

built to build

FORMWORKS



MAGNUM

PILOSIO





MAGNUM

Modular formwork system for large areas, **MAGNUM** represents the ideal solution for large sites and for obtaining high productivity even in the most severe conditions.

The base or reinforced panel of 240x300 cm, equal to 7.20 m² uses only 4 bar passages for the contrast tie-rods and just two clamps for connection. Few connection accessories allow creating large reinforced areas to be handled in a single solution single-sided casting up to 7.50 m in height, climbing casting in elevation, castings of walls and pillars up to 9.0 - 10.0 m in height and any other structure cast on site.

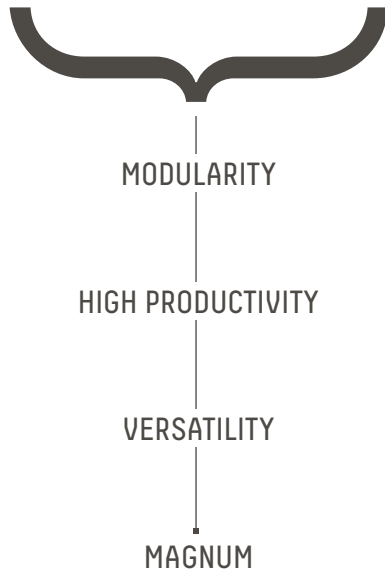
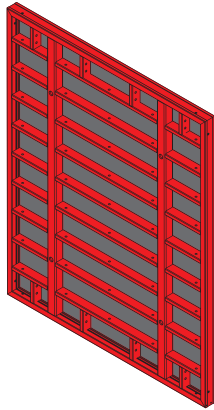
The **MAGNUM** formworks belong to class 7 according to prEN15113-1.

The maximum resistance to pressures of concrete casting is 60 kN/m² for the base version and 100 kN/m² for the reinforced version.





Pennsylvania USA



STRENGTHS

- large modularity of panels that can be used both vertically and horizontally
- availability of undersized models and plywood elements to center the measurement
- The base panel of 240x300 cm is the strongest of **Pilosio** formworks (411 kg) with features that allow applications up to 60/80 kN/m² for the reinforced panel
- high productivity of the large dimension panel with a surface of 7.2 m²
- 1 tie rod every 1.8 m², 1 connection clamp every 3.6 m², bar passage with conical bushing
- possibility of casting with “**Self Compacting Concrete**” cement
- the **MAGNUM** system can be combined to **MINIMAG** panels by using an adjustable clamp
- the panels can be reinforced when inclined
- wide range of accessories for every need (angular hinges, service brackets, panel sealing, support brackets, contrast beams)
- 3 different options to reinforce the corner nodes according to the needs of the site

CHARACTERISTICS

MAGNUM formworks of 240x300 cm, with tie rods inside the panel and formworks of 120x300 cm (including all undersized models) with perimeter tie- rods of large surfaces and with few accessories.

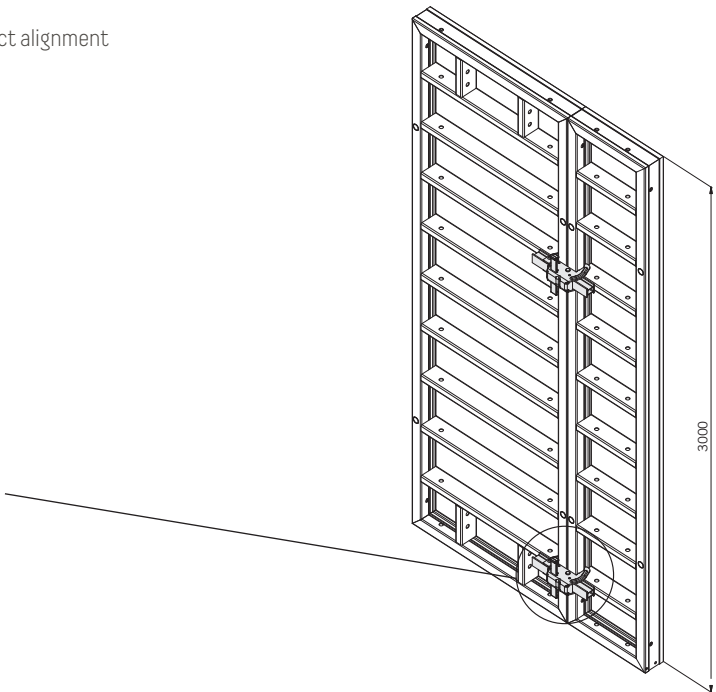
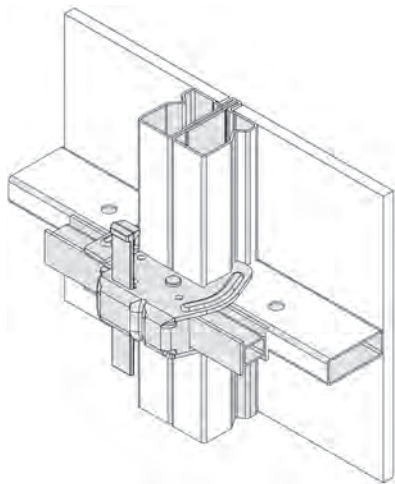
PANEL SIZES		
H 300 cm	H 150 cm	adjustable panel for pillars
240x300	120x150	100x300
240x300 reinforced	100x150	100x150
120x300	90x150	
100x300	80x150	
90x300	70x150	
80x300	60x150	
70x300	50x150	
60x300	40x150	
50x300	30x150	
40x300		
30x300		



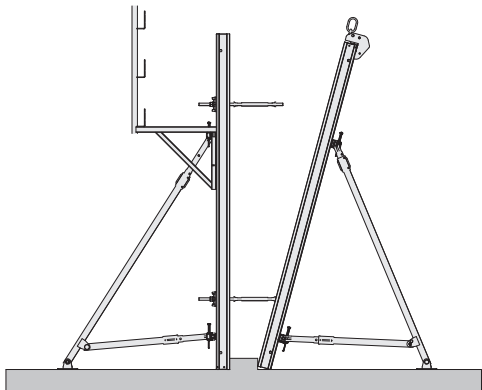


CONNECTION SYSTEM

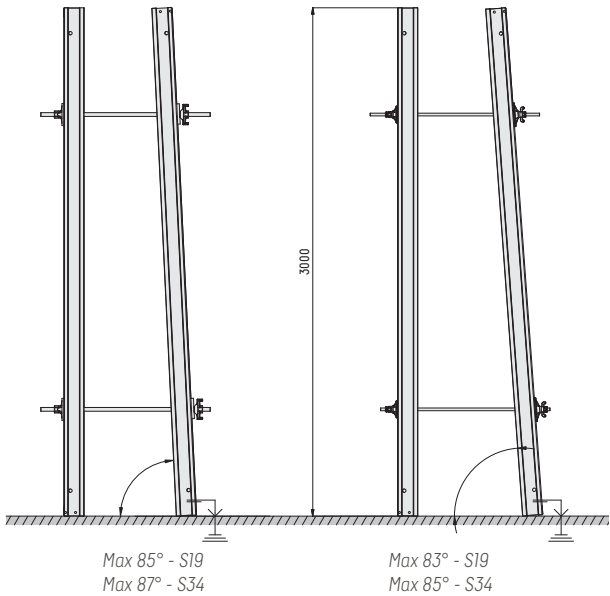
The connection clamp ensures quick assembly and perfect alignment of panels.



Vertical Formworks



Formwork installation.

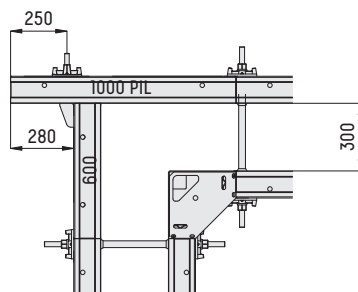
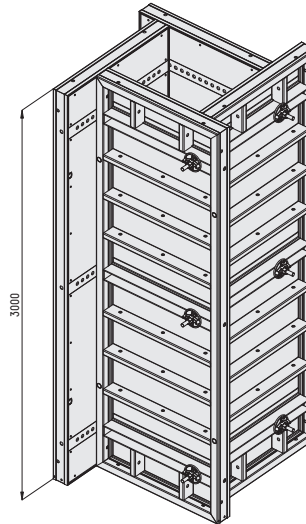
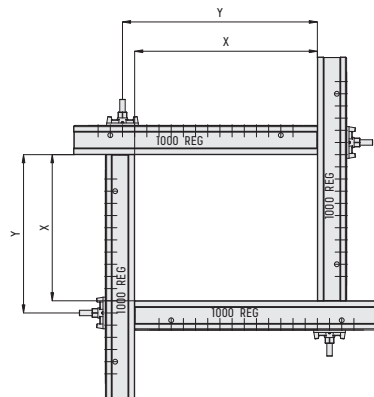


Walls, inclined up to 7° compared with the vertical line can be carried out.

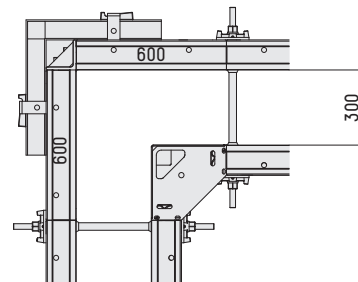
ACCESSORIES

Panels for casting of pillars adjustable from 20 cm to 85 cm every 5 cm.

X	Y
200	250
250	300
300	350
350	400
400	450
450	500
500	550
550	600
600	650
650	700
700	750
750	800
850	900

**FORMATION OF CORNER NODES (SOLUTION 1)**

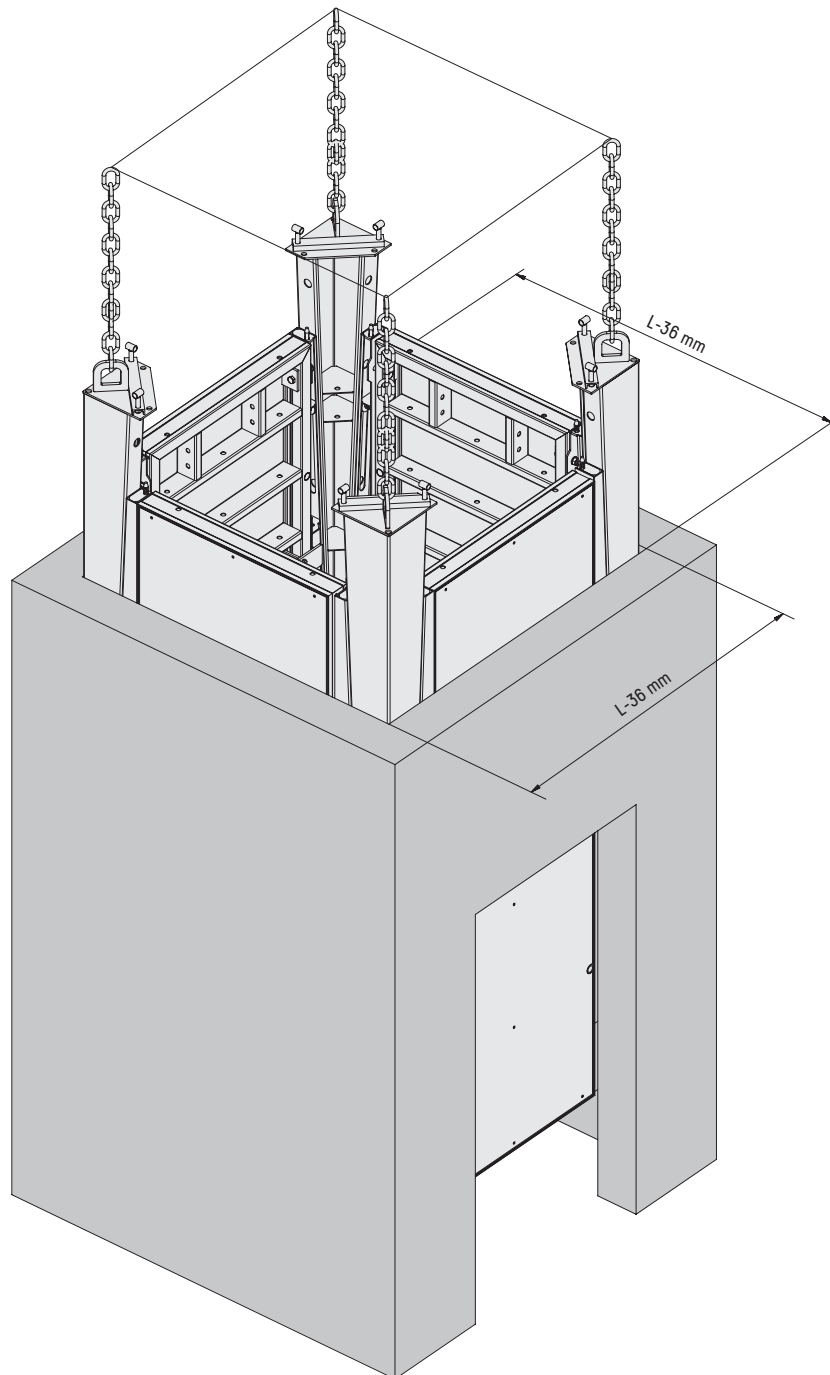
By using the adjustable panel for pillars, the internal angle bar and undersized panels.

**FORMATION OF CORNER NODES (SOLUTION 2)**

By using the external angle bar, the internal angle bar and undersized panels.



Lift well with dismantling conical angle bar. It is sufficient a single crane lift to dismantle in only one solution the complete internal formwork.



CHARACTERISTICS OF MATERIALS

To ensure high standards of quality and durability, the frame in high strength steel, after a process of degreasing and cleaning is painted by immersion and dried in the oven at 130°. The result is a frame highly resistant to abrasion and oxidation.

The multi-layer panel is 18 mm thick with phenolic surface film protection (220 g/m²). It consists of 11 layers of birch and has no moisture absorption when panel is protected. The edges are protected with paint and it can be used about 100 times per side. The weight is 11.35 kg/m².

The **MAGNUM** formwork system has been designed and manufactured in factories of **Pilosio** according to prEN15113-1/206 "Vertical formwork - Part 1 performance requirements, general design and assessment".

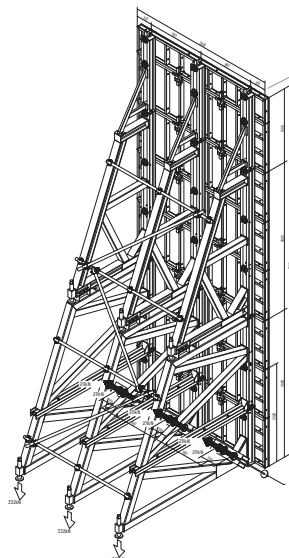
TECHNICAL CHARACTERISTICS	Panel 240x300	Panel 120x300
Reinforced surface m ²	7,2	3,6
Connecting accessories	2 MAGNUM clamps	2 MAGNUM clamps
Threaded tie rods	4	2
Incidence of tie rods per m ²	1 each 1,8 m ²	1 each 1,8 m ²
Multi-layered characteristics	18 mm - 13 ply-birch – 220 g/m ²	18 mm - 13 ply-birch – 220 g/m ²
Use per multi-layered side	100	100
Element weight kg	404	186
Incidence kg/m ²	57,08	51,66
Manual handling	NO	NO
Spacial panel for pillars	YES	YES
Consumable materials		
PVC caps	0	2
PVC spacers	4	2
PVC conic spacers	8	4



Vertical Formworks

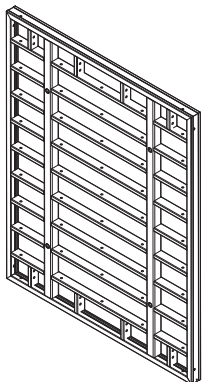
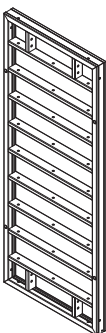
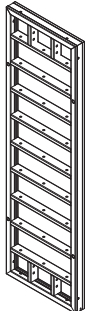
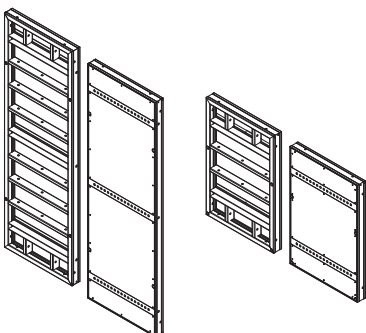
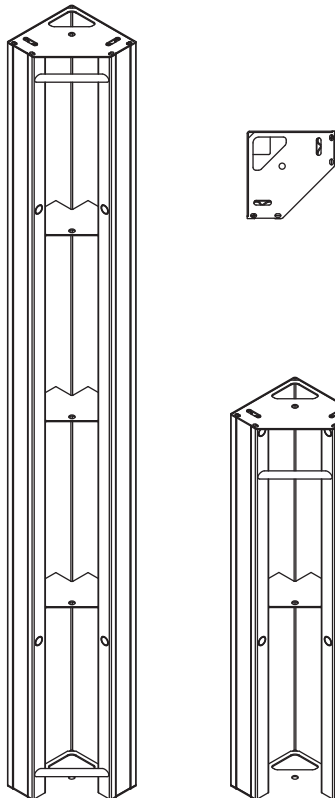
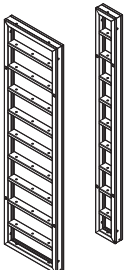
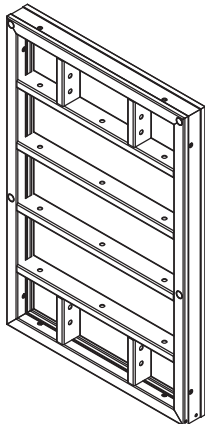
SPECIAL APPLICATIONS

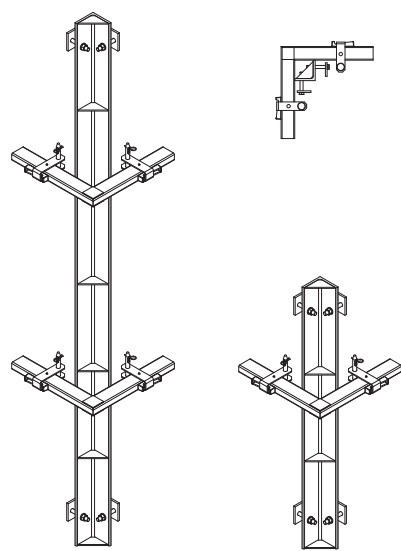
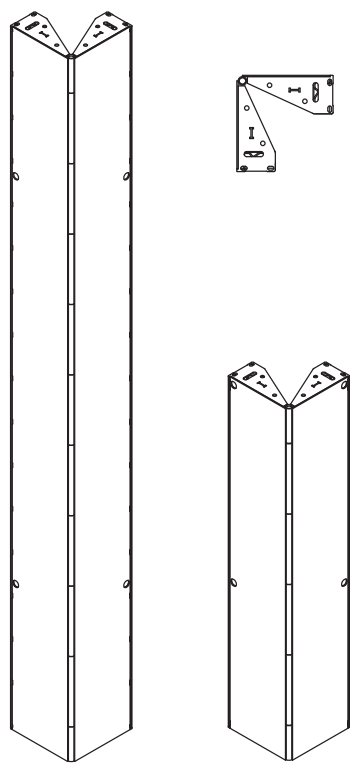
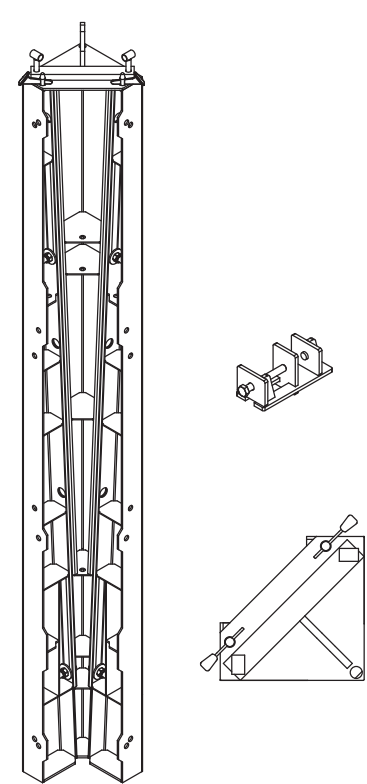
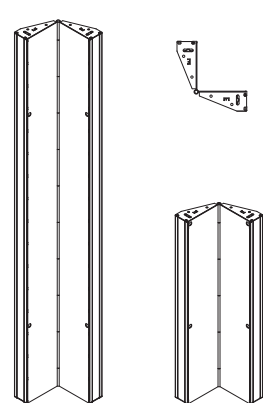
Single sided castings with heights from 2 to 7.6 m.



Barcelona, Spain.

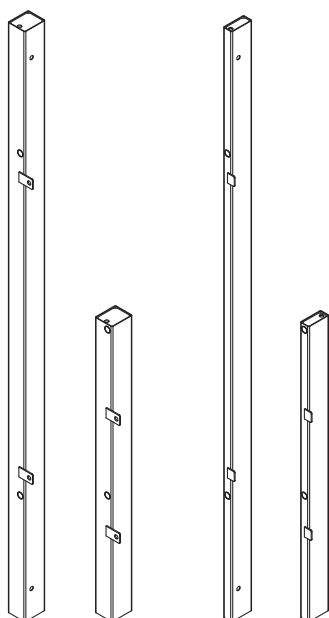


ART.	DIM. MM	KG	ART.	DIM. MM	KG	ART.	DIM. MM	KG
PANEL TYPE 1			PANEL OF 120X300			PANEL OF 90X300		
533240	2400x3000	411.0	533120	1200x3000	186.0	533090	900x3000	147.0
-	2400x3000	443.0						
reinforced panel (pressure 100 kN/m ²)								
								
PANEL H= 300			ADJUSTABLE PANEL (FOR COLUMNS AND CORNERS)			INNER CORNER (30+30)		
533180 (on demand)	1800x3000	297.0	533101	1000x3000	186.0	533356	3000	120.8
533100	1000x3000	157.0	532101	1000x1500	103.0	532356	1500	62.0
533080	800x3000	116.0						
533070	700x3000	106.0						
533060	600x3000	98.0						
533050	500x3000	85.0						
533040	400x3000	75.0						
533030	300x3000	64.0						
								
PANEL H= 150								
532120	1200x1500	88.0						
532100	1000x1500	78.0						
532090	900x1500	72.0						
532080	800x1500	65.0						
532070	700x1500	58.0						
532060	600x1500	51.0						
532050	500x1500	45.0						
532040	400x1500	40.0						
532030	300x1500	33.0						

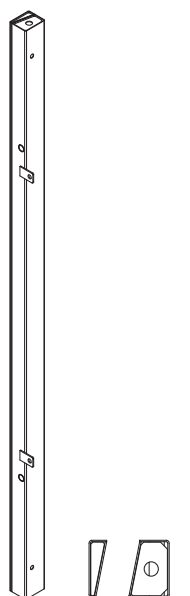
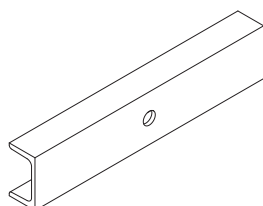
ART.	DIM. MM	KG	ART.	DIM. MM	KG	ART.	DIM. MM	KG
OUTER CORNER (0+0) COMPLETE			INNER CORNER WITH HINGE			STRIPPING CORNER (30+30)X300 COMPLETE		
533310	3000	87.2	533360	3000	133.0	553300	3000	155.0
N° 2 set square for outer corner (0+0) N° 4 screw M18x120 UNI 5737 Zn N° 4 nut M18 UNI 5588 Zn N° 4 washer 19x34 UNI 6592 Zn N° 4 plate 100x80x10 Zn N° 4 P300 Zn pin			532360			N° 4 screw M18x100 UNI 5737 Zn N° 4 nut M18 UNI 5588 Zn N° 4 washer 20x54 UNI 6593 Zn N° 4 plate 100x80x10 Zn N° 4 connection brackets		
522310	1500	46.0		1500	67.0			
N° 1 set square for outer corner (0+0) N° 4 screw M18x120 UNI 5737 Zn N° 4 nut M18 UNI 5588 Zn N° 4 washer 19x34 UNI 6592 Zn N° 4 plate 100x80x10 Zn N° 2 P300 Zn pin								
								
OUTER CORNER WITH HINGE								
533370	3000	137.0						
532370	1500	68.0						
								



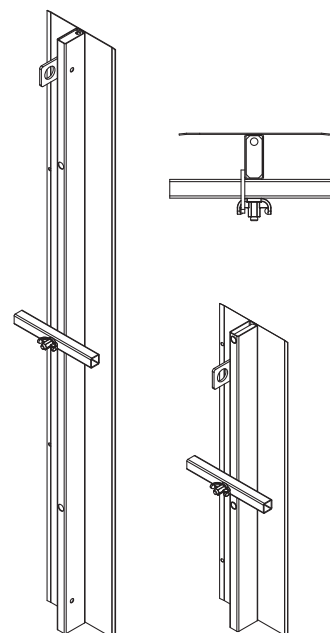
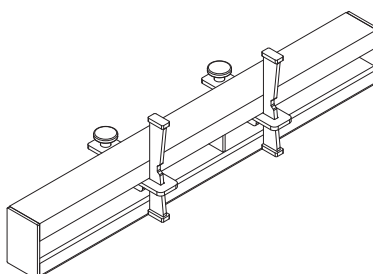
ART.	DIM. MM	KG	ART.	DIM. MM	KG	ART.	DIM. MM	KG
INFILL BAR			STRIPPING FILLER			INFILL PANEL COMPLETE		
534005	50x3000	24.0	534015	100x3000	50.0	534040	400x3000	55.0
534010	100x3000	47.0				N° 1 tube 50x4 L= 450		
532505	50x1500	11.8				N° 1 S19 wing nut		
532510	100x1500	24.0				532540	400x1500	29.6
						N° 1 tube 50x4 L= 450		
						N° 1 S19 wing nut		

**REINFORCEMENT
"U" BEAM**

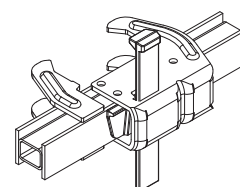
554042 400 3.5

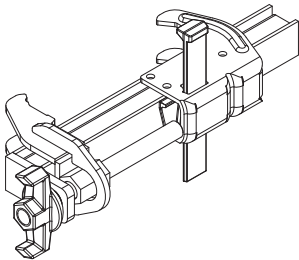
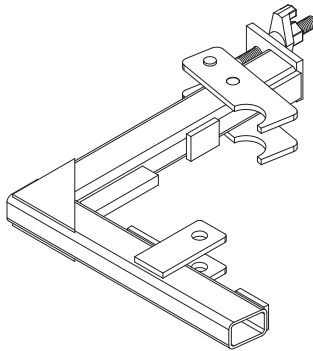
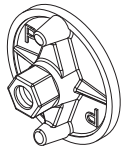
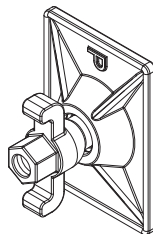
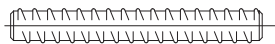
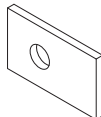
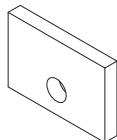
**ALIGNING DEVICE
COMPLETE**

535030 - 16.5
N° 2 P300 pin
N° 2 safety split pin of 3

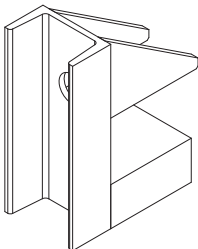
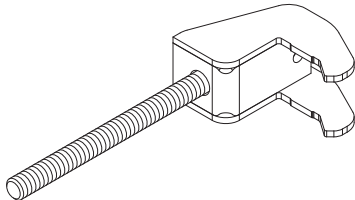
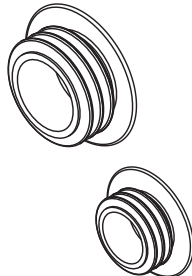
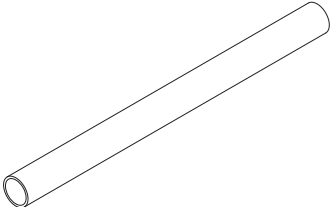
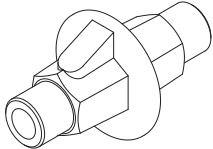
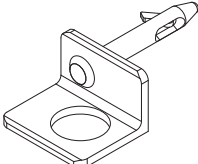
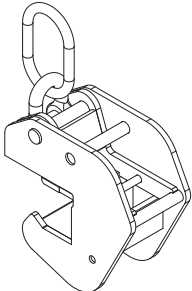
**MAGNUM
ALIGNING CONNECTOR**

505010 - 5.3



ART.	DIM. MM	KG	ART.	DIM. MM	KG	ART.	DIM. MM	KG
VT MAGNUM ADJUSTABLE ALIGNING CONNECTOR			SCREW ALIGNER FOR OUTER CORNER COMPLETE			S34 TIE-ROD		
535021	-	9.0	K535025	-	10.2	585037	375	1.0
			N° 1 S19 wing nut N° 2 P300 pin			585075	750	1.95
						585100	1000	2.6
						585150	1500	3.9
						585200	2000	5.2
						585250	2500	6.5
						585300	3000	7.8
S34 WING NUT			S34 ADJUSTABLE WING NUT			S34 NUT WITH WINGS AND PLATE FOR TIE-ROD		
585900	ø 130	1.5	585905	100x140x78	1.5	585907	120 (A)	0.4
						585930	120x120x15 (B)	1.6
								
S34 NUT			PLATE FOR NUT FOR COLUMNS			PLATE FOR TIE-ROD		
585910	-	0.3	585940	110x65x8	0.5	585935	120x80x15	1.1
								



ART.	DIM. MM	KG	ART.	DIM. MM	KG	ART.	DIM. MM	KG
MOBILE TIE-ROD			TIE FOR OUTER CORNER			PLASTIC PLUG Ø 24 AND Ø 28		
537020	-	3.0	535040	-	1.9	584024	Ø 24	0.001
						584028	Ø 28	0.001
								
SPACER Ø26 MM OF 200			PLASTIC CONE			S19 WATER STOP CONNECTOR		
584210	2000	0.3	584105	Ø 26	0.002	585945	111	1.0
								
PIN FOR PANEL HOISTING			SELF-LOCKING LIFTING HOOK					
537095	-	1.0	537101	-	8.0			
								





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