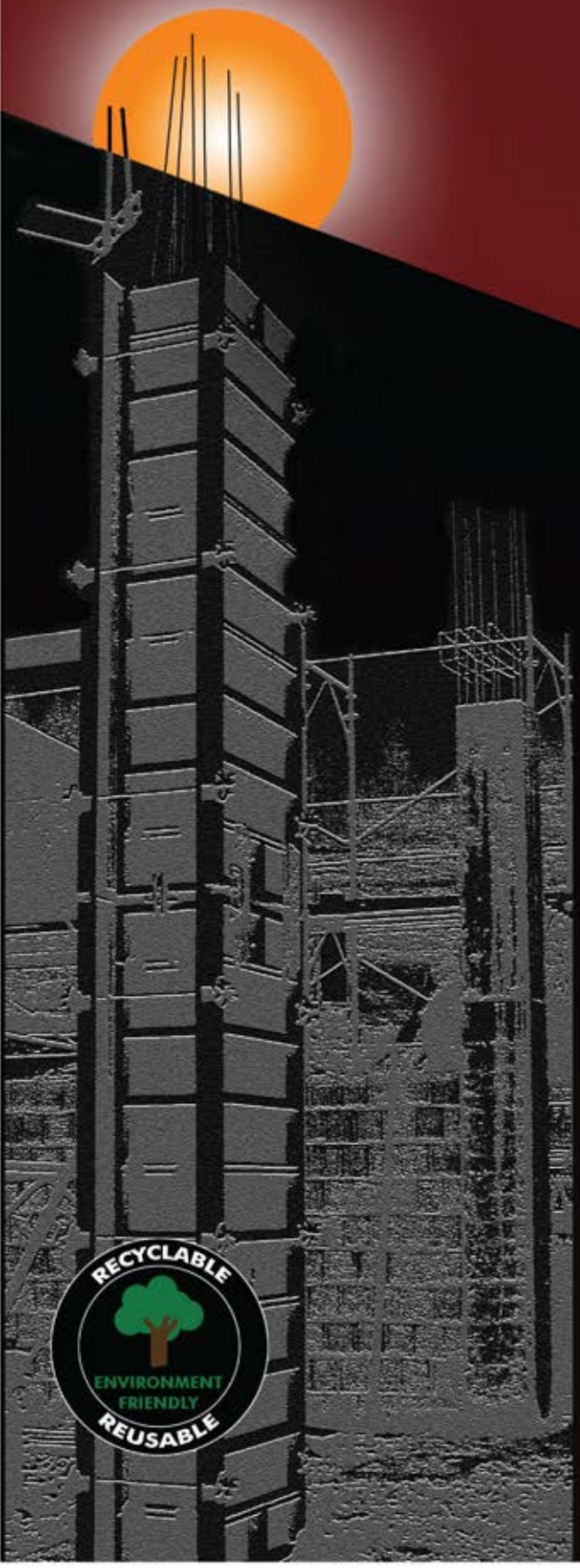
# Product Catalogue

FORMA®

## Art of Formwork

EUROPEAN TECHNOLOGY -
REDEFINED IN INDIA




SIMPLICITY

SPEED

SATISFACTION

# SEWVAC

Form Work Division

## CONTENTS

Technical team designing Infrastructure Formwork contract under manufacturing license from Interfama G.m.b.H Germany

**Philosophy**

In 1984 Franz Ohrwalder founded the company Interfama based on the principles of efficiency, economy and safety in large-scale formwork applications.

SEWVAC has taken up this philosophy in India under manufacturing license from Interfama Formwork System, thus making SEWVAC the ideal partner for building projects of any size.

CALL US:
WHEN DOWNTIME THREATENS TO CONVERT YOUR SQUARE METERS TO TRICKLES.

INNOVATIVE FORMWORK SYSTEMS

MANUFACTURING AND ASSEMBLY SHOP FLOOR

**Quality and Technology**

SEWVAC commenced production in December 2009 under the manufacturing license agreement with Interfama G.m.b.H who have over 25 years of experience in the production of Formwork and supporting systems, Interfama uses modern production lines and innovative technology to guarantee a high standard of quality.

**Production**

The production of the elements which make up the systems is programmed directly onto the lines through the robotized system. SEWVAC produces about 500 square metres of formwork every day.

**Logistics**

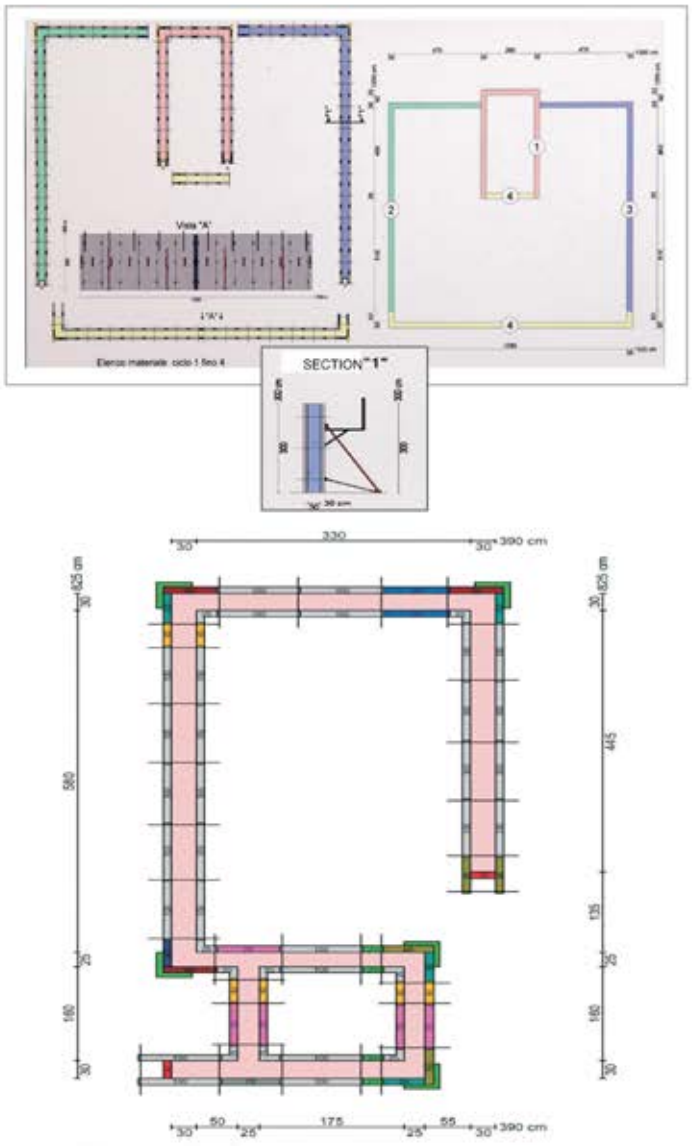
Product distribution follows a logistical system which is based on the delivery of goods directly to the site and stock upkeep at our dealerships as required in specific cases.

**Satisfaction**

The philosophy of SEWVAC is, above all, to meet the needs of our clients. To this end, we offer technical consultancy, financial, and on-site technical assistance.

QUALITY AND TECHNOLOGY

## CONVERTING YOUR DREAMS INTO REALITY




## ELEVATION SECTION

## FORMWORK SOLUTIONS WITH COM PANE SYSTEM

The COM PANE system allows a number of geometric configurations to be assembled. This is of great importance as it makes it possible to optimize working procedures and tackle safety issues in the best possible manner.

SEWVAC also offers customized design and builds formwork according to the needs of the client.

Value Added Services

SEWVAC , together with Interfama, has over 25 years of experience in the production of formwork and offer the following:

- Technical and financial consultancy services
- Technical assistance during the construction process.

Formwork Solution

Our technical office will provide you with all the answers with regard to formwork problems , using the COM PANE system.

PLANNING THE FORMWORK SOLUTION

Technical Team viewing Composite Panel after many uses

## EXTENSIVE DESIGN POSSIBILITIES

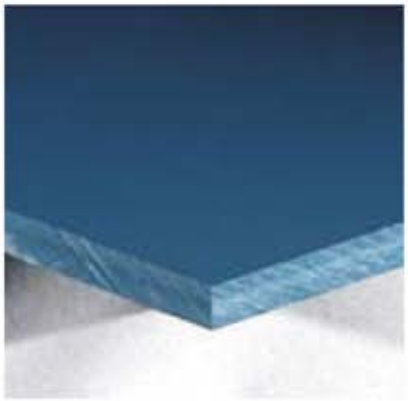
FORMA®

Innovative Formwork Systems

## COM PANE : ALUMINUM / STEEL COMPOSITE PANELS

Formwork for Vertical and Horizontal Concreting

### COM PANE : Over 250 uses



### The Unique Aspects of The COM PANE Profile:

It is versatile to use and apply.

The Innovative Efficiency of the profile makes it an ideal choice for all purposes.

All Materials are completely recyclable with an optional buy back arrangement.

### Do You Need Plywood?

No you don't need plywood as the COM PANE System uses only composite panels.

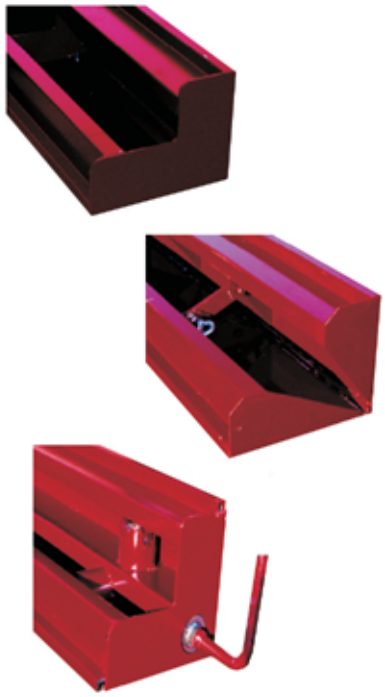
## COM PANE SYSTEM: PANELS

| ITEM CODE | DESCRIPTION | Kgs |
|---|---|---|
| SSCPM 3240 | ELEMENT COM PANEL STEEL 300X240CM | 245 |
| SSCPM 3200 | ELEMENT COM PANEL STEEL 300X200CM | 215 |
| SSCPM3100 | ELEMENT COM PANEL STEEL 300X100CM | 102 |
| SSCPM3100F | ELEMENT COM PANEL STEEL 300X100CM MULTI | 102 |
| SSCPM 3075F | ELEMENT COM PANEL STEEL 300X75 CM MULTI | 72 |
| SSCPM 3075 | ELEMENT COM PANEL STEEL 300X75 CM | 72 |
| SSCPM 3060 | ELEMENT COM PANEL STEEL 300X60 CM | 62 |
| SSCPM 3050 | ELEMENT COM PANEL STEEL 300X50CM | |
| SSCPM 3040 | ELEMENT COM PANEL STEEL 300X40CM | 46 |
| SSCPM 3030 | ELEMENT COM PANEL STEEL 300X30CM | |
| SSCPM 3023 | ELEMENT COM PANEL STEEL 300X23CM | 35 |
| SSCPM 3020 | ELEMENT COM PANEL STEEL 300X20CM | |
| SSCPM27240 | ELEMENT COM PANEL STEEL 270 X 240 CM | 258 |
| SSCPM27200 | ELEMENT COM PANEL STEEL 270 X200 | 215 |
| SSCPM27100F | ELEMENT COM PANEL STEEL 270 X 100 MULTI | 107.5 |
| SSCPM27100 | ELEMENT COM PANEL STEEL 270 X100 | 107.5 |
| SSCPM2790 | ELEMENT COM PANEL STEEL 270 X90 | 96.8 |
| SSCPM2775F | ELEMENT COM PANEL STEEL 270 X 75 MULTI | 80.6 |
| SSCPM2775 | ELEMENT COM PANEL STEEL 270 X 75 | 80.6 |
| SSCPM2760 | ELEMENT COM PANEL STEEL 270 X60 | 64.5 |
| SSCPM2750 | ELEMENT COM PANEL STEEL 270 X50 | 53.8 |
| SSCPM2740 | ELEMENT COM PANEL STEEL 270 X 40 | 43 |
| SSCPM2730 | ELEMENT COM PANEL STEEL 270 X 30 | 32 |
| SSCPM2723 | ELEMENT COM PANEL STEEL 270 X 23 | 25 |
| SSCPM2720 | ELEMENT COM PANEL STEEL 270 X20 | 22 |
| SSCPM 15100 | ELEMENT COM PANEL STEEL 150X100CM MULTI | 52 |
| SSCPM15100F | ELEMENT COM PANEL STEEL 150X100CM | 52 |
| SSCPM1575F | ELEMENT COM PANEL STEEL 150X75CM MULTI | 38 |
| SSCPM 1575 | ELEMENT COM PANEL STEEL 150X75CM | 38 |
| SSCPM 1560 | ELEMENT COM PANEL STEEL 150X60 CM | 32 |
| SSCPM 1550 | ELEMENT COM PANEL STEEL 150X50CM | 28 |
| SSCPM 1540 | ELEMENT COM PANEL STEEL 150X40 CM | 24 |
| SSCPM1530 | ELEMENT COM PANEL STEEL 150X30CM | 20 |
| SSCPM1523 | ELEMENT COM PANEL STEEL 150X23CM | 18 |
| SSCPM1520 | ELEMENTCOM PANEL STEEL 150X20CM | 16 |

## COM PANE SYSTEM: PANELS

| ITEM CODE | DESCRIPTION | Kgs |
|---|---|---|
| SACPMA 3100 | ELEMENT COM PANEL ALU 300X100CM | 62 |
| SACPMA 3100F | ELEMENT COM PANEL ALU 300X100CM MULTI | 62 |
| SACPMA 3075F | ELEMENT COM PANEL ALU 300X75CM MULTI | 48 |
| SACPMA 3075 | ELEMENT COM PANEL ALU 300X75CM | 48 |
| SACPMA 3060 | ELEMENT COM PANEL ALU 300X60CM | 42 |
| SACPMA 3050 | ELEMENT COM PANEL ALU 300X50 CM | 37 |
| SACPMA 3040 | ELEMENT COM PANEL ALU 300X40CM | 32 |
| SACPMA 3030 | ELEMENT COM PANEL ALU 300X30 CM | 27 |
| SACPMA 3023 | ELEMENT COM PANEL ALU 300X23 CM | 25 |
| SACPMA 3020 | ELEMENT COM PANEL ALU 300X20 CM | 22 |
| | | |
| SACPMA 27100F | ELEMENT COM PANEL ALU 270X100CM MULTI | 57 |
| SACPMA27100 | ELEMENT COM PANEL ALU 270X100CM | 57 |
| SACPMA 2790 | ELEMENT COM PANEL ALU 270X90CM | 53 |
| SACPMA2775 F | ELEMENT COM PANEL ALU 270X75 MULTI | 46 |
| SACPMA 2775 | ELEMENT COM PANEL ALU 270X75CM | 46 |
| SACPMA 2760 | ELEMENT COM PANEL ALU 270X60 CM | 40 |
| SACPMA 2750 | ELEMENT COM PANEL ALU 270X50CM | 35 |
| SACPMA 2740 | ELEMENT COM PANEL ALU 270X40CM | 30 |
| SACPMA 2730 | ELEMENT COM PANEL ALU 270X30CM | 26 |
| SACPMA 2723 | ELEMENT COM PANEL ALU 270X23CM | 13 |
| SACPMA 2720 | ELEMENT COM PANEL ALU 270X20CM | 21 |
| | | |
| SACPMA 15100 | ELEMENT COM PANEL ALU 150X100CM | 33 |
| SACPMA15100F | ELEMENT COM PANEL ALU 150X100 CM MULTI | 33 |
| SACPMA 1575F | ELEMENT COM PANEL ALU 150X75CM MULTI | 25 |
| SACPMA1575 | ELEMENT COM PANEL ALU 150X75 CM | 25 |
| SACPMA 1560 | ELEMENT COM PANEL ALU 150X60CM | 22 |
| SACPMA 1550 | ELEMENT COM PANEL ALU 150X50 CM | 19 |
| SACPMA 1545 | ELEMENT COM PANEL ALU 150X45 CM | 17.5 |
| SACPMA 1540 | ELEMENT COM PANEL ALU 150X40 CM | 16 |
| SACPMA 1530 | ELEMENT COM PANEL ALU 150X30 CM | 13 |
| SACPMA 1523 | ELEMENT COM PANEL ALU 150X23 CM | 11.5 |
| SACPMA 1520 | ELEMENT COM PANEL ALU 150X20 CM | 10 |
| | | |
| SACPMA1260 | ELEMENT COM PANEL ALU 120 X60 CM | 15.84 |
| SACPMA1250 | ELEMENT COM PANEL ALU 120 X50 CM | 13.2 |
| SACPMA1245 | ELEMENT COM PANEL ALU 120 X45 CM | 11.88 |
| SACPMA1240 | ELEMENT COM PANEL ALU 120 X40 CM | 10.56 |
| SACPMA1230 | ELEMENT COM PANEL ALU 120 X30 CM | 7.92 |
| | | |

## COM PANE SYSTEM: COMPONENTS



### COM PANE Inner corner

Dimensions: 300 x 25 x 25 cm Item: SAIM 3025 Weight: 52,0 kg
Dimensions: 270 x 25 x 25 cm Item: SAIM 2725 Weight: 47,0 kg
Dimensions: 150 x 25 x 25 cm Item: SAIM 1525 Weight: 26,0 kg

### COM PANE Hinged corner

Dimensions: 300 x 25 x 25 cm Item: SAIIM 300 Weight: 76,0 kg
Dimensions: 270 x 25 x 25 cm Item: SAIIM 270 Weight: 59,0 kg
Dimensions: 150 x 25 x 25 cm Item: SAIIM 150 Weight: 39,0 kg

### COM PANE Retractable corner

Dimensions: 300 x 25 x 25 cm Item: SADM 300 Weight: 108,0 kg
Dimensions: 270 x 25 x 25 cm Item: SADM 270 Weight: 97,0 kg
Dimensions: 150 x 25 x 25 cm Item: SADM 150 Weight: 57,0 kg

### COM PANE Compensation piece

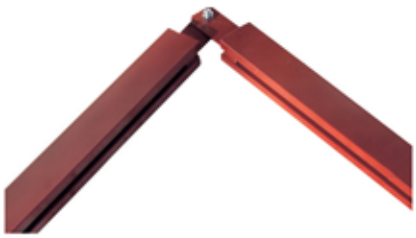
Dimensions: 300 x 5 cm Item: SCM 305 Weight: 16,0 kg
Dimensions: 270 x 5 cm Item: SCM 275 Weight: 14.4 kg
Dimensions: 150 x 5 cm Item: SCM 155 Weight: 9,2 kg
Dimensions: 300 x 3 cm Item: SCM 303 Weight: 15,0 kg
Dimensions: 270 x 3 cm Item: SCM 273 Weight: 13.5 kg
Dimensions: 150 x 3 cm Item: SCM 153 Weight: 9,0 kg

### COM PANE Compensation plate with profile

Dimensions: 300 x 20 cm Item: SCL 3020 Weight: 31,0 kg
Dimensions: 270x 20 cm Item: SCL 2720 Weight: 28,0 kg
Dimensions: 150 x 20 cm Item: SCL 1520 Weight: 16,0 kg

### COM PANE Compensation plate for hinged corners

Dimensions: 300 x 15 cm Item: SCLAII 300 Weight: 34,0 kg
Dimensions: 270 x 15 cm Item: SCLAII 270 Weight: 31,0 kg
Dimensions: 150 x 15 cm Item: SCLAII 150 Weight: 23,0 kg



## COM PANE SYSTEM: ACCESSORIES

### Panel Clamp

item:SMP
weight:4,0kg

### Stacking Clamp

item:SMAL
weight:7,5kg

### Corner/Column clamp

item:SMPP
weight:2,6kg

### Outer Corner Clamp

item:SMAE
weight:4,5kg

### Adjustable Clamp

item:SMR
weight:5,7kg

### Adjustable Radius Clamp for Circular Formwork

item:SMRC2
weight:5,35kg

### Wing-nut with Threaded Rod

item:SFA 15140G
weight:1,6kg

### Crane Hook

item:SGM
weight:3,4kg
max.weight capacity:
800,0 kg

### Anchor-rail Connector

item:SALF
weight:0,6kg

### Galvanised tie-rods, SDW

| Length | Item | Weight | Length | Item | Weight |
|---|---|---|---|---|---|
| 35 cm | TA 1835 | 0,7 kg | 150 cm | TA 18150 | 2,5 kg |
| 85 cm | TA 1885 | 1,4 kg | 175 cm | TA 18175 | 3,0 kg |
| 100 cm | TA 18100 | 1,7 kg | 200 cm | TA 18200 | 3,4 kg |
| 120 cm | TA 18120 | 2,1 kg | 600 cm | TA 18600 | 10,2 kg |

## COM PANE SYSTEM : ACCESSORIES

### Cap-nut

Item: SDF 1850
Weight: 0,3 kg

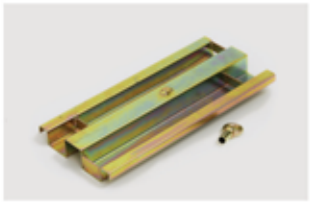
### Jolly COM PANE

Item: SJM
Weight: 0,3 kg

### Base clamp for plinths

Item: SMPM
Weight: 3,9 kg

### Adaptor for service bracket



Item: SAMSM
Weight: 3,4 kg

### Stacking bracket for shuttering board

Item: SPSM 5027
Weight: 4,0 kg

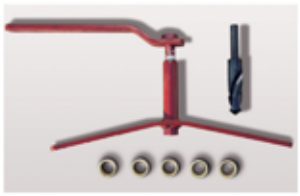
### Spanner for sheeting corner

Item: SSW 30
Weight: 1,3 kg

### Transport kit

Item: SKIT
Weight: 11,4 kg
Max. weight capacity:
1.000,0 kg

### Bore set complete with 50 brass bushes



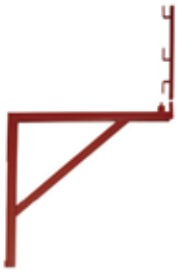
Item: SBS
Weight: 2,5 kg

### Adjustable prop max. 450 cm

Item: SPTM - Weight: 16,0 kg
Distance tube for prop Item: DPM, Weight: 5,0 kg
Adjustable prop 450/600 cm
Item: PTM 450/600 - Weight: 28,0 kg
Distance tube for prop Item: DPM 450/600,
Weight: 5,5 kg

## COM PANE SYSTEM : ACCESSORIES

### Climbing Bracket



Item: SMRM
Weight 30,0 kg

Handrail
Art.: PP100
Weight: 3,2 kg

### Adjustable Climbing Clamp

Item: SMRS
Weight 12, 0 kg

### Walkway Bracket

Item: SMSM
Weight: 13,0 kg

### End-piece for Walkway Bracket

Item: SMSMC
Weight: 9,3 kg

### Anchor

Item: Anchor for
Concrete
Weight: 0,3 kg

### Waterstop

Item: SWST
Weight: 0,8 kg

### Base Cap-nut

Item: SDP 1850
Weight: 0,3 kg

### Base Cap-nut with Guidance Wedge

Item: SDFF
Weight: 0,5 kg

### 45° Cap-nut for Climb Platform

Item: SDF 18°/45°
Weight: 0,5 kg

### Forming Oil Pump

Item: SPO
Weight: 3,0 kg

## COM PANE SYSTEM : ACCESSORIES

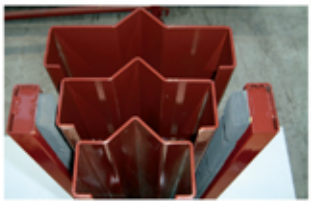
### PVC Plug

Item: SVS
Box: 2000 pz

### Distance Sleeve with Plug

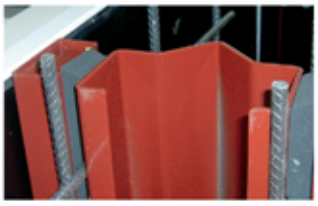
PVC 20 cm Box 50 pc.
PVC 25 cm Box 50 pc.
PVC 30 cm Box 50 pc.
PVC 35 cm Box 50 pc.
PVC 40 cm Box 50 pc.

### Head-Closing set 300 x 20/25/30 cm



Item: SMMA 30 SET
Weight: 94,0 kg

### Head-closing 300 cm x 20/25/30 cm



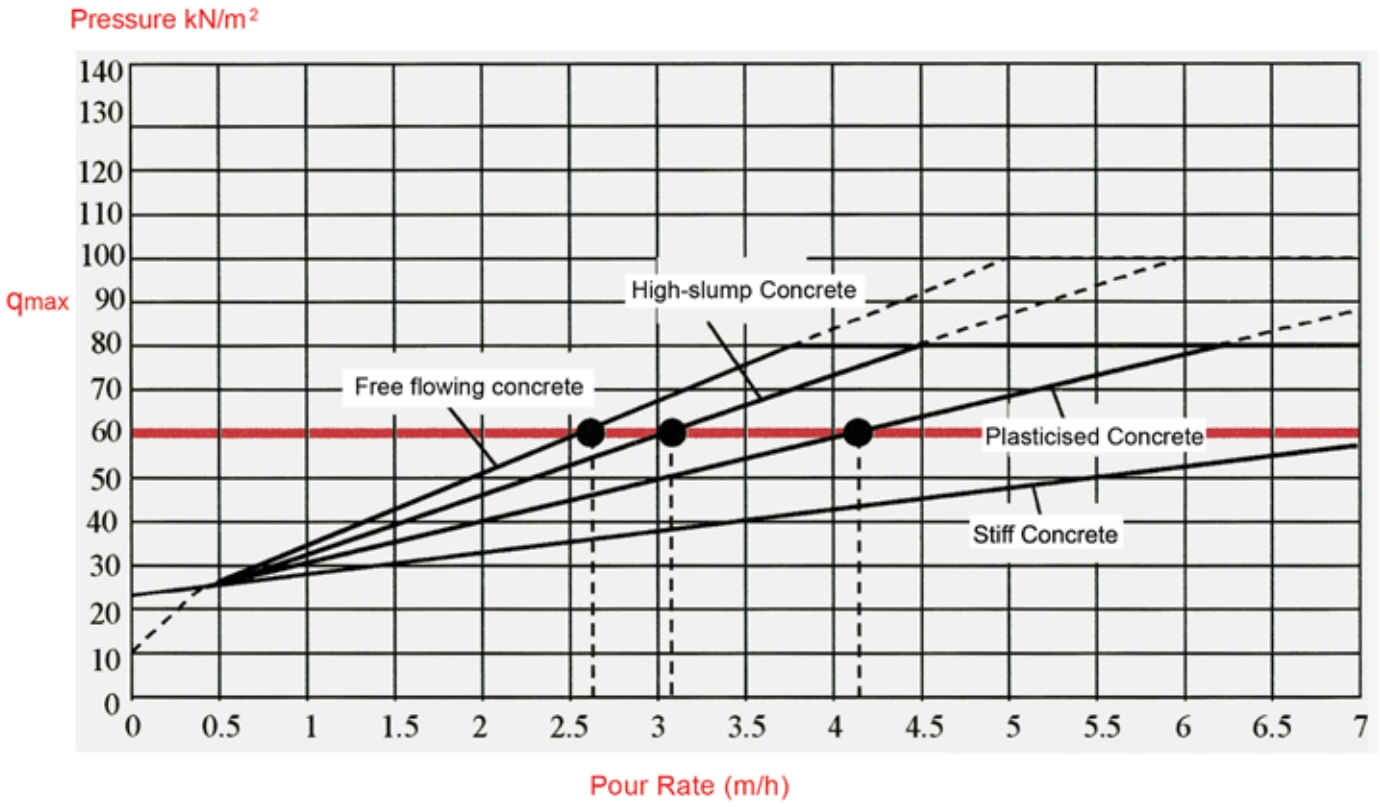
Item: SMMA 3020
SMMA 3025,
SMMA 3030
Weight: 40,8 kg,
43,8 kg, 46,8 kg

### Plastic Three-edged Strip

Item: SDL
Pack of 50,
length 3 m each

## POUR RATE GRAPH

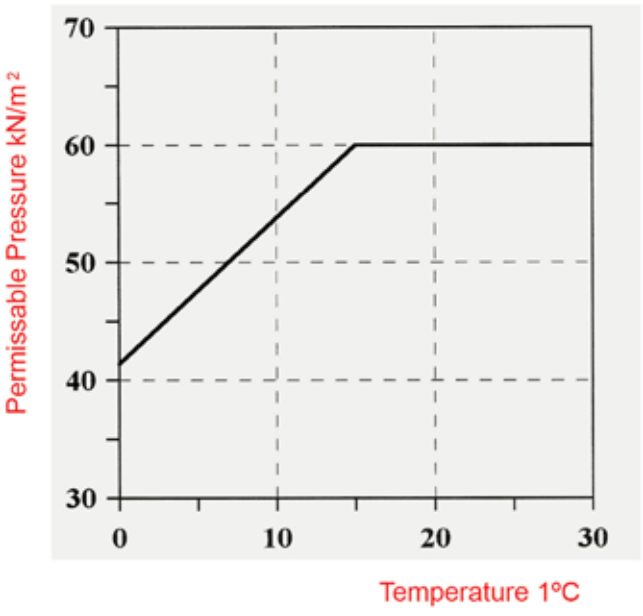
The concrete pouring rate can be determined from the following diagram. This prevents the concreting pressure of the various elements from exceeding. The table is based on scientific tests and technical evaluations carried out by the Polytechnic University of Milan.




Working pour-rate for varying consistencies of concrete for a permissible pressure of 60 kN / m². From the intersection of the curve relative to the consistency of concrete used, it is possible to determine the maximum pour rate for COM PANE panels in steel and aluminum. The values obtained are valid for any pouring height not exceeding 6 m.

With temperatures below 15° at the moment of pouring, an increased pressure of the liquid concrete of 3% per 1° C below 15°C must be considered.

The maximum pressure load of COM PANE panels in relation to temperature is shown in the above graphs.



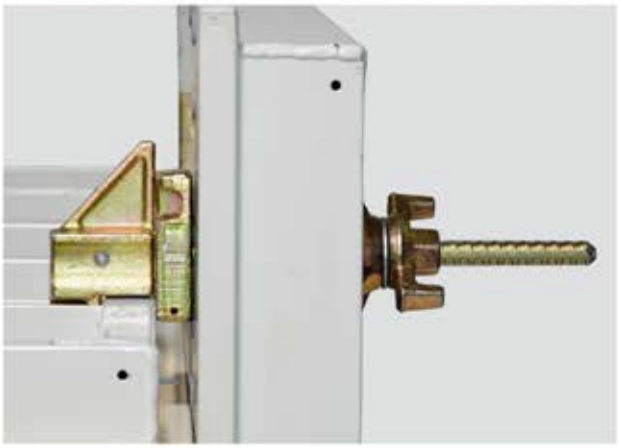
## COM PANE FORMWORKS FOR ALL FIELDS OF APPLICATION

COM PANE formworks can be used in many areas of construction. Thanks to its special curve profile and to the relative accessory, equipment, formwork can easily be erected for all kinds of structures.

## COM PANE COMPOSITE PANEL OR PLYWOOD

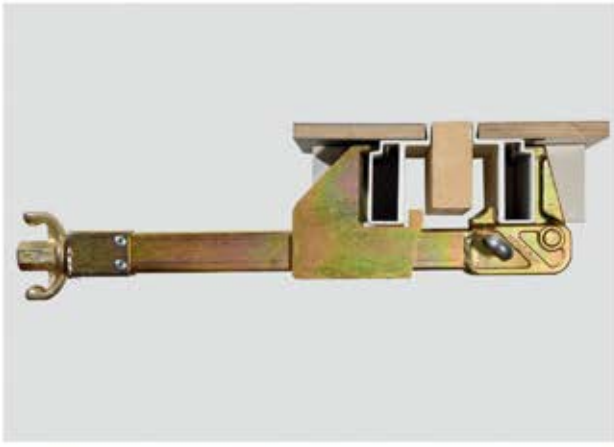
**Panel clamp**

This clamp provides a horizontal join between adjacent formwork panels. It is also used for alignment purposes.



**Corner/ Column clamp**

This clamp joins two upright panels on an external corner.



**Adjustable lamp**

This clamp is used for joining two adjacent wall elements between which there is a compensating space appr. 20 cm.

**Wing nut**

Wing nut is used for tightening the tie-rods.

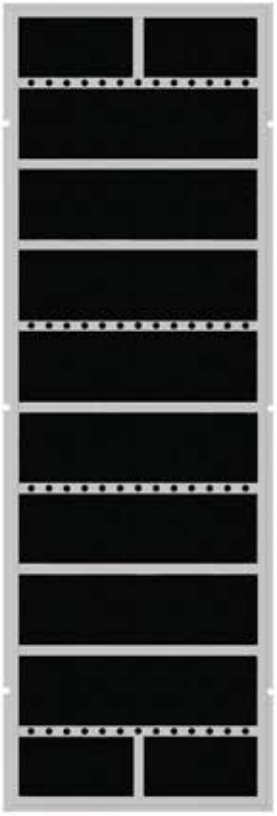
## COM PANE SYSTEM: TECHNICAL SPECIFICATIONS

The frame of the COM PANE panels is made of structural steel or aluminum. The frame, after galvanisation, is powder-coated in order to obtain a smooth, easily cleaned surface.

### Steel-framed panels

Corrosion protection using the following method:

Class C2 - coating in accordance with EN 39.



### Aluminum-framed panels

In the absence of lifting machinery or in demanding working conditions, **COM PANE** Alu can be manoeuvred by hand with full adherence to construction regulations.

**COM PANE steel Panels**
300 x 100 cm
= **102,0 kg**
Maximum pressure
**60 kN/m²**
(see diagram pouring rate p.19)

**COM PANE ALU Panels**
300 x 100 cm
= **65,0 kg**
Maximum pressure
**60 kN/m²**
(see diagram pouring rate p.19)

Example: Triangular support attached to formwork (see p 35).

U traverse allows accessories to be attached with anchor rail connector.

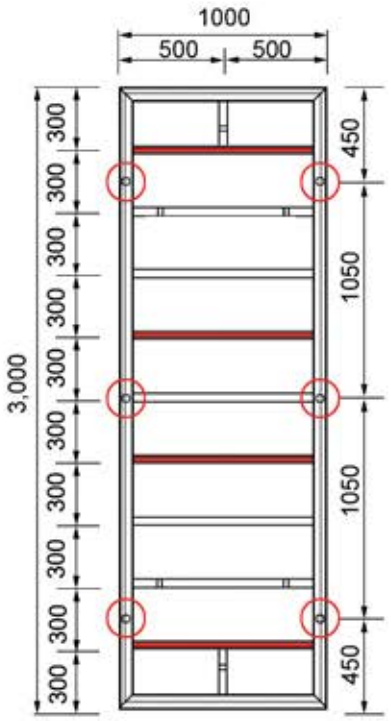
Certification Milan Polytechnic.

## COM PANE: STANDARD PANELS AVAILABLE IN STEEL AND ALUMINUM

Panel
300 x 100 cm

Panel
300 x 75 cm

Panel
300 x 60 cm




Position of boreholes on frame
300x100 cm

Panel
300 x 50 cm

Panel
300 x 40 cm

Panel
300 x 30 cm

Panel
300 x 20 cm

Inner corner 300 x 25 x 25 cm

Hinged corner 300 x 25 x 25 cm

Retractable corner 300 x 25
x 25 cm

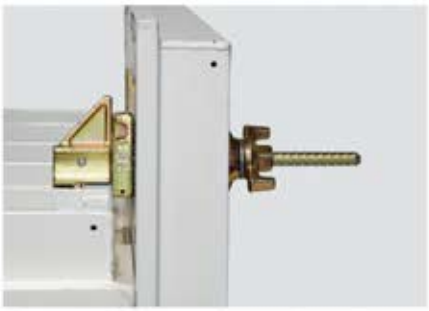
## COM PANE SYSTEM: XL PANEL WITH LARGE WORKING AREA (ONLY IN STEEL)

COM PANE - XL panels enable fast, economical work with uniform results. Panels with fewer accessories can be combined with all COM PANE formwork in steel or aluminum. Only one (1) tie-rod is needed every 1.5 metre square.

Panel 300 x 200 cm

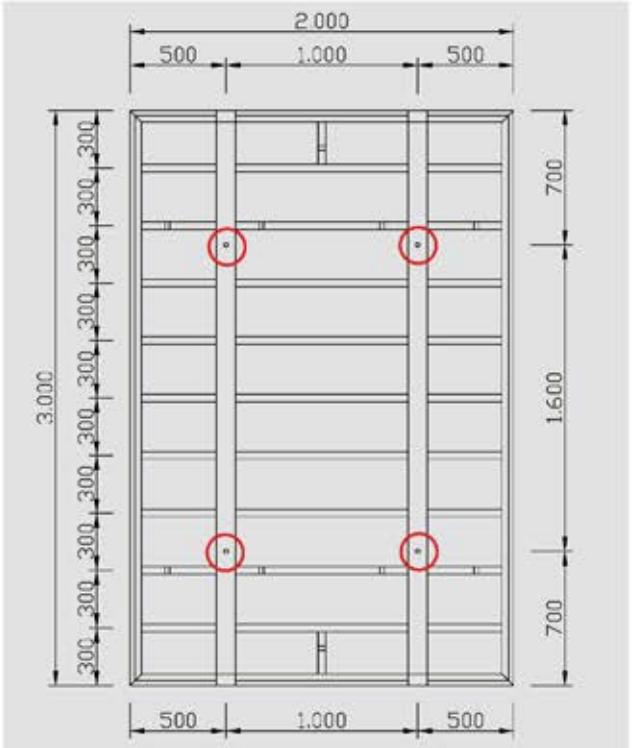
### Basic Accessories

Panel clamp (SMP)



Corner/ Column clamp (SMPP)

Wing nut with threaded rod (SFA15140G)




Position of boreholes on frame 300x200 cm

## COM PANE: STANDARD PANELS, AVAILABLE IN STEEL AND ALUMINUM

The COM PANE multi-use panel resolves every formwork task easily and quickly.

A real multi-purpose formwork panel!

Every COM PANE panel has the holes to facilitate multi-features.

The multi use panel, with tie-holes at every 5 centimeters, is available in the following dimensions:

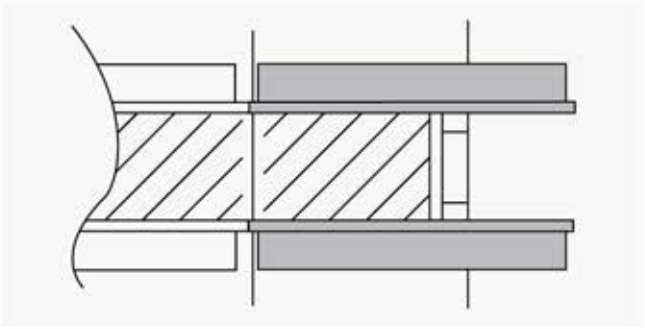
300 x 100 cm
300 x 75 cm

Available in Aluminum and Steel this multi use panel is ideal for vertical and horizontal formwork.

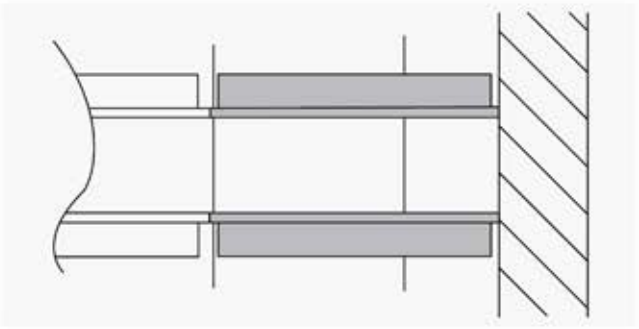
**"IDEAL FOR THE WALLS AND DECK"**

With the relative tie-hole kit you can drill the composite panel in the required points. The kit includes brass bushes to prevent damage to the holes.

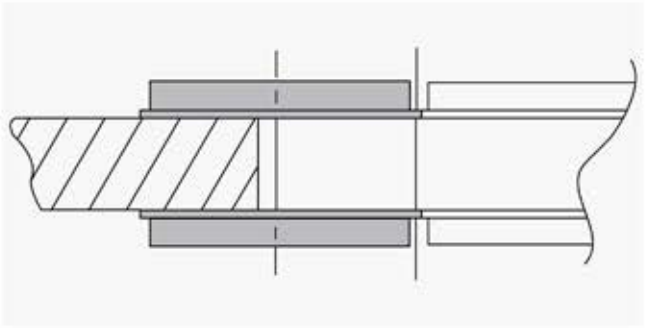
## COM PANE: MULTI-USE PANELS



Stop-end forming with Multi-use panel

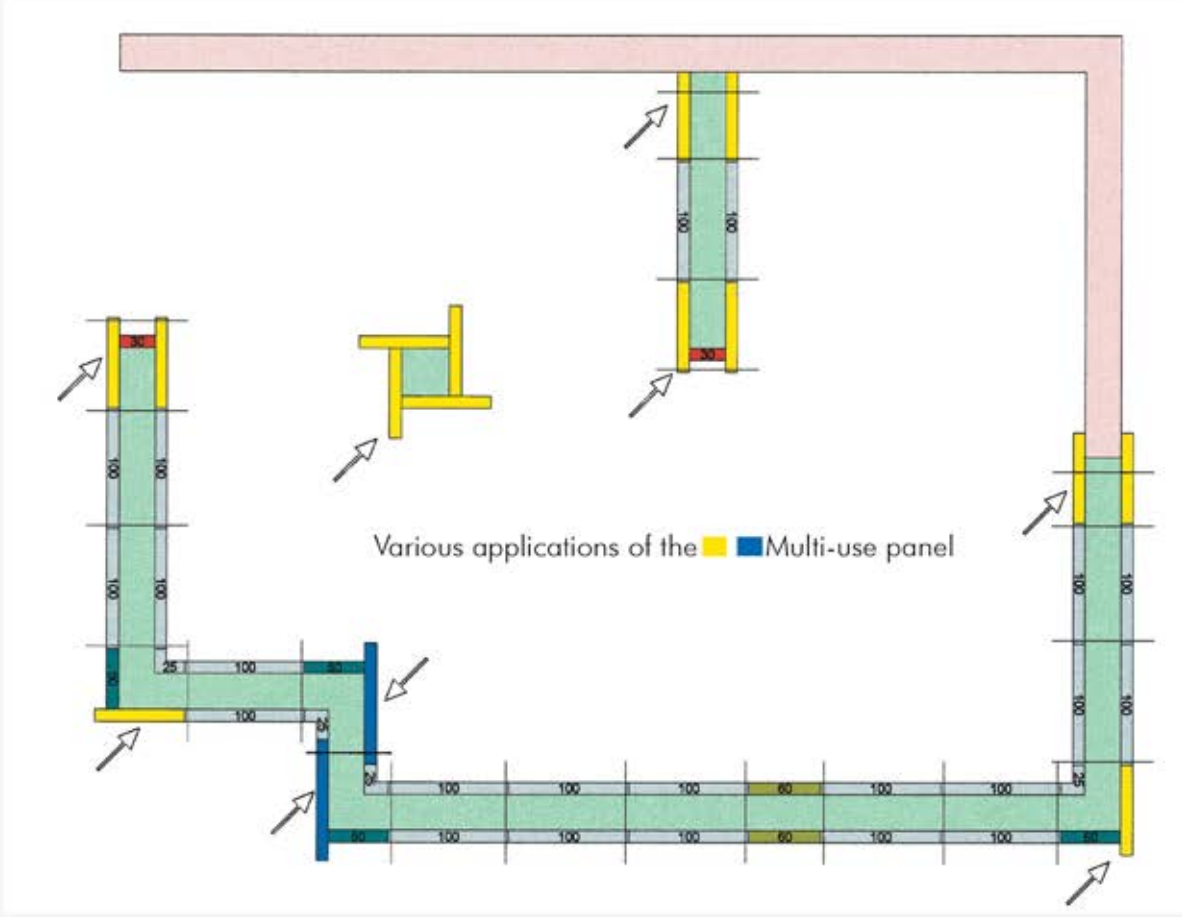


Connection to existing wall with Multi-use panel



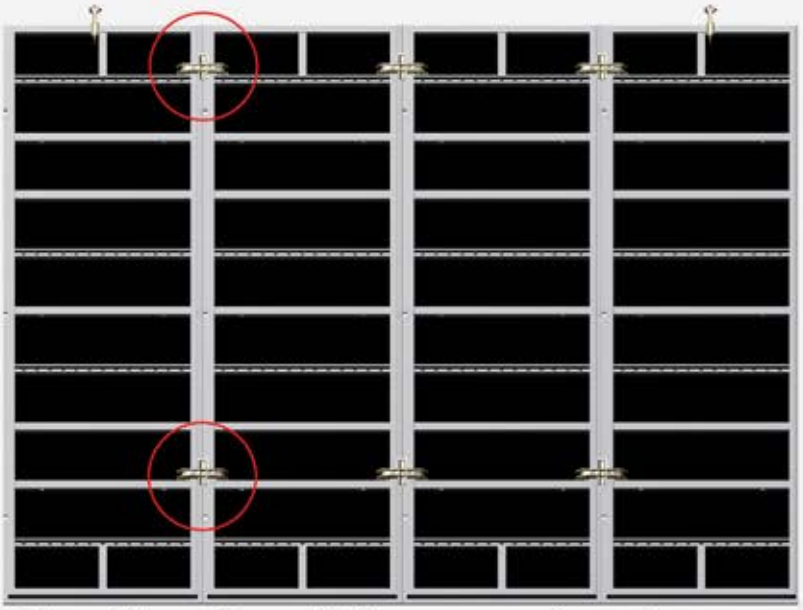
Continuous forming with Multi-use panel

Horizontal formwork with Multi-use panel



## COM PANE: SAFE AND QUICK TRANSPORTATION

The transportation kit allows for packaging of the panels and guarantees safety when loading and unloading. It also makes it easier for one person to join panels rather than two, normally needed for manoeuvring. The system allows for the moving of panel units of up to 30 metre square of framework.



Only two (2) panel clamps (SMP) are necessary for a perfect alignment of COM PANE panels.

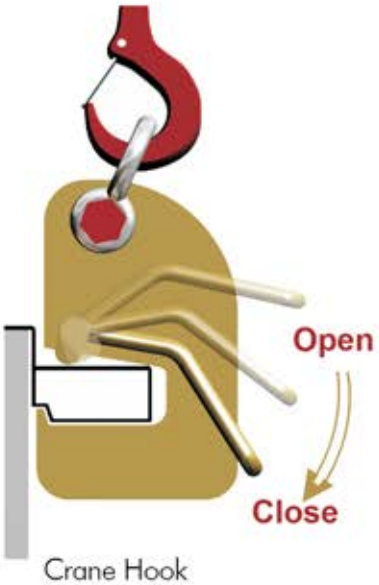
### Panel assembly

Sewvac recommendation: place the elements together on a flat base and, following panel assembly with the crane, move them to the location requiring formwork.

The COM PANE panel clamp guarantees perfect alignment of the elements.

## COM PANE: ELEMENT ASSEMBLY

It is vital to follow the safety instructions where formwork elements are being moved using mechanical equipment such as a crane or telescopic arm. Further information can be found in the "COM PANE Working in Safety" manual.

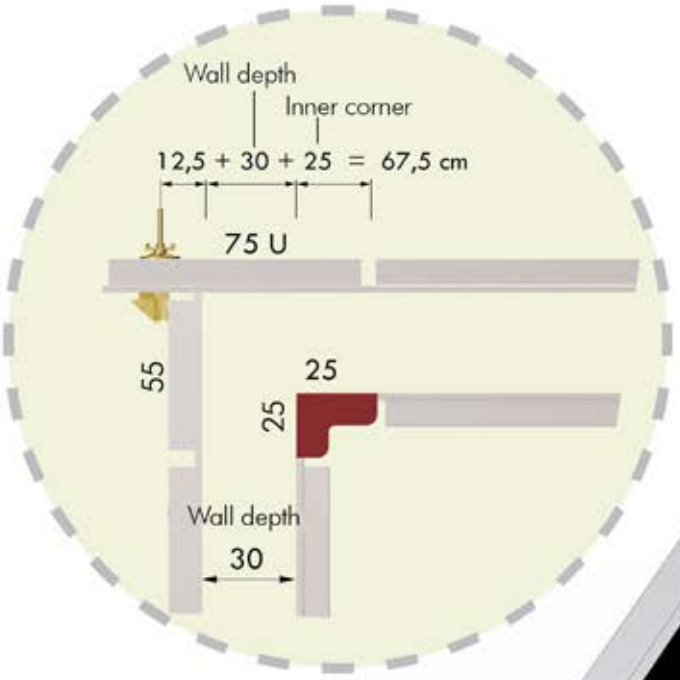



Crane Hook
Capacity max.800,0 kg

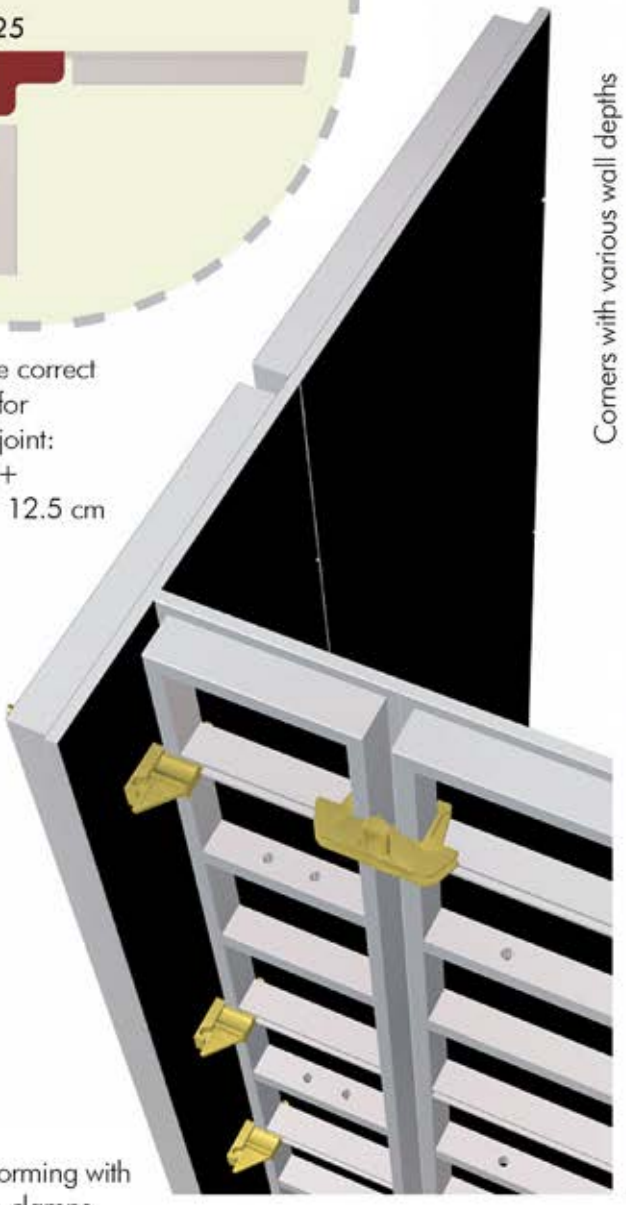
- Start mounting at the corners. Only 1 support prop per 5 m of formwork is necessary to stabilize the formwork.
- When mounting the TIE-RODS, keep the bore holes free for the TIE-ROD.
- Insert the TIE-ROD Bars.
- Insert plastic spacer tube.
- Close the formwork and place the TIE-ROD in final position.
- Fit the walk way bracket fittings and safety accessories.
- Check final line and level
- Cast Concrete

## COM PANE: CORNER FORMATION AND THE VERSATILITY OF THE MULTI-USE PANEL

COM PANE internal corners are formed with inner corner 300 x 25 x 25 cm, and external corners with the multiuse panel 300 x 75 cm together with panel 300 x 40 or 300 x 50 cm (depending on depth of wall) with 4 corner/column clamps and 4 wing nuts.

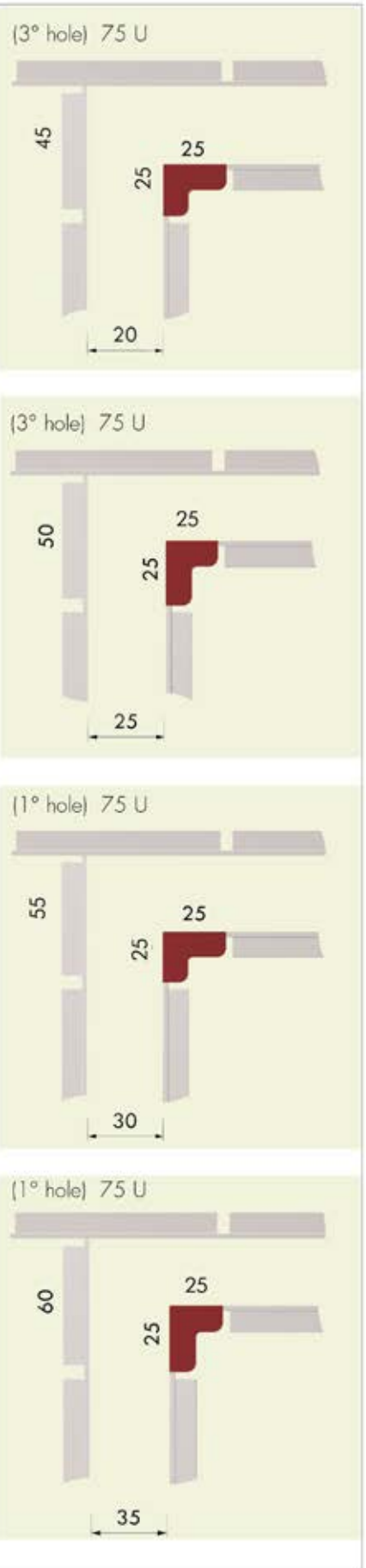



Position of the correct anchor-hole for outer corner joint: Inner corner + wall depth + 12.5 cm



Outer corner forming with corner/column clamps

Corners with various wall depths

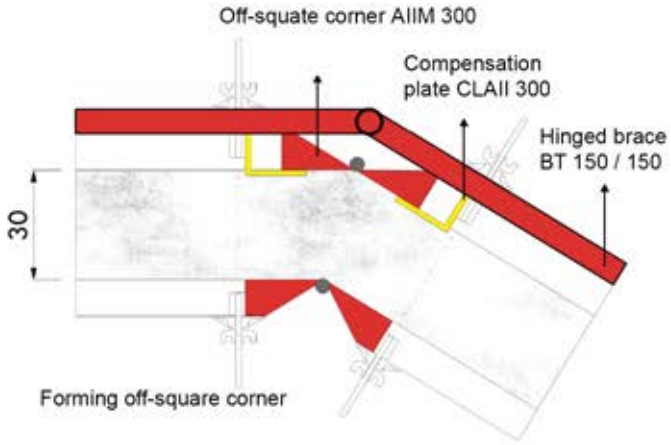


## COM PANE: FORMATION OF OFF-SQUARE CORNERS

The special SEWVAC hinged corners can be used as outer or inner corners

For 1 complete corner you only need: 2 hinged corners SAIIM 300 (300 x 25 x 25 cm), 2 compensation plates SCLAII 300 for hinged corners and 3 hinged braces BT 150/150 (150 + 150 cm).


The hinged corner can be fixed at 90° and thus forms a normal inner corner.



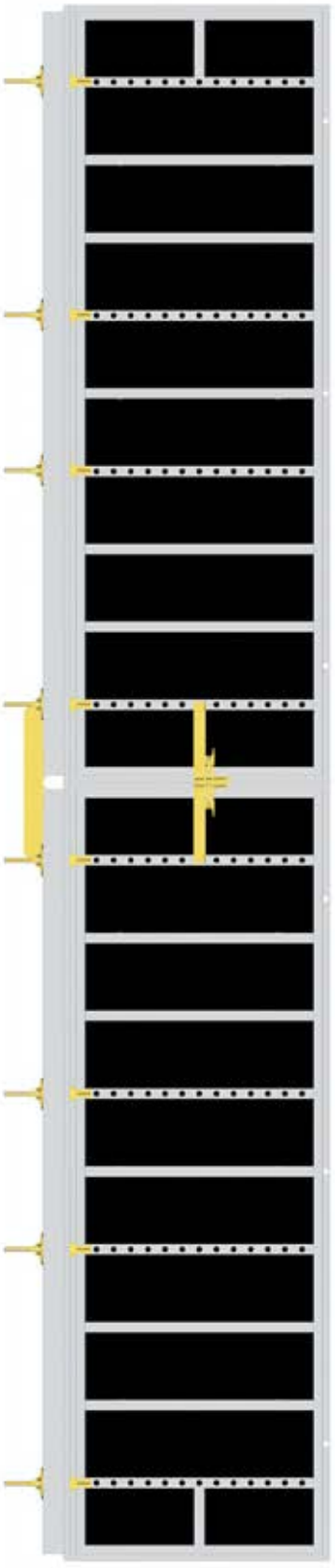

If the compensation plate CLAII 300 is not sufficient, use 1-2 additional 300x25/25 cm elements.

Hinged corner

Compensation plate

Hinged brace

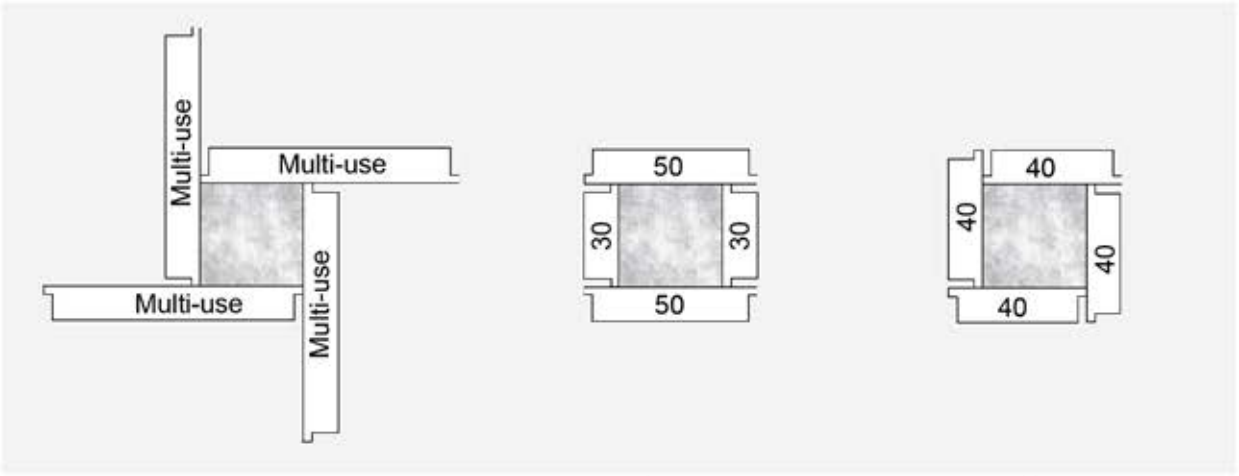
## COM PANE: COLUMN FORMWORK

The Multi-use Panel allows the formation of columns in grids of 5 cm by 5 cm up to a height of 6 m.

- Multi Use panel 300 x 100 cm/ 10 - 80 cm
- Multi Use panel 300 x 75 cm/ 10 - 55 cm

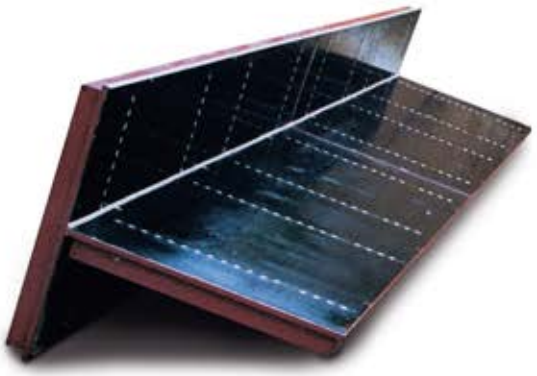
4 stacking clamps are needed for stacking columns




Example of 30 x 30 cm columns: 4 elements COM PANE 300x75/100 Multi-use, 16 clamps for corner/column, 16 wing-nut.

Example of 30 x 30 cm columns: 2 elements COM PANE 300x50 and 2 elements COM PANE 300x40, 16 outer corner clamp, 16 wedges galvanized.

Example of 30 x 30 cm columns: 2 elements COM PANE 300x40 and 2 elements COM PANE 300x40, 16 outer corner clamp, 16 wedges galvanized.



Formwork in assembly phase. Column formwork with outer corner clamps.

The elements are assembled as a corner on the floor, then positioned using the crane

Column formwork with outer corner clamps

## COM PANE: CIRCULAR COLUMN FORMWORK

The excellent finishing quality of the circular column formwork made of Steel provides perfect concrete surfaces


- **Quick assembly -**

  Only two column halves are assembled using the COM PANE clamp, ensuring quick and economical concreting.

- **Correct stacking -**

  The three different element heights (3.00 m, 1.50 m or 0.50 m) ensure ideal height adjustment.

- **Fresh concrete pressure -**

  The circular formwork is suitable for a fresh concrete pressure of 80 kN/m²

- **Simple loading / unloading and transport -**

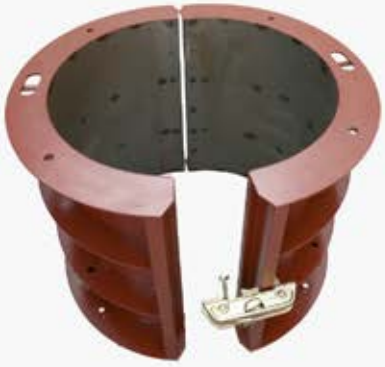
  Elements can be loaded / unloaded individually or stacked.

Integrated loading / unloading accessories ensure safe, non-slip stack of elements. Precious construction site storage space can be used more efficiently

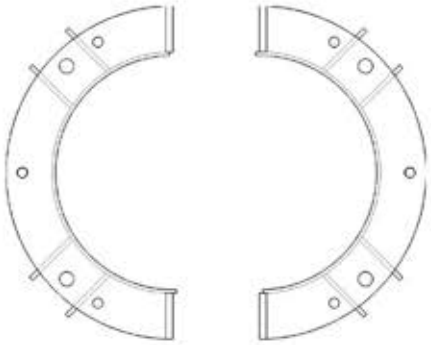
## COM PANE: CIRCULAR COLUMN FORMWORK

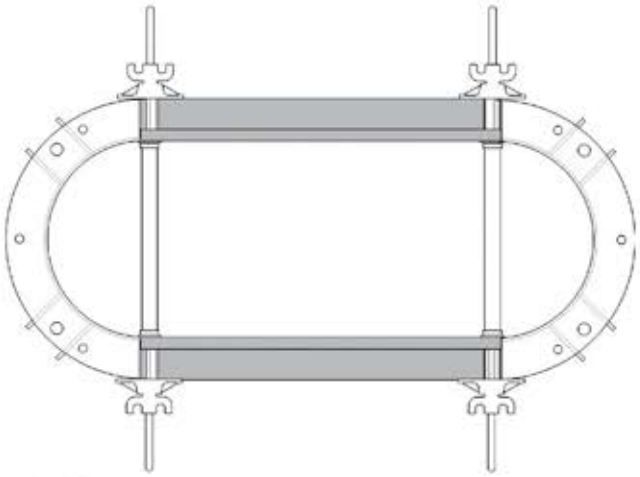
Circular column formwork
Height: 50 – 300 cm

Diameter: 30 – 100 cm (other heights and diameters on request)



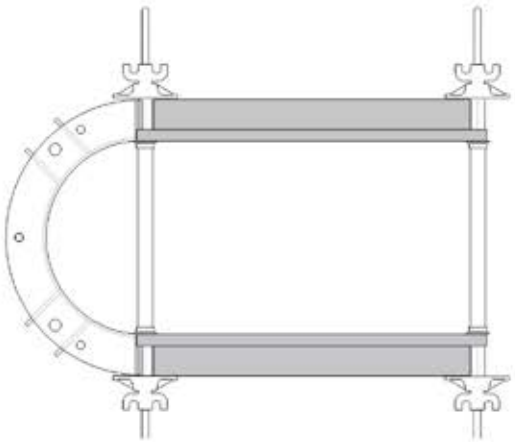






Oval columns.

The circular column formwork can be combined with COM PANE standard element.

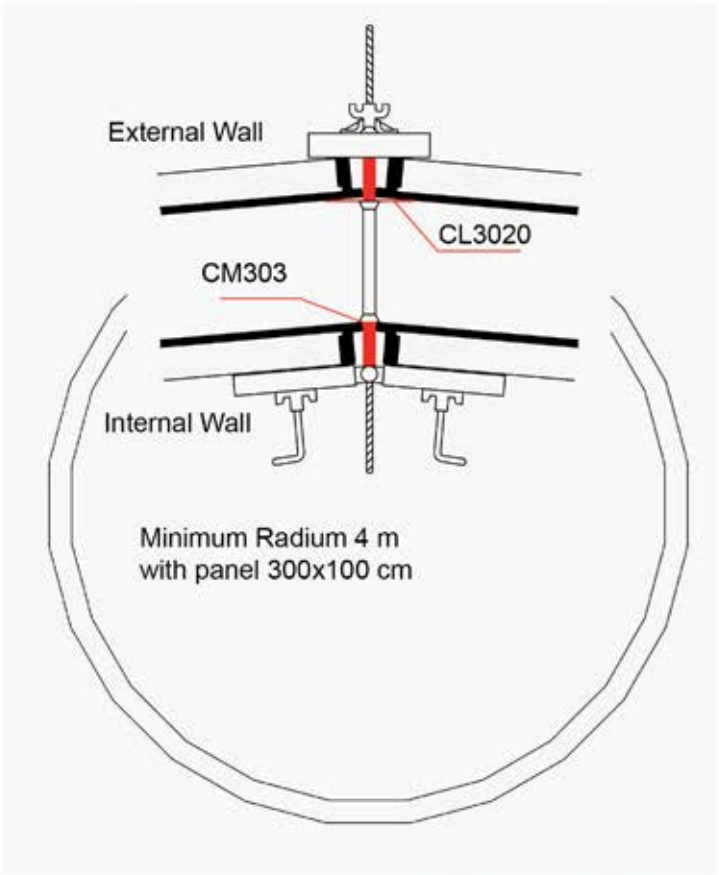


Circular head-closing

## COM PANE: FORMWORK CIRCULAR WALLS

The special shape of the panel frame permits an optimal utilization of the COM PANE system for the creation of circular walls.

The smallest radius is of 300 x 100 cm, which corresponds to a 15° angle at every joint. The compensation piece for circular formwork, which is used to join the panels together, can be adjusted to suit the radius curvature required.




Internal wall joint
One (1) Compensation piece SCM303 and two (2) radius clamps SMRC2

External wall joint
One (1) Compensation plate SCL3020

Internal view

External view

## COM PANE: ACCESSORIES FOR CIRCULAR FORMWORK

Compensation plate SCL 3020
complete with profile (300 x 20 cm)

Compensation piece SCM303
(300 x 3 cm)

Radius clamp SMRC2 for
circular formwork

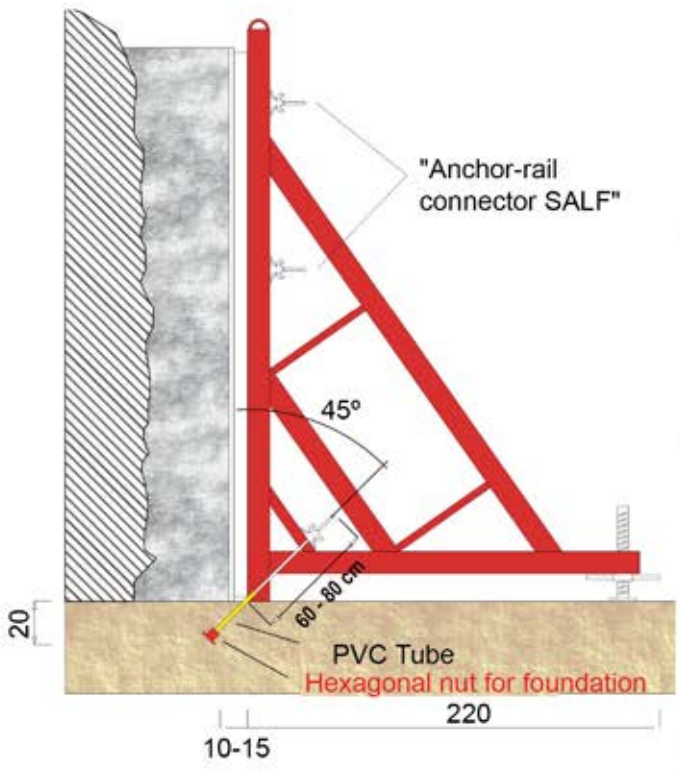
## COM PANE: SINGLE SIDED FORMWORK

Anchorage of the formwork is of vital importance here, particularly as concrete pressure and lifting forces must be diverted to the foundation nut. This system is used for single-sided formwork, vanes, steel columns etc.

SEWVAC is able to supply a proven, absolutely safe and economical solution. The system consists of triangular supports to be attached to the formwork, thus creating the units. The triangle, via the tie-rod should be attached to the appropriate position in the frame system.

**Formwork for single-sided concreting**
System components per linear meter:

1 element 300 x 100 cm,
1 support, 2 fasteners,
2 SALFs,
1 threaded rod 100 cm,
3 wing nuts




**Formwork accessories:**

1 hexagonal nut for foundation per linear meter,
1 PVC sleeve (Ø22-26) of approx.30 cm as protection for the threaded rod.

**Assembly instructions:**

The hexagonal nut with PVC sleeve is fixed approx. 40 cm deep into the foundation.

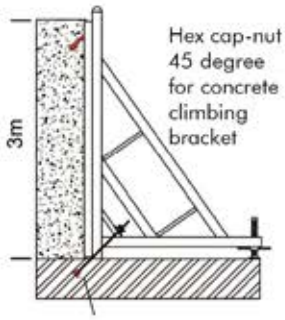
The PVC sleeve for the threaded rod should protrude 10 - 15 cm (positioned at approx. 45°) from the foundation at the building line of the wall to be constructed.

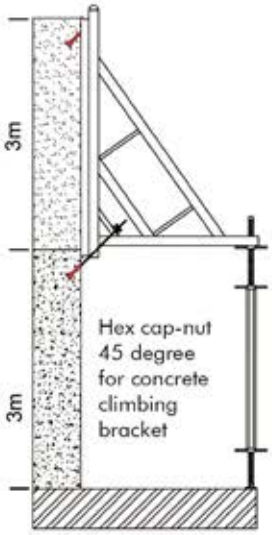
Specific solutions are offered depending on the situation for concreting heights of over 3.0 m (please ask our technical office).

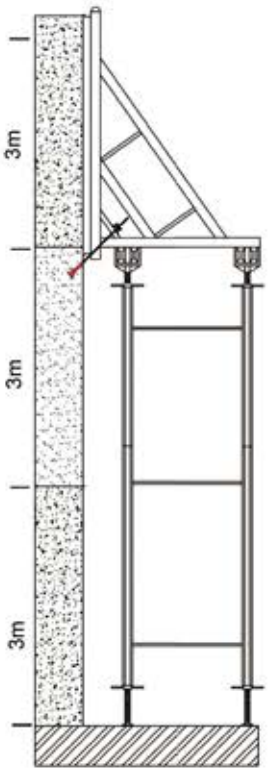
Base cap-nut

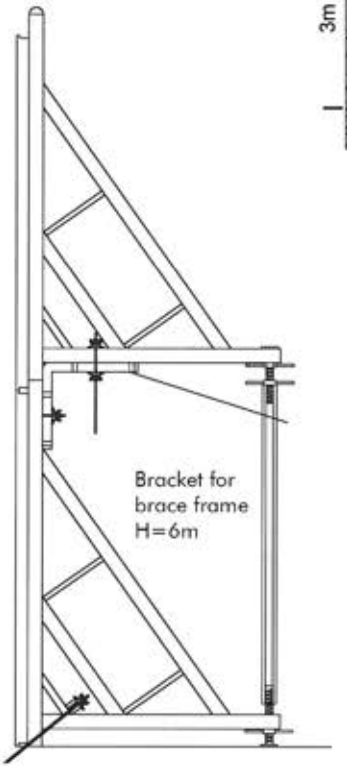
Base cap-nut with guidance wedge

Hex cap-nut 45 degree for concrete climbing bracket



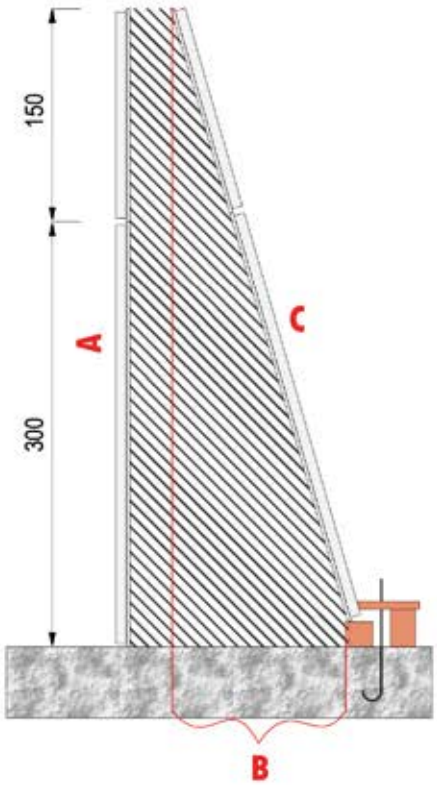
## COM PANE: FORMWORK FOR RETAINING WALL

Thanks to the special profile of the COM PANE panels, it is also possible to scaffold inclined walls up to a slant of 30 cm per 1 m height.

The slant shuttering plate is used for inclines of over 10%. This gives a uniform distribution of the tension over the frame.

**Walls with a slant of over 5°.**

- Anchorage to compensate for the oscillating movement.
- Installation of a board between the frame and the wing nut in order to distribute the tension of the tie-rod equally over the formwork.


Formula for calculating the slanted side of the formwork:

$C = \sqrt{A2 + B2}$

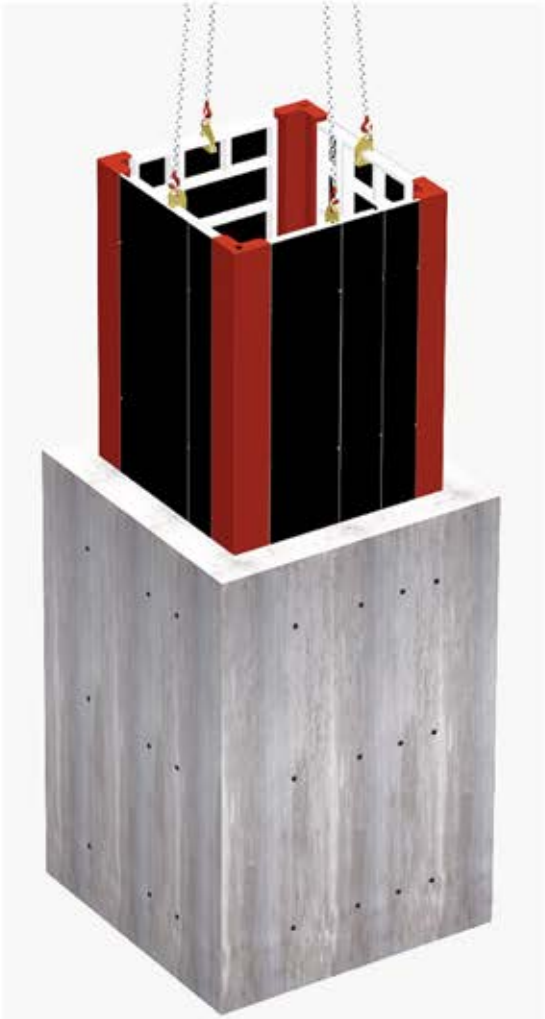
Beispiel:

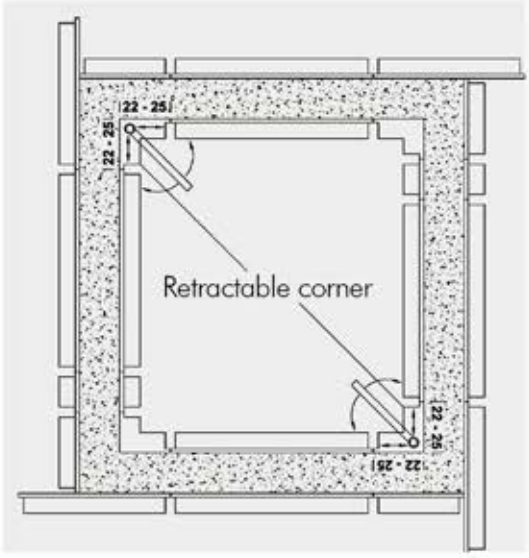
| | | |
|---|---|---|
| (A) | 4502 = | 202.500 |
| (B) | 1002 = | 10.000 |
| | | 212.500 |

$C = \sqrt{212.500} = 460$ cm

## COM PANE: FORMWORK FOR LIFT SHAFTS

Just one twist with the spanner on the stripping corner is enough to reduce the inner corner by 2 cm on each side. This enables the stripping of lift shafts etc. without dismantling the formwork.

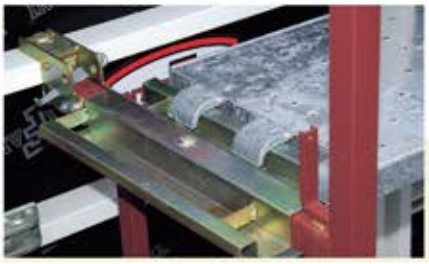





Retractable corner 300 x 25 x 25 cm

## COM PANE: WALK WAY BRACKETS FOR WORKING SAFELY

The brackets are attached to the panel wall at the points provided. This allows the temporary erection of walkways and fulfills safety requirements. With the 300 x 100 cm panels, the walkway can be composed of steel plates (commonly used for metal bridges).



Adaptor for brackets and metal plates

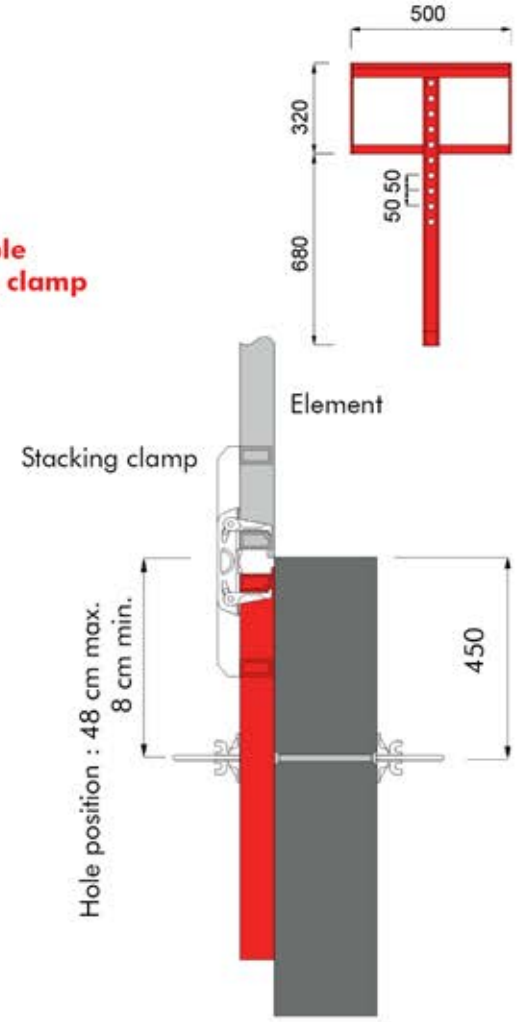
Security pin, end-piece for service bracket

**"We Provide the Confidence to Work Safely"**

## COM PANE: CLIMBING SCAFFOLD BRACKETS AND CLIMBING CLAMPS

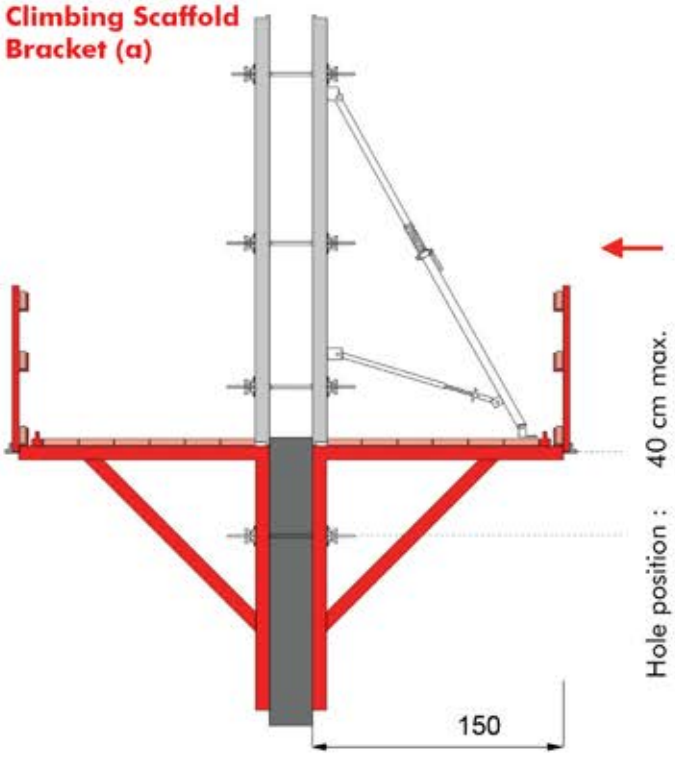
The adjustable climbing clamp is ideal for use as a climbing support for construction joints when no work platform is required, e.g. existing scaffolding or other work surfaces.

**Adjustable climbing clamp**



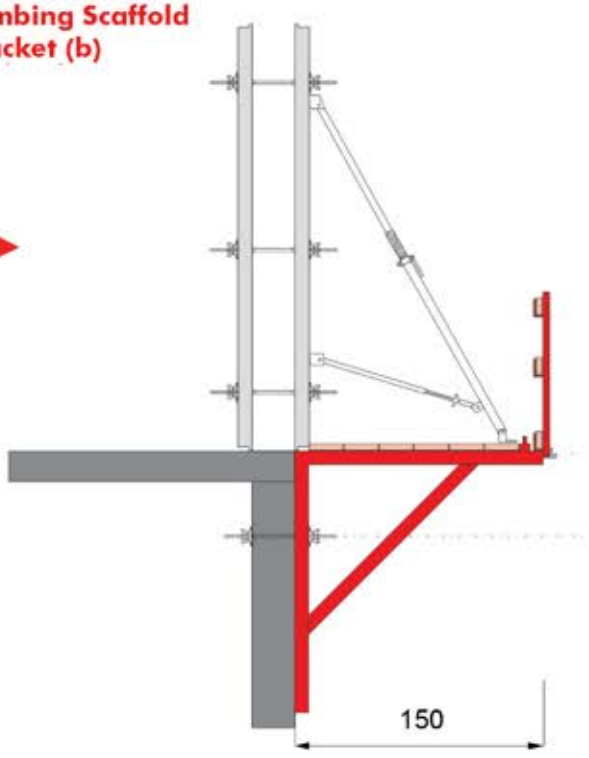

SEWVAC climbing scaffold brackets: The rational solution for single-pouring. The platform can be laid by the client with simple scaffolding procedures. The distance between climbing brackets must not exceed 180 cm.

**Climbing Scaffold Bracket (a)**




Hole position : 40 cm max. 10 cm min. regulable every 5 cm

**Climbing Scaffold Bracket (b)**



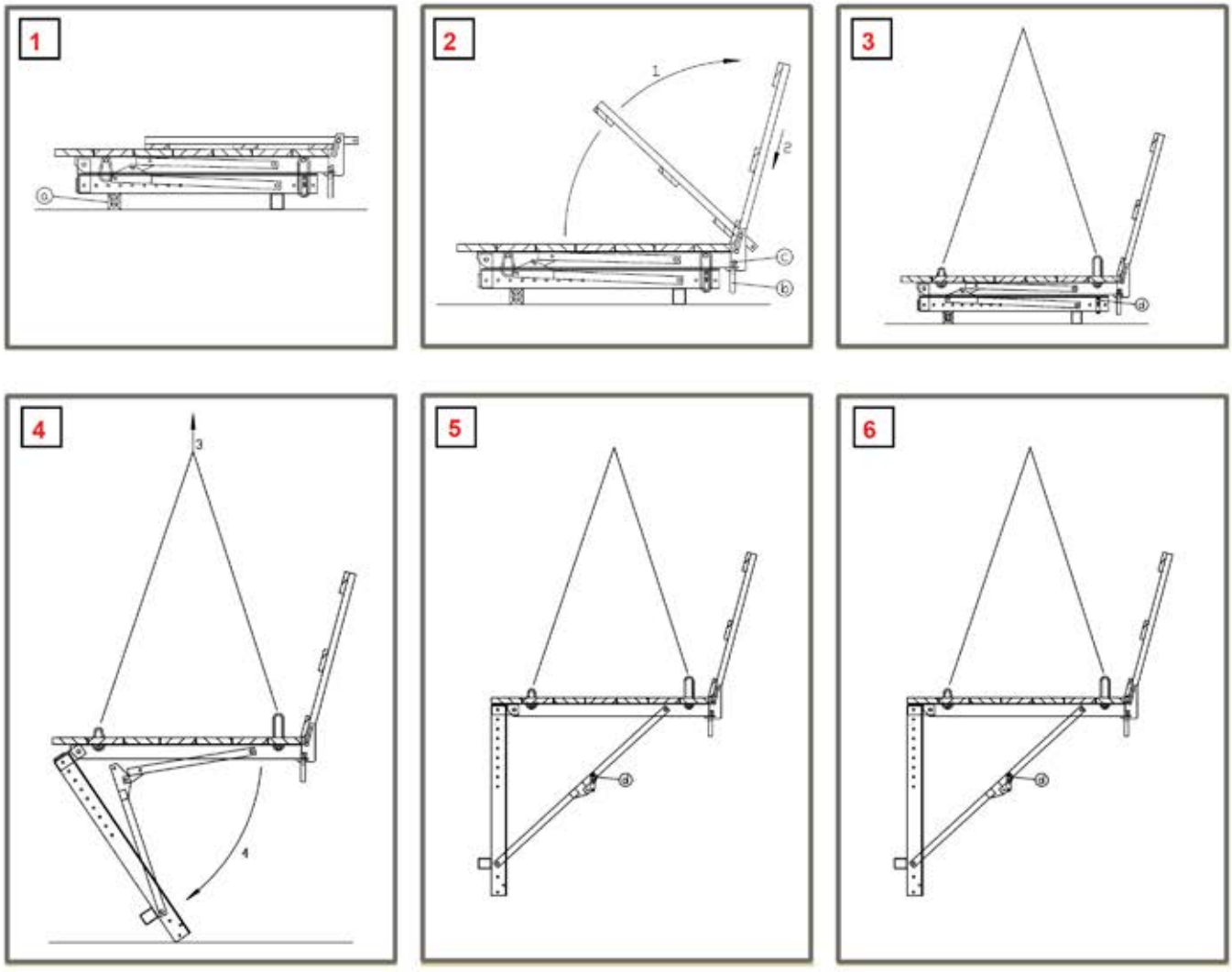
## COM PANE: CLIMBING PLATFORMS SAFE WORKING

SEWVAC climbing platforms provide the complete system for safe and economical climbing. A platform of 1.8 m gives ample space to work on.

The support props of the formwork can be attached directly onto the platform and so enable a quick and accurate positioning of the formwork. They are ideal for high walls with several horizontal fill sections.

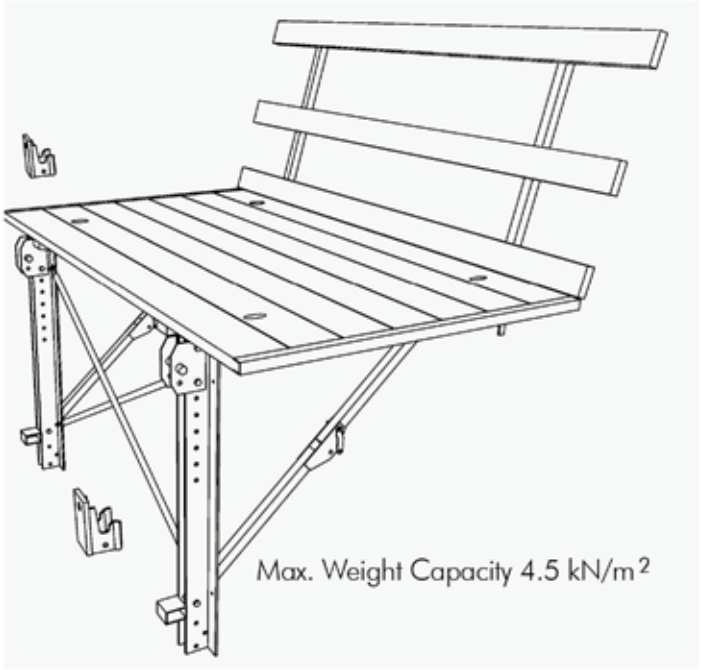
Further information can be found in the "Working in Safety" manual.

## COM PANE: CLIMBING PLATFORM APPLICATIONS - SIMPLE TO USE

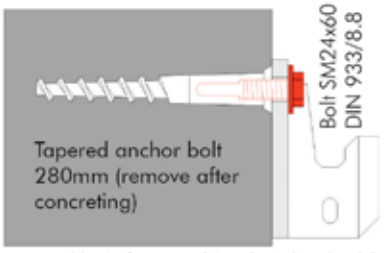


## COM PANE: STEPS FOR PLATFORM ASSEMBLY

1. Position the climbing platform on the wooden beams (a), as seen in diagram.
2. Raise the parapet (end-piece) (1), turn the pin (b) 90% and remove it, lock the parapet into position (2) and reinsert pin (c), which locks the whole bracket into an open position.
3. Hook lifting-cables onto rings while removing pin (d).
4. Raise bracket, allowing a 90° opening.
5. Secure the diagonal. Insert pin (d) into central mechanism of the diagonal and fasten with the appropriate stopper.
6. Affix clevis shoe (e) in the pre-bored holes according to the working height of the clamp.
7. Position the clamp in the relative clevis (5) and block with pin (f).
8. If the climbing platform is to be used as a formwork bolster, the appropriate accessory must be mounted every 2 m.
9. Suspending scaffold is used to remove the clevis shoes (height up to 3.75 m).

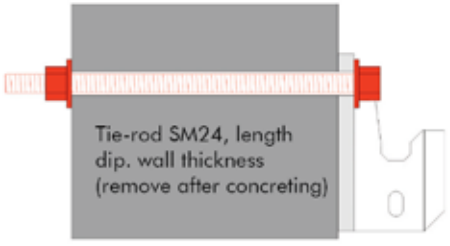



**Anchor bolt version**

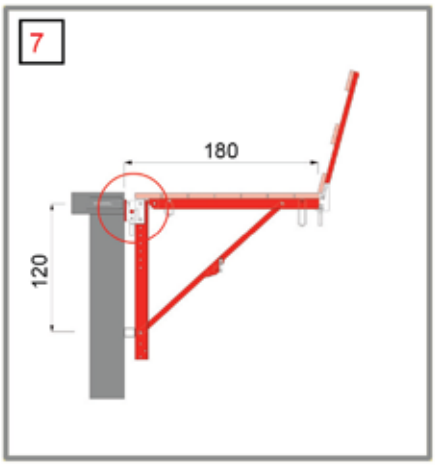


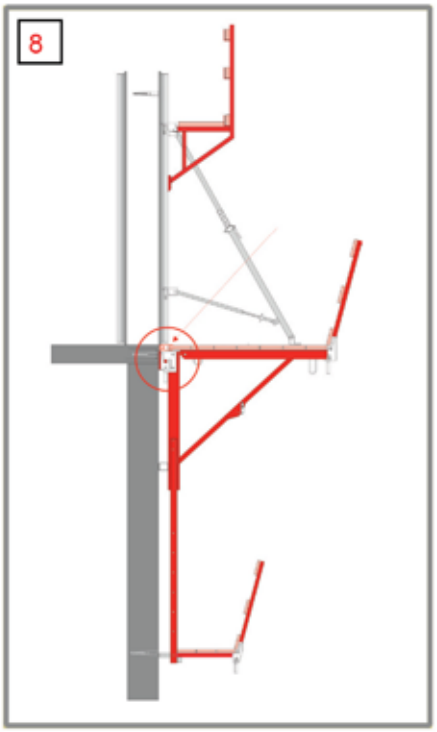

Clevis for attaching bracket SM30

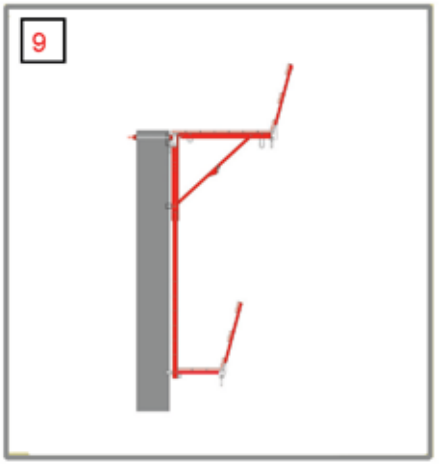
**Version with threaded rod 24mm and screw SM24**




Clevis for attaching bracket SM30



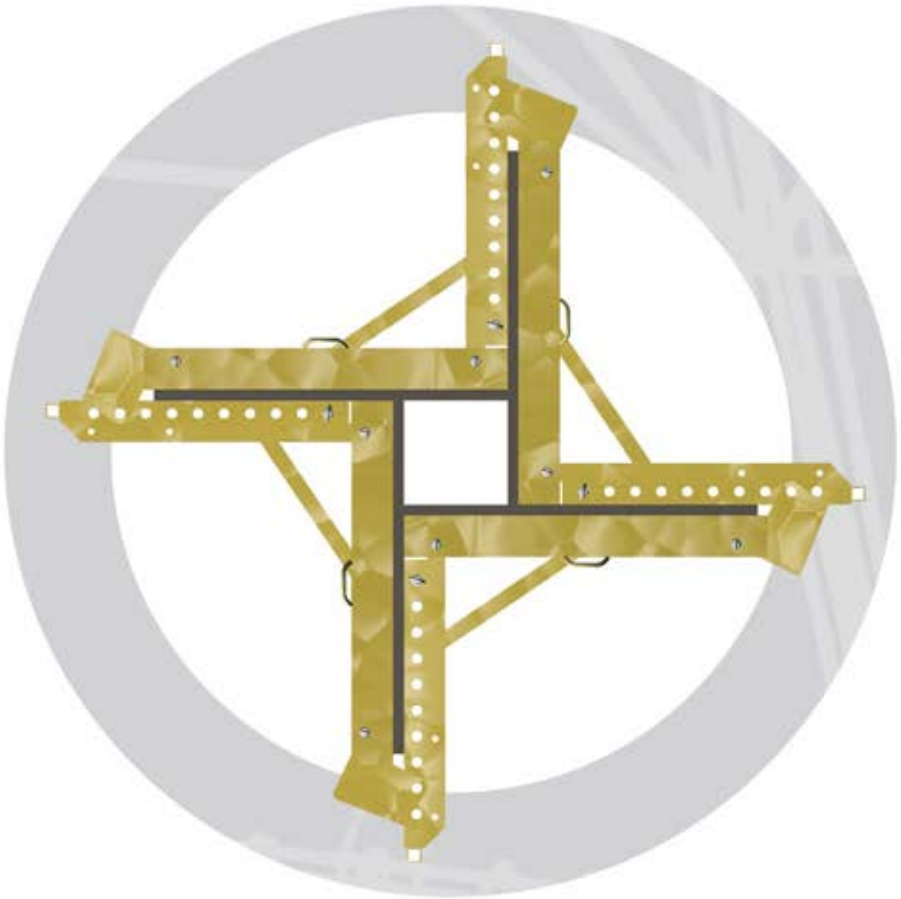
## EXTENSIVE DESIGN POSSIBILITIES

FORMA®

Innovative Formwork Systems

**Kwik-Col:**

# **Kwik-Col:** COLUMN FORMWORK FOR HIGH EXPOSED CONCRETE REQUIREMENTS



## Kwik-Col: COLUMN FORMWORK

Kwik-Col column formwork can be manoeuvred with excellent forming times for high exposed concrete requirements.

- Only 4 clamps on one side need be opened for dismantling
- Position with just 1 lifting operation (folding mechanism)
- Ladder ascent and concreting platform for safe working at any height
- Wheels mean the complete column formwork can be manoeuvred by hand
- Small transport volume thanks to folding support struts

Adjustment range: 200 - 600 mm in 50 mm grid.
Element height: 3000/2700/1500/1200 mm
Formwork face: Composite Panel (15 mm)

Permissible concrete pressure: 80kN/m² in accordance with standard DIN18218

**Models:1200-3000 mm**

Simple clamping in 5 cm grid

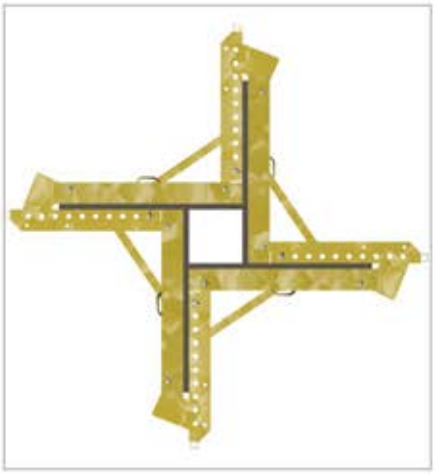
Four wheels for manoeuvring the complete column formwork

Elements can be stacked to save space

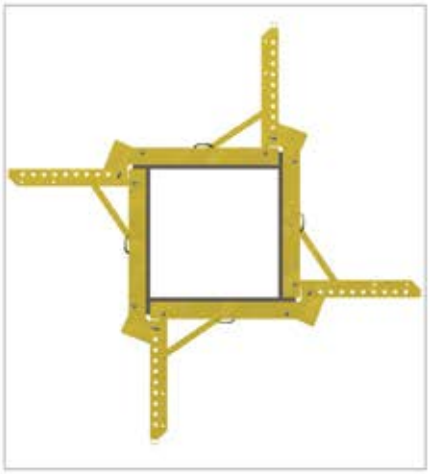
High exposed concrete requirements

## **Kwik-Col:** COLUMN FORMWORK

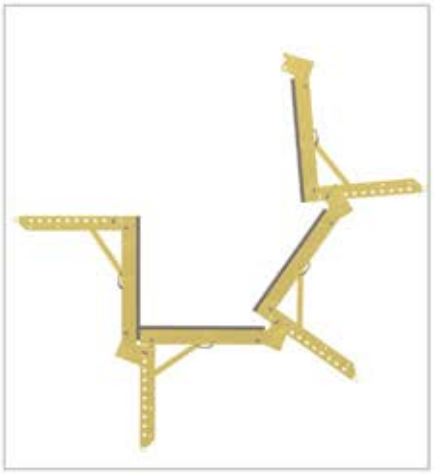
Column cross sections from 200 x 200 mm to 600 x 600 mm can be concreted in 50mm grid in square or rectangular forms.



Example:
column 200 x 200 mm



Example:
column 600 x 600 mm



Complete **Kwik-Col** column formwork can be positioned in one lifting operation

## EXTENSIVE DESIGN POSSIBILITIES

FORMA®

Innovative Formwork Systems

## Pi (π) RADIAL FORMWORK SYSTEM:

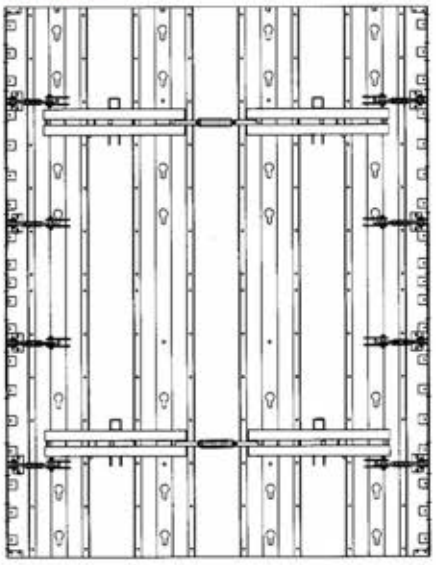
A versatile formwork system that can be used to contruct any shape.


## Pi ($\pi$) RADIAL FORMWORK SYSTEMS:

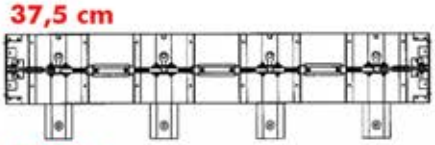
Four different height plus a telescopic section

Using the four different sizes along with the telescopic section you can reduce the overlap to a minimum on any wall height.

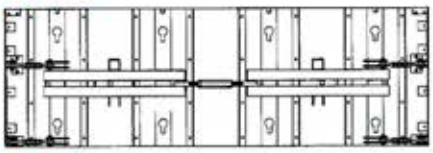
**300 cm**



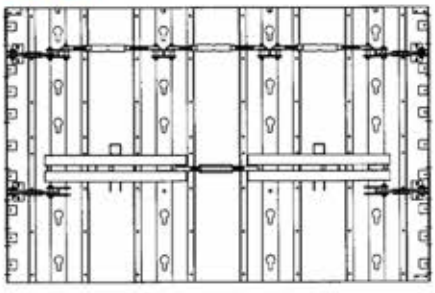
**37,5 cm**

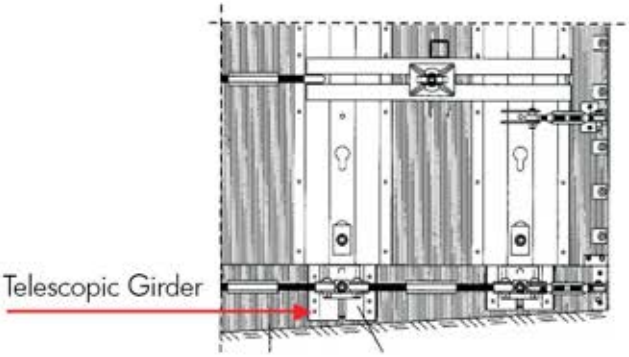


**75 cm**



**150 cm**



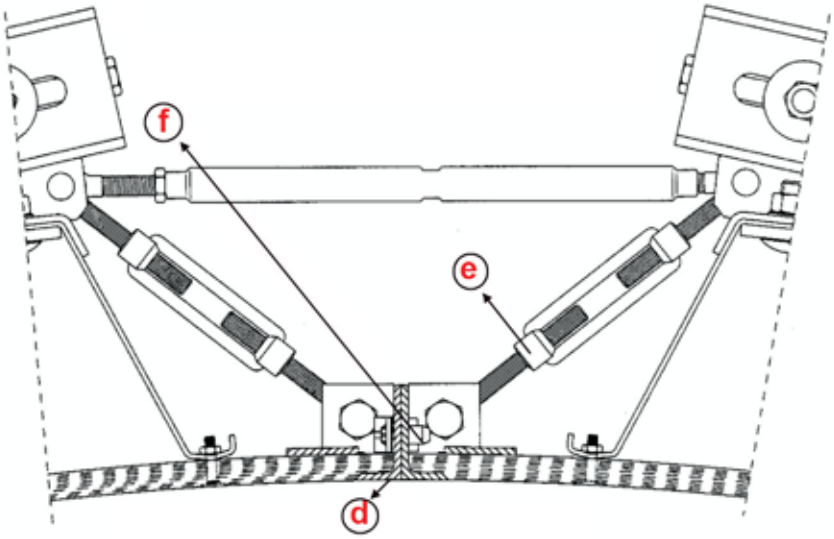


## Pi (π) RADIAL FORMWORK SYSTEMS:

Segment connection angle with oblong holes and clamp

The Clamp completely rules out any risk of misalignment at the joints and guarantees the fast and necessary tightness of the structure. Optimum concrete finishing. No expensive re-working.

Any unevenness in the ground slab can be compensated with ease.

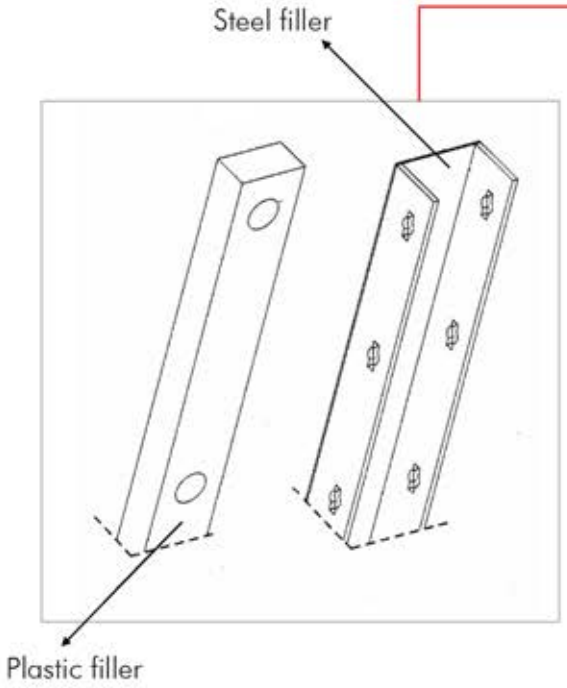



d = Segment Connection Angle
e = Turnbuckel M16
f = Keybolt

## Pi (π) RADIAL FORMWORK SYSTEMS:

### Plastic/Steel filler pieces

The system has a large array of variable filler pieces which enables the formwork of complex design and difficult dimensions to be accomplished with ease.




No Work-bench required

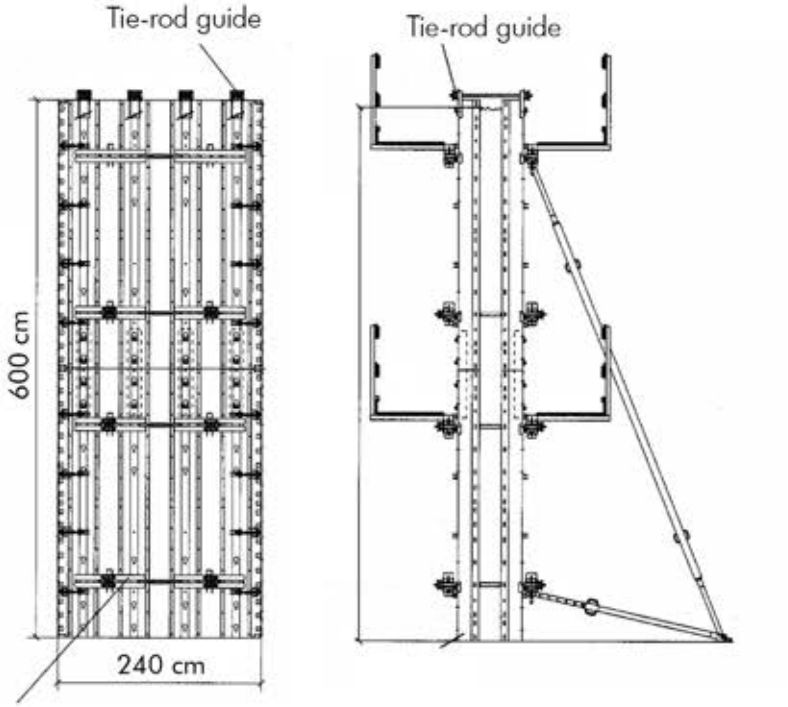
## Pi (π) RADIAL FORMWORK SYSTEMS:

**This system has very few tie-rods in the concrete**

This is very apt for forming water retaining structures as few tie-rods will reduce costs.

Segment high 300cm without tie-rod guide = 0,56 Spst./m²

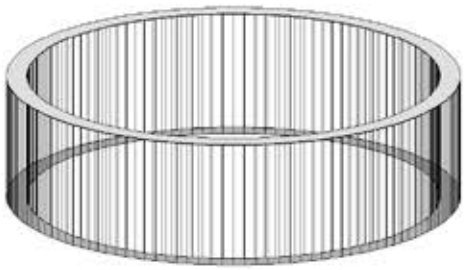
Segment high 300cm with tie-rod guide = 0,28 Spst./m² at the concrete.

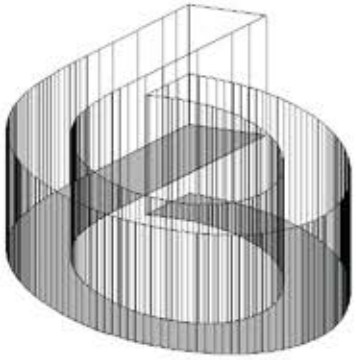


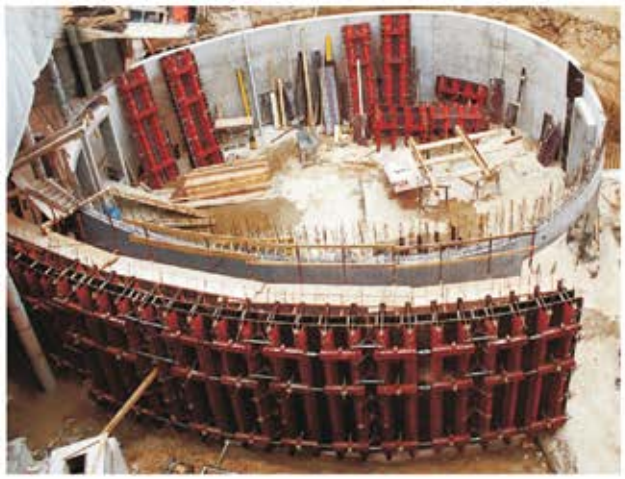
## Pi ( π ) RADIAL FORMWORK SYSTEMS:

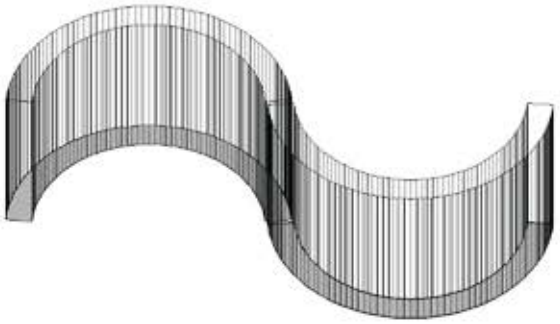
### Different Radii Settings are possible

You need only one special wedge on a conical wall at the joints





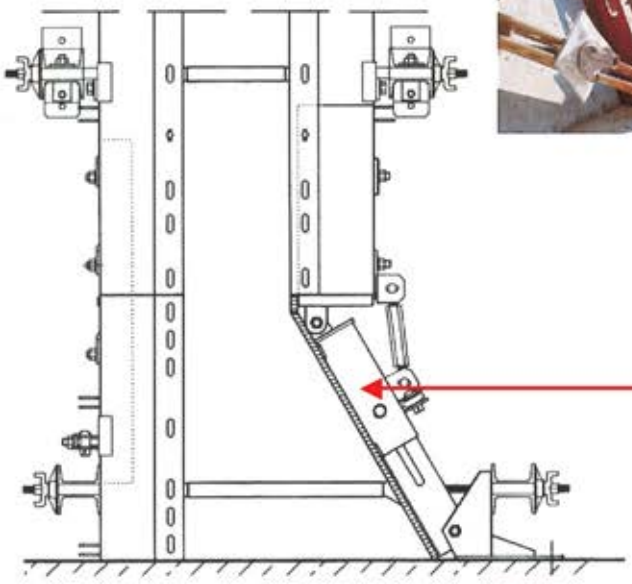




## Pi ( π ) RADIAL FORMWORK SYSTEMS:

### Haunch Girder :

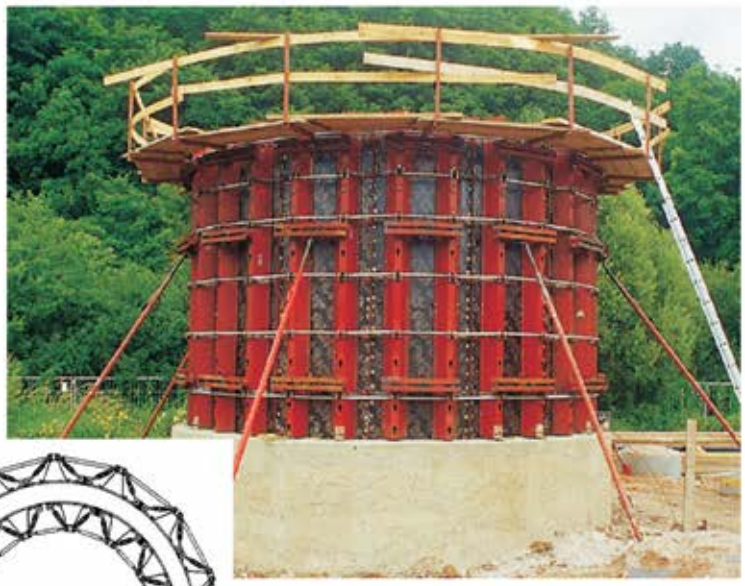
Economic solution for variable haunches.

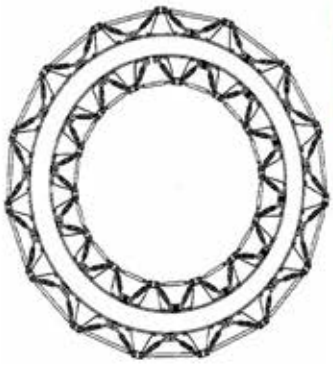


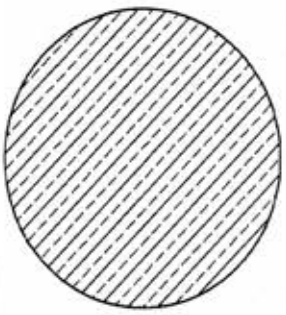

## Pi (π) RADIAL FORMWORK SYSTEMS:

### Tie-less tasks:

For small concrete circular tanks the forces can be absorbed by ring tension eliminating tie rods therefore SAVING TIME AND MONEY.

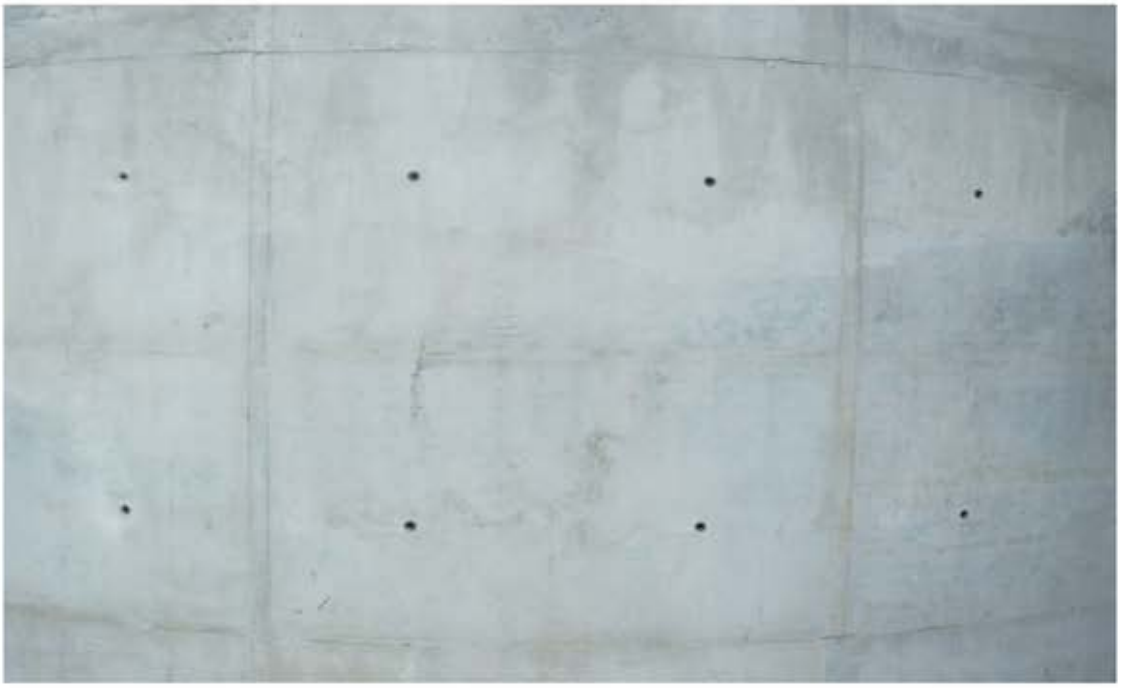






## Pi (π) RADIAL FORMWORK SYSTEMS:

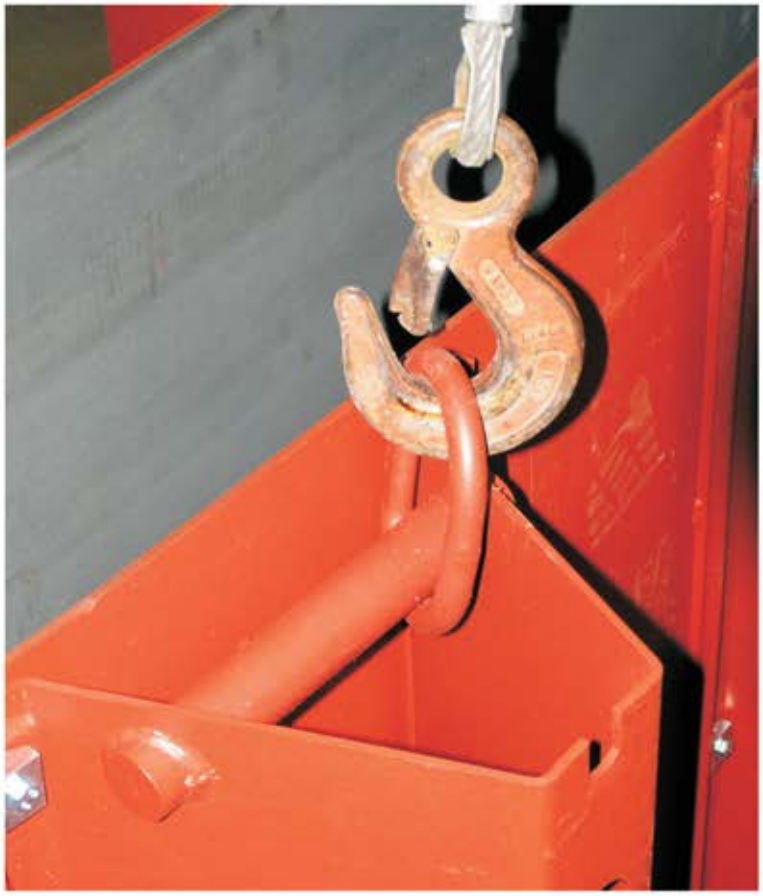
CONCRETE FINISH



LEVELLING DEVICE GROUND FLOOR

## Pi ($\pi$) RADIAL FORMWORK SYSTEMS:

LIFTING DEVICE



SHOWING FORM & CONCRETE FINISH

## EXTENSIVE DESIGN POSSIBILITIES

FORMA®

Innovative Formwork Systems

## ALUSTRONG

Support System For Heavy Loads (Leg Load Of 6000 kg)

Safe and Easy to Erect

## ALUSTRONG: SUPPORTS FOR HEAVY LOADS

Certificate Milan Polytechnic

The Alustrong of 2m X 2m Support System (6000kg Leg Load)

## ALUSTRONG: SUPPORTS FOR HEAVY LOADS

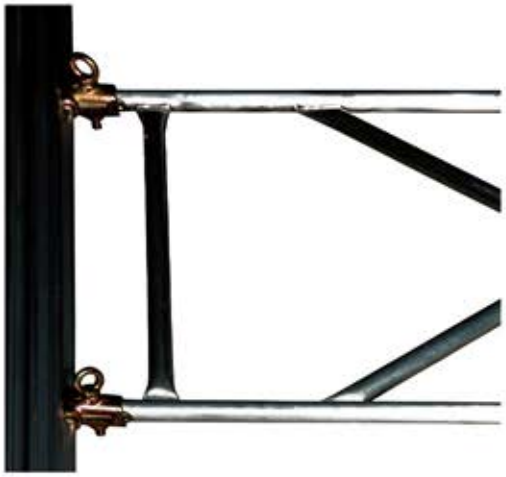
**Salient features:**

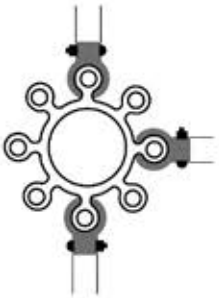
- Ideal for heavy loads both in concentrated and distributed designs. Max. weight per support 6000 kg.
- Vertical assembly of the structure to raise level above working height.
- Quick assembly with easy-lock clamps.
- The single support can be transformed into a framed structure.

Example: The system permits the building of structures up to a height of 10 m, making the erection of the support system quick, safe and easy.

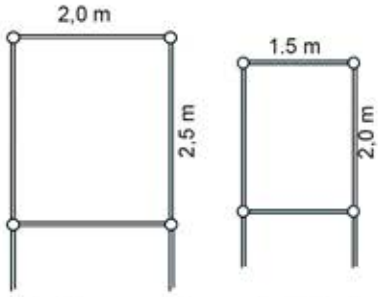
## ALUSTRONG: SUPPORTS FOR HEAVY LOADS

### Quick And Easy to Use





The 8 brace connecting points on the Alustrong.

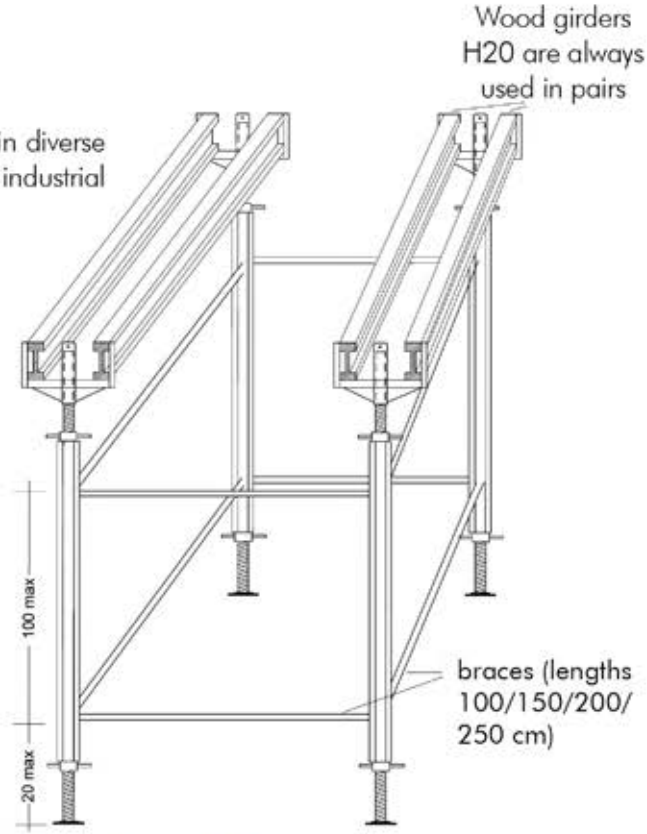



Example of prop spacing and relative load: 250 x 200 cm for a load of 1200 kg/m$^2$ and 200x 150 cm for a load of 2000 kg/m$^2$

ALUSTRONG props can be used singly or as part of a stacked support frame.

The connector frames and distance tubes can be attached to any point on the ALUSTRONG frame.

ALUSTRONG support system can be used in diverse sectors ranging from residential housing, industrial buildings to infra-structure projects.



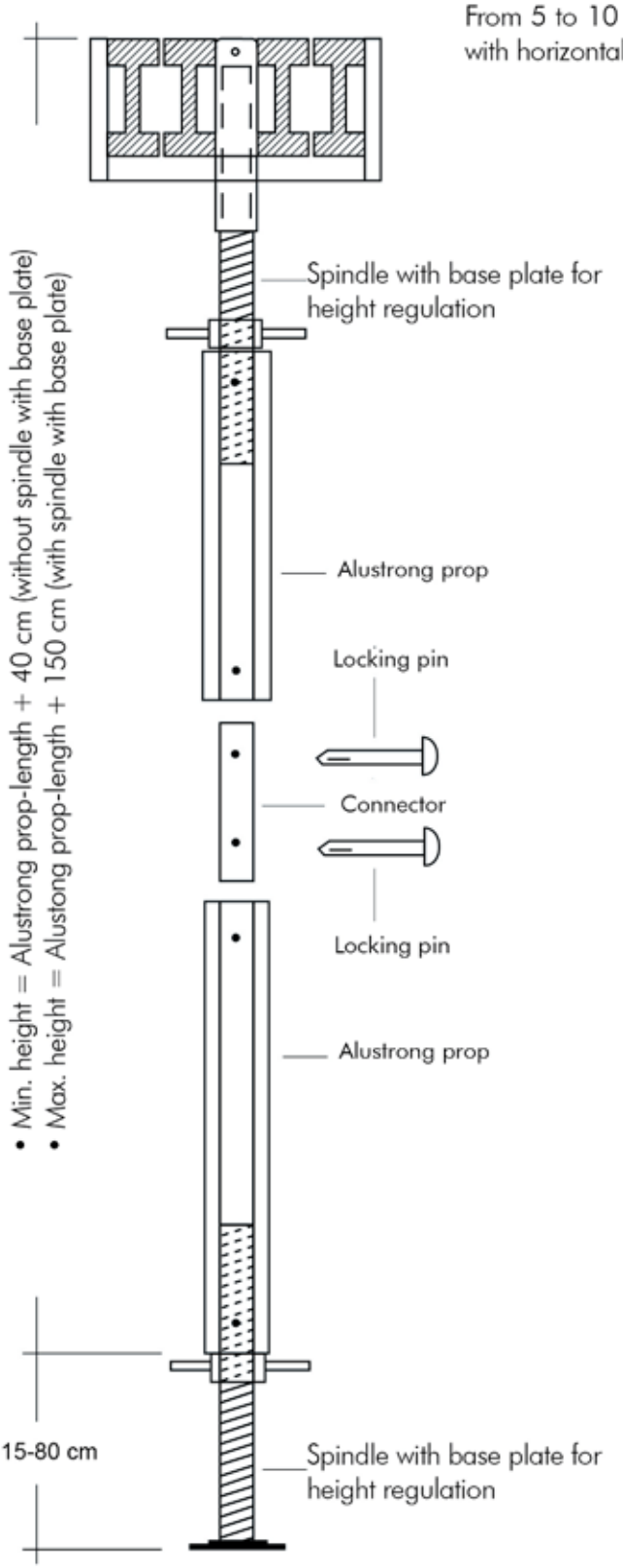

**System Assembly:**
The single props are connected using horizontal and diagnol braces in the desired grid-spacing form.

## ALUSTRONG: ASSEMBLY ALUSTRONG PROP

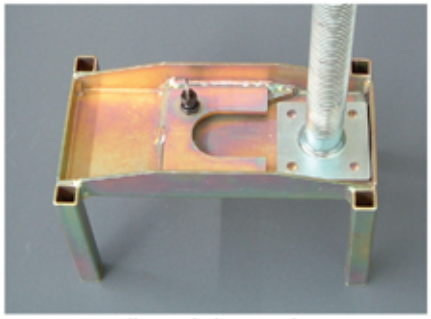
The ALUSTRONG system is composed of a small number of components.

Height can be adjusted.
Safe load per prop is 6000 kg up to a height of 5 m.

From 5 to 10 m the max load is 4500 kg (a tower with at least 4 props with horizontal and diagonal braces).

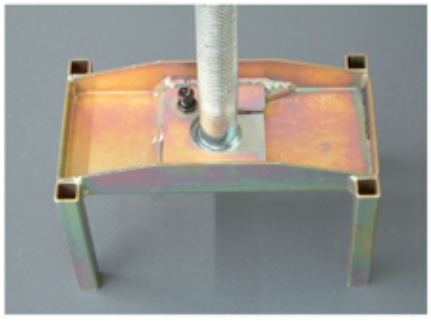



**Connection of the prop-head to the spindle with base plate**



Insert spindle with base plate into the appropriate position.

Lift locking pin



The spindle with base plate is connected to the prop-head

# ALUSTRONG: SYSTEM COMPONENTS

## Alustrong Bored Profile

Item: A-P 10 Dimensions: 1,00 m Weight: 5,7 kg
Item: A-P 15 Dimensions: 1,50 m Weight: 8,5 kg
Item: A-P 20 Dimensions: 2,00 m Weight: 11,3 kg
Item: A-P 30 Dimensions: 3,00 m Weight: 17,0 kg
Item: A-P 40 Dimensions: 4,00 m Weight: 22,7 kg

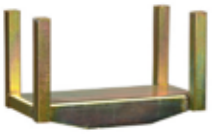
## Spindle complete with base plate

Item: A-FCP
Weight: 7,0 kg

## Complete spindle

Item: A-FC
Weight: 5,9 kg

## Prop-head



Item: A-TP
Weight: 8,8 kg

## Brace connector

Item: A-TG
Dimensions: 0,50 m
Weight: 1,73 kg

Locking pin
Item: A-PN

## Connector frame

Item: A-DGI 20
Dimensions: 2,0 m
Weight: 8,1 kg

## Connector frame

Item: A-DGI 15
Dimensions: 1,50 m
Weight: 7,4 kg

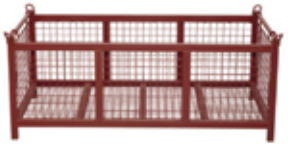
## Distance tubes

Item: A-D 10 Dimensions: 1,00 m Weight: 3,2 kg
Item: A-D 15 Dimensions: 1,50 m Weight: 4,2 kg
Item: A-D 20 Dimensions: 2,00 m Weight: 5,2 kg
Item: A-D 25 Dimensions: 2,50 m Weight: 6,2 kg

## Diagonal tube

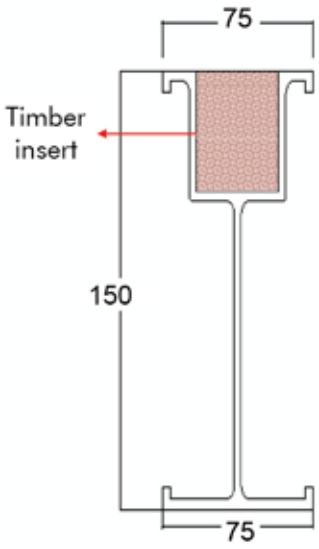
Item: A-DG 30
Dimensions: 3,00 m
Weight: 8,3 kg

## Grid box

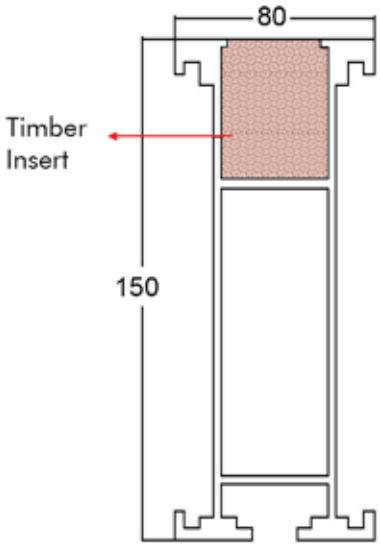


Item: CAR
Dimensions:
200 x 115 x 80 cm
Weight: 100,0 kg
Max. weight :
2.500,0 kg

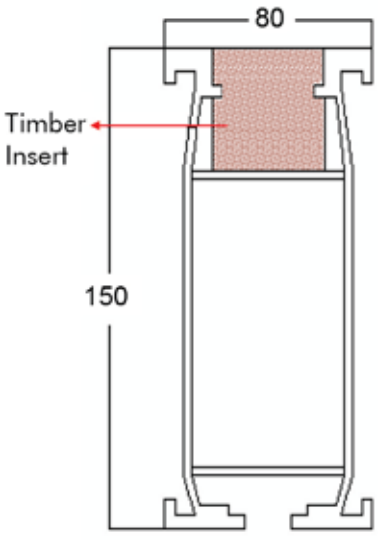
**FS 150 AB**




**FS 151 AB**




**FS 152 AB**



## FORMWORK FOR HIGHWAYS:

SPECIAL FORMWORK FOR HIGHWAYS

## FORMWORK FOR HIGHWAYS

Formwork for highways is mainly used for kerbs. Its many readjustment possibilities allow for quick and precise forming.

With the help of guard-rails, the rails themselves, with posts, are mounted directly onto the formwork, where they are encapsulated during the pouring process. This saves the measuring and adjusting of the guard-rail posts. The readjustment mechanism allows pre-bending of the guard-rails in light curves allowing for routing to follow the roads.

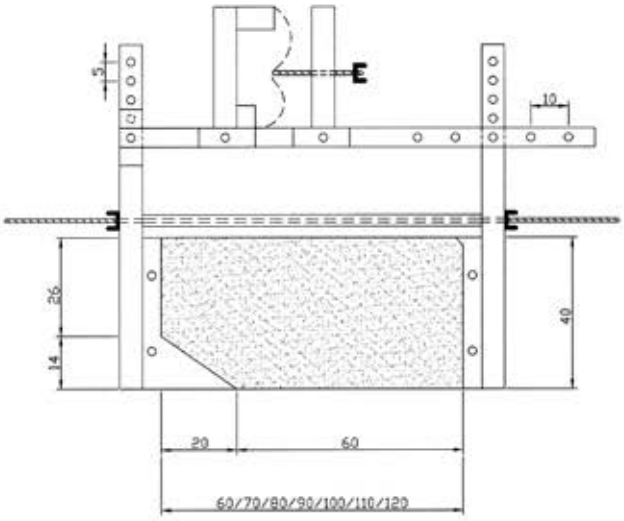
## FORMWORK FOR HIGHWAYS: TECHNICAL INFORMATION

The special formwork is 40 cm high and is adjustable every 10 cm in its width (min. 60 cm - max. 120 cm).

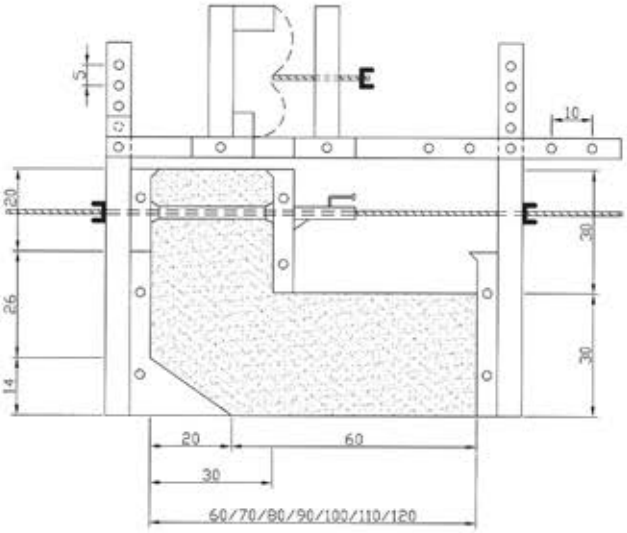
There is an optional climbing support crown which is mounted on the regular crest formwork and which allows you to vary the shape of the crest.

Lengths of panels available: 100 cm/ 200 cm.

Every panel is equipped with compensation parts to enable the creation of the various radii. All parts are connected with security pins and wedges to enable quick assembly (40 m per day).




Special Formwork




Special Formwork with Climbing Support Crown

## SPECIAL FORMWORK

The use of special formwork permits independent working to save time and costs.

**Steel formwork:**

Steel formwork consists of an inner part, two long outer parts, a base part with topside end piece for inserting the grating.

**Prefab concrete well**

External dimensions:
200 x 144 x 70 cm

Internal dimensions:
200 x 128 x 60 cm

Diameter: 8 ~10 cm

Concrete quantity:
approx. ½ metre cube
Grating dimensions:
132.5 x 64 x 4 cm

Basement wells can be manufactured and / or poured directly on the building site.

**Prefab concrete well assembled**

Attachment bracket complete with 3 steel impact pins M12 Prefab concrete well assembled

Packing: 12 items/bag.

## APPLICATION PICTURES FOR REFERENCE

Bridge support

Bridge formwork

Bridge Trafoi

## APPLICATION PICTURES FOR REFERENCE

Dam **WALL** with COM PANE Alu (AUSTRIA)

Inclined **WALL**, height 4 m Formed with COM PANE Alu

## APPLICATION PICTURES FOR REFERENCE

Water purification plant

Dam **WALL** with COM PANE Alu (GERMANY)

## APPLICATION PICTURES FOR REFERENCE

COM PANE Alu formwork, 7 m high

Basement construction

Formwork COM PANE for domestic buildings starting at basement level

## APPLICATION PICTURES FOR REFERENCE

Special formwork for cable car station.

Special formwork for concrete shaft.

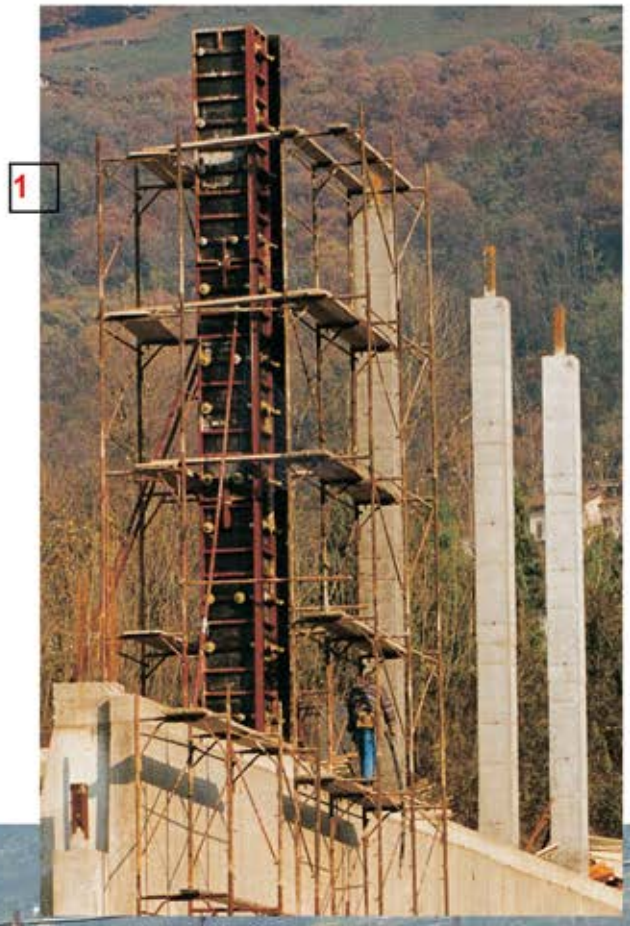

Concrete shaft for ski elevator plant.

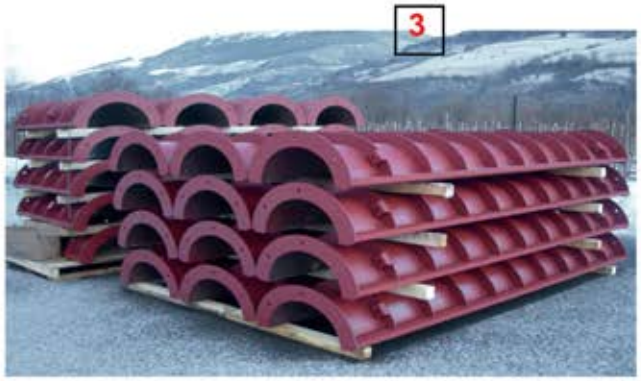
## APPLICATION PICTURES FOR REFERENCE

Shaft for Sewerage

COM PANE Formwork with a fixed walkway climbing platform

## APPLICATION PICTURES FOR REFERENCE






1. Columns, height 9 m, scaffold done with COM PANE multiuse steel panels
2. Column, height 2.5 m, scaffold done with COM PANE ALU
3. Metallic formwork for circular columns
4. Reinforced columns with COM PANE panels and custom-built parts

## APPLICATION PICTURES FOR REFERENCE

1. Economical production of columns with Kwik-Col formwork, height 3.0 m

2. Safe working ensured by ladder ascent and work platform

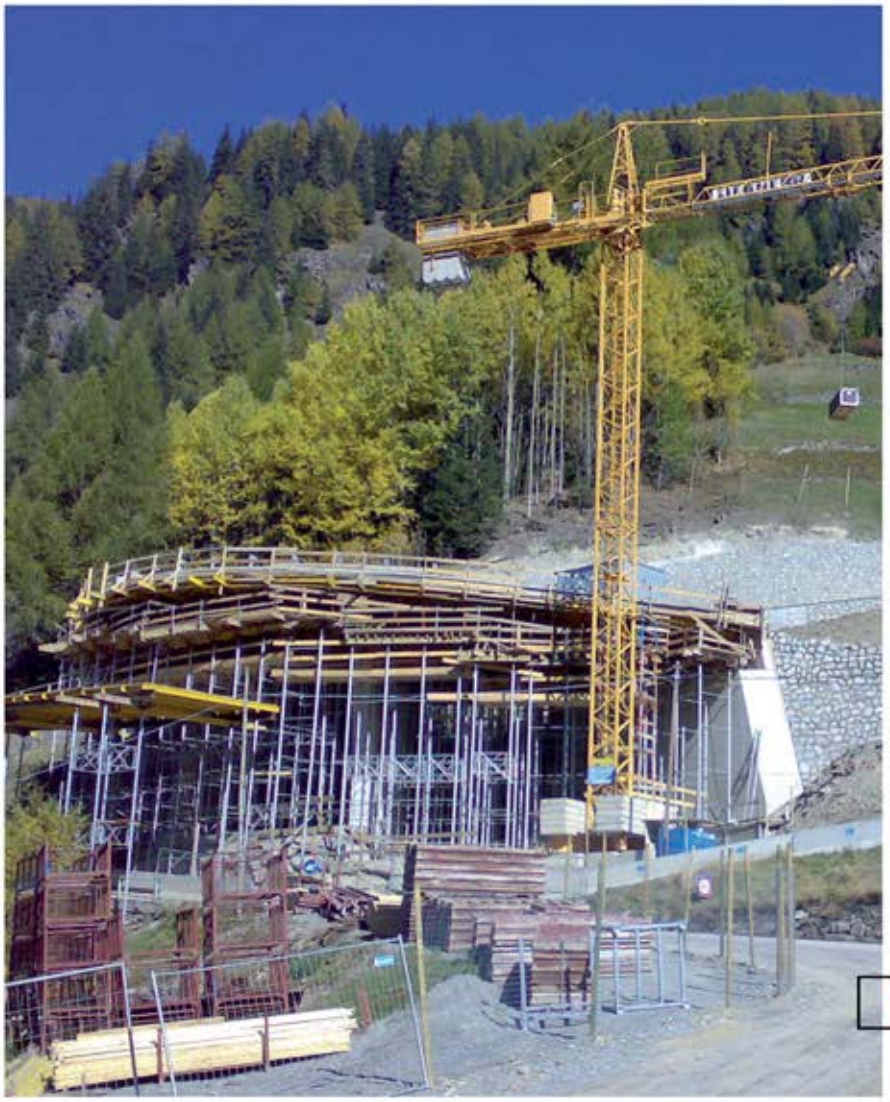
3. Dismantling with just 4 clamps on one side

1


2


3

## APPLICATION PICTURES FOR REFERENCE




### ALUSTRONG SUPPORT SYSTEM

1. ALUSTRONG support system for supporting a road section

2. Completion of the first section

## APPLICATION PICTURES FOR REFERENCE

### ALUSTRONG SUPPORT SYSTEM

1. ALUSTRONG building block principle with connector frames for roof support, height 8.0 m
2. ALUSTRONG building block principle with diagonal tubes for supporting a concrete girder
3. ALUSTRONG support system with distance tubes used for an underpass



## APPLICATION PICTURES FOR REFERENCE

MASS HOUSING PROJECTS

Malaysia

Equador

Thailand

Malaysia

Germany

Philippines

Malaysia

Romania

"Sewvac" is patented internationally. In India under the Patent No : 1803288 dated 6/Apr/2009 and any product design copied or infringed upon will face legal proceedings and claim of liquidated damages . Most products are sold with non – disclosure agreements to end clients

## Sewvac India

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