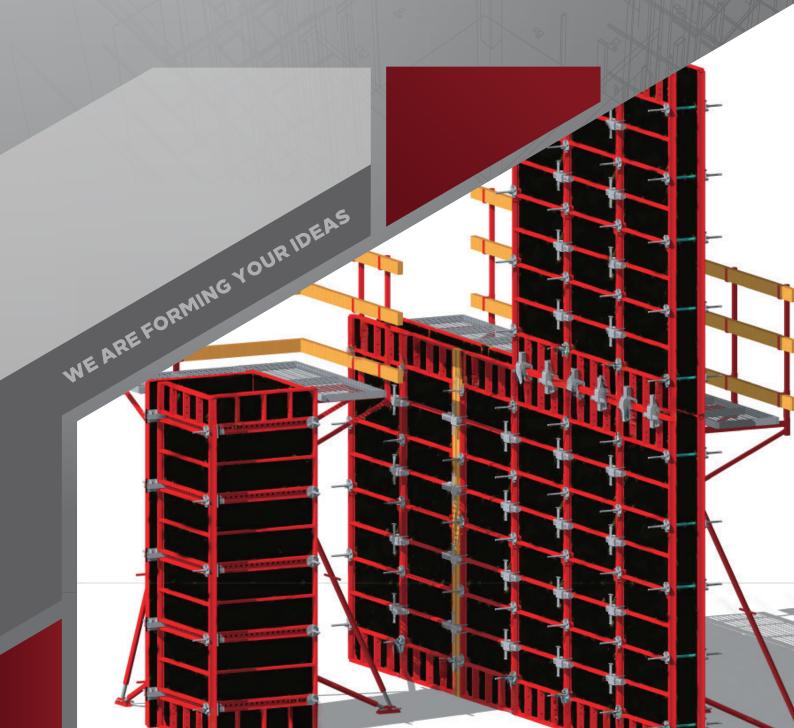




E.M 80 PANELS SYSTEM

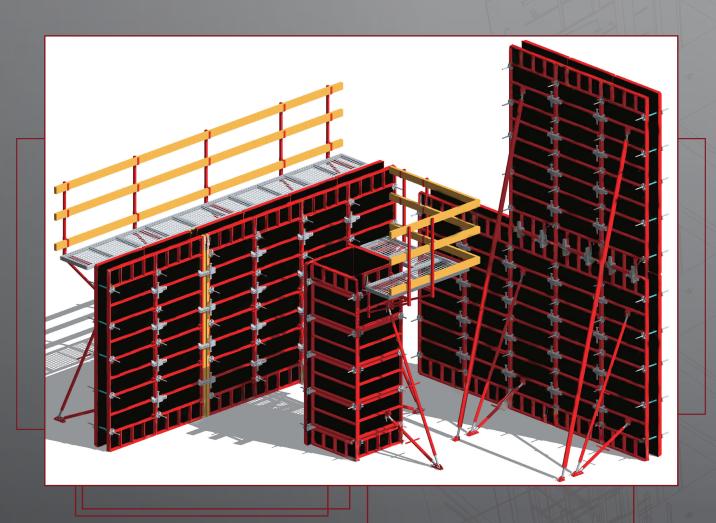




APPLICATIONS

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 $3 \times 1 \text{ m} - 2$ 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

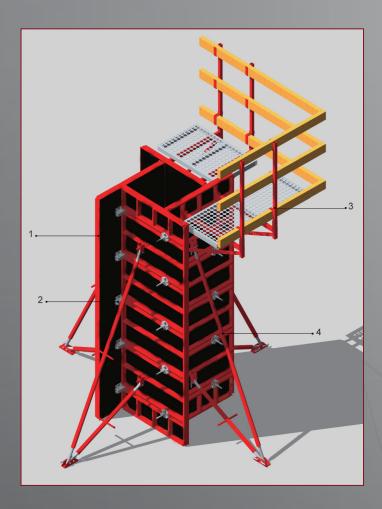
Complete Unisteel-Form birch shuttering ensures prolonged service life and produces high quality concrete finishing. Cost saving due to its replaceable.

EASY AND FAST OPERATIONS

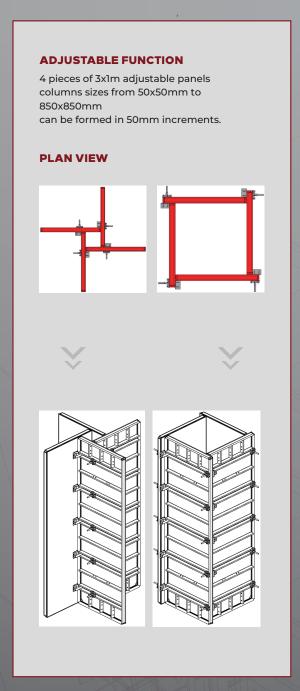
With minimum panel widths as well as panels heights that can be used both horizontally and vertically.

SYSTEM OVERVIEW

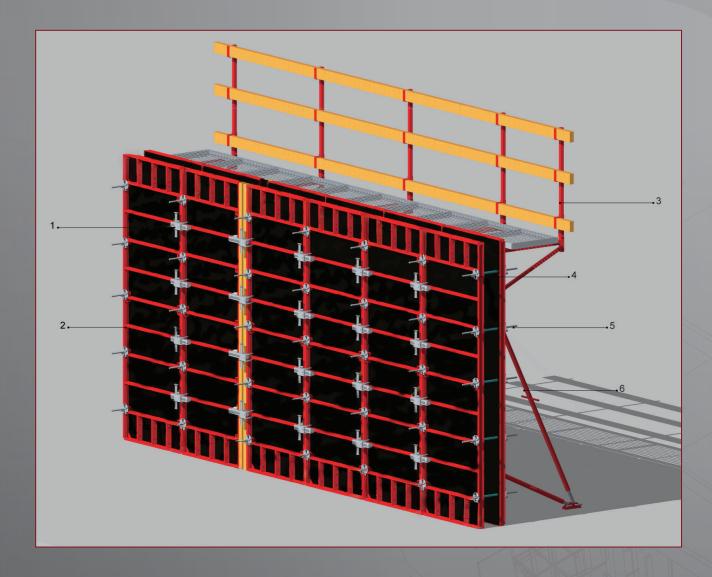
- COLUMN



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

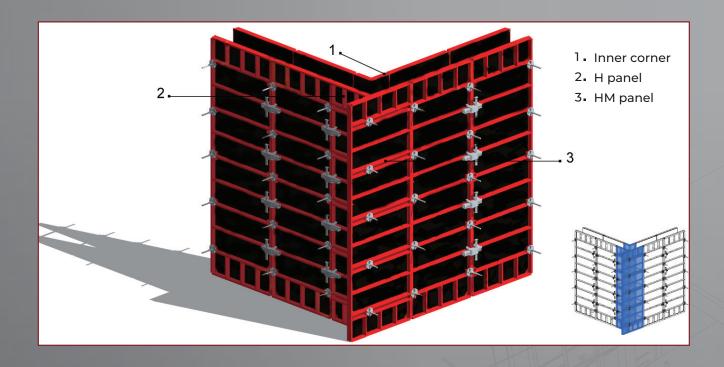


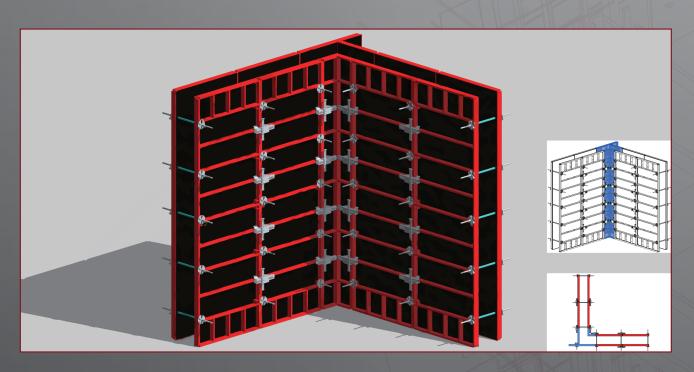
- SHEAR WALL



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

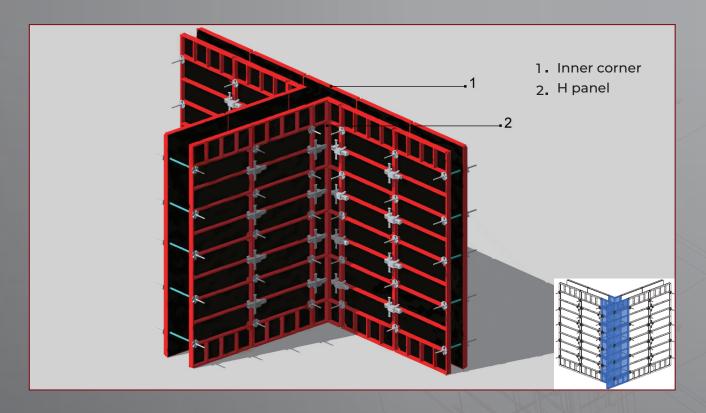
- 90° CORNERS

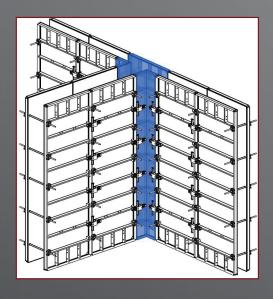


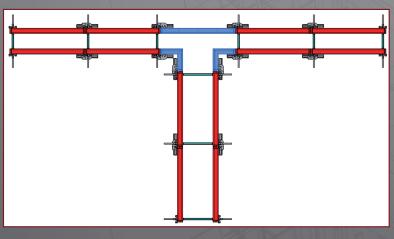


- T-JUNCTION

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

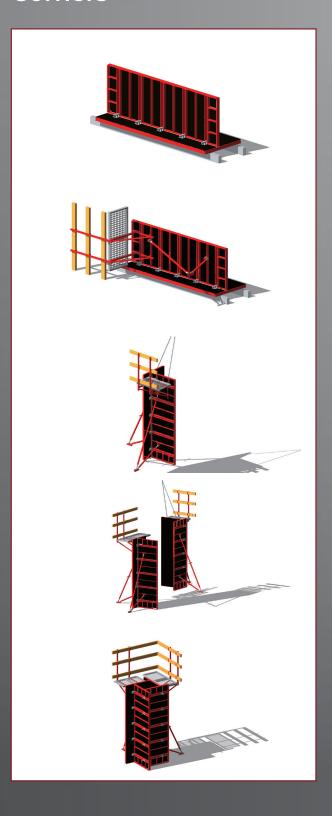






- ASSEMBLY PROCESS

Corners



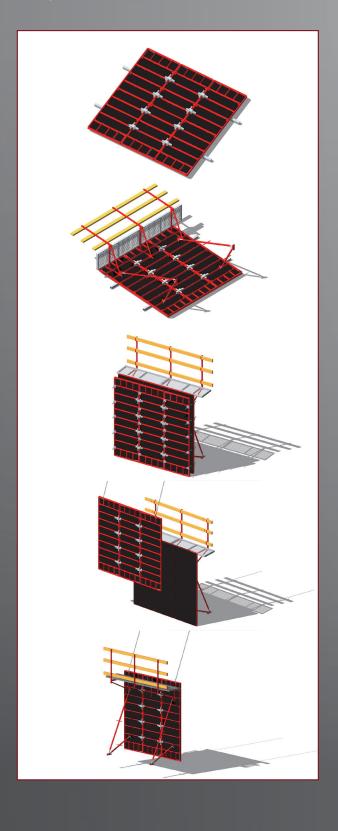
- Assemble 2 HM panels into
 L shape
- 2. Assemble components including walking bracket, push-pull props and etc
- **3.** Transport L shaped formwork by tower crane to right position

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



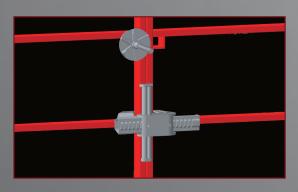
- 1 Positioning and assemble first side of wall formwork with H panels
- 2. Assemble components including push-pull props, walking bracket, etc
- 3. Transport first side formwork to right position by tower crane

- 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.

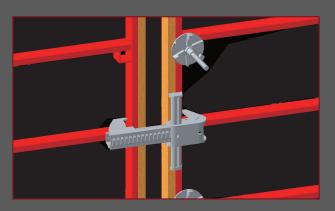


One component for all virtually and horizontal connections

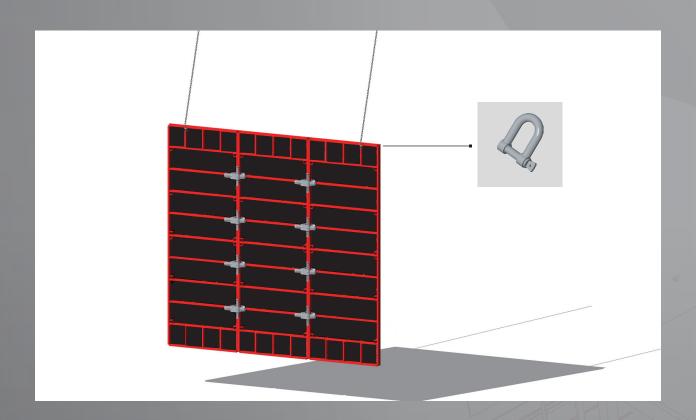




Easy fasten with hammer



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, co bined 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
	HM Panel 300/100	120.94	3000x1000mm
	HM Panel 300/75	94.68	3000x750mm
	HM Panel 300/60	80.08	3000x600mm
	HM Panel 300/35	53.87	3000x350mm
The state of the s	HM Panel 240/100	98.49	2400x1000mm
	HM Panel 240/75	76.95	2400x750mm
	HM Panel 240/60	65.19	2400x600mm
	HM Panel 240/35	43.69	2400x350mm
	HM Panel 180/100	76.01	1800x1000mm
	HM Panel 180/75	59.20	1800x750mm
	HM Panel 180/60	50.27	1800x600mm
 powder coated 	HM Panel 180/35	33.49	1800x350mm
	HM Panel 120/100	53.53	1200x1000mm
	HM Panel 120/75	41.46	1200x750mm
	HM Panel 120/60	35.35	1200x600mm
	HM Panel 120/35	23.29	1200x350mm
	Inner Corner 300	84.23	Inside Corner 300x300mm
	Inner Corner 240	67.71	Inside Corner 300x300mm
	Inner Corner 180	51.19	Inside Corner 300x300mm
powder coated	Inner Corner 120	34.65	Inside Corner 300x300mm

	Description U	nit Weight (kg)	
• plastic	Panel plug	0.01	For sealing tie holes Ø20mm, which are not required
	Corner sealing strip	1.63 1.30 0.98	3m 2.4m 1.8m
• plastic		0.65	1.2m
• zine coated	HC Alignment coupler	4.35	For all panel connections
• zine coated	Column coupler	2.70	For corner connector
• powder coated	Steel waling 120	7.60	For length compensations, height extensions, stopend formwork and special applications
• zine coated Thread D15	Stopend tie	1.50	For transferring forces from the stopend formwork to the panels
• powder coated	Walking bracket	13.82	For assembly of working and concreting scaffolds
powder coated	Formwork panel hook	0.27	Lifting hook
• zine coated	Tie rod	0.90	D15, L=600 mm
• zine coated	Big plate nut	0.72	D15
7	Push-Pull Prop 229-280	30.32	2.29-2.80m / 1.09-1.55m adjustable length
	Push-Pull Prop 339-390	35.11	3.39-3.90m / 1.09-1.55m adjustable length
• powder coated	Push-Pull Prop 555-583	49.19	5.55-5.83m / 2.29-2.80m adjustable length



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