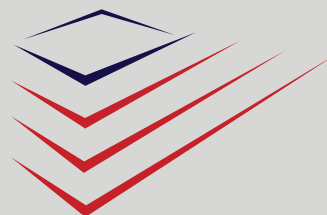




ACROW

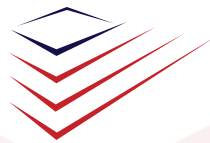
Formwork Technology



Acrow H20 & Soldier System

Acrow MISR Provides Full Site Service Based On More Than 35 Years Experience In The Field

ACROW
Formwork Technology





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Introduction

Being one of the largest formwork and scaffolding companies in Egypt, Acrow H20 and soldier system is one of the most flexible systems in Acrow formwork. In addition, it is a multi-purpose system, where it can be used in different applications.

The H20 and soldier wall system formwork elements are easily and quickly assembled by connecting the H20 timber beams to the soldier

by the means of H20 connection. Moreover, elements dismantling are done as easily as system erection.

The main H20 and Soldier system advantage is that it provides both high adaptation and easy re-assembling when structure ground plans are changed frequently. In addition, this system proved to be one of the most economical alternatives compared with steel frame formwork panel

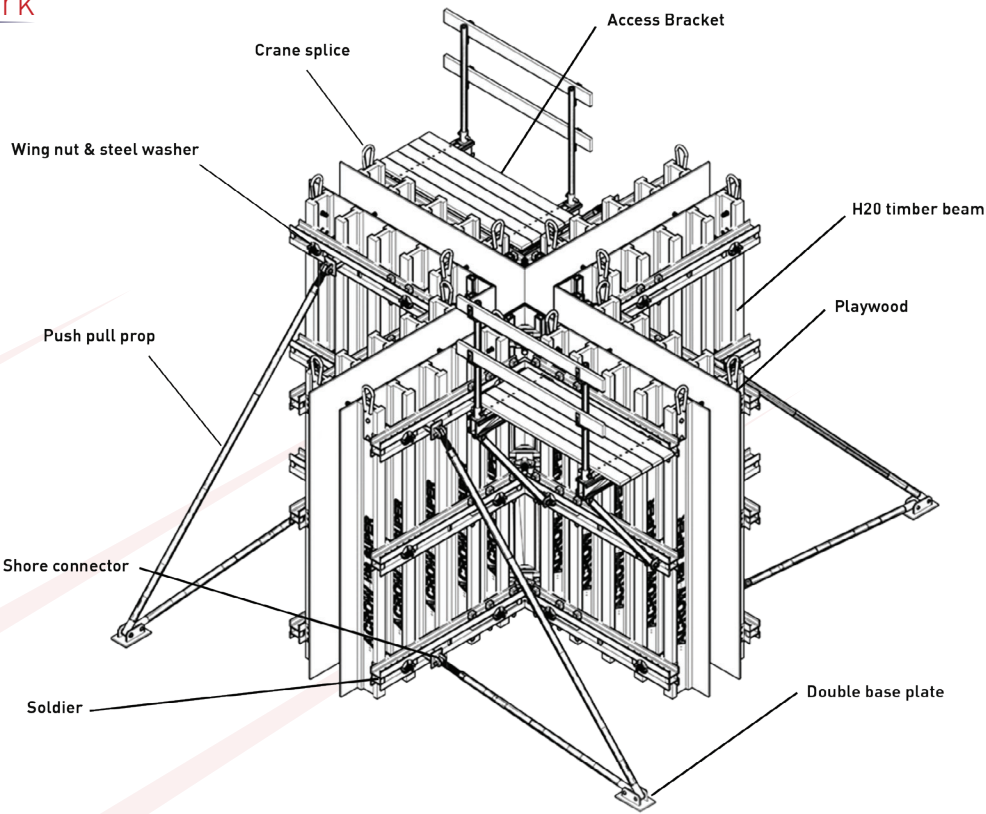
system, where it comes to both complicated designs and numerous non-typical applications with the same wall heights.

The H20 and Soldier system is typically used for all types of walls and columns where it showed to have high rigidity as well as high stability compared with the panels' low weight.

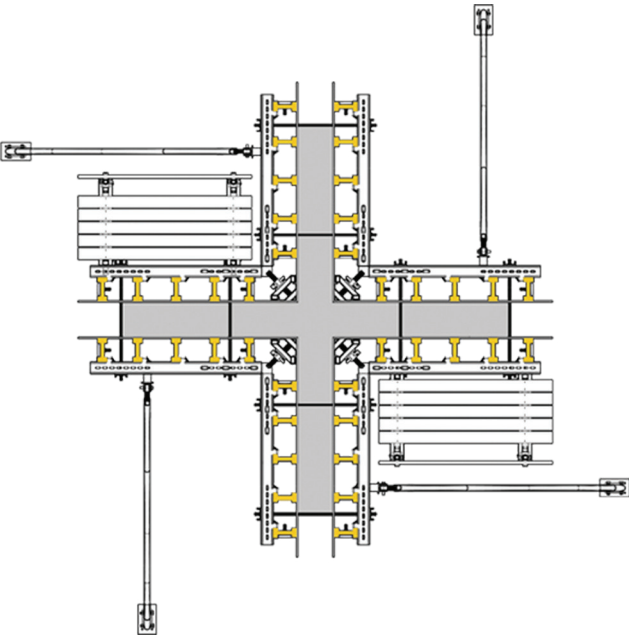


Product Overview

Wall Formwork



Plan View



Advantages

- Acrow H20 and soldier system is considered to be the most cost effective system that combines between both the timber beams steel soldier and the plywood.
- It gives an architecturally good shape with extremely high quality

concrete finishing for the straight and curved walls.

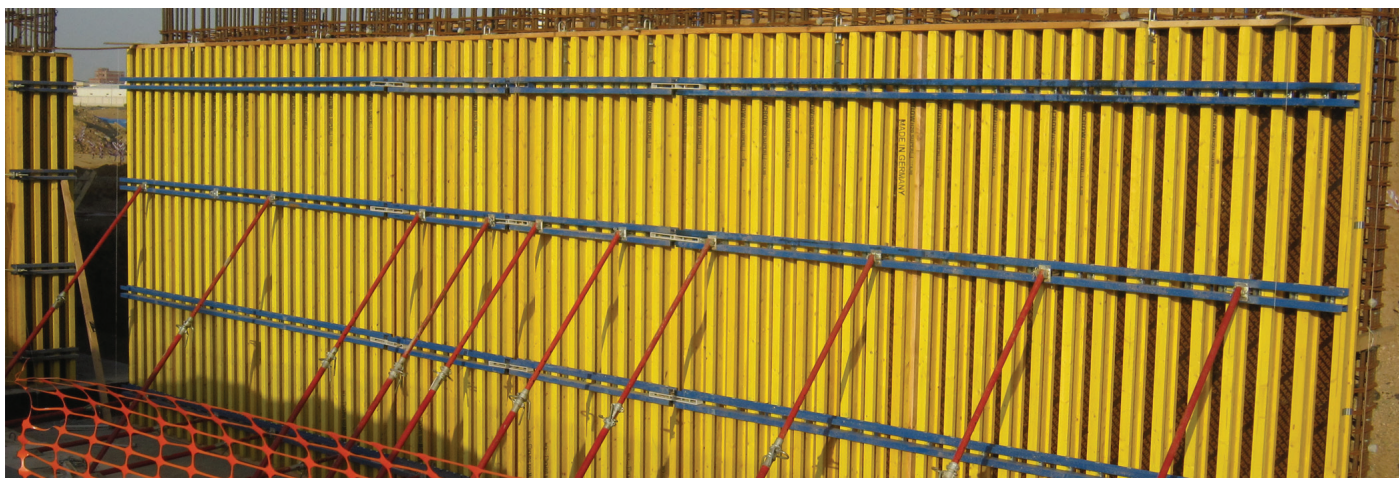
- The high flexural stiffness for timber beams and steel walers speed up shuttering by minimizing the number of used tie rods. It is considered to be an economical system due to the low

materials cost.

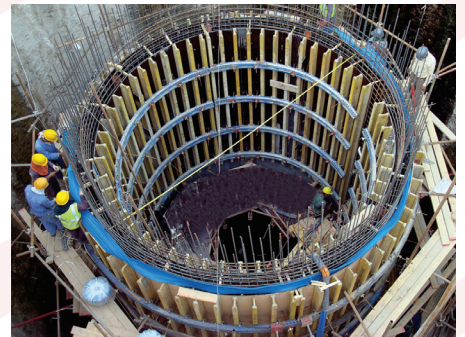
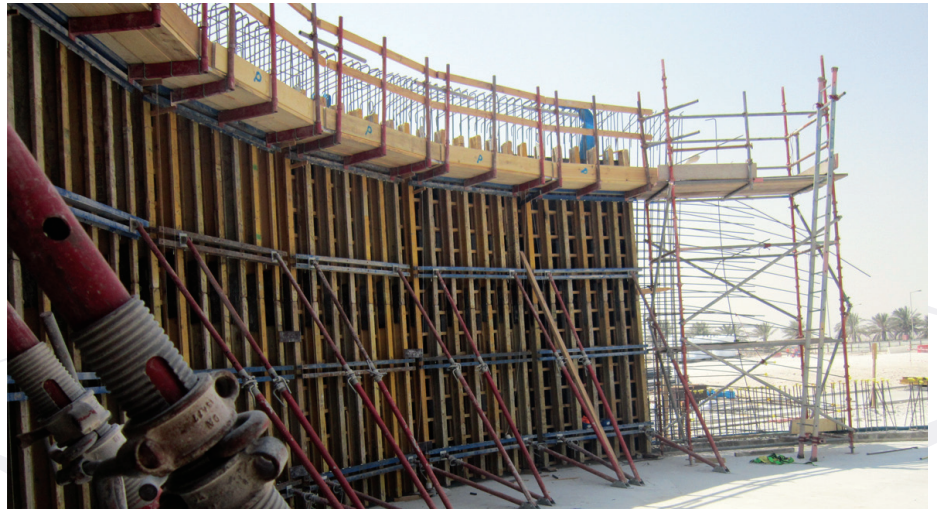
- It is flexible for any height or layout and can be easily shuttered.
- It is adjustable due to the holes, soldier and splices.



Applications



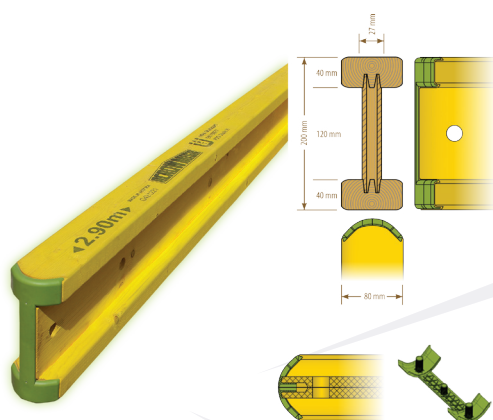
Applications



Applications

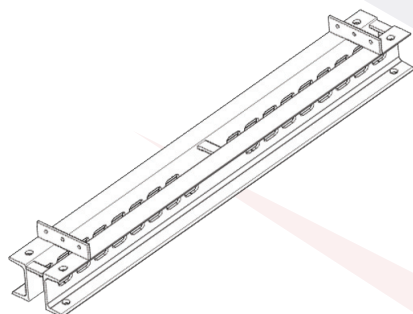


System Components



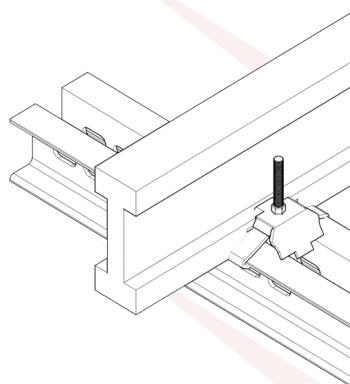
Acrow wooden beams H20

- The new Acrow wooden beam H20 with plastic cap end protection Allowable Values
Shear force $Q = 11 \text{ kN}$
A support reaction $A = 22 \text{ kN}$
Bending moment $M = 5 \text{ kNm}$



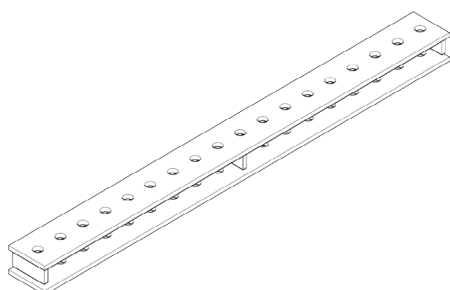
Steel waler (soldier)

- Acrow steel waler provides high accuracy for the panel alignment. Moreover, the slotted end eases the connection to the next panel using Acrow splice.



H20 connection

- H20 connection connects the H20 timber beam with the waler at any required or planned position.



Steel waler splice

- Using Acrow splice, the two panels can be both easily and fastly connected together. In addition, they will be connected using the same waler splice with Acrow big wedge or where the need for wrench and the fixation time are eliminated.

System Accessories

tilt up shore / push pull prop:

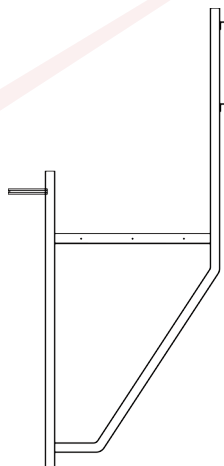
- Tilt up shore is used to adjust both the verticality and the panel location.
- The lower tilt up shore eases the push/pull of the formwork to its right connection.
- The upper tilt up shore eases the panel verticality adjustment.
- The push-pull prop is available for any required length.
- Tilt up shore is available for 5 standard sizes:

- Tilt up shore X0
- Tilt up shore X1
- Tilt up shore X2
- Tilt up shore X3
- Tilt up shore X4



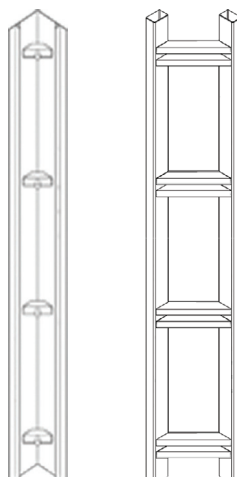
Access bracket

- For safety considerations while concreting, Acrow supplied an access bracket with a handrail post with two levels of timber handrails. The bracket must be connected with two small wedges.



Corner filler panel

- Acrow corner filler panel eases the shaft form stripping.
- The corner angle is 100% achieved and the stripping is easy.
- Finally, a closed shaft can be done without any filler if corner filler panel was used.



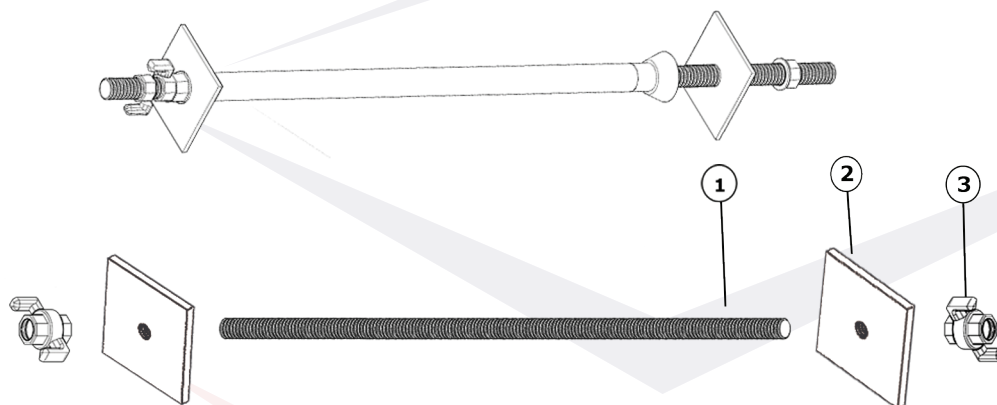
Dw 16 Tie System

The Acrow DW 16-Tie system is primarily used with soldiers requiring minimum number of ties. Moreover, the basis for the assembly is the

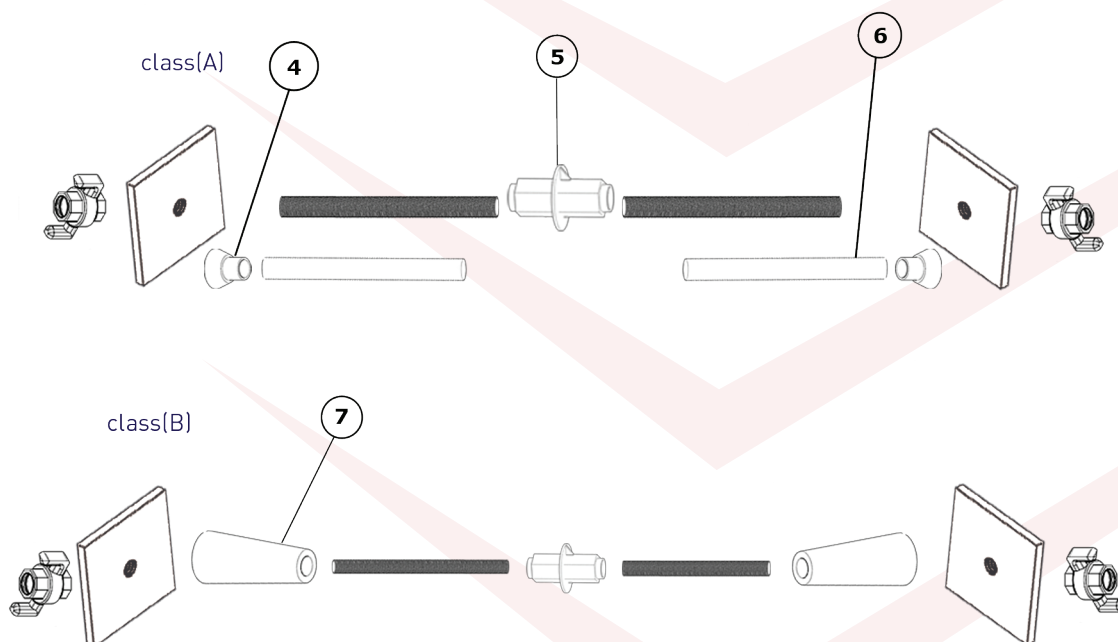
continuous thread high-tensile steel rod. Finally, the wing nut is designed to freely spin on the fast threaded

rod in order to effectively speed the time for the formwork erection and stripping.

1- THRU D W 16 TIE SYSTEM : there is no lost items

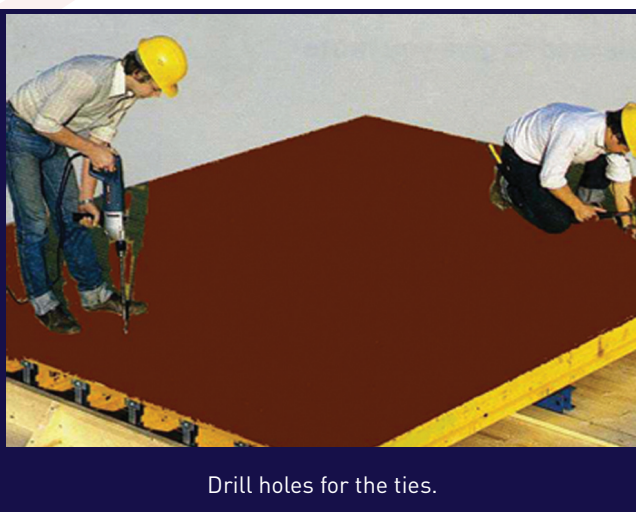
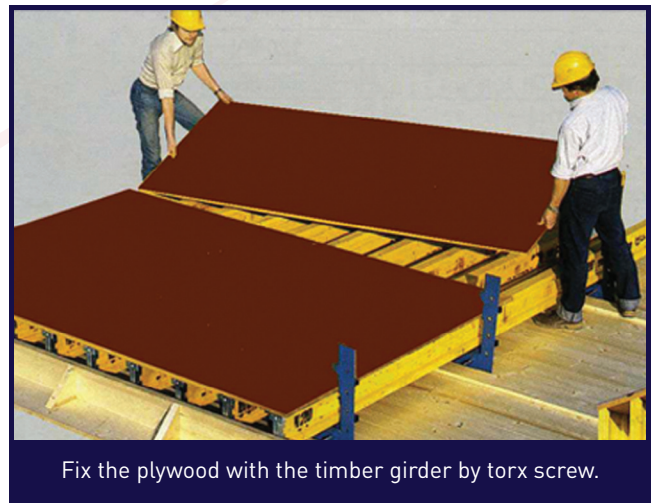
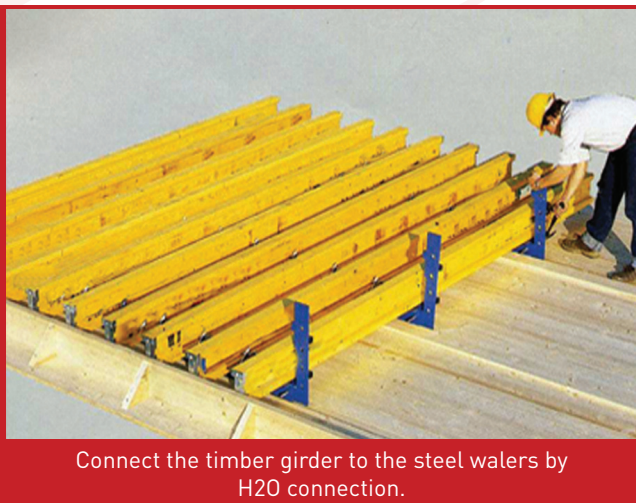


2 - WATER SEAL D W 16 tie system



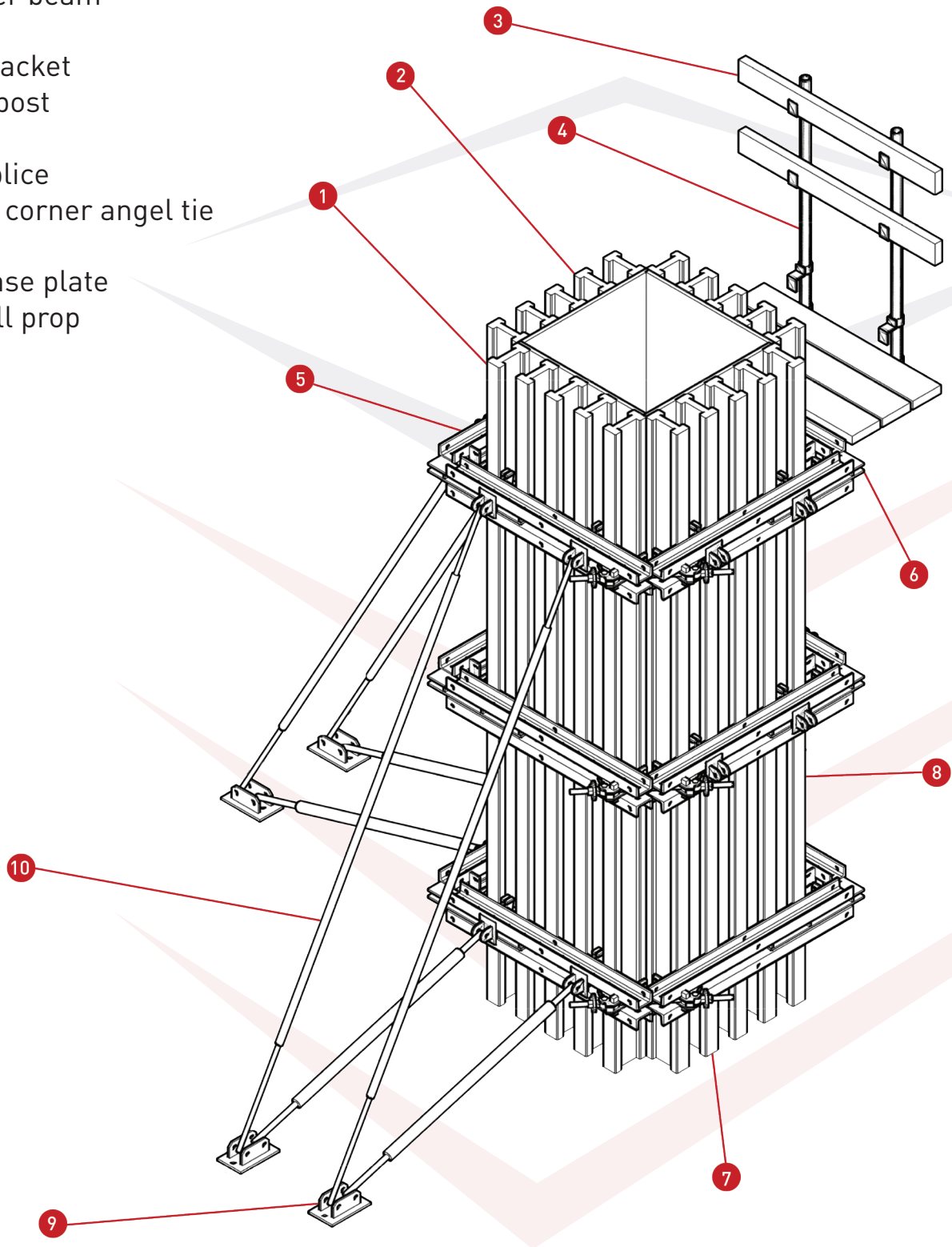
1- DW16 tie rod 2- Steel washer 3- Wing nut 4- Plastic cone 5-Water barrier 6- Palstic tube 7- Steel cone

Formwork Panel Assembly



Product Overview For Column

- 1- H20 timber beam
- 2- Plywood
- 3- Access bracket
- 4- Handrail post
- 5- Soldier
- 6- Corner splice
- 7- Universal corner angel tie
- 8- Tie rod
- 9- Double base plate
- 10- Push pull prop



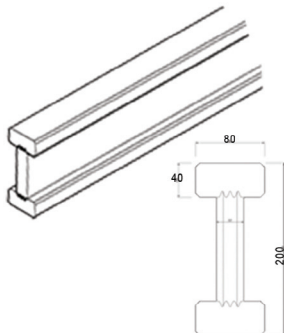
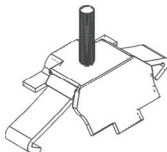
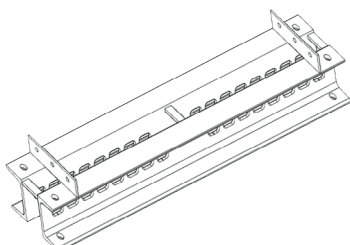

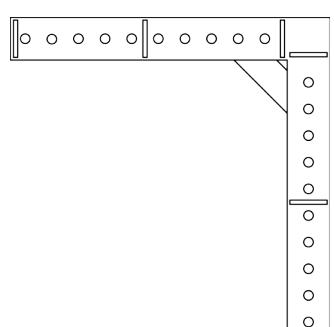
H20 & Soldier System For Columns

- By using the same components of the H20 and soldier wall formwork system in addition to steel column waling, a column formwork can be easily assembled.
- Column formwork is assembled in two L-shaped halves. These two halves are anchored to each other using corner tie connector.
- High permissible fresh concrete pressure makes it easy to pour any column height in one time.
- H20 and soldier system for columns formwork are suitable for both

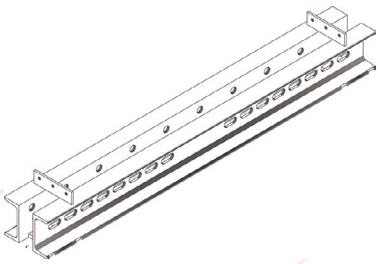
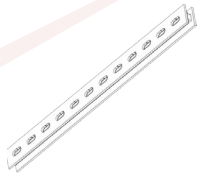
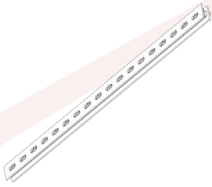
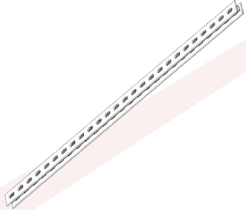
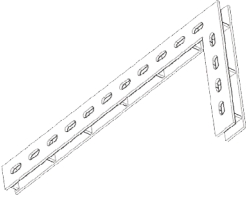
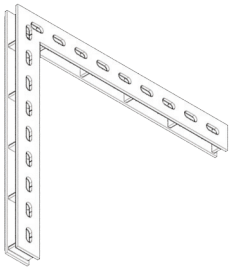
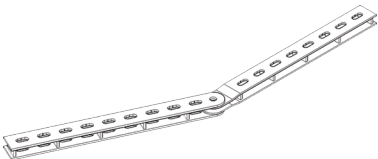
rectangular and circular columns. However, circular columns and other complicated shapes could be achieved by using timber negatives.



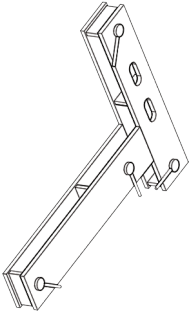
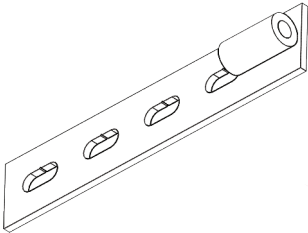
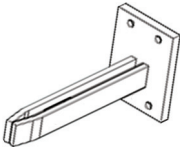
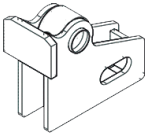


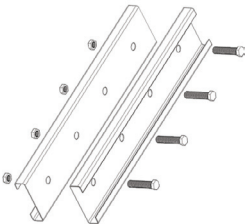
Components

Item	Description	Code no.	Weight (kg)
 <p>Permissible bending Moment = 5.0 KNm Permissible shear for = 11.0 KN Approx. weight = 5.0 Kg/m</p>	Timber H20 L=2.50 m	6221177024062	12.50
	Timber H20 L=2.90 m	6221177024076	14.50
	Timber H20 L=3.30 m	6221177024093	16.50
	Timber H20 L=3.60 m	6221177024109	18.00
	Timber H20 L=3.90 m	6221177024116	19.50
	Timber H20 L=4.50 m	6221177024130	22.50
	Timber H20 L=4.90 m	6221177024147	24.50
	Timber H20 L=5.90 m	6221177024154	29.50
	H20 connection	6221177006891	0.70
	Soldier][10 75 cm (Holes)	6221177020613	15.60
	Soldier][10 100 cm (Holes)	6221177020620	21.20
	Soldier][10 125 cm (Holes)	6221177020637	26.50
	Soldier][10 150 cm (Holes)	6221177020644	31.80
	Soldier][10 175 cm (Holes)	6221177020651	37.10
	Soldier][10 200 cm (Holes)	6221177020668	42.40
	Soldier][10 225 cm (Holes)	6221177020675	47.40
	Soldier][10 250 cm (Holes)	6221177020682	53.00
	Soldier][10 275 cm (Holes)	6221177020699	58.30
	Soldier][10 300 cm (Holes)	6221177020705	63.60
	Soldier][10 350 cm (Holes)	6221177020729	74.20
	Soldier][10 400 cm (Holes)	6221177020736	84.80
	Soldier][10 450 cm (Holes)	6221177020743	95.40
	Soldier][10 500 cm (Holes)	6221177020750	106.00
	Soldier][10 550 cm (Holes)	6221177020767	116.60
	Soldier][10 600 cm (Holes)	6221177020774	127.20
	Splice 60 double	6221177022242	6.02
	Corner Splice	6221177022136	12.10

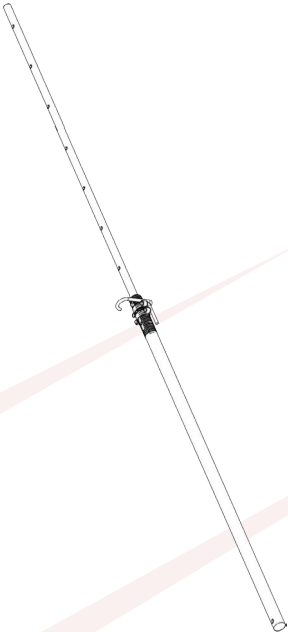

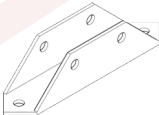
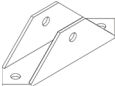


Components

Item	Description	Code no.	Weight (kg)
	Soldier I[12 1.17 m (Slotted & Holes)	6221177020941	31.60
	Soldier I[12 1.47 m (Slotted & Holes)	6221177020958	39.70
	Soldier I[12 1.78 m (Slotted & Holes)	6221177020965	48.10
	Soldier I[12 2.39 m (Slotted & Holes)	6221177020972	64.50
	Soldier I[12 3.00 m (Slotted & Holes)	6221177033026	81.00
	Soldier I[12 3.61 m (Slotted & Holes)	6221177020989	97.50
	Soldier I[12 4.22 m (Slotted & Holes)	6221177020996	113.95
	Soldier I[12 4.83 m (Slotted & Holes)	6221177021009	130.40
	Soldier I[12 5.44 m (Slotted & Holes)	6221177021016	146.35
	Soldier I[12 6.05 m (Slotted & Holes)	6221177021023	163.35
	Splice 99 cm	6221177022273	9.95
	Splice 147 cm	6221177032562	14.78
	Splice 211 cm	6221177032579	21.20
	Corner Splice (95 X 43) cm	6221177032692	13.86
	Corner splice (76 X 76) cm	6221177032708	15.30
	Pivot splice (60X60) cm	6221177032715	12.10
	Pivot splice (76X76) cm	6221177032722	16.10



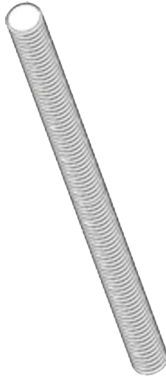
Components

Item	Description	Code no.	Weight (kg)
	Column corner splice	6221177032609	10.00
	Stop end connection	6221177032593	2.10
	Compression plate	6221177028039	1.28
	Universal corner angle tie	6221177026080	2.60
	Big wedge	6221177027629	0.85
	Small wedge	6221177027636	0.35
	Girder splice 60cm (single)	6221177022174	2.30



Components

Item	Description	Code no.	Weight (kg)
	Tilt up shor X0 1.04 - 1.83 m	6221177023942	10.90
	Tilt up shor X1 1.75 - 3.20 m	6221177023959	17.50
	Tilt up shor X2 1.98 - 3.35 m	6221177023966	18.65
	Tilt up shor X3 2.95 - 3.96 m	6221177023976	21.25
	Tilt up shor X4 3.20 - 4.88 m	6221177023980	25.64
	Shore Connector for horizontal soldier	6221177006358	1.64
	Double Base plate	6221177000813	4.63
	Single Base plate	6221177000882	1.50
	Rivet pin L =7.50 cm	6221177012281	0.12
	Rivet pin L =12.50 cm	6221177012304	0.20
	Spring clip large	6221177022617	0.03
	Spring clip small	6221177022624	0.01

Components

Item	Description	Code no.	Weight (kg)
	Crane splice (4holes)	6221177022167	4.00
	Bolt m 16 X 80	2012090028596	0.16
	Nut m 16	2012210029779	0.033
	Assembling bracket	6221177003203	8.34
	Access bracket for horizontal soldier	6221177077167	21.00
	Wing nut DVD	6221177011383	0.44
	Tie rod DVD L=0.75 mm L=1.00 mm L=1.25 mm L=1.50 mm L=1.75 mm L=2.00 mm L=2.50 mm L=3.00 mm L=3.50 mm L=4.00 mm L=5.00 mm L=6.00 mm	6221177023270 6221177023294 6221177023300 6221177023317 6221177023324 6221177023331 6221177023355 6221177023362 6221177023379 6221177023386 6221177023409 6221177023423	1.19 1.58 1.98 2.37 2.77 3.16 3.95 4.74 5.50 6.32 7.90 9.48

Components

Item	Description	Code no.	Weight (kg)
	Steel washer	6221177027513	1.10
	Hi skaf Anchor	6221177028084	2.85
	Corner filer panel L shape H = 1.0 m Corner filer panel L shape H = 2.0 m Corner filer panel L shape H = 3.0 m	6221177006624 6221177006631 6221177006648	12.78 16.54 37.03
	Corner filer panel Lader shape H = 1.0 m Corner filer panel Lader shape H = 2.0 m Corner filer panel Lader shape H = 3.0 m	6221177006594 6221177006600 6221177006617	9.30 18.00 26.35

ACROW

Formwork Technology



Acrow H20 & solidor



Acrow One shutter solidor



Acrow V.M.C



Acrow Tech-Form



Acrow Cuplock



Acrow Bridge table form



Acrow Circular column



Acrow climbing system



Acrow shorbrace Table form



Acrow Big steel panel



Acrow European prop



Acrow Vari form



Acrow Prop table form



Acrow frame



Acrow early striking system



Acrow Ring lock

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