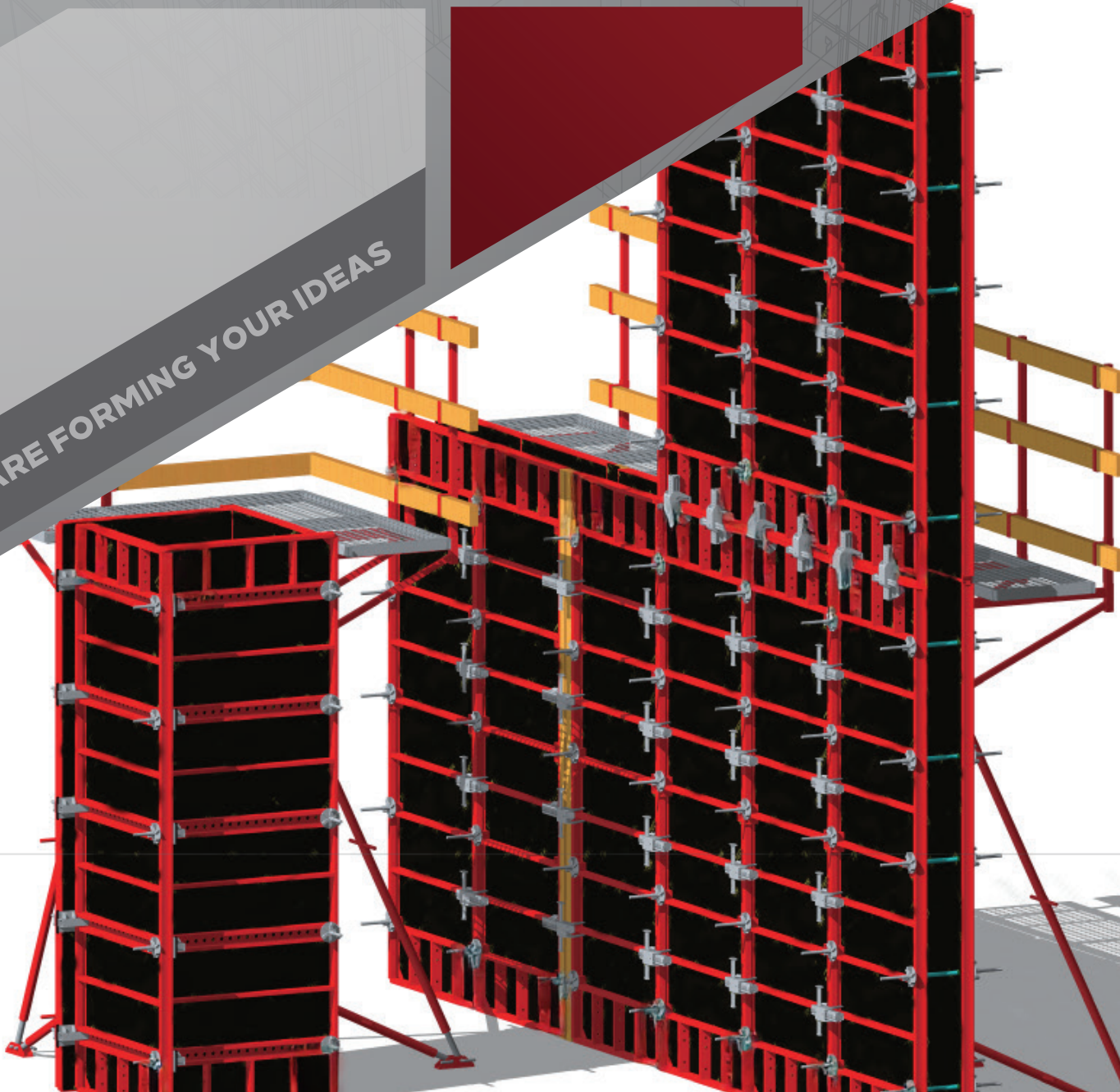




يوني ستيل
UNISTEEL
Formwork & Scaffolding

E.M 80 PANELS SYSTEM

WE ARE FORMING YOUR IDEAS





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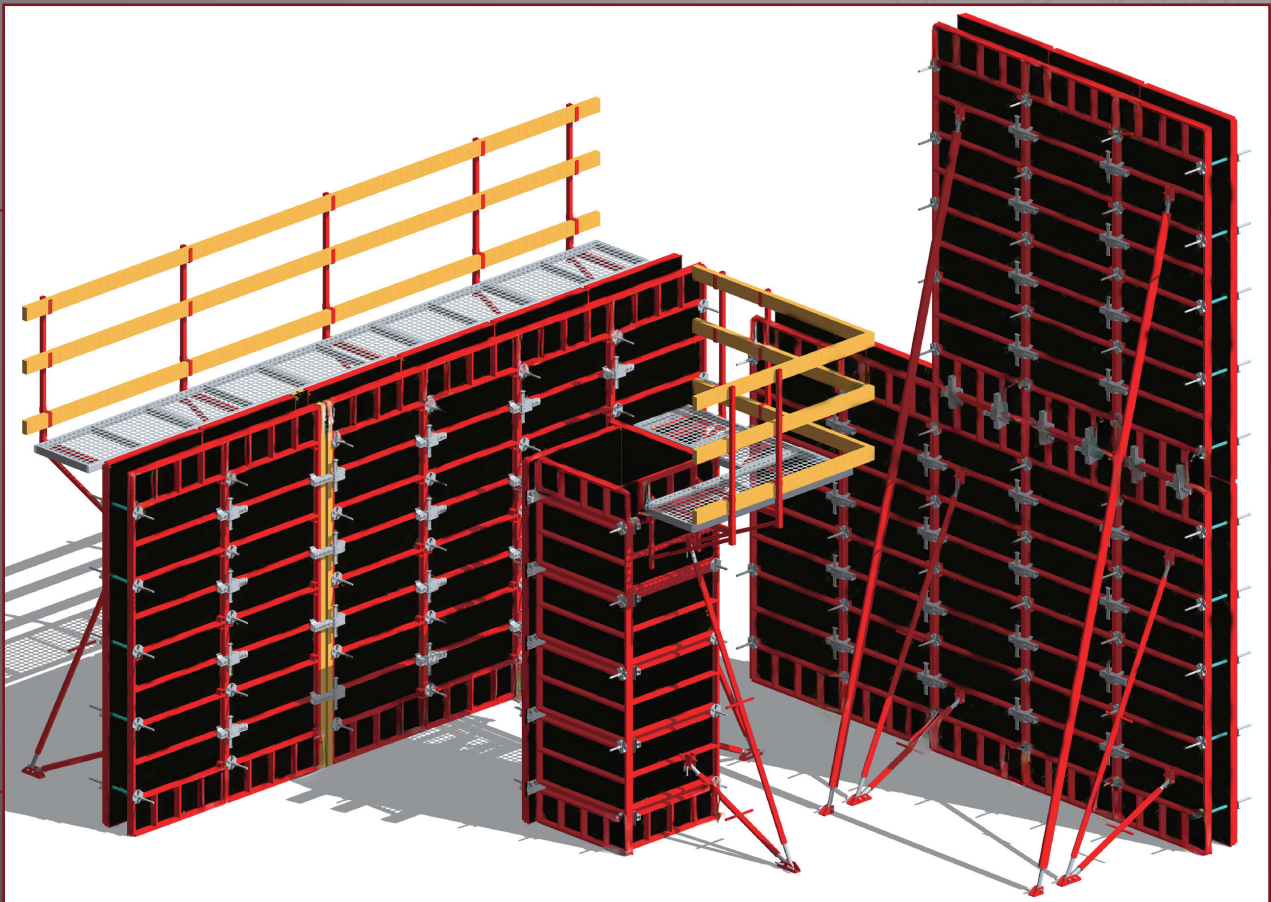
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APPLICATIONS

E.M80 FORMWORK IS SUITABLE FOR

- foundations
- basement and high-rise building walls
- swimming pools
- adjustable columns
- rectangular piers and columns
- retaining walls
- shafts and tunnels
- rebuild projects



FEATURES

The adjustable E.M 80 wall and column formwork panels with only one connecting part

Unisteel E.M80 Panels is a steel frame panel system lined with 12mm birch film-faced-plywood, universal and high efficient for walls in medium to big scale projects under crane assistance. With the alignment coupler for all panel connections, it ensures very fast site assembly.

LARGE-AREA SHUTTERING

With standard panel sizes up to 3 x 1 m – 2 panels connection only by 4 couplers, very efficient on assembly job.

EASY AND SIMPLE CONNECTIONS

With the alignment coupler as the only component for all panel connections.

ADJUSTABLE ALIGNMENT COUPLER

Adjustment ranges from 0mm to 150mm, connects with plywood or timber to use as filler plate.

ADJUSTABLE PANEL

With 50mm adjust modulus, one panel can make as several sizes, easy to reuse to further project.





FULL PIECE BIRCH PLYWOOD, AND REPLACEABLE

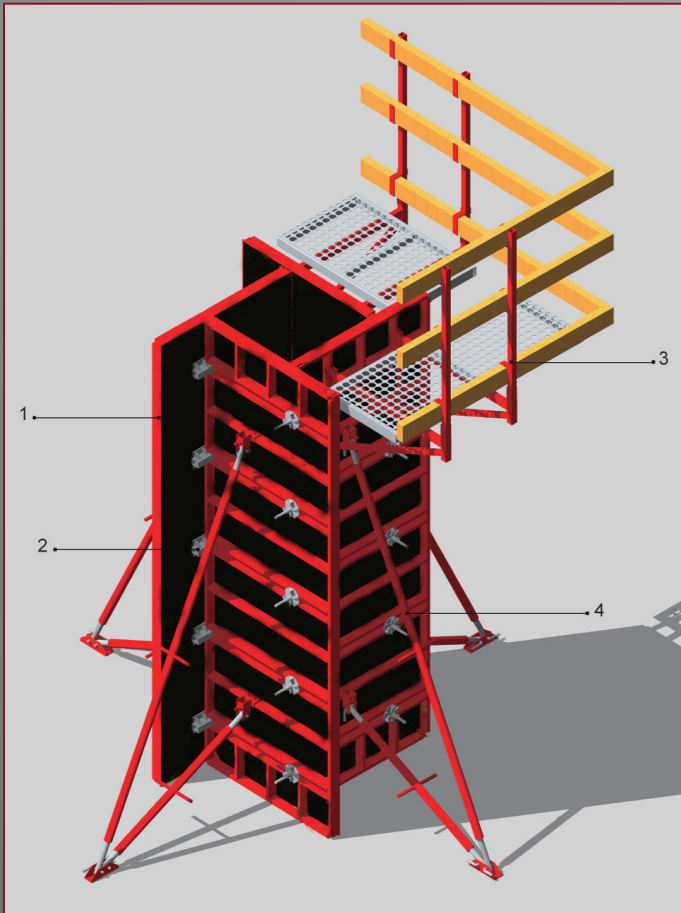
Complete Unisteel-Form birch shuttering ensures prolonged service life and produces high quality concrete finishing. Cost saving due to its replaceable.

EASY AND FAST OPERATIONS

With minimum panel widths as well as panels heights that can be used both horizontally and vertically.

SYSTEM OVERVIEW

- COLUMN

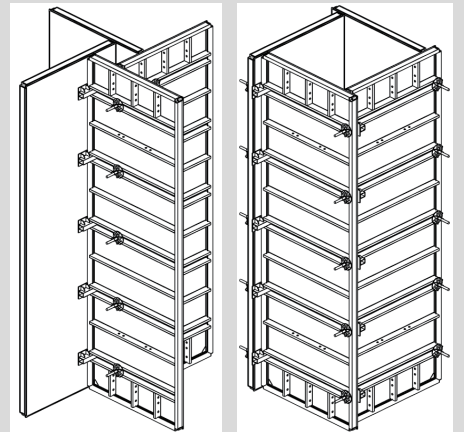
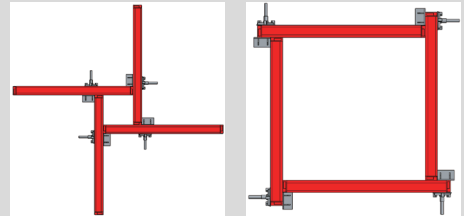


1. HM panel
2. Column coupler
3. Walking bracket
4. Push-pull prop

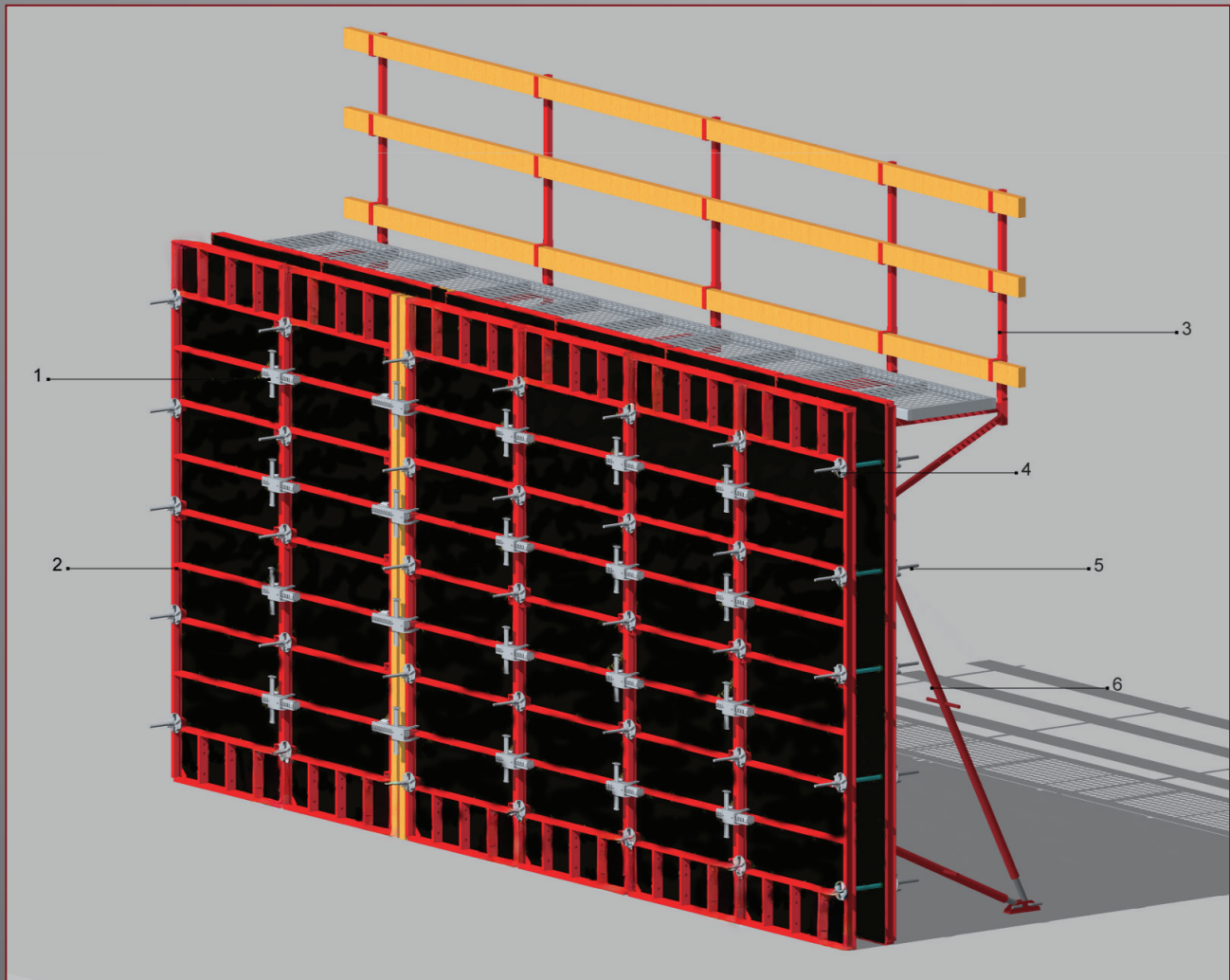
ADJUSTABLE FUNCTION

4 pieces of 3x1m adjustable panels
columns sizes from 50x50mm to
850x850mm
can be formed in 50mm increments.

PLAN VIEW

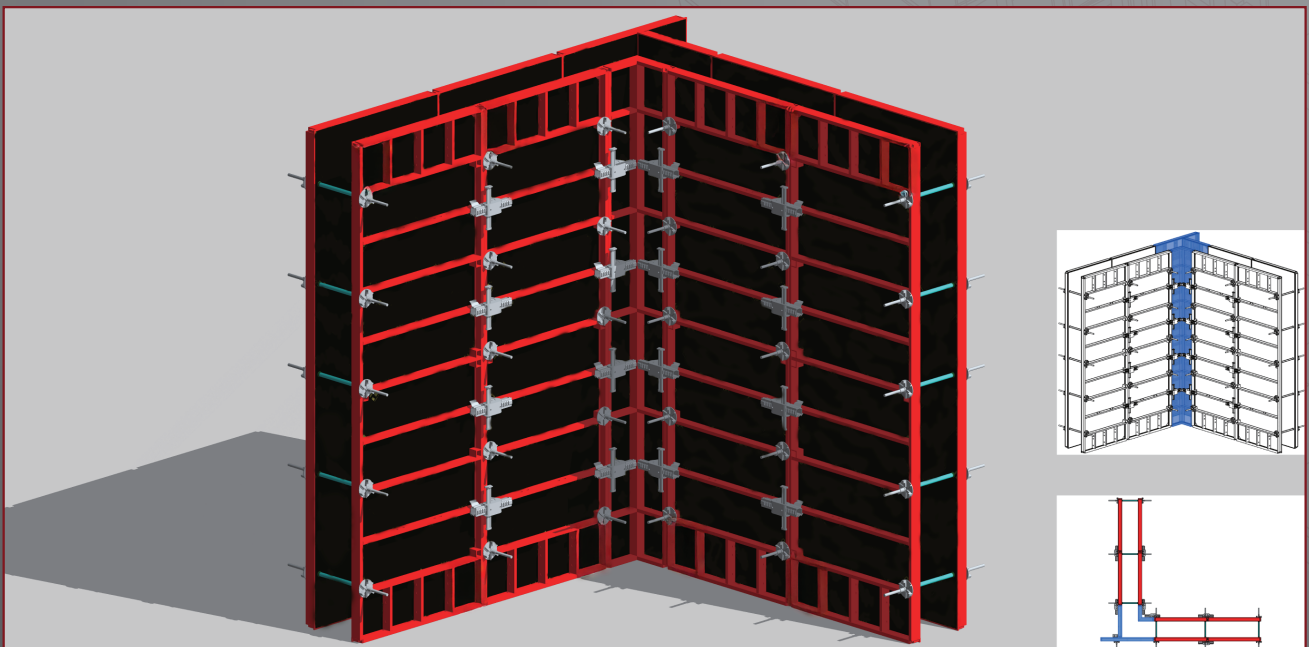
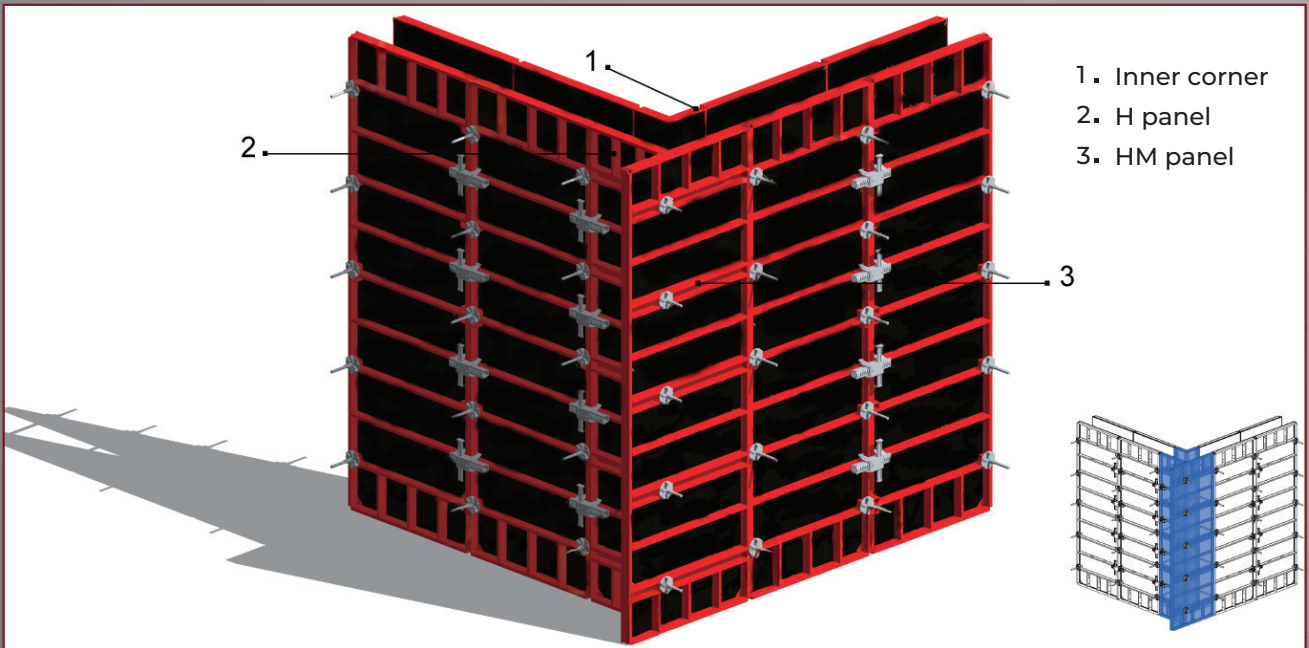


- SHEAR WALL



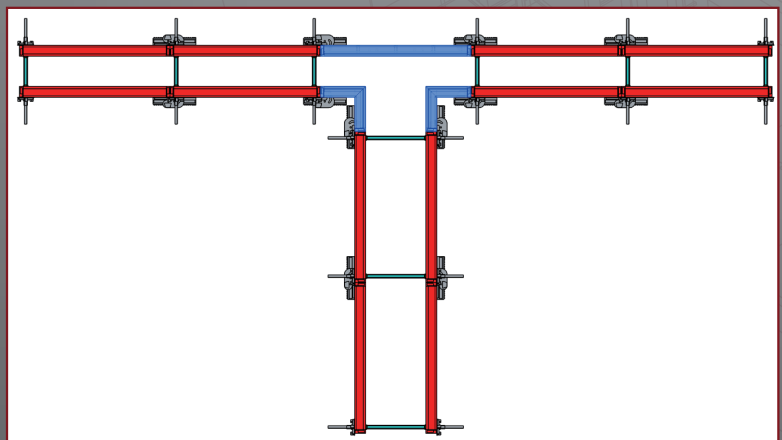
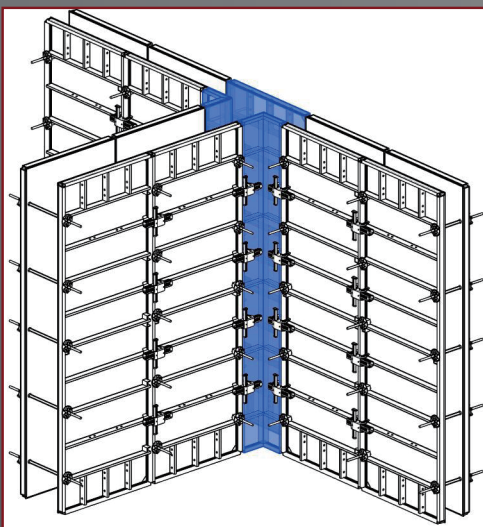
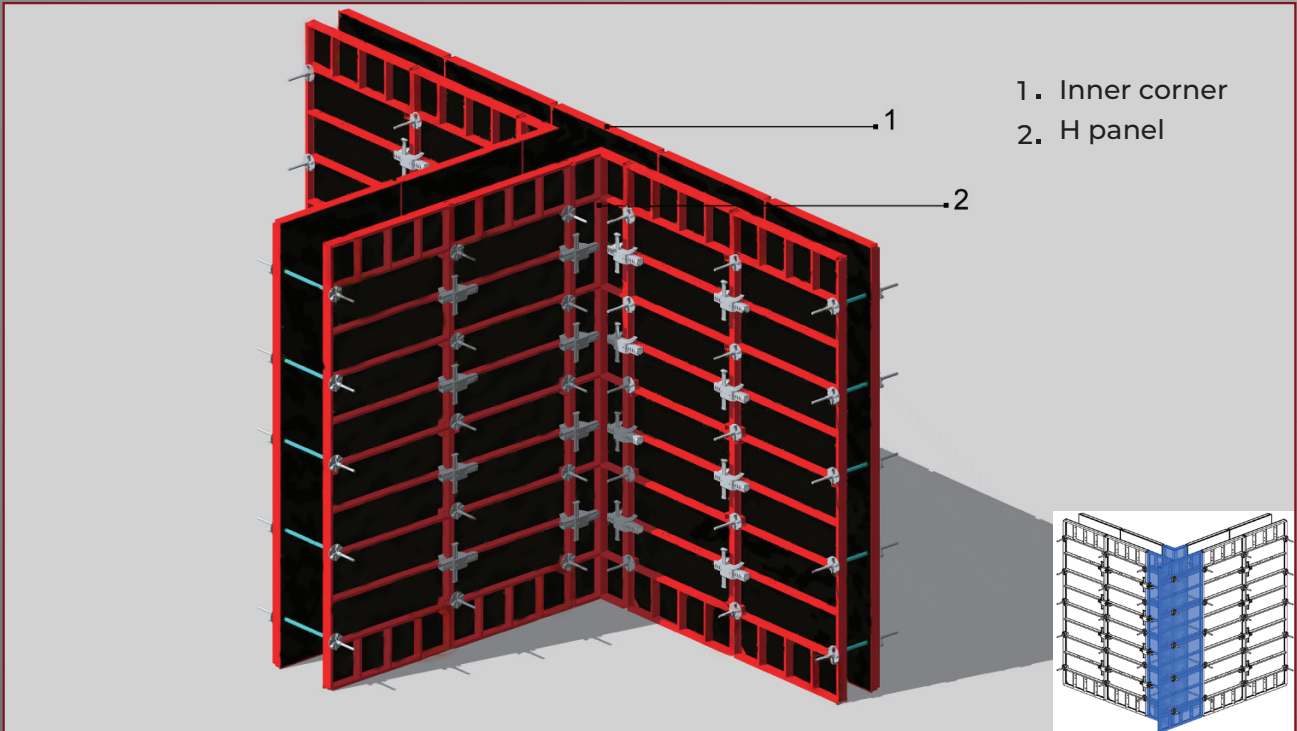
1. HC alignment coupler
2. H panel
3. Walking bracket
4. Big plate nut
5. Tie rod
6. Push-pull prop

- 90° CORNERS



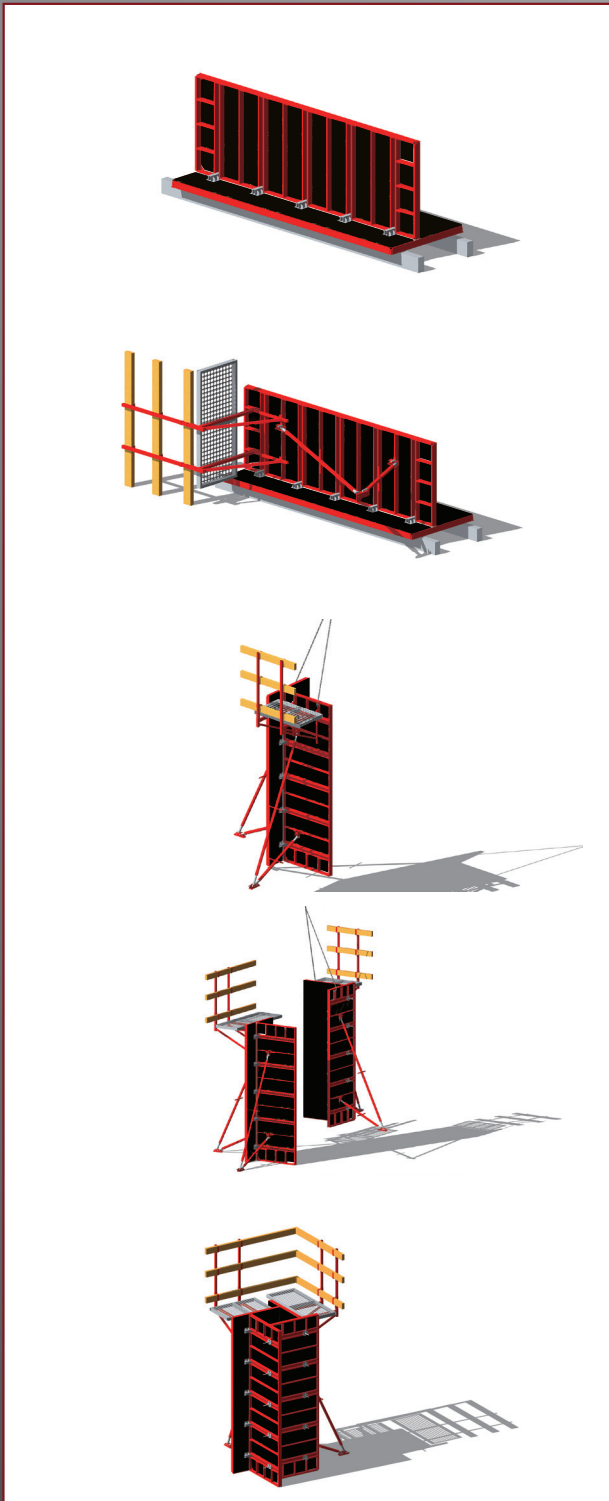
- T-JUNCTION

For T-Junction connections E.M80 requires only a minimum of system components.



- ASSEMBLY PROCESS

Corners



1 . Assemble 2 HM panels into L shape

2. Assemble components including walking bracket, push-pull props and etc

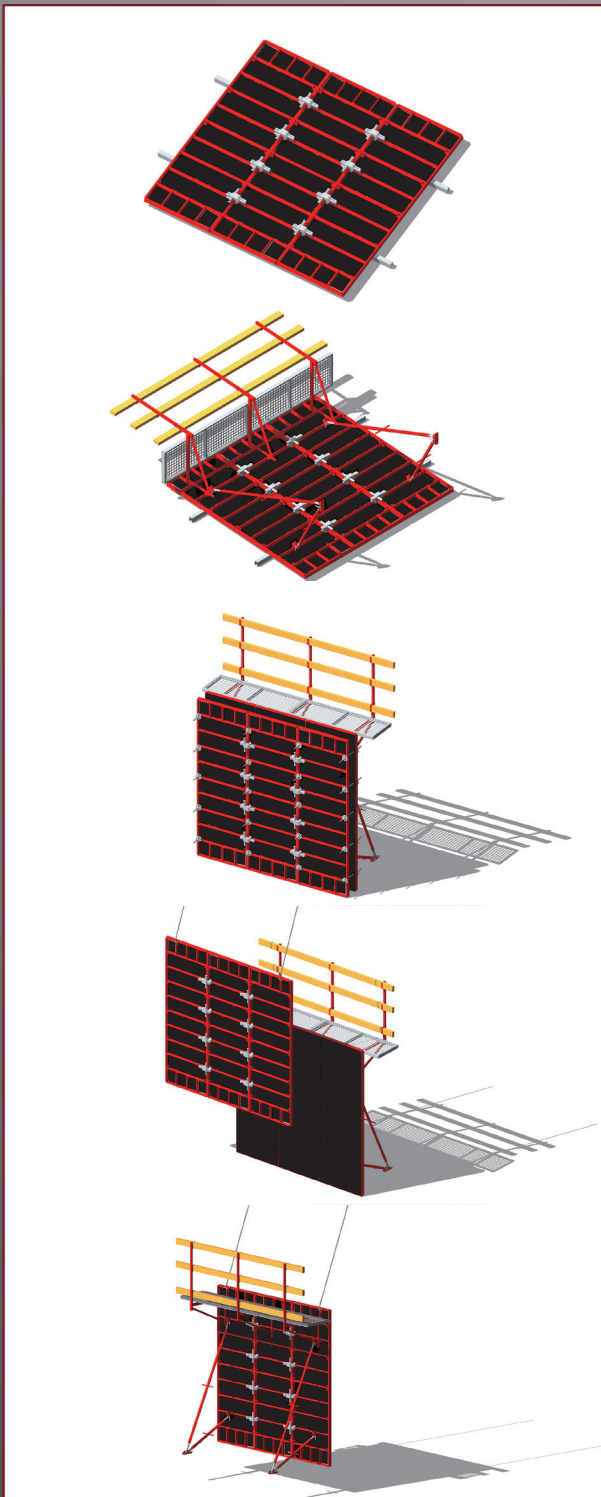
3. Transport L shaped formwork by tower crane to right position

4. Repeat step 1 and step 2, transport another set of L shaped formwork

5. Connect 2 L shaped formworks with column Coupler, finish assembly

- ASSEMBLY PROCESS

Wall



1. Positioning and assemble first side of wall formwork with H panels
2. Assemble components including push-pull props, walking bracket, etc
3. Transport first side formwork to right position by tower crane
4. Repeat step 1 and step 2, transport another side of formwork
5. Insert tie rod and PVC tube, adjusting them according to wall thickness, fix big plate nuts on tie rod for both sides then finish assembly.

SYSTEM COMPONENTS

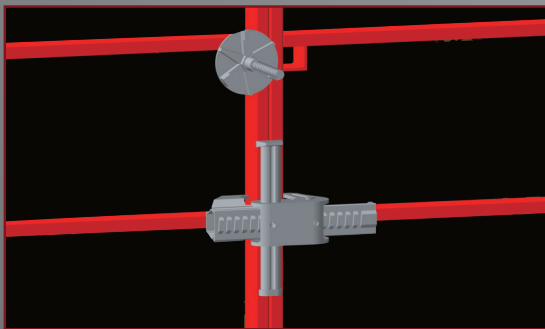
ALIGNMENT COUPLERS

-The HC Alignment Coupler was designed specifically for the E.M 80 Panels with three advantages.

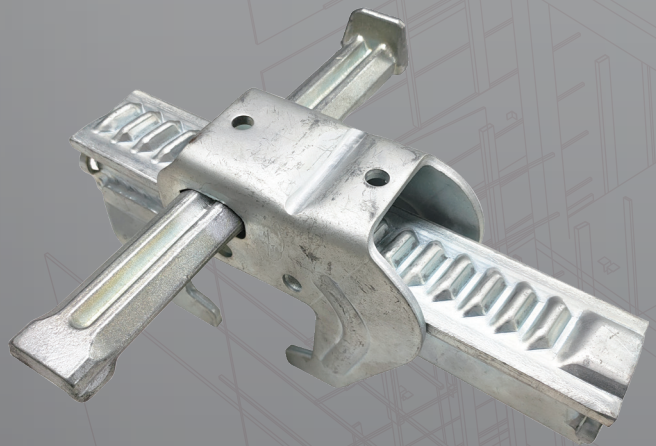
-Aligned the form work elements and tight in a single operation. The extremely accurate alignment thus provides the very best formwork results day after day.

-The HC Alignment Coupler is used for standard panel joints multi-purpose panels connection, timber compensations and extensions.

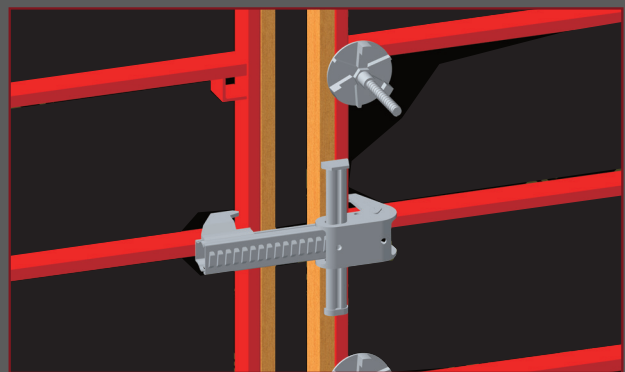
-With an adjustable function in 150mm.



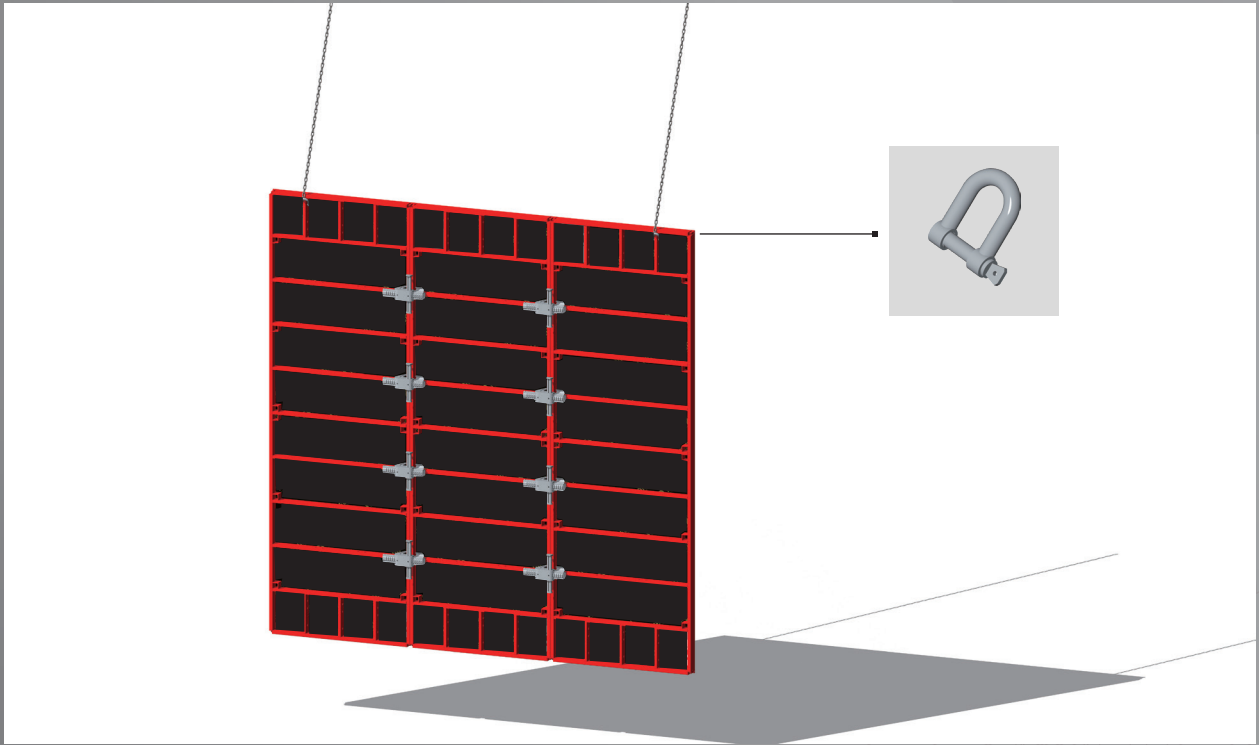
One component for all virtually and horizontal connections



Easy fasten with hammer



Alignment and adjustable



E.M80 LIFTING HOOK

Load Capacity for lifting hook is up to 500 kg.

Big size panels can be moved vertically together easily via this hook. Usually 2 lifting hooks for each panel units during site transportation.














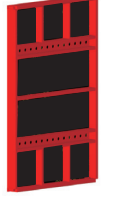




UNISTEEL- 12MM PP FACED PLYWOOD



12mm PP Faced Plywood is a high-quality plywood sheet that features a polypropylene (PP) film on both sides. This film provides a smooth and durable surface that is resistant to moisture, chemicals, and abrasion, making it ideal for use in construction, especially for formwork in concrete applications. The plywood's core is typically made from hardwood or a mix of hardwood and softwood, offering strength and stability. Its lightweight nature, combined with its resistance to warping and cracking, makes it easy to handle and install, while the PP facing ensures multiple reuses in formwork before replacement is necessary.

AN OVERVIEW OF THE E.M80 SIZES RANGE OF PANELS

An overview of the E.M80 sizes range of panels Biggest HM panel is 3*1m in 120.94kg with 80KN/sqm permissible fresh concrete pressure.

HM Panel		Width			
		100	75	60	35
Height	300	 S:300x100 W;120.94kg	 S:300x75 W;94.68kg	 S:300x60 W;80.08kg	 S:300x35 W;53.87kg
	240	 S:240x100 W;98.49kg	 S:240x75 W;76.95kg	 S:240x60 W;65.19kg	 S:240x35 W;43.69kg
	180	 S:180x100 W;61.25kg	 S:180x75 W;48.66kg	 S:180x60 W;42.4kg	 S:180x35 W;29.81kg
	120	 S:120x100 W;55.53kg	 S:120x75 W;41.46kg	 S:120x60 W;35.35kg	 S:120x35 W;23.29kg

AN OVERVIEW OF THE E.M80 SIZES RANGE OF PANELS

Description	Unit Weight (kg)	Size	Description	Unit Weight (kg)	Size
HM Panel 300/100	120.94	3000x1000mm	 Panel plug	0.01	For sealing tie holes Ø20mm, which are not required
HM Panel 300/75	94.68	3000x750mm	 Corner sealing strip	1.63	3m
HM Panel 300/60	80.08	3000x600mm		1.30	2.4m
HM Panel 300/35	53.87	3000x350mm		0.98	1.8m
HM Panel 240/100	98.49	2400x1000mm		0.65	1.2m
HM Panel 240/75	76.95	2400x750mm	HC Alignment coupler	4.35	For all panel connections
HM Panel 240/60	65.19	2400x600mm	Column coupler	2.70	For corner connector
HM Panel 240/35	43.69	2400x350mm	Steel waling 120	7.60	For length compensations, height extensions, stopend formwork and special applications
HM Panel 180/100	76.01	1800x1000mm	Stopend tie	1.50	For transferring forces from the stopend formwork to the panels
HM Panel 180/75	59.20	1800x750mm	Walking bracket	13.82	For assembly of working and concreting scaffolds
HM Panel 180/60	50.27	1800x600mm	Formwork panel hook	0.27	Lifting hook
HM Panel 180/35	33.49	1800x350mm	Tie rod	0.90	D15, L=600 mm
HM Panel 120/100	53.53	1200x1000mm	Big plate nut	0.72	D15
HM Panel 120/75	41.46	1200x750mm	Push-Pull Prop 229-280	30.32	2.29-2.80m / 1.09-1.55m adjustable length
HM Panel 120/60	35.35	1200x600mm	Push-Pull Prop 339-390	35.11	3.39-3.90m / 1.09-1.55m adjustable length
HM Panel 120/35	23.29	1200x350mm	Push-Pull Prop 555-583	49.19	5.55-5.83m / 2.29-2.80m adjustable length
Inner Corner 300	84.23	Inside Corner 300x300mm			
Inner Corner 240	67.71	Inside Corner 300x300mm			
Inner Corner 180	51.19	Inside Corner 300x300mm			
Inner Corner 120	34.65	Inside Corner 300x300mm			



● powder coated



● powder coated



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