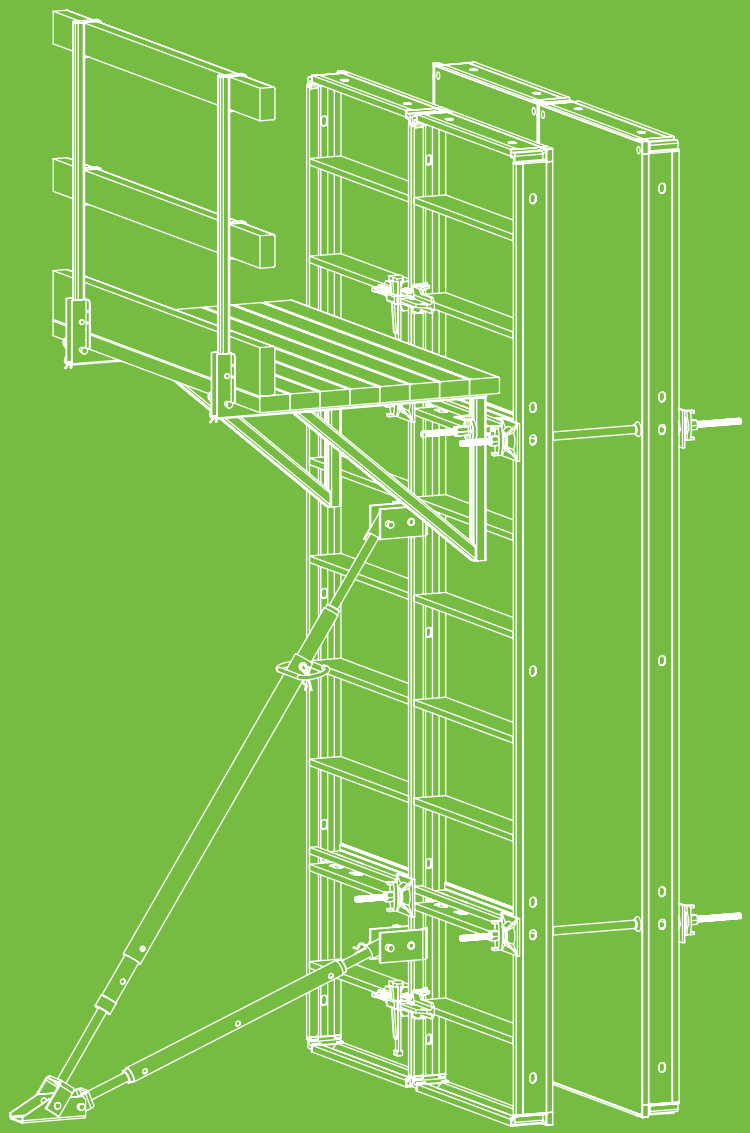


SBA GROUP

User Information

Rummy Formwork System

Contents

1 - Safety Introduction

When using the system presented in this manual, follow the Safety at Work Regulations (Construction Work) 1988 as well as the S.B.A. Safety Manual, which constitute an integral part of this manual.

The site manager / construction foreman (hereinafter: "the Customer") make sure that all information material provided by S.B.A. Group, including manufacturer's instructions, safety manual, up-to-date drawings, etc. are in their designated places, accessible, and up-to-date.

This manual provides guidelines and rules for maintaining appropriate safety and hygiene conditions to protect the workers at the work sites. Project managers and/or foremen will be in charge of complying with these rules.

This manual shall not be considered as a substitute for a risk assessment of the work site, since the obligation of planning, applying, and updating the risk assessment rests on the Customer only.

Work Environment

- The Customer is obligated to arrange a safe work environment, including safe approach routes to and from formwork and system components.
- The Customer shall take into account weather conditions, as well as the physical and mental capacity of the workers in the vicinity of the equipment, and the latter's use and storage.
- Sources of fire and devices emitting intense heat should be kept away from formwork and system components.

Use of equipment

- The Customer will be in charge of arranging an S.B.A. Group Site Instructor visit to give instruction before commencement of work with the system.
- The system/equipment shall be assembled in accordance with and subject to all applicable laws, standards and rules, by people trained in working with it, as described in this manual.
- The Customer will be in charge of visually inspecting the equipment before using it, to make sure it is serviceable. It is forbidden to use any component that is damaged, distorted, or cracked.
- It is forbidden to change or correct any S.B.A. plans and/or drawings and/or products. Changes or corrections shall be made by S.B.A. Group only, or an agent authorized by it. Any change and/or repair not authorized by S.B.A. Group constitutes a safety risk.
- Do not integrate S.B.A. systems with those of other manufacturers, without prior written approval by S.B.A. Group such combinations could constitute safety risks.
- Throughout all stages of work with the system, stability of the system must be monitored and maintained. Make sure there are no deviations from the maximum permitted loads applied to the equipment/system, as noted in this manual and/or S.B.A. working drawings.
- It is absolutely forbidden to weld S.B.A. products.
- Check the stability of the system's work platforms before stepping onto them.
- The foreman shall inspect the formwork including all components before casting, pursuant to Regulation 84(a) of the Safety at Work Regulations.
- To avoid any risk of overload and system failure, the casting rate noted in this manual should not be exceeded.
- Formwork shall be dismantled only after the concrete has hardened to a sufficient degree of strength, and under supervision of the constructor, structural designer.
- When dismantling the system, use the proper tools, detailed in this manual.
- Stability of the system should be maintained while being dismantled.

Maintenance

- Before each casting, clean the formwork of any concrete, and spread formwork oil on the surfaces.
- Use only original S.B.A. parts as spare parts in the system. Repairs to the system shall be done by S.B.A. Group only.

General comments

- The manual may be used for generic application or to accompany specific planning on site. Do not deviate from the instructions of this manual and/or any application not included in the applications described in this manual, unless written approval has been given by a certified authority in S.B.A. Group.
- The illustrations that appear in this manual are for demonstration purposes only, and do not necessarily include all safety measures. In light of the above, as needed and pursuant to the rules and regulations, appropriate safety accessories should be used.
- The weights shown in this manual are average values for new equipment however, actual weights may be different due to material tolerances, dirt, dampness, etc. In addition, S.B.A. Group reserves the right to make technical changes to its products.
- These guidelines were written by S.B.A., pursuant to the various safety laws, regulations, provisions, procedures, and arrangements. This manual is a preliminary, obligatory procedure for arrangement of safety at work. In any case of contradiction between the instructions of this manual and provisions of the Ministry of Labor, laws, and regulations, regulatory provisions shall prevail.
- All reasonable stresses and measurements have been taken into account in order to ensure the accuracy of the informating appearing in this manual. Nevertheless, S.B.A. cannot be held liable for errors or inaccuracy, and therefore reserves the right to make changes from time to time without prior notice to the manual and its characteristics.
- S.B.A. does not assume liability for any losses or damage of any kind, owing to the use of this manual or any of the characteristics associated with it.

Symbols in the manual:

Warning of an action that could cause injury

Technical limitation of the equipment that should not be deviated from

Guidance for proper way of using the system

2 - Loading, Transport, Unloading and Storage

Modular formwork system for casting concrete walls, columns, beams and foundations. The system consists of a small number of accessories, enabling quick and simple assembly and dismantling. The system is suited for working either with a crane or manually, thus enabling savings in costs.

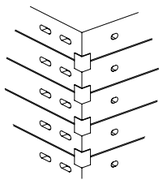
Ensure compliance with all laws and regulations that apply to loading, unloading and working with formwork and scaffolding.

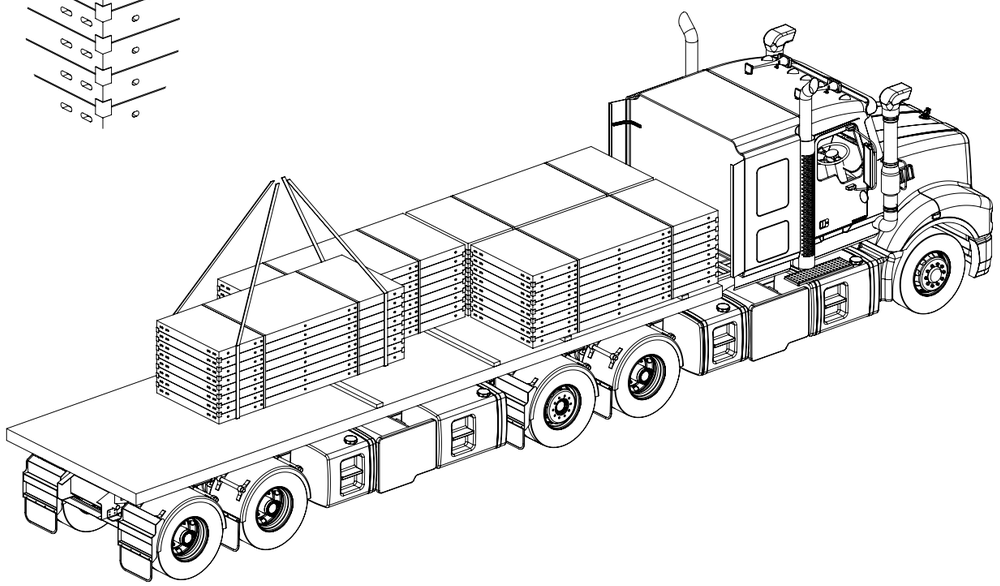
For loading or unloading of formwork and/or packagings, customers shall use lifting accessories inspected as required by law. Handling of formwork and packagings by customers shall be done using serviceable lifting and conveying equipment inspected as required by law.

Loading the formwork

- Make sure truck is suitable for the loaded equipment, as far as dimensions, payload capacity, anchor points and securing/fastening accessories are concerned. .
- Formwork should be placed from the front of the truck on planks to prevent slipping, in stacks of up to 16 sections, aligned and sorted according to width.
- To prevent slipping, it is recommended to place four plastic spacers between every two formwork sections.
- Each pile of formwork shall be fastened with at least two metal strap.

Plastic spacers between formworks





Loading of accessories

- System accessories should be placed inside designated accessories cases.
- Cases should be fastened to the truck with standard fastening straps, to prevent sliding.
- Oil barrels should be placed on wood pallets, in vertical position only. It is forbidden to stack oil barrels.

Transport

- Make sure the truck's cargo is properly loaded and fastened, to prevent it from moving during transport.
- Make sure the cargo does not hinder the driver's field of vision.
- Make sure height and weight of cargo comply with Regulation 85 of the Transportation Regulations 1961.

Overall truck weight (kg)	Maximum height from road surface (meter)
Up to 1500	2.5
Up to 3500	3.0
Up to 8000	3.5
Over 8000	4.0

* For cargo above 4 m, follow the instructions in the regulation

Unloading cargo

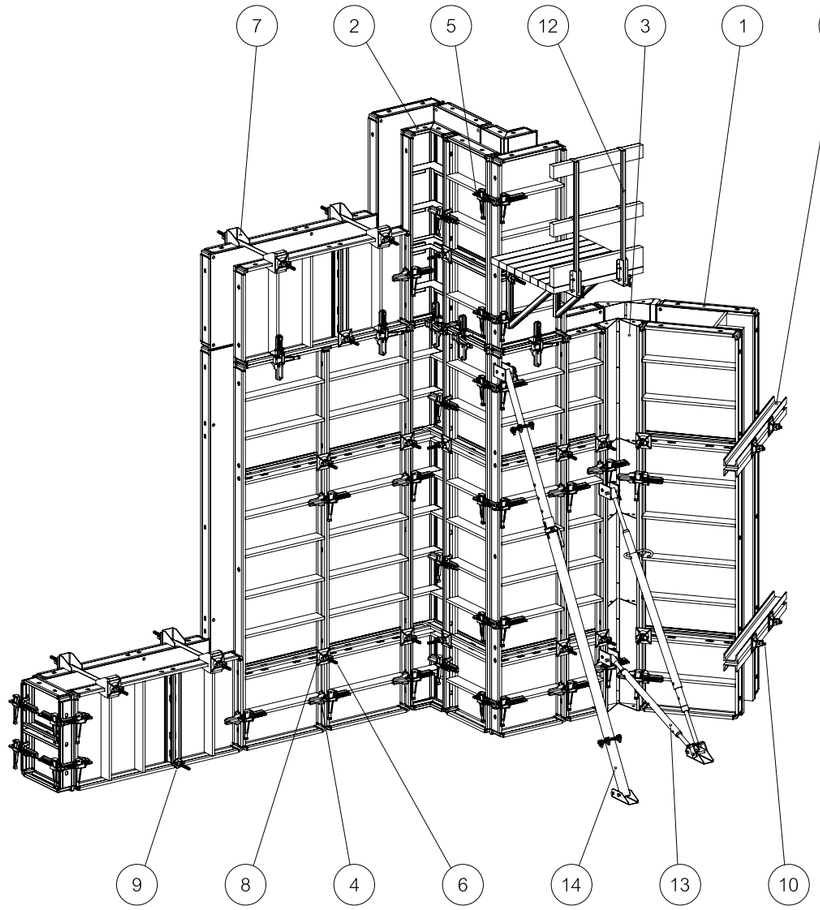
- The user shall verify the amount of goods he can receive, as well as the place and means of unloading.
- Before unloading panels, formwork and accessories, check for any loose or free components.
- Panels and accessories should be unloaded onto a compacted leveled surface, suitable for unloading.

Unloading cargo

- Formwork and system components should be stored on a compacted leveled surface.
- Accessories should be stored in designated cases, formwork should be laid horizontally with four plastic spacers between every two formworks, to prevent sliding.
- Formwork and system accessories should not be stored near sources of fire.
- Keep approach routes to the storage area safe and easily accessible.

3 - Rummy System

Modular formwork system for casting concrete walls, columns, beams and foundations. The system consists of a small number of accessories, enabling quick and simple assembly and disassembly. The system is suited for working either with a crane or manually, thus enabling savings in costs.



1. Rummy Formwork
2. Rummy Inside Corner
3. Rummy Hinged Corner
4. Rummy Standard Clamp K10
5. Rummy Corner Clamp K30
6. Tie Rod
7. Rummy Tie Rod Adapter
8. Nut 120S
9. Nut 70S
10. Fixing Bolt T25
11. Steel Waling
12. Rummy pouring bracke
13. Panel Strut 3 m
14. Panel Strut 4 m

3.1 - Rummy Formwork

Lightweight formwork, average weight about 40 kg/m^2, with galvanized steel frame and plywood. Rummy Formwork comes in several standard sizes that enable modularity and adapting to customer needs.

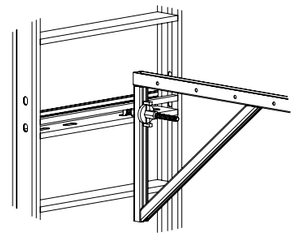
Formwork height dimensions of 3, 2.8, 1.5 and 0.75 m.

width dimensions of 90, 75, 60, 55, 50, 45, 40, 35 and 30 cm.

Concrete pressure resistance up to $60\frac{kN}{m^2}$

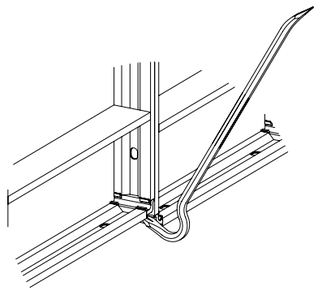
1. Side beam
2. Top/bottom beam
3. Formwork Profile
4. Slotted Formwork Profile
5. Frame's reinforced corners
6. Phenolic faced plywood, 15mm thickness.

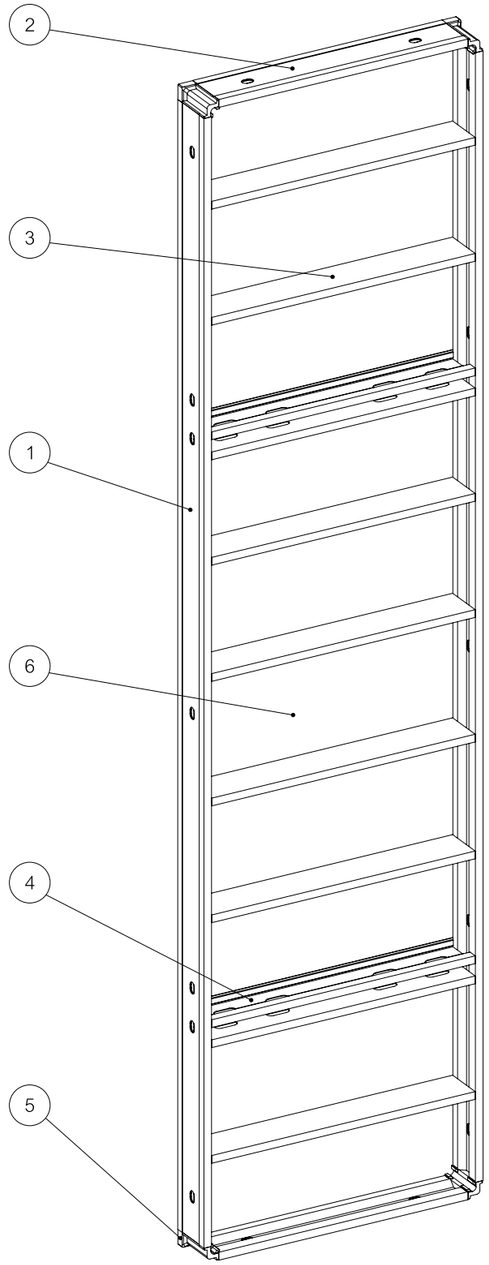
- The slots in the formwork beams are designed for mounting a Rummy pouring bracket.



Do not climb up the formwork profiles.
Maximum permissible weight to be carried by one worker 25 kg.

- The frame's reinforced corners enable placing and extracting formwork with a designated crowbar, without causing damage to the formwork frame.





3.2 - Connecting Accessories

The Rummy system has a small number of accessories, custom designed for quick and easy use.

Tie Rod Connection

Connection of one formwork facing another shall be done using a Tie Rod 15/17 and Nut 120S.

Locations of standard holes are 59, 211 and 297 cm height from bottom of formwork, and 33 mm from each side.

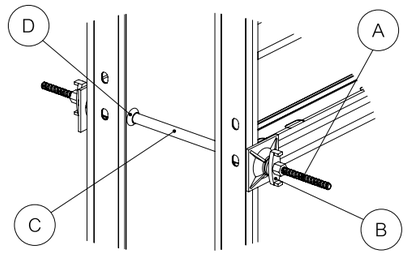
Before casting, seal the remaining holes with formwork plugs.
For castings of 3 m height, connect two tie rods in the vertical plane.

A - Tie rod 15/17

B - Nut 120S

C - Plastic tube - maintains distance

D - Plastic Cone 1"



Maximum permitted load on tie rod 15/17 - 90kN.

Water Stop

Water barrier connected to tie rod, designed to prevent penetration of water and gases.

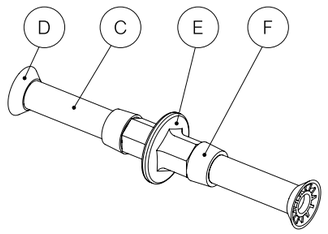
E - Water barrier

C - Plastic tube - maintains distance

F - Plastic sleeve

D - Plastic cone 1”

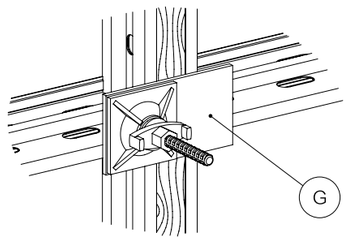
Plastic cone is removed after casting, plastic tube and water barrier remain in concrete.



Pressure Plate 8x120x120

The pressure plate is used for straightening and fixing of the 1-9 cm thick wood spacer between two formworks.

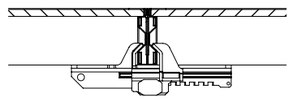
G - Pressure plate

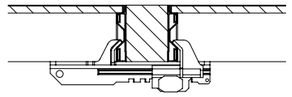


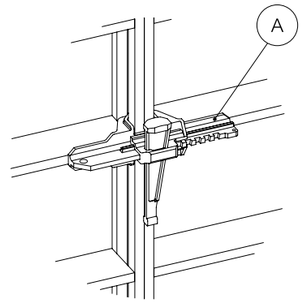
Rummy Standard Clamp K10

Clamp K10 connects and straightens two adjacent formworks, thus enabling the lifting of several formworks as one rigid element.

A - Rummy standard clamp K10





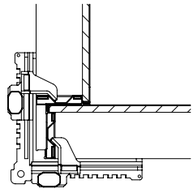


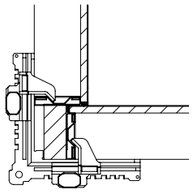
Use a formwork hammer for locking and releasing the wedge of the Rummy standard clamp.
Two formworks can be connected with a wood spacer of 9 mm maximum thickness.

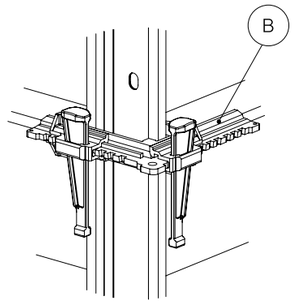
Rummy Corner Clamp K30

The K30 Clamp connects between two perpendicular formworks, thus making outside corners redundant.

B - Rummy Corner Clamp K30





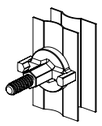


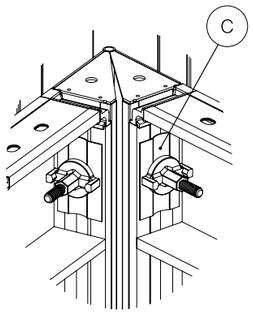
Rummy corner clamp K30 enables connecting two perpendicular formworks with a wooden spacer up to 5 cm thick.

Rummy Panel Connector

For clamping and centering two adjacent formworks. Used when the K10 Clamp cannot be used, for example, in the case of a sharp angled corner.

C - Rummy panel connector





Rummy Tie Rod Adapter

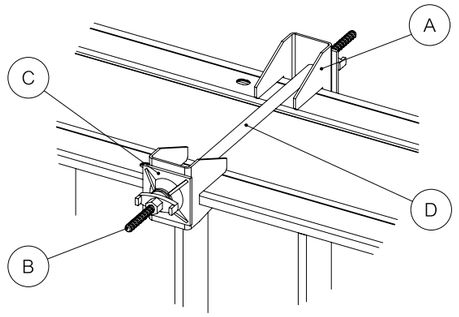
The adapter positioned on the formworks side beam enables connection of two facing formworks, independently of the formwork holes.

A - Rummy tie rod adapter

B - Tie rod 15/17

C - Nut 120S

D - Plastic tube



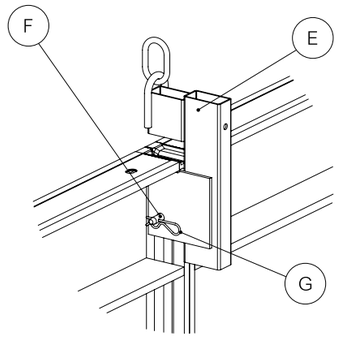
Rummy Lifting Hook

Lifting hooks are connected to the Rummy formwork side frame and secured with a locking pin.

E - Rummy lifting hook

F - Locking pin

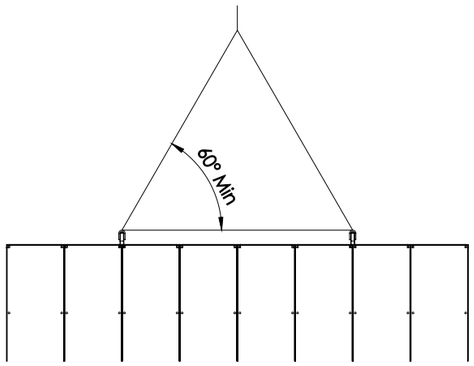
G - Pin R



Make sure the lifting accessory is valid and has been approved by a certified tester.

Do not lift the industrial formwork without first checking its lifting accessories for any apparent defects. (Regulation 96 of the Work Safety - Construction Work - Regulations 1988)

It is forbidden to use the lifting hook without securing it with a locking pin and pin R.



The maximum permitted load for the lifting hook is 1,000 kg.
According to the Safety at Work Order 1970, the minimum lifting angle is 60°.

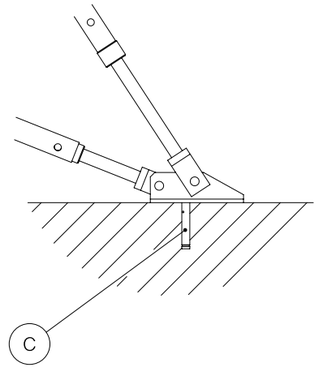
3.3 - Struts

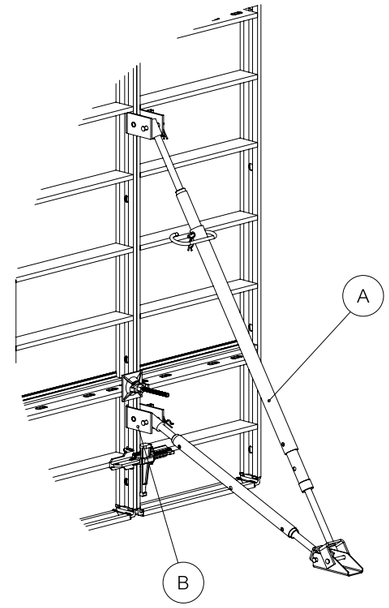
The function of the struts is to secure the formwork from falling, either due to imbalance, wind forces, blow from transport equipment, or any other cause. The struts may be connected when the panel (assembled from several formworks) is either lying on the ground or standing while secured by a crane. The struts are connected to the profiles of the Rummy formworks frame with the closer plate and a nut 70s. The base of the strut must be anchored to the concrete surface with a HILTI HUS3-H M14/115 anchoring bolt or equivalent.

A - Panel strut

B - Rummy closer plate for strut

C - Anchoring bolt





Connecting the Panel Strut to The Rummy Formwork

Connection is made by clamping the closer plate to the side beams of the Rummy formwork, using nut 70S.

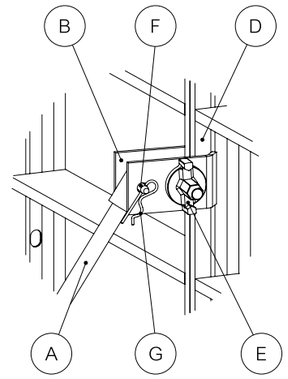
D - Rummy formwork

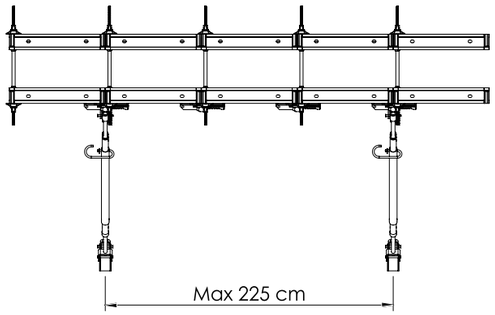
A - Panel strut

B - Rummy closer plate for strut

E - Nut 70S

F - Pin Ø14 mm

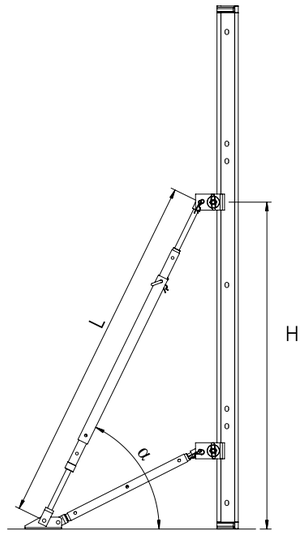




Maximum distance between two struts: 2.25m

Panel Strut 3 m

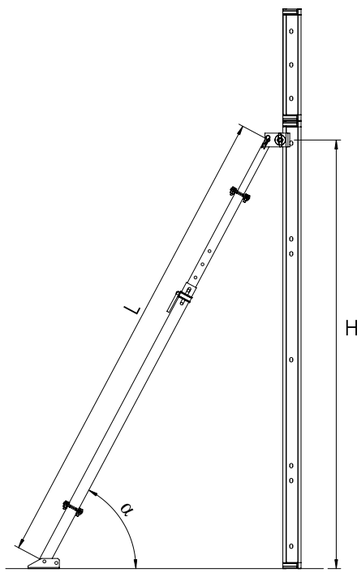
Strut length L: 156 - 280 cm



The strut should be connected so that H will be at about 70% of cross section height (or more) and angle α about 50° – 60°.

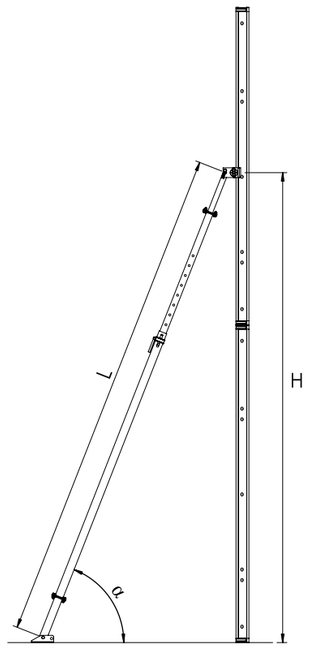
Panel Strut 4 m

Strut length L: 190 - 400 cm



Panel Strut 6 m

Strut length L: 380 - 600 cm



3.4 - Rummy Pouring Bracket

The Rummy Pouring Bracket enables safe work, with easy and fast operation.

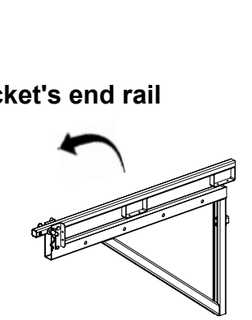
Locking the pouring bracket's end rail

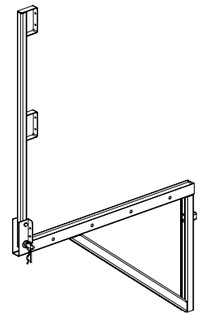
A - Rummy pouring bracket

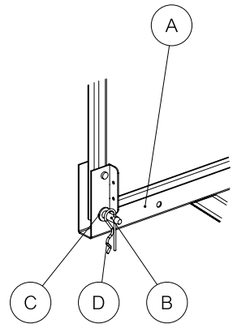
B - Pin Ø14 mm

C - Washer 9/16"

D - Pin R







Connecting Pouring Bracket to Rummy Formwork

The bracket is connected to the Rummy formwork either vertically or horizontally using Fixing Bolt T25 placed between the Slotted Formwork Profiles.

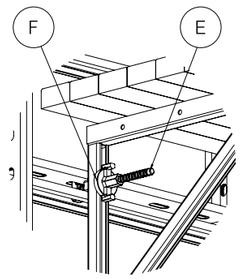
The platform and handrail are made from high-quality wooden beams, at least 4 cm thick, connected with nails.

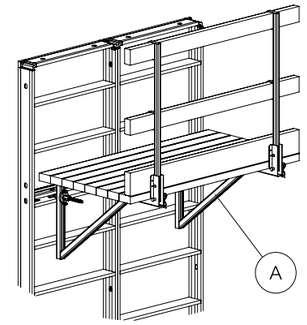
E - Fixing Bolt T25

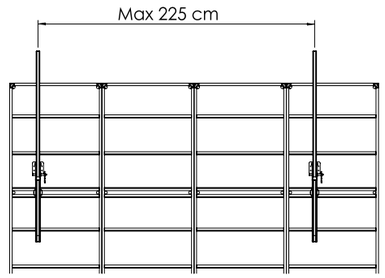
F - Nut 70S

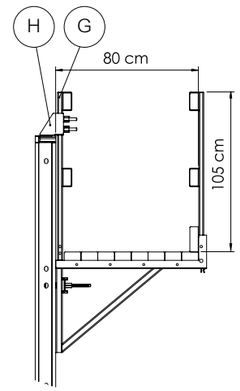
G - End rail post

H - Platform end rail connector







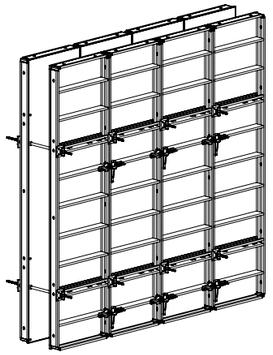


Loading equipment on the platform is strictly forbidden. If needed, and according to standard requirements, a front handrail and handrail at the free end shall be installed.

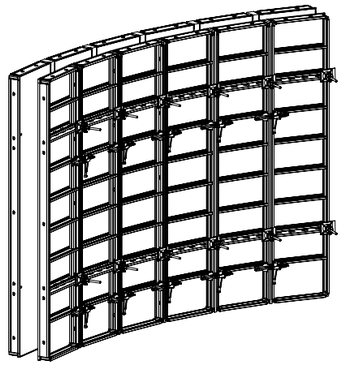
Maximum permitted load 150 kg/m².
Maximum distance between two brackets: 2.25 m.

4 - System Applications

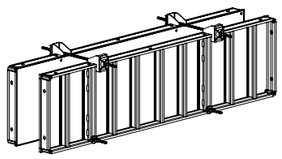
Retaining Walls



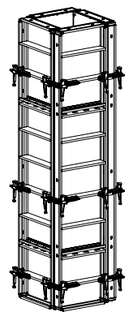
Circular Wall



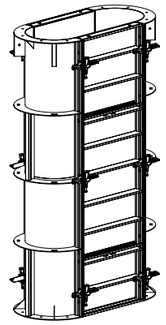
Beams and Foundations



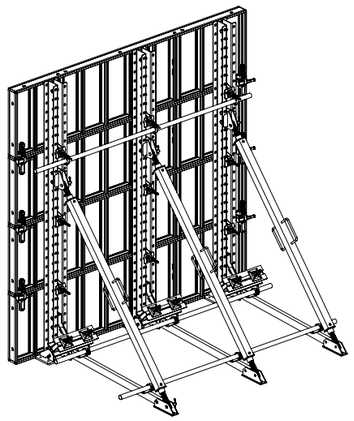
Columns



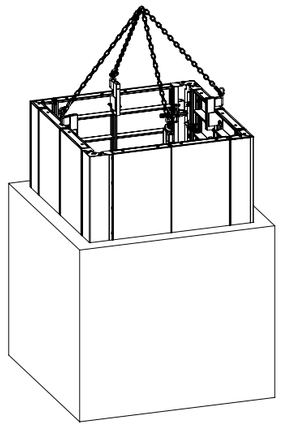
Round / Oval Columns



Single Sided Wall



Piers



4.1 - Retaining Walls

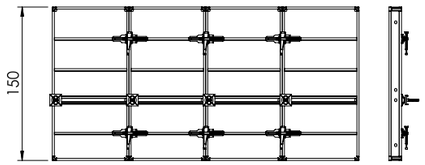
The variety of dimensions and heights of Rummey Formwork enable assembly of panels up to 6 m high.

If the required panel height is higher than the formwork height, then formwork units may be stacked - connected one on top of the the other.

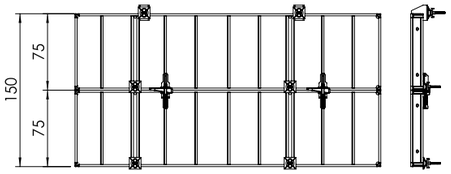
The stacked formworks are connected using the Rummy K10 clamps. If needed, a vertical steel walling may be connected as described in the following.

4.1.1 - Panel Assembly

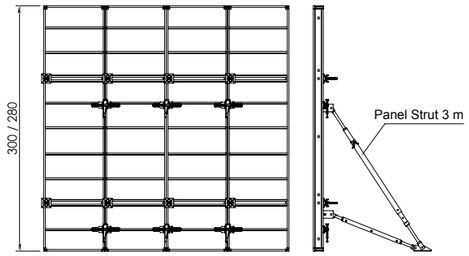
Height 150 cm



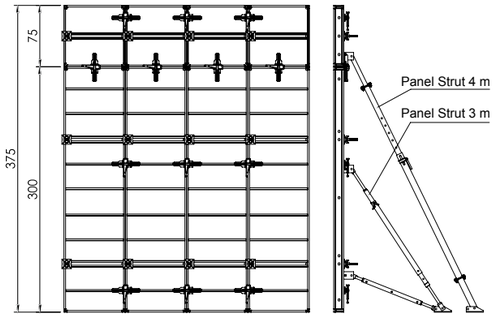
Height 150 cm with horizontal formworks



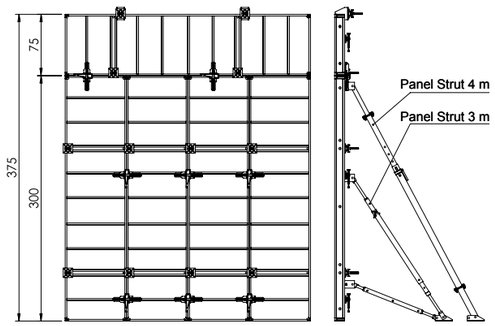
Height 300/280 cm



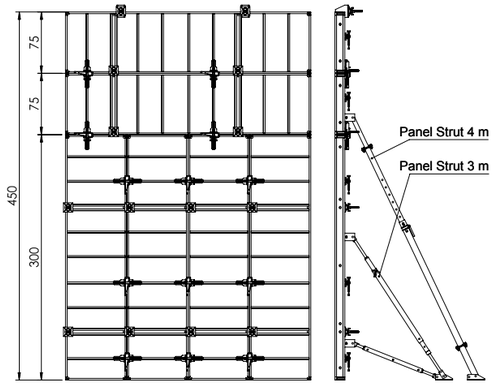
Height 375 cm



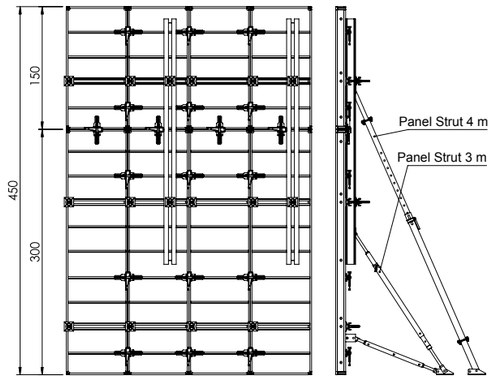
Height 375 cm with horizontal formwork



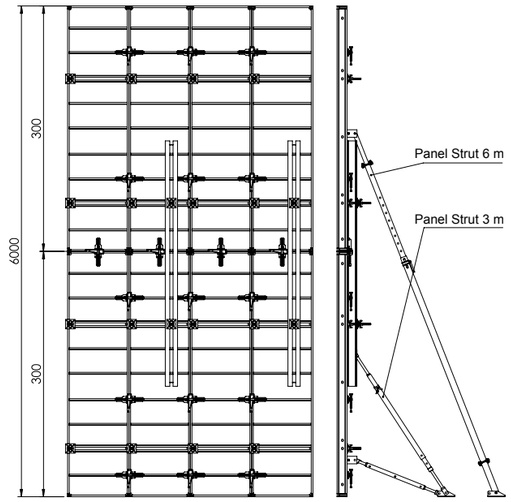
Height 450 cm with horizontal formworks



Height 450 cm



Height 600 cm



4.1.2 - Corners

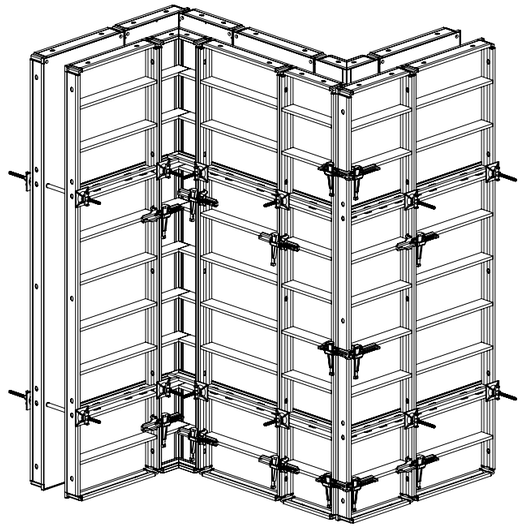
Rummy Formwork systems offer a wide variety of solutions for casting right angled corners as well as angled corners. Right Angle Corner - assembled from a Rummy inside corner in the interior section, and straight formworks connected with a K30 clamp in the exterior section.

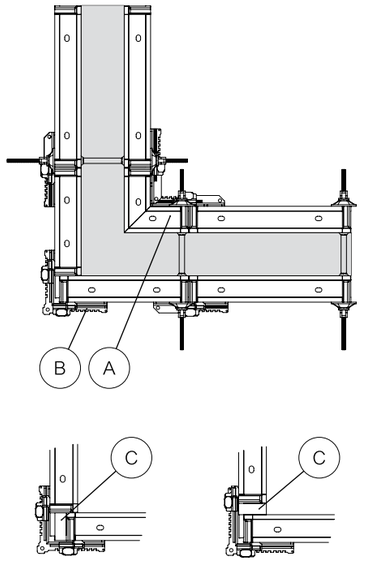
If needed, wood spacers up to 5 cm thick may be used.

A - Inside corner

B - Rummy corner clamp K30

C - Wood completion





To connect two inside corners one on top of the other, use a K10 clamp.

The number of K30 clamps used depends on the height of the panel.					
Panel		**Bottom formwork**		**Top formwork**	
Height (cm)	Quantity	Height (cm)	Quantity	Height (cm)	Quantity
75 ,150	2	75 ,150	2	-	-
280 ,300	3	280 ,300	3	-	-
355 ,375	5	280 ,300	3	75	2
430 ,450	6	280 ,300	4	150	2
600	7	300	4	300	3

Angular Corner - may be installed by using two hinged corners, one for the inner and the other for the external corner. Hinged corners enable obtaining corners with minimum angle of 70°.

A - Hinged corner

B - Rummy standard clamp K10

C - Tie rod 15/7 + Nut 120

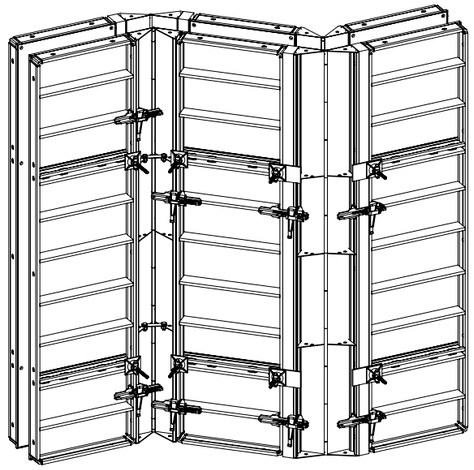
D - Pressure plate 8x120x220

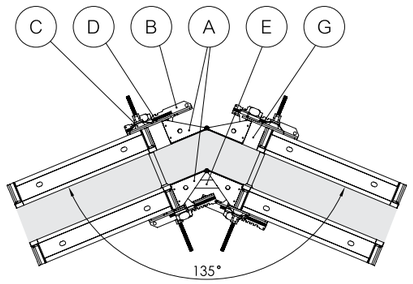
E - Fixing plate

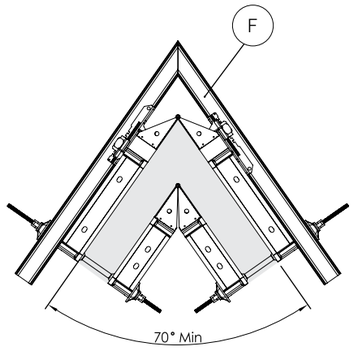
F - Steel waling

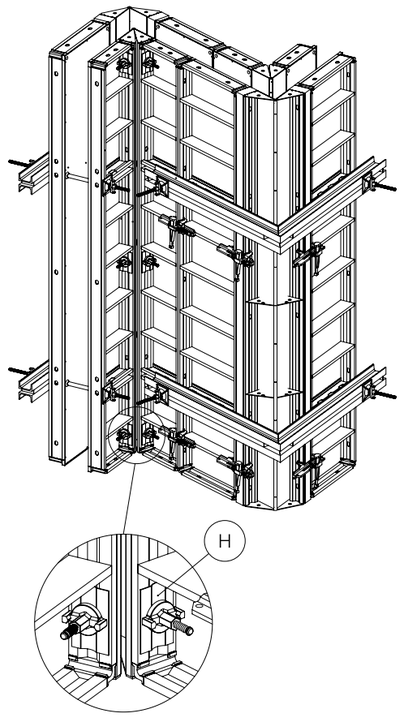
G - Wood completion

H - Rummy panel connector









By using a fixing plate, corner angles of 135° or 90° can be obtained.

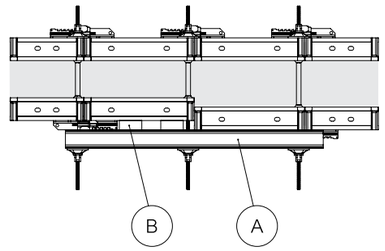
In cases where no tie rod can be passed between formworks, a fixing profile should be used.

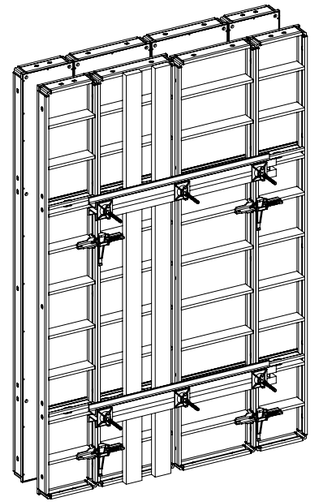
4.1.3 - Offset

Change of wall thickness - a wall offset of up to 10 cm can be obtained by using wood supports and a steel waling.

A - Steel waling

B - Wood support



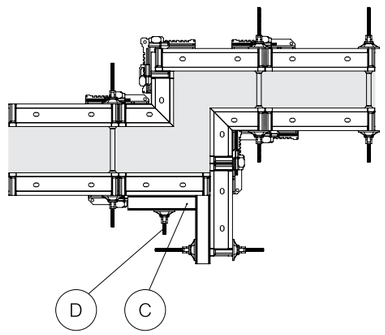


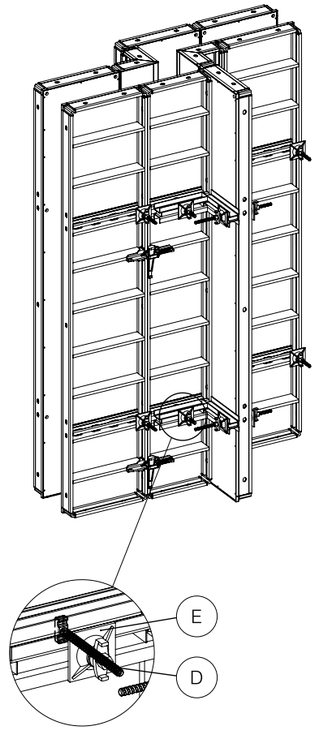
Wall Step - to obtain a wall step we shall use a fixing profile for the corner as depicted in the example.

C - Rummy corner waling

D - Fixing bolt T25

E - Nut 120S





To fix the profile, a Fixing bolt T25 may be used.

The bolt is connected to the Rummy formwork at the designated slot in the formwork profile and fastened with nut 120S.

4.1.4 - Stop-End (stopper)

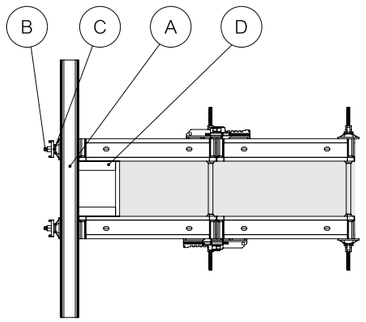
Use of steel waling and wooden board

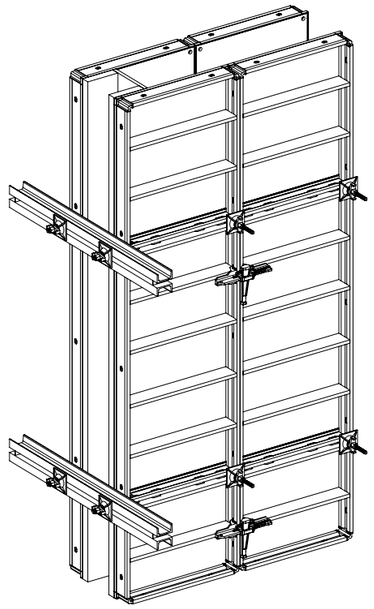
A - Steel waling

B - Fixing bolt T25

C - Nut 120S

D - Wooden board and beams

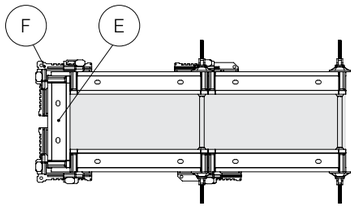


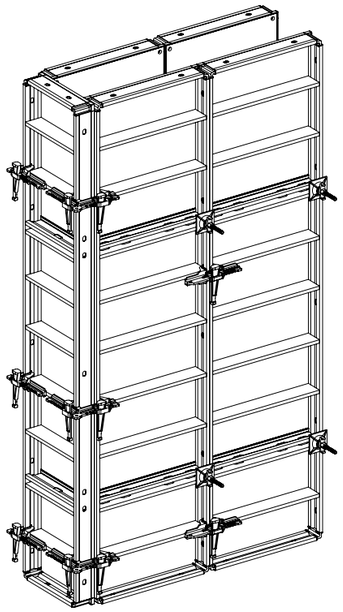


Use of formwork

E - Rummy formwork

F - Rummy corner clamp K30





4.2 - Piers

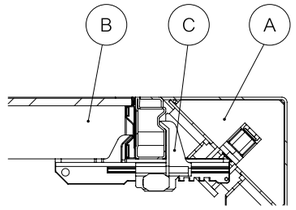
Use of stripping corners enables extraction of the inner formworks as a single unit. This leads to great savings in dismantling and assembling formwork, when proceeding from one casting to another.

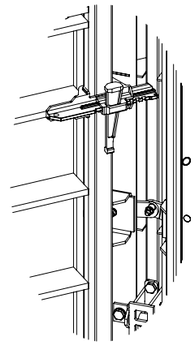
Shuft Formwork Assmbly - shuft cells contain two opposite stripping corners. The Rummy formworks are connected to the stripping corner with transition clamp K45.

A - Stripping corner

B - Rummy formwork

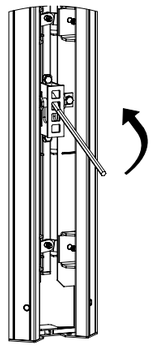
C - Transition clamp K45



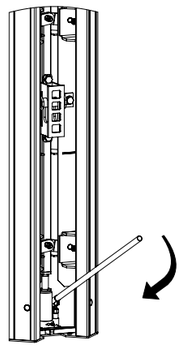


Detaching shuft formworks from cast walls - thanks to the stripping corner mechanism, shuft formworks may be detached from cast walls using a hydraulic jack or a crowbar.

Contraction of shuft formwork units is done without use of a crane!
Before detaching the shuft formworks, make sure there are no parts attached to the formworks that could prevent their removal.



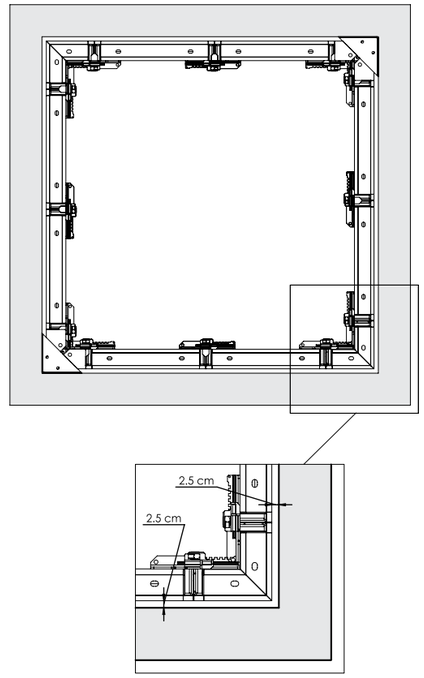
Detaching with a crowbar



Detaching with a jack

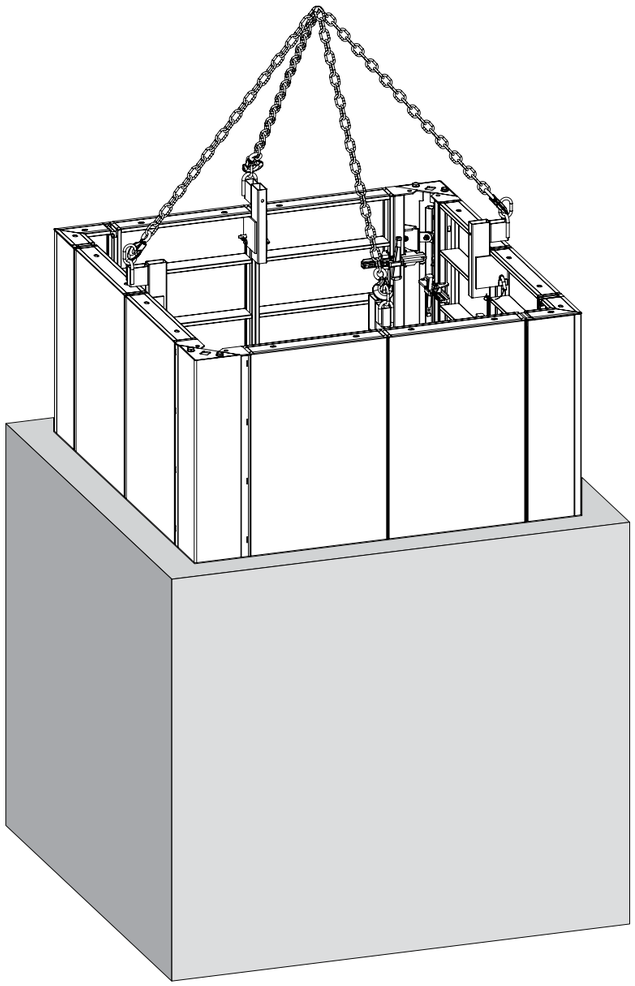
- Detachment results in a gap of about 2.5 cm between shuft formworks and cast wall.

Returning the cell to casting state is done with a crowbar.



Lifting the Shuft Formworks Unit - after detachment, a crane is connected to the four lifting hooks in the shuft formworks, and it is lifted as one unit.

Maximum weight for a shuft formworks unit is 4,000 kg.



The crane hooks shall be connected only to the four lifting hooks in the shuft formworks unit.

4.3 - Columns

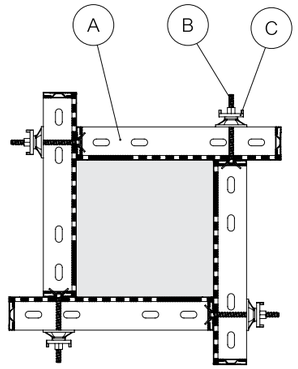
Casting Columns using Universal Formwork - universal formwork is characterized by rows of holes at intervals of 5 cm, enabling flexibility in casting columns varying in thickness.

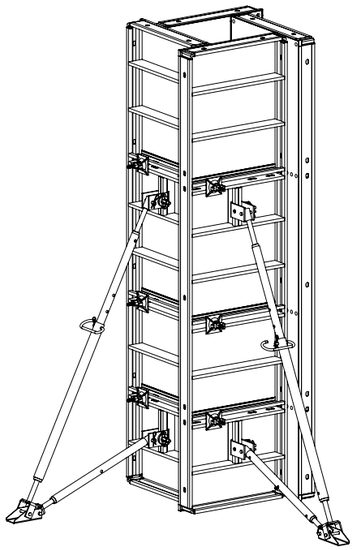
For example, using four 75 cm wide formworks, columns with dimensions of 20x20 to 65x65 may be cast.

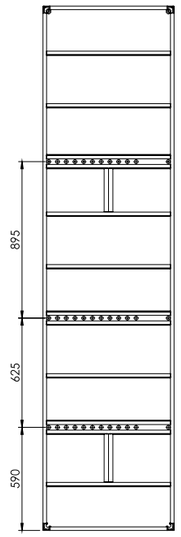
A - Universal formwork

B - Fixing bolt C25

C - Nut 120



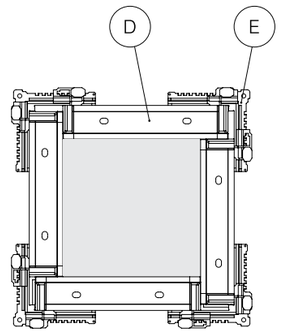


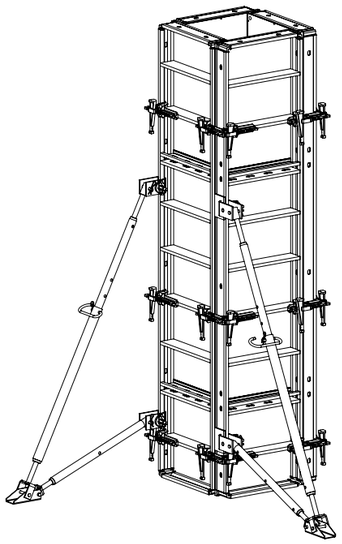


Casting Columns using Rummy Formwork

D - Rummy formwork

E - Rummy corner clamp K30



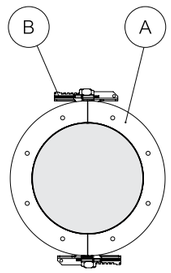


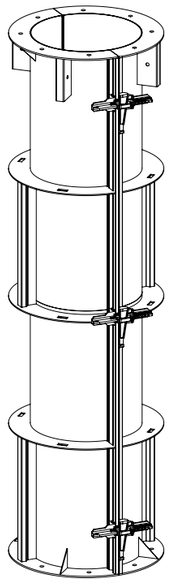
Maximum permissible pressure of fresh concrete $60\,\frac{kN}{m^2}$

Casting Round and Oval Columns - round and oval columns may be cast using round and straight formwork.

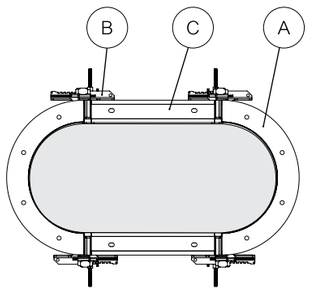
A - Circular formwork

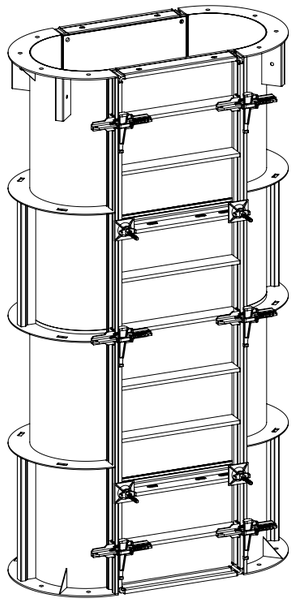
B - Rummy standard clamp K10





C - Rummy formwork





4.4 - Circular Wall

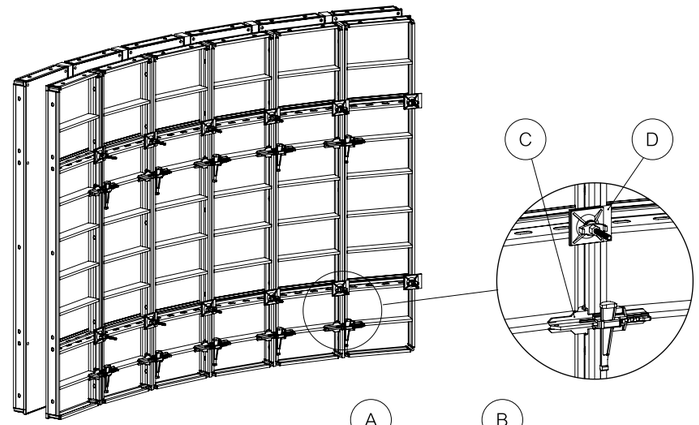
Casting a Circular Wall Using Wood Completions - fitted wood completions are located between the Rummy formworks, connected with a K10 clamp and secured with a pressure plate.

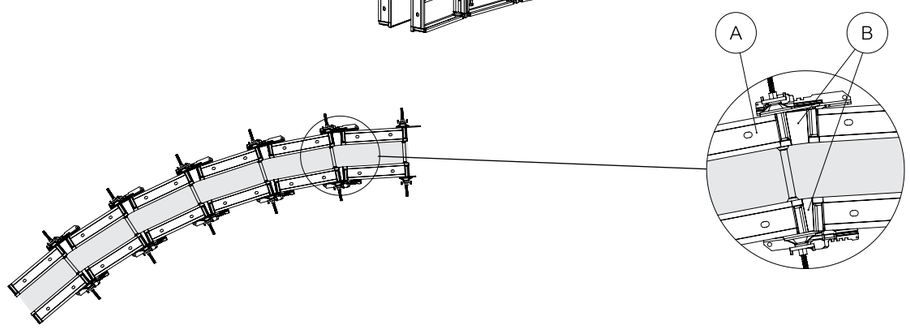
A - Rummy formwork

B - Wood completion

C - Rummy standard clamp K10

D - Pressure plate





4.5 - Beams and Foundations

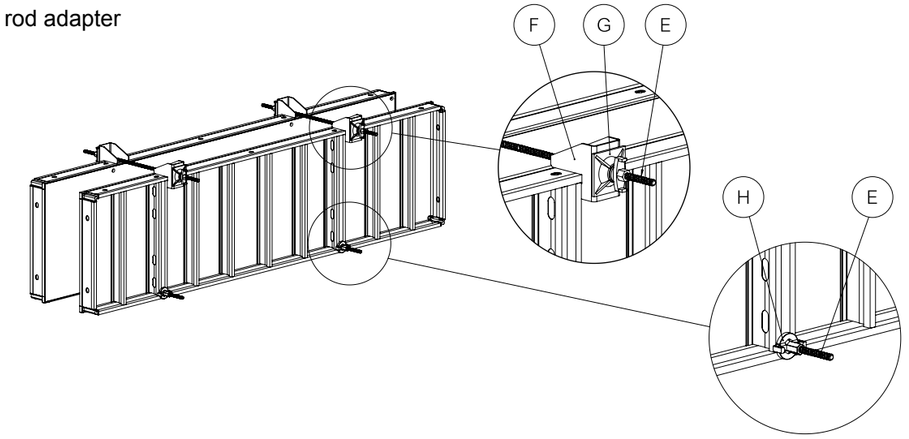
The Rummy System enables casting of beams and foundations by combining small formwork and horizontal formwork.

E - Tie rod 15/17

F - Rummy tie rod adapter

G - Nut 120S

H - Nut 70S



4.6 - Single Sided Wall

The SW 300/400/600 single sided wall system connects to either vertical or horizontal Rummy formworks, enabling casting of single sided walls of up to 6 m height.

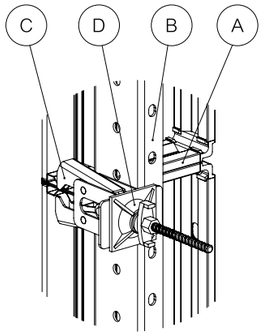
Casting single sided walls with horizontal Rummy formworks

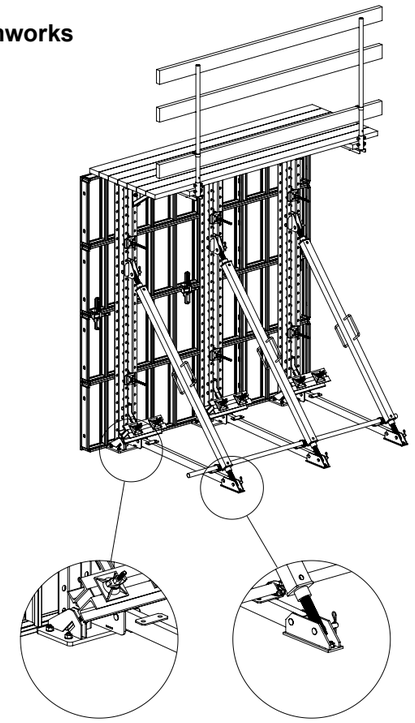
A - Rummy formwork

B - Single sided support system

C - Single sided gripper

D - Nut 120S





Make sure the single sided wall system is securely anchored to the concrete floor, using suitable anchoring bolts.

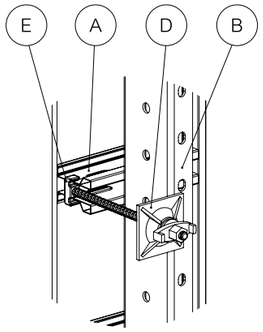
Casting single sided walls with vertical Rummy formworks

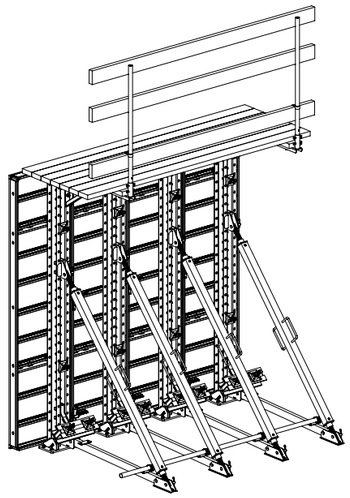
A - Rummy formwork

B - Single sided support system

E - Fixing bolt T35

D - Nut 120S





- For further review and parts list see user information manual - Single Sided Walls.

5 - Technical Information

During the concrete casting process, a horizontal load is applied to the formwork, due to the pressure of the fresh concrete.

Several factors affect the magnitude of the load applied to the formwork: Type and composition of concrete, height of casting, temperature of fresh concrete while casting, vibration, and rate of casting.

The permitted concrete pressure for Rummy Formwork is 60 kN/m², therefore, the rate of casting should be adjusted with consideration for the other factor mentioned above.

- Calculation of casting rate according to regulation Standard SI 904 of December 2010, Formwork for Concrete.

P [kN/m^2] – Fresh concrete pressure
R [m/h] – Concrete puring rate
T [°C] – Concrete temperture
C_w – Concrete specific gravity coefficient
C_c – Cement type coefficient
W_f [kN/m^3] – Specific gravity for fresh concrete

$$P = C_w C_c \left(7.5 + \frac{800\,R}{T + 18}\right)$$

$$R_{max} = \frac{(T + 18)\left(\frac{P_{max}}{C_w C_c} - 7.5\right)}{800}$$

Concrete specific gravity coefficient Cw calculation table

W_f [kN/m^3]	C_w
Less than - 23.4	0.5[(Wf/23.8)+1], No less than - 0.8
23.4 - 24.2	1.0
Greater than - 24.2	Wf / 23.8

Cement type coefficient Cc calculation table

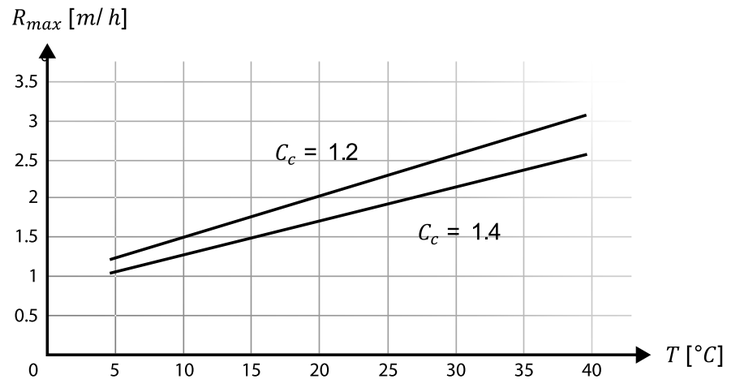
Inhibitors and Cement Type	C_c
CEM I, CEM II	1.2
Inhibitors used in large quantity	1.4
For any other cement type	1.4

Calculation Example:

$P_{max} = 60\,[kN/m^2]$; $T = 20\,[°C]$; $C_w = 1.0$; $C_c = 1.2$

$$R_{max} = \frac{(20 + 18)\left(\frac{60}{1 \cdot 1.2} - 7.5\right)}{800} = 2.0\,[m/h]$$

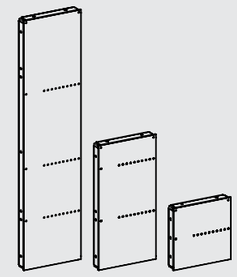
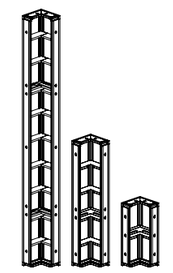
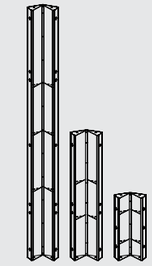
Permitted casting rate vs temperature and cement type (Cc)

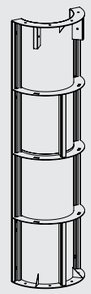
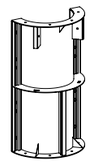
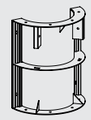


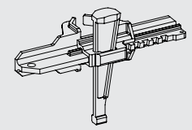
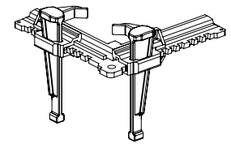
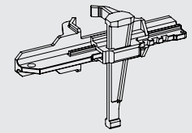
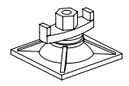
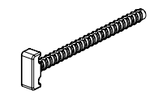
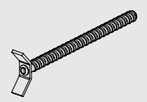
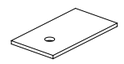
* The calculation presented is merely theoretical, and does not take into account additional parameters such as side load and correction factors that appear in the standard. For calculation in real cases, the standard should be followed.

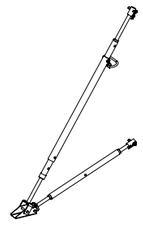
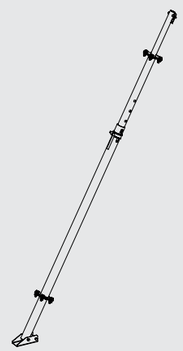
6 - List of Items

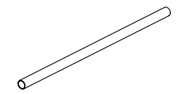
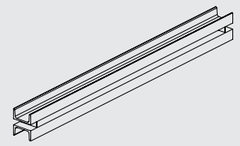
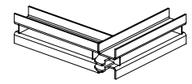
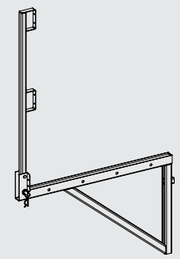
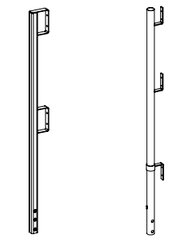
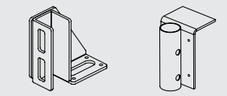
Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Formwork 90x300	87	5904010	
Rummy Formwork 75x300	75	5904020	
Rummy Formwork 60x300	64	5904030	
Rummy Formwork 55x300	62	5904040	
Rummy Formwork 50x300	58	5904050	
Rummy Formwork 45x300	56	5904060	
Rummy Formwork 40x300	55	5904070	
Rummy Formwork 35x300	50	5904080	
Rummy Formwork 30x300	40	5904085	
Rummy Formwork 90x280	84	5900010	
Rummy Formwork 75x280	72	5900020	
Rummy Formwork 60x280	61	5900030	
Rummy Formwork 55x280	59	5900040	
Rummy Formwork 50x280	55	5900050	
Rummy Formwork 45x280	53	5900060	
Rummy Formwork 40x280	52	5900070	
Rummy Formwork 35x280	47	5900080	
Rummy Formwork 30x280	42	5900085	
Rummy Formwork 90x150	45	5900400	
Rummy Formwork 75x150	40	5900410	
Rummy Formwork 60x150	36	5900420	
Rummy Formwork 55x150	35	5900430	
Rummy Formwork 50x150	33	5900440	
Rummy Formwork 45x150	31	5900450	
Rummy Formwork 40x150	27	5900460	
Rummy Formwork 35x150	26	5900470	
Rummy Formwork 30x150	23	5900475	
Rummy Formwork 90x75	26	5906080	
Rummy Formwork 75x75	23	5906070	
Rummy Formwork 60x75	20	5906060	
Rummy Formwork 55x75	19	5906050	
Rummy Formwork 50x75	18	5906040	
Rummy Formwork 45x75	17	5906030	
Rummy Formwork 30x75	16	5906020	
Rummy Formwork 35x75	15	5906010	
Rummy Formwork 30x75	14	5906005	

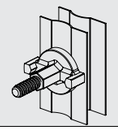
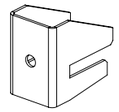
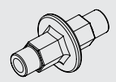
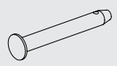
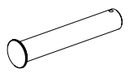
Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Universal Formwork 90x300	87	5904011	
Rummy Universal Formwork 90x150	58	5904301	
Rummy Universal Formwork 90x75	32	5904302	
Rummy Universal Formwork 75x300	73	5904303	
Rummy Universal Formwork 75x150	50	5904305	
Rummy Universal Formwork 75x75	28	5904306	
Rummy Inside Cornerl 30x30x300	60	5904090	
Rummy Inside Cornerl 30x30x150	34	5900480	
Rummy Inside Cornerl 30x30x75	18	5906095	
Rummy Inside Cornerl 20x20x300	69	5904110	
Rummy Inside Cornerl 20x20x150	36	5900485	
Rummy Inside Cornerl 20x20x75	16	5906100	
Rummy Hinged Corner 20x20x300	71	5904095	
Rummy Hinged Corner 20x20x150	36	5900490	
Rummy Hinged Corner 20x20x750	18	5900491	
Stripping Corner 30x30x330	158	5909000	

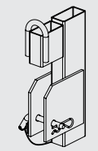
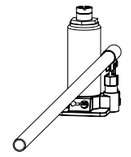
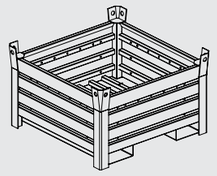
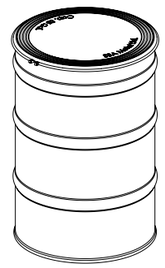
Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Circular Formwork Ø100x300	240	6050100	
Circular Formwork Ø90x300	220	6050105	
Circular Formwork Ø80x300	200	6050110	
Circular Formwork Ø70x300	180	6050115	
Circular Formwork Ø60x300	160	6050120	
Circular Formwork Ø50x300	140	6050130	
Circular Formwork Ø40x300	120	6050140	
Circular Formwork Ø30x300	100	6050150	
Circular Formwork Ø100x150	130	6050101	
Circular Formwork Ø90x150	120	6050106	
Circular Formwork Ø80x150	110	6050111	
Circular Formwork Ø70x150	100	6050116	
Circular Formwork Ø60x150	90	6050121	
Circular Formwork Ø50x150	80	6050135	
Circular Formwork Ø40x150	70	6050145	
Circular Formwork Ø30x150	60	6050155	
Circular Formwork Ø100x100	98	6051100	
Circular Formwork Ø90x100	90	6051105	
Circular Formwork Ø80x100	82	6051110	
Circular Formwork Ø70x100	74	6051115	
Circular Formwork Ø60x100	66	6051120	
Circular Formwork Ø50x100	58	6051130	
Circular Formwork Ø40x100	50	6051140	
Circular Formwork Ø30x100	42	6051150	
Circular Formwork Ø100x50	60	6051101	
Circular Formwork Ø90x50	55	6051106	
Circular Formwork Ø80x50	50	6051111	
Circular Formwork Ø70x50	45	6051116	
Circular Formwork Ø60x50	40	6051121	
Circular Formwork Ø50x50	35	6051135	
Circular Formwork Ø40x50	30	6051145	
Circular Formwork Ø30x50	25	6051155	

Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Standard Clamp K10	4	5900105	
Rummy Corner Clamp K30	6.6	5900130	
Transition Clamp K45	4.1	5900180	
Nut 120S	1.1	96200040	
Nut 70S	0.4	96100010	
Fixing Bolt T25	0.8	5900191	
Fixing Bolt T35	0.5	5900190	
Fixing Bolt C25	0.5	5900192	
Pressure Plate 8x120x220	1.7	5900210	

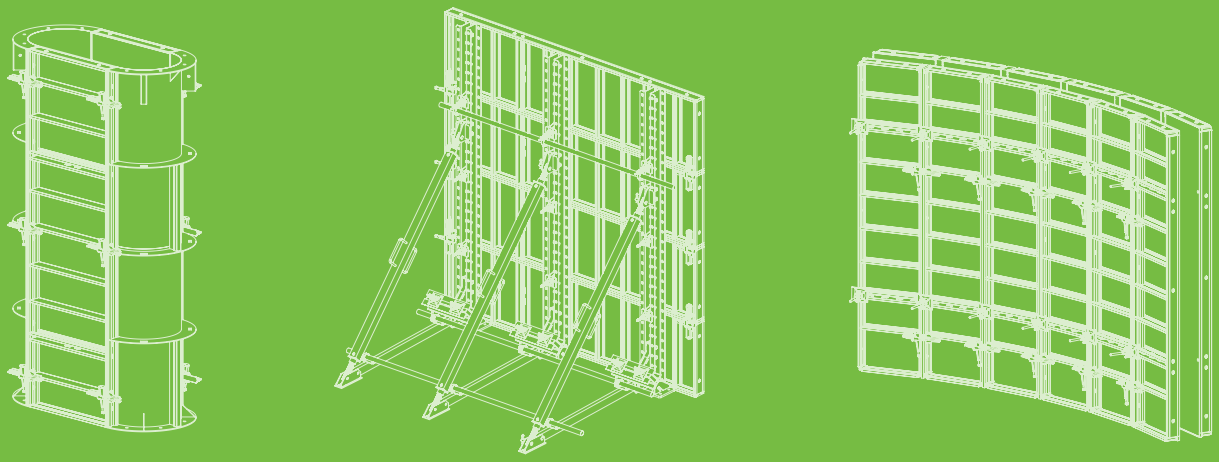
Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Closer Plate for Strut	2.3	5900150	
Panel Strut 3 m	23	96000335	
Panel Strut 4 m	23	96000324	
Panel Strut 6 m		96000325	

Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Tie Rod 15/17 L=0.5m	0.7	96200180-1	
Tie Rod 15/17 L=0.75m	1	96200180-2	
Tie Rod 15/17 L=1m	1.4	96200180-3	
Tie Rod 15/17 L=1.5m * Additional tie rods exist, up to 5.8m in length.	2	96200180-5	
Plastic Tube 1" L=2m	0.3	96200080	
Plastic Tube 1¼" L=2m	0.4	96200083	
Steel Waling L=0.9m	10.6	5900215	
Steel Waling L=1.4m	16.4	5900220	
Steel Waling L=3m	36	5900223	
Rummy Corner Waling	8.8	5900195	
Rummy Pouring Bracket	12	5900140	
Square End Rail Post	2.5	96500430	
Round End Rail Post	2.4	96500440	
Front Platform End Rail Connector	1.3	96500330	
Side Platform End Rail Connector	1.3	96500350	

Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Panel Connector	1.5	5900151	
Rummy Tie Rod Adapter	1.8	5900230	
Water Barrier	0.4	96000070	
Plastic Sleeve	0.04	90100085	
Plastic Cone 1"	0.04	90100090	
Plastic Cone 1¼"	0.05	90100095	
Formwork Plug 22 mm	0.05	90100100	
Pin Ø14 mm	0.15	91300050	
Pin Ø20 mm	0.32	91300140	
Pin R	0.01	91300010	

Description and Dimensions (cm)	Weight (kg)	Cat. No.	
Rummy Lifting Hook	9.5	5900160	
Rummy Long Lifting Hook	11.7	5900170	
Hydraulic Jack 2 ton	10.5	6100600	
Accessories Case	130	96001000	
Oil Drum	200	99100300	

Comments



S.B.A. Metal Works Ltd.
Haroshet 94, Kiryat Bialik
Tel: 04-9955050
Email: info@sbametal.co.il
www.sbametal.com