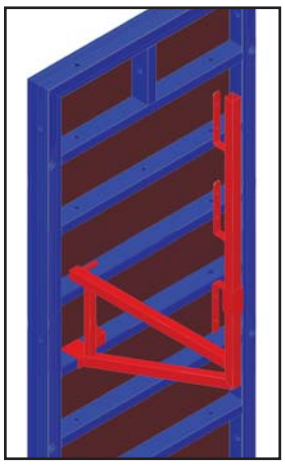
GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

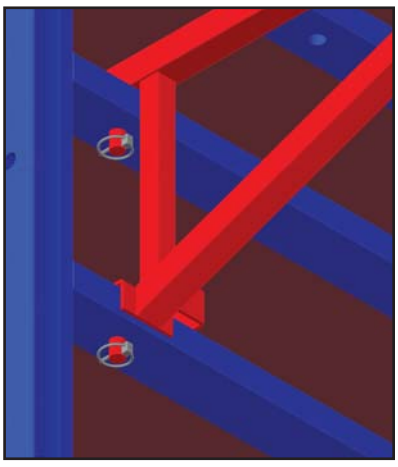
Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



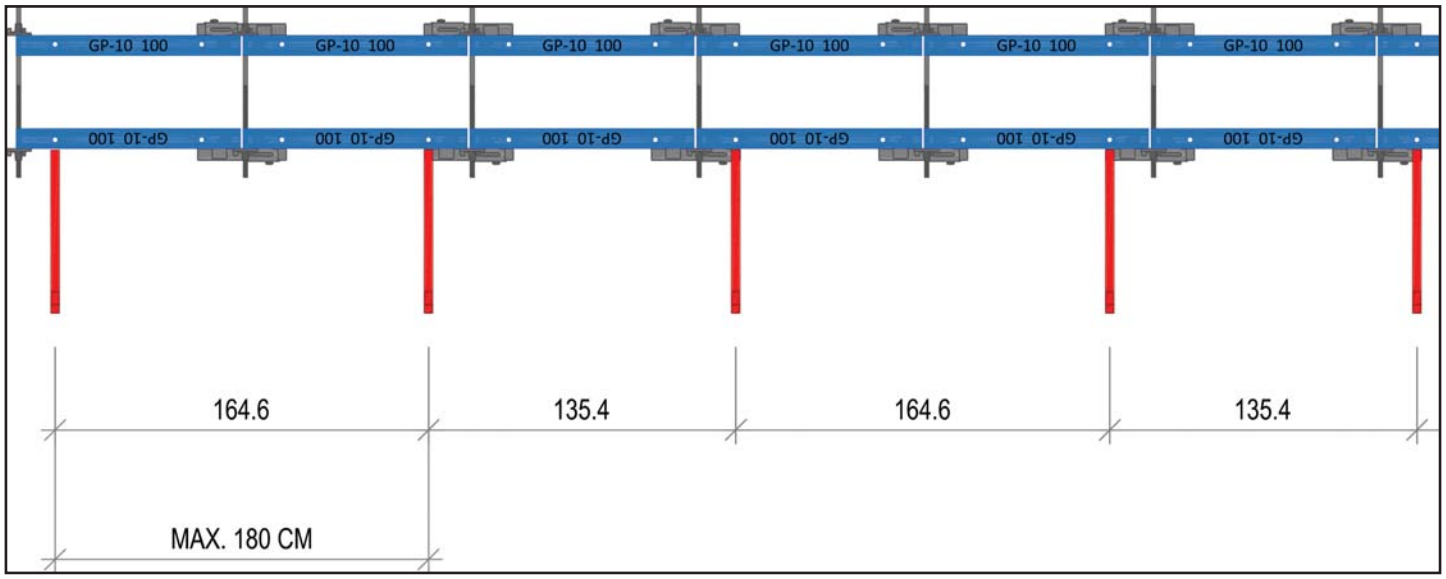
STEP 1:
Insert the pins of the shelf inside the holes present in the reinforcing crossbars of the panel.

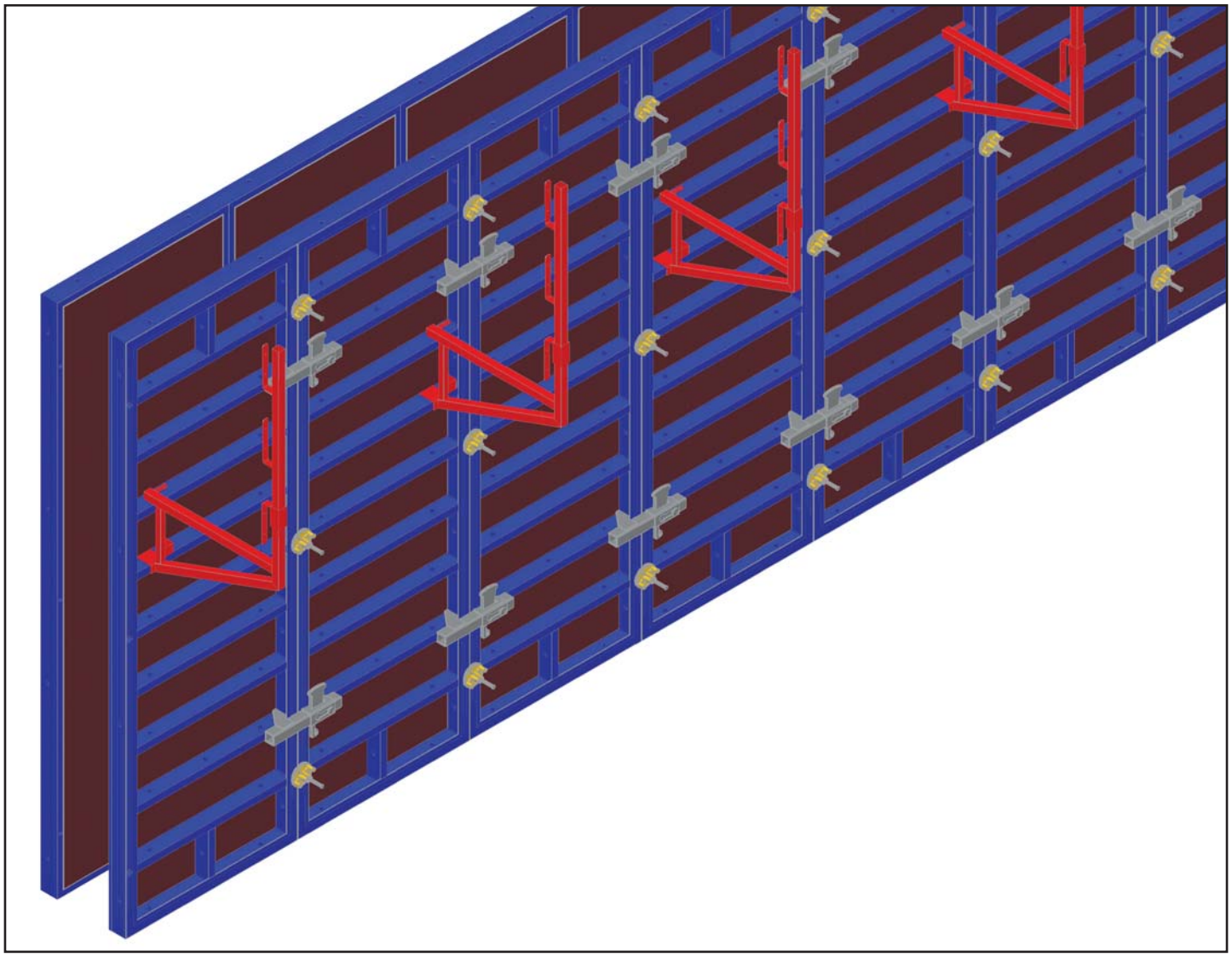


STEP 2:
Ensure perfect shelf stability.

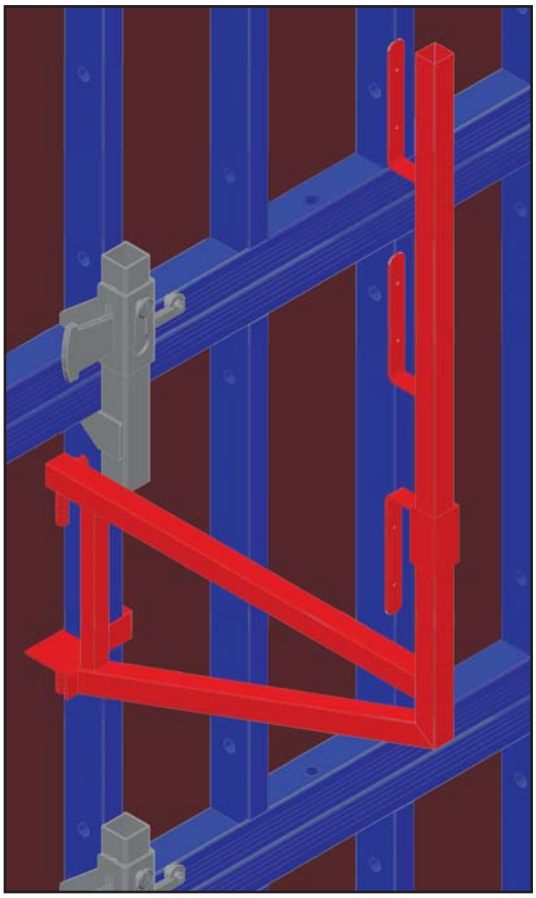


STEP 3:
Install the safety pins.


GP-10 100
GP-10 100
GP-10 100
GP-10 100
GP-10 100
GP-10 100
164.6
135.4
164.6
135.4
MAX. 180 CM



CONSOLE SERVICE TABLE - ART. 296021 - KG. 12,0



DESCRIPTION:

The service shelf fixed to the GP-10 formworks serves to create a useful walkway for safe working.
The wood that is utilized is borne by the user.

USED MATERIAL:

291021	Service console table	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:

CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

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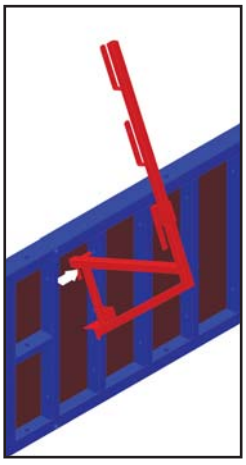
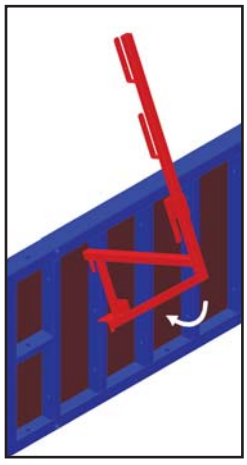
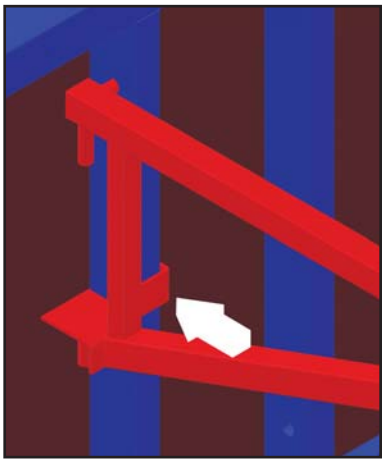
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



STEP 1:
Insert the pins of the shelf inside the holes present in the reinforcing crossbars of the panel.

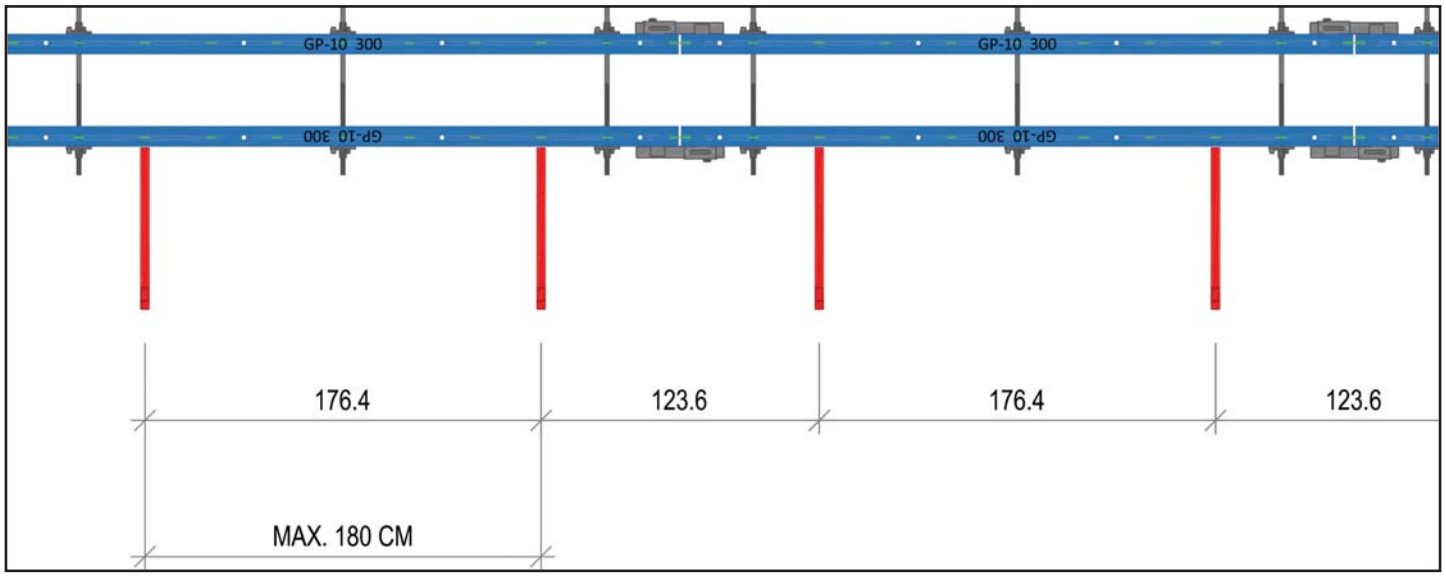


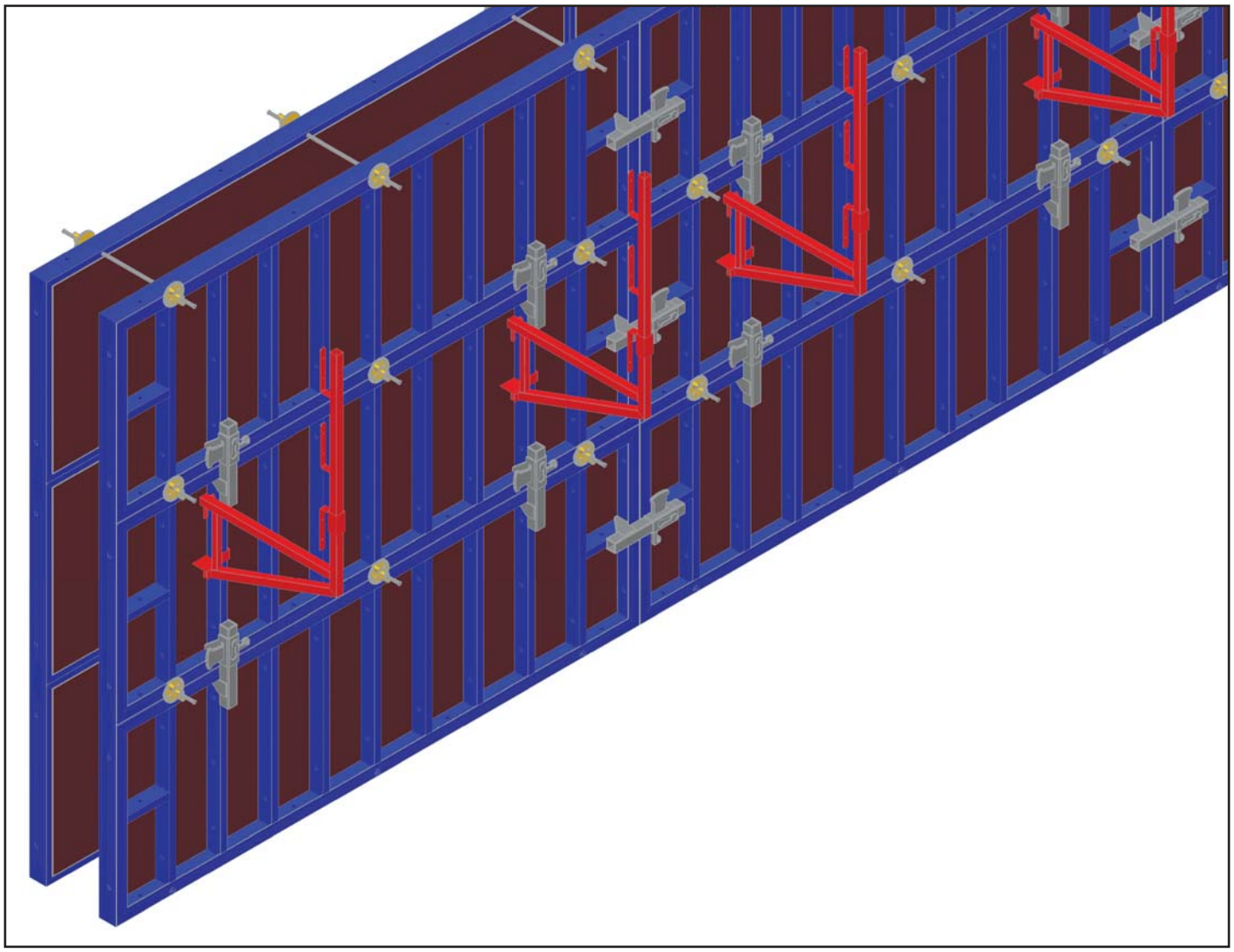
STEP 2:
Rotate the shelf until it reaches the safety position.



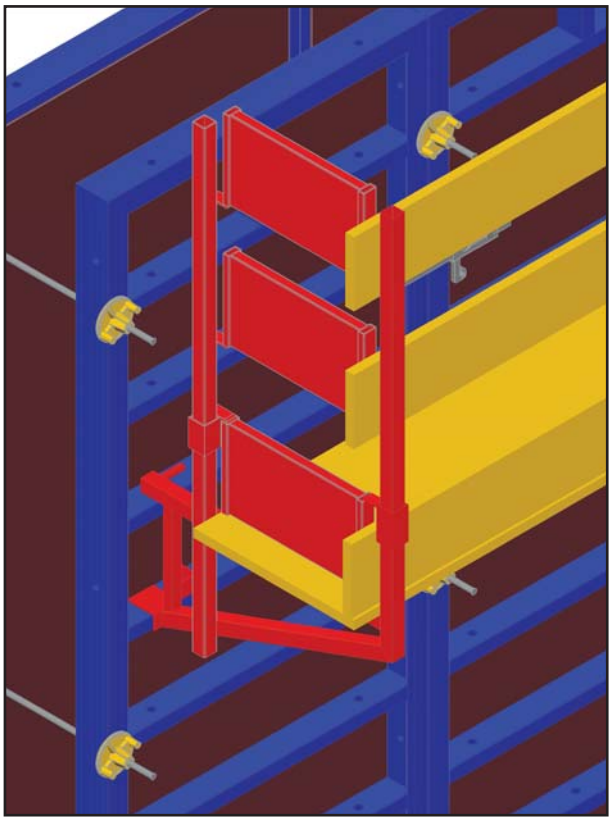
STEP 3:
Check the perfect position of the shelf in correspondence with the cross-piece of the panel.

STEP 4:
Install the safety pins.


GP-10 300
GP-10 300
GP-10 300
GP-10 300
176.4
123.6
176.4
123.6
MAX. 180 CM



PARAPET COLUMN - ART. 296022 - KG. 6,2
PARAPET SIDE - ART. 296023 - KG. 3,0



DESCRIPTION:
The parapet column and the parapet rail are fixed to the service shelf to secure the deck entrances.

USED MATERIAL:

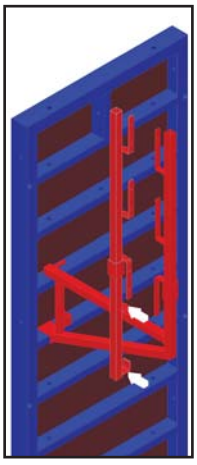
291021	Parapet column	Pcs. 01
296023	Parapet side	Pcs. 03

ATTENTION:
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

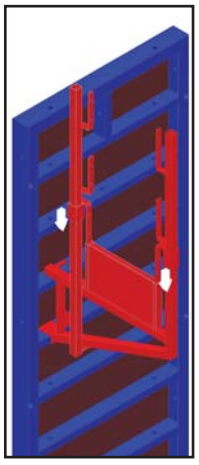
GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

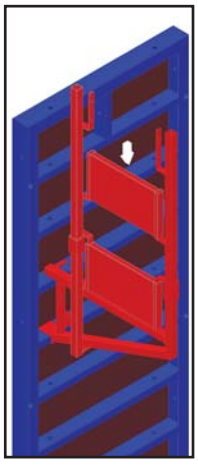
Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



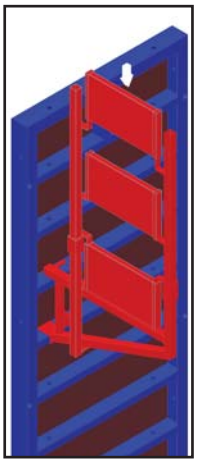
STEP 1:
Install the parapet column by sliding the guide profiles on the service shelf.



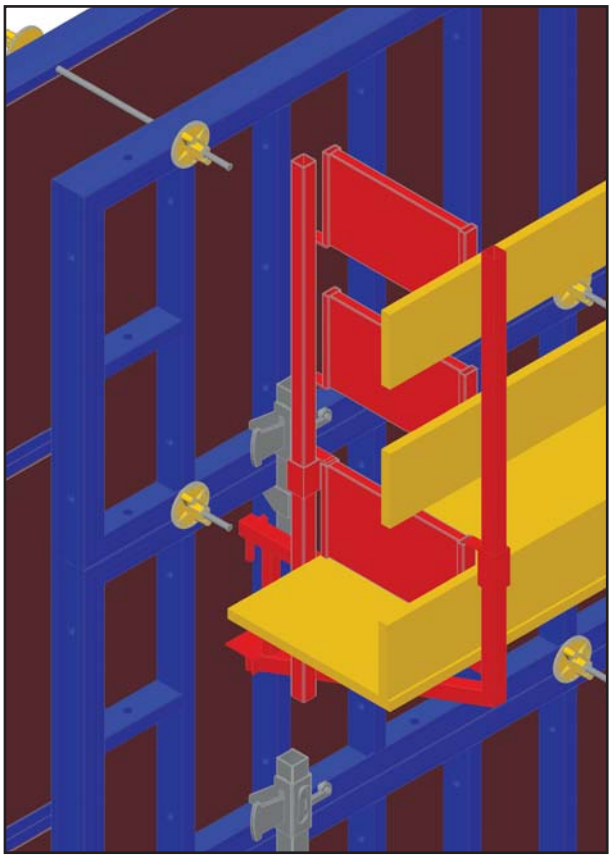
STEP 2:
Lift the movable pins and position the first parapet strip; lower the pins by inserting them into the square tube of the side panel (strip).



STEP 3:
Install the second strip by positioning it in correspondence with the pins.



STEP 4:
Repeat the operation positioning the third strip.



DESCRIPTION:

The parapet column and the parapet rail are fixed to the service shelf to secure the deck entrances.

USED MATERIAL:

291021	Parapet column	Pcs. 01
296023	Parapet side	Pcs. 03

ATTENTION:

CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

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SCAFFOLD BY USER.

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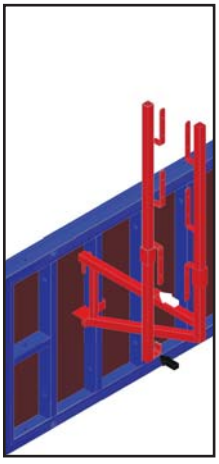
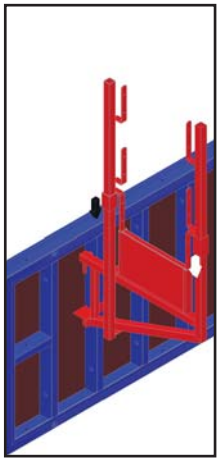
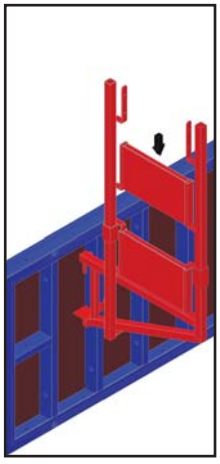
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



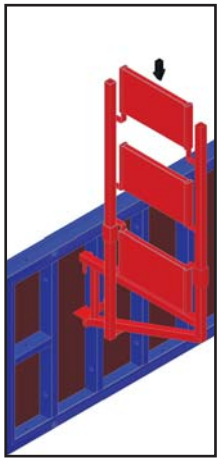
STEP 1:
Install the parapet column by sliding the guide profiles on the service shelf.



STEP 2:
Lift the movable pins and position the first parapet strip; lower the pins by inserting them into the square tube of the side panel (strip).

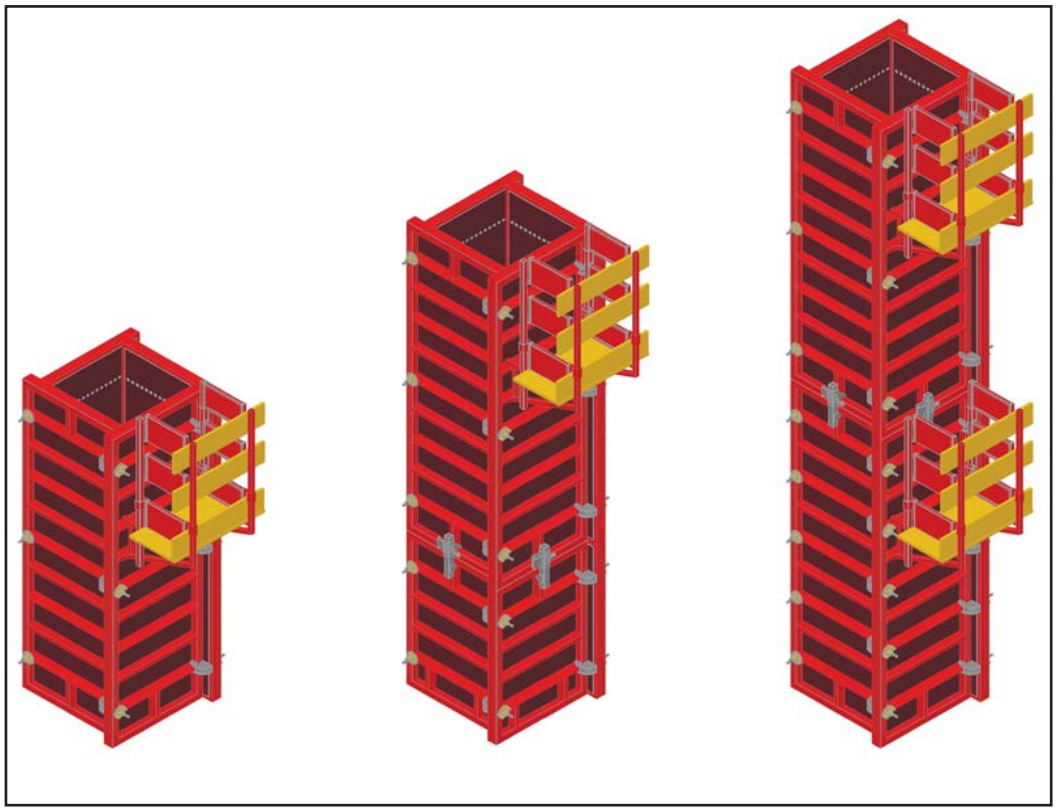


STEP 3:
Install the second strip by positioning it in correspondence with the pins.

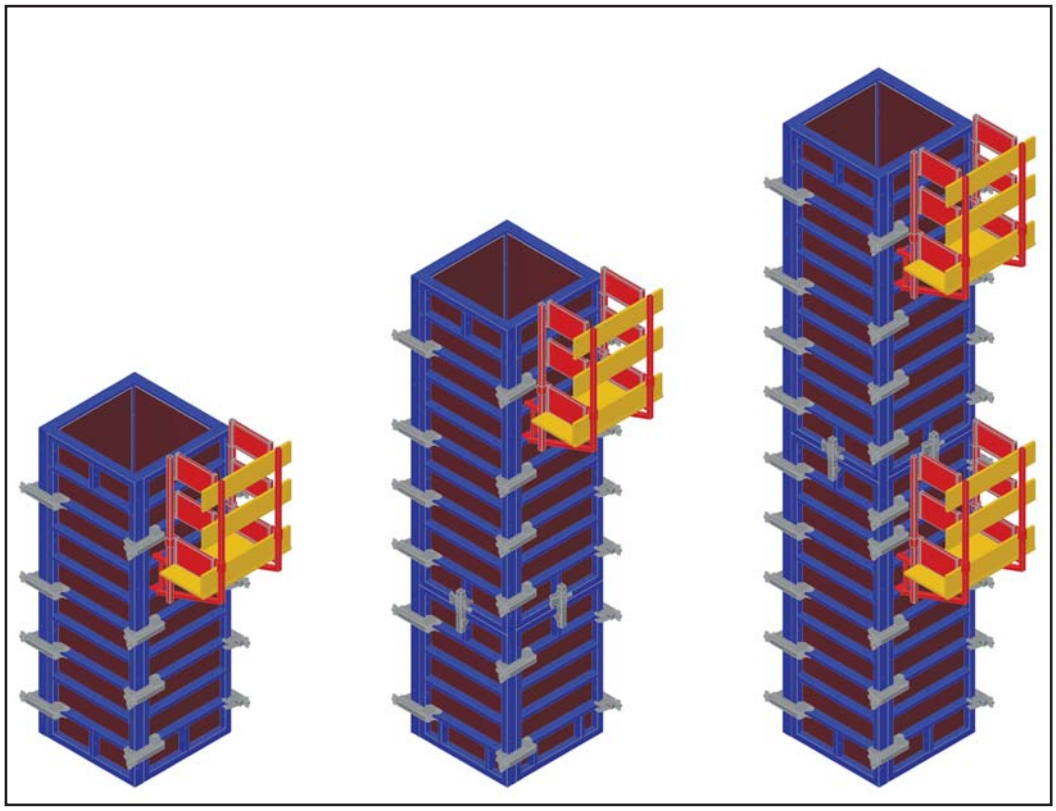


STEP 4:
Repeat the operation positioning the third strip.

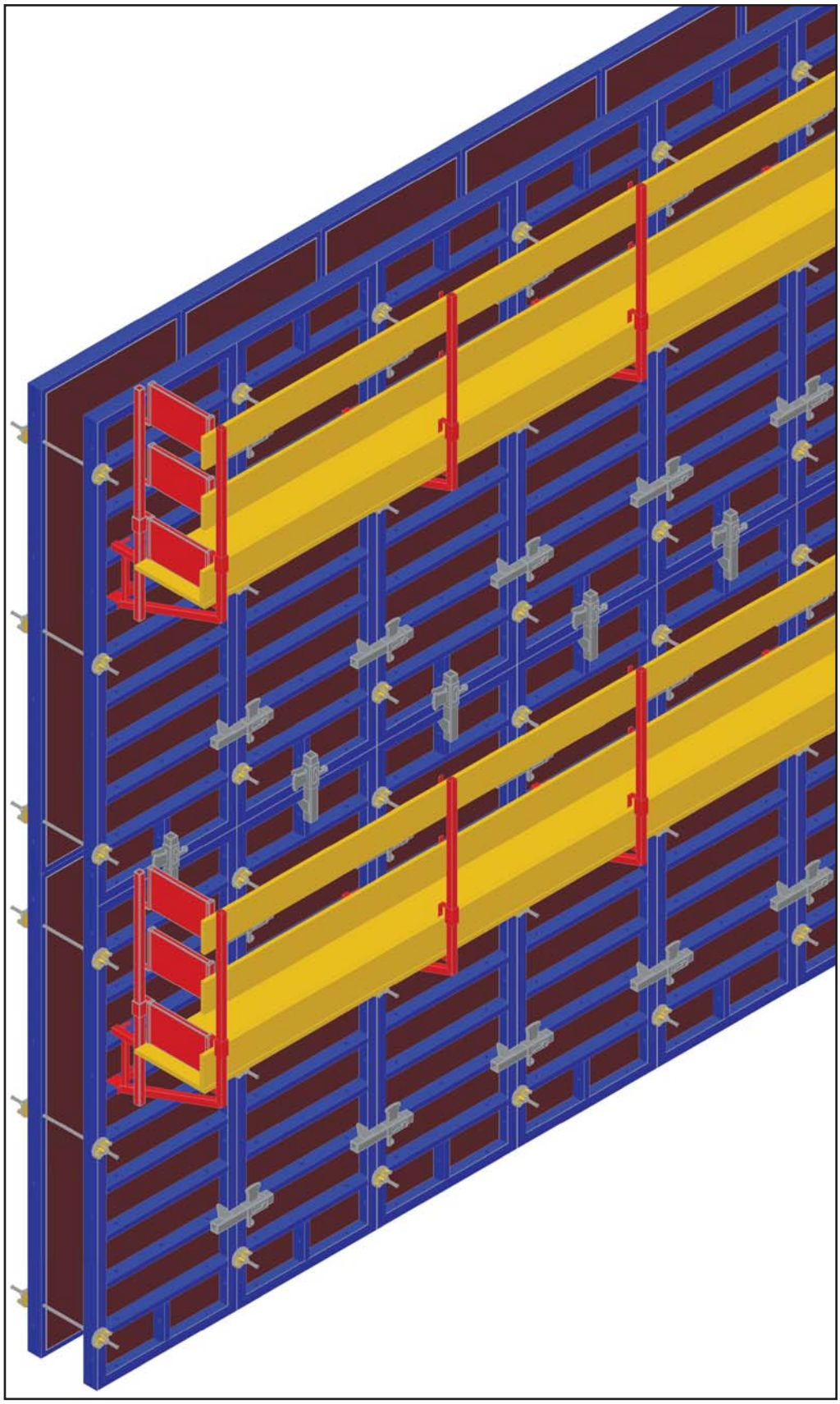
EXAMPLES



DESCRIPTION:
Application of service console tables and parapets on the pillar system.

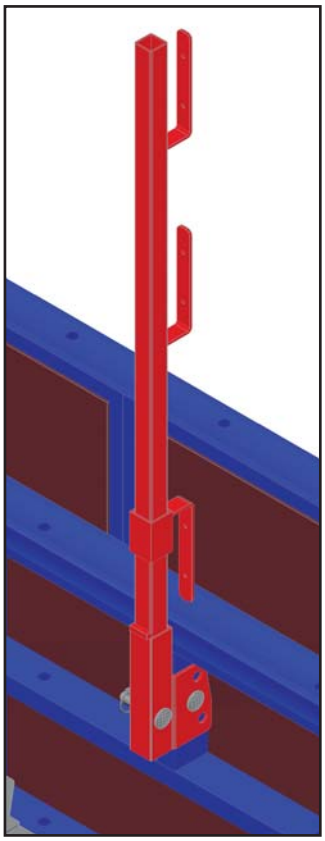


DESCRIPTION:
Application of service console tables and parapets on the pillar system.



DESCRIPTION:
Application of service console tables and parapets on the wall H600 – H540 – H660.

FRONTAL PARAPET COLUMN - ART. 296018 - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019 - KG. 3,5



DESCRIPTION:
The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

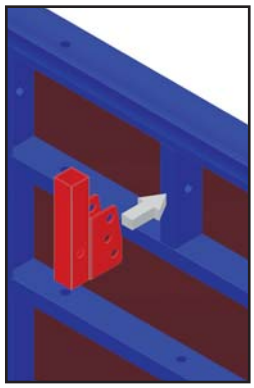
296018	Frontal parapet column	Pcs. 01
296019	Bracket frontal parapet column	Pcs. 01

ATTENTION:
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

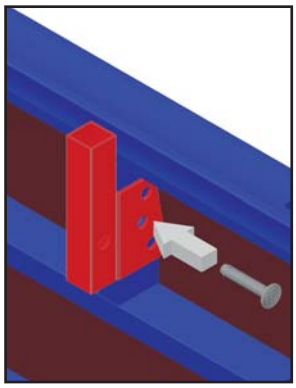
GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

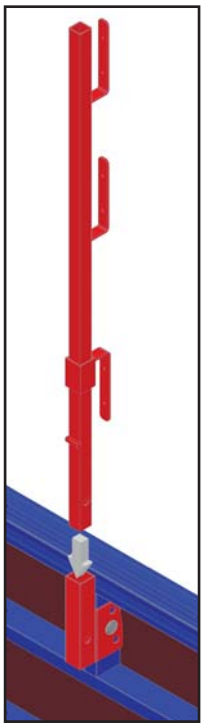
Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



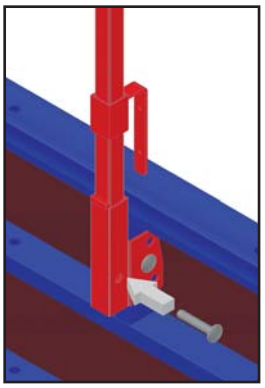
STEP 1:
Install the front parapet support in correspondence with the headboard cross-piece of the GPrandina formwork.



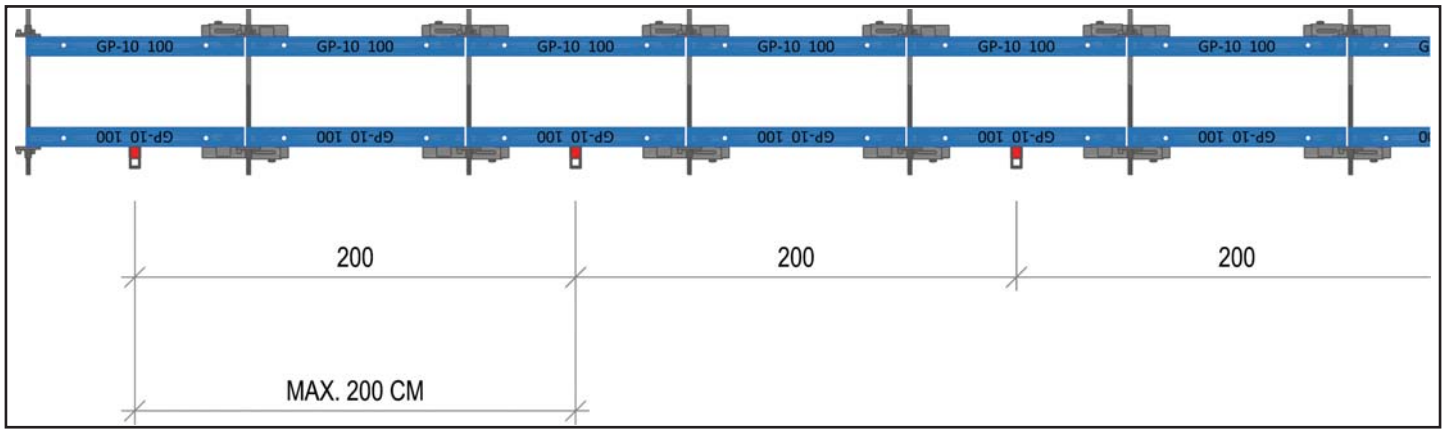
STEP 2:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

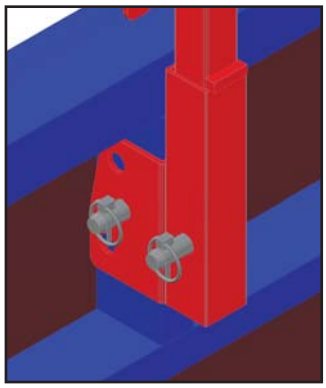


STEP 3:
Insert the front parapet support into the support as shown in the figure.

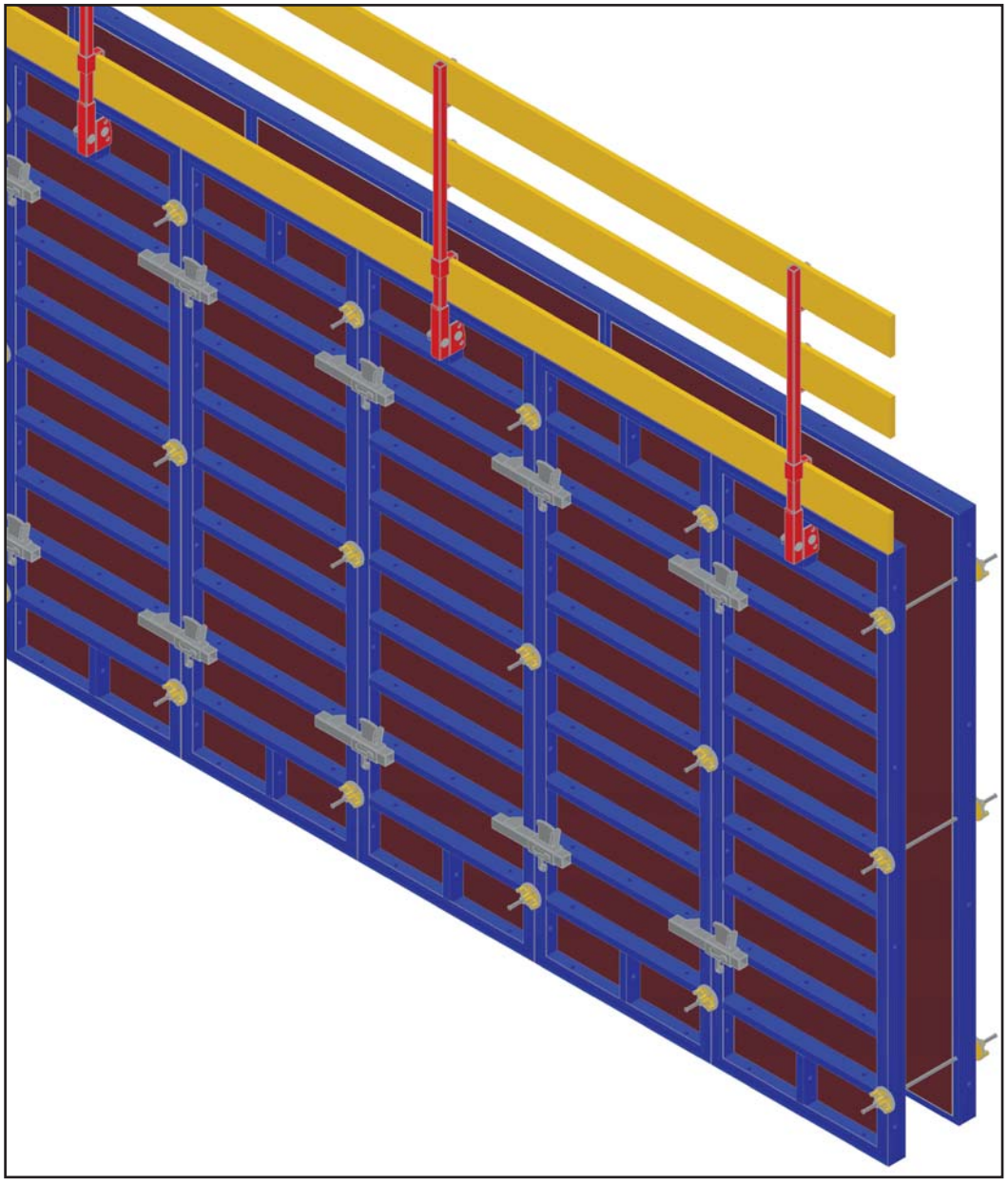


STEP 4:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

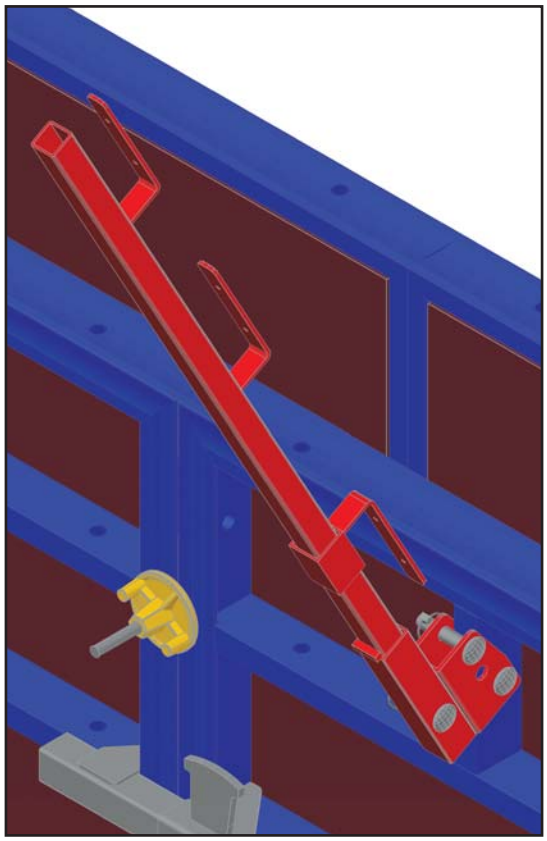




STEP 5:
Install the safety pins.



FRONTAL PARAPET COLUMN - ART. 296018 - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019 - KG. 3,5



DESCRIPTION:

The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

296018	Frontal parapet column	Pcs. 01
296019	Bracket frontal parapet column	Pcs. 01

ATTENTION:

CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

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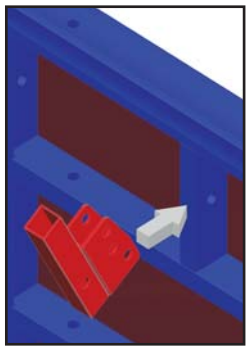
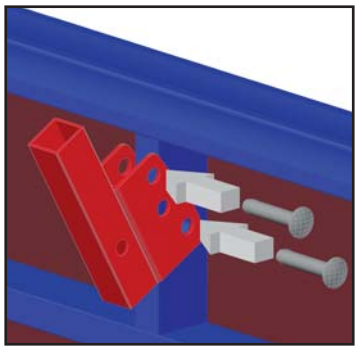
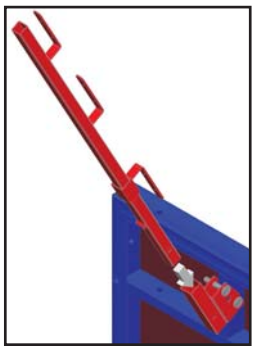
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



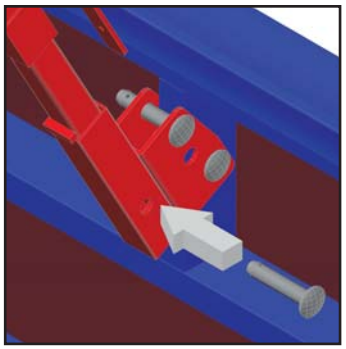
STEP 1:
Install the front parapet support in correspondence with the headboard cross-piece of the GPrandina formwork.



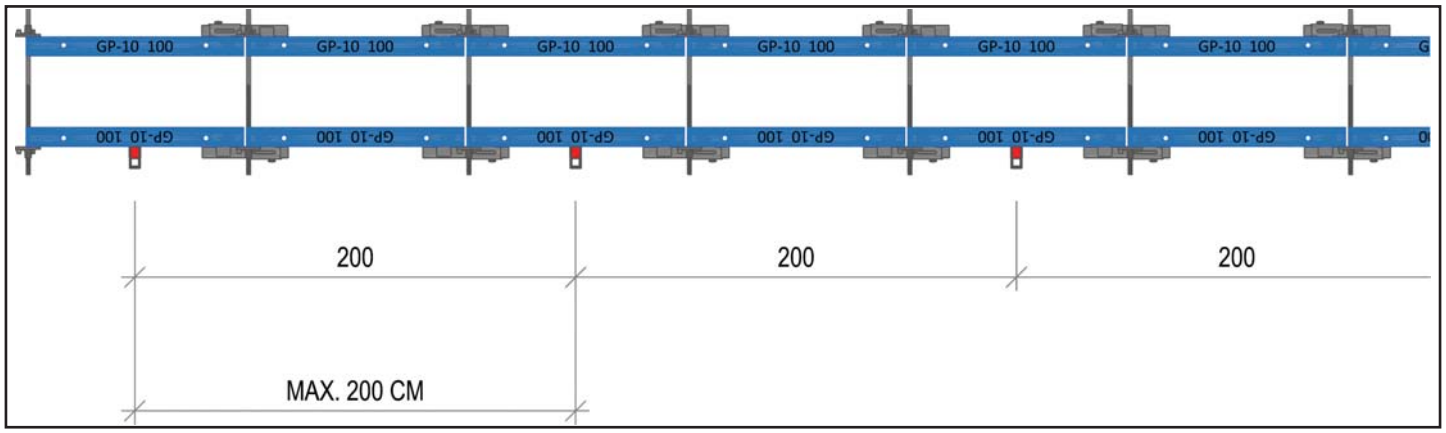
STEP 2:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

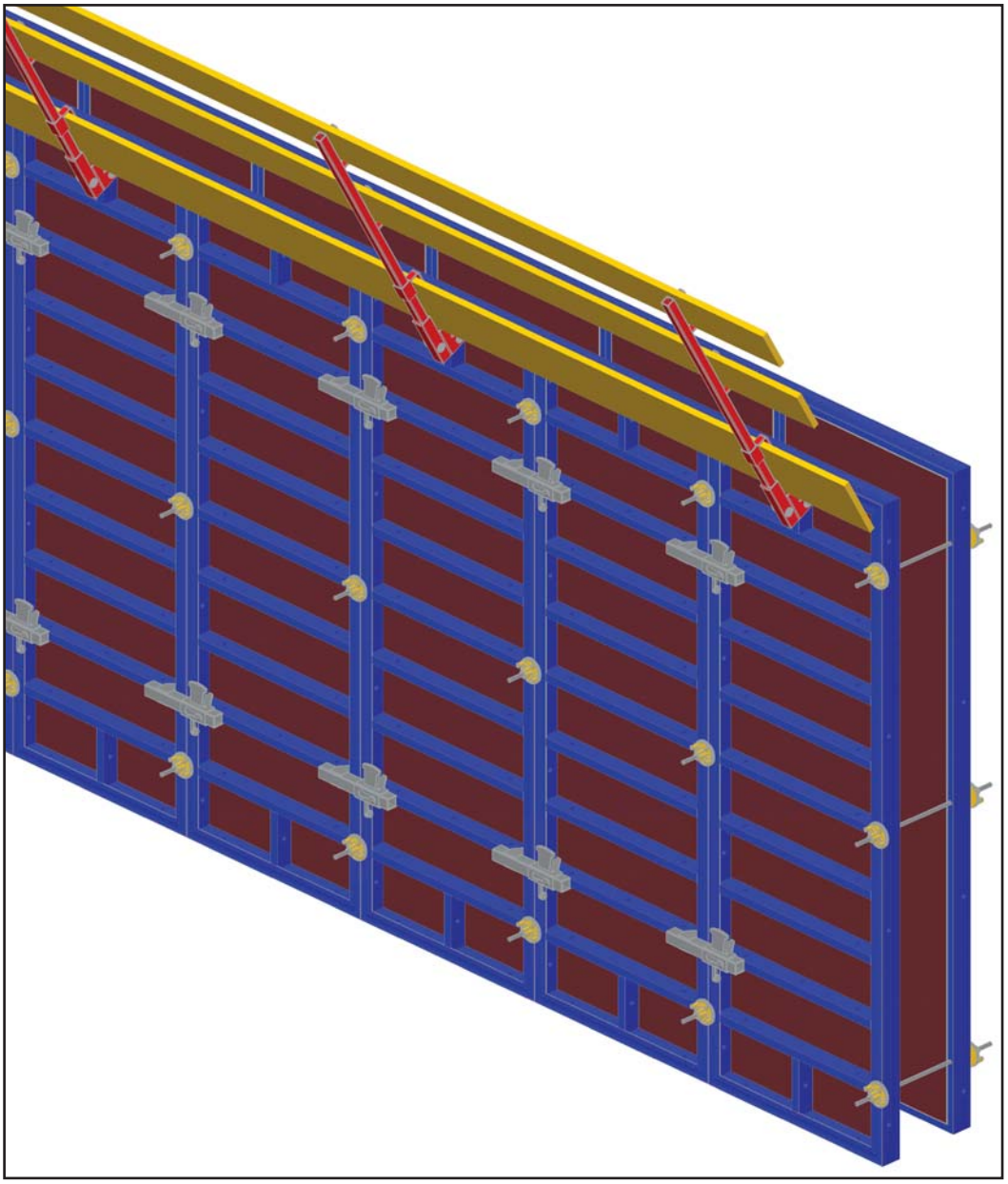


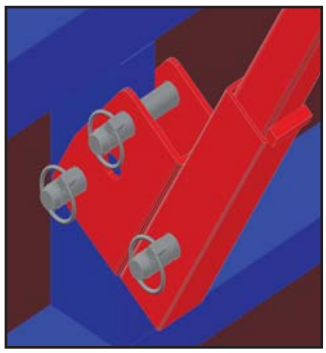
STEP 3:
Insert the front parapet support into the support as shown in the figure.



STEP 4:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

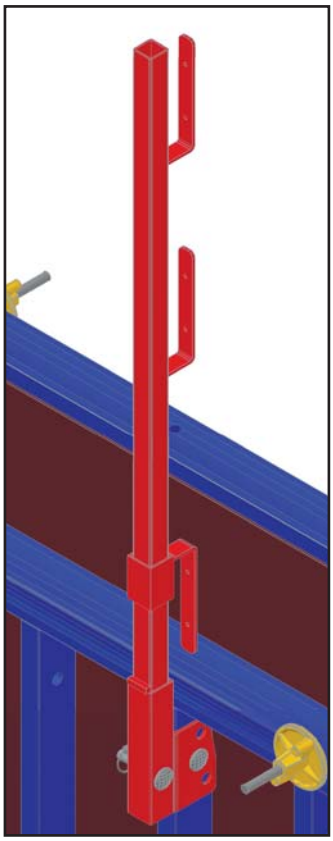






STEP 5:
Install the safety pins.

FRONTAL PARAPET COLUMN - ART. 296018 - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019 - KG. 3,5



DESCRIPTION:

The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

296018	Frontal parapet column	Pcs. 01
296019	Bracket frontal parapet column	Pcs. 01

ATTENTION:

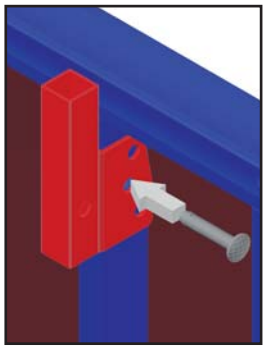
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

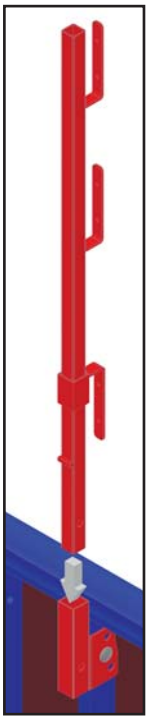
SCAFFOLD BY USER.

Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.

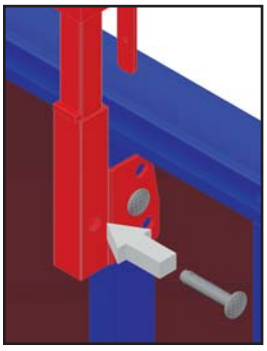
STEP 1:
Install the front parapet support in correspondence with the headboard cross-piece of the GPrandina formwork.



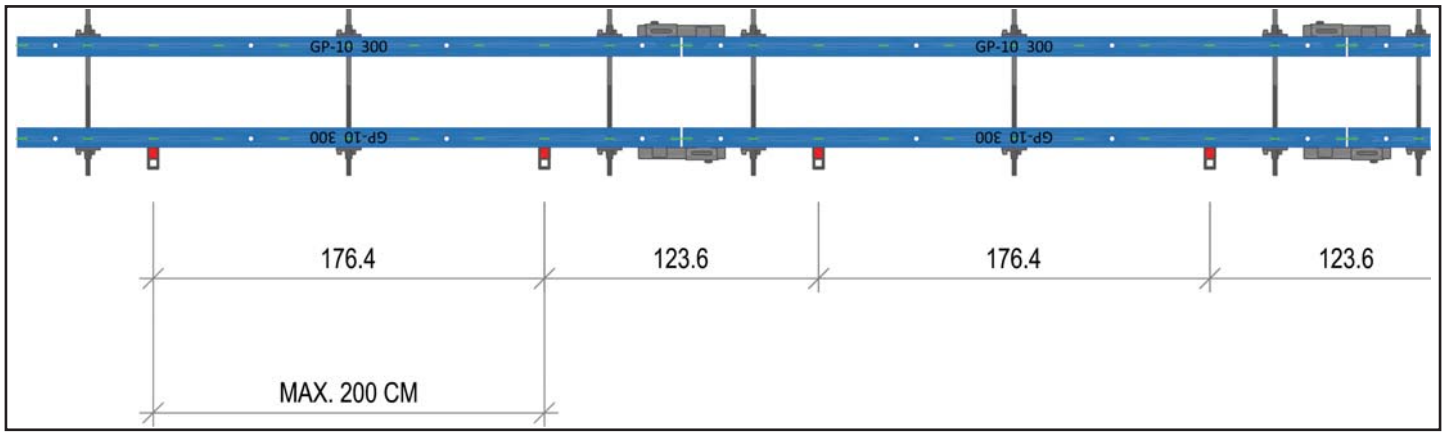
STEP 2:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

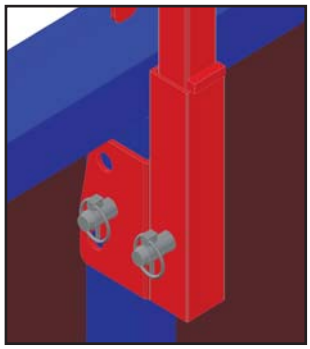


STEP 3:
Insert the front parapet support into the support as shown in the figure.

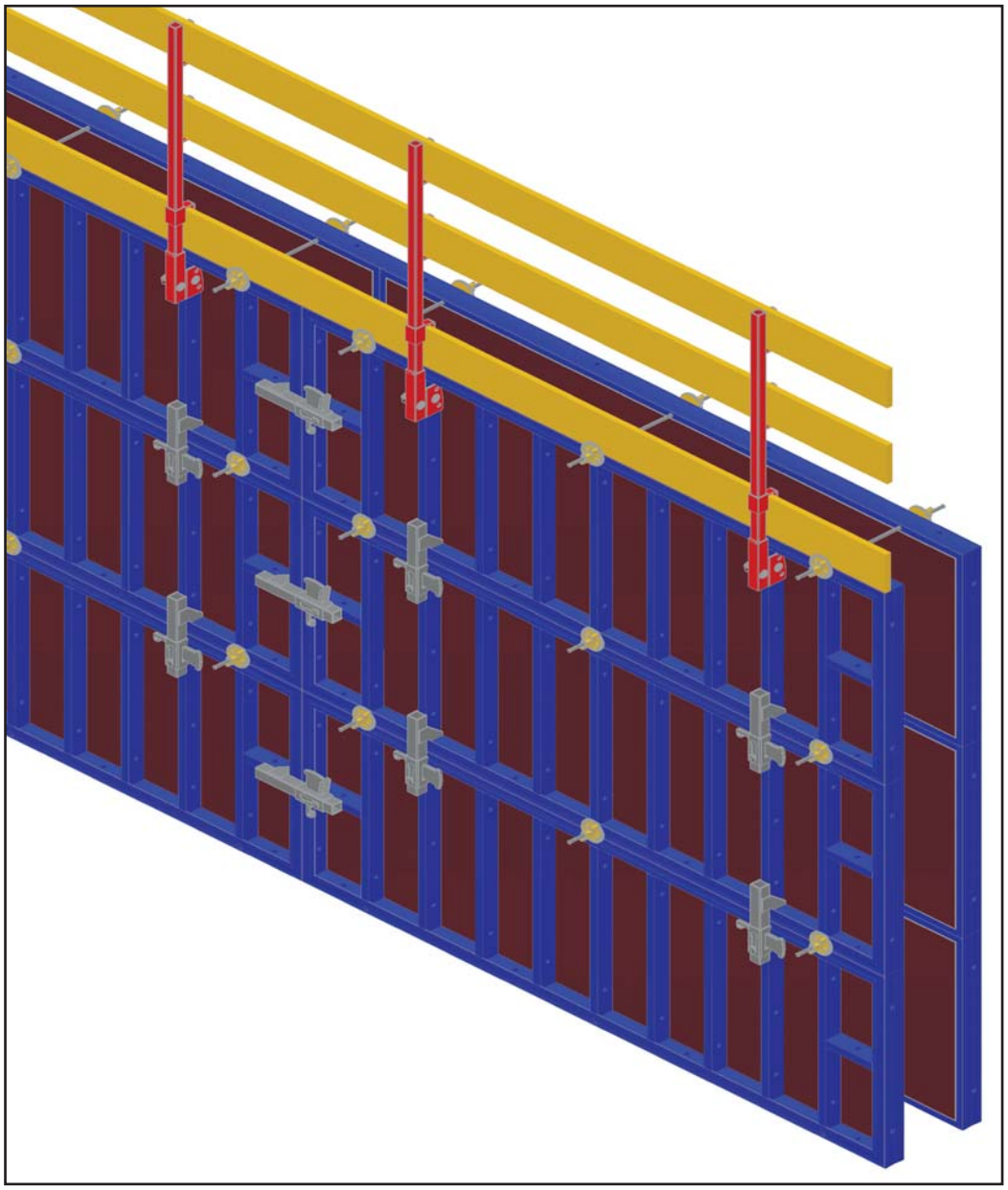


STEP 4:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.





STEP 5:
Install the safety pins.



FRONTAL PARAPET COLUMN - ART. 296018 - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019 - KG. 3,5

DESCRIPTION:

The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

296018	Frontal parapet column	Pcs. 01
296019	Bracket frontal parapet column	Pcs. 01

ATTENTION:

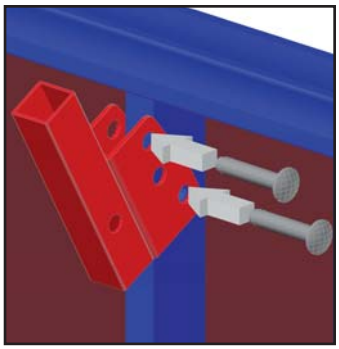
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

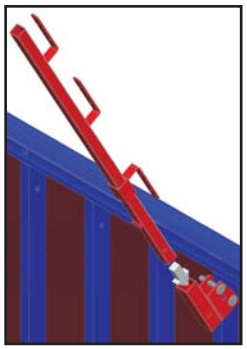
SCAFFOLD BY USER.

Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.

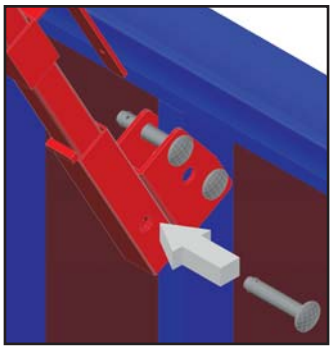
STEP 1:
Install the front parapet support in correspondence with the headboard cross-piece of the GPrandina formwork.



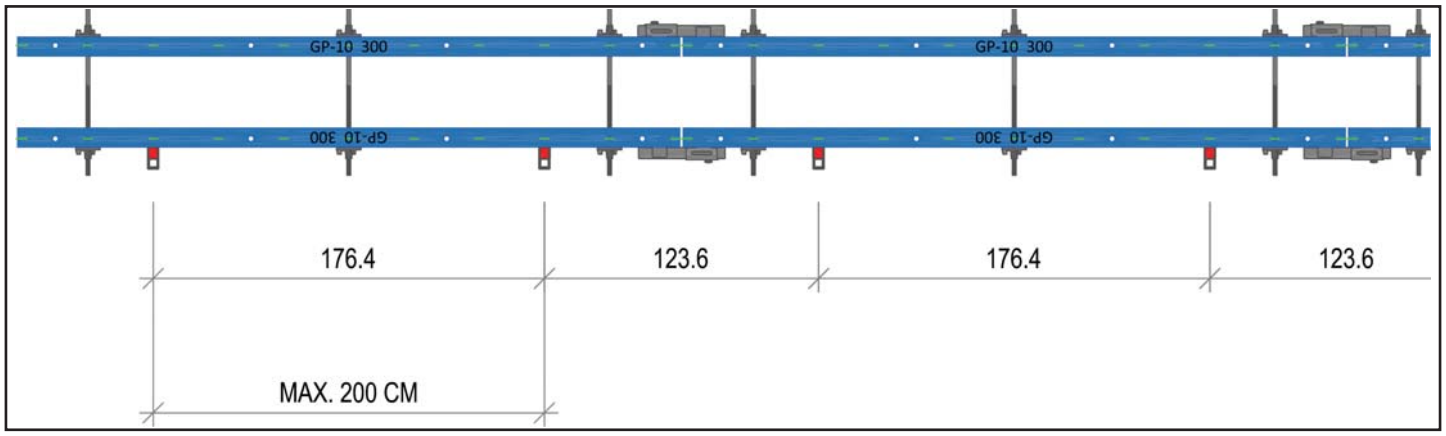
STEP 2:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

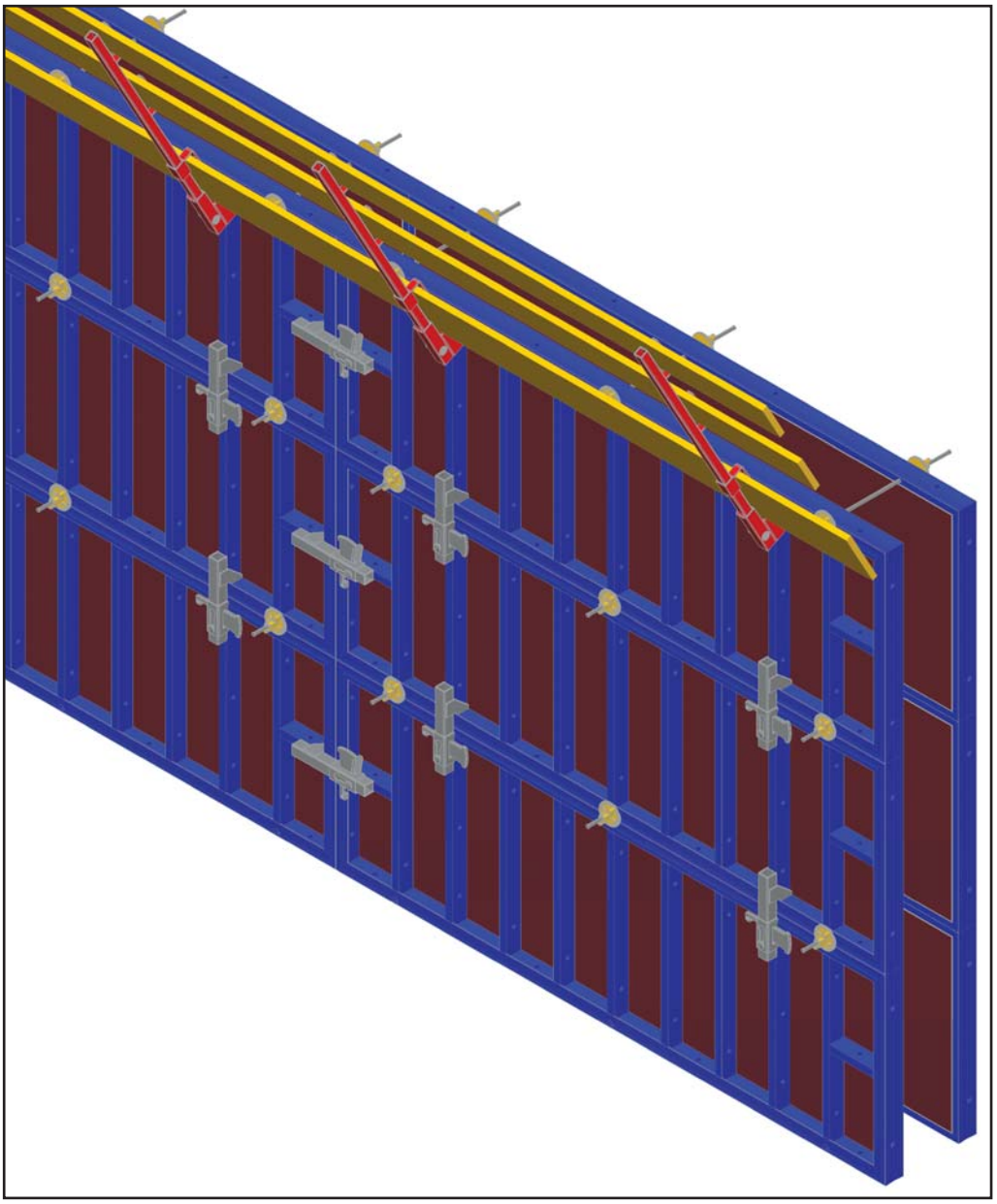


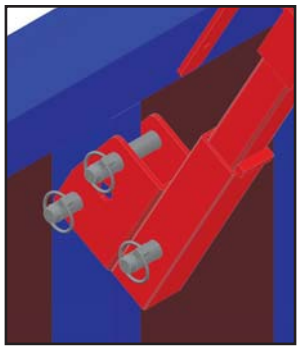
STEP 3:
Insert the front parapet support into the support as shown in the figure.



STEP 4:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

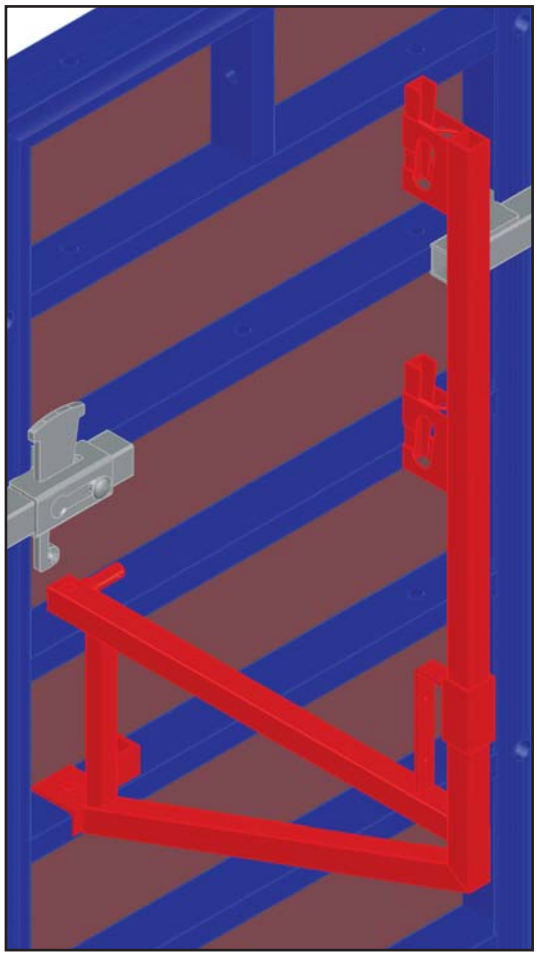






STEP 5:
Install the safety pins.

CONSOLE SERVICE TABLE FR - ART. 296021-FR - KG. 12,0



DESCRIPTION:
The service shelf fixed to the GP-10 formworks serves to create a useful walkway for safe working.
The wood that is utilized is borne by the user.

USED MATERIAL:

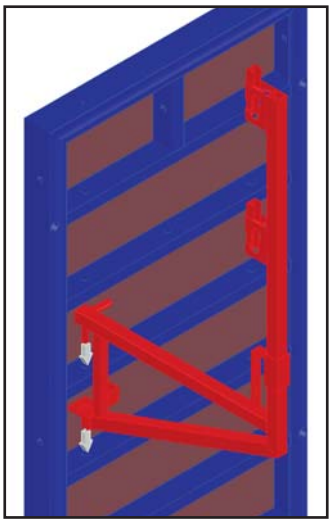
291021-FR	Service console table	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

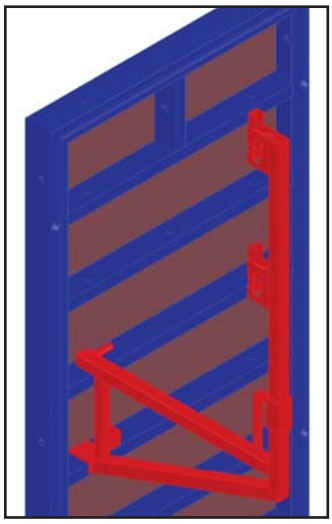
GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

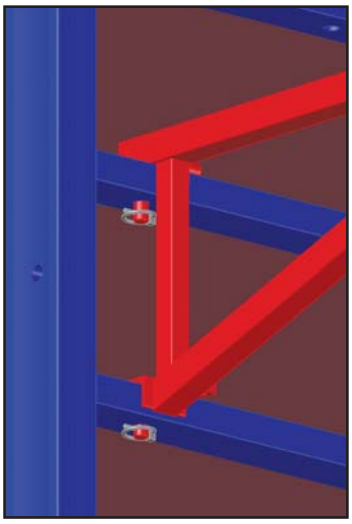
Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



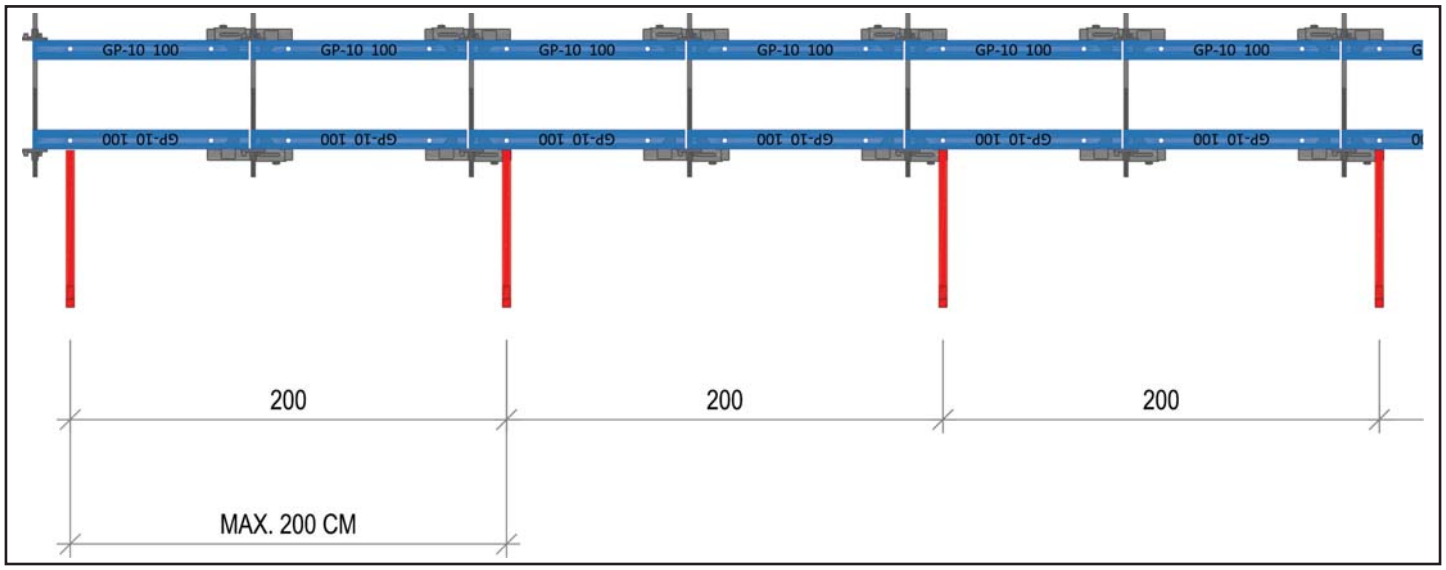
STEP 1:
Insert the pins of the shelf inside the holes present in the reinforcing crossbars of the panel.

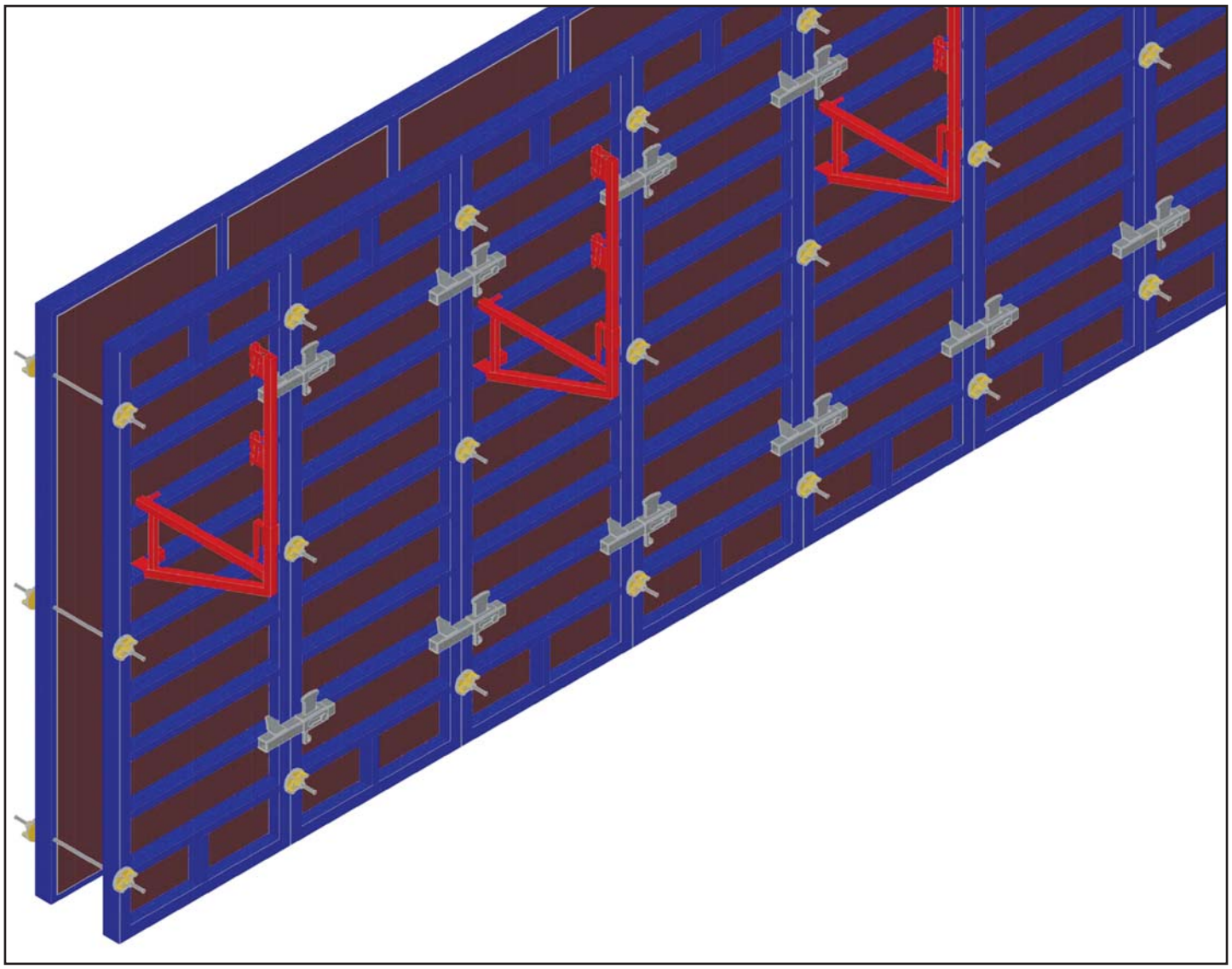


TEP 2:
Ensure perfect shelf stability.



STEP 3:
Install the safety pins.


GP-10 100
GP-10 100
GP-10 100
GP-10 100
GP-10 100
GP-10 100
200
200
200
MAX. 200 CM



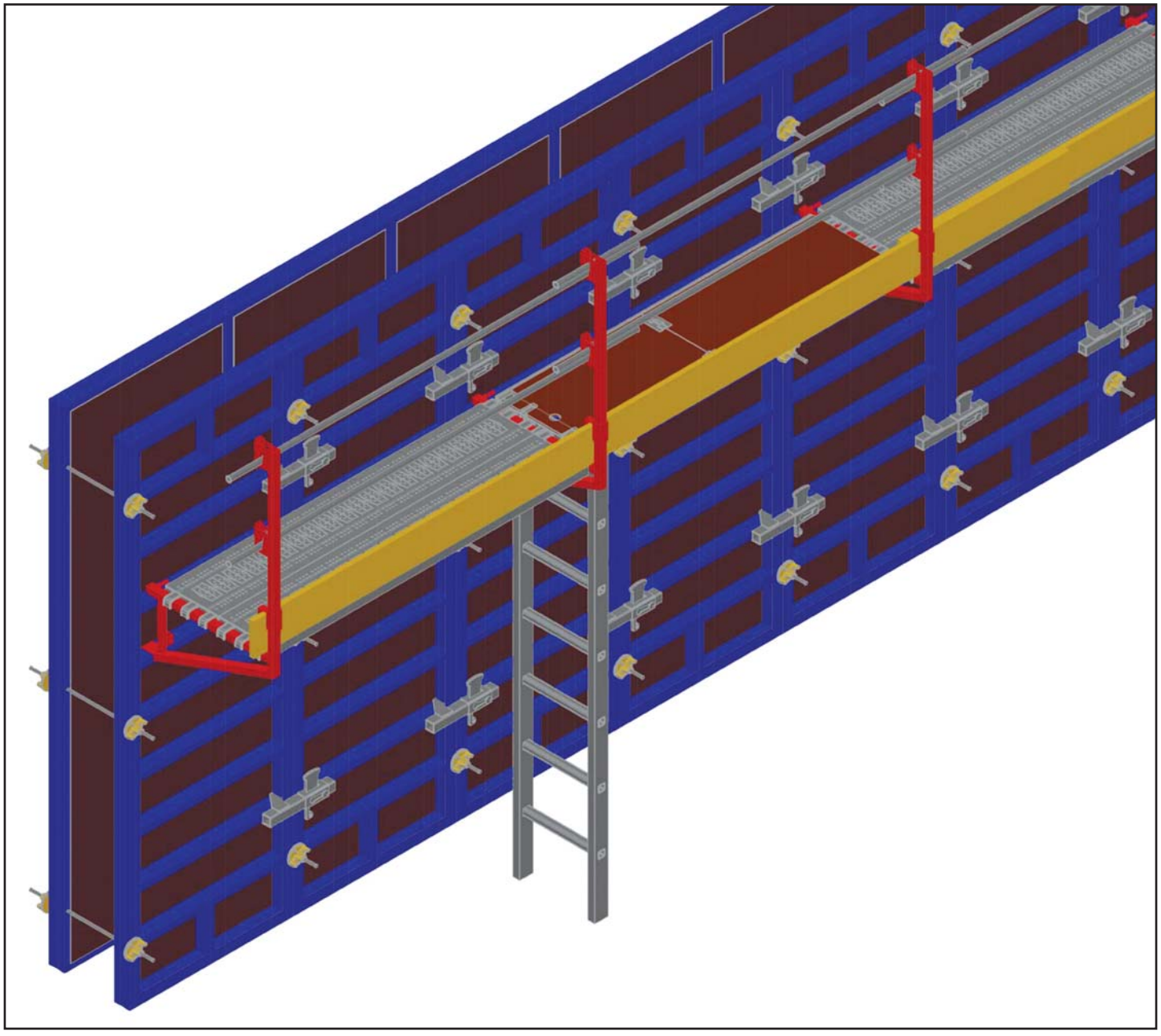
PLATFORM AND PARAPETS FR.

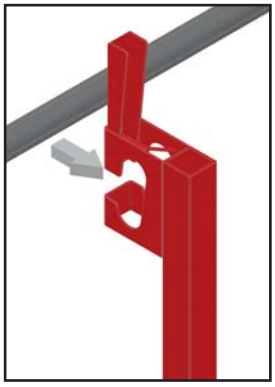
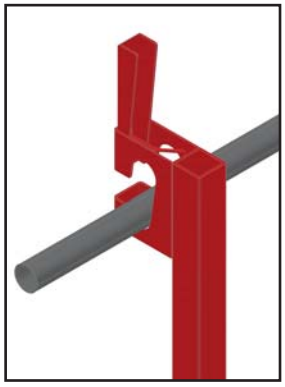
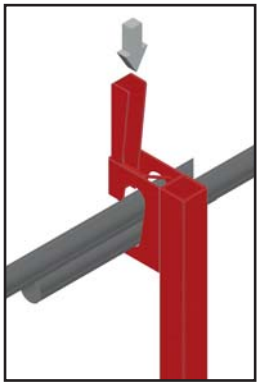
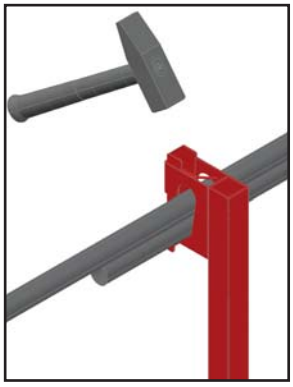
DESCRIPTION:

The console service table fixed to the GP-10 formworks, in combination with the platforms, serves to create a walkway useful for working in safety. The railings are the responsibility of the end user (see images on the side). The wood used is the responsibility of the user.

USED MATERIAL:

291021-FR	Service console table	Pcs. 01
296024	Split pin	Pcs. 01
296030	Platform 200X33	Pcs. 01
296040	PLATFORM WITH HATCH 200X61	Pcs. 01
296050	Ladder	Pcs. 01

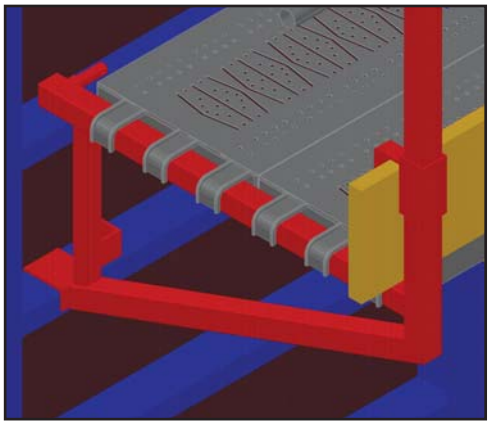
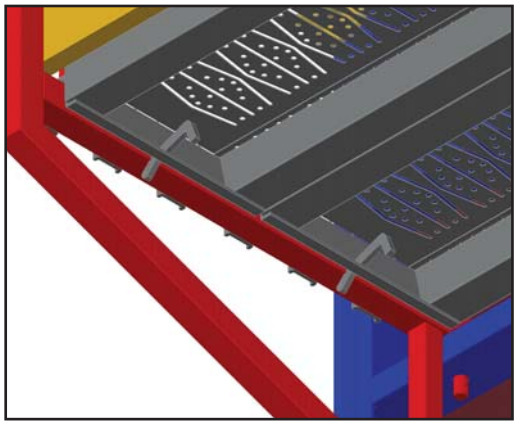


STEP 1:
Install the tube in the clamp and slide it into the template.
Insert the second tube and lower the safety wedge.

STEP 2:
Tighten the safety wedge with the hammer.

N.B.:
Tube Ø 1 inch (Ø 33.7 mm) max.

STEP 1:
Install the platforms as shown in the image.

STEP 2:
Secure the platform to the shelf with the appropriate safety wedges.

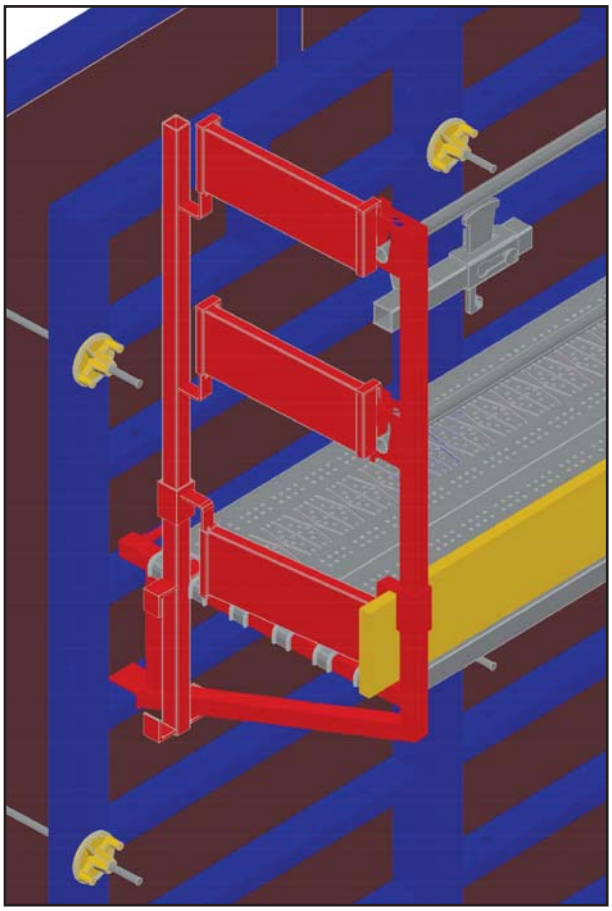
ATTENTION:
CHECK THE STATE OF THE CONSOLE SERVICE TABLE AND THE PLATFORMS: IT MUST NOT PRESENT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA SRL DISCLAIMS ALL LIABILITY WHEN THE SHELVES ARE MODIFIED IN EVERY PART.

PARAPET BY THE USER.

GPrandina srl declines all responsibility in the event that timber is used in poor condition or in the presence of obvious signs of damage.
The user is obliged to use timber in good condition.

PARAPET COLUMN FR - ART. 296022-FR - KG. 6,2
PARAPET SIDE FR - ART. 296023-FR - KG. 3,0



DESCRIPTION:
The railing column and the parapet rail are fixed to the service shelf to secure the deck entrances.

USED MATERIAL:

291021-FR	Parapet column	Pcs. 01
296023-FR	Parapet side	Pcs. 03

ATTENTION:
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

SCAFFOLD BY USER.

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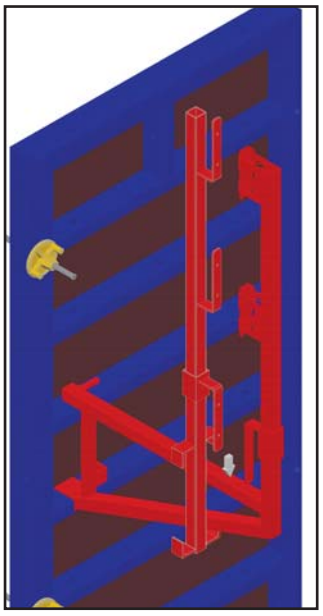
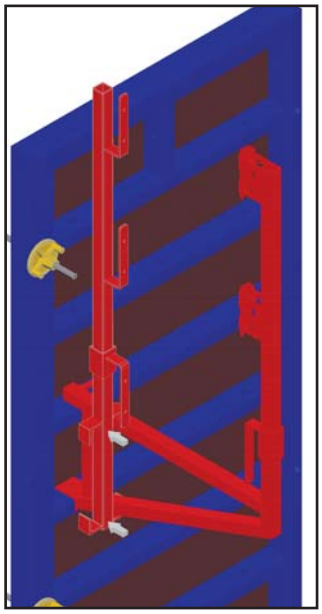
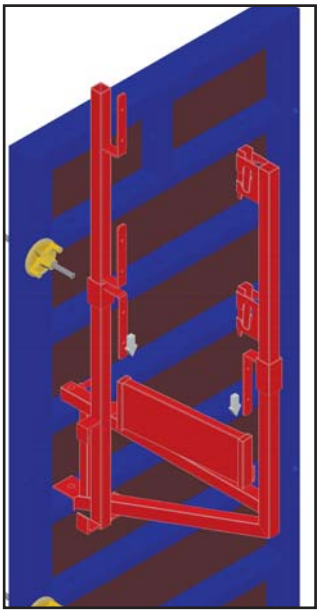
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.

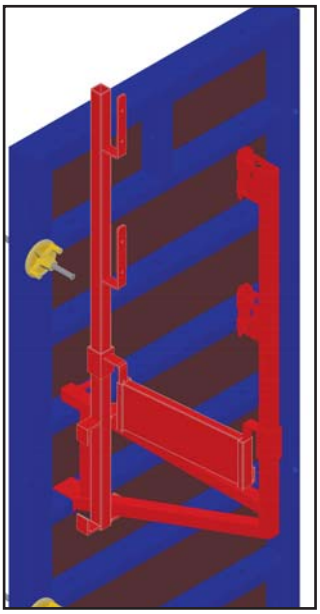




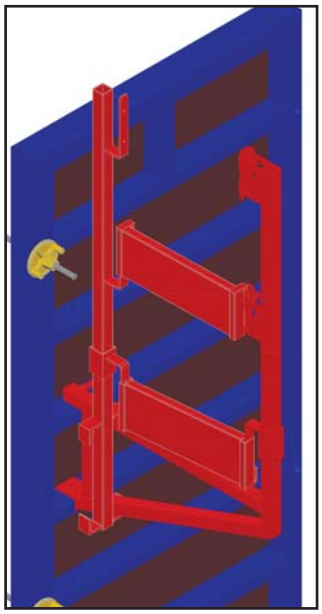
STEP 1:
Install the railing column by sliding the guide profiles onto the service shelf.



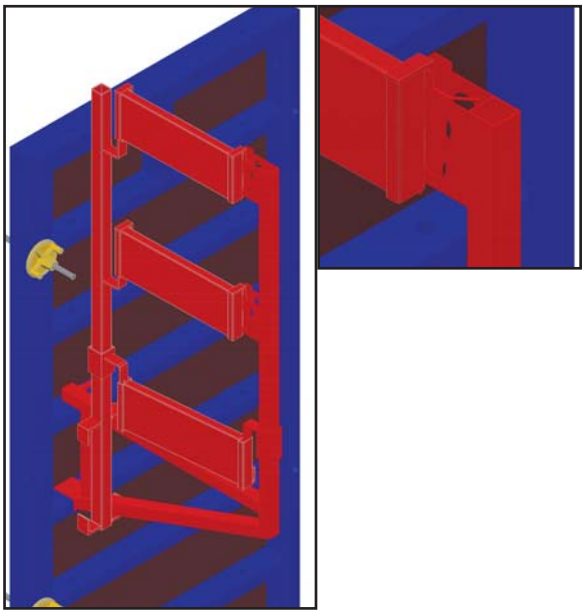
STEP 2:
Lift the movable pins and position the first railing rail; lower the pins by inserting them into the square tube of the side panel.



STEP 3:
Lower the movable pins.

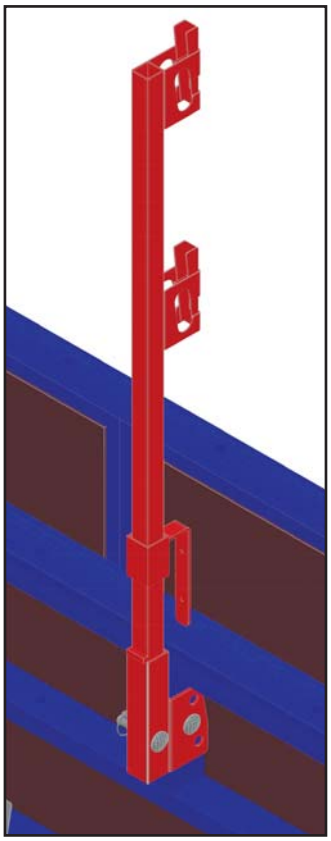


STEP 4:
Install the second side panel by positioning it at the pins.



STEP 5:
Repeat the operation placing the third sideboard.

FRONTAL PARAPET COLUMN - ART. 296018-FR - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019-FR - KG. 3,5



DESCRIPTION:

The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

296018-FR	Frontal parapet column	Pcs. 01
296019-FR	Bracket frontal parapet column	Pcs. 01

ATTENTION:

CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

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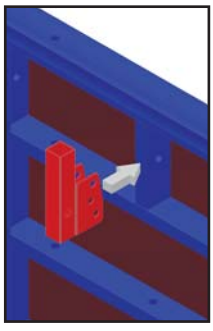
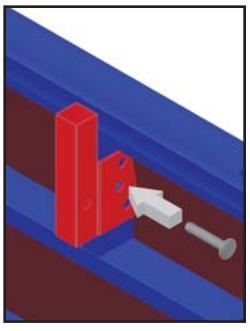
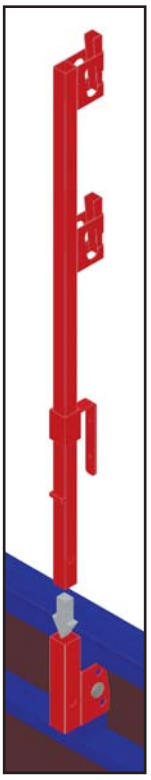


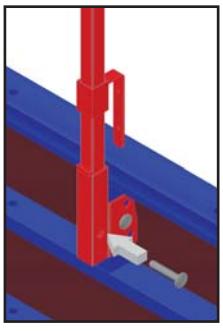
STEP 1:
Install the front parapet support in correspondence with the headboard cross-piece of the GPrandina formwork.



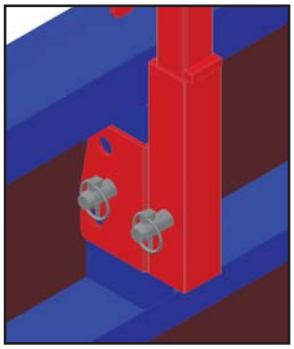
STEP 2:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.



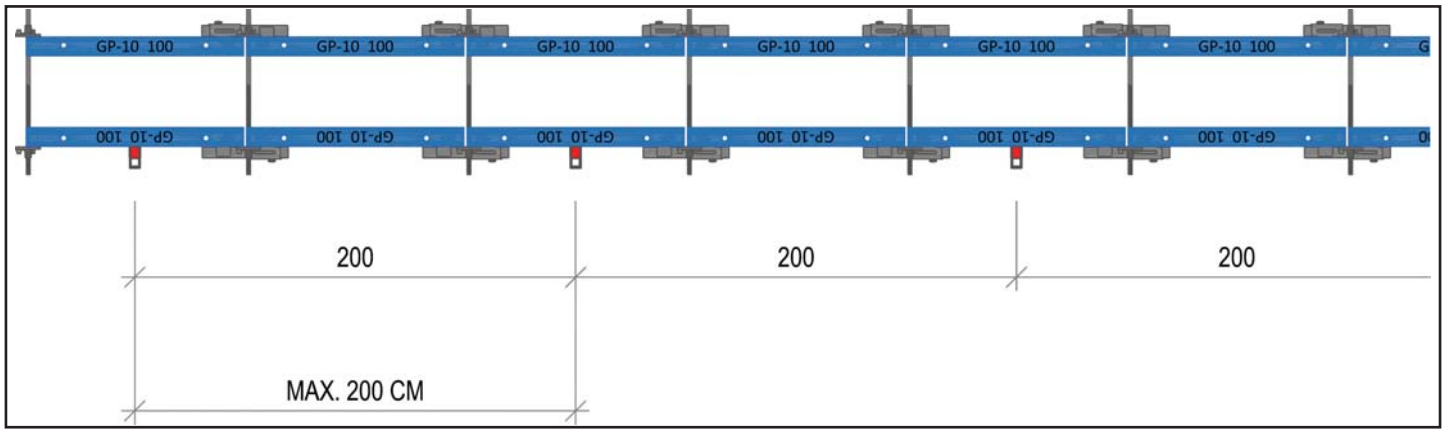
STEP 3:
Insert the front parapet support into the support as shown in the figure.

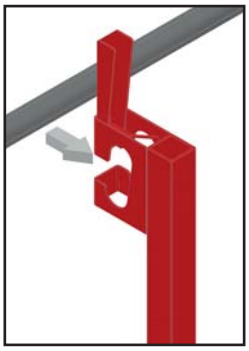


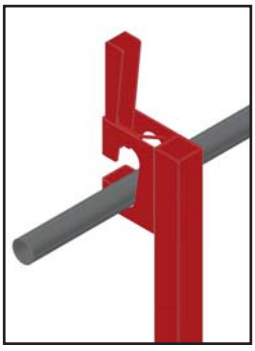
STEP 4:
Insert the 90 mm L. plug (supplied with the support) into the hole as shown in the figure.

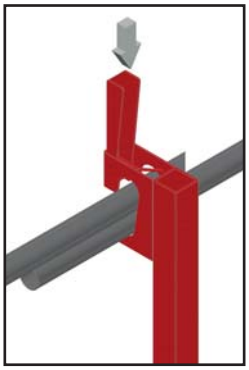


STEP 5:
Install the safety pins.

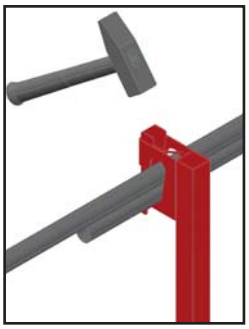






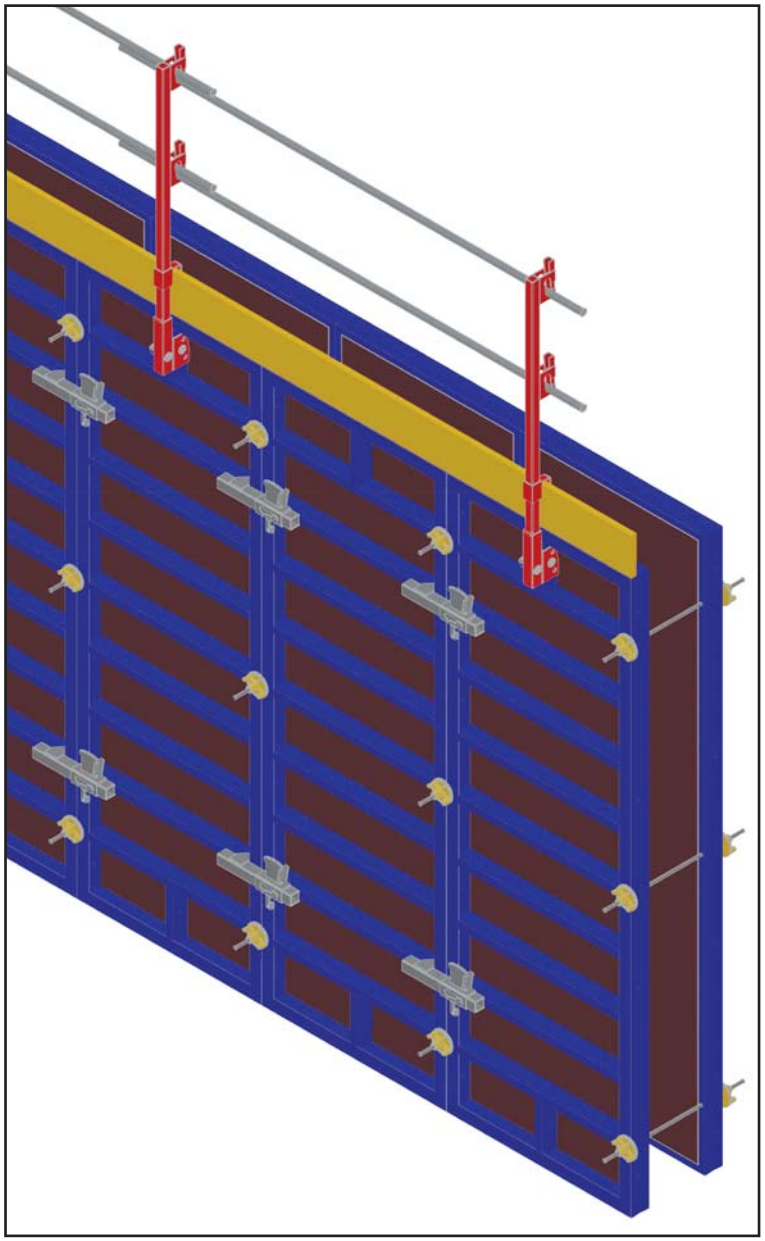


STEP 1:
Install the tube in the clamp and slide it into the template.
Insert the second tube and lower the safety wedge.

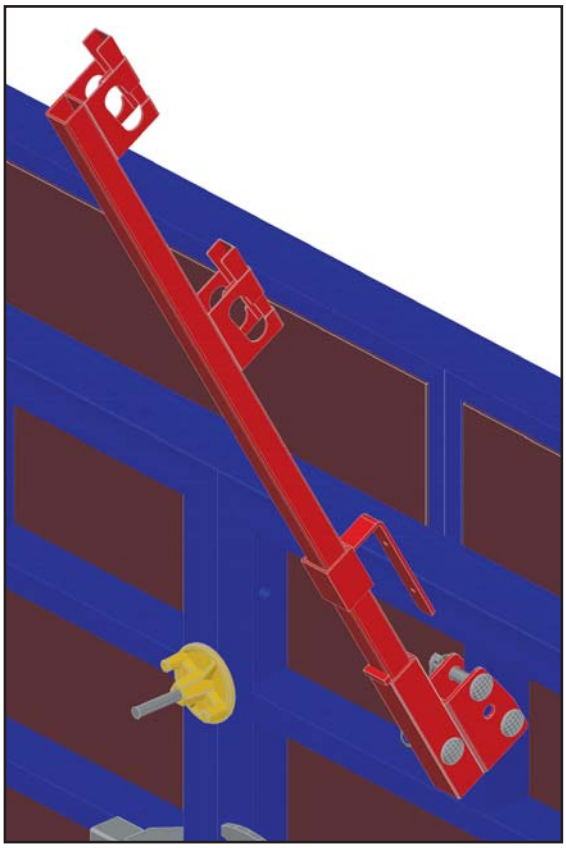


STEP 2:
Tighten the safety wedge with the hammer.

N.B.:
Tube Ø 1 inch (Ø 33.7 mm) max.



FRONTAL PARAPET COLUMN - ART. 296018-FR - KG. 6,5
BRACKET FRONTAL PARAPET COLUMN - ART. 296019-FR - KG. 3,5



DESCRIPTION:

The front parapet column fixed to the GPrandina formwork thanks to the front parapet support, is used to create a safety rail to prevent the fall of things and / or people.
The wood that is used is borne by the user.

USED MATERIAL:

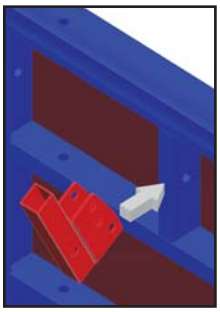
296018-FR	Frontal parapet column	Pcs. 01
296019-FR	Bracket frontal parapet column	Pcs. 01

ATTENTION:

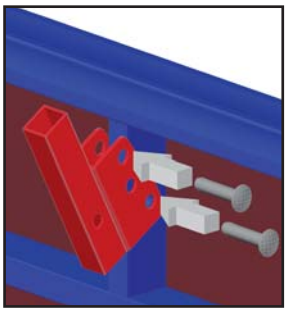
CHECK THE STATE OF THE SHELF: IT MUST NOT SUBMIT CRACKS, DEFORMATIONS OR DAMAGED WELDINGS.

GPRANDINA DECLINES EVERY RESPONSIBILITY IN THE CASE IN WHICH THE SHELVES ARE CHANGED IN ANY OF THEIR PARTS.

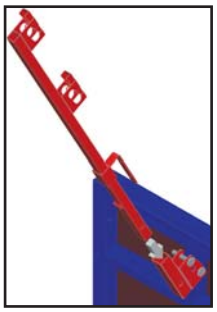
Gprandina srl declines all responsibility in the case in which timber in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.
The use of wood for scaffolding with a thickness of 50 mm is recommended.



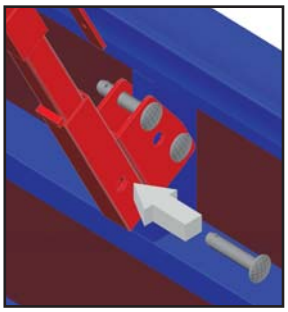
FASE 1:
Installare il supporto parapetto frontale i corrispondenza del traversino di testata del cassero GPrandina.



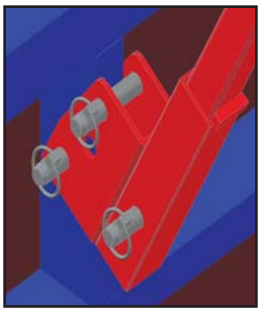
FASE 2:
Inserire la spina L.90 mm (fornita insieme al supporto) nel foro come indicato nella figura.



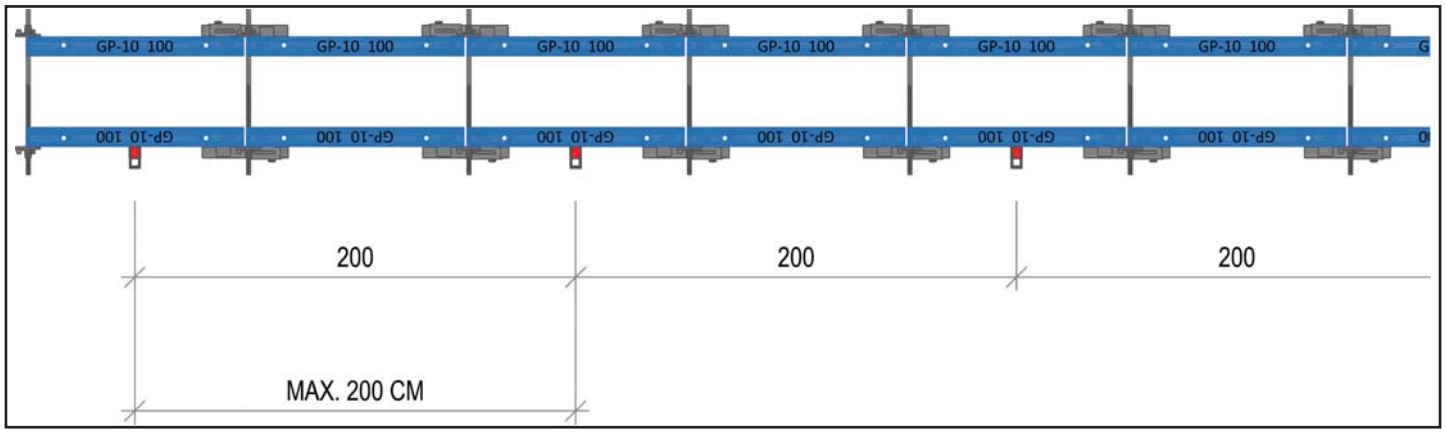
FASE 3:
Inserire il piantone parapetto frontale nel supporto come indicato in figura.

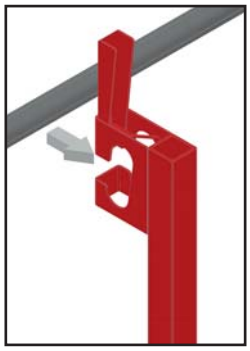


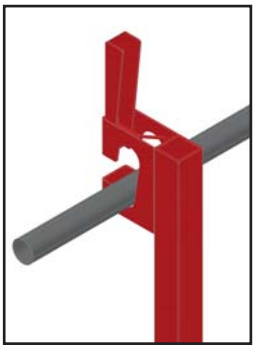
FASE 4:
Inserire la spina L.90 mm (fornita insieme al supporto) nel foro come indicato nella figura.

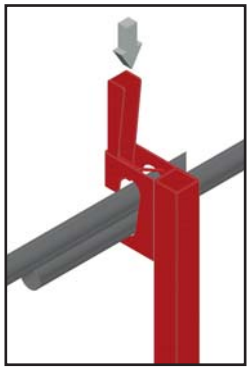


FASE 5:
Installare le coppiglie di sicurezza.

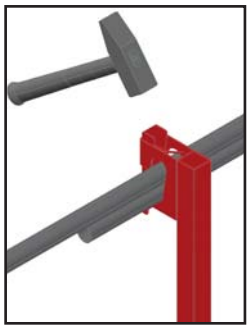






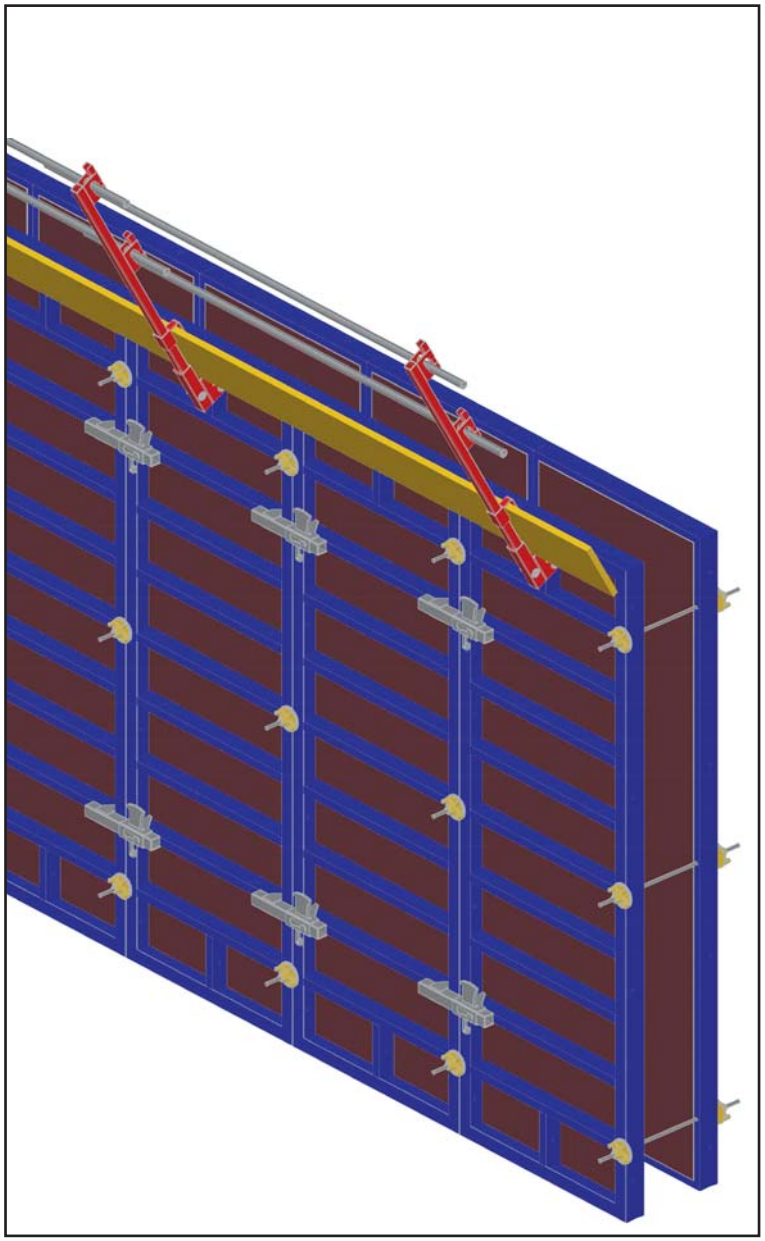


STEP 1:
Install the tube in the clamp and slide it into the template.
Insert the second tube and lower the safety wedge.



STEP 2:
Tighten the safety wedge with the hammer.

N.B.:
Tube Ø 1 inch (Ø 33.7 mm) max.

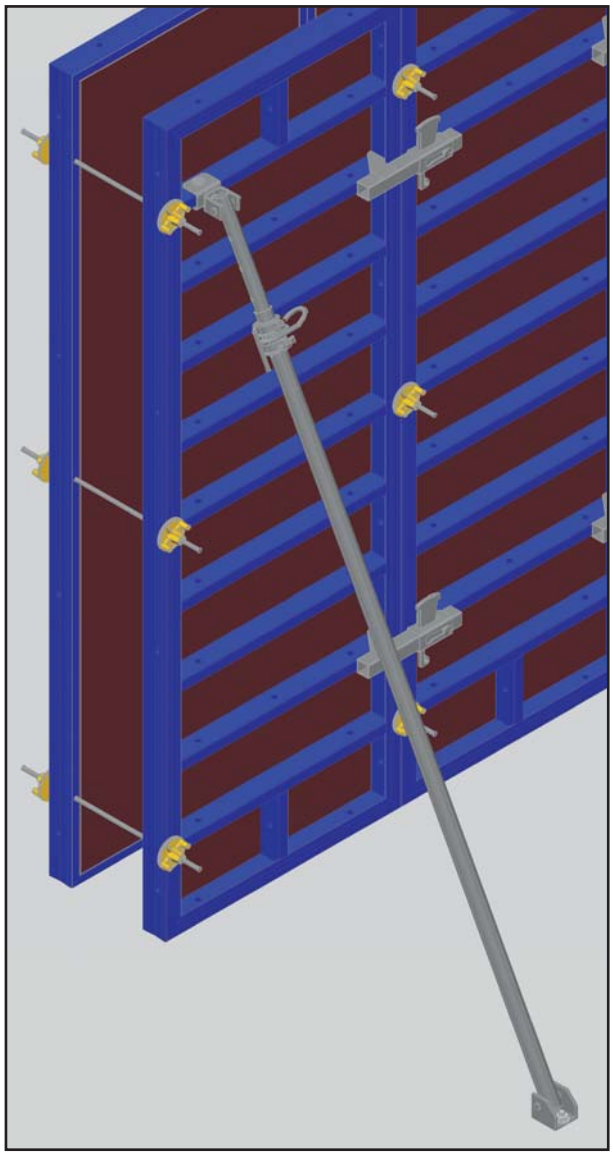


5.0.0
PUSH PULL PROPS

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

PUSH PULL PROP REG. 250-450 COMPL. SINGLE - ART. 296001 - KG. 15,0

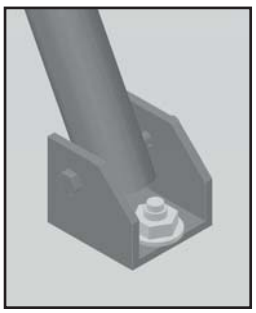


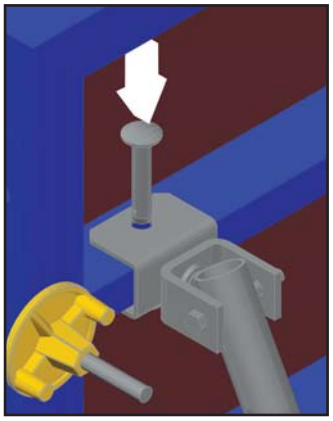
DESCRIPTION:
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

USED MATERIAL:

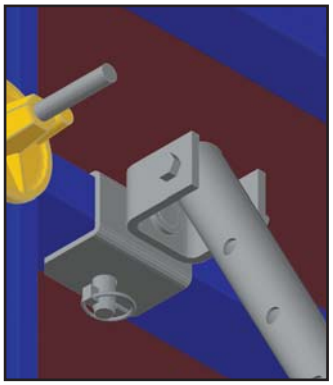
296001	Push pull prop reg. 250-450 compl. single	Pcs. 01
296024	Split pin	Pcs. 01

ATTENTION:
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.

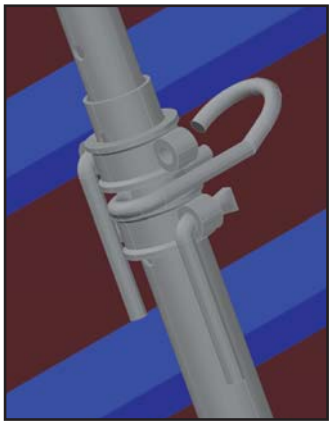




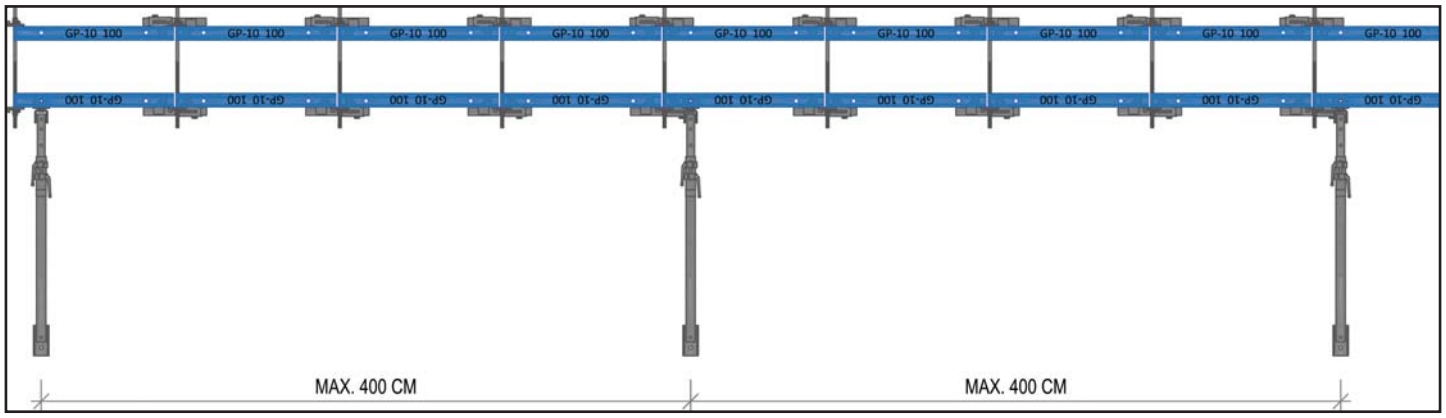
STEP 1:
Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.

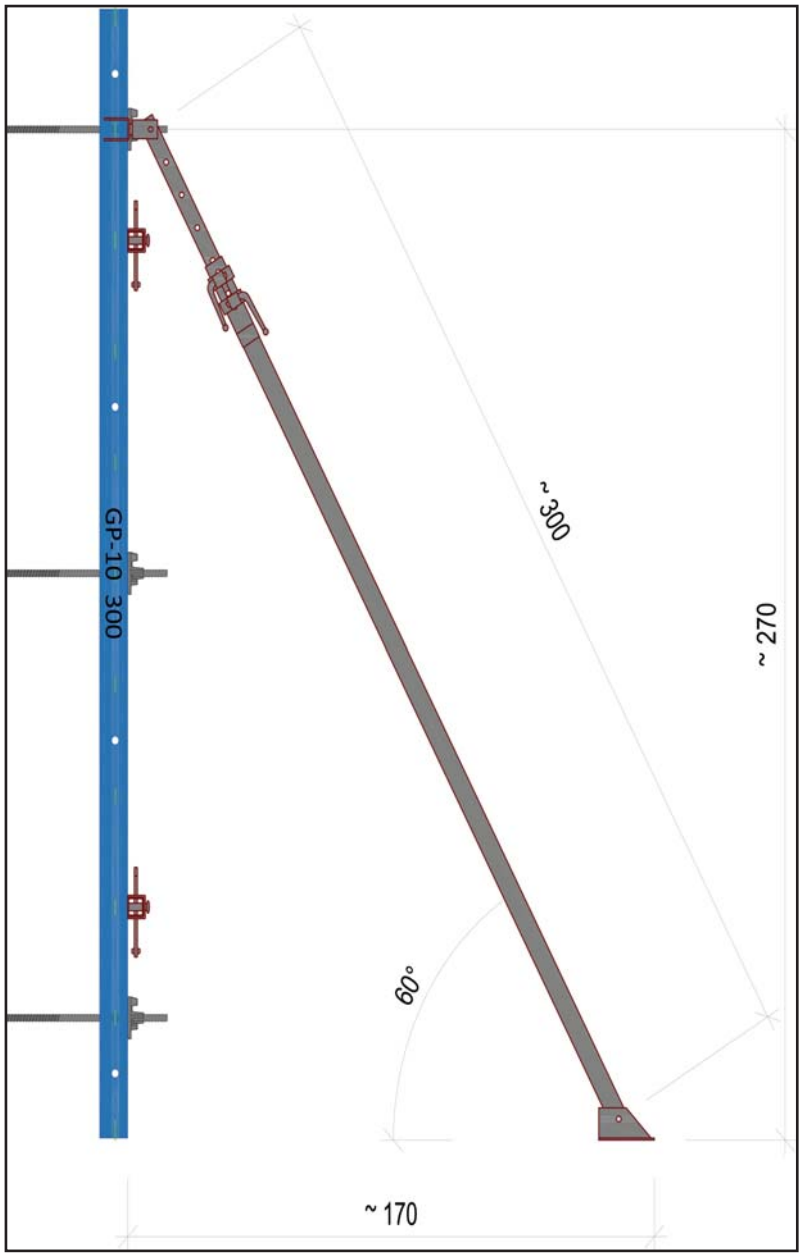


STEP 2:
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:
Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

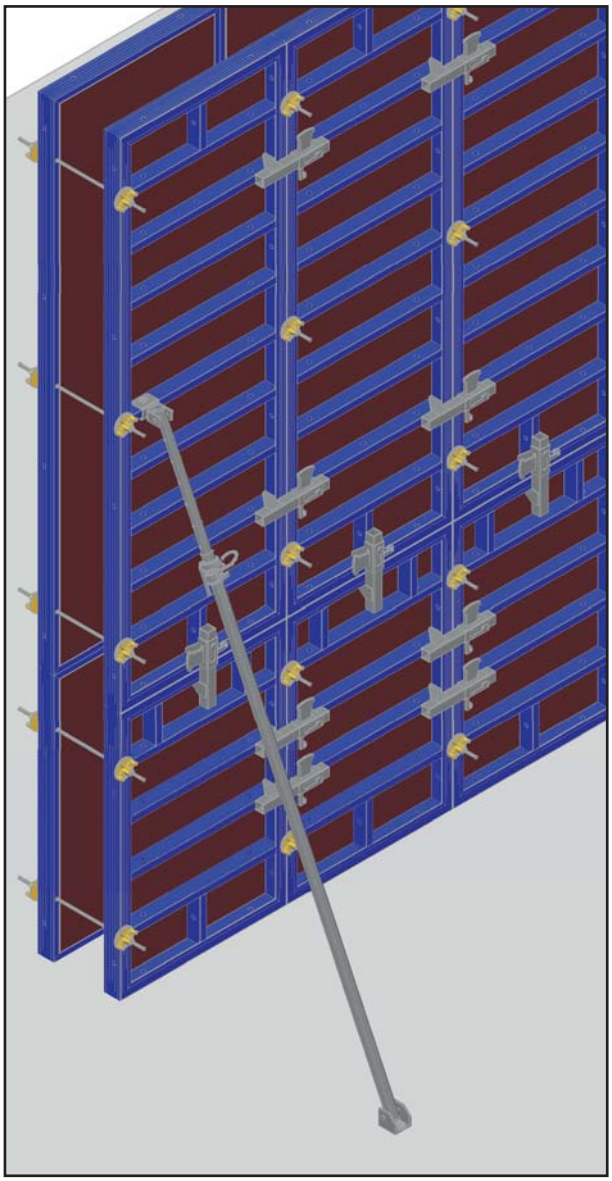




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 186-187.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. SINGLE - ART. 296001 - KG. 15,0



DESCRIPTION:

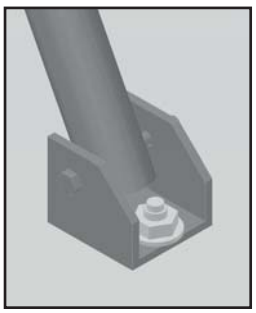
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

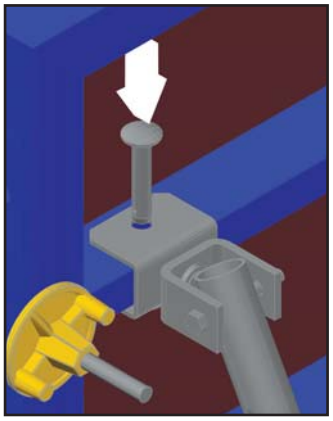
USED MATERIAL:

296001	Push pull prop reg. 250-450 compl. single	Pcs. 01
296024	Split pin	Pcs. 01

ATTENTION:

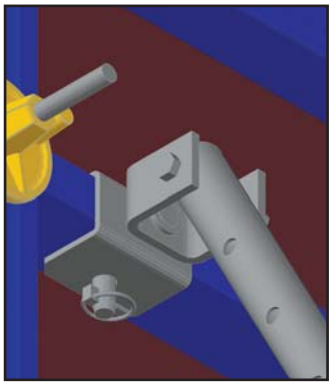
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





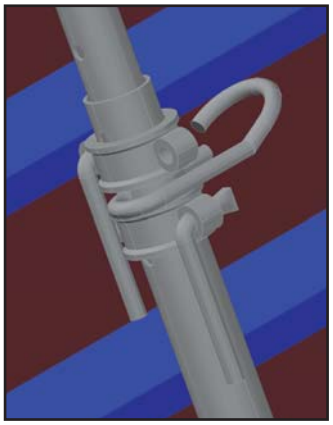
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



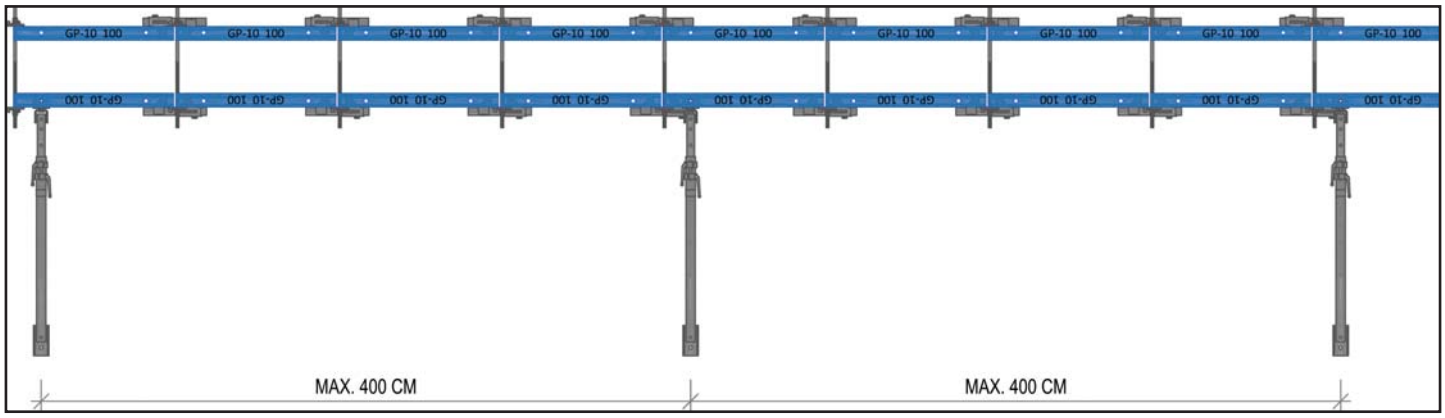
STEP 2:

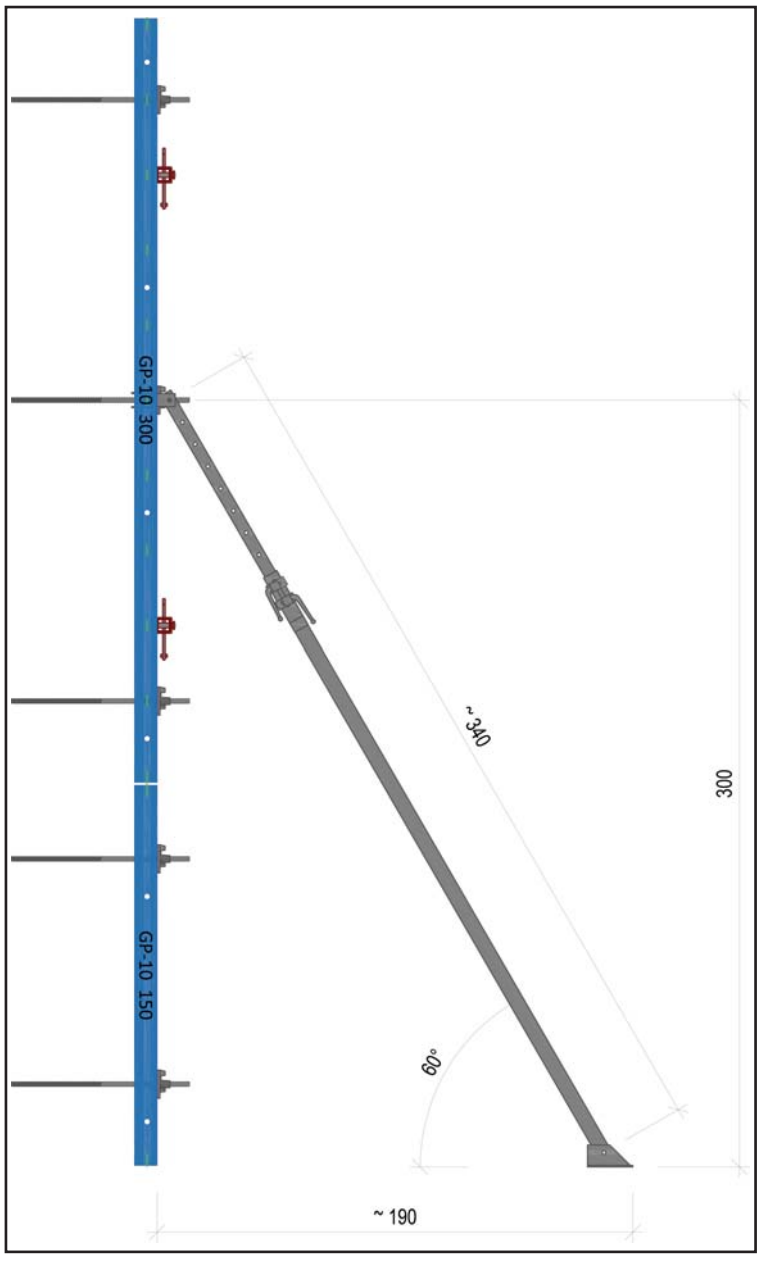
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

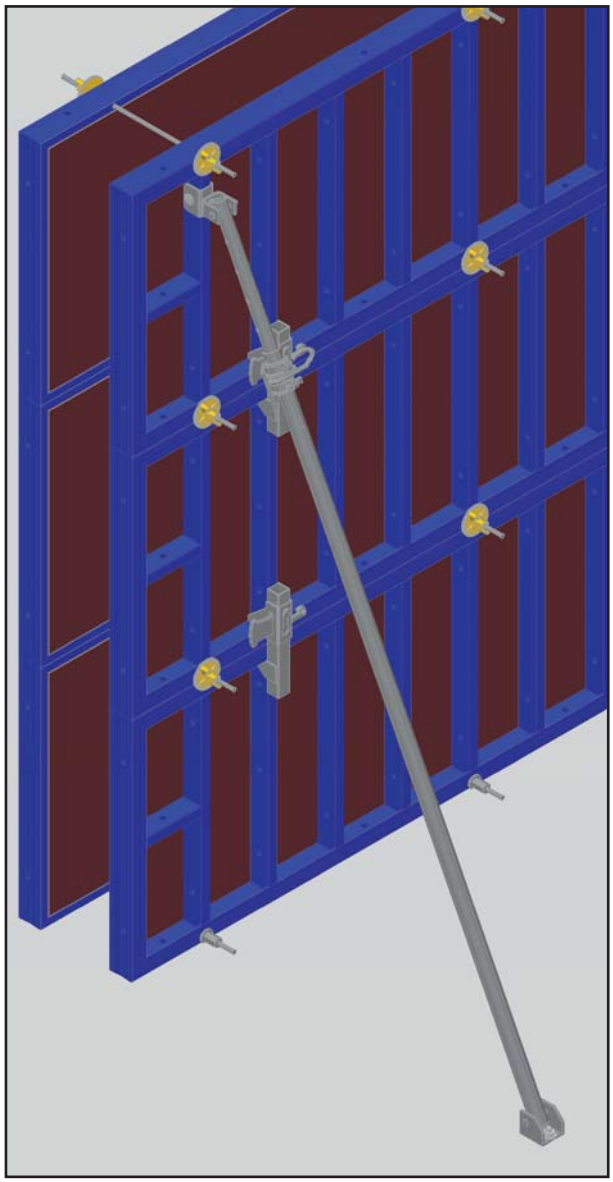




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 186-187.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. SINGLE - ART. 296001 - KG. 15,0



DESCRIPTION:

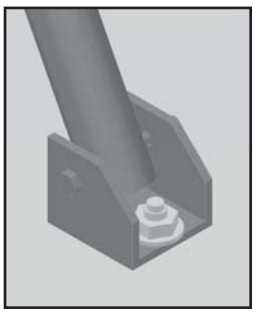
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

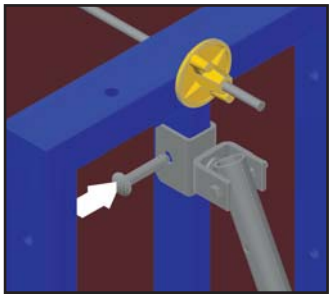
USED MATERIAL:

296001	Push pull prop reg. 250-450 compl. single	Pcs. 01
296024	Split pin	Pcs. 01

ATTENTION:

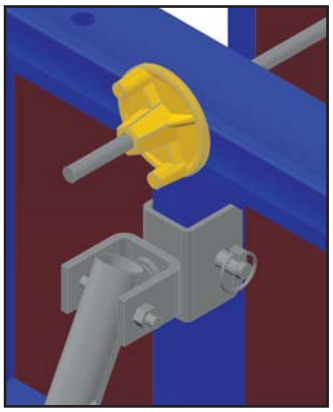
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





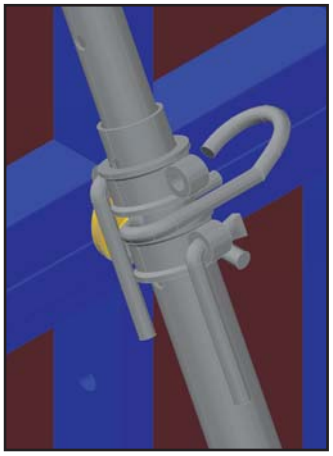
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



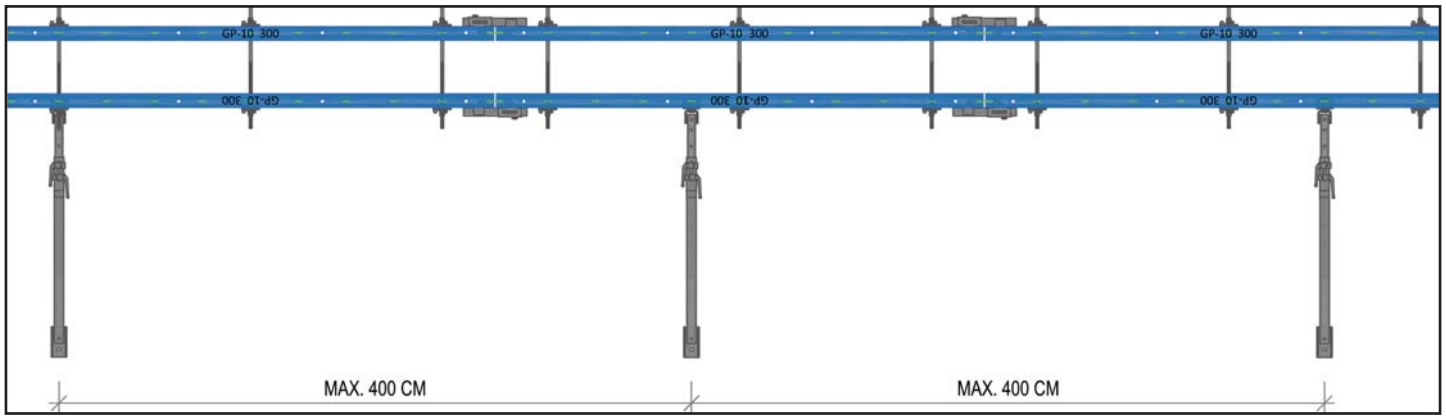
STEP 2:

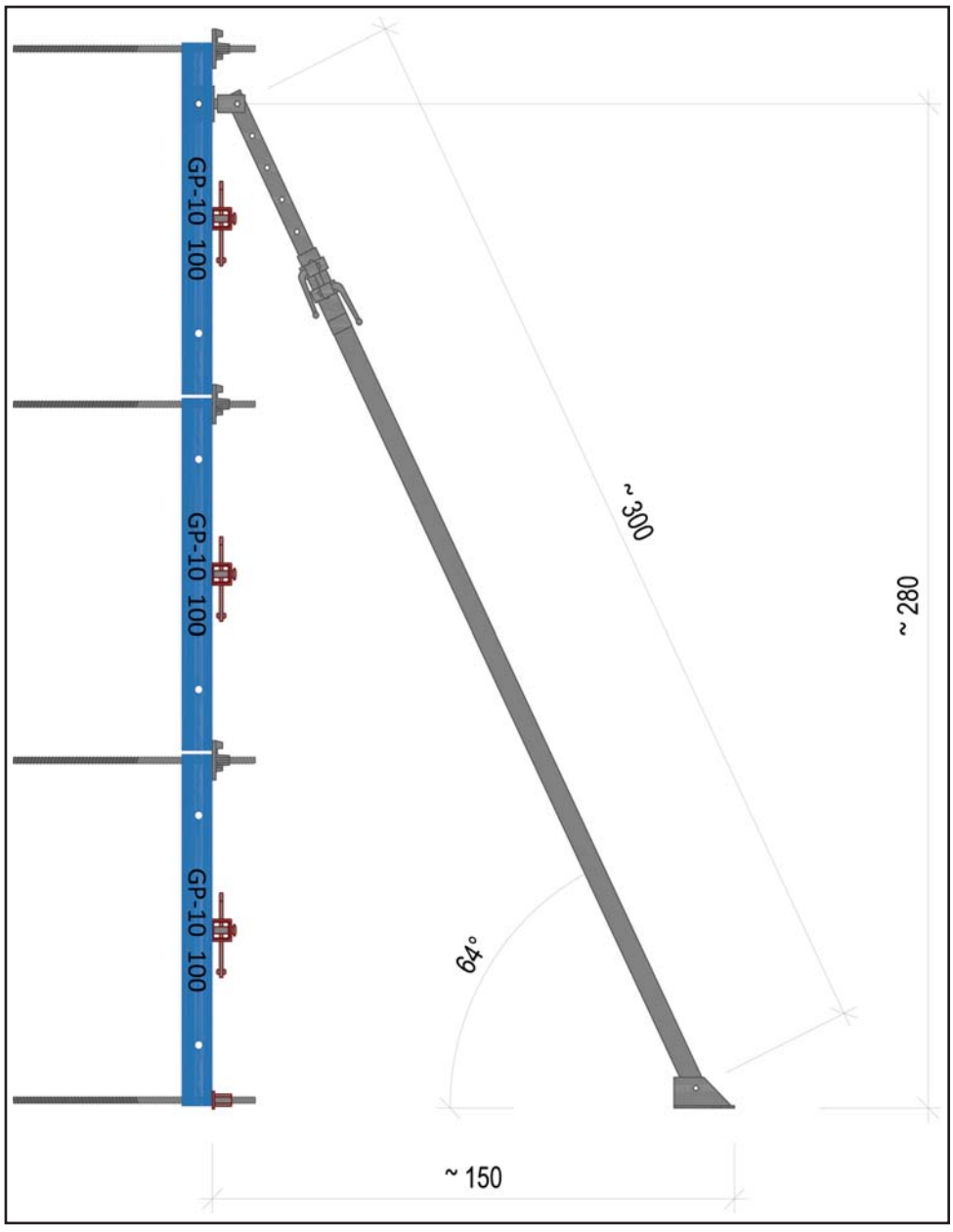
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

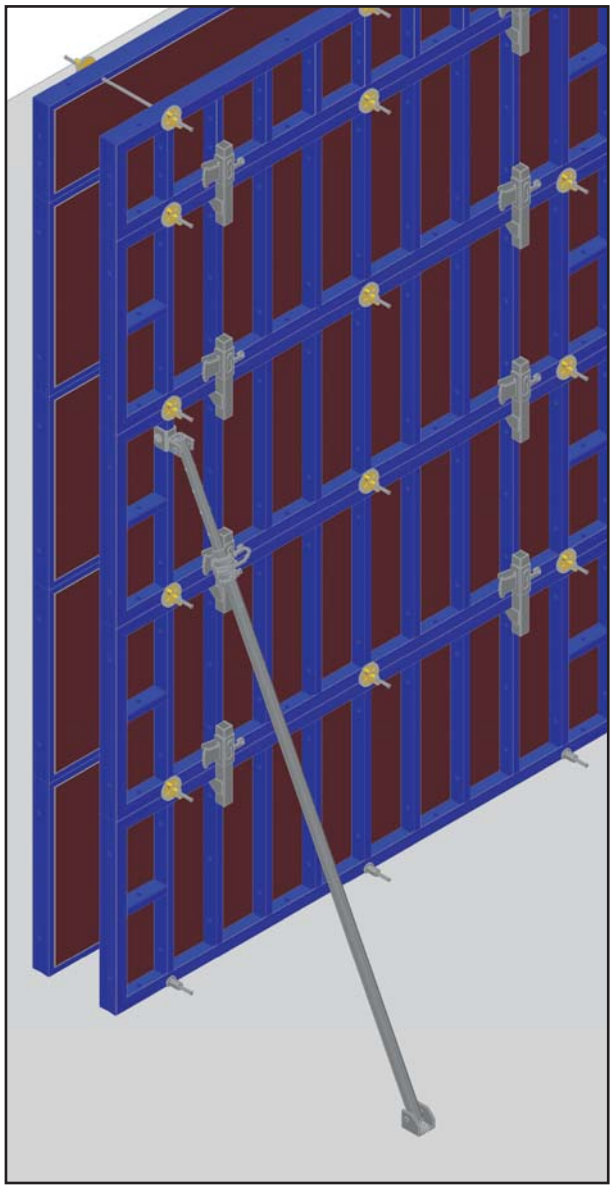




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 186-187. GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. SINGLE - ART. 296001 - KG. 15,0



DESCRIPTION:

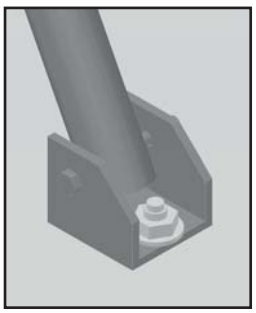
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

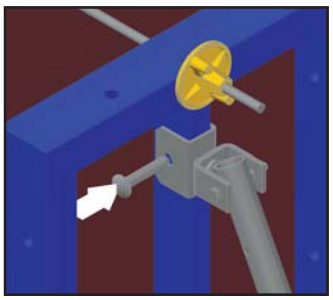
USED MATERIAL:

296001	Push pull prop reg. 250-450 compl. single	Pcs. 01
296024	Split pin	Pcs. 01

ATTENTION:

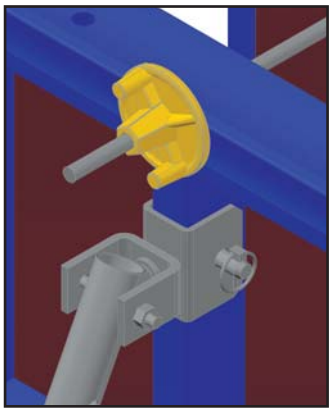
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





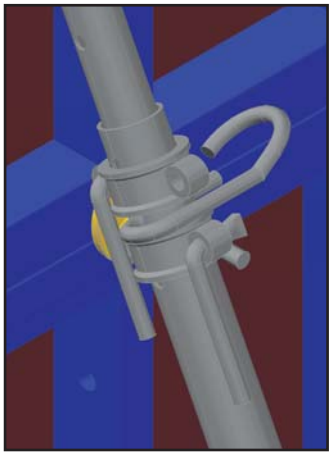
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



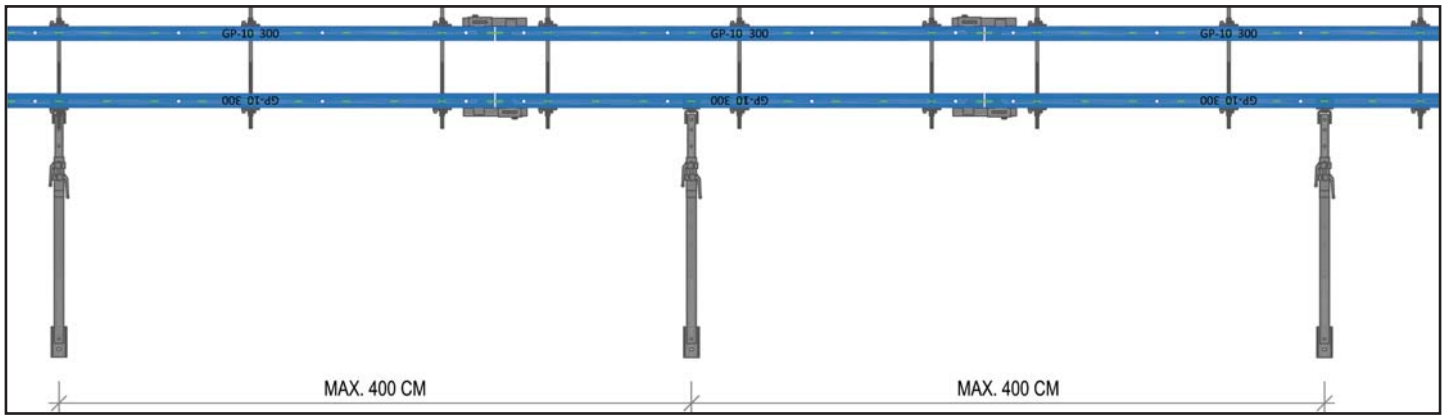
STEP 2:

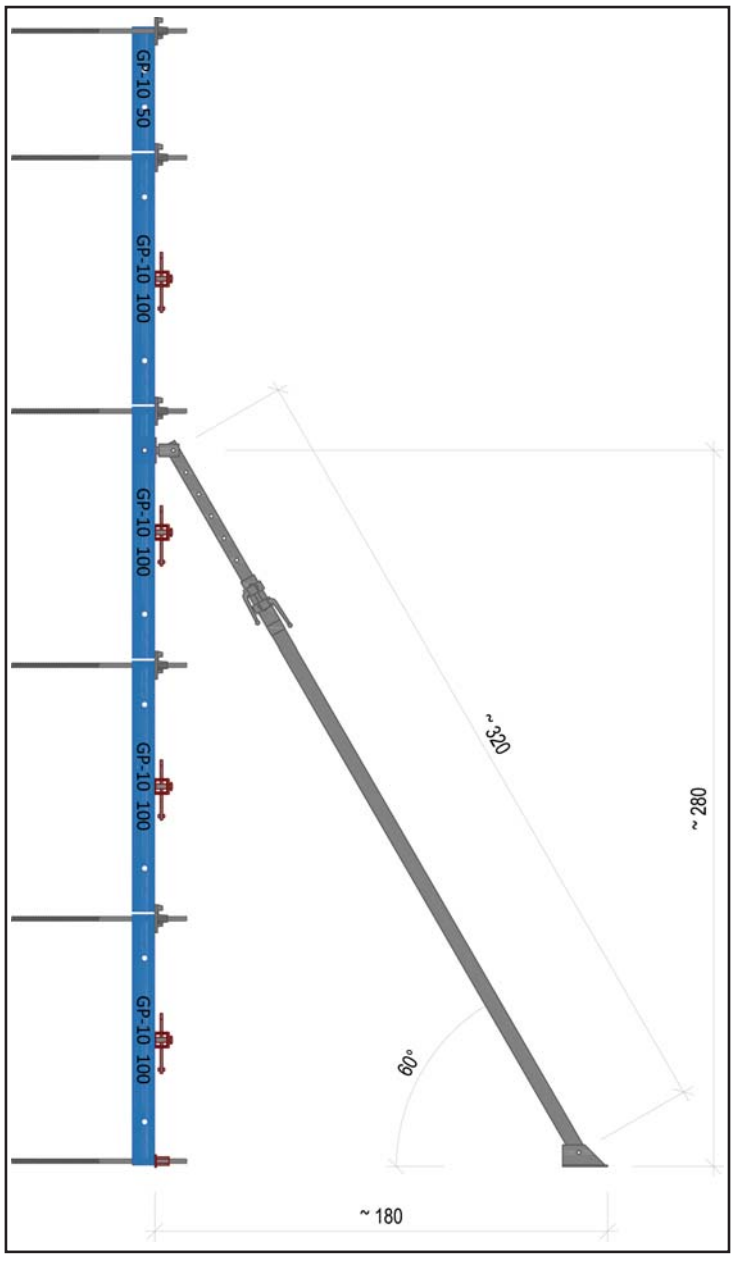
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

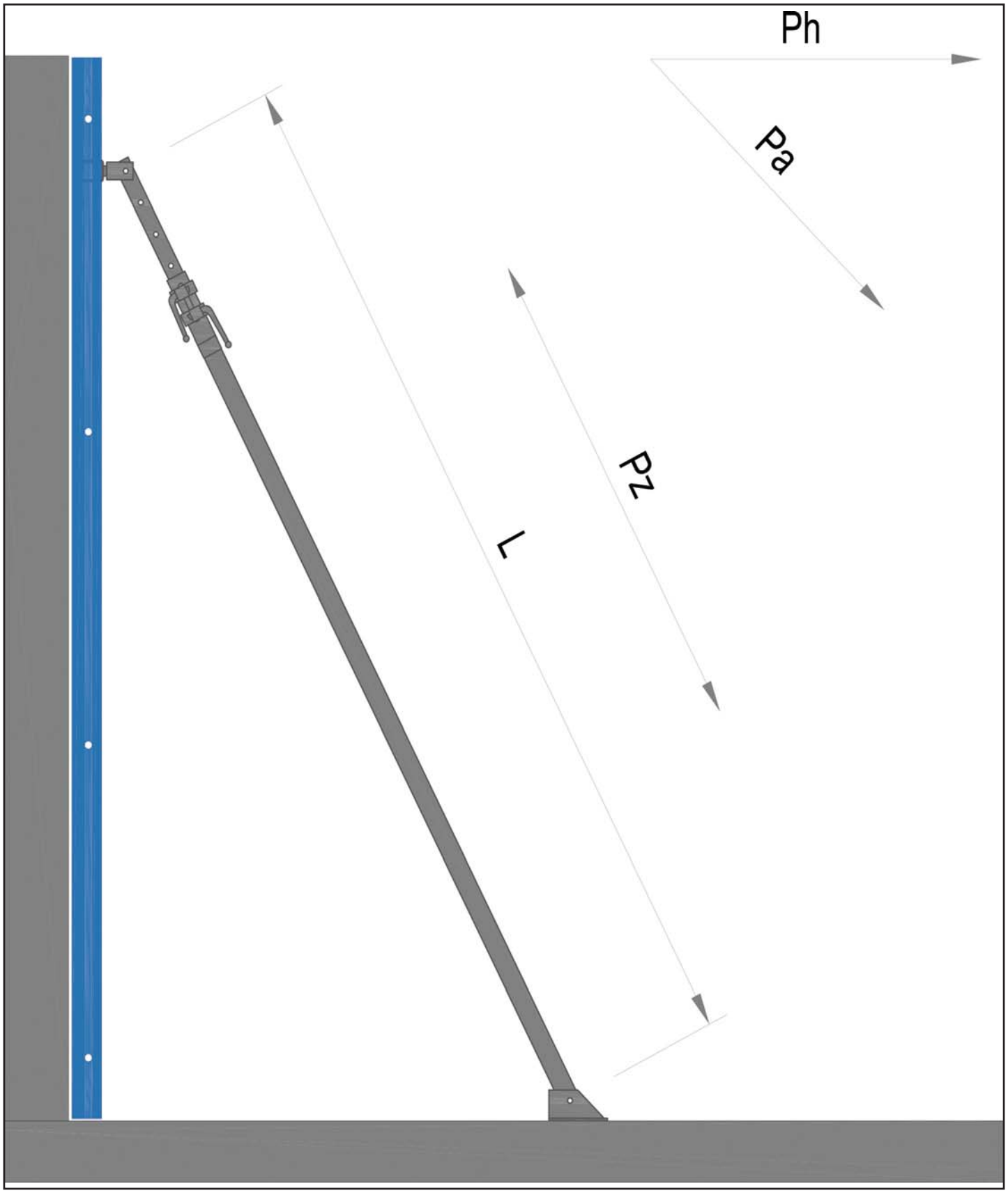




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 186-187.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

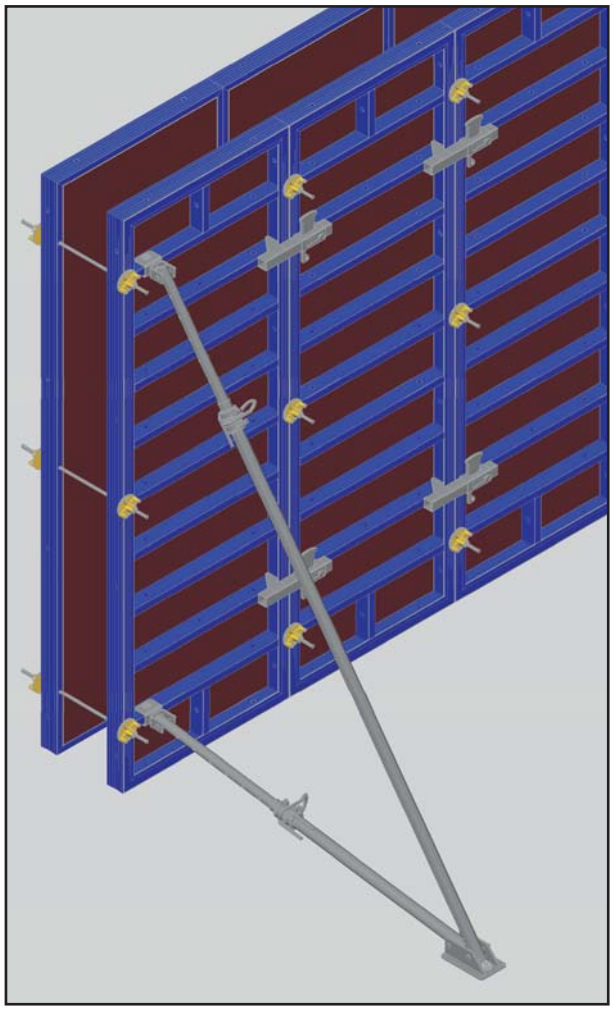
ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

TABLE OF FLOWING OF ADJUSTABLE PLUMBERS



PUSH PULL PROP REG. 250-450 COMPL. SINGLE			
EXTENSION cm	COMPRESSION STRENGTH KN		TRACTION FORCE KN
L	Ph	Pa	Pz
260	12,37	17,50	17,50
270	12,37	17,50	17,50
280	12,30	17,40	17,50
290	11,28	15,95	17,50
300	10,71	15,15	17,50
310	10,39	14,70	17,50
320	9,93	14,05	17,50
330	9,62	13,60	17,50
340	9,26	13,10	17,50
350	8,98	12,70	17,50
360	8,66	12,25	17,50
370	8,45	11,95	17,50
380	7,88	11,15	17,50
390	7,07	10,00	17,50
400	6,68	9,45	17,50
410	6,58	9,30	17,50
420	6,05	8,55	17,50
430	5,76	8,15	17,50
440	5,30	7,50	17,50
450	4,95	7,00	17,50
460	4,60	6,50	17,50

PUSH PULL PROP REG. 250-450 COMPL. DOUBLE - ART. 296006 - KG. 35,0

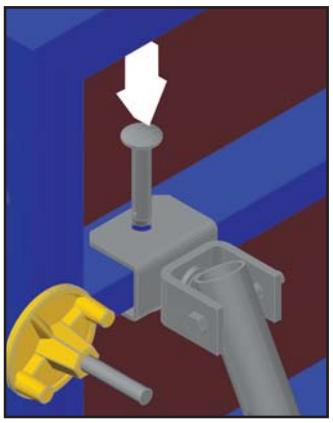


DESCRIPTION:

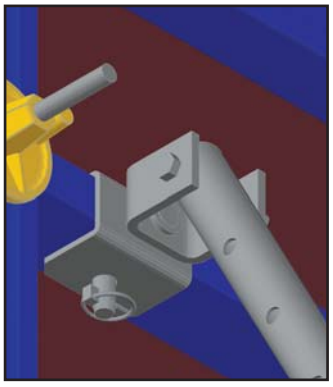
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

USED MATERIAL:

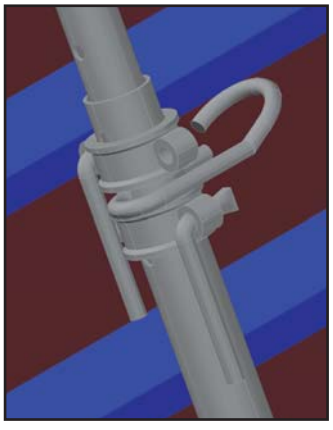
296006	Push pull prop reg. 250-450 compl. double	Pcs. 01
296024	Split pin	Pcs. 02



STEP 1:
Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.

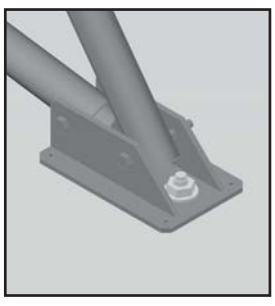


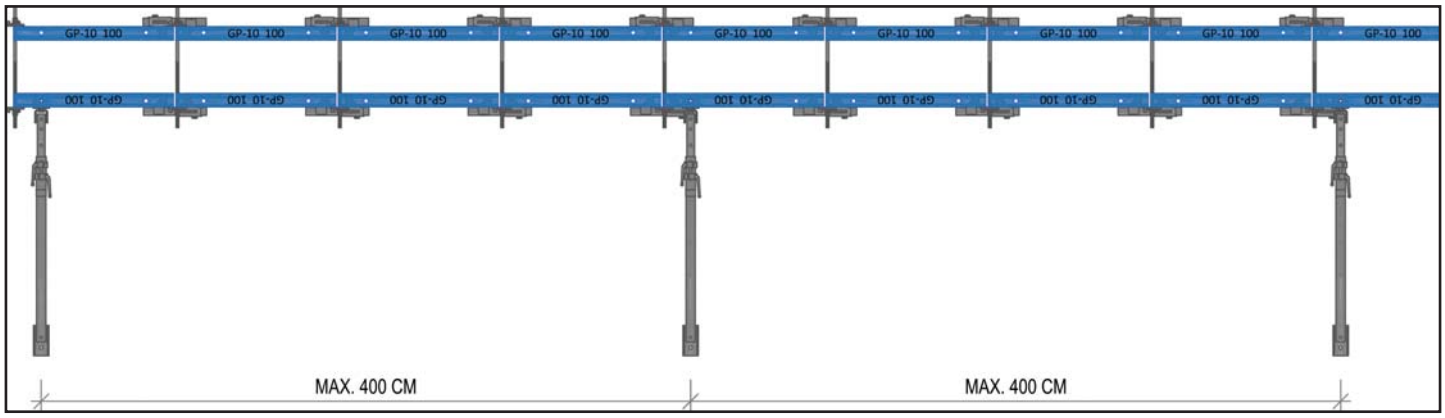
STEP 2:
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.

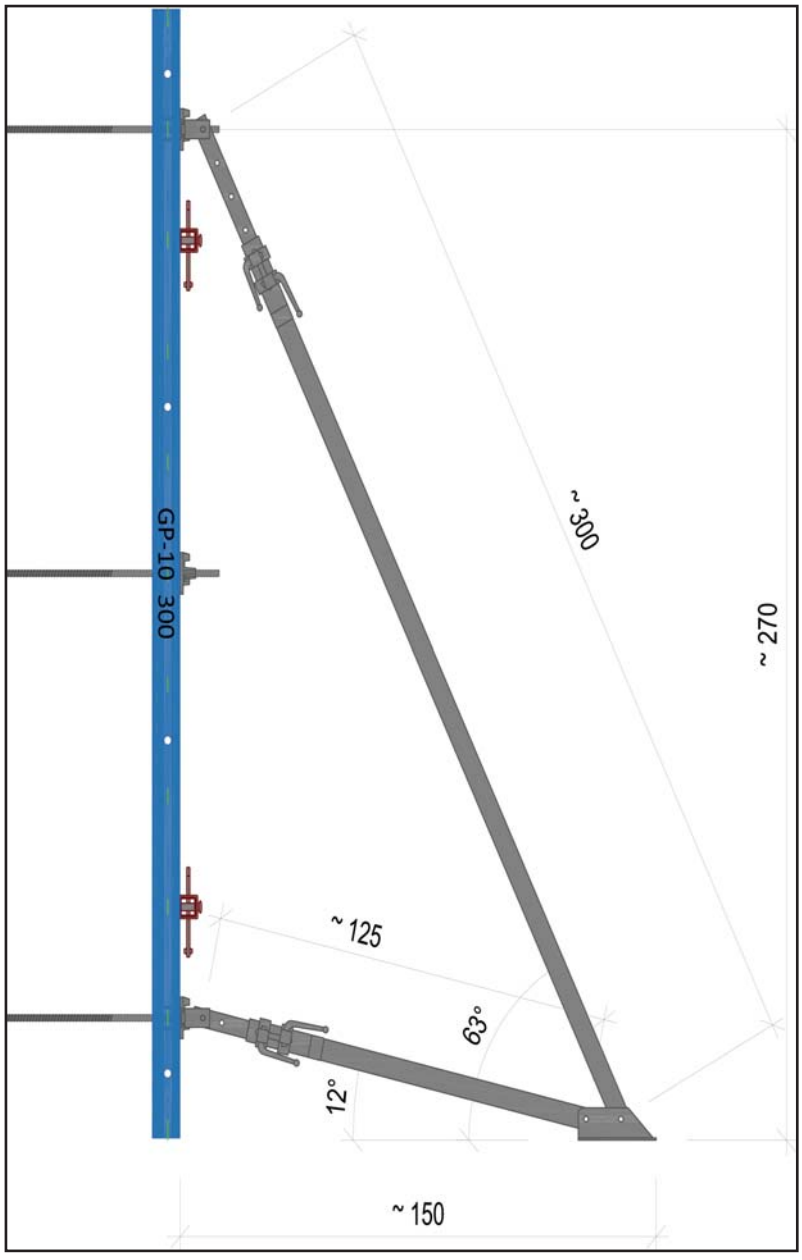


STEP 3:
Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

ATTENTION:
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.



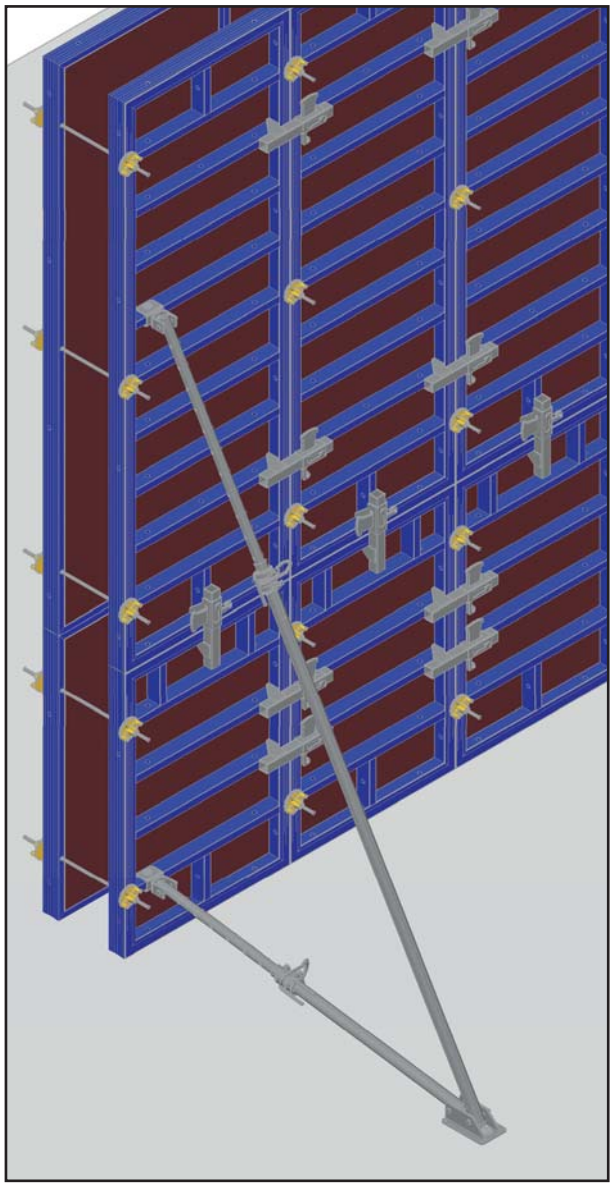




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 196-197. GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. DOUBLE - ART. 296006 - KG. 35,0



DESCRIPTION:

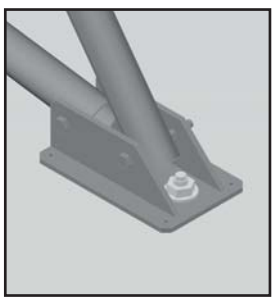
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

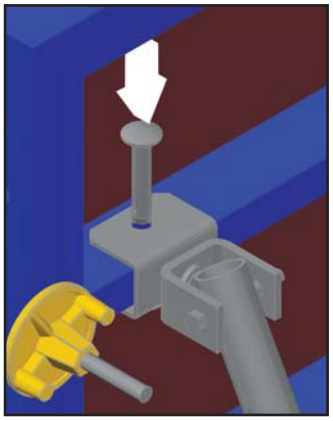
USED MATERIAL:

296006	Push pull prop reg. 250-450 compl. double	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:

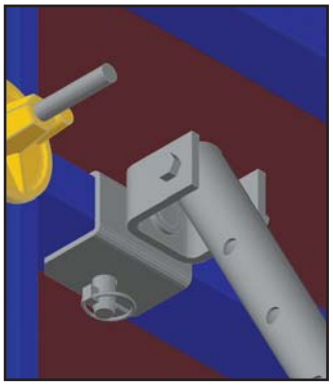
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





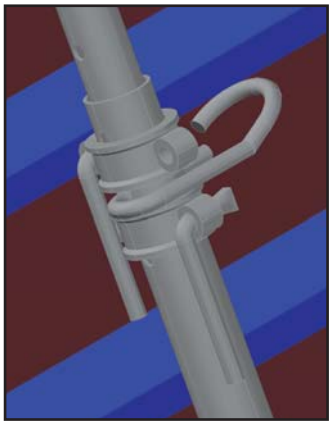
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



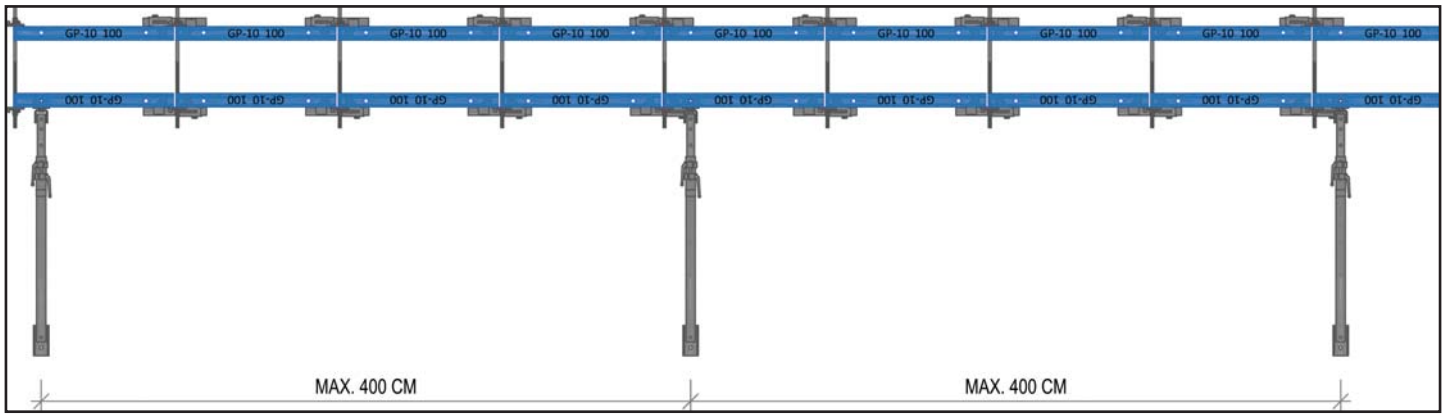
STEP 2:

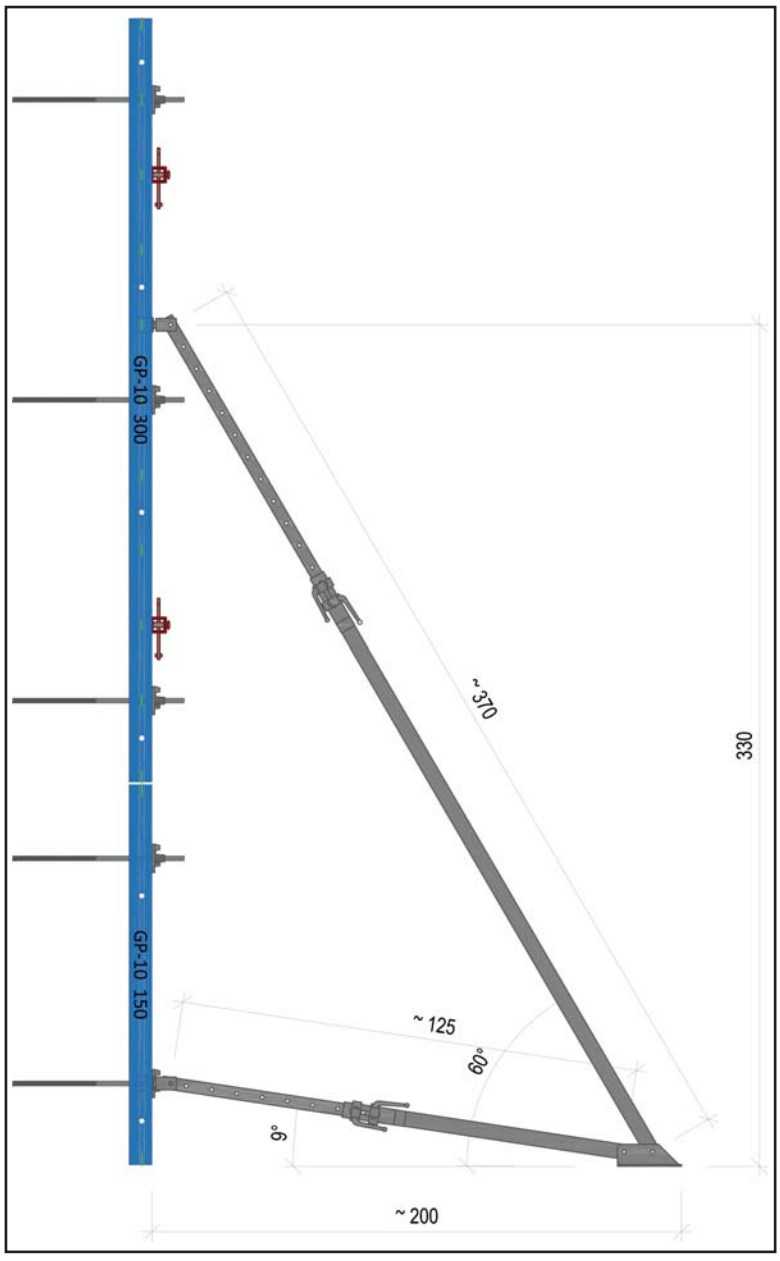
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

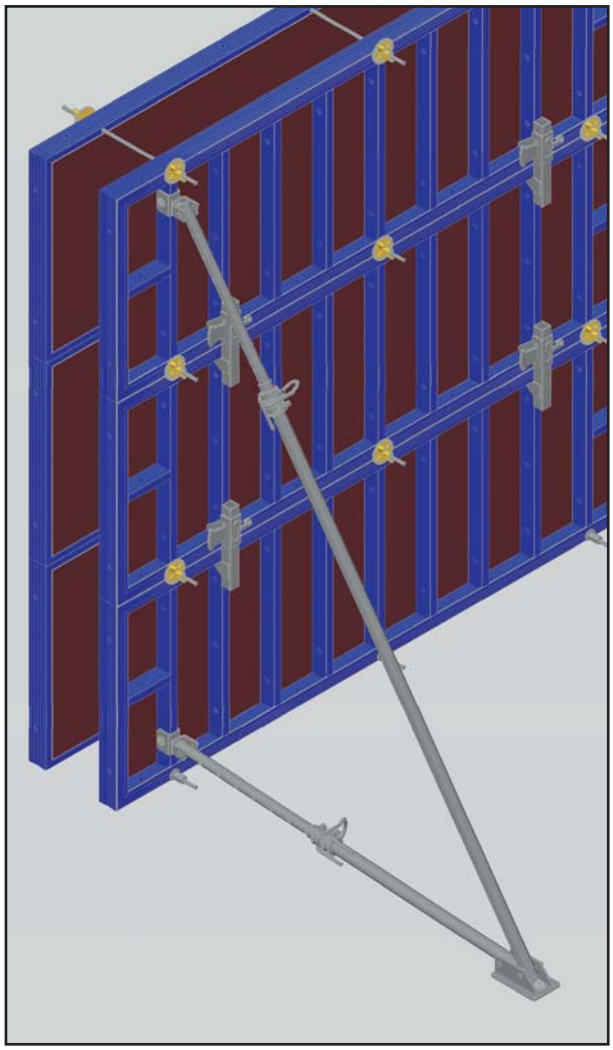




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 196-197. GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. DOUBLE - ART. 296006 - KG. 35,0

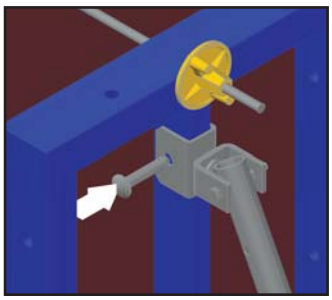


DESCRIPTION:

The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

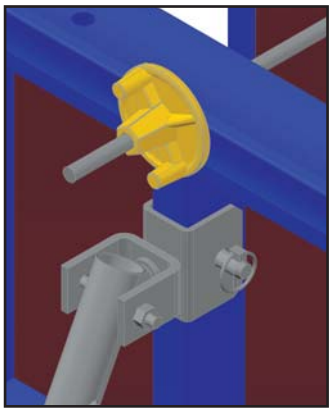
USED MATERIAL:

296006	Push pull prop reg. 250-450 compl. double	Pcs. 01
296024	Split pin	Pcs. 02



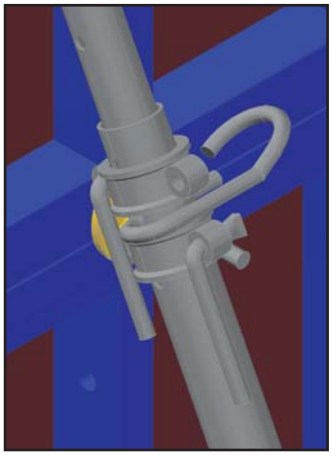
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



STEP 2:

Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.

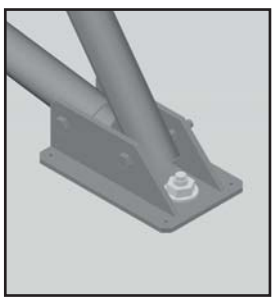


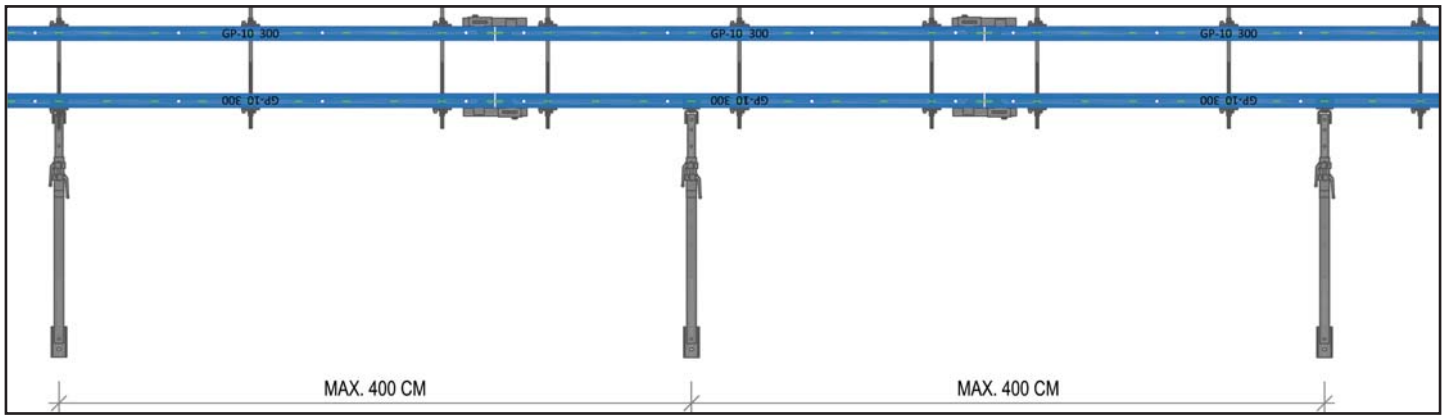
STEP 3:

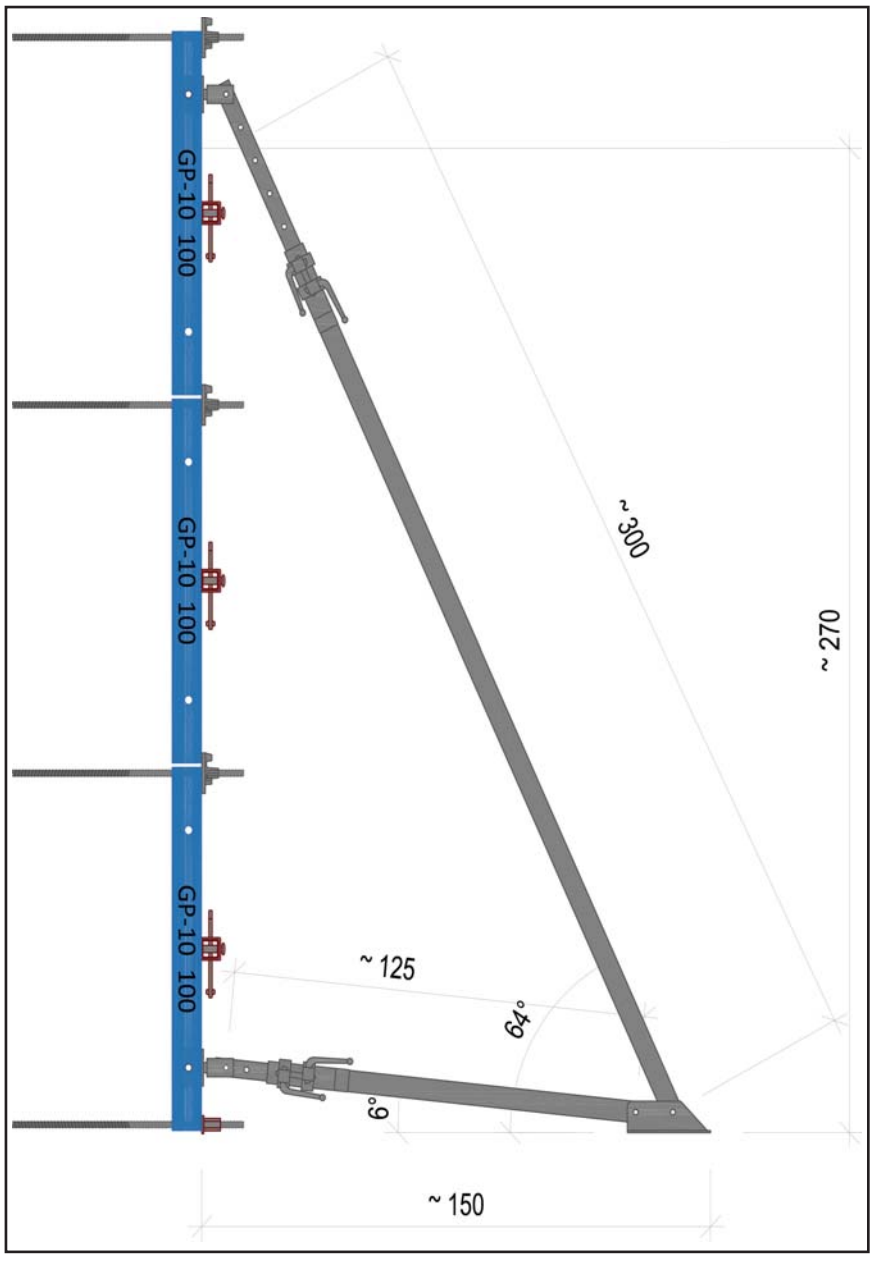
Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

ATTENTION:

IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.



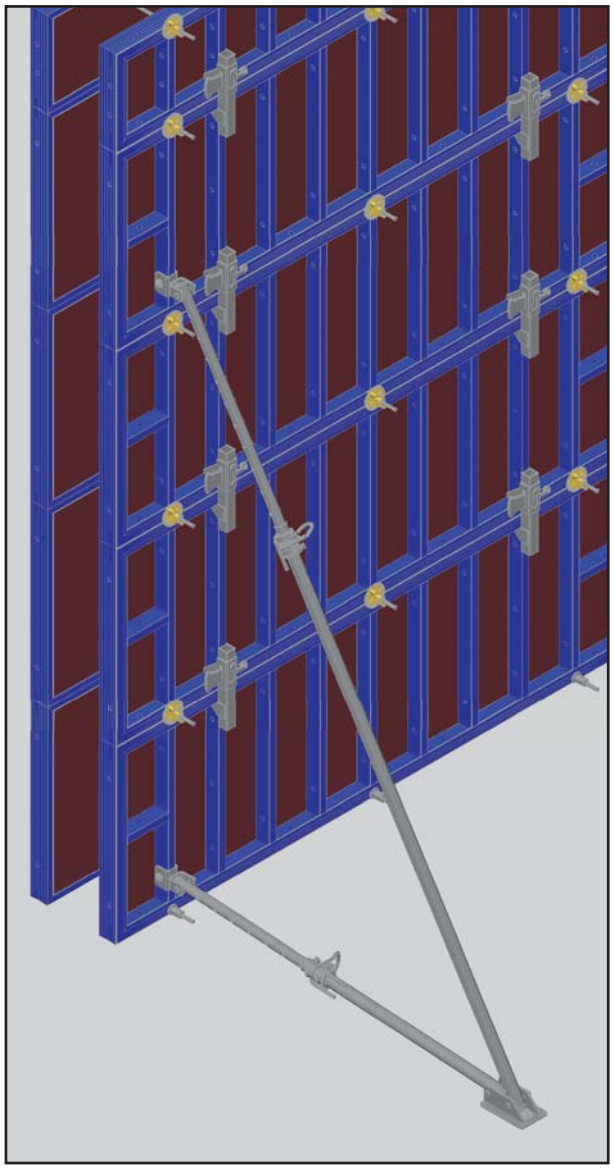




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 196-197. GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

PUSH PULL PROP REG. 250-450 COMPL. DOUBLE - ART. 296006 - KG. 35,0



DESCRIPTION:

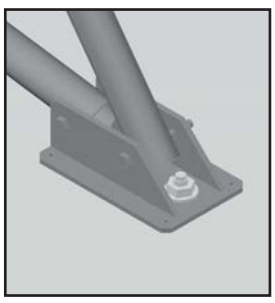
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

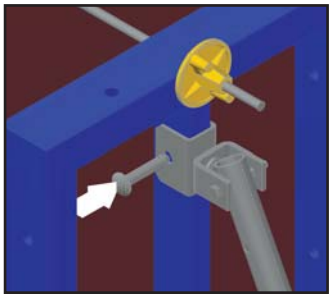
USED MATERIAL:

296006	Push pull prop reg. 250-450 compl. double	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:

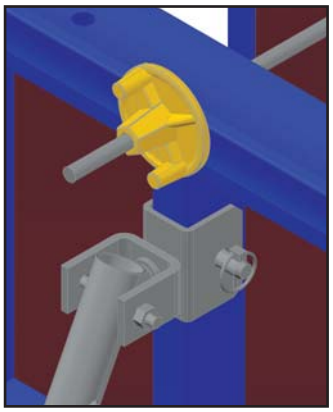
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





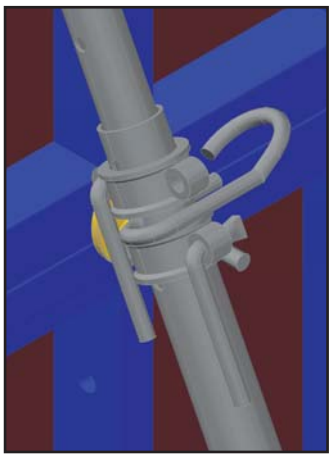
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



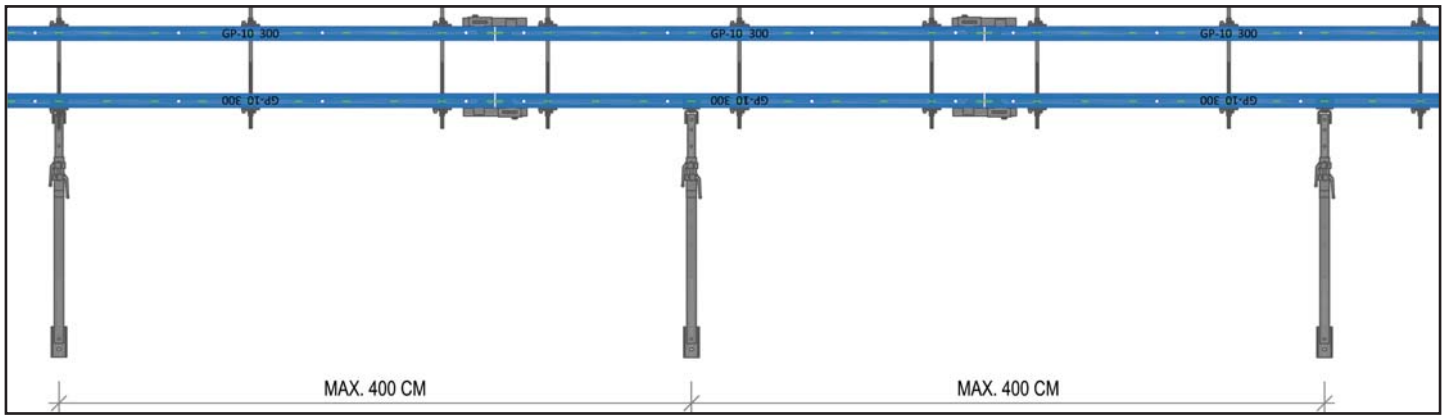
STEP 2:

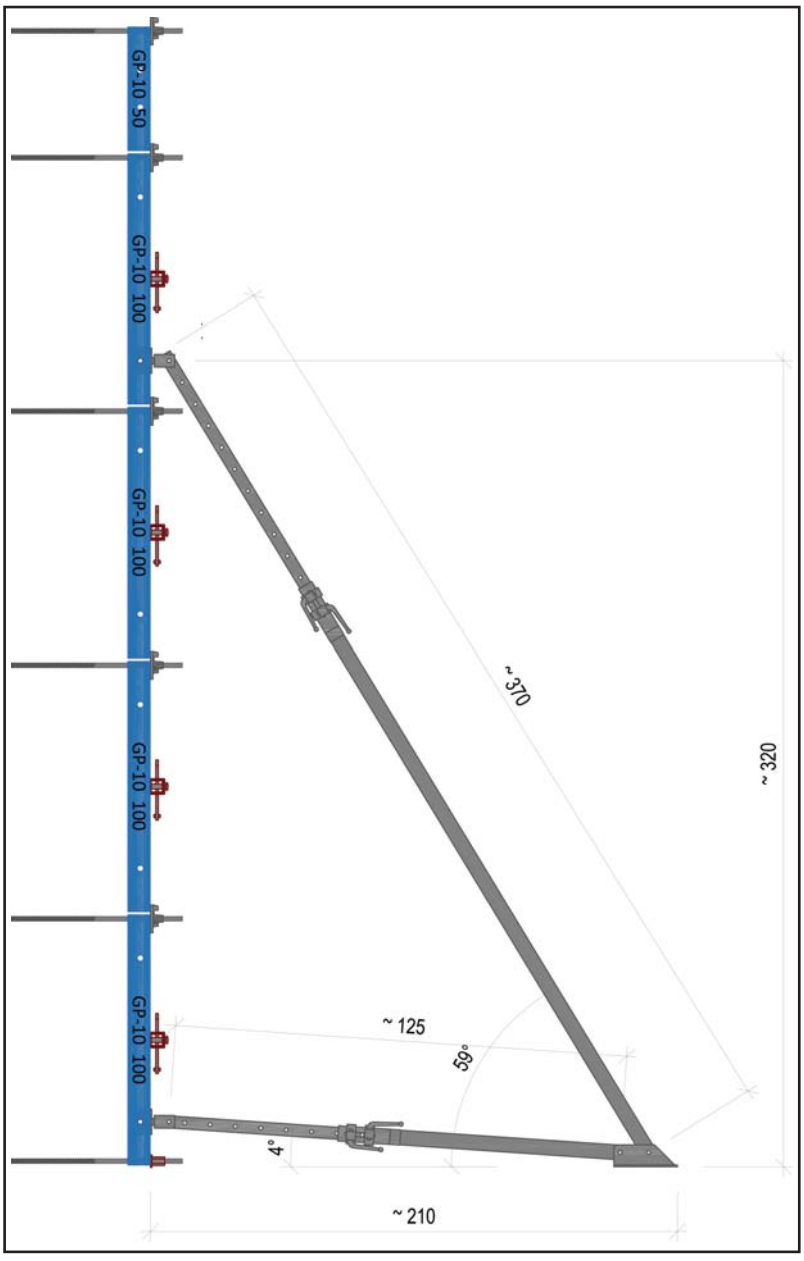
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

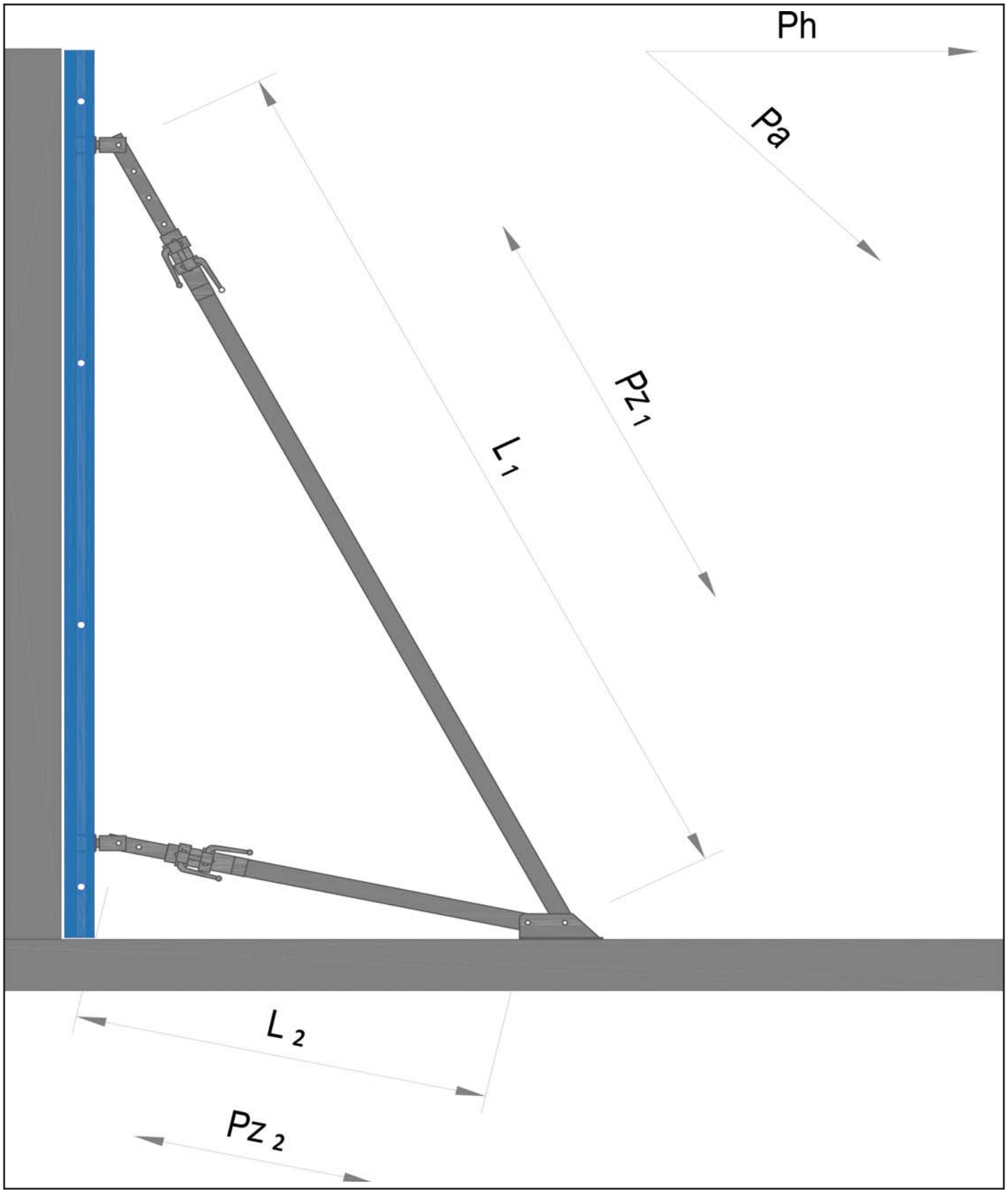




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 196-197.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

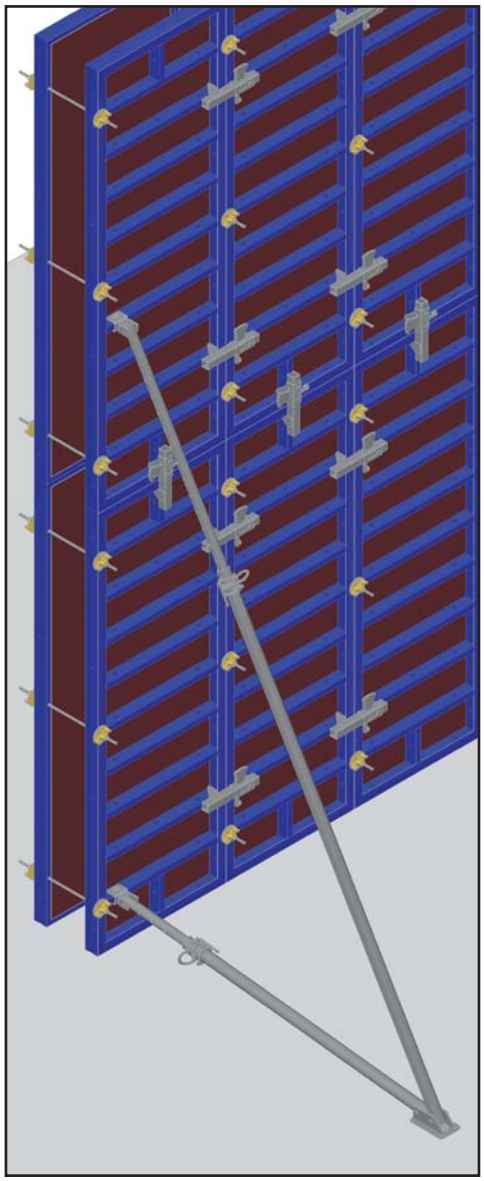
ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

TABLE OF FLOWING OF ADJUSTABLE PLUMBERS



PUSH PULL PROP REG. 250-450 COMPL. DOUBLE								
UPPER ARM					LOWER ARM			
EXTENSION cm	COMPRESSION STRENGTH KN		TRACTION FORCE KN		EXTENSION cm	COMPRESSION STRENGTH KN		TRACTION FORCE KN
L	Ph	Pa	Pz		L	Ph	Pa	Pz
260	20,36	28,80	30,00		160	21,21	30,00	30,00
270	18,83	26,63	30,00		170	21,21	30,00	30,00
280	17,46	24,69	30,00		180	21,21	30,00	30,00
290	16,23	22,96	30,00		190	21,21	30,00	30,00
300	15,13	21,40	30,00		200	19,59	27,70	30,00
310	14,14	20,00	30,00					
320	13,24	18,73	30,00					
330	12,68	17,93	30,00					
340	12,39	17,52	30,00					
350	11,78	16,66	30,00					
360	11,43	16,16	30,00					
370	11,00	15,56	30,00					
380	10,51	14,86	30,00					
390	10,22	14,46	30,00					
400	9,79	13,85	30,00					
410	9,39	13,28	30,00					
420	8,86	12,53	30,00					
430	8,41	11,89	30,00					
440	7,99	11,29	30,00					
450	7,56	10,69	30,00					
460	7,17	10,13	30,00					

PUSH PULL PROP REG. 400-600 COMPL. DOUBLE - ART. 296011 - KG. 52,0

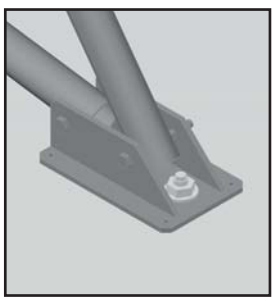


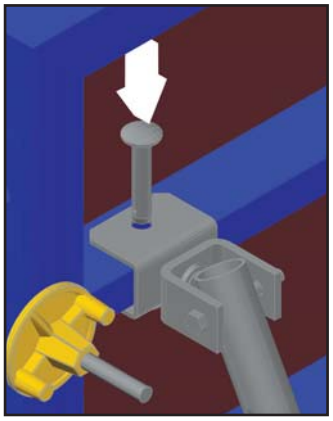
DESCRIPTION:
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

USED MATERIAL:

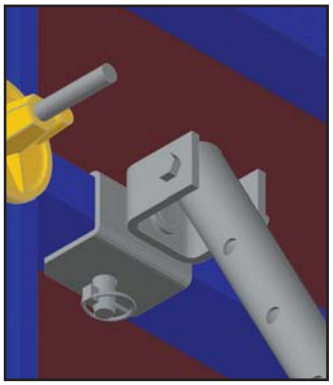
296011	Push pull prop reg. 400-600 compl. double	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.

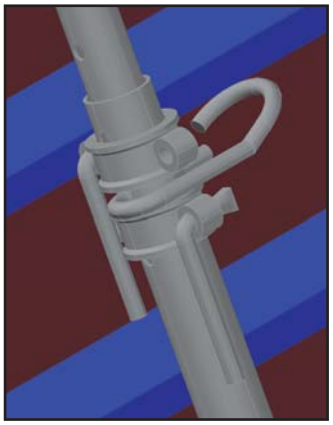




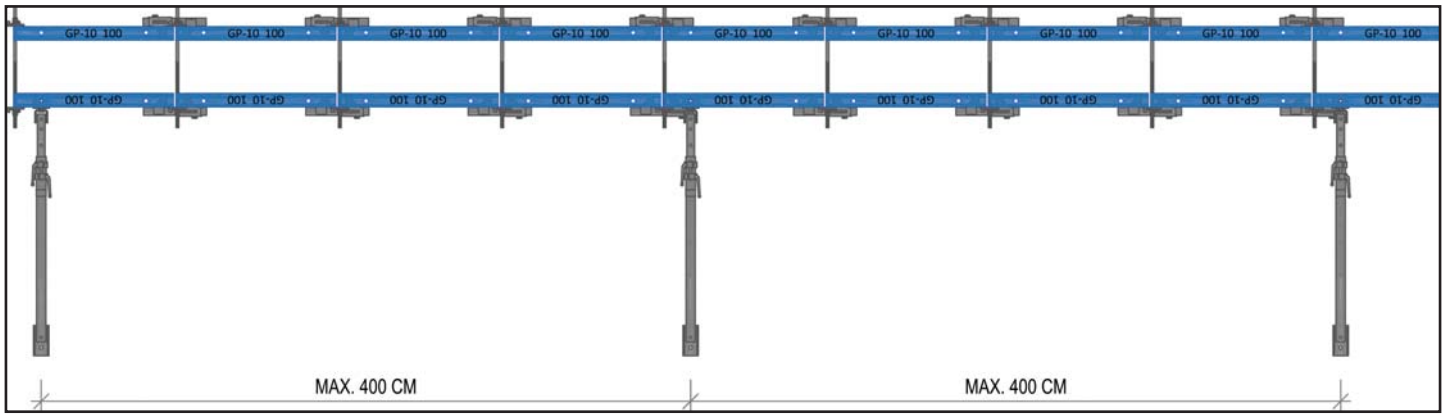
STEP 1:
Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.

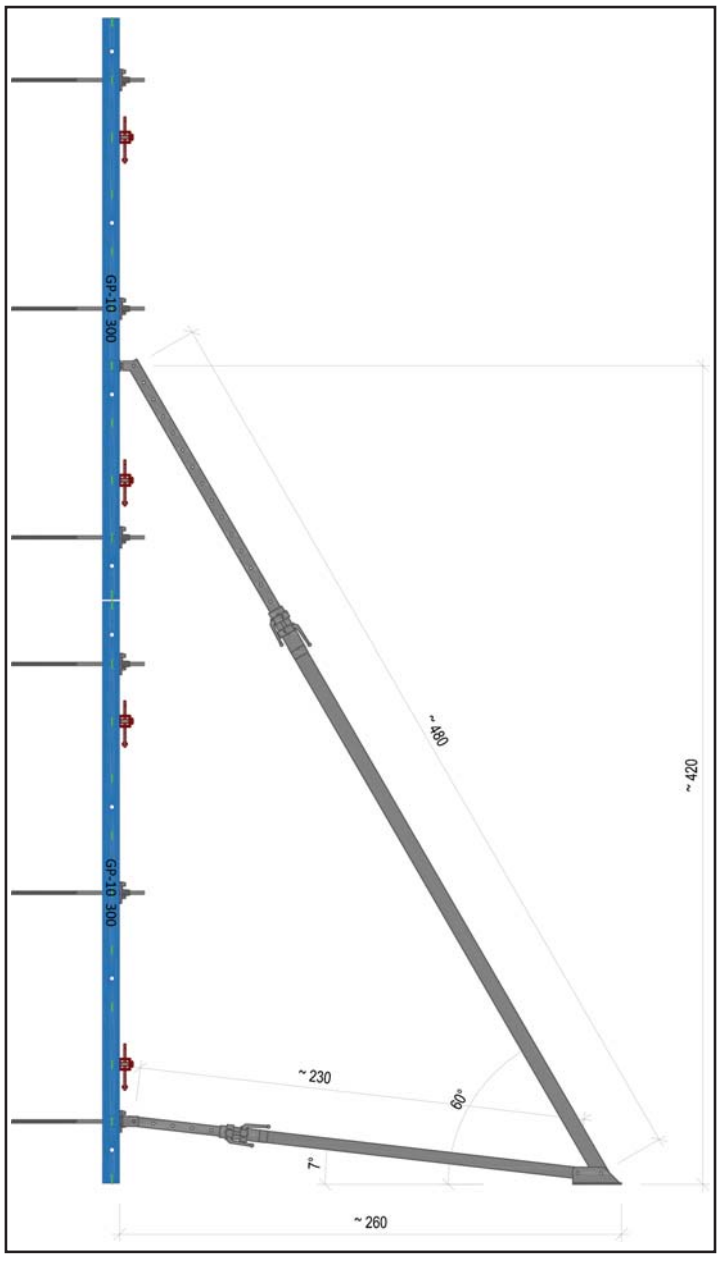


STEP 2:
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



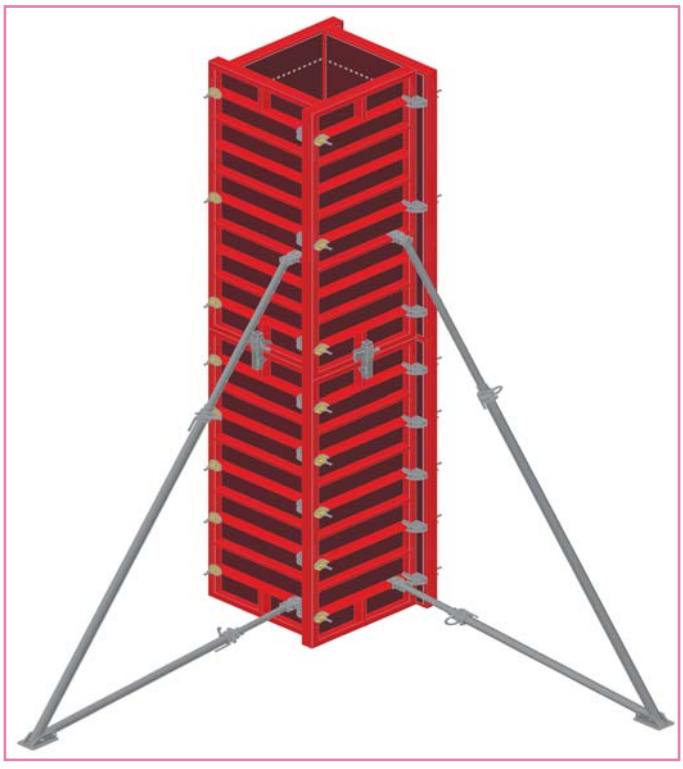
STEP 3:
Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.



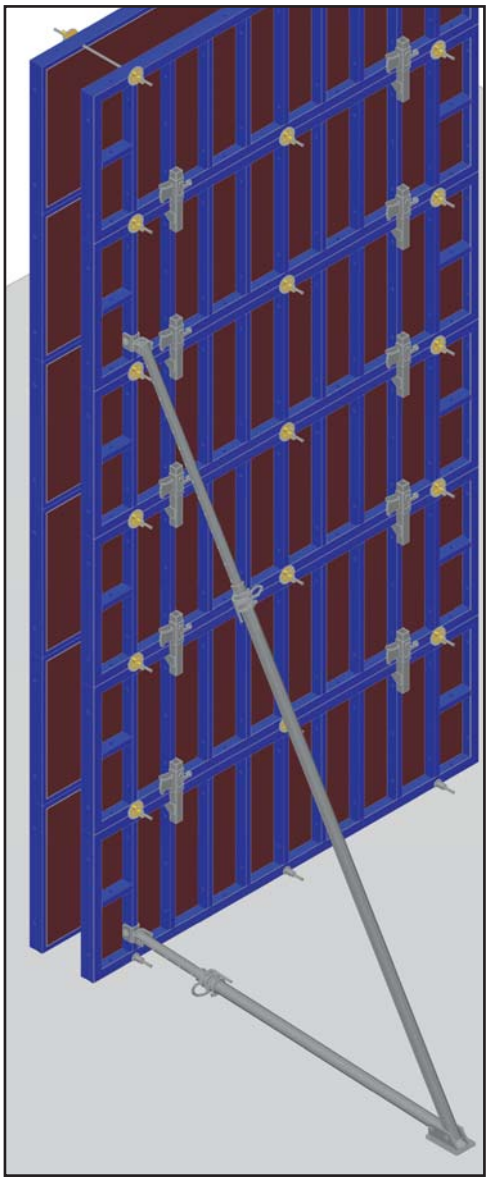


ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 202-203.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.



PUSH PULL PROP REG. 400-600 COMPL. DOUBLE - ART. 296011 - KG. 52,0



DESCRIPTION:

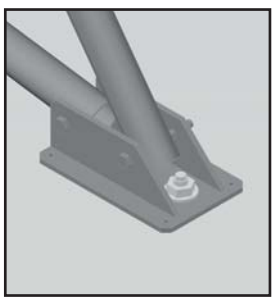
The vertical plumber serves to record the verticality of the formworks during assembly. Thanks to the jointed attachment, the formworks can be used both in a vertical position and in a horizontal position.

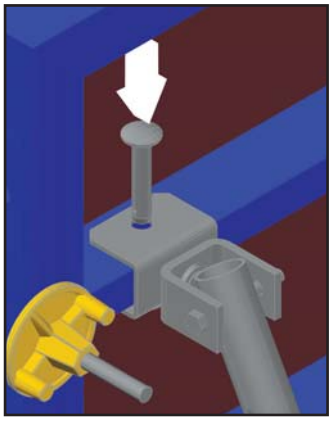
USED MATERIAL:

296011	Push pull prop reg. 400-600 compl. double	Pcs. 01
296024	Split pin	Pcs. 02

ATTENTION:

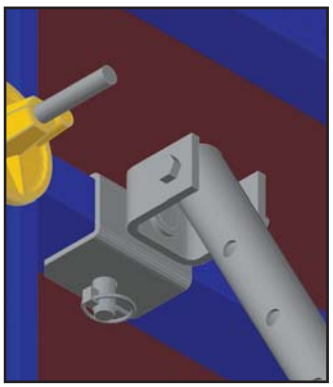
IT IS OBLIGATORY TO FIX THE PLUNGER TO THE FLOOR.
ANCHOR BY USER.





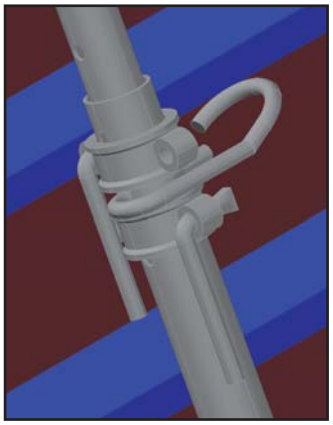
STEP 1:

Position the plunger by installing the double joint at the hole on the crosspieces of the panels. Insert the plug L.90 mm into the hole to secure the plunger to the panel.



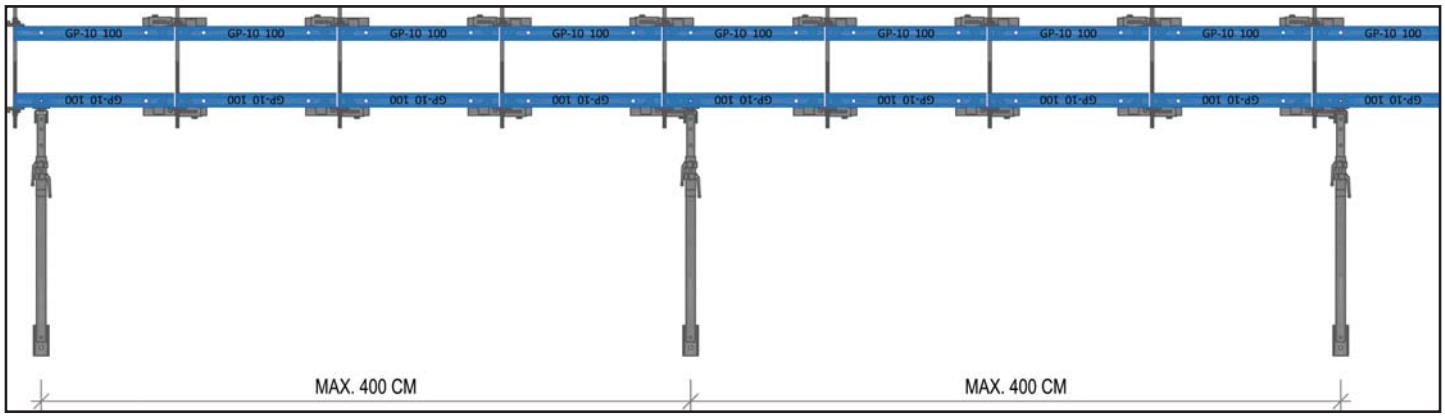
STEP 2:

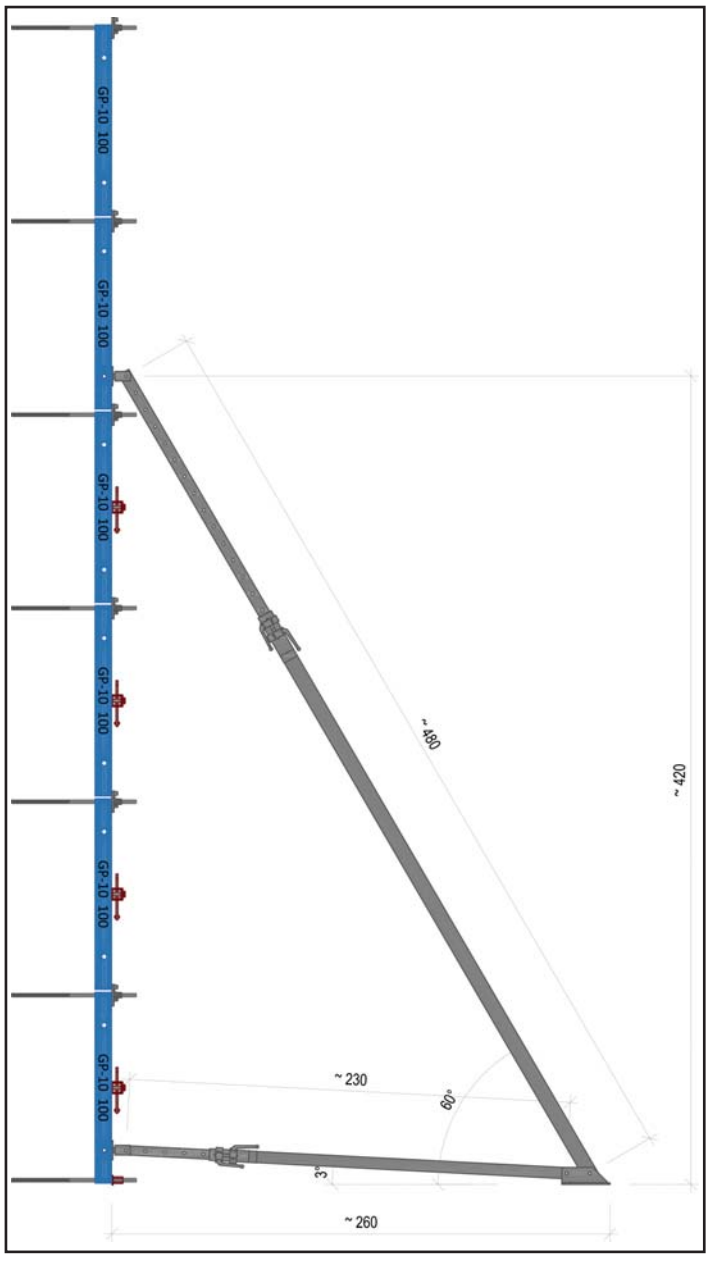
Install the safety pin to prevent the plug from slipping out of the hole and consequently disconnecting from the panel.



STEP 3:

Adjust the perpendicularity of the panel by working on the adjustment rings on the plunger.

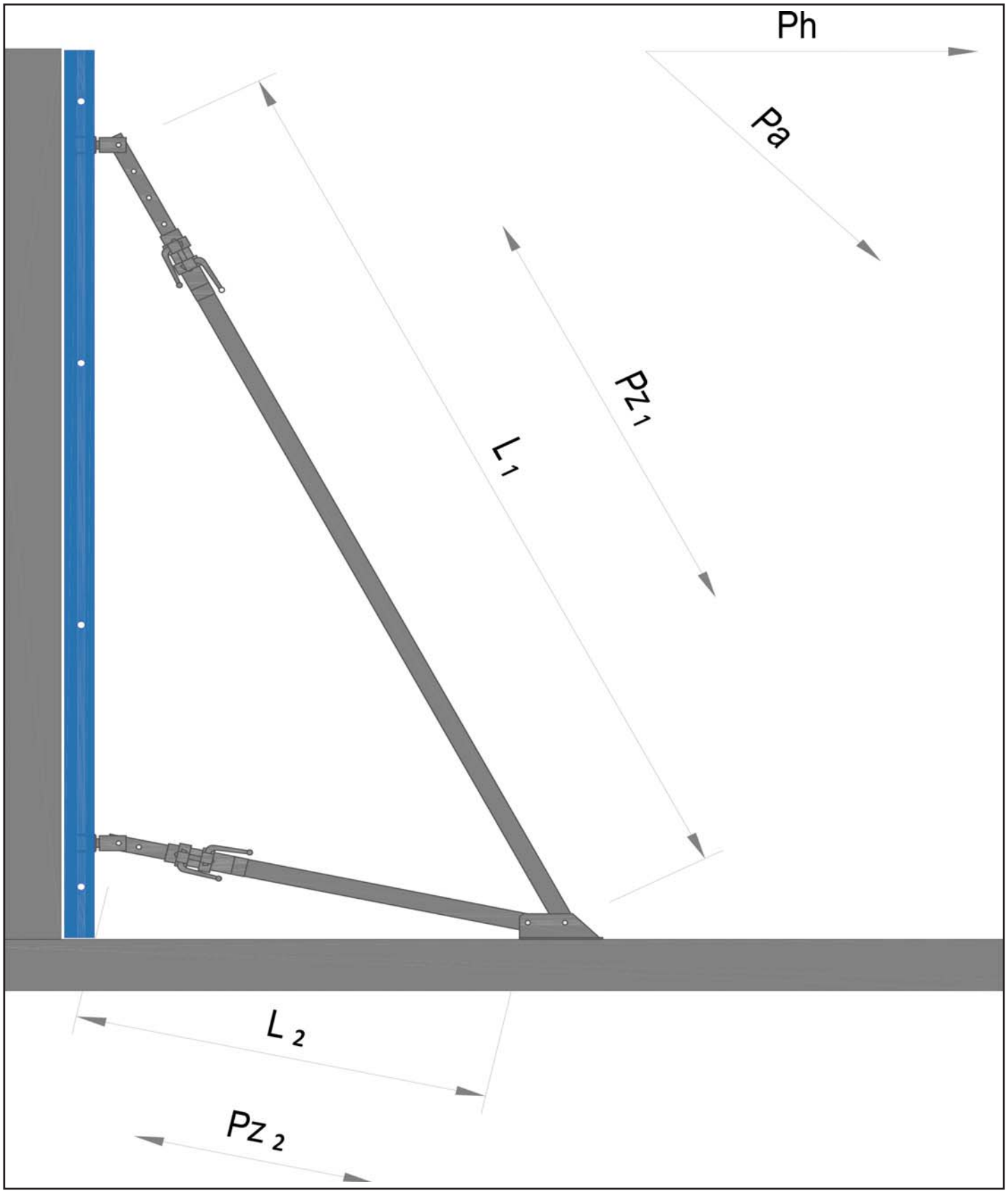




ATTENTION:
IT IS OBLIGATORY TO FOLLOW THE TABLE OF FLOWS TO PAGE 202-203.
GPRANDINA DECLINES EVERY RESPONSIBILITY IN CASE OF BREAKDOWN OR SAG CAUSED BY THE OVERLOADS OF THE PLUMBERS.

ATTENTION:
BEFORE INSTALLING THE PLUMBERS, CHECK THE PERFECT INTEGRITY OF EVERY COMPONENT.

TABLE OF FLOWING OF ADJUSTABLE PLUMBERS

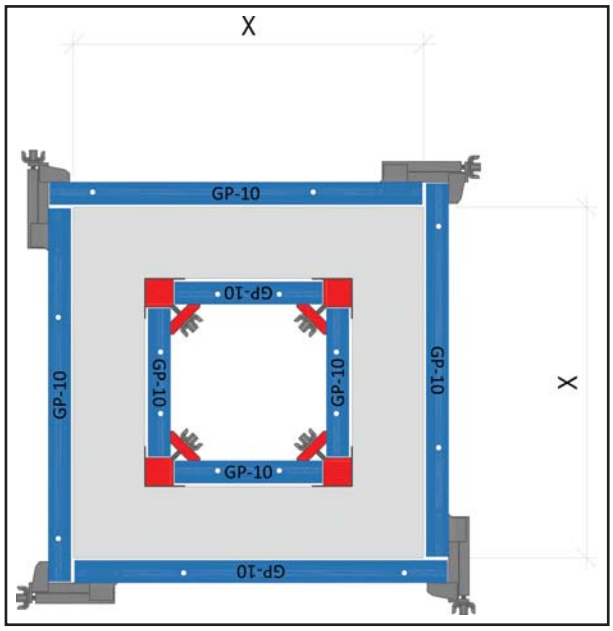


PUSH PULL PROP REG. 400-600 COMPL. DOUBLE								
UPPER ARM					LOWER ARM			
EXTENSION cm	COMPRESSION STRENGTH KN		TRACTION FORCE KN		EXTENSION cm	COMPRESSION STRENGTH KN		TRACTION FORCE KN
L	Ph	Pa	Pz		L	Ph	Pa	Pz
370	22,57	32,23	35,01		180	21,01	30,01	30,01
380	21,21	30,31	35,01		190	21,01	30,01	30,01
390	19,99	28,56	35,01		200	21,01	30,01	30,01
400	18,87	26,95	35,01		210	19,05	27,21	30,01
410	17,83	25,47	35,01		220	17,36	24,80	30,01
420	16,88	24,11	35,01		230	15,88	22,68	30,01
430	15,99	22,86	35,01		240	14,58	20,84	30,01
440	15,19	21,70	35,01		250	13,44	19,20	30,01
450	14,44	20,62	35,01		260	12,43	17,76	30,01
460	13,75	19,63	35,01		270	11,52	16,47	30,01
470	13,10	18,71	35,01		280	10,72	15,32	30,01
480	12,49	17,86	35,01		290	9,99	14,28	30,01
490	11,93	17,05	35,01		300	9,34	13,34	30,01
500	11,41	16,31	35,01					
510	10,92	15,60	35,01					
520	10,46	14,95	35,01					
530	10,02	14,33	35,01					
540	9,62	13,74	35,01					
550	9,24	13,20	35,01					
560	8,88	12,69	35,01					
570	8,54	12,20	35,01					
580	8,23	11,76	35,01					
590	7,92	11,33	35,01					
600	7,64	10,91	35,01					

6.0.0
PLINTHS AND CATCH BASINS

GENERAL PROVISION:
The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

PLINTH TYPE 1



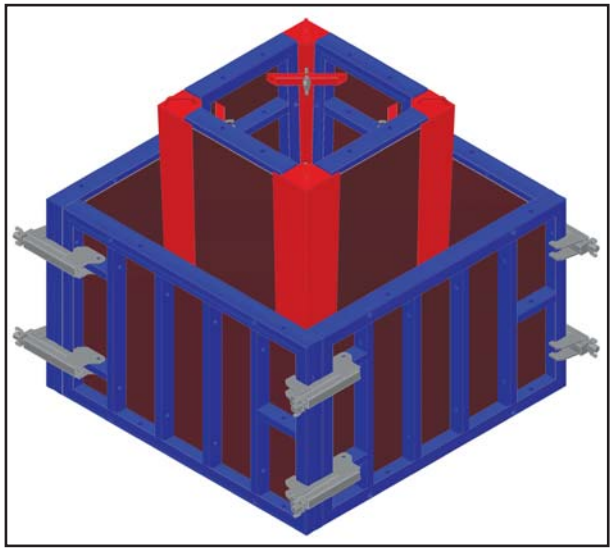
DESCRIPTION:

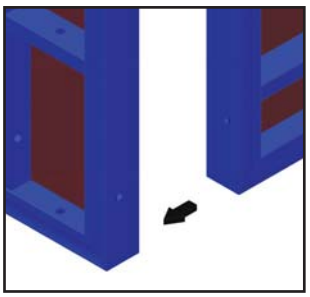
With this solution you can make plinths (with or without a catch basin) of fixed measurements.
The height of the plinth may vary depending on the size of the selected GP-10 panel.

USED MATERIAL:

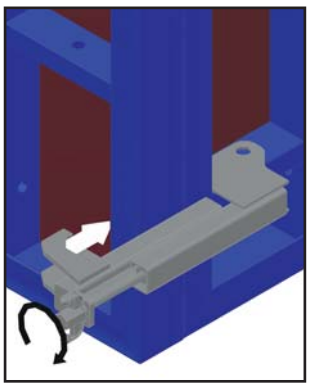
	Pannello GP-10	Pcs. 04
291042	Adjustable clamp for external corner	Pcs. 08

Size of panel GP-10 (cm)	X Size plinth (cm)
GP-10 300	290
GP-10 150	140
GP-10 270	260
GP-10 135	125
GP-10 330	320
GP-10 165	155

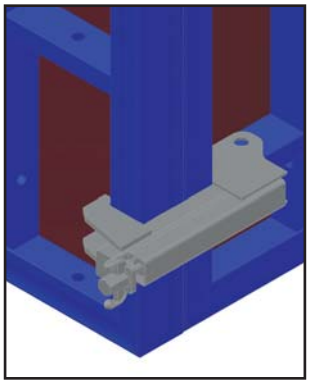




STEP 1:
Place n. 2 GP-10 panels perpendicular to each other. Approach the two formworks as shown in the picture.

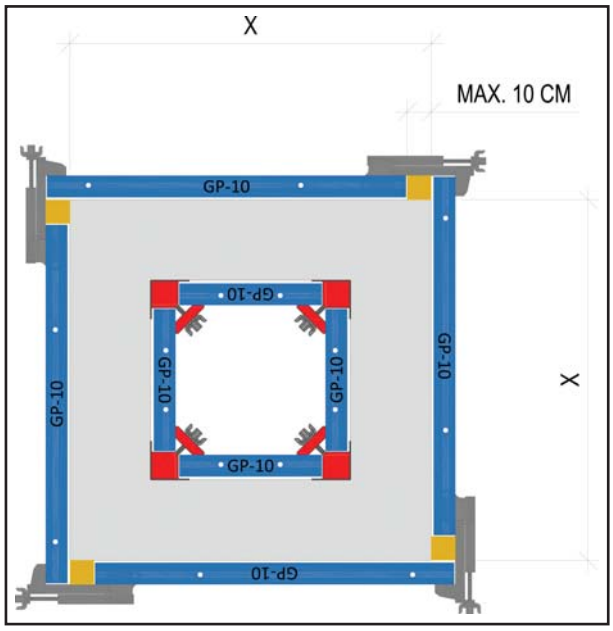


STEP 2:
Place the previously open clamp at the reinforcement bars.

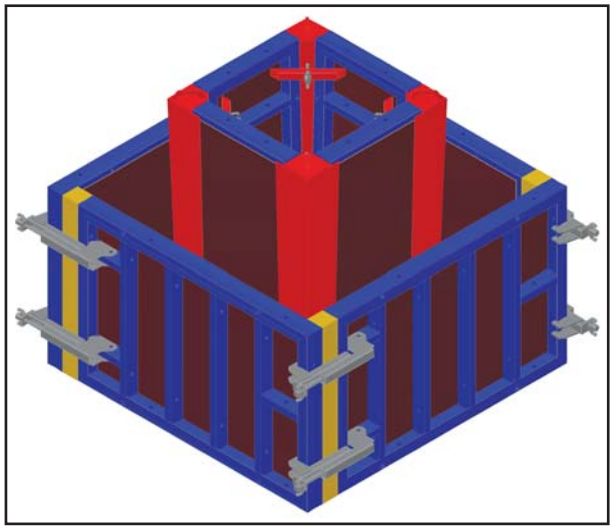


STEP 3:
Screw the clamping bar of the outer corner clamp and secure with a lever.

PLINTH TYPE 2



Size of panel GP-10 (cm)	X Size plinth (cm)
GP-10 300	300
GP-10 150	150
GP-10 270	270
GP-10 135	135
GP-10 330	330
GP-10 165	165

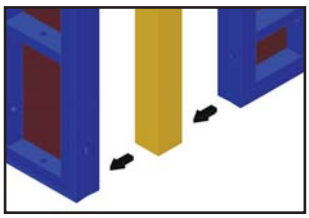


DESCRIPTION:

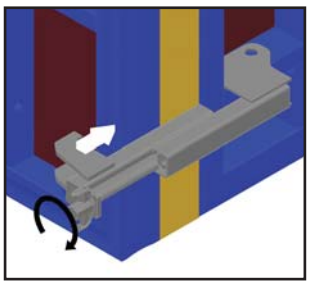
With this solution you can make plinths (with or without a catch basin) of fixed measurements.
The height of the plinth may vary depending on the size of the selected GP-10 panel.

USED MATERIAL:

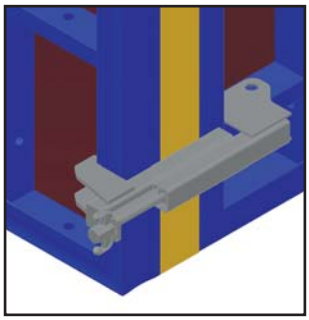
	Panel GP-10	Pcs. 04
291042	Adjustable clamp for external corner	Pcs. 08



STEP 1:
Place n. 2 GP-10 panels and n. 1 wooden wall perpendicular to each other.
Bring the elements together as shown in the picture.



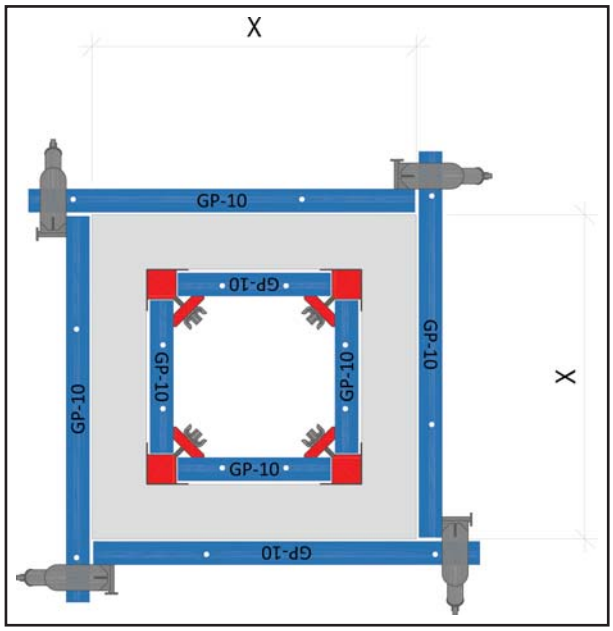
STEP 2:
Place the previously open clamp at the reinforcement bars.



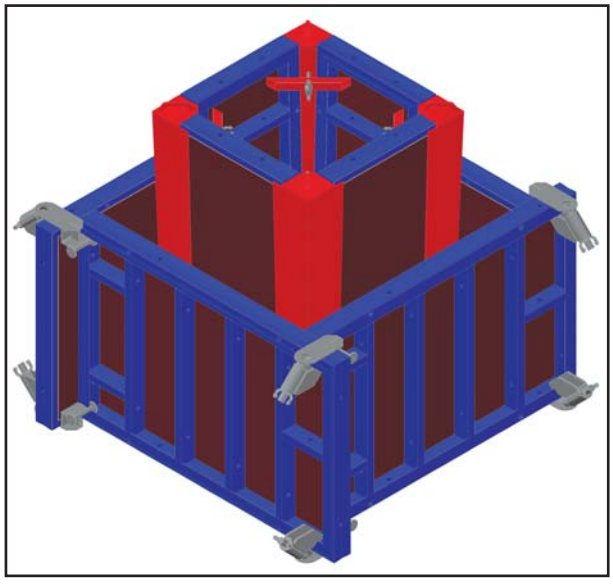
STEP 3:
Screw the clamping bar of the outer corner clamp and secure with a lever.

ATTENTION:
GPrandina srl declines all responsibility in the event that wood in bad condition or in the presence of evident signs of damage is used.
The user is obliged to use wood in good condition.

PLINTH TYPE 3



Size of panel GP-10 (cm)	X Size plinth (cm)
GP-10 300	0 - 275
GP-10 150	0 - 125
GP-10 270	0 - 245
GP-10 135	0 - 110
GP-10 330	0 - 305
GP-10 165	0 - 140

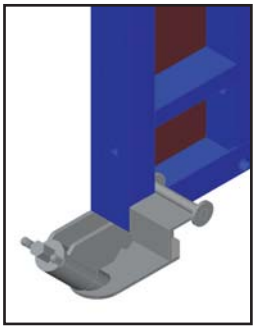


DESCRIPTION:

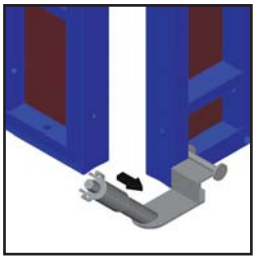
With this solution you can make plinths (with or without a catch basin) of fixed measurements.
The height of the plinth may vary depending on the size of the selected GP-10 panel.

USED MATERIAL:

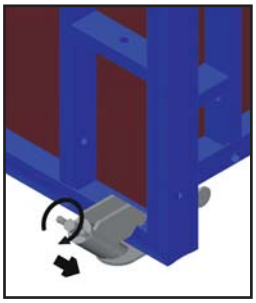
	Pannello GP-10	Pcs. 04
291172	External clamp for plinth	Pcs. 08



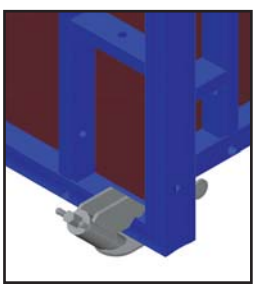
STEP 1:
Place n. 1 GP-10 panel and n. 1 external plinth clamp: position the latter inserting the special insert into the GP-10 profile.
(see figure alongside).



STEP 2:
After opening the external plinth clamp, slide the GP-10 panel over the plate.

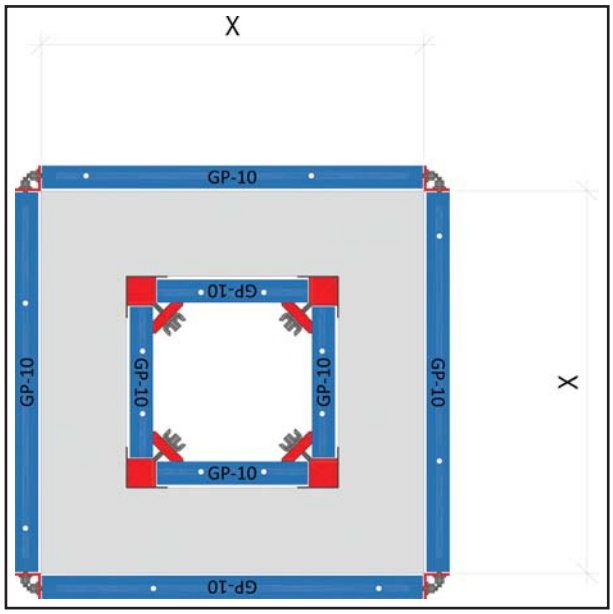


STEP 3:
Close the clamp by tightening the fixing screw.

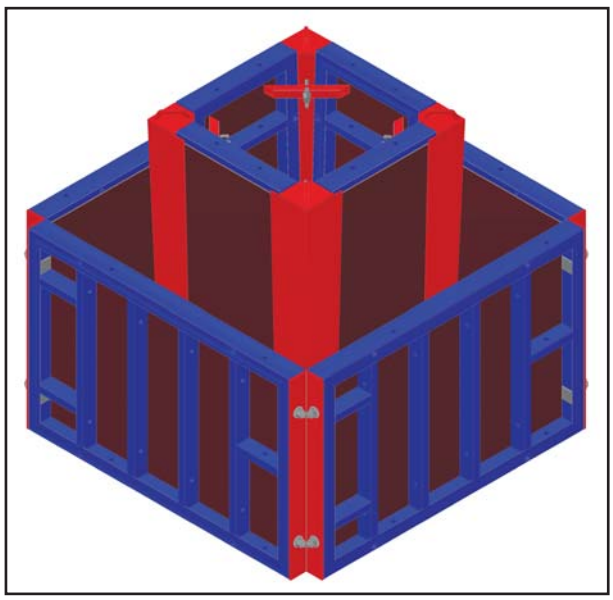


STEP 4:
Screw the clamping bar of the external plinth clamp and secure with a lever.

PLINTH TYPE 4



Size of panel GP-10 (cm)	X Size plinth (cm)
GP-10 300	300
GP-10 150	150
GP-10 270	270
GP-10 135	135
GP-10 330	330
GP-10 165	165

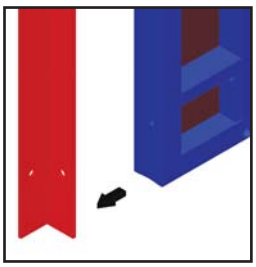


DESCRIPTION:

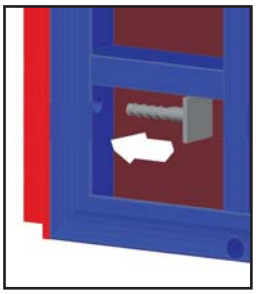
With this solution you can make plinths (with or without a catch basin) of fixed measurements.
The height of the plinth may vary depending on the size of the selected GP-10 panel.

USED MATERIAL:

	Pannello GP-10	Pcs. 04
222701	External corner 10x10 H100	Pcs. 04
291183	Small fix pin L.90 mm	Pcs. 16
291211	Nut for pin	Pcs. 16

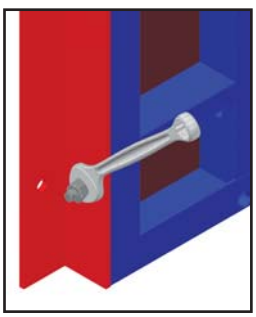


STEP 1:
Place N°1 panels GP-10 and N°1 external corner 10x10 H100 perpendicular to each other.
Bring the elements together as shown. (see figure alongside)

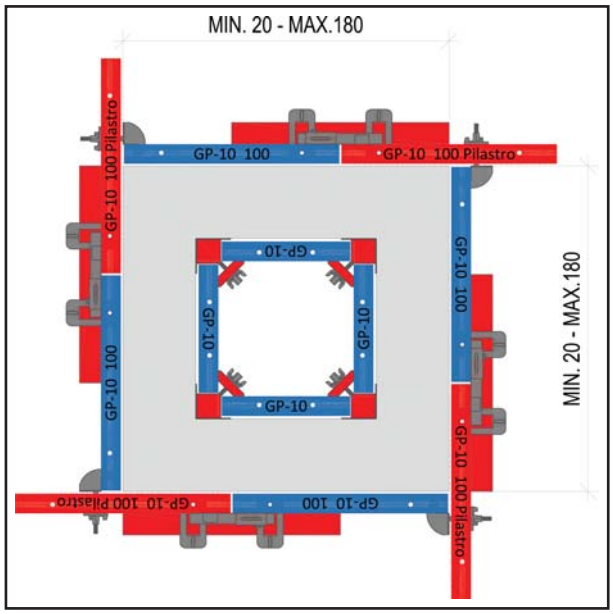


STEP 2:
Insert the fixed plug L. 90 mm respecting the direction shown in the image alongside.

STEP 3:
Tighten the M30 nut and fix everything with the M30 key.
Repeat the operation in all the holes to ensure perfect sealing of the corner.



PLINTH TYPE 5

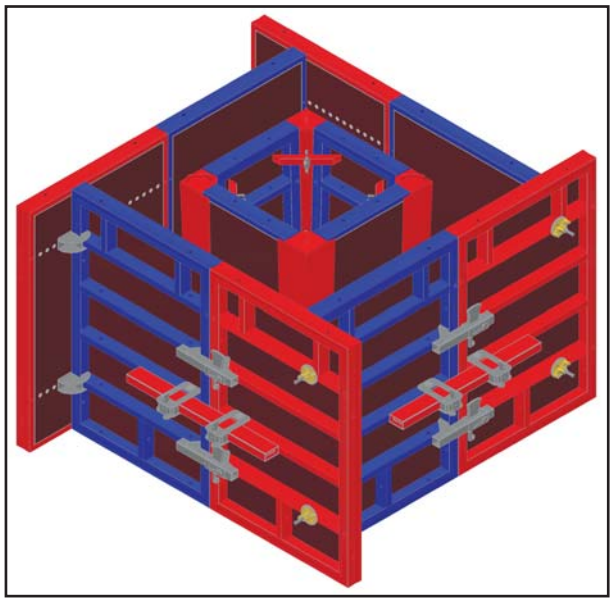


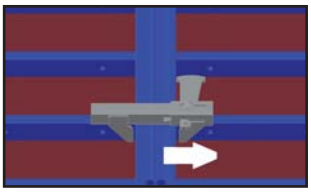
DESCRIPTION:

With this solution you can make plinths (with or without a glass) of different measurements: the size can change from a minimum of 20 cm. up to a maximum of 180 cm.
The height of the plinth may vary depending on the size of the selected GP-10 panel.

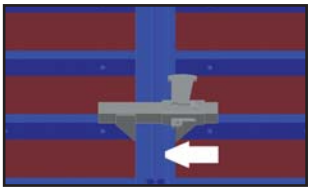
USED MATERIAL:

	Panel GP-10	Pcs. 04
	Panel GP-10 Pillar forated	Pcs. 04
291012	Alignement clamp	Pcs. 08
291102	Tie clamp complete	Pcs. 08
291142	Alignement bracket	Pcs. 08
291143	Alignement pipe cm. 100 GP-10	Pcs. 04

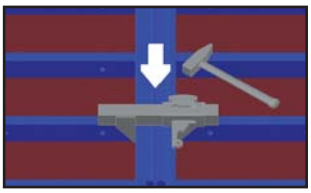




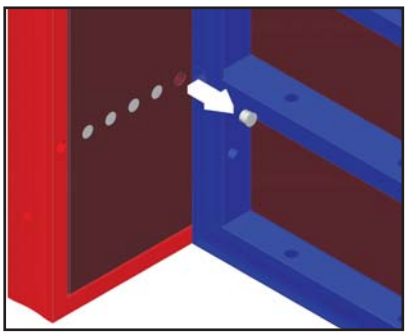
STEP 1:
Open the GP-10 alignment clamp by sliding the wedge up and moving the jaw box to the right.



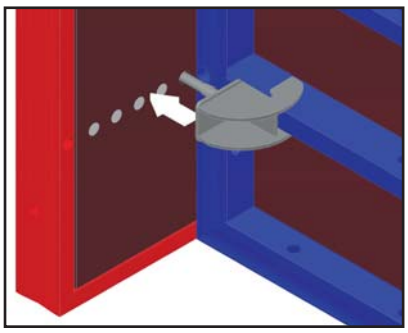
STEP 2:
Position the aligning clamp at the panel reinforcement bars. Recall the tightening box to the left.
Then slide the wedge downwards.



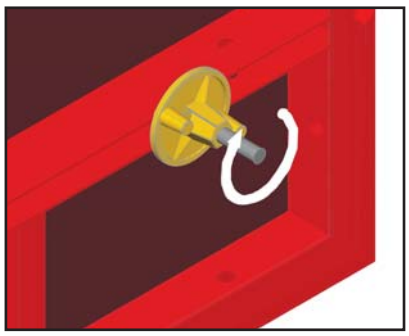
STEP 3:
Tighten the wedge with the hammer making sure that:
- the two panels match perfectly
- the fixing plates match the profile of the GPrandina “T2096” profile.
See picture.



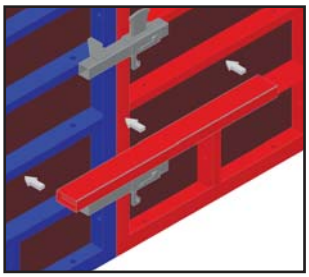
STEP 1:
Remove the PVC plug at the required hole.



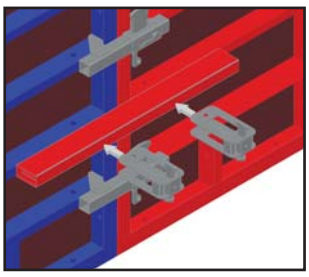
STEP 2:
Insert the pillar clamp in correspondence with the hole on the multilayer making sure that the plates match perfectly with the profile GPrandina.



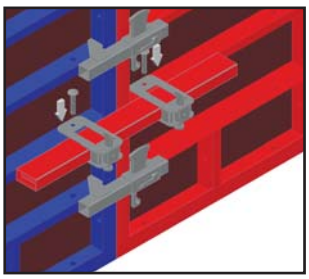
STEP 3:
Screw the DW15 nut plate and tighten with a lever.



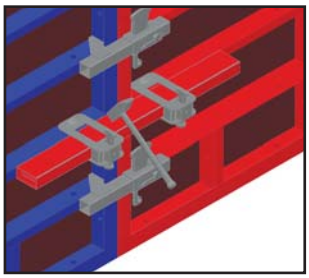
STEP 1:
Place n. 1 alignment tube cm. 100 GP-10 in correspondence of reinforcement crosspieces.



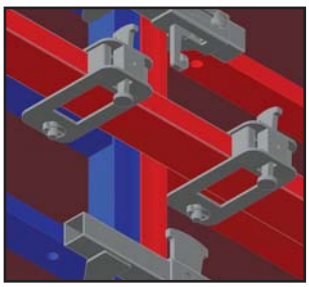
STEP 2:
Place n. 2 aligning brackets in correspondence of the holes on the reinforcing crosspieces.



STEP 3:
Insert the L. 90 MM plug in correspondence with the hole in the aligning bracket.

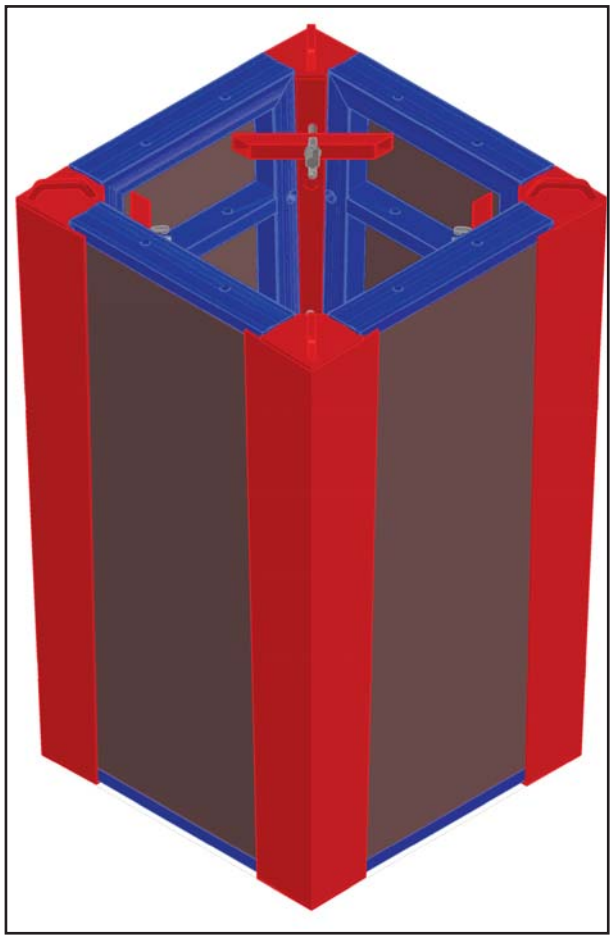


STEP 4:
Fix the wedge with a hammer.



STEP 5:
Fit the safety pin on both plugs L90 mm

CATCH BASIN TYPE 1

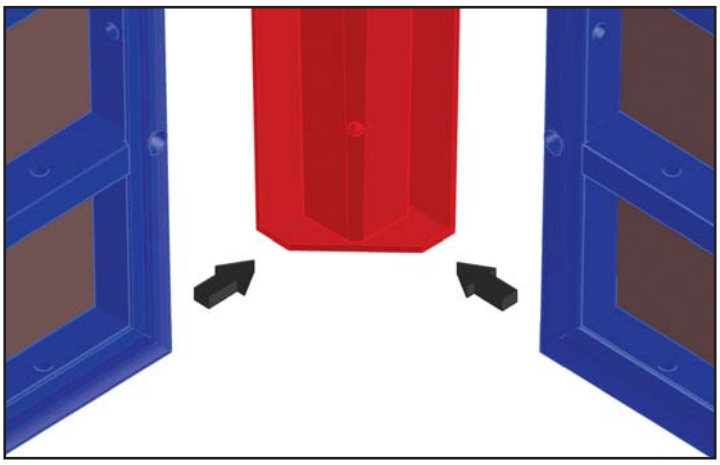


DESCRIPTION:

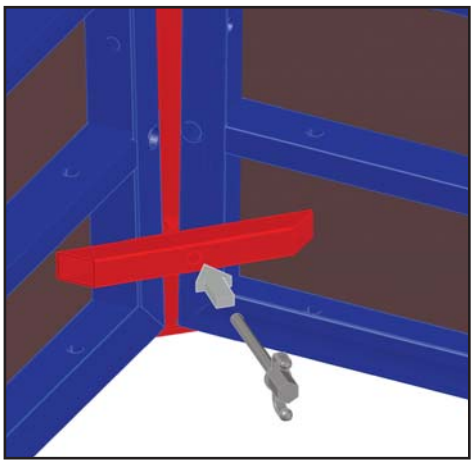
With this solution on can compose catch basins of different sizes. Thanks to its conformation (it presents 5 cm of conicity on a height of 150 cm) this angle ensures the disarming of the entire casket block with the aid of the crane.

USED MATERIAL:

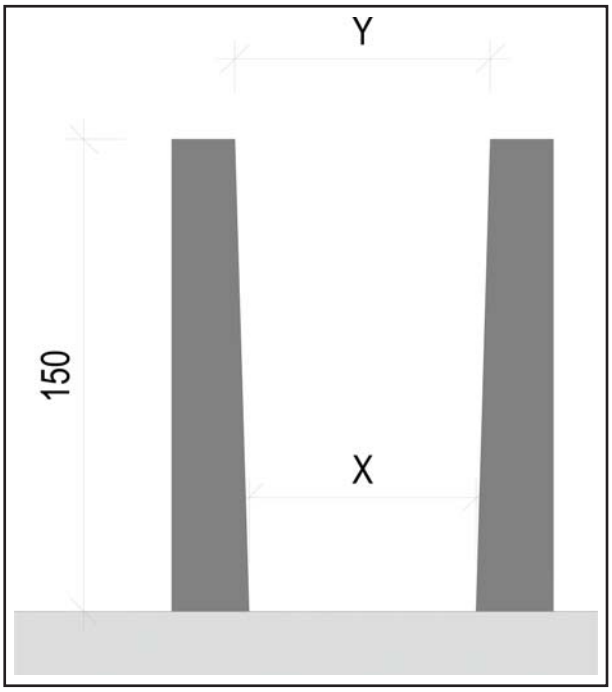
	Panel GP-10	Pcs. 04
223000	Conical corner for drum H150	Pcs. 04



STEP 1:
After placing a tapered conical corner, position n. 2 GP-10 panels in the housing adjacent to the central corner core.



STEP 2:
At the lower hole in the corner, position the connecting bar by screwing the threaded bar.



DIMENSION CATCH BASIN LOWER PART :

To dimension the lower part of the catch basin, perform this simple operation:

X = (10,5x2) + GP

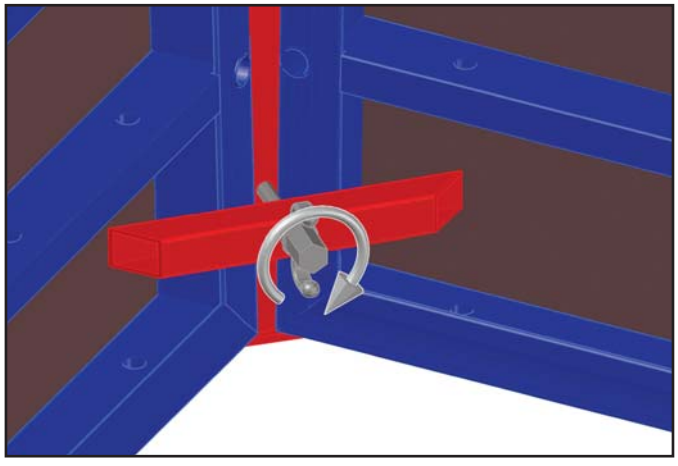
X= measure finished lower part of the catch basin
10,5= lower measurement of the bevel angle of the catch basin
GP= GP-10 panel size

DIMENSION CATCH BASIN UPPER PART :

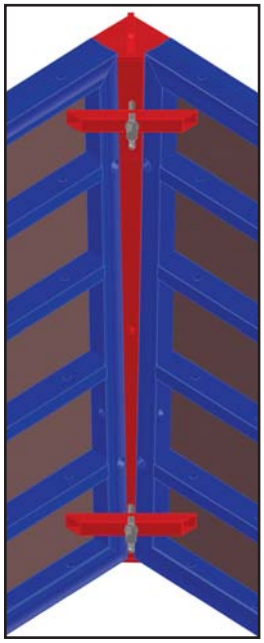
To dimension the lower part of the catch basin, perform this simple operation:

Y = (15,5x2) + GP

Y= measure finished upper part of the catch basin
15,5= upper measurement of the bevel angle of the catch basin
GP= GP-10 panel size

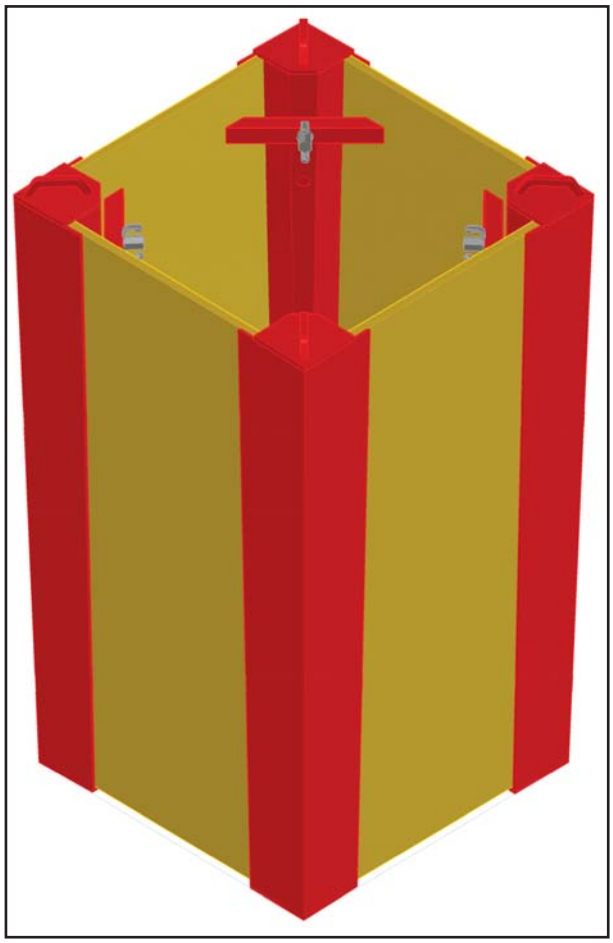


STEP 3:
Tighten the threaded bar using a lever or a hammer.



STEP 4:
To complete the assembly:
- install n. 2 connection bars;
- repeat the operation on all four corners.

CATCH BASIN TYPE 2

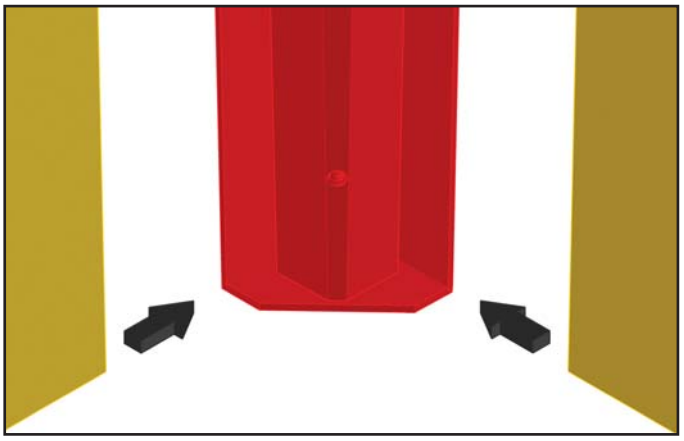


DESCRIPTION:

With this solution on can compose catch basins of different sizes. Thanks to its conformation (it presents 5 cm of conicity on a height of 150 cm) this angle ensures the disarming of the entire casket block with the aid of the crane.

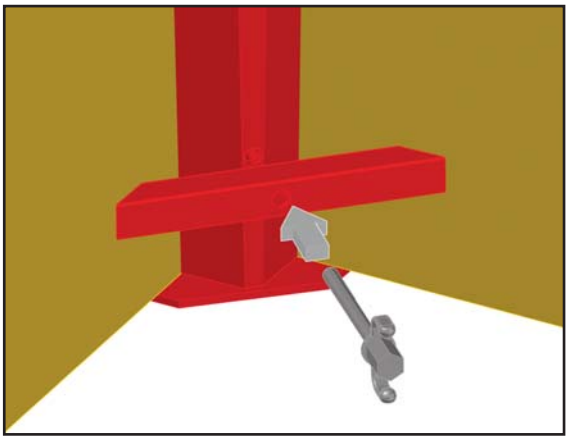
USED MATERIAL:

	3 layers panel	Pcs. 04
223000	Conical corner for drum H150	Pcs. 04



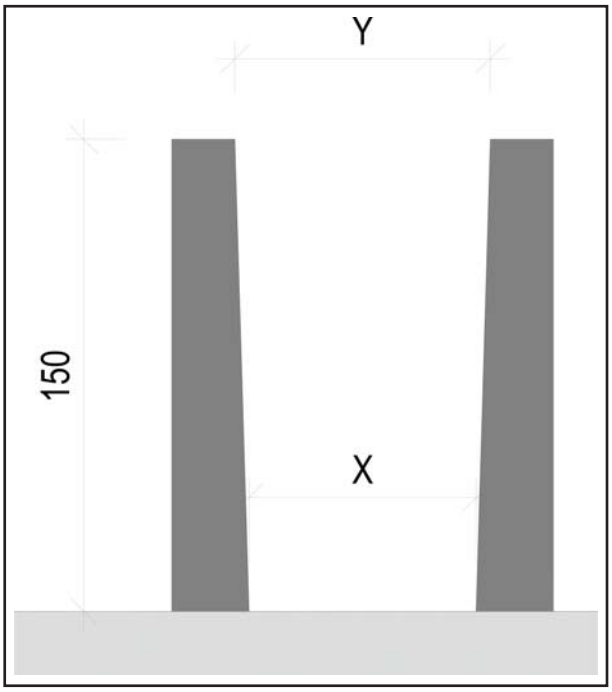
STEP 1:

After placing a tapered conical corner, position n. 2 GP-10 panels in the housing adjacent to the central corner core.



STEP 2:

At the lower hole in the corner, position the connecting bar by screwing the threaded rod.



DIMENSION CATCH BASIN LOWER PART :

To dimension the lower part of the catch basin, perform this simple operation:

X = (10,5x2) + PT27

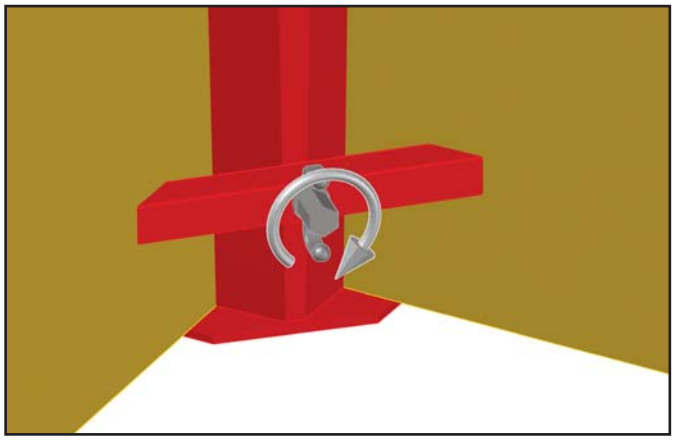
X= measure finished lower part of the catch basin
10,5= lower measurement of the bevel angle of the catch basin
PT27= 3 layers panel th. 27 mm

DIMENSION CATCH BASIN UPPER PART :

To dimension the lower part of the catch basin, perform this simple operation:

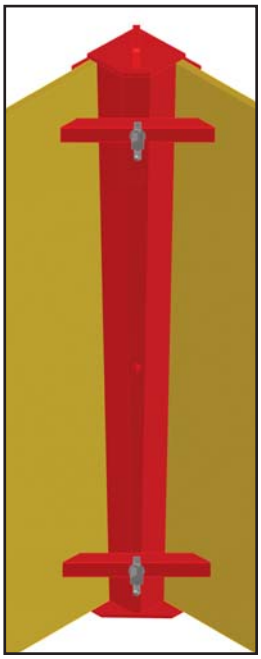
Y = (15,5x2) + PT27

Y= measure finished upper part of the catch basin
15,5= upper measurement of the bevel angle of the catch basin
PT27= 3 layers panel th. 27 mm



STEP 3:

Tighten the threaded rod, using a lever or a hammer.



STEP 4:

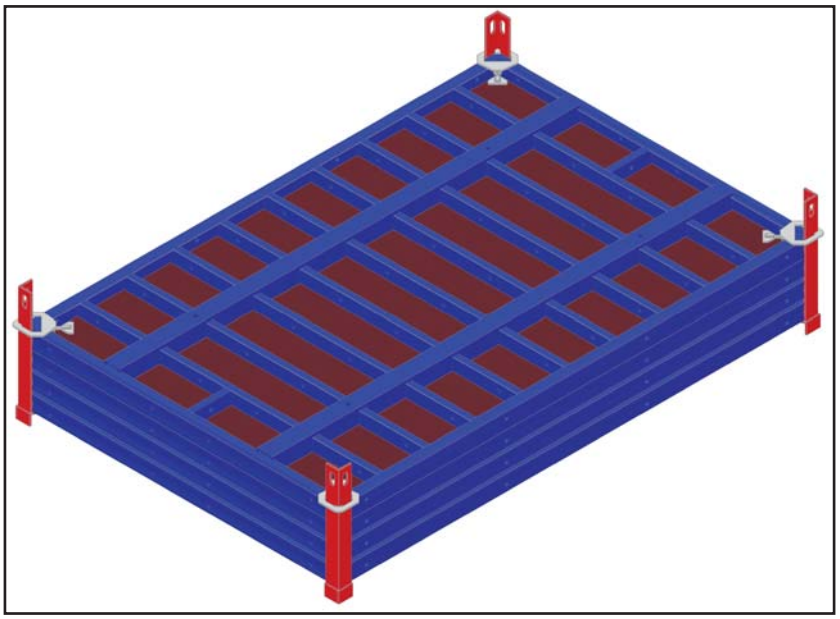
To complete the assembly:
- install n. 2 connection bars;
- repeat the operation on all 4 corners.

7.0.0
STORAGE

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

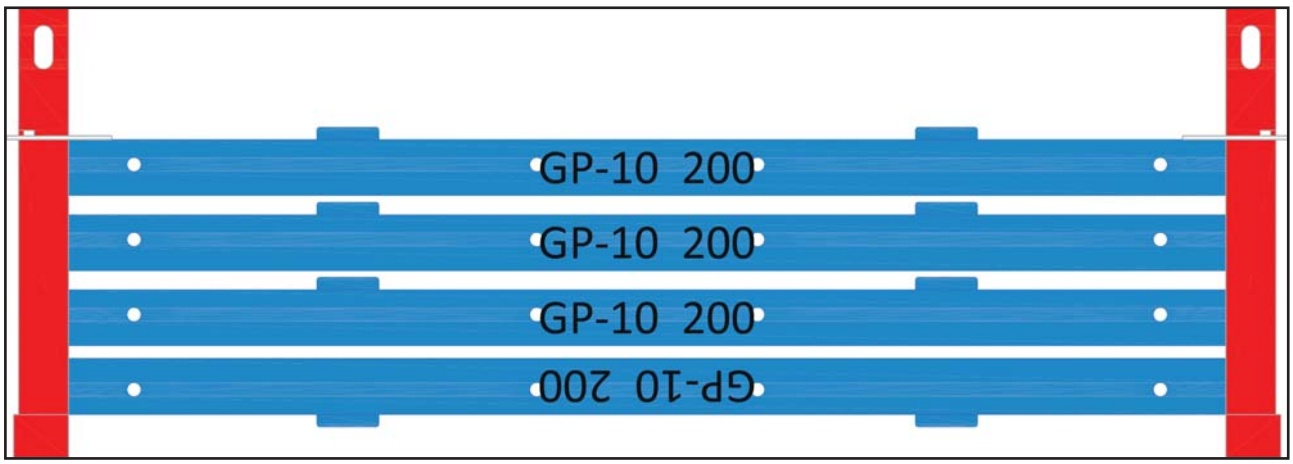
STORAGE
CONTAINERS FOR PANELS 200



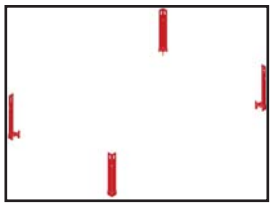
DESCRIPTION:
Thanks to the container for panels, panels of the same size or different sizes can be packed.
This accessory guarantees the safe handling of panels on site, in storage and during transport.

N.B.: **follow the examples at the bottom of the page for the correct use of the panel transport upright.**

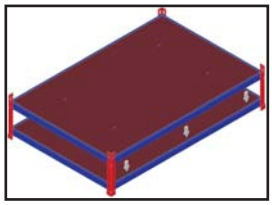
USED MATERIAL:
296051 Panels transport ring up 200 Pcs. 01



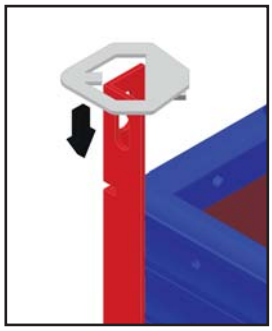
ATTENTION:
BEFORE USING THE TRANSPORTATION PANELS, CHECK THE STATUS OF THE COMPONENTS.



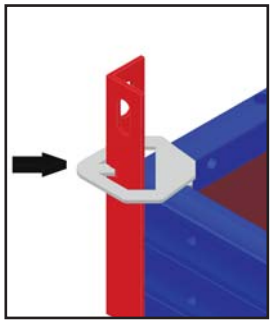
STEP 1:
Prepare n. 4 legs equivalent to the panel to be loaded.



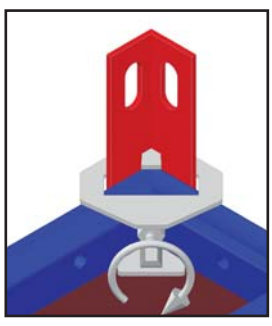
STEP 2:
Place the panels with the multilayer upwards.



STEP 3:
After placing n. 4/7/10 panels mount the bracket as shown in the adjacent figure.



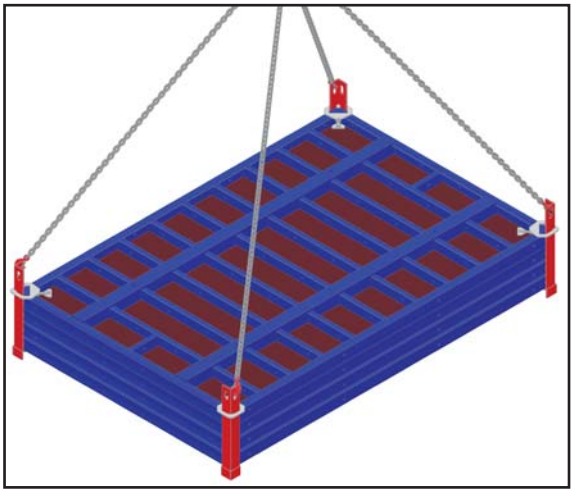
STEP 4:
Insert the pin of the bracket inside the slit in the leg.



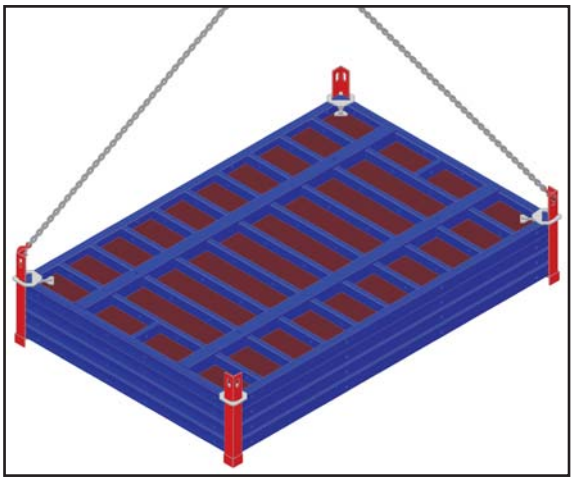
STEP 5:
Fix the bracket + leg assembly with the safety screw.

LIFTING:

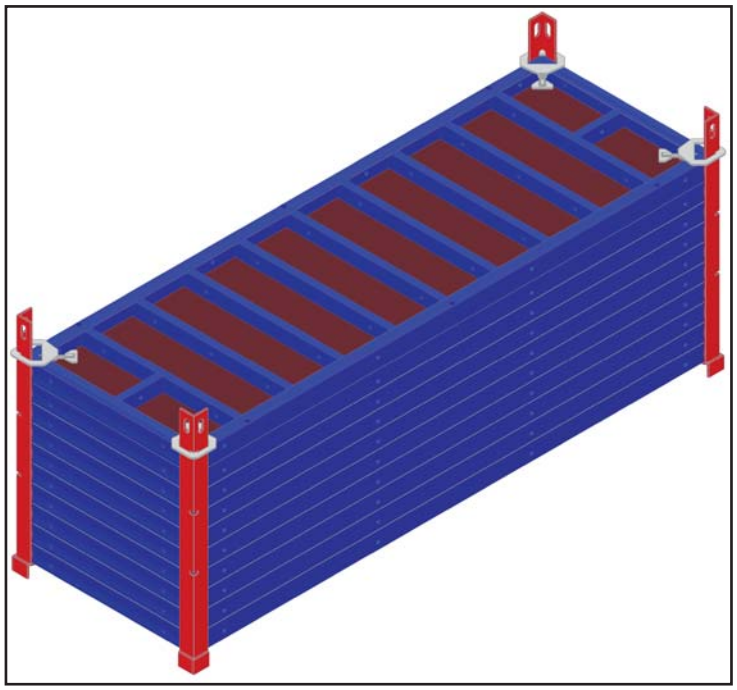
Lifting type “A”: n. 4 chains.



Lifting type “B”: n. 2 chains.



STORAGE
CONTAINERS FOR PANELS



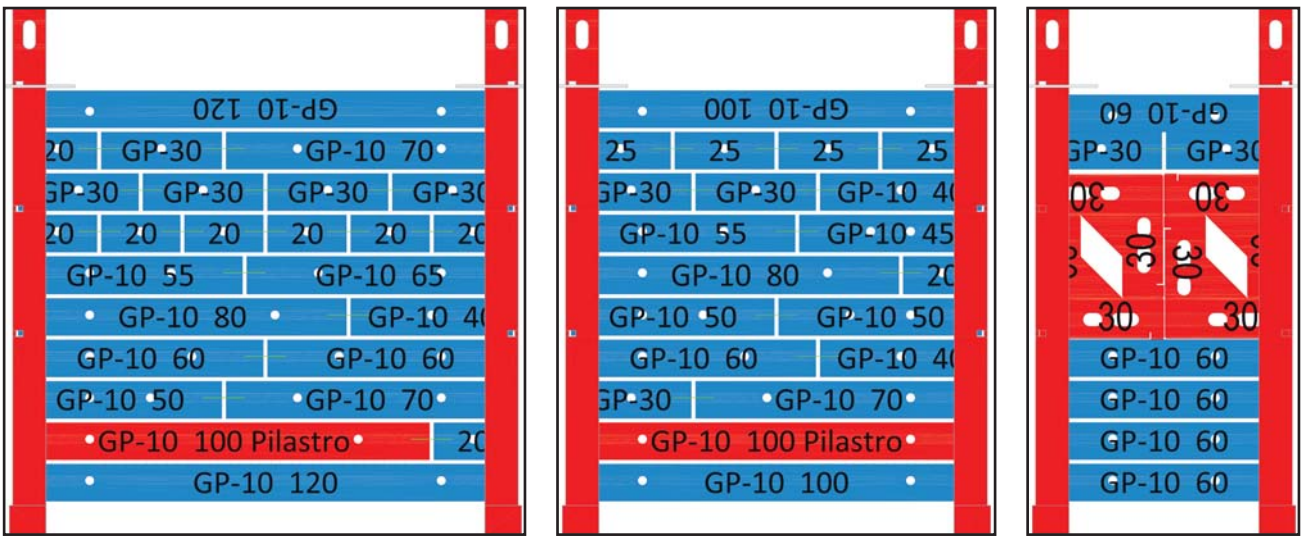
DESCRIPTION:

Thanks to the container for panels, panels of the same size or different sizes can be packed.
This accessory guarantees the safe handling of panels on site, in storage and during transport.

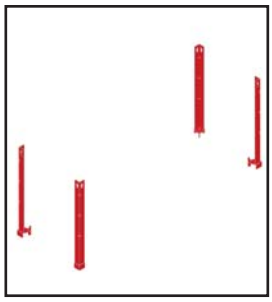
N.B.: follow the examples at the bottom of the page for the correct use of the panel transport upright.

USED MATERIAL:

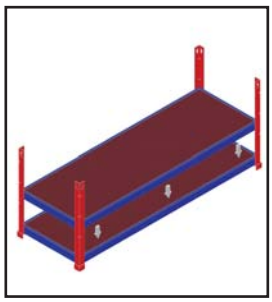
296052	Panels transport ring up	Pcs. 01



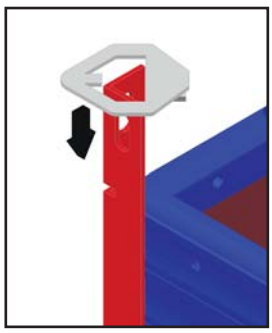
ATTENTION:
BEFORE USING THE TRANSPORTATION PANELS, CHECK THE STATUS OF THE COMPONENTS.



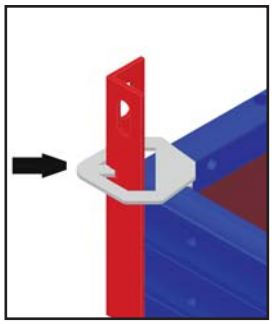
STEP 1:
Prepare n. 4 legs equivalent to the panel to be loaded.



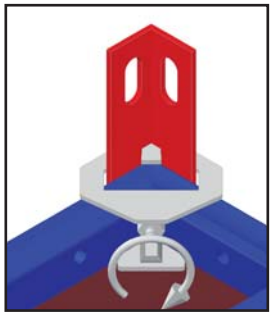
STEP 2:
Place the panels with the multilayer upwards.



STEP 3:
After placing n. 4/7/10 panels mount the bracket as shown in the adjacent figure.



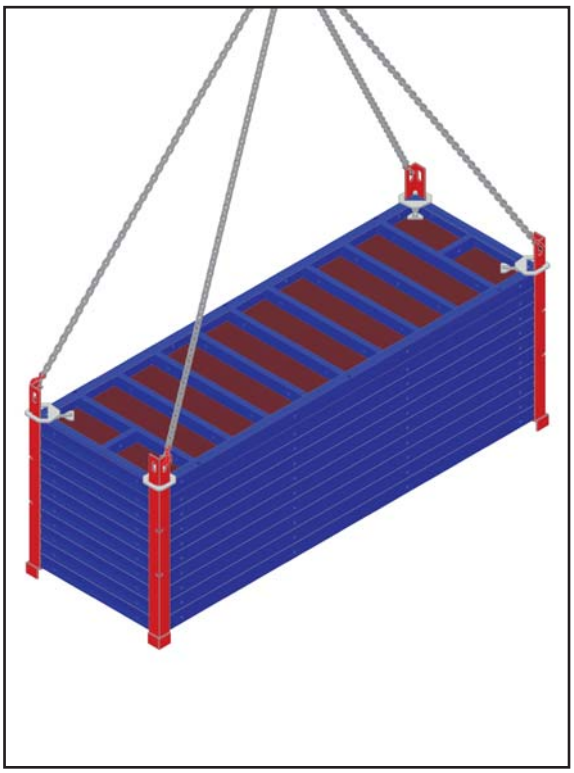
STEP 4:
Insert the pin of the bracket inside the slit in the leg.



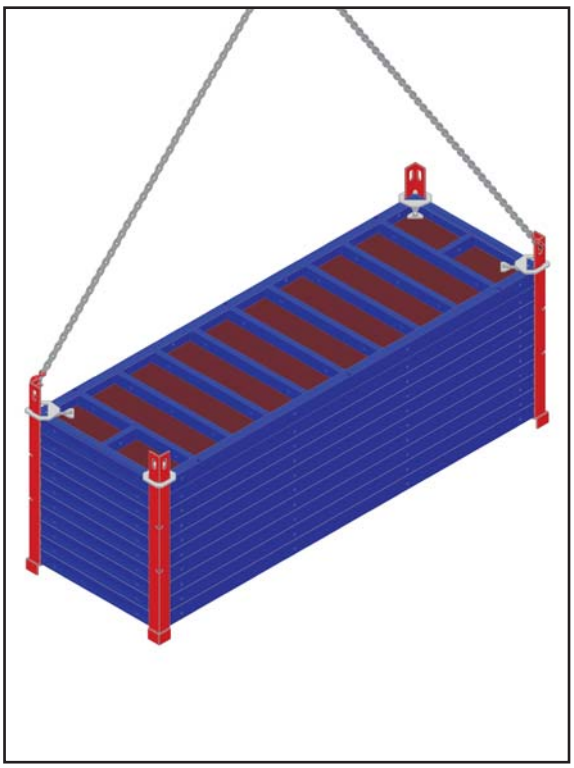
STEP 5:
Fix the bracket + leg assembly with the safety screw.

LIFTING:

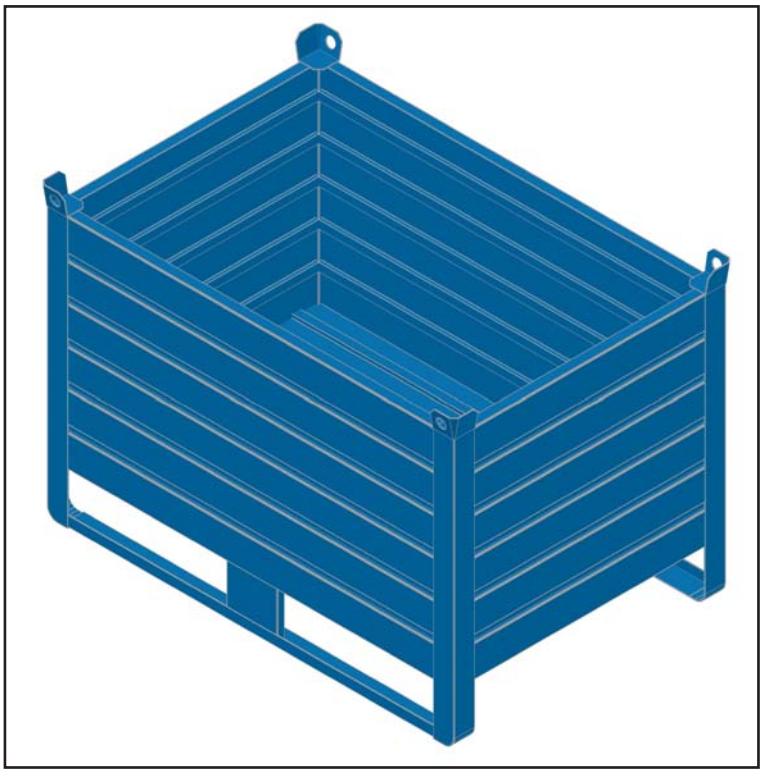
Lifting type “A”: n. 4 chains.



Lifting type “B”: n. 2 chains.



STORAGE
CONTAINERS FOR ACCESSORIES



DESCRIPTION:

Thanks to the accessory container, all the accessories needed to mount the formworks can be stored: clamps, DW bars, nut plates, etc.

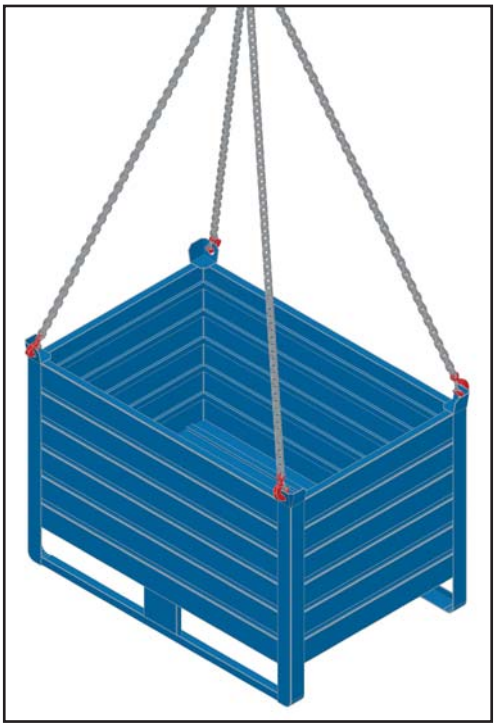
N.B.: **The containers for accessories can be stacked.**

USED MATERIAL:

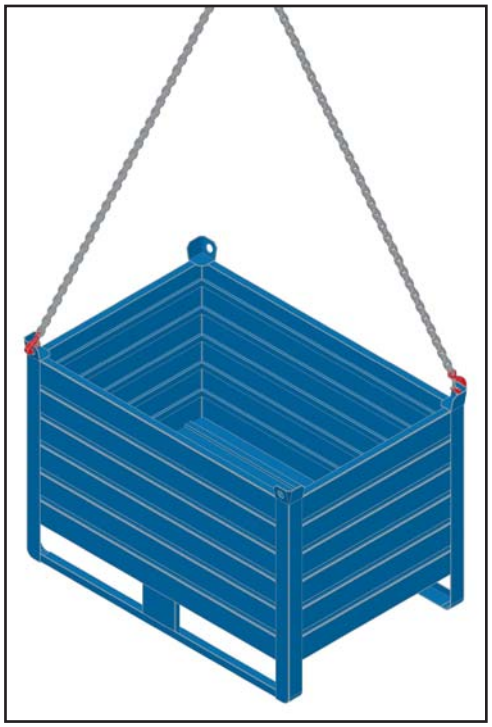
296053 Fitting box 120x80 Pcs. 01

LIFTING:

Lifting type “A”: n. 4 chains.



Lifting type “B”: n. 2 chains.



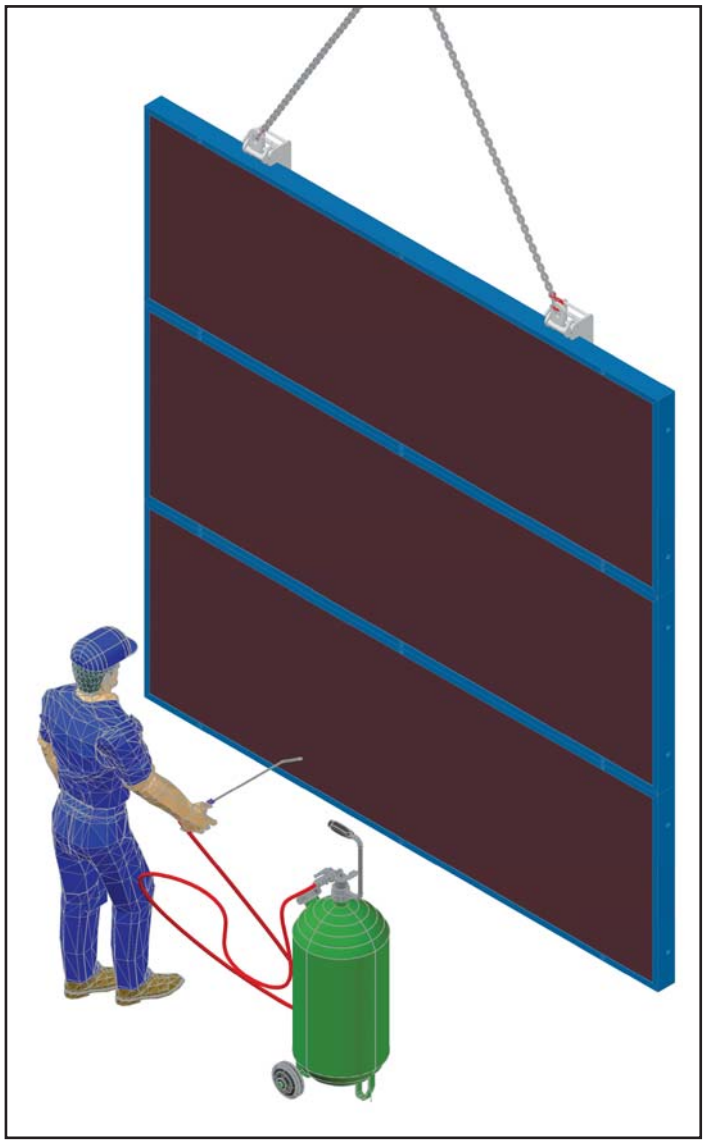
MAX LOAD:
1000 KG

8.0.0
MAINTENANCE AND CLEANING

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

MAINTENANCE AND CLEANING



DESCRIPTION:

Before each casting and before storing the formworks, apply a thin layer of oil to dismount on the multilayer and on the metal frame.
This oil prevents and facilitates the dismantling of formworks.
We recommend applying the oil with a spray pump.

USED MATERIAL:

880121 Disarming oil Pcs. 01

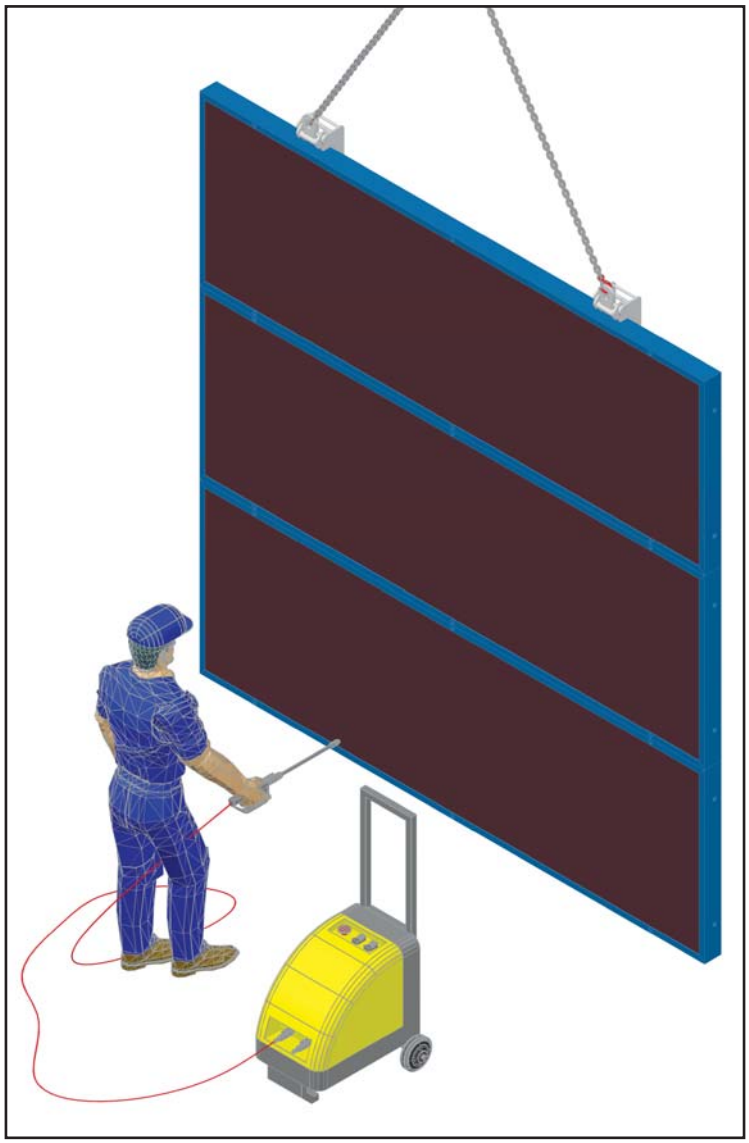
ATTENZIONE:

USE EXCLUSIVELY PRODUCTS SUITABLE FOR FORMWORKES.
IT IS FORBIDDEN THE USE OF PRODUCTS NOT SUITABLE FOR FORMWORKS: THESE COULD DAMAGE THE MULTILAYER AND METAL FRAME.

DISARMING OIL:

ATTENTION:

- **DISARMO OIL CONTAINS HARMFUL SUBSTANCES FOR THE ENVIRONMENT;**
- **DO NOT DISPUTE IN THE ENVIRONMENT;**
- **USE IN WELL-VENTILED AREAS;**
- **DO NOT INHALE AND / OR SWALLOW.**

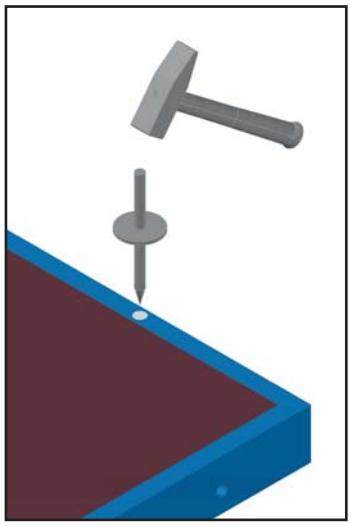


DESCRIPTION:

The special coating of the formworks and the multilayer allows cleaning with the use of high-performance washers.

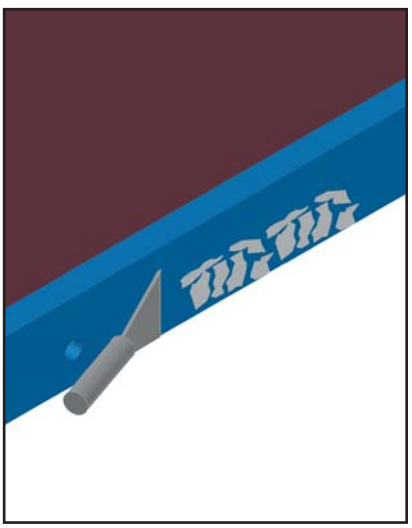
It is recommended to observe the following requirements:

- Performance from 200 bar to a maximum of 300 bar.
- Pay attention to the distance and the speed of the jet;
- The higher the pressure, the greater the distance to maintain;
- Pay close attention to the silicone joint;
- Excessive pressure can damage the silicone joint:
- Do not dwell too long in the same place.



CLEANING:

To clean the holes in the bar passage, position the formwork with the multilayer facing upwards.
Using a hammer and a chisel, apply pressure to cement.
Thanks to the conical bush, the cement will come out without problems.



CLEANING:

To clean the edge profiles of the formworks, use a spatula eliminating the cement slag.

9.0.0
DAMAGE ON PLYWOOD

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

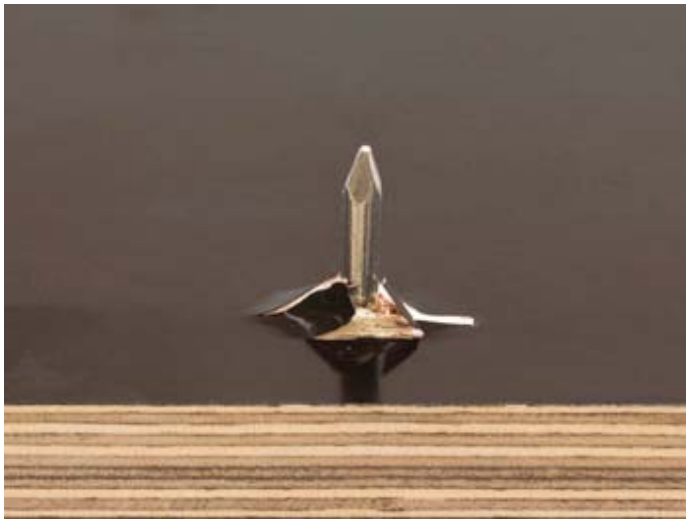
DAMAGE ON PLYWOOD - RIPPLING

ATTENTION:
THE DAMAGES BELOW ARE NOT COVERED BY GUARANTEE BY GPRANDINA SRL BUILDING SYSTEMS.

DESCRIPTION:
The micro-waves formed on the plywood panel is caused by the penetration of moisture into the panel itself.
It can occur more easily in the edges of the perimeter, in the fixing screw holes or in any other place where the multilayer is not protected by the phenolic film.
The ripple should disappear when moisture penetrates evenly through the holes, usually after 6 to 8 times.

DAMAGE ON PLYWOOD - VARIOUS DRILLING (NAILS, SCREWS, ETC.):

ATTENTION:
THE DAMAGES BELOW ARE NOT COVERED BY GUARANTEE BY GPRANDINA SRL BUILDING SYSTEMS.

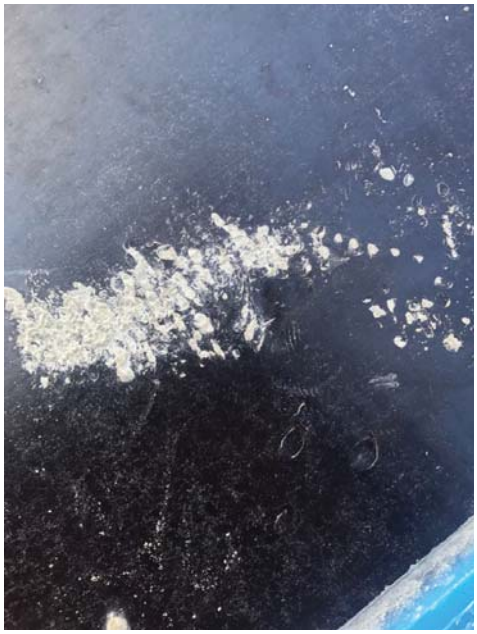


DESCRIPTION:
The GP-10 frame formwork multilayer may have these defects due to pinholes caused by the fixation / extraction of nails, screws or drill holes made with the drill which causes the crumbling of the phenolic film of different sizes, compromising the quality of the surfaces and a greater penetration of moisture in the multilayer.

DAMAGE ON PLYWOOD - VIBRATOR

ATTENTION:
THE DAMAGES BELOW ARE NOT COVERED BY GUARANTEE BY GPRANDINA SRL BUILDING SYSTEMS.

DESCRIPTION:
This damage is caused by the vibrator needle, which coming into contact too long with the phenolic protective film, causes uneven abrasion, circular or in length which, by removing the phenolic film, causes the wear of the multilayer a few millimeters deep.



10.0.0 ARTICLES

GENERAL PROVISION:

The components must be installed as shown in this section of the manual.
For the safe use of the GP-10 elements, the user must provide an adequate support base for the latter which supports the ground discharge of the forces generated by the concrete casting.
It is strictly forbidden to use the GP-10 systems on poorly resistant bases such as wood, gravel, earth, etc.
It is strictly forbidden to make changes, add or subtract details to the GPrandina elements.
Gprandina srl Building System declines all responsibility for incorrect use of its building systems.

ARTICLES

PANEL RANGE H300 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221100	Panel GP-10 300x200	345,00	6,00
221102	Panel GP-10 300x120	148,00	3,60
221104	Panel GP-10 300x100	110,00	3,00
221106	Panel GP-10 300x90	102,00	2,70
221108	Panel GP-10 300x80	90,00	2,40
221109	Panel GP-10 300x75	86,00	2,25
221110	Panel GP-10 300x70	78,20	2,10
221111	Panel GP-10 300x65	76,00	1,95
221112	Panel GP-10 300x60	72,00	1,80
221113	Panel GP-10 300x55	68,00	1,65
221114	Panel GP-10 300x50	64,10	1,50
221115	Panel GP-10 300x45	60,20	1,35
221116	Panel GP-10 300x40	56,00	1,20
221118	Panel GP-10 300x30	44,00	0,90
221119	Panel GP-10 300x25	41,00	0,75
221120	Panel GP-10 300x20	37,90	0,60
221154	Panel GP-10 300x100 Pillar	113,00	3,00
221154F-3T	Panel GP-10 300x100 Pillar Foretad 3T	113,00	3,00
221154F-5T	Panel GP-10 300x100 Pillar Foretad 5T	113,00	3,00
221160	Panel GP-10 300x75 Pillar	92,00	2,25
221160F-3T	Panel GP-10 300x75 Pillar Foretad 3T	92,00	2,25
221160F-5T	Panel GP-10 300x75 Pillar Foretad 5T	92,00	2,25

PANEL RANGE H300 ALLUMINIUM:

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221100A	Panel GP-10 AL 300x200	169,00	6,00
221104A	Panel GP-10 AL 300x100	72,00	3,00
221106A	Panel GP-10 AL 300x90	66,00	2,70
221108A	Panel GP-10 AL 300x80	60,00	2,40
221109A	Panel GP-10 AL 300x75	57,00	2,25
221110A	Panel GP-10 AL 300x70	54,00	2,10
221111A	Panel GP-10 AL 300x65	50,50	1,95
221112A	Panel GP-10 AL 300x60	47,50	1,80
221113A	Panel GP-10 AL 300x55	44,50	1,65
221114A	Panel GP-10 AL 300x50	41,50	1,50
221115A	Panel GP-10 AL 300x45	38,50	1,35
221116A	Panel GP-10 AL 300x40	36,00	1,20
221118A	Panel GP-10 AL 300x30	27,50	0,90
221119A	Panel GP-10 AL 300x25	25,50	0,75
221120A	Panel GP-10 AL 300x20	23,00	0,60
221154A	Panel GP-10 AL 300x100 Pillar	71,50	3,00
221154FA-3T	Panel GP-10 AL 300x100 Pillar Foretad 3T	71,50	3,00
221154FA-5T	Panel GP-10 AL 300x100 Pillar Foretad 5T	71,50	3,00
221160A	Panel GP-10 AL 300x75 Pillar	56,50	2,25
221160FA-3T	Panel GP-10 AL 300x75 Pillar Foretad 3T	56,50	2,25
221160FA-5T	Panel GP-10 AL 300x75 Pillar Foretad 5T	56,50	2,25

PANEL RANGE H150 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221202	Panel GP-10 150x120	75,00	1,80
221204	Panel GP-10 150x100	58,00	1,50
221206	Panel GP-10 150x90	52,40	1,35
221208	Panel GP-10 150x80	47,50	1,20
221209	Panel GP-10 150x75	45,50	1,13
221210	Panel GP-10 150x70	43,10	1,05
221211	Panel GP-10 150x65	40,10	0,98
221212	Panel GP-10 150x60	38,00	0,90
221213	Panel GP-10 150x55	35,90	0,83
221214	Panel GP-10 150x50	33,80	0,75
221215	Panel GP-10 150x45	31,70	0,68
221216	Panel GP-10 150x40	29,50	0,60
221218	Panel GP-10 150x30	25,30	0,45
221219	Panel GP-10 150x25	23,10	0,38
221220	Panel GP-10 150x20	21,00	0,30
221254	Panel GP-10 150x100 Pillar	59,00	1,50
221254F	Panel GP-10 150x100 Pillar Foretad	59,00	1,50
221260	Panel GP-10 150x75 Pillar	46,10	1,13
221260F	Panel GP-10 150x75 Pillar Foretad	46,10	1,13

PANNELLI SERIE H150 ALLUMINIO:

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221204A	Panel GP-10 AL 150x100	38,20	1,50
221206A	Panel GP-10 AL 150x90	34,50	1,35
221208A	Panel GP-10 AL 150x80	31,50	1,20
221209A	Panel GP-10 AL 150x75	30,00	1,13
221210A	Panel GP-10 AL 150x70	28,30	1,05
221211A	Panel GP-10 AL 150x65	26,30	0,98
221212A	Panel GP-10 AL 150x60	24,80	0,90
221213A	Panel GP-10 AL 150x55	23,30	0,83
221214A	Panel GP-10 AL 150x50	21,70	0,75
221215A	Panel GP-10 AL 150x45	20,10	0,68
221216A	Panel GP-10 AL 150x40	18,70	0,60
221218A	Panel GP-10 AL 150x30	14,50	0,45
221219A	Panel GP-10 AL 150x25	13,20	0,38
221220A	Panel GP-10 AL 150x20	12,00	0,30
221254A	Panel GP-10 AL 150x100 Pillar	38,00	1,50
221254FA	Panel GP-10 AL 150x100 Pillar Foretad	38,00	1,50
221260A	Panel GP-10 AL 150x75 Pillar	28,80	1,13
221260FA	Panel GP-10 AL 150x75 Pillar Foretad	28,80	1,13

PANEL RANGE H270 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221300	Panel GP-10 270x200	311,00	5,40
221302	Panel GP-10 270x120	133,00	3,24
221304	Panel GP-10 270x100	100,30	2,70
221306	Panel GP-10 270x90	96,50	2,43
221308	Panel GP-10 270x80	82,20	2,16
221309	Panel GP-10 270x75	79,00	2,03
221310	Panel GP-10 270x70	75,00	1,89
221311	Panel GP-10 270x65	69,00	1,76
221312	Panel GP-10 270x60	65,10	1,62
221313	Panel GP-10 270x55	61,50	1,49
221314	Panel GP-10 270x50	58,00	1,35
221315	Panel GP-10 270x45	54,50	1,22
221316	Panel GP-10 270x40	51,00	1,08
221318	Panel GP-10 270x30	39,20	0,81
221319	Panel GP-10 270x25	37,00	0,68
221320	Panel GP-10 270x20	34,20	0,54
221354	Panel GP-10 270x100 Pillar	103,30	2,70
221354F	Panel GP-10 270x100 Pillar Foretad	103,30	2,70
221356	Panel GP-10 270x90 Pillar	95,40	2,43
221356F	Panel GP-10 270x90 Pillar Foretad	95,40	2,43
221360F	Panel GP-10 270x75 Pillar	84,00	2,03
221360F	Panel GP-10 270x75 Pillar Foretad	84,00	2,03

PANEL RANGE H270 ALUMINIUM:

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221300A	Panel GP-10 AL 270x200	152,00	5,40
221304A	Panel GP-10 AL 270x100	66,00	2,70
221306A	Panel GP-10 AL 270x90	60,50	2,43
221308A	Panel GP-10 AL 270x80	54,50	2,16
221309A	Panel GP-10 AL 270x75	51,70	2,03
221310A	Panel GP-10 AL 270x70	49,00	1,89
221311A	Panel GP-10 AL 270x65	45,50	1,76
221312A	Panel GP-10 AL 270x60	43,00	1,62
221313A	Panel GP-10 AL 270x55	40,30	1,49
221314A	Panel GP-10 AL 270x50	37,50	1,35
221315A	Panel GP-10 AL 270x45	35,00	1,22
221316A	Panel GP-10 AL 270x40	32,30	1,08
221318A	Panel GP-10 AL 270x30	24,70	0,81
221319A	Panel GP-10 AL 270x25	22,70	0,68
221320A	Panel GP-10 AL 270x20	20,50	0,54
221354A	Panel GP-10 AL 270x100 Pillar	65,50	2,70
221354AF	Panel GP-10 AL 270x100 Pillar Foretad	65,50	2,70
221356A	Panel GP-10 AL 270x90 Pillar	60,00	2,43
221356AF	Panel GP-10 AL 270x90 Pillar Foretad	60,00	2,43
221360AF	Panel GP-10 AL 270x75 Pillar	51,20	2,03
221360AF	Panel GP-10 AL 270x75 Pillar Foretad	51,20	2,03

PANEL RANGE H135 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221402	Panel GP-10 135x120	62,70	1,62
221404	Panel GP-10 135x100	49,20	1,35
221406	Panel GP-10 135x90	45,60	1,22
221408	Panel GP-10 135x80	42,00	1,08
221409	Panel GP-10 135x75	40,00	1,01
221410	Panel GP-10 135x70	37,30	0,95
221411	Panel GP-10 135x65	35,50	0,88
221412	Panel GP-10 135x60	33,60	0,81
221413	Panel GP-10 135x55	31,80	0,74
221414	Panel GP-10 135x50	30,00	0,68
221415	Panel GP-10 135x45	28,30	0,61
221416	Panel GP-10 135x40	26,30	0,54
221418	Panel GP-10 135x30	21,00	0,41
221419	Panel GP-10 135x25	19,60	0,34
221420	Panel GP-10 135x20	18,10	0,27
221454	Panel GP-10 135x100 Pillar	50,60	1,35
221454F	Panel GP-10 135x100 Pillar Foretad	50,60	1,35
221456	Panel GP-10 135x90 Pillar	46,70	1,22
221456F	Panel GP-10 135x90 Pillar Foretad	46,70	1,22
221460F	Panel GP-10 135x75 Pillar	41,00	1,01
221460F	Panel GP-10 135x75 Pillar Foretad	41,00	1,01

PANEL RANGE H135 ALUMINIUM:

VERNICIATO

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221404A	Panel GP-10 AL 135x100	33,30	1,35
221406A	Panel GP-10 AL 135x90	30,50	1,22
221408A	Panel GP-10 AL 135x80	28,00	1,08
221409A	Panel GP-10 AL 135x75	26,50	1,01
221410A	Panel GP-10 AL 135x70	25,00	0,95
221411A	Panel GP-10 AL 135x65	23,30	0,88
221412A	Panel GP-10 AL 135x60	22,00	0,81
221413A	Panel GP-10 AL 135x55	20,50	0,74
221414A	Panel GP-10 AL 135x50	19,30	0,68
221415A	Panel GP-10 AL 135x45	18,00	0,61
221416A	Panel GP-10 AL 135x40	16,50	0,54
221418A	Panel GP-10 AL 135x30	13,20	0,41
221419A	Panel GP-10 AL 135x25	12,00	0,34
221420A	Panel GP-10 AL 135x20	11,00	0,27
221454A	Panel GP-10 AL 135x100 Pillar	33,00	1,35
221454AF	Panel GP-10 AL 135x100 Pillar Foretad	33,00	1,35
221456A	Panel GP-10 AL 135x90 Pillar	30,20	1,22
221456AF	Panel GP-10 AL 135x90 Pillar Foretad	30,20	1,22
221460AF	Panel GP-10 AL 135x75 Pillar	26,20	1,01
221460AF	Panel GP-10 AL 135x75 Pillar Foretad	26,20	1,01

ARTICLES

PANEL RANGE H330STEEL:

VERNICIATO / ZINCATO

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221500	Panel GP-10 330x200	379,00	6,60
221502	Panel GP-10 330x120	160,00	3,96
221504	Panel GP-10 330x100	129,00	3,30
221506	Panel GP-10 330x90	111,00	2,97
221508	Panel GP-10 330x80	98,10	2,64
221509	Panel GP-10 330x75	93,70	2,48
221510	Panel GP-10 330x70	89,40	2,31
221511	Panel GP-10 330x65	83,20	2,15
221512	Panel GP-10 330x60	79,00	1,98
221513	Panel GP-10 330x55	74,50	1,82
221514	Panel GP-10 330x50	70,20	1,65
221515	Panel GP-10 330x45	65,90	1,49
221516	Panel GP-10 330x40	61,30	1,32
221518	Panel GP-10 330x30	48,00	0,99
221519	Panel GP-10 330x25	44,90	0,83
221520	Panel GP-10 330x20	41,70	0,66
221554	Panel GP-10 330x100 Pillar	124,50	3,30
221554F	Panel GP-10 330x100 Pillar Forated	124,50	3,30
221560	Panel GP-10 330x75 Pillar	100,00	2,48
221560F	Panel GP-10 330x75 Pillar Forated	100,00	2,48

PANEL RANGE H100 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221704	Panel GP-10 100x100	37,50	1,00
221706	Panel GP-10 100x90	34,70	0,90
221708	Panel GP-10 100x80	31,80	0,80
221709	Panel GP-10 100x75	30,40	0,75
221710	Panel GP-10 100x70	29,00	0,70
221711	Panel GP-10 100x65	27,50	0,65
221712	Panel GP-10 100x60	26,10	0,60
221713	Panel GP-10 100x55	24,70	0,55
221714	Panel GP-10 100x50	23,20	0,50
221715	Panel GP-10 100x45	21,80	0,45
221716	Panel GP-10 100x40	20,40	0,40
221718	Panel GP-10 100x30	17,50	0,30
221719	Panel GP-10 100x25	16,10	0,25
221720	Panel GP-10 100x20	14,70	0,20
221754	Panel GP-10 100x100 Pillar	38,90	1,00
221754F	Panel GP-10 100x100 Pillar Foretad	38,90	1,00
221760	Panel GP-10 100x75 Pillar	31,30	0,75
221760F	Panel GP-10 100x75 Pillar Foretad	31,30	0,75

PANEL RANGE H165 STEEL:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221602	Panel GP-10 165x120	86,50	1,98
221604	Panel GP-10 165x100	66,20	1,65
221606	Panel GP-10 165x90	54,50	1,49
221608	Panel GP-10 165x80	50,20	1,32
221609	Panel GP-10 165x75	48,00	1,24
221610	Panel GP-10 165x70	45,80	1,16
221611	Panel GP-10 165x65	42,60	1,07
221612	Panel GP-10 165x60	40,40	0,99
221613	Panel GP-10 165x55	38,20	0,91
221614	Panel GP-10 165x50	36,00	0,83
221615	Panel GP-10 165x45	33,80	0,74
221616	Panel GP-10 165x40	31,60	0,66
221618	Panel GP-10 165x30	24,80	0,50
221619	Panel GP-10 165x25	23,20	0,41
221620	Panel GP-10 165x20	21,50	0,33
221654	Panel GP-10 165x100 Pillar	63,00	1,65
221654F	Panel GP-10 165x100 Pillar Foretad	63,00	1,65
221660	Panel GP-10 165x75 Pillar	49,00	1,24
221660F	Panel GP-10 165x75 Pillar Foretad	49,00	1,24

PANEL RANGE H100 ALUMINUM:

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m^2)
221704A	Panel GP-10 AL 100x100	25,00	1,00
221706A	Panel GP-10 AL 100x90	23,00	0,90
221708A	Panel GP-10 AL 100x80	21,00	0,80
221709A	Panel GP-10 AL 100x75	20,00	0,75
221710A	Panel GP-10 AL 100x70	19,00	0,70
221711A	Panel GP-10 AL 100x65	18,00	0,65
221712A	Panel GP-10 AL 100x60	16,80	0,60
221713A	Panel GP-10 AL 100x55	15,80	0,55
221714A	Panel GP-10 AL 100x50	14,80	0,50
221715A	Panel GP-10 AL 100x45	13,70	0,45
221716A	Panel GP-10 AL 100x40	12,70	0,40
221718A	Panel GP-10 AL 100x30	10,00	0,30
221719A	Panel GP-10 AL 100x25	9,00	0,25
221720A	Panel GP-10 AL 100x20	8,20	0,20
221754A	Panel GP-10 AL 100x100 Pillar	24,50	1,00
221754AF	Panel GP-10 AL 100x100 Pillar Foretad	24,50	1,00
221760A	Panel GP-10 AL 100x75 Pillar	19,50	0,75
221760AF	Panel GP-10 AL 100x75 Pillar Foretad	19,50	0,75

EXTERNAL CORNER STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
222101	External corner 10x10 H300	27,40	
222201	External corner 10x10 H150	13,70	
222301	External corner 10x10 H270	24,50	
222401	External corner 10x10 H135	12,30	
222501	External corner 10x10 H330	30,10	
222601	External corner 10x10 H165	15,00	
222701	External corner 10x10 H100	9,10	

PAINTED / GALVANIZED

CONICAL CORNER FOR DRUM STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
223000	Conical corner for drum H150	26,00	0,40

PAINTED / GALVANIZED

INTERNAL CORNER STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
222111	Internal corner 30x30 H300	84,00	1,80
222211	Internal corner 30x30 H150	43,20	0,90
222311	Internal corner 30x30 H270	75,30	1,62
222411	Internal corner 30x30 H135	39,40	0,81
222511	Internal corner 30x30 H330	91,30	1,98
222611	Internal corner 30x30 H165	47,00	0,99
222711	Internal corner 30x30 H100	25,00	0,60

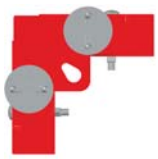
PAINTED / GALVANIZED

FILLER PROFILE 10 STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
223101	Filler profile 10 H300	19,70	0,30
223201	Filler profile 10 H150	10,40	0,15
223301	Filler profile 10 H270	17,90	0,27
223401	Filler profile 10 H135	9,50	0,14
223501	Filler profile 10 H330	21,60	0,33
223601	Filler profile 10 H165	11,40	0,17
223701	Filler profile 10 H100	7,30	0,10

PAINTED / GALVANIZED

STRIKING CORNER STEEL:



ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
222121	Striking corner 30x30 H300	115,00	1,80
222221	Striking corner 30x30 H150	61,00	0,90
222321	Striking corner 30x30 H270	110,00	1,62
222421	Striking corner 30x30 H135	54,50	0,81
222521	Striking corner 30x30 H330	133,00	1,98
222621	Striking corner 30x30 H165	66,50	0,99
222721	Striking corner 30x30 H100	40,20	0,60

PAINTED / GALVANIZED

FILLER PROFILE 5 STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
223111	Filler profile 5 H300	15,00	0,15
223211	Filler profile 5 H150	8,00	0,08
223311	Filler profile 5 H270	13,80	0,14
223411	Filler profile 5 H135	7,20	0,07
223511	Filler profile 5 H330	16,50	0,17
223611	Filler profile 5 H165	8,70	0,09
223711	Filler profile 5 H100	5,60	0,05

PAINTED / GALVANIZED

EXTERNAL HINGE CORNER STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
222131	External hinge corner 10x10 H300	52,00	0,60
222231	External hinge corner 10x10 H150	27,30	0,30
222331	External hinge corner 10x10 H270	49,00	0,54
222431	External hinge corner 10x10 H135	24,60	0,27
222531	External hinge corner 10x10 H330	60,00	0,66
222631	External hinge corner 10x10 H165	30,00	0,33
222731	External hinge corner 10x10 H100	18,20	0,20

PAINTED / GALVANIZED

STRIKING FILLER PLATE 5 STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
223131	Striking filler plate 5 H300	17,80	0,15
223231	Striking filler plate 5 H150	9,80	0,08
223331	Striking filler plate 5 H270	16,50	0,14
223431	Striking filler plate 5 H135	9,00	0,07
223531	Striking filler plate 5 H330	19,40	0,17
223631	Striking filler plate 5 H165	10,60	0,09
223731	Striking filler plate 5 H100	7,20	0,05

PAINTED / GALVANIZED

INTERNAL HINGE CORNER STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
222141	Internal hinge corner 30x30 H300	80,00	1,80
222241	Internal hinge corner 30x30 H150	42,00	0,90
222341	Internal hinge corner 30x30 H270	75,60	1,62
222441	Internal hinge corner 30x30 H135	37,80	0,81
222541	Internal hinge corner 30x30 H330	92,40	1,98
222641	Internal hinge corner 30x30 H165	46,20	0,99
222741	Internal hinge corner 30x30 H100	28,00	0,60

PAINTED / GALVANIZED

FILLER PLATE 30 STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
223151	Filler plate 30 H300	50,50	0,90
223251	Filler plate 30 H150	33,00	0,45
223351	Filler plate 30 H270	47,50	0,81
223451	Filler plate 30 H135	31,20	0,41
223551	Filler plate 30 H330	54,00	0,99
223651	Filler plate 30 H165	34,80	0,50
223751	Filler plate 30 H100	27,20	0,30

PAINTED / GALVANIZED

ARTICLES

STOP END FOR ELECTROWELDED STEEL:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
224103	Stop end L40 H300	36,00	
224104	Stop end L30 H300	30,00	
224105	Stop end L25 H300	26,70	
224106	Stop end L20 H300	23,50	
224203	Stop end L40 H150	19,00	
224204	Stop end L30 H150	15,80	
224205	Stop end L25 H150	14,00	
224206	Stop end L20 H150	12,40	
224303	Stop end L40 H270	32,50	
224304	Stop end L30 H270	27,00	
224305	Stop end L25 H270	24,10	
224306	Stop end L20 H270	21,20	
224403	Stop end L40 H135	17,10	
224404	Stop end L30 H135	14,30	
224405	Stop end L25 H135	12,60	
224406	Stop end L20 H135	11,20	
224503	Stop end L40 H330	39,60	
224504	Stop end L30 H330	33,00	
224505	Stop end L25 H330	29,40	
224506	Stop end L20 H330	25,90	
224603	Stop end L40 H165	21,00	
224604	Stop end L30 H165	17,40	
224605	Stop end L25 H165	15,40	
224606	Stop end L20 H165	13,70	
224703	Stop end L40 H100	12,00	
224704	Stop end L30 H100	10,00	
224705	Stop end L25 H100	9,00	
224706	Stop end L20 H100	8,00	

PAINTED / GALVANIZED

STEEL CONNECTION ACCESSORIES:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291002	Crane hook GP-10	7,00	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291012	Alignement clamp GP-10	4,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291022	Variable clamp GP-10	5,50	
291032	Long Variable clamp GP-10	6,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291042	Adjustable clamp for external corner GP-10	6,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291052	Clamp for internal corner GP-10	6,80	

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291102	Tie clamp complete GP-10	2,80	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291112	Square for pillar GP-10	9,00	

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291122	Connecting square for pillar GP-10	4,00	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291142	Alignement braket GP-10	2,80	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291143	Align pipe CM.100 GP-10	5,00	

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291152	Extension braket CM.50 GP-10	12,50	

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291162	Hinge stiffing pipe	16,00	

PAINTED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291172	External clamp for plinth	5,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291183	Small fix pin L.90MM	0,20	
291186	Long fix pin L.140MM	0,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291191	Adjustable pin	0,70	

GALVANIZED

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291201	Rondelle	0,10	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
291211	Nut for pin Ø17	0,10	
291212	Nut for pin Ø19	0,11	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
252921	Exagonal key	1,20	

STEEL ANCHORING ACCESSORIES:

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811001	Tie rod DW15 - CM.25	0,40	
811002	Tie rod DW15 - CM.50	0,70	
811003	Tie rod DW15 - CM.75	1,10	
811004	Tie rod DW15 - CM.100	1,40	
811005	Tie rod DW15 - CM.120	1,70	
811006	Tie rod DW15 - CM.150	2,10	
811007	Tie rod DW15 - CM.200	2,80	
811008	Tie rod DW15 - CM.250	3,50	
811009	Tie rod DW15 - CM.300	4,20	
811010	Tie rod DW15 - CM.400	5,60	
811011	Tie rod DW15 - CM.500	7,00	
811012	Tie rod DW15 - CM.600	8,40	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811051	Wing nut DW15	0,90	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811052	Anchor plate DW15	1,30	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811053	Wing nut DW15	0,40	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811054	Nut with welded washer DW15	0,30	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811055	Manchon hexagonal DW15 90 MM	0,30	
811056	Manchon hexagonal DW15 140 MM	0,80	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811101	Joint plate 50	7,00	
811102	Joint plate 80	12,00	
811103	Joint plate 100	15,00	
811105	Joint plate 150	22,50	
811106	Joint plate 200	30,00	
811108	Joint plate 250	37,50	
811109	Joint plate 300	45,00	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811111	Base plate 220x120x8	1,50	

GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
811112	Base plate 100x100x8	0,70	

STEEL SAFETY ACCESSORIES:

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296000	Regolable push pull prop 200-360 single complete	13,00	
296001	Regolable push pull prop 250-450 single complete	15,00	
296004	Regolable push pull prop 180-320 double complete	33,00	
296006	Regolable push pull prop 250-450 double complete	35,00	
296011	Regolable push pull prop 400-600 double complete	52,00	
296012	Regolable push pull prop 700-900 single complete	90,00	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296018	Frontal parapet column	6,50	
296018-FR	Frontal parapet column	7,00	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296019	Bracket frontal parapet column	3,50	

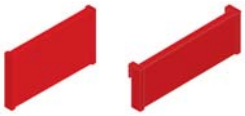
ARTICLES

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296021	Console service table	12,00	
296021-FR	Console service table	12,50	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296022	Parapet column	6,20	
296022-FR	Parapet column	7,00	

PAINTED / GALVANIZED



ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296023	Parapet side	3,00	
296023-FR	Parapet side	3,20	

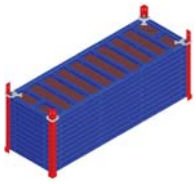
PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296030	Platform 200X33	12,00	
296040	Platform with hatch 200X61	26,00	
296050	Ladder	6,00	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296024	Split pin	0,01	

GALVANIZED



ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296051	Panels transport ring up 200	31,00	
296052	Panels transport ring up	42,00	

PAINTED / GALVANIZED

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
296053	Fitting box 120x80	60,00	

PAINTED / GALVANIZED

MATERIAL TO LOSE:

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
821001	Cls DW15 Plug	0,30	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
821021	Waterstop DW15 pig-iron	0,50	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
821022	Waterstop DW15 plate	0,70	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880121	Disarming oil - 25 LT.	27,00	
880122	Barrel of disarming oil - 220 LT.	230,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880126	Pompa 25 LT. inox stantuffo	10,00	
880127	Pompa 25 LT. PVC stantuffo	10,00	
880128	Pompa 25 LT. a pressione acciaio	13,00	
880129	Pompa 25 LT. a pressione inox	13,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880131	Rigid PVC pipe D=22 MM - 50 MT.	7,50	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880132	PVC washer D=22 MM - 1000 pz.	5,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880133-20	Plug PVC D=20 MM - 1000 pz.	5,00	
880133-22	Plug PVC D=22 MM - 1000 pz.	5,00	
880133-P	Plug PVC PILASTRO - 1000 pz.	5,00	

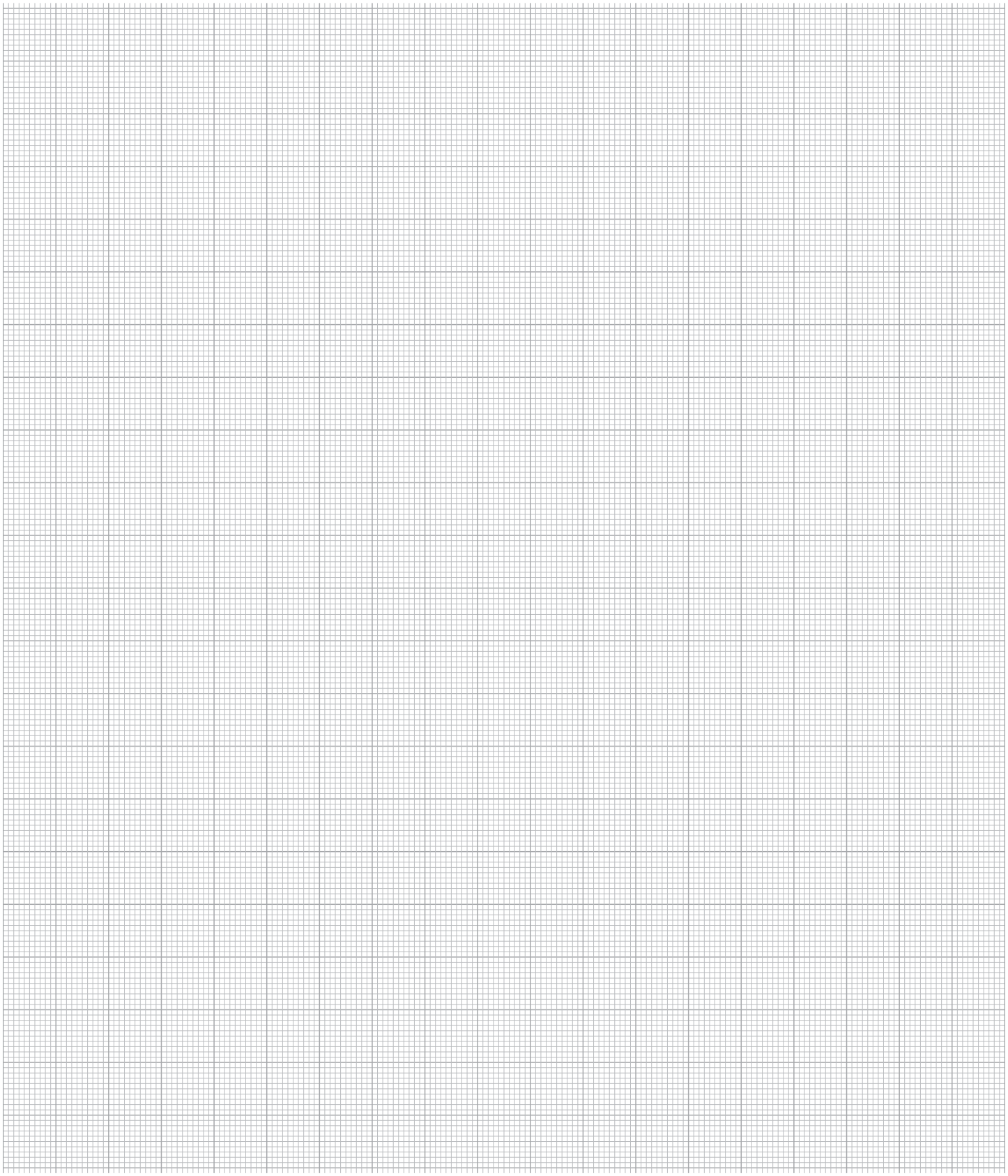
ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880134	Plug PVC D=22 MM - 2000 pz. hermetic	5,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880135	Protection poppet D=16 MM - 1000 pz.	5,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880136	Adapter pvc pipe - waterstop - 1000 pz.	5,00	

ARTICLE	DESCRIPTION	WEIGHT(kg)	(m²)
880151	PVC spacer compl. 15cm - 50 pz.	5,00	
880152	PVC spacer compl. 20cm - 50 pz.	5,50	
880153	PVC spacer compl. 25cm - 50 pz.	6,00	
880154	PVC spacer compl. 30cm - 50 pz.	6,50	
880155	PVC spacer compl. 35cm - 50 pz.	7,00	
880156	PVC spacer compl. 40cm - 50 pz.	7,50	
880157	PVC spacer compl. 50cm - 50 pz.	8,00	

NOTES



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SCHIAVON, VI, Italy

How to get there

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