

AS10[®]

FORMWORK



PRODUCTIVITY

MODULARITY

STEEL

ALUMINIUM

STEEL AND ALUMINIUM
VERTICAL FORMWORK

Alphi[®]
Formwork and solutions

AS10 | Steel and aluminium vertical formwork

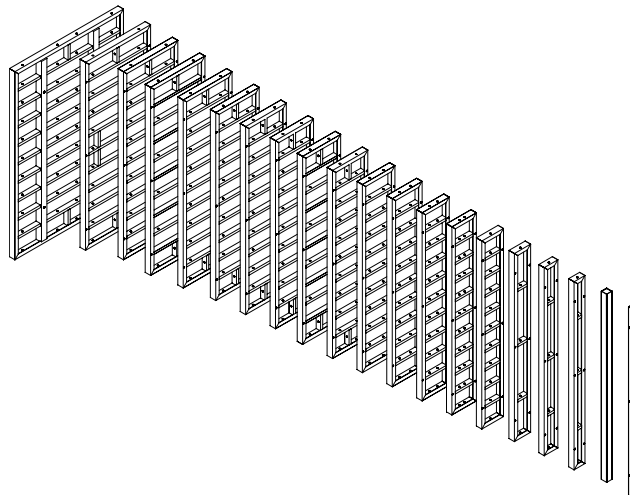


AS10

The AS10 vertical formwork panel system can reduce assembly times on building sites, as well as production costs.



COMPONENT

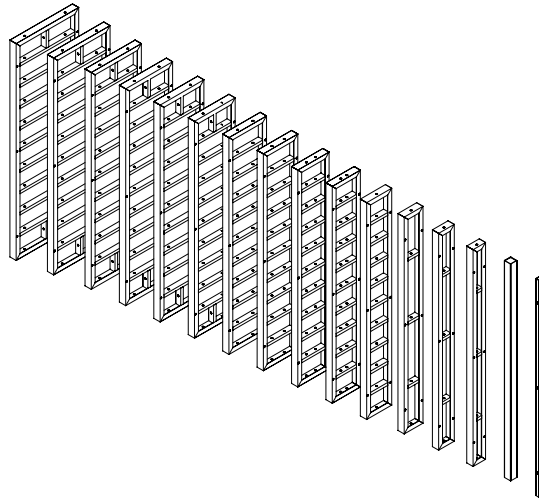


AS10 STEEL panels

Cat. No.	Height (cm)	Width (cm)	Unit weight (kg)	Cat. No.	Height (cm)	Width (cm)	Unit weight (kg)
221100	300	200	375	221202	150	120	73
221102	300	120	150	22124	150	100	58
221104	300	100	115	221254F	150	100	62
221154F	300	100	120	221206	150	90	53
221106	300	90	107	221208	150	80	49
221108	300	80	98	221209	150	75	47
221109	300	75	87	221210	150	70	45
221110	300	70	83	221260F	150	70	50
221160F	300	70	87	221211	150	65	42
221111	300	65	77	221212	150	60	39
221112	300	60	73	221213	150	55	37
221113	300	55	69	221214	150	50	35
221114	300	50	65	221215	150	45	33
221115	300	45	61	221216	150	40	30
221116	300	40	57	221218	150	30	25
221118	300	30	45	221219	150	25	23
221119	300	25	42	22120	150	20	21
221120	300	20	39	223201	150	10	14
223101	300	10	28	223211	150	5	7.5
223111	300	5	15				

AS10 Steel panels are available in various sizes ranging from 1.35 m to 3.30 m.





AS10 ALUMINIUM panels









Cat. No.	Height (cm)	Width (cm)	Unit weight (kg)	Cat. No.	Height (cm)	Width (cm)	Unit weight (kg)
221104A	300	100	69	221204A	150	100	36.6
221154AF	300	100	69	221254AF	150	100	36.6
221106A	300	90	65.2	221206A	150	90	32.5
221108A	300	80	59.3	221208A	150	80	29.4
221109A	300	75	56.3	221209A	150	75	27.9
221110A	300	70	53.3	221210A	150	70	26.3
221160AF	300	70	53.3	221260AF	150	70	26.3
221111A	300	65	50.4	221211A	150	65	24.7
221112A	300	60	46.5	221212A	150	60	22.7
221113A	300	55	43.5	221213A	150	55	21.2
221114A	300	50	40.5	221214A	150	50	19.5
221115A	300	45	37.6	221215A	150	45	18.2
221116A	300	40	34.6	221216	150	40	16.5
221118A	300	30	26.5	221218	150	30	13
221119A	300	25	24	221219	150	25	11.5
221120A	300	20	21.6	221220	150	20	10.5
223101	300	10	28	223201	150	10	14
223111	300	5	15	223211	150	5	7.5

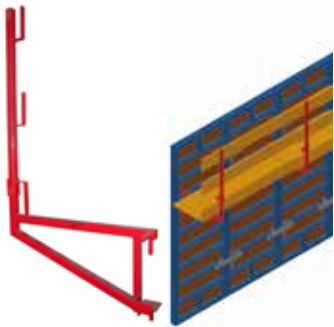
AS10 aluminium panels are available in various sizes ranging from 1.35 m to 3.00 m.

AS10 ACCESSORIES

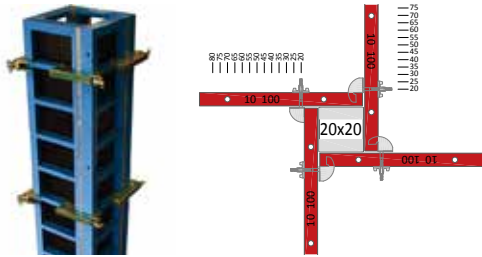
Compensation	5 cm rod compensation element	Cat. No.	Height (cm)	Weight (kg)	Description
		223111	From 135 to 330	From 7.00 to 16.50	<ul style="list-style-type: none"> Suitable for obtaining a specified size failing panels of the required size
	10 cm rod compensation element	Cat. No.	Height (cm)	Weight (kg)	Description
		223101	From 135 to 330	From 12.50 to 31.00	<ul style="list-style-type: none"> Suitable for obtaining a specified size failing panels of the required size
	Formwork strike-down element	Cat. No.	Height (cm)	Weight (kg)	Description
		223131	From 135 to 330	From 7.00 to 16.50	<ul style="list-style-type: none"> 2 oblique parts for performing formwork removal after applying pressure
	Compensation holding profile	Cat. No.	Height (cm)	Weight (kg)	Description
	811101	From 50 to 250	From 7.00 to 37.50	<ul style="list-style-type: none"> In the case of 5 or 10 cm compensation, makes it possible to obtain satisfactory formwork support absorbing the concrete thrust 	





Additional	Lifting hook	Cat. No.	Weight (kg)	MWL (kN)	Description
		291002	7.00	11.40	<ul style="list-style-type: none"> Can be used alone or in pair according to load To be positioned at the level of a reinforcement bar
	Form panel alignment clamp	Cat. No.	Length (cm)	Weight (kg)	Description
	291012	45	5.20	<ul style="list-style-type: none"> Suitable for keeping 2 form panels attached and ensuring tightness 	

Angle brackets	90° internal bracket 30 x 30 cm	Cat. No.	Height (cm)	Weight (kg)	Description
		222111	From 135 to 330	From 270 to 670	<ul style="list-style-type: none"> Made of steel, can be used for forming 90° angles or for forming "T" connections
	External angle bracket	Cat. No.	Height (cm)	Weight (kg)	Description
		222401	From 135 to 330	From 9.00 to 24.50	<ul style="list-style-type: none"> Quick, flexible system clamped to the various elements connected by means of a short pin and a key
	Variable angle bracket external 10 x 10 cm	Cat. No.	Height (cm)	Weight (kg)	Description
		222131	From 135 to 330	From 30.00 to 79.00	<ul style="list-style-type: none"> Used for forming variable external angles
	Variable angle bracket internal 30 x 30 cm	Cat. No.	Height (cm)	Weight (kg)	Description
	222141	From 135 to 330	From 30.00 to 79.00	<ul style="list-style-type: none"> Used for forming variable internal angles 	

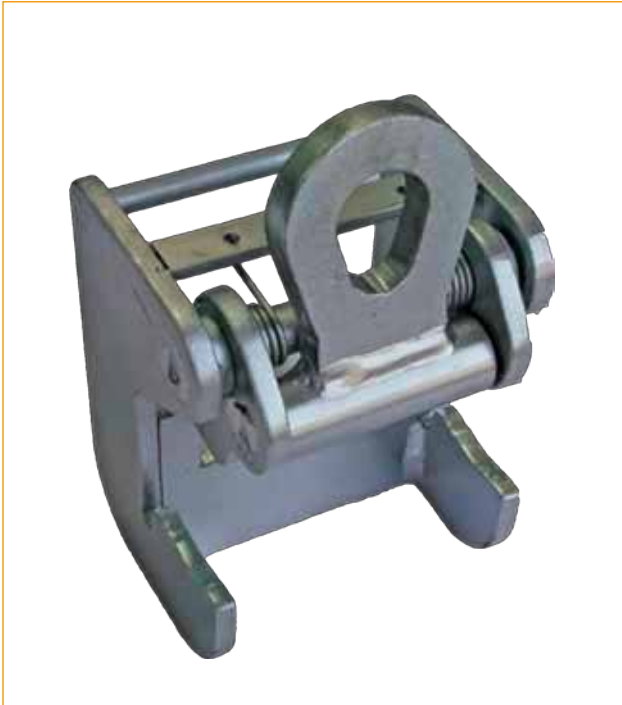
Safety	Service bracket	Cat. No.	Weight (kg)	Description
		296021	12.00	<ul style="list-style-type: none"> Used to form a gangway to allow the user to move about safely

AS10 ACCESSORIES

Custom	Posts		Description
			<ul style="list-style-type: none"> Option of forming custom posts by assembling panels using a post fixing tool Adjustable shapes and sizes

Universal modular single-faced skin	Anchoring truss	Cat. No.	Height (cm)	Weight (kg)	Description
		310010	From 70 to 300	From 20.00 to 330.00	<ul style="list-style-type: none"> System for absorbing horizontal forces during single-faced skin casting
	Extension piece	Cat. No.	Height (cm)	Weight (kg)	Description
		310012	150	64.00	<ul style="list-style-type: none"> Connection element
	Hook	Cat. No.	Weight (kg)	Description	
		310021	1.60	<ul style="list-style-type: none"> Connection element 	
	Galvanized steel tube	Cat. No.	Length (cm)	Weight (kg)	Description
	310100	300	10.40	<ul style="list-style-type: none"> Used for truss crossbracing 	
	310102	150	5.20		

USER GUIDE: LIFTING HOOK



- The CE-Mat. 7417/04 certified lifting hook (CE declaration of conformity) can only be used with the AS10 formwork system. It is used to handle formwork.



- Its maximum working load is 1140 kg.



- The lifting hook may be used alone or in pairs according to the load to be lifted, and must be positioned at the level of a vertical reinforcement bar.

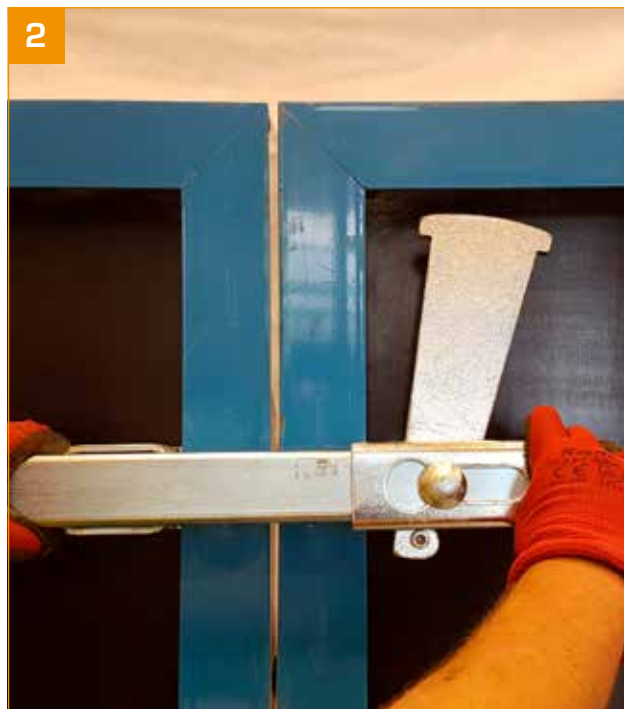


- It is equipped with a locking and unlocking system characterised by springs allowing quick and automatic hooking and unhooking in complete safety.

USER GUIDE: FORM PANEL ALIGNMENT CLAMP



- Form panel alignment clamps, which are 45 cm long, are used to assemble several panels or accessories, both vertically and horizontally.



- The form panel alignment clamp must be positioned as an extension of the reinforcement profiles in order to obtain proper alignment of the panels.



- It locks and firmly binds the assembled elements together, for increased safety.

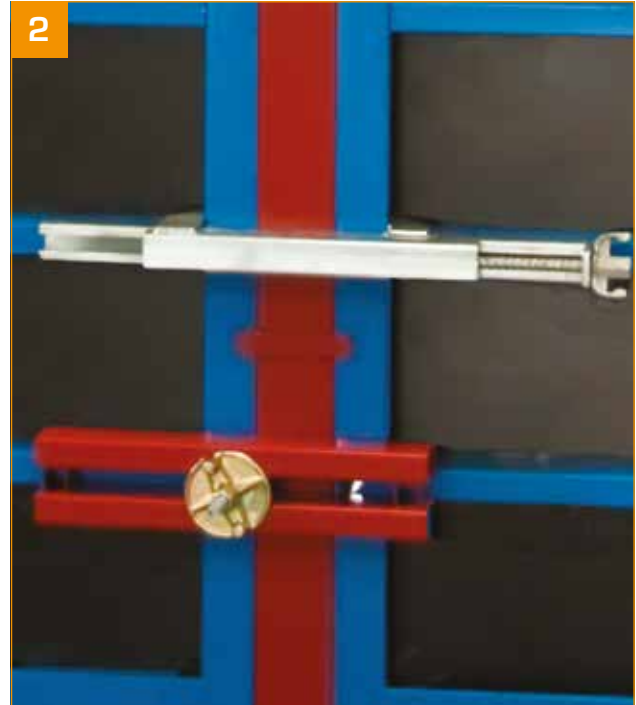


- Drive home the key to finalise locking.

USER GUIDE: COMPENSATION ELEMENTS



- AS10 rod compensation elements are used to obtain the desired size in the absence of panels of the correct size.
- The range includes 5 and 10 cm metal and timber compensation elements, and a 6 to 30 cm compensation sheet.



- To facilitate formwork removal, a formwork strike-down element consisting of two oblique parts is available.
- For 5 or 10 cm compensations, the bar openings can be used with the profiles below to obtain proper support for the formwork whilst the concrete is being cast.



- 5 cm rod compensation element



- 10 cm rod compensation element



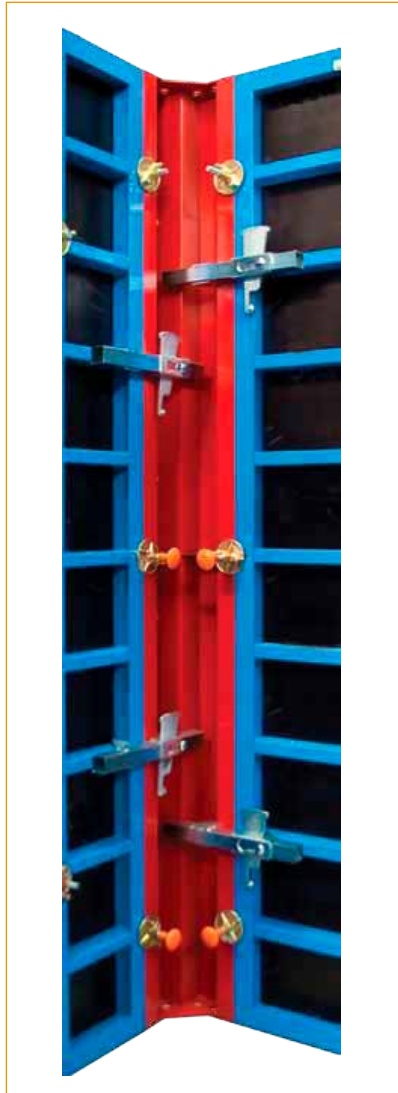
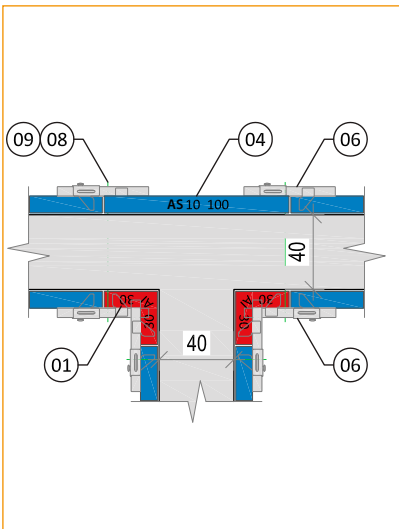
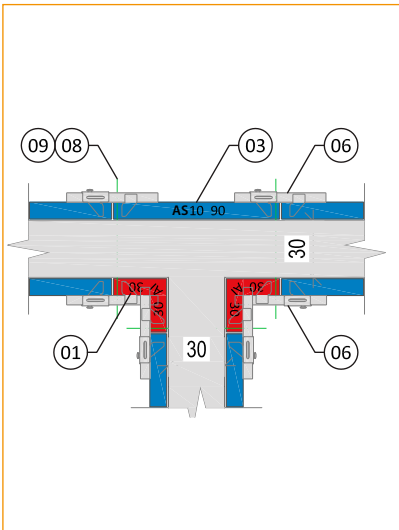
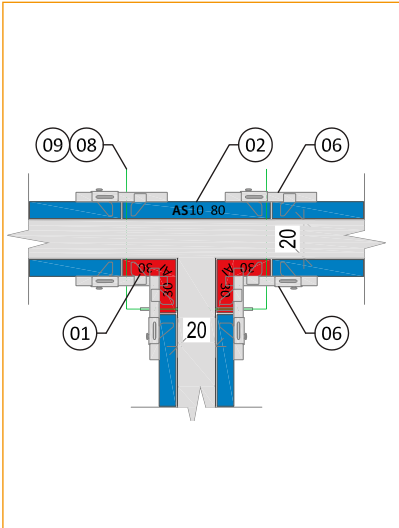
- Formwork strike-down element



- Compensation holding profile

USER GUIDE: OTHER ELEMENTS

90° INTERNAL BRACKET

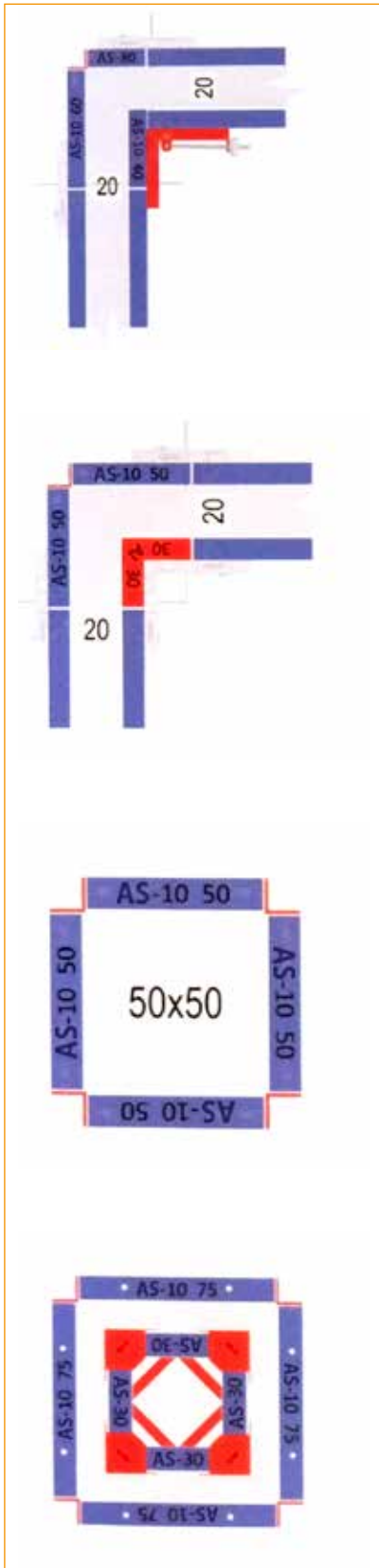


- The fixed 30 x 30 cm internal bracket, entirely made of steel, is used for 90° angles or "T" connections.

- It can be connected to the formwork via a form panel alignment clamp placed at the level of the panel reinforcement bars to guarantee optimum alignment (alternative: fixed pin and key).

	Description	Cat. No.
①	Internal bracket 30 x 30 H300	222111
②	AS10 panel, 300x80	221108
③	AS10 panel, 300x90	221106
④	AS10 panel, 300x100	221104
⑤	Compensation rod, 5 H300	223111
⑥	Form panel alignment clamp	291012
⑧	Rod DW15 - 75 cm	811003
⑨	Nut plate, DW15	811051

EXTERNAL ANGLE BRACKET

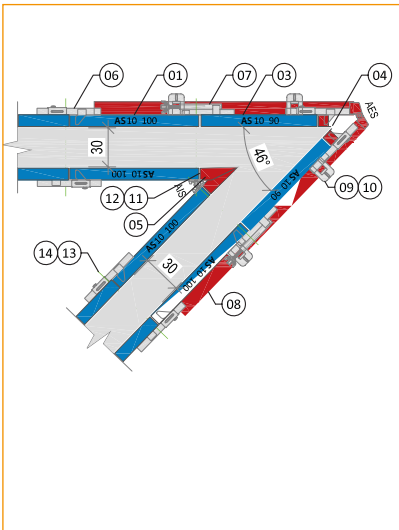
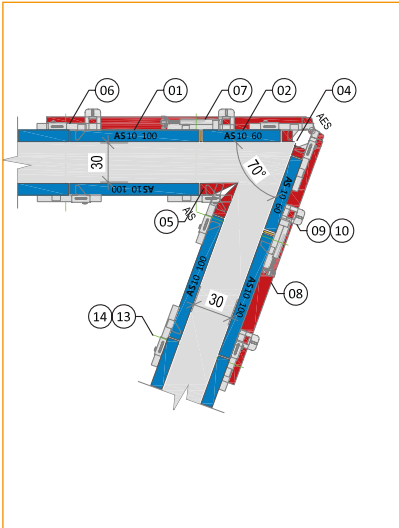


- The external angle is formed by a 10x10 cm metallic profile and can be applied to form fixed external angles, posts with fixed measurements according to the formwork used and also for bottom slab formwork.
- This quick, flexible system is clamped to the various elements connected by means of a short pin and a key.

Height (cm)	Cat. No.
H300	222101
H150	222201
H270	222301
H135	222401
H330	222501
H165	222601

USER GUIDE: OTHER ELEMENTS

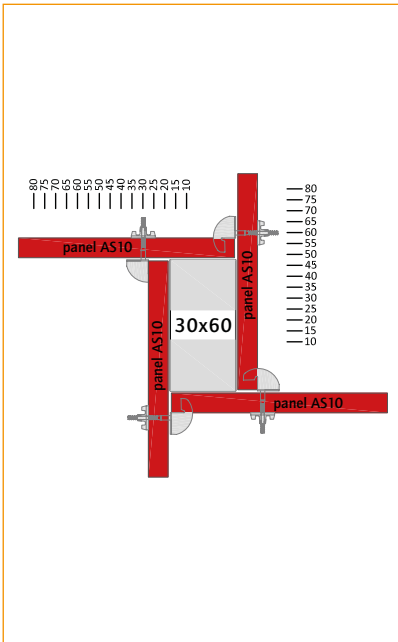
VARIABLE ANGLE BRACKET



- The two AS10 hinged brackets are used to form variable angles.
- They are mounted on the formwork via the form panel clamp for angles greater than 70°, or via a pin and key for angles less than 70°.
- To increase the rigidity of the hinged external bracket, in the absence of the DW15 threaded bar, use the hinged stiffener placed at the level of the internal formwork reinforcements, and tighten it using an alignment bracket.

	Description	Cat. No.
①	AS10 panel, 300x100	221104
②	AS10 panel, 300x60	221112
③	AS10 panel, 300x90	221106
④	Hinged external bracket H300	222131
⑤	Hinged internal bracket H300	222141
⑥	Form panel alignment clamp	291012
⑦	Variable form panel clamp	291022
⑧	Hinge rode	291162
⑨	Alignment claw	291142
⑩	Key shaft L 90 mm	291183
⑪	Key shaft L 140 mm	291186
⑫	Key	291211
⑬	Rod DW15 - 75 cm	811003
⑭	Nut plate, DW15	811051

POSTS



Post with post panels

- This type of formwork, with reinforcement bars with multiple holes, allows panels to be assembled via a mount, forming posts of various shapes and sizes.

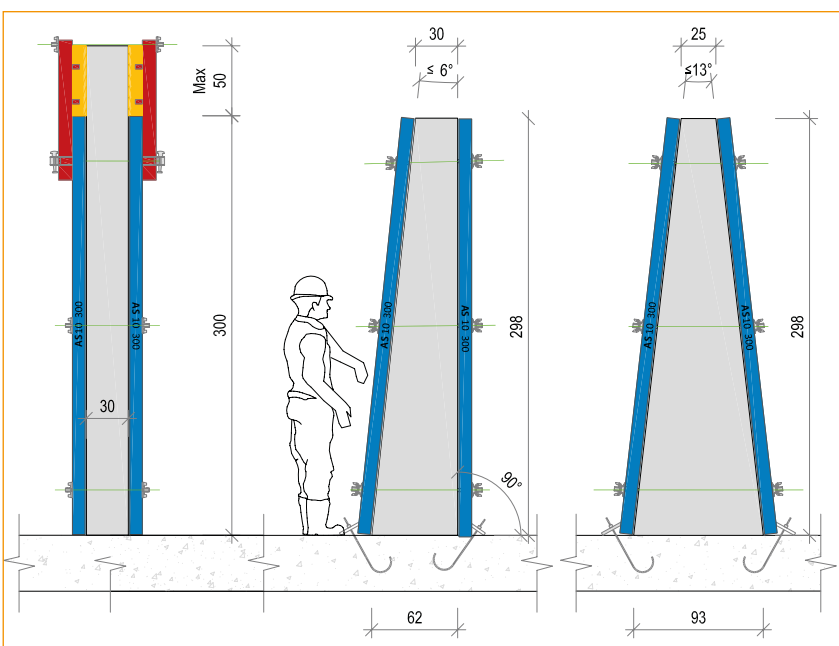
Dimensions:

- from 20 x 20 cm to 80 x 80 cm, in 5 cm increments, using 100 cm wide formwork,
- from 20 x 20 to 50 x 50 cm using 70 cm wide formwork.

Post with custom panels

- This system is used to create posts with fixed dimensions according to the size of the formwork used. Assembly is performed using an external angle form panel clamp with spindle and pin.
- This type of post guarantees an excellent result thanks to the fastening system. The elements are assembled using the external angle alignment flange and bolt.

EXTENSION - OBLIQUE WALL



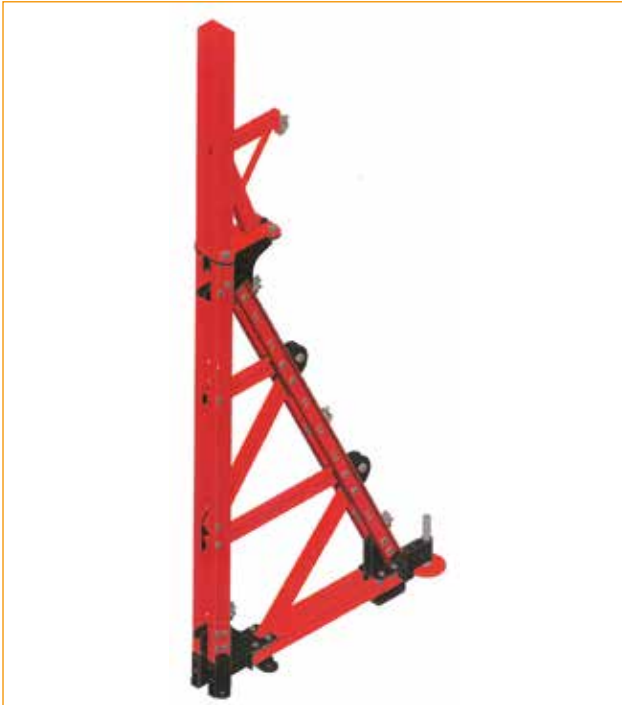
CM 50 As10 extension

- The CM 50 AS10 extension is used to reach the desired casting height without the need to use additional formwork, up to a maximum extension of 50 cm with the addition of a connecting rod to the top part.
- The CM 50 AS10 extension is always placed at the level of a formwork reinforcement bar with a maximum spacing of 100 cm and fastened with an alignment bracket.
- The application of 8, 21, or 27 mm thick multi-ply panels can be envisaged.

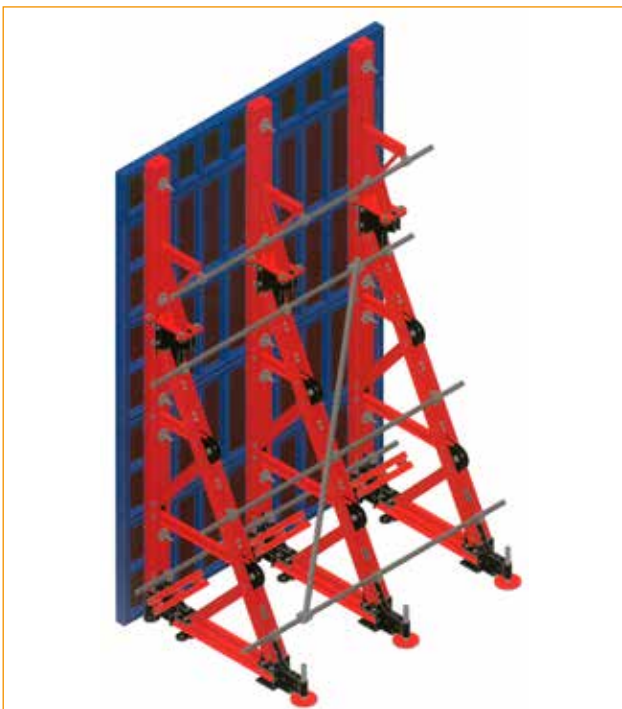
Oblique wall

- The conical bush inserted into the patented profile lets you create oblique walls using the panels in a vertical or horizontal position, to reach a maximum inclination of 6° per wall.
- To secure the panels, the DW15 threaded rod must be used, exclusively connected using the hinged nut plates, which provide proper support on the metal formwork while preventing any malfunction.

SAMPLE CONFIGURATIONS



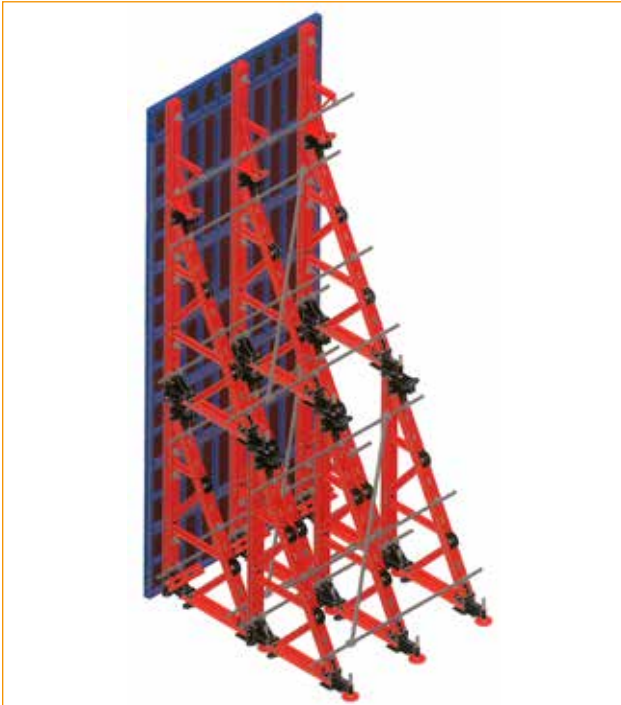
- Universal modular single-faced skin H300



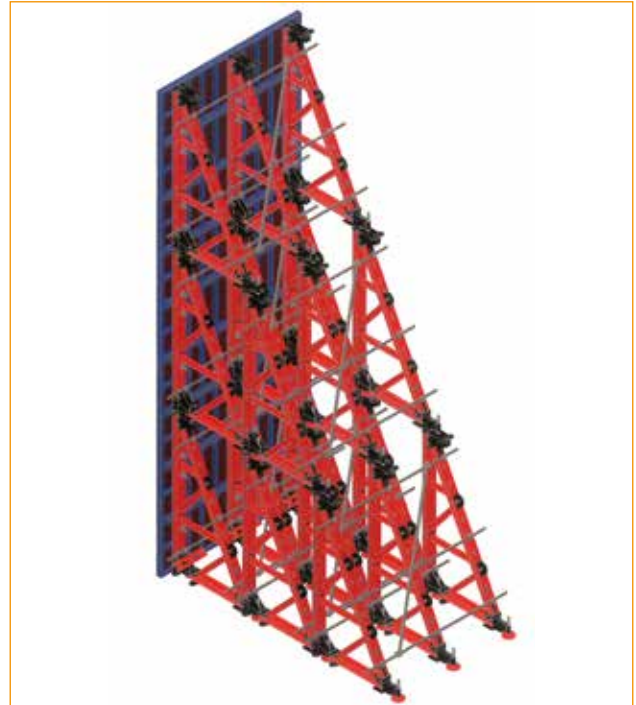
- Universal modular single-faced skin H450



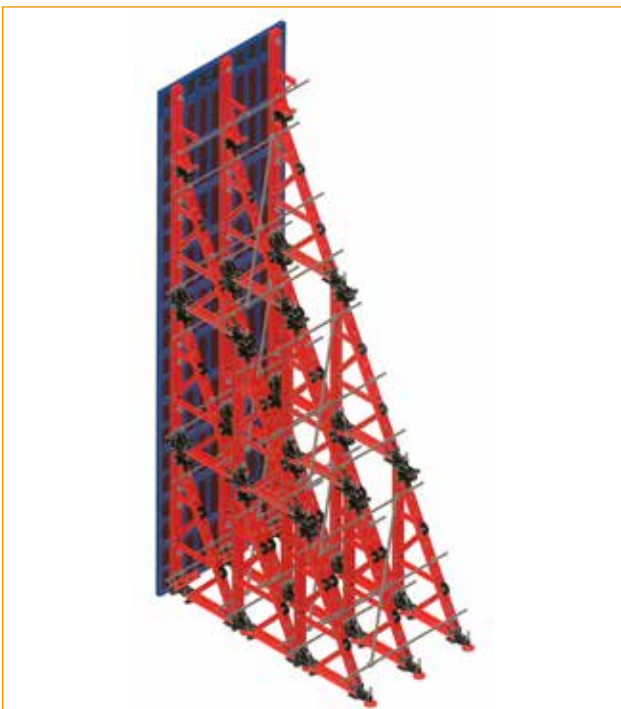
- Universal modular single-faced skin H600



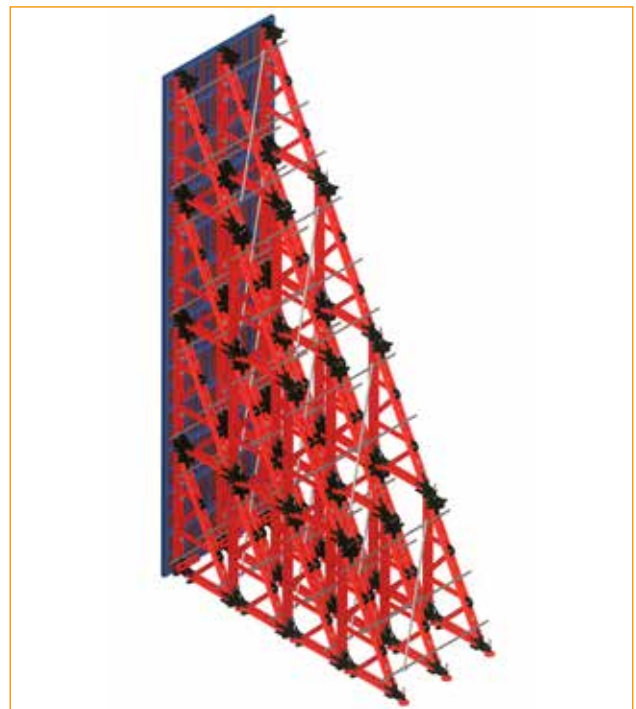
- Universal modular single-faced skin H750



- Universal modular single-faced skin H900



- Universal modular single-faced skin H1050



- Universal modular single-faced skin H1200

STEEL AND ALUMINIUM VERTICAL FORMWORK



AS10 vertical formwork panels, available in steel or aluminium, allow all geometric combinations, from rectilinear to circular.

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