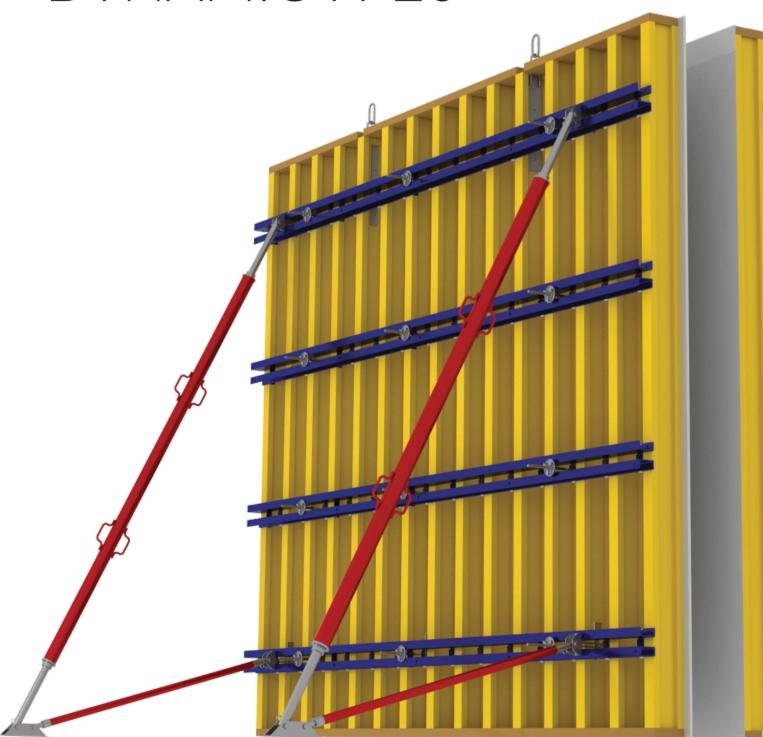
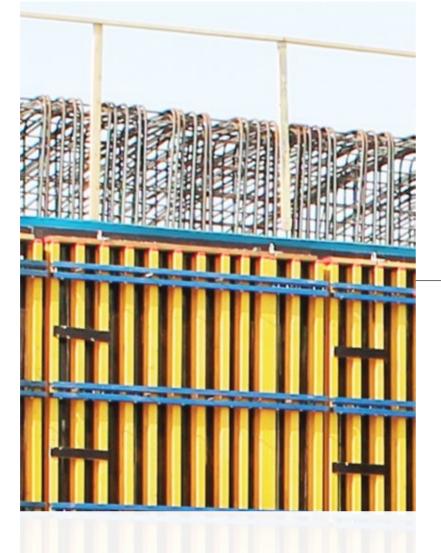


CATALOGUE

### DYNAMIC H-20





#### SYSTEM OVERVIEW

- Panel Details
- Elements Description

#### ASSEMBLY, USE AND DISASSEMBLY

#### SITE APPLICATIONS:

- 1- Straight Connections
- [1-A] Joint Between Panels (Without Filler) [1-B] Joint Between Panels (With Filler)
- 2- Corner Connections
- [2-A] For Outer Part [2-B] For Inner Part
- 3- Acute & Obtuse-Angled Corners
- 4- T-Corners
- 5- Pilasters
- 6- Wall Stop End
- A- Using universal corner angle ties B- Using Stop-End Splice
- 7- Round Connection
- 8- Vertical Panel Extension
- 9- Panels Bracing
- 10-Access Bracket
- 11- Lifting methods
- 12- Columns

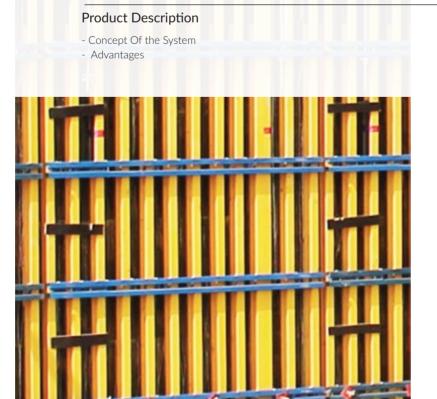
#### **ADVANCED APPLICATIONS**

- 1- Climbing Formwork
- 2- Single Sided Wall
- 3- Applications In Infra-Structure

#### COMPLEMENTARY COMPONENTS

- 1- Tying system
- 2- access ladder
- 3- Hi-skaf
- 4- ACROW board

Components and Accessories





### PRODUCT DESCRIPTION

#### CONCEPT OF THE SYSTEM

At the core of DYNAMIC H-20 is a commitment to unlimited flexibility. This system is designed to adapt effortlessly to your specific project requirements by enabling the assembly of customized panels based on several key factors:

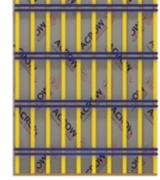
- Size: Each panel can reach up to a maximum area of 36 m<sup>2</sup>, offering expansive coverage without compromising structural integrity.
- Formwork Sheeting: : Choose between various types of plywood or the advanced ACROW BOARD, taking into account how frequently the panels will be used and the desired quality of the concrete finish (For further advantages and usage guidelines, please refer to the ACROW BOARD User Manual.)
- Shape: Construct panels tailored to the precise dimensions needed for your project, all while relying on a set of standards, yet versatile components.

This dynamic combination of design elements makes the ACROW Dynamic H-20 system exceptionally adaptable—ideal for projects where ground plans are frequently altered. It's a cost-effective, high-performance solution that redefines formwork efficiency, providing both the robustness of traditional systems and the innovative flexibility demanded by modern construction.

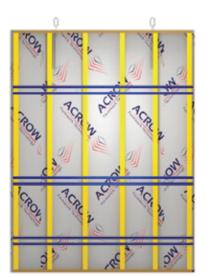
- Concrete pressure: : The system intelligently adjusts the spacing between Acrow H-20 beams according to the concrete pressure applied, ensuring optimal performance and stability under varying structural loads







Horizontal position





Low pressure

High pressure

#### ADVANTAGES

#### Optimized Planning:

The DYNAMIC ACROW H-20 system provides multiple benefits. such as streamlined planning, reduced material needs on-site.

#### Custom-Sized Large Formwork Panels:

Large elements can be assembled specifically for each project, ensuring that sizing and configuration are fully tailored to the project's demands.

#### Architectural Finish:

The type and size of the form lining as well as the form lining fixings can always be freely selected to meet project specifications.

#### Adjustable Panel Dimensions:

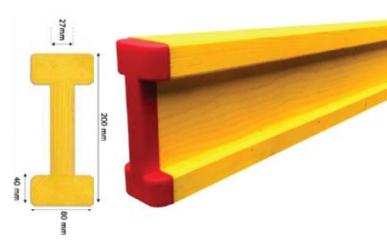
Panel widths and heights are adjustable, with options to configure the position of any height extension.

#### Standard Pressure Design Capacities:

- Walls: Rated for up to 50 kN/m<sup>2</sup>
- Columns: Rated for up to 100 kN/m<sup>2</sup>
- Custom Requirements: Customized pressure can be provided based on specific project specification

#### Panel Types & Configurations:

The formwork system supports various panel types, including straight, curved, or offset panels, allowing for maximum design flexibility.



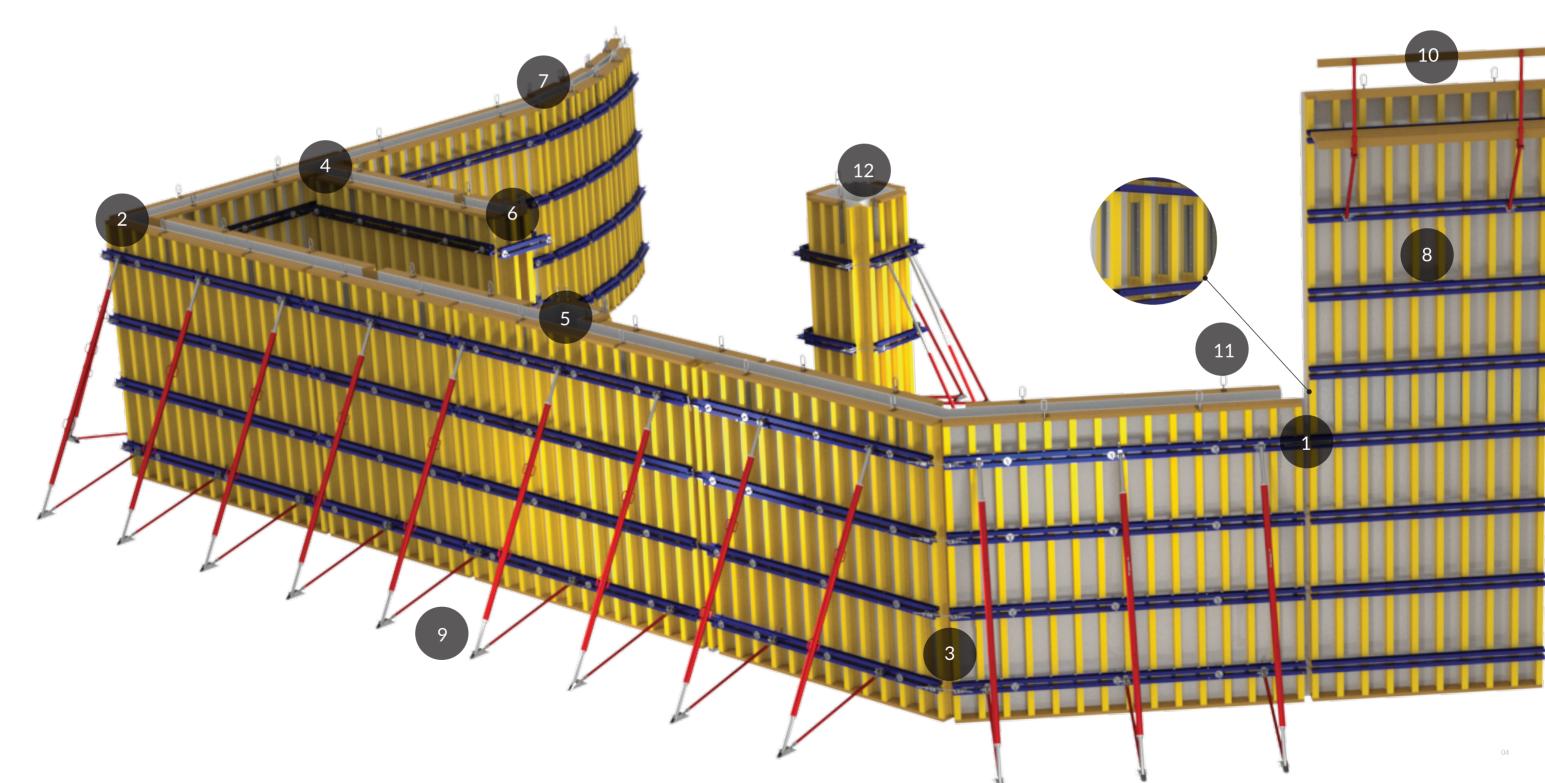


Dynamic H-20 Catalogue Dynamic H-20 Catalogue

# O2 System overview

- 1-.Straight Connections
- 2- Corner Connections
- 3- Acute & Obtuse Angle Connections 4- T-Corners

- 5- Pilasters 6- Wall Stop-Ends
- 7- Curved Walls
- 8- Vertical Panel Extension
- 9- Panel Bracing
  10- Access & Concreting Platforms
- 11- Lifting Methods 12- Columns



#### PANEL DETAILS

#### The Panel Components

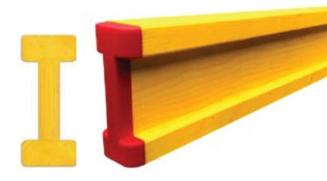
- 1- Acrow H20 Girder
- 2- Plywood/Acrow Board
- 3- Soldier U100
- 4- Crane Splice
- 5- H-20 Connection
- Versatile Assembly: Using soldiers (steel walers), ACROW DYNAMIC H-20 elements can be assembled into panels with varying widths, providing the flexibility to adapt to different project requirements.
- Adaptive Height: The height of each panel is directly dependent on the chosen H-20 beam length, ensuring that every configuration is optimized for the specific structural needs.
- Extended Girder Length Options: With a range of girder lengths available up to 5.9 meters, the system caters to various design complexities, allowing for extended spans and robust construction solutions.
- Concrete Pressure Capacity: The permissible fresh concrete pressure for each panel assembly is variable and determined based on the design, ensuring the system can safely and efficiently accommodate the required pressure during installation.



#### **ELEMENTS DESCRIPTION**

#### 1- ACROW H-20 BEAMS

In the ACROW formwork system, the ACROW H-20 plays a crucial role as a secondary element, complementing the primary structural components such as soldiers (steel walers) and main girders. This secondary element is engineered to:



#### Consistent High Load Capacity:

Delivers reliable high load-bearing capacity across the entire beam length, thanks to the use of homogeneous web material.

#### Proven Strength & Safety:

All flanges are machine stress-graded and load-tested to ensure secure and verified component strength.

#### Dimensional Stability:

Maintains consistent product characteristics due to high dimensional stability throughout the beam.

#### Lightweight with High Load Capacity:

Combines improved load capacity with reduced weight compared to traditional squared timber, enhancing handling and on-site efficiency.

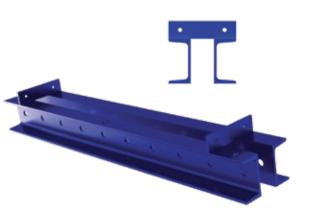
#### 2- SOLDIER (STEEL WALER)

Achieve high-precision panel alignment with our ACROW Steel Waler, which features pre-drilled holes to facilitate easy splice connection between panels.

This ensures a seamless, secure link between panels, accelerating installation and enhancing overall efficiency.

ACROW steel walers, offer a suite of benefits that enhance overall efficiency, safety, and performance on any construction site.

- High-Precision Alignment: Engineered for precision, ACROW Steel Walers ensure exact panel positioning, resulting in consistent load distribution and superior structural integrity. This level of accuracy minimizes errors and rework, which is vital in high-stakes construction projects
- Enhanced Structural Stability: Built to withstand high loads, these steel walers significantly improve overall stability in formwork systems. They evenly distribute stress, which is critical for the safety and durability of the structure
- **Versatility and Adaptability:** ACROW Steel Walers adapt seamlessly to various formwork systems and project geometries. Their modular design allows use in a wide range of applications, from simple wall setups to complex structural frameworks (such as heavy duty trusses for gantries and HD shoring towers)



#### 3- H20 MIDDLE AND END CONNECTION

Engineered for precision, the ACROW H-20 Connection seamlessly joins ACROW H-20 with Soldiers in the required perpendicular alignment. This connection ensures exact positioning, simplifying the assembly process and enhancing overall system stability. Ideal for dynamic construction sites that demand swift, secure, and adaptable formwork, the ACROW H-20 Connection is a key component for achieving efficient and cost-effective project execution.



#### 4- CRANE SPLICE [4 HOLES]

- Ensure safe and efficient panel lifting with the ACROW Crane Splice. Each panel is equipped with two crane splice lifting hooks, allowing for secure attachment and smooth handling.
- Allowable load per Crane Splice = 900 Kg Resulting in a max. weight of panel lifted by 2 Crane Splices = 1.80 ton



#### 5- PLYWOOD/ACROW BOARD

Designed for durability and efficiency, the ACROW Board serves as the panel surface in direct contact with concrete. Engineered for multiple reuses, it maintains structural integrity while delivering a smooth, high-quality finish. Its resistance to moisture, impact, and makes it a reliable choice for construction projects requiring precision and longevity.



#### 6- SPLICE

- Rapid Panel Connection: The ACROW Steel Waler Splice is engineered for quick, secure, and tool-free panel connections—maximizing on-site efficiency.
- Fast & Easy Connection: ACROW splice technology allows panels to be joined quickly and efficiently.
- Secure Fit: The rivet pin system ensures a strong, reliable connection between panels.
- **Hassle-Free Installation:** No need for wrenches—reducing setup time and simplifying the process.



#### 7- CORNER SPLICE

The Corner splice is engineered to securely join two Soldiers at a perpendicular angle, ensuring stability and precision during formwork assembly. A splice is available in either slot or hole configurations to accommodate varying connection requirements.

(It is ideal for applications such as:)

- 90° corners
- Columns
- Pilasters
- Elevator cores



#### 8 - PIVOT SPLICE

The Pivot Splice is engineered to securely connect two Soldiers positioned at variable angles within a panel, offering enhanced flexibility in formwork assembly. Its precision design ensures a robust and reliable connection, effectively accommodating unconventional geometries without compromising structural integrity



# 03 ASSEMBLY AND DISASSEMBLY

#### STEPS:

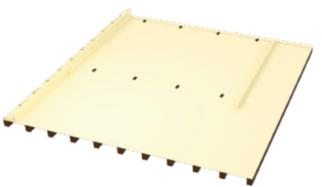
#### 1-Set Up the Assembly Bench:

Ensure a flat, stable assembly bench is positioned within the crane's reach for assembling all formwork elements.



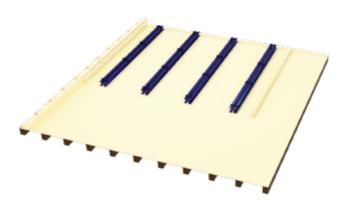
#### 2-Install Stopper Beams

Fix the stopper timber beams in place according to the prescribed soldier spacing. Once the Stopper Beams are secured, place the ACROW Soldiers against them, ensuring proper alignment.



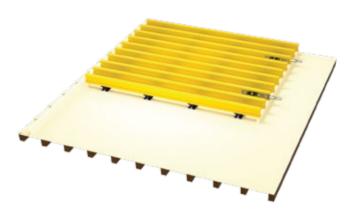
#### 3- Position the Soldiers:

Place the soldiers against the side stops with the connection plates facing upward.



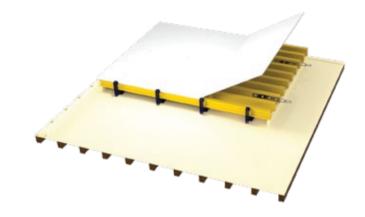
#### 4- Attach the ACROW H-20 Beams

Fasten the ACROW H-20 at the desired centers (as specified in the shop drawings) using the ACROW connection system. Before tightening, ensure the beams are centered.



#### 5- Install ACROW board (18mm) Sheets:

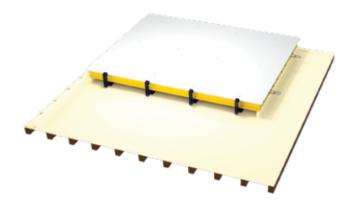
Install the assembling bracket onto the Soldiers to ensure the rectangularity of the plywood surface. Position the ACROW Board and fasten it to each ACROW H-20 with nails spaced 30 cm apart and 5 cm from the board edge.



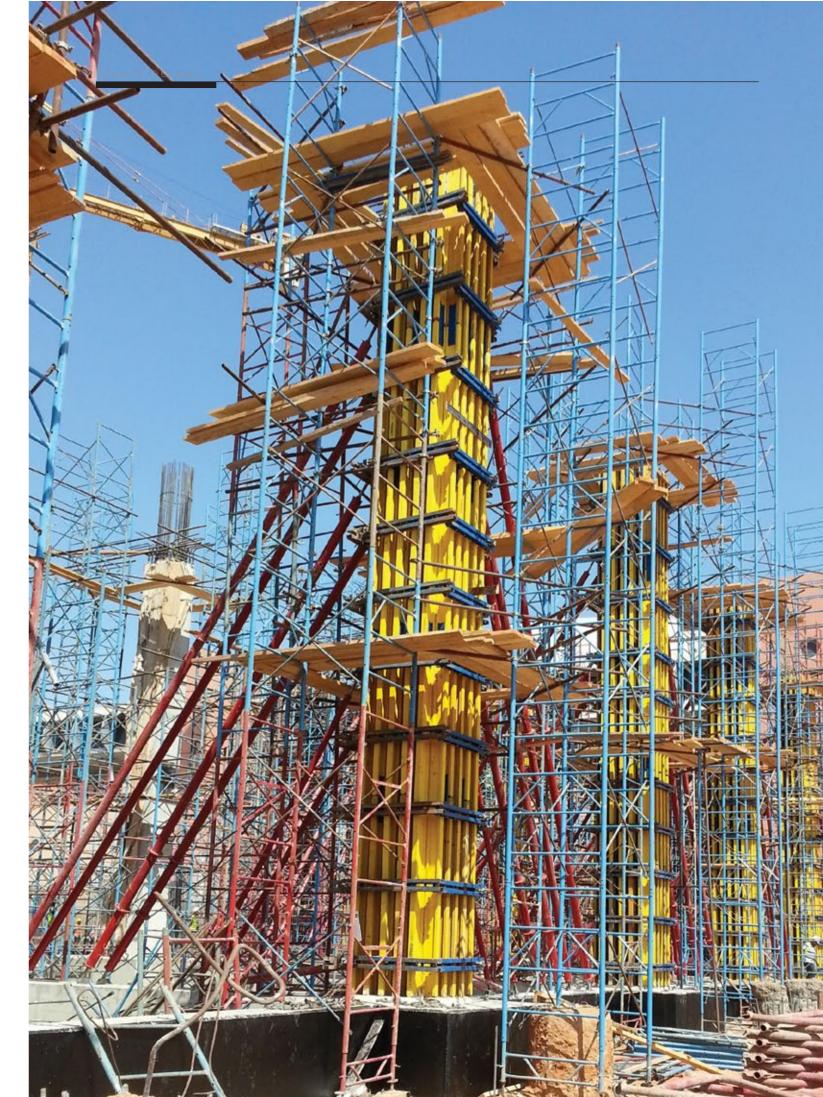
#### 6-Drill Holes for the Tie Rods:

Drill the required holes through the formwork at the specified locations to accommodate the tie rods.

This step can be done onsite to avoid heavy rebars arrangement







# 04 SITE APPLICATIONS

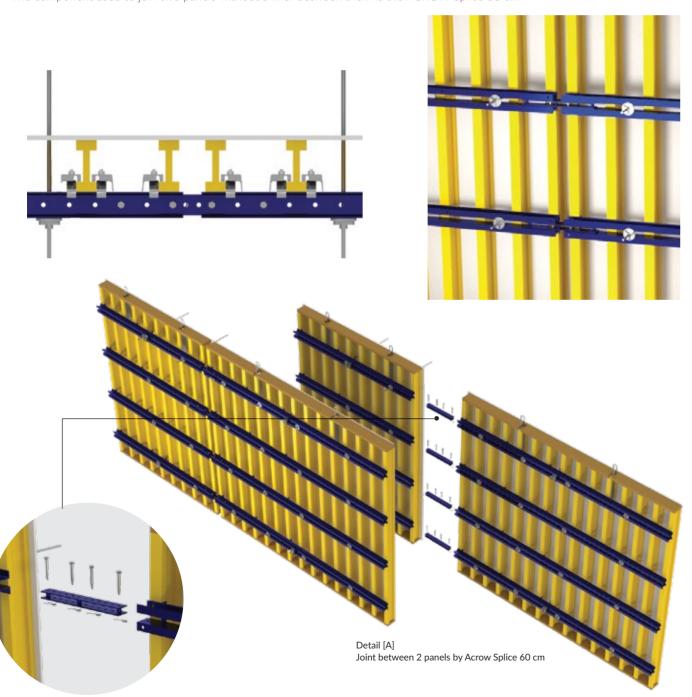


#### 1- STRAIGHT CONNECTIONS

Panel connections are formed using a splice and four rivet pins, ensuring the element joint is flush for proper alignment.

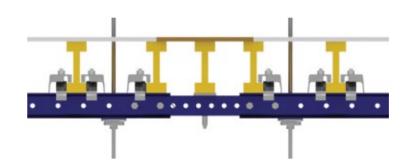
#### [1.A] JOINT BETWEEN PANELS (WITHOUT FILLER)

- The component used to join two panels without a filler between them is the ACROW Splice 60 cm

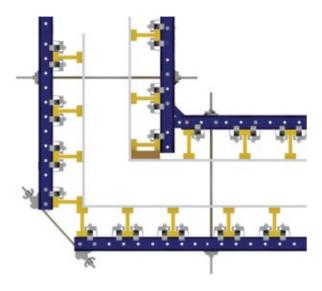


#### [1.B] JOINT BETWEEN PANELS (WITH FILLER)

The component used to join two Panels with a filler between them is Acrow Splice 90 cm with compression plate.

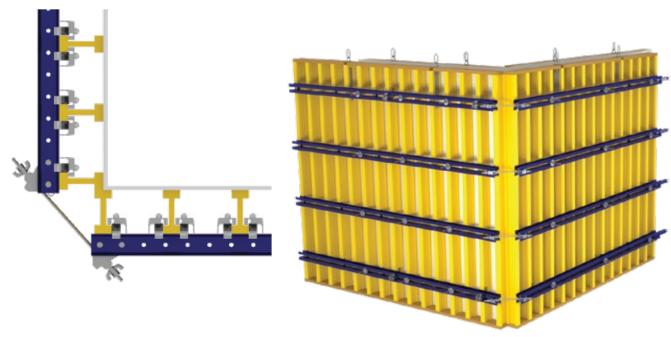






#### [2.A] FOR OUTER PART

The outer joint between two panels is secured using two Universal Corner Angles connected by a Tie Rod. This solution maintains both alignment and stability.

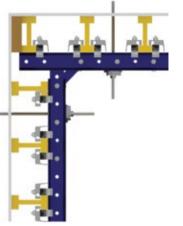


N.B. – H20 Connectivity Requirement Panels must include dual-side H-20 beam connections using H-20 connectors at a minimum of two soldier levels

#### [2.B] FOR INNER PART

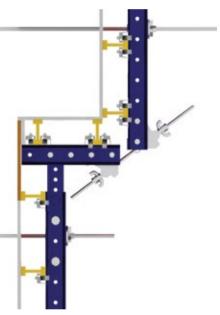
#### 1- With Corner Splice

The Corner Splice creates a true inside corner. It leverages the strength of ACROW H-20 to maintain accurate dimensions while ensuring a secure, rigid connection between panels.



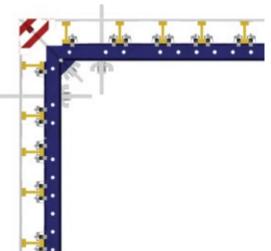
#### 2- With T-Splice.

Strategically positioned in tight corner zones to facilitate uninterrupted alignment of soldiers and optimize accessory placement



#### 3- With Corner Filler Panel

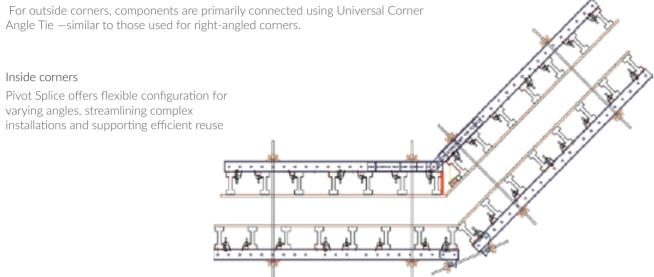
Implemented in confined shaft and enclosed areas to facilitate the striking process, ensuring efficient removal of formwork components with minimal disruption



Each of these solutions is tailored to address specific challenges encountered in forming 90° corners, ensuring that both structural integrity and ease of assembly are achieved regardless of the project demands.

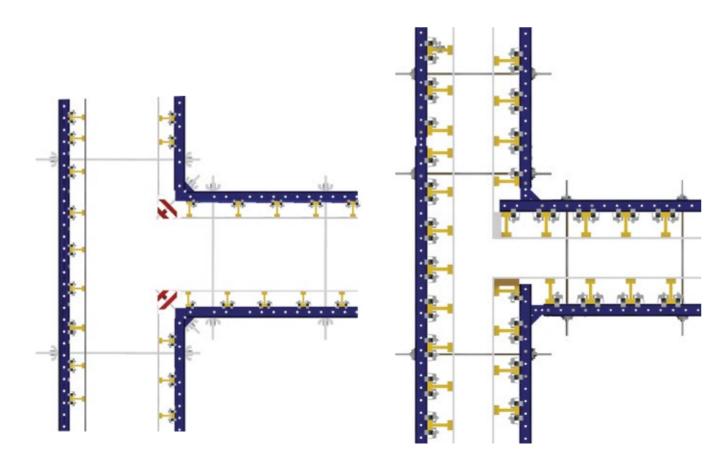
#### 3- ACUTE & OBTUSE-ANGLED CORNERS.

#### Outside Corners



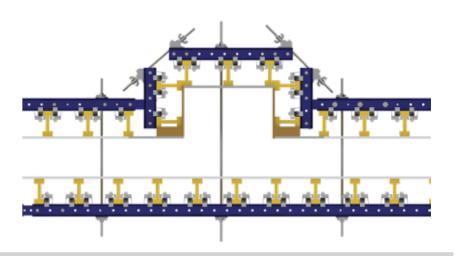
#### 4- T-CORNERS

Similar to right-angled corners, inside corners in formwork assemblies are primarily connected using the following methods:



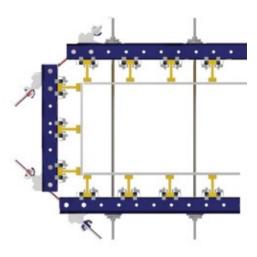
#### 5- PILASTERS

- Pilaster formwork is executed using a T-Connection, with panel dimensions selected to best suit the project requirements.



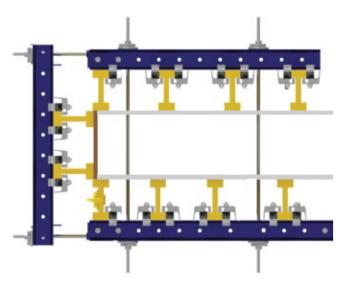
#### 6- WALL STOP END

A-Using universal corner angle ties:



Typical End Connection for Wide Wall Panel

#### B- Using Stop-End Splice:



End Connection Plan with Anchor Plate



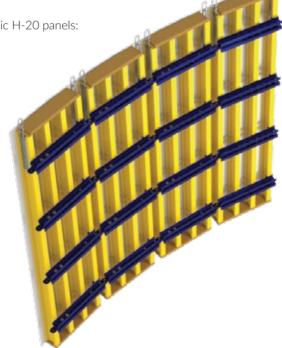
Typical End Connection with Stop-End Splice

#### 7- ROUND CONNECTION

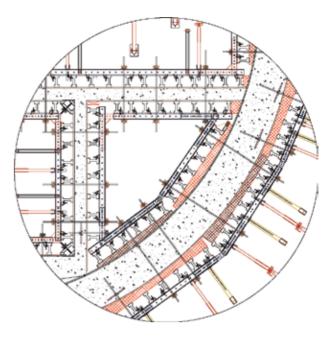
Curved structures can be efficiently formed using Pivot Splices and curb timber to create the desired shape.

There are 3 different methods to place the curb timber within the Dynamic H-20 panels:

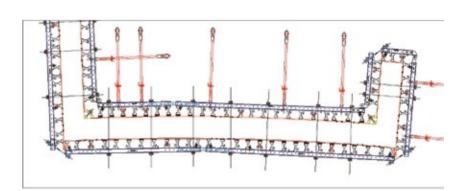
- 1. Timber templates with the required curved shape between the form lining and the H20 girders.
- 2. Small timber pieces between the H20 girders and the soldiers. Hook Straps are required in this case instead of the regular H20 connections.
- 3. Timber templates inside the soldiers with the curved shape. Timber templates are connected to the H20 girders using H20 to H20 connection.



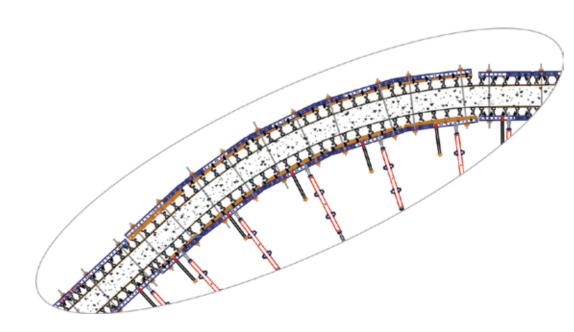
Method 1



Method 2

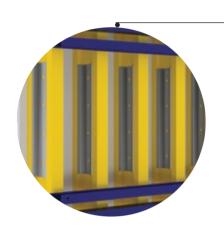


Method 3



#### 8- VERTICAL PANEL EXTENSION

H20 Beams are connected together vertically using girder splice



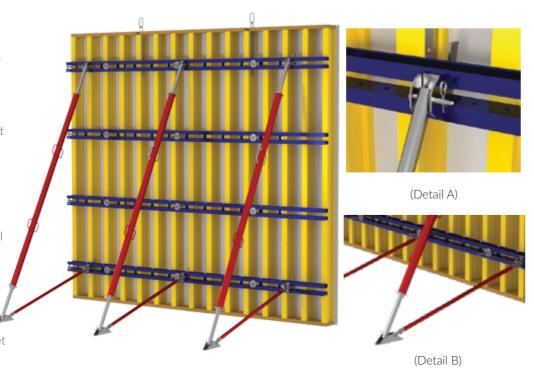
#### 9- PANELS BRACING

Using Tilt-Up Shore / Push-Pull Props for panel stabilization offers several benefits:.

- **Protection:** Shields the formwork from potential wind forces.
- Ease of Placement: Facilitates easier placement and precise positioning of the formwork.
- Vertical Alignment: Assists in adjusting and maintaining the verticality and proper alignment of panels.

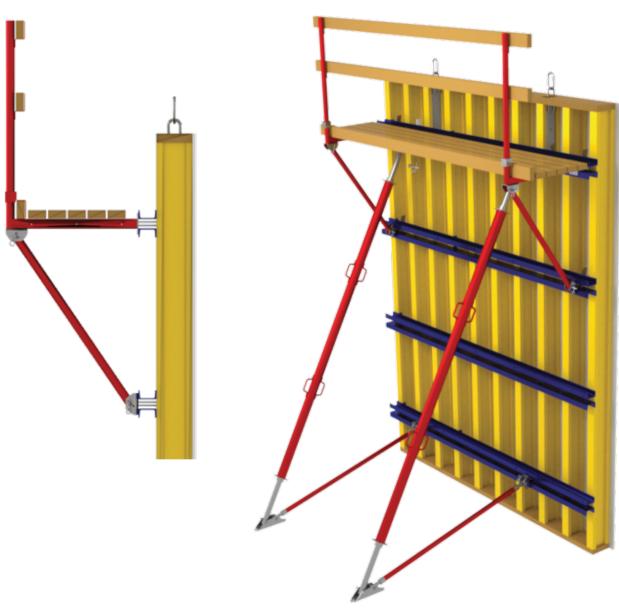
Ground Connection: Push-Pull Props are connected to the ground via a single or double base plate, which is anchored securely (Detail B).

- Soldier Connection: Push-Pull Props are attached to the Soldiers using a Shore Connector and a small wedge (Detail A).
- Shore Connector Fixing: The Shore Connector is linked to the Push-Pull Props with a Rivet Pin and Spring Clip.



#### 10- ACCESS BRACKET

The Access Bracket is an essential component for concrete formwork systems, engineered to create secure and reliable platforms. Its design supports the placement of planks for creating a stable working surface, while additional planks serve as handrails to ensure safety during concreting operations.

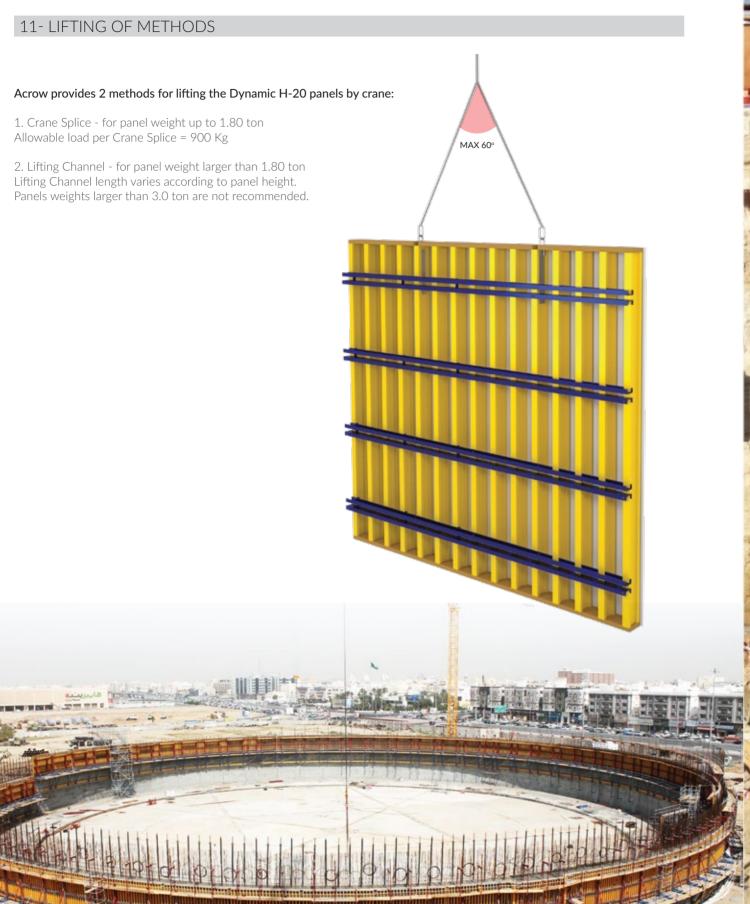


#### - Secure Working Platforms:

Supports planks that form the working surface for concreting. Accommodates additional planks configured as handrails.

- Versatile Connections:
- Column Formwork: The bracket attaches to the upper soldier using a Small Wedge.
- Wall Formwork: Utilizes a Rivet Pin and Spring Clip for a firm connection with the upper soldier.



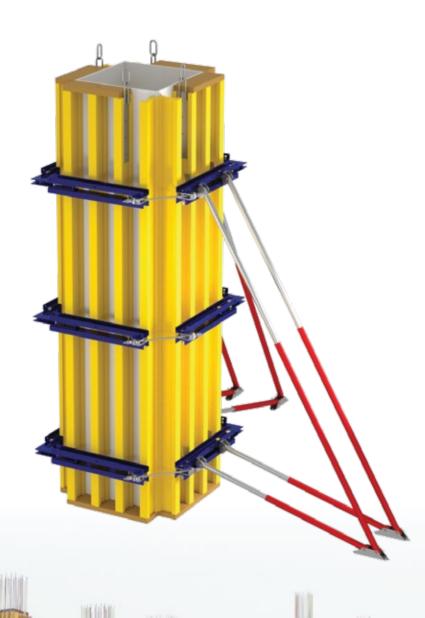




#### 12- COLUMNS

ACROW DYNAMIC H-20 column formwork is highly versatile, catering to both rectangular and circular configurations. For more complex shapes—such as circular columns— timber negatives can be incorporated to achieve the desired geometry while maintaining consistent dimensions and structural integrity.

- 1- H20 Beams
- 2-Soldier
- 3-Acrow Board
- 4-H20 Connection
- 5-Tie Rod
- 6-Universal Corner Angle
- 7-Corner Splice
- 8-Bracing Items
- 9-Access Bracket

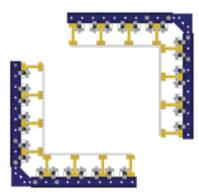


#### COLUMNS

A column formwork system can be easily assembled using the same components as the ACROW H-20 beam and Soldier wall formwork system.

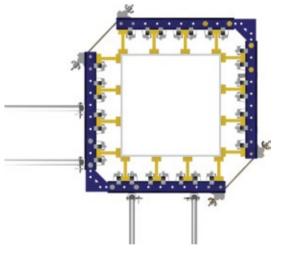
#### 1-Assemble Two L-Shaped Halves:

The column formwork is constructed in two L-shaped halves. Each half consists of two panels securely anchored together using a Corner Splice.



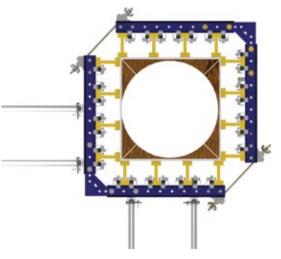
#### 2- Connect the L-Shaped Halves:

In a manner similar to right-angled corners, the two L-shaped halves are connected using Universal Corner Angles. This method ensures precise alignment and robust stability throughout the formwork structure.



#### 3- Configuration for circular columns

ACROW H-20 used in column formwork are versatile and suitable for creating both rectangular and circular columns. For circular columns or other complex shapes, timber negatives can be employed to achieve the desired form, ensuring accuracy and consistency.





# 05

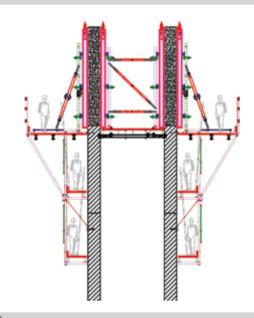
### ADVANCED APPLICATIONS:

#### 1- CLIMBING FORMWORK

Dynamic H-20 system can be used with various types of climbing platforms, either crane-climbing or self-climbing (hydraulic climbing). Panels are attached to the climbing platforms and lifted as one unit, significantly decreasing the lifting process time by minimizing the number of crane lifts.

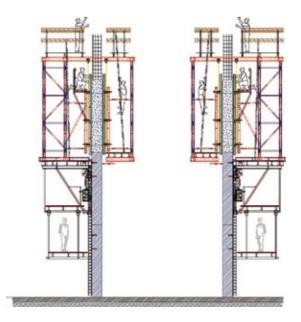
A- ACCB240 CLIMBING PLATFORMS & INNER PLATFORMS, WITH DYNAMIC H-20 PANELS (DOUBLE SIDED CLIMBING PLATFORMS)



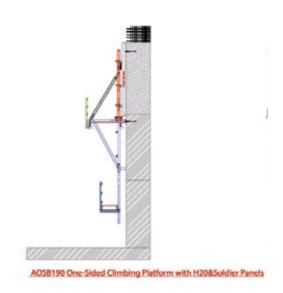


#### [B] BSC SELF-CLIMBING PLATFORM WITH DYNAMIC H-20 PANELS





#### [C] AOSB190 ONE-SIDED CLIMBING PLATFORM WITH DYNAMIC H-20 PANELS

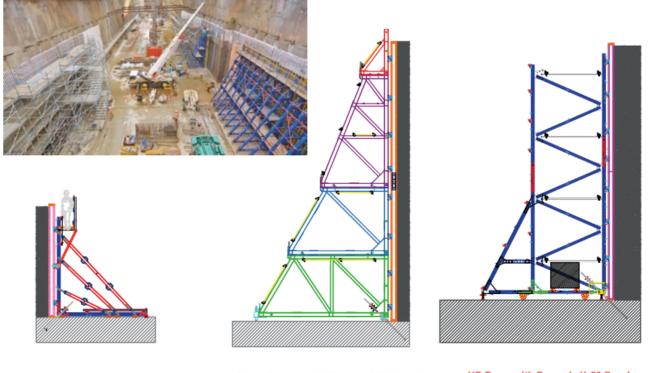


#### 2- SINGLE SIDED WALLS

#### SINGLE SIDED WALLS

Dynamic H-20 system can be used with various types of single-sided walls systems:

- [a] With Light Frames up to a height of 4.50m.
- [b] With Brace Frames up to a height of 8.0m.
- [c] With HD Trusses up to a height of 12.0m.



**Light Frame with Dynamic H-20 Panels** 

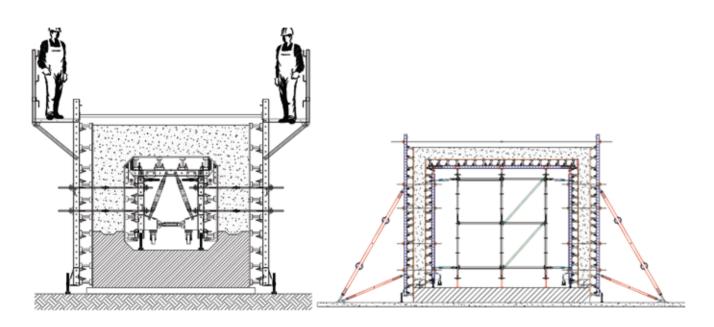
Brace Frames with Dynamic H-20 Panels

**HD Truss with Dynamic H-20 Panels** 

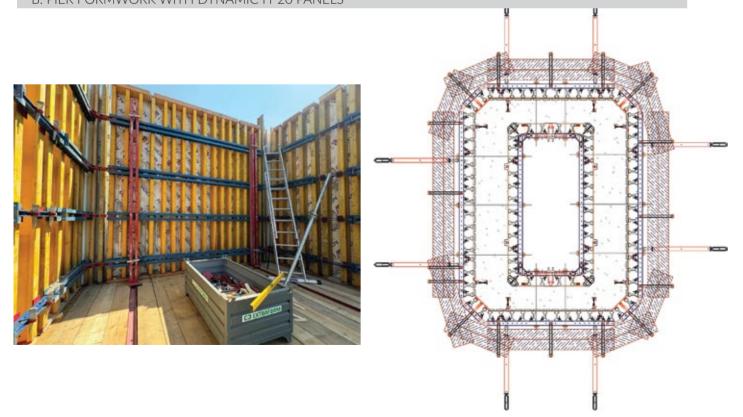
 $^* \ For \ restrictions \ and \ conditions \ of \ using \ the \ single-sided \ walls \ systems, \ refer \ to \ the \ Single-Sided \ Walls \ catalogue.$ 

#### 3- APPLICATIONS IN INFRA-STRUCTURE

#### A- TUNNEL FORM WITH DYNAMIC H-20 PANELS



#### B. PIER FORMWORK WITH DYNAMIC H-20 PANELS

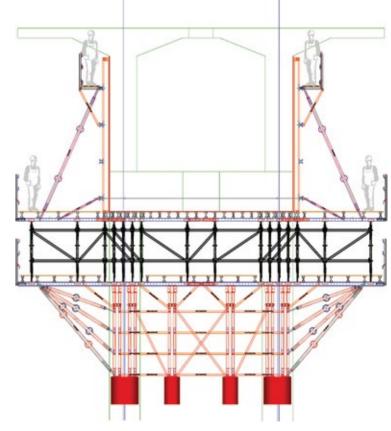


#### C. ABUTMENT FORMWORK WITH DYNAMIC H-20 PANELS

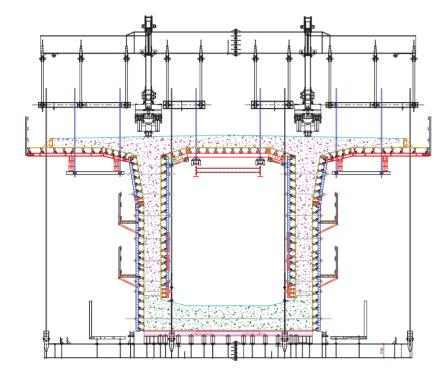


#### D- STUMP FORM WITH DYNAMIC H-20 PANELS

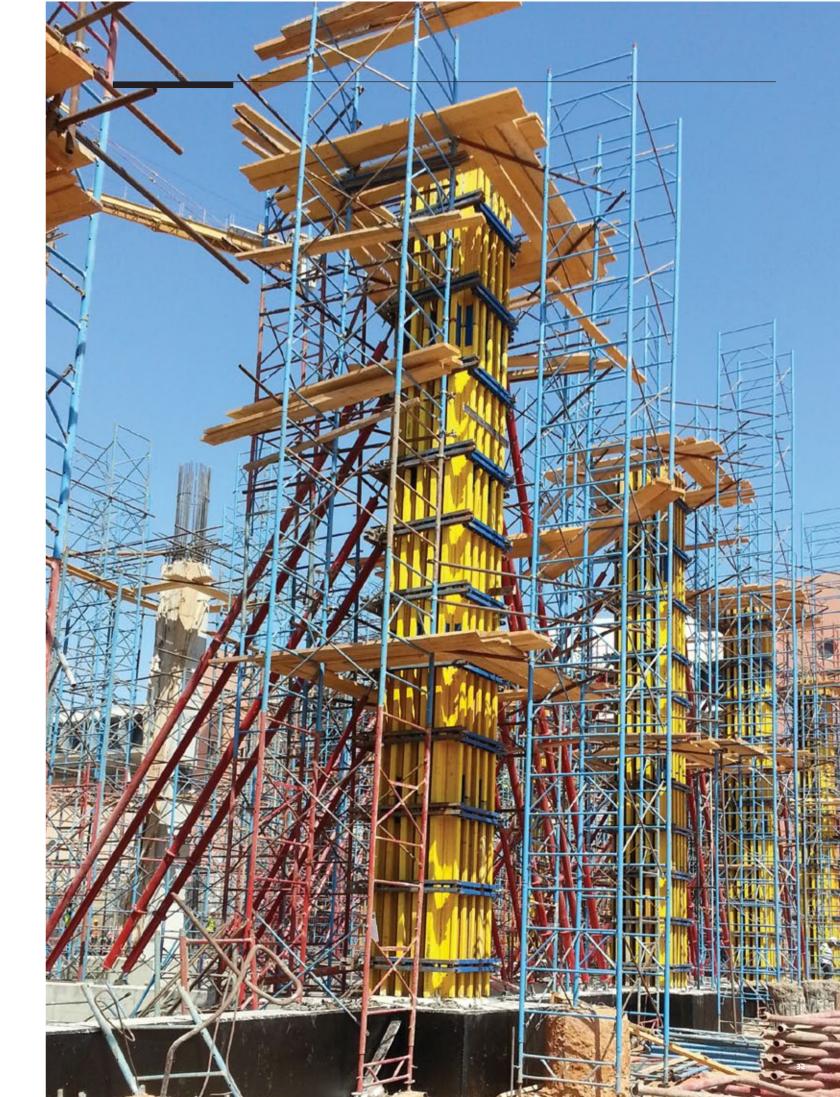




#### E- CANTILEVER CARRIAGE WITH DYNAMIC H-20 PANELS







# 06 COMPLEMENTARY COMPONENTS



## 1- TYING SYSTEM

The acrow DW16-ties system is primarily used with soldiers, where minimum number of ties is required.

The continuous thread high tensile steel rod is the basis of the DW 16 tie system assembly.

The wing nut is designed to freely spin on the fast threaded rod, which effectively speeds both the erection and stripping times of the formwork.

#### 1-THRU DW tie system: there are no lost items.



#### 2 - WATER SEAL DW 16 tie system

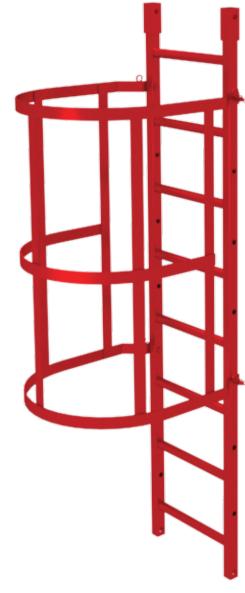


#### 3- STEEL PLASTIC CONE MKK



# 2-ACCESS LADDERS

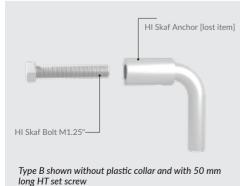
Since safe and efficient access is paramount in formwork, ACROW offers a diverse selection of access ladders tailored to various formwork systems. These ladders can be customized to your needs and the specific system you're using, with options such as safety cages, trap doors, and compatible connection parts. To find the perfect access ladder for your project, consult your trusted ACROW sales representative.



#### REGULAR

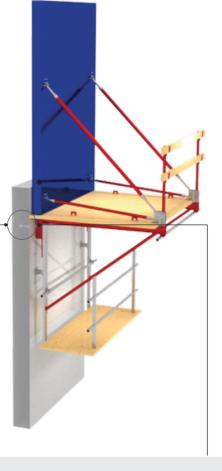
ACROW standard Hi-Skaf scaffold brackets have been developed as main members for an external suspended scaffold system. It is possible to extend the scope of these brackets with use of scaffold tubes and fittings to offer two or three levels of suspended platforms one below the other. The scaffold brackets are used at a maximum horizontal spacing of 2.40 m center to center. For practical purposes, a number of brackets are assembled together to form a unit, the scaffold brackets being connected together by scaffold tube and re-positioning these units is usually done by crane.

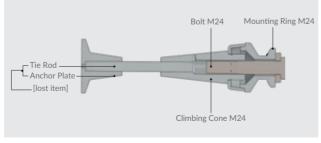




Hi-Skaf type [B]

WITH FINISHING PLATFORM







Hi-Skaf type [A]

### 4- ACROW BOARD



















#### **SPECIAL CLIENT BENEFITS**

#### Formwork stripping

ACROW-BOARD is a non-stick formwork material that can be easily stripped from concrete without the need for a release agent. This leaves a clean and superior smooth concrete surface.

#### Physical Performance

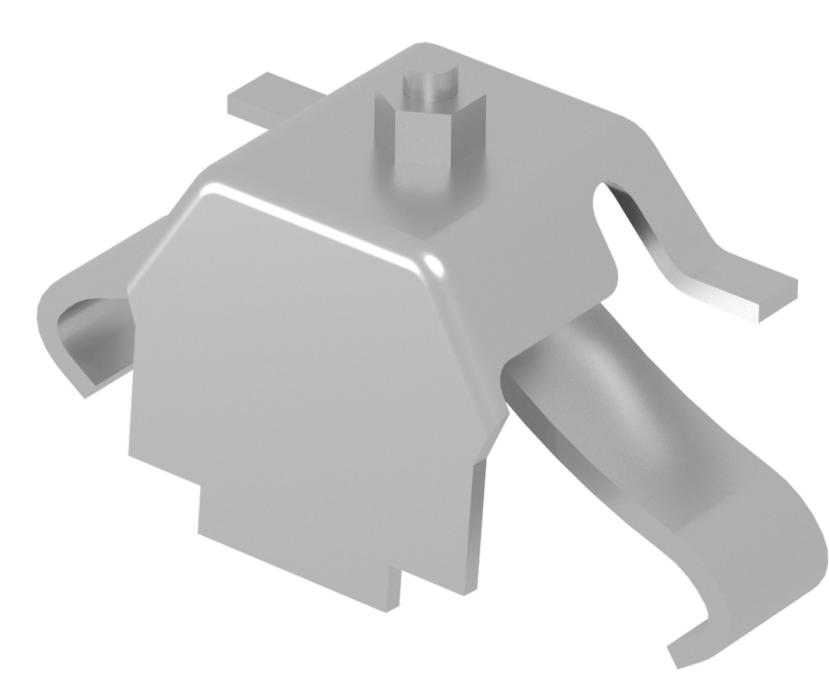
Can withstand moisture, and fire.

#### Site Requirement

No special tools or equipment needed when working with the ACROW-BOARD. Traditional timber tools, nails, saw hammer...etc. are used.



# O7 COMPONENTS AND ACCESSORIES



Item	Description	Code no.	Weight (kg
TIMBER H20			
	Timber H20 ,L=1.80 M	6221177140762	8.50
	Timber H20 ,L= 2.50 M	6221177024062	11.75
	Timber H20 ,L= 2.90 M	6221177024079	13.60
	Timber H20 ,L= 3.30 M	6221177024093	15.50
	Timber H20 ,L= 3.60 M	6221177024109	16.90
	Timber H20 ,L= 3.90 M	6221177024116	18.40
	Timber H20 ,L= 4.20 M	6221177024123	19.75
	Timber H20 ,L= 4.50 M	6221177024130	21.15
	Timber H20 ,L= 4.90 M	6221177024147	23.10
	Timber H20 ,L= 5.90 M	6221177024154	27.80
	Unit of Girder Splice 60cm	6221177144449	6.20
Soldier U100			
	Soldier U100 ,L=0.50 m	6221177115050	11.80
	Soldier U100 ,L=0.75 m	6221177115074	16.10
	Soldier U100 ,L=1.00 m	6221177115081	21.40
	Soldier U100 ,L=1.25 m	6221177115098	26.40
	Soldier U100 ,L=1.50 m	6221177115104	31.40
_	Soldier U100 ,L=1.75 m	6221177115111	36.60
	Soldier U100 ,L=2.00 m	6221177115128	42.20
	Soldier U100 ,L=2.25 m	6221177115135	47.60
	Soldier U100 ,L=2.50 m	6221177115142	52.00
	Soldier U100 ,L=2.75 m	6221177115159	58.90
	Soldier U100 ,L=3.00 m	6221177115166	63.60
	Soldier U100 ,L=3.25 m	6221177115173	70.80
	Soldier U100 ,L=3.50 m	6221177115180	73.50
	Soldier U100 ,L=3.75 m	6221177115197	78.00
	Soldier U100 ,L=4.00 m	6221177115203	86.20
	Soldier U100 ,L=4.50 m	6221177115210	96.70
	Soldier U100 ,L=5.00 m	6221177115227	104.00
	Soldier U100 ,L=5.50 m	6221177115234	114.70
	Soldier U100 ,L=6.00 m	6221177115241	126.50
H20 Connection			
200	1100.0	/00147700/004	0.70
	H20 Connection H20 End Connection	6221177006891 6221177140823	0.70 1.00

Item	Description	Code no.	Weight (kg)
Splice			
	Splice 90cm (double)(S&H) Splice 60cm (double) Splice 90cm (double)	6221177147655 6221177022242 6221177022266	8.91 6.50 9.50
Corner Splice			
T. Craling	Corner Splice 60 x 30 cm Corner Splice 45x45cm (for soldier) Corner Splice 60x45cm (for soldier) Corner Splice 60x60cm (for soldier)	6221177032623 6221177022112 6221177022129 6221177022136	8.80 8.75 10.35 11.90
T-Splice ————————————————————————————————————		6221177022280	9.85
Universal Corner Angle			
		6221177026042	2.40

Item	Description	Code no.	Weight (kg)
Stop-End Splice			
		6221177028008	2.35
Base Plate for VI. Soldier			
For fixing vertical soldiers to the ground.		6221177129705	2.30
Pivot Splice			
	Pivot Splice 30x30cm (Slotted) Pivot Splice 45x45cm (Slotted) Pivot Splice 60x60cm (Slotted) Pivot Splice 75x75cm (Slotted)	6221177147341 6221177147358 6221177147365 6221177147372	6.50 9.50 12.50 15.50
Corner Splice	Corner Splice 60x60 cm (Slotted) Corner Splice 45x45 cm (Slotted)	6221177147389 6221177147396	11.80 8.70
Unit Of Channel Splice 90cm		6221177142889	15.00

Item		Description	Code no.	Weight (kg)
Assembling Bracket ( For	H20, S12)			
Compression Plate			6221177144234	8.50
Table Lifting Eye	Compression Plate		6221177038039	1.49
For lifting p stacking in the	anels horizontally for the stockyard. bles)		6221177028206	10.50
Lifting Channel			6221177142896	6.50
	Lifting Channel UPN 100, Lifting Channel UPN 100, Lifting Channel UPN 100, Lifting Channel UPN 100, Lifting Channel UPN 100,	L=6.00 m L=4.00 m L=2.50 m	6221177251925 6221177251932 6221177204396 6221177309312 6221177309305 6221177186852	94.45 62.90 42.10 26.10 20.80 0.57

Item	Description	Code no.	Weight (kg)
Lifting Channel Connection to Soldier 10			
		6221177186852	0.57
Access Bracket-L- (Hr-VI) For Soldier (8-10)cm	1		
ı ı			
For walls applications		6221177133641	8.00
· ·			
Access Bracket-L-For HL.Soldier ][10			
4		6221177102357	10.20
For columns applications			
Access Bracket -L- For H20			
		6221177142896	6.50

Item	Description	Code no.	Weight (k
Push Pull			
	Push Pull PPS132 Push Pull PPS162 Push Pull PPS202 Push Pull PPS252 Push Pull PPS302 Push Pull PPS352 Push Pull PPH164 Push Pull PPH204 Push Pull PPH206 Push Pull PPH354 Push Pull PPH354 Push Pull PPH354 Push Pull PPH354 Push Pull PPH404 Push Pull PPH502 Push Pull PPH502 Push Pull PPH552 Push Pull PPH602 Push Pull PPH652 Push-Pull Prop MPP4 (2.65:4.65) m Push-Pull Prop MPP5 (4.45:6.75) m Push-Pull Prop MPP6 (6.45:10.00) m	6221177014261 6221177014285 6221177014308 6221177014315 6221177014322 6221177014032 6221177014056 6221177014070 6221177014070 6221177014117 6221177014131 6221177014155 6221177014162 6221177014186 6221177014209 6221177014223 6221177014247 6221177163556 6221177163570	7.30 8.40 9.60 11.40 13.30 15.10 21.70 26.00 27.60 28.80 33.00 38.10 42.40 48.00 50.70 56.30 82.10 86.40 39.40 61.60 120.80
Tilt Up Shore	Tilt Up Shore X0 (Galv.) Tilt Up Shore X1 (Galv.) Tilt Up Shore X2 (Galv.) Tilt Up Shore X3 (Galv.) Tilt Up Shore X4 (Galv.)	6221177112424 6221177112431 6221177112448 6221177112455 6221177112462	12.50 19.20 20.40 23.00 27.80

Item	Description	Code no.	Weight (kg)
Shore Connector			
	Shore Connector for Hz. Soldier ][10 (U-lug)	6221177086824	1.45
Small Wedge (5cm)			
		6221177082918	0.43
Base Plate			
	Double Base Plate Single Base Plate	6221177000813 6221177000882	2.40 1.50
Rivet Pin 17 mm, L=12.5 c	m ( Type I )		
		6221177012304	0.25
Spring Clip (medium)			
		6221177087289	0.03

Item	Description	Code no.	Weight (kg
Tie Rod			
	Tie Rod 15mm DW L=0.50m	6221177095581	0.79
	Tie Rod 15mm DW L=0.75m	6221177095598	1.20
	Tie Rod 15mm DW L=1.00m	6221177095604	1.60
	Tie Rod 15mm DW L=1.25m	6221177095611	2.00
<b>41</b>	Tie Rod 15mm DW L=1.50m	6221177095628	2.40
	Tie Rod 15mm DW L=1.75m	6221177095635	2.80
	Tie Rod 15mm DW L=2.00m	6221177095642	3.20
	Tie Rod 15mm DW L=2.25m	6221177095659	3.60
<b>*</b>	Tie Rod 15mm DW L=2.50m	6221177095666	4.00
	Tie Rod 15mm DW L=2.75m	6221177095673	4.30
<b>*</b> ***********************************	Tie Rod 15mm DW L=3.00m	6221177095680	4.70
	Tie Rod 15mm DW L=3.25m	6221177095697	5.10
	Tie Rod 15mm DW L=3.50m	6221177095703	5.50
	Tie Rod 15mm DW L=3.75m	6221177095710	5.90
	Tie Rod 15mm DW L=4.00m	6221177095727	6.30
***	Tie Rod 15mm DW L=4.25m	6221177095734	6.70
	Tie Rod 15mm DW L=4.50m	6221177095741	7.10
	Tie Rod 15mm DW L=4.75m	6221177095758	7.50
	Tie Rod 15mm DW L=5.00m	6221177095765	7.90
	Tie Rod 15mm DW L=5.25m	6221177095772	8.30
	Tie Rod 15mm DW L=5.50m	6221177095789	8.70
	Tie Rod 15mm DW L=5.75m	6221177095796	9.10
	Tie Rod 15mm DW L=6.00m	6221177095802	9.50
	Tie Rod 20mm DW Type (G) L=0.50m	6221177100964	1.30
	Tie Rod 20mm DW Type (G) L=0.75m	6221177100988	2.00
· ·	Tie Rod 20mm DW Type (G) L=1.00m	6221177100995	2.60
	Tie Rod 20mm DW Type (G) L=1.25m	6221177101015	3.30
	Tie Rod 20mm DW Type (G) L=1.50m	6221177101039	3.90
	Tie Rod 20mm DW Type (G) L=1.75m	6221177101053	4.60
	Tie Rod 20mm DW Type (G) L=2.00m	6221177101077	5.20
	Tie Rod 20mm DW Type (G) L=2.25m	6221177101091	5.90
	Tie Rod 20mm DW Type (G) L=2.50m	6221177101114	6.50
	Tie Rod 20mm DW Type (G) L=2.75m	6221177101138	7.20
	Tie Rod 20mm DW Type (G) L=3.00m	6221177101169	7.80
	Tie Rod 20mm DW Type (G) L=3.25m	6221177101183	8.50
	Tie Rod 20mm DW Type (G) L=3.50m	6221177101206	9.10
	Tie Rod 20mm DW Type (G) L=3.75m	6221177101220	9.80
	Tie Rod 20mm DW Type (G) L=4.00m	6221177100056	10.40
	Tie Rod 20mm DW Type (G) L=4.25m	6221177101251	11.10
	Tie Rod 20mm DW Type (G) L=4.50m	6221177100063	11.70
	Tie Rod 20mm DW Type (G) L=4.75m	6221177101282	12.40
	Tie Rod 20mm DW Type (G) L=5.00m	6221177101305	13.00
	Tie Rod 20mm DW Type (G) L=5.25m	6221177101329	13.70
	Tie Rod 20mm DW Type (G) L=5.50m	6221177101718	14.30
	Tie Rod 20mm DW Type (G) L=5.75m	6221177101732	15.00
	Tie Rod 20mm DW Type (G) L=6.00m	6221177101756	15.60

Item	Description	Code no.	Weight (kg)
Forged Wing Nut			
	Forged Wing Nut 15 mm DVD (Type I)	6221177011314	0.35
Steel Washer			
	Steel Washer M15 Steel Washer M20	6221177027513 6221177224837	1.10 1.70
Steel Washer Embossed			
		6221177247102	0.68
Wing Nut Pivot Plate 15mm DVD			
ALLOWS TIE-RODS TO INCLINATION ANGLE C		6221177042745	1.60
Corner Filler Panel Ladder-Shape			
	Corner Filler Panel Ladder-Shape, H=3.60 m Corner Filler Panel Ladder-shape, H=3.0m Corner Filler Panel Ladder-shape, H=2.0m Corner Filler Panel Ladder-Shape, H=1.70m Corner Filler Panel Ladder-Shape, H=1.50m Corner Filler Panel Ladder-Shape, H=1.30m Corner Filler Panel Ladder-shape, H=1.0m	6221177038816 6221177006617 6221177006600 6221177204792 6221177044534 6221177204815 6221177006594	33.55 25.90 17.25 15.10 14.10 12.25 10.10

ltem	Description	Code no.	Weight (kg)
Corner Filler Panel L-shape			
BSC Inner Splice ( 0°: 90°)	Corner Filler Panel L-shape, H=3.0m Corner Filler Panel L-shape, H=2.0m Corner Filler Panel L-Shape, H=1.70m Corner Filler Panel L-Shape, H=1.50m Corner Filler Panel L-Shape, H=1.30m Corner Filler Panel L-shape, H=1.0m Tie Rod DVD L=25cm (wrenched) Type (I) Corner Filler Dismantling Tool	6221177006648 6221177006631 6221177204808 6221177044541 6221177204822 6221177006624 6221177023447 6221177182984	38.10 25.40 21.80 19.40 17.00 13.40 0.40 4.22
		6221177181123	13.50

Item	Description	Code no.	Weight (kg)	
BSC Outer Splice ( 90°: 180°)	)			Steel-Plastic Cone type I
		6221177181130	13.60	
3				Hex. Nut Dvd with Weld
	Bolt M16 × 100 mm (8.8) Full Thread Nut M16 (8.8)	2012060027918 2012180029632	0.184 0.033	
Filler Panel				
	Filler Panel for H20, H=3.00 m  Filler Panel for H20, H=3.70 m  Filler Panel for H20, H=4.00 m  Filler Panel for H20, H=4.30 m  Filler Panel for H20, H=4.60 m  Filler Panel for H20, H=5.00 m	6221177182991 6221177308070 6221177330378 6221177242763 62211777335816 62211777229368	57.75 82.70 96.60 108.05 115.50 123.00	
Water Barrier				
	Water barrier (flange type) ( Type T) Water barrier (flange type) ( Type I ) Water Barrier 20 mm (flange type) (Type G) Reducer for Water Barier	6221177053574 6221177028220 6221177134099 6221177039219	0.56 0.52 2.26 0.04	

	Description	Code no.	Weight (kg)
Steel-Plastic Cone type MKK			
		6221177136109	0.60
Hex. Nut Dvd with Welded Bars			
*		6221177136352	1.34

