

NEVI MODULAR FORMWORK

The perfect balance of resistance and handset



IMPORTANT:

Any safety provisions as directed by the appropriate governing agencies must be observed when using our products.

The pictures in this brochure are snapshots of situations at different stages of assembly, and therefore are not complete images. For the purpose of safety, they should not be deemed as definitive.

All of the indications regarding safety and operations contained in this brochure, and the data on stress and loads should be respected. ULMA Construcción's Technical Department must be consulted anytime that field changes alter our equipment installation drawings.

Our equipment is designed to work with accessories and elements made by our company only. Combining such equipment with other systems is not only dangerous but also voids any or all our warrantees.

The company reserves the right to introduce any modifications deemed necessary for the technical development of the product.

All rights reserved

Neither all nor part of this document may be reproduced or transmitted in any way by any electronic or mechanical procedure, including photocopy, magnetic recording or any other form of information storage or retrieval system without the written permission of **ULMA Construcción**.

NEVI MODULAR FORMWORK

- 4 Product description
- **7** Basic system components
- 22 Basic assembly process
- 28 Technical Solutions
- 51 Handling and repair
- 53 Componentes y accesorios
- **58** ULMA Construcción addresses
- 62 Our products

Product description

Its lightweight compared to other type of formwork facilitates its handling

The **NEVI Modular Formwork** system is an innovative range of panels and accessories for framing any vertical geometrical shape in buildings like walls, columns...

The lightness and quality of materials of NEVI formwork allow manipulate **either by crane or by hand** most of the range, guaranteeing always high performances.

The new materials and technical innovations have resulted in the **ideal combination between light and resistant panels:** a frame of steel structure, plywood covered by phenolic film and standard accessories like clamps to joint panels to forming gangs of panels.



- Light panels facilitate handset assembly and disassembly.
- **All the panels provide lateral holes** that allow quickly framing typical solutions, such as bulkheads, corners, columns... NEVI system assures versatility to solve any problem in the sites.
- This system uses **common standard accessories** to other ULMA Construccion's vertical formworks.
- Wide range of panels.
- System designed to support high concrete pressures.
- **Robust panel** formed by a metallic frame with reinforced corners.
- The plywood shuttering face provides **excellent surface finishes.**
- Panels are joined by clamps with the strike of a hammer to form large gangs, which can then be lifted.
- Universal Panels provides solutions for columns of different dimensions, bulkheads, corners...
- Safety elements are easily fastened to panels, thus always guaranteeing system's reliability.













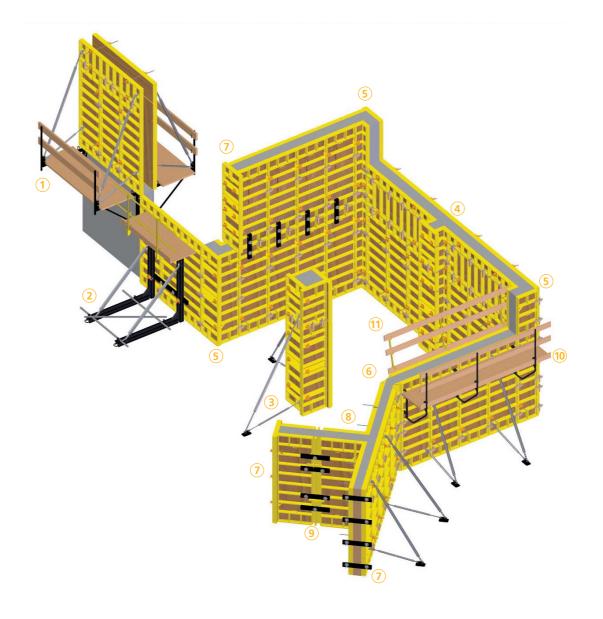






Possibilities of the NEVI system: Features and Solutions

1 Climbing systems	7 Bulkheads
2 One face formwork support	8 90° wall intersections
3 Columns	9 Fillers
4 Pilasters	10 Walkway bracket
5 90° corners	11 Post bracket
6 Hinged corners	



Basic system components

Maximun performance at jobsite

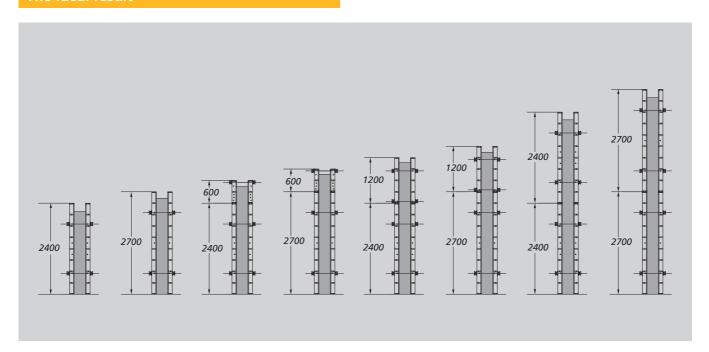
The principle of ULMA Construction is to take care of the customer. Thinking about him and the **profitability of its acquisition**, has opted for the **versatility**.

Accordingly, the NEVI Modular Formwork system is comprised of a series of components that, for the most part, can be used in conjunction with different ULMA Construcción's vertical formwork systems.



Panels:

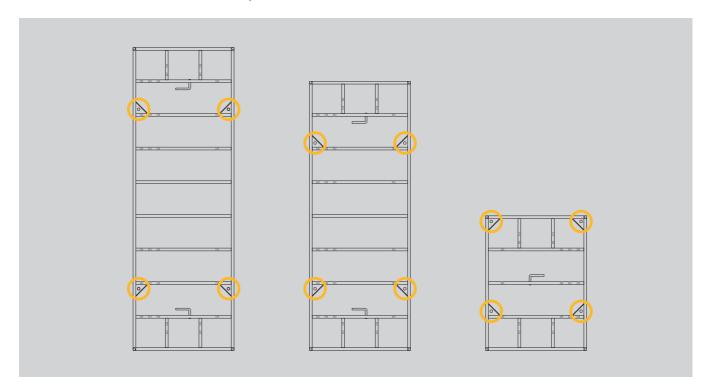
The ideal result



- Maximum load pressure:
- Wall higher than 2.7m, maximum load pressure: 60 kN/m².
- · Maximum deflections:
- Maximum deflections (60 kN/m²):line 6, tab.3 DIN 18202.
- · Hydrostatic pressure:
- Wall high up to 2.7m: hydrostatic pressure 67.5 KN/m², it's not required to control the concrete pouring speed.
- Requires 2 ties in height.

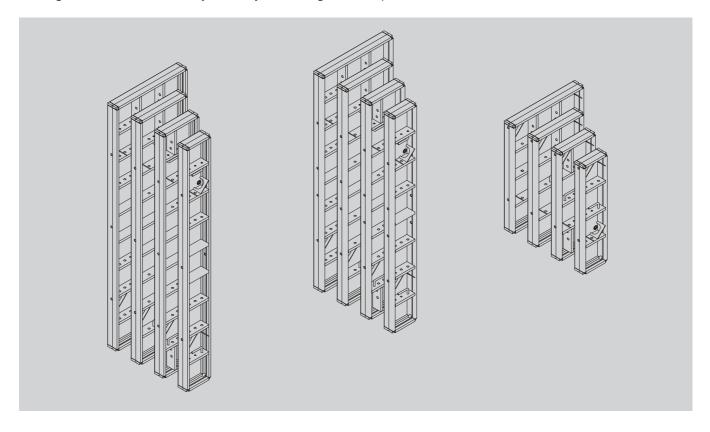


Three **ranges of panel heights:** 2.7m 2.4m and 1.2m panels. These are completely compatible and they can be assembled in vertical or horizontal position.



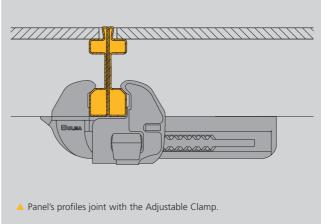
Width range:

0.9m; 0.6m; 0.45m; 0.3m. Gangs can be assembled every 15cm by combining different panels.

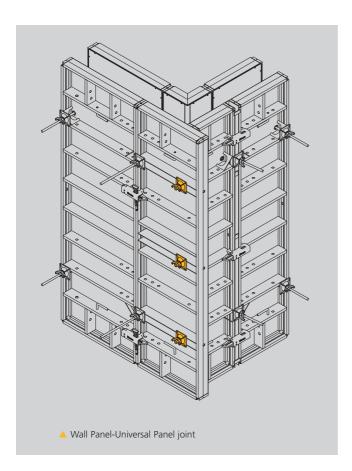


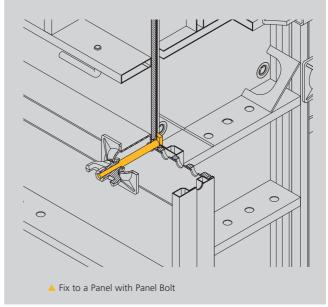
Robust system. The metal frame is formed by a perimeter profile and reinforced corners capable of absorbing impacts and avoiding breakage due to incorrect use. Besides, this corner's reinforcement includes a hollow to introduce the crow bar.





Versatile system. All the panels have lateral holes on the profiles for providing bulkhead, corner and column solutions.

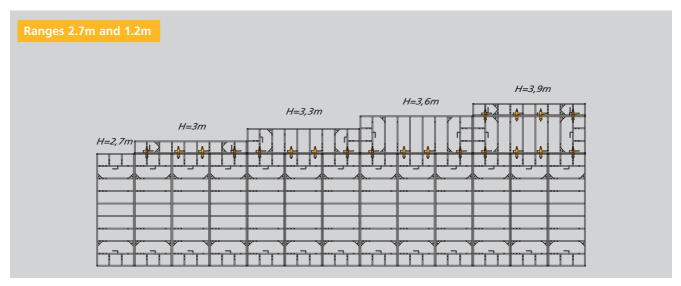




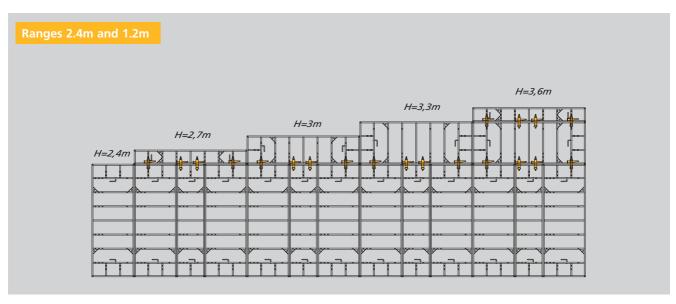
The shuttering face of the 15mm **thick plywood** is riveted to the metal frame. Its edges and tie holes are protected against impact and moisture.







▲ NEVI Panel's height range (Ranges 2.7m + 3.9m)

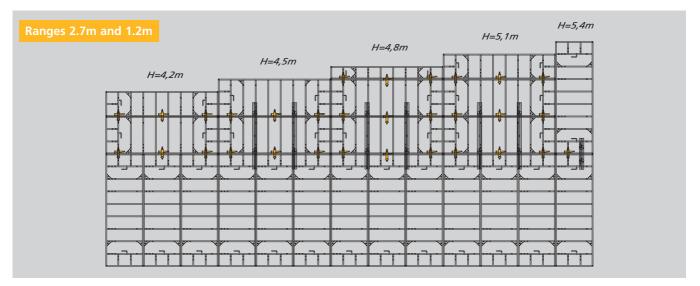


▲ NEVI Panel's height range (Ranges 2.4m + 3.6m)

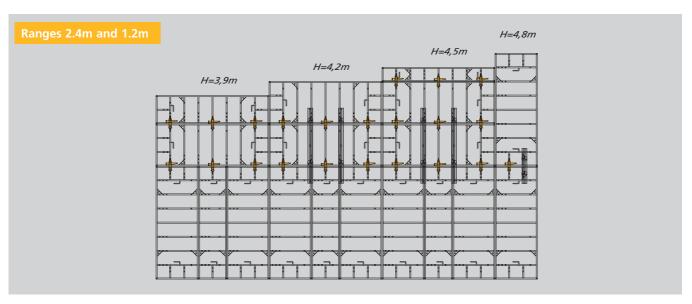








▲ NEVI Panel's height range (Ranges 4.2m + 5.4m)



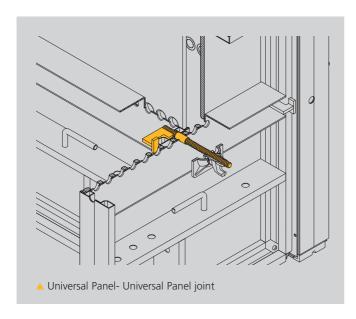
▲ NEVI Panel's height range (Ranges 3.9m + 4.8m)



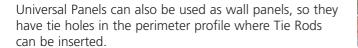
Universal Panel

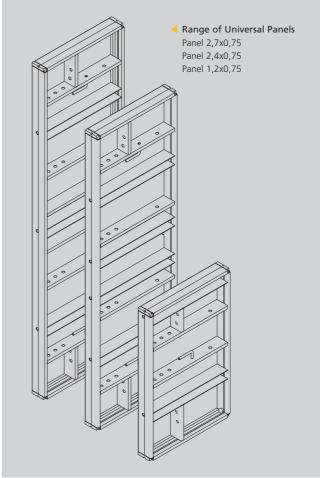
A world of possibilities

The **Universal Panel** has U-shaped ribs with multipunched holes. Thus, these holes permit quickly framing corners, bulkheads and pilasters combining Universal and wall panels.











Clamps:

Union with a hammer strike

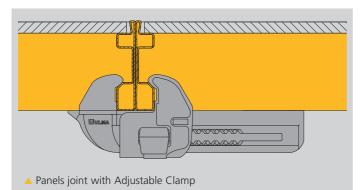
Adjustable Clamp

Union with and without fillers

The Adjustable Clamp is the main component used to join panels horizontally and vertically. With one single strike of the hammer, it can be used to form big gangs assuring always, no any concrete leak.

· It has three basic functions:

- Joining
- Aligning
- Stiffening



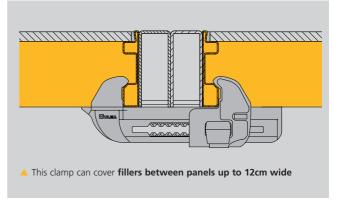


▲ Ease of installation





▲ Joining panels with filler





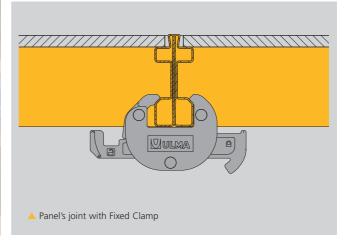
Fixed Clamp

Perfect joint between panels

This clamp **joins panels without fillers**, it means, that **it can not be used any** with compensation between panels. Just as with the **Adjustable Clamp**, all panel joints can be formed with this clamp.









The **Fixed Clamp** includes two icons in the wedge, simulating a padlock, indicating the sense of striking for its closure or opening.



▲ The clamp joins panels in the edge

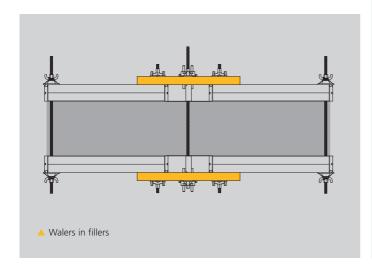
Waler:

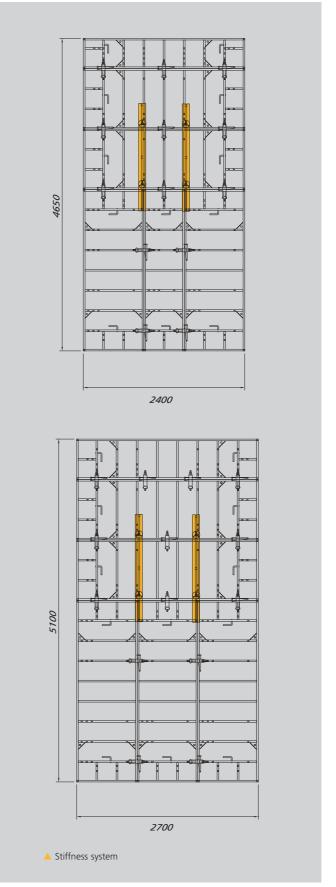
A consistent lifting or alignment of panels

The Waler is an auxiliary element used to lift gangs and alignment accessory for compensations.



▲ Hooks and Plate Nuts 15 are used to fix this waler to the panel.







Tying System:

This tying system is strong enough to support the high pressures exerted when concrete is poured

The tying system is formed by Tie Rods and its fixation, the Plate Washer Nut. Its special design is developed to support high pressures of the concrete.

NEVI system uses Ø15mm Tie Rods. Its function is to connect both panels, situated face to face, inserting the Tie rod through the frame's holes. They can be recovered after curing because they are protected by plastic tubes, whose length also defines the different thicknesses of the wall.

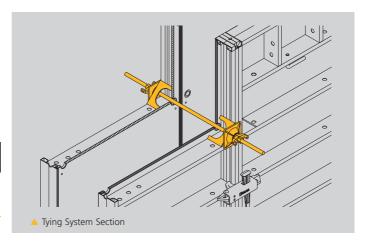
NAME 15 mm Tie	
Plate Washer Nut 15	
Spacer Tube 22/25	Control of the second of the s
Cone 22	
Tie Rod 15	



▲ The nut design allows the entering of Tie Rod



The Plate Washer Nut is the tying system's anchoring component. It is capable of supporting small inclinations in the rods





▲ Being protected by plastic tube, the rods are reusable

Lifting:

Completely safe and resistant gang lifting

The Lifting Hook is an auxiliary component used in conjunction with a crane to lift single panels or gangs of panels.

This element has a maximum working load of **1.200 kg**, with a recommended angle of 60° between the slings. A minimum of two hooks must be used for gang lifting.

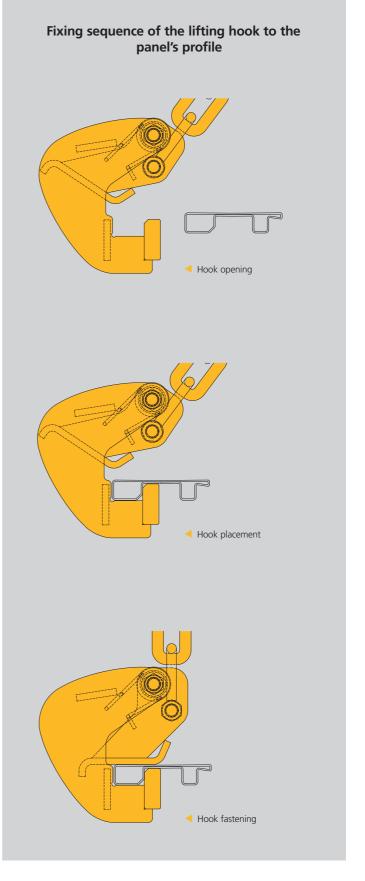
It has "CE" mark for the European Directive 98/37/CE on machinery.



▲ Lifting Hook fixed to the Panel



 ${\color{red} \blacktriangle}$ It is recommended to use two lifting hooks when lifting



Safety Elements:

Total and collective protection

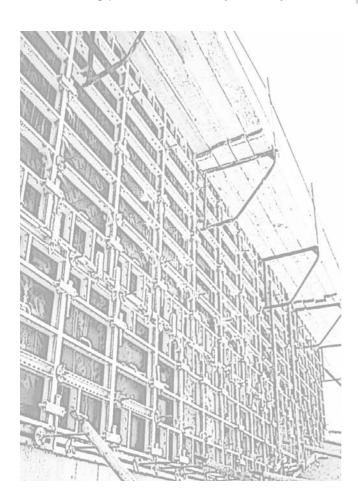
ULMA Construcción strives daily to assure **complete**, **personal and collective protection for workers and third parties alike**. The company provides the same care for its products as it does for its professionals, always seeking to obtain the pertinent certifications from accredited companies. All of its systems incorporate **safety elements to protect personnel when assembling and using** the system.

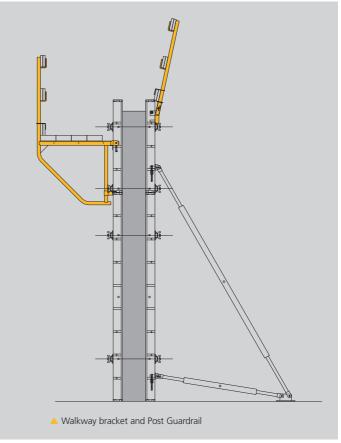
Work Platforms:

Stable and safe working area

Work at high elevations, such as those reached when pouring concrete or installing different elements on top of the formwork, should be carried out from **safe and stable** work platforms that prevent workers from falling. ULMA Construction provides working areas, stable and secure, guaranteeing the integrity of the worker.

The working platforms are built by Walkway brackets.







▲ Safe working area in every height







▲ Detail: fixed to a horizontal rib

▲ Detail: fixed to a vertical rib

■ Walkway bracket

Safe support at high elevations

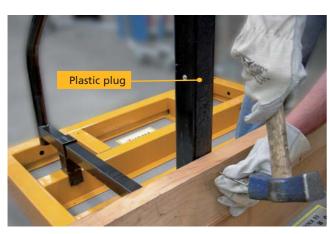
This accessory, support for the working platform, is fixed by passing the rods through the tie holes on the horizontal ribs or by tying them to the vertical tubes. The abutment is supported by the lower ribs.

This component can also be used with other ULMA Construcción's vertical formwork systems.

It includes elements that allow precisely **installing handrails and toeboards** using planks.

The work platform is created by nailing various planks to the top of the plastic block on the walkway bracket.

The same bracket system can be assembled on the opposite panel, or a safety handrail, using the Post Bracket and the Safety Handrail Post.



▲ Work Platforms instalation



▲ The lateral sides of the platform can be covered using Clamps Safety Handrail.



Stabilizing System:

Constant balance

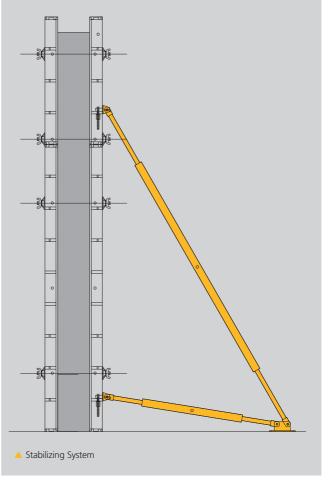
Elements used during panel assembly to stabilize them against wind loads and to plumb the formwork once it is assembled. The system uses adjustable jacks to support both tensile and compression stresses.





▲ Gallery inside formwork stabilized to the ground

- It is comprised of the following:
- **Push-pull prop:** a tube over which two jacks slide to acquire the proper length. More than one type of push-pull prop may be used to stabilize the formwork based on the height of the formwork. Push-pull props range in length from 1.1 to 6m.
- **Push-pull prop Head 25:** an element that joins the panel and the push-pull prop. It can be placed over both the vertical and horizontal ribs.
- **Push-pull prop shoe:** component used to anchor push-pull props to the foundation through the holes includes on it. It's recommended to use HSA M20X125 Hilti anchors.





▲ Push-pull prop fixed to a vertical rib



▲ Push-pull prop fixed to a horizontal rib



▲ Gangs stabilized by Push-pull prop



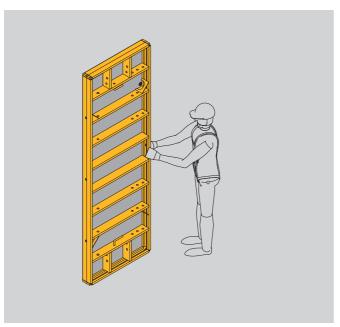


Basic assembly process

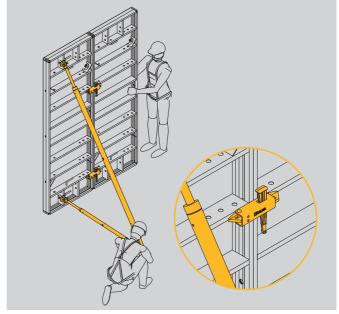
The work process described below may vary depending on the geometry required. Work at high elevations should be executed safely from working platforms or using reglamentary auxiliary equipment that guarantees the operator's safety.

NEVI formwork system can be assembled either by hand or by crane forming gangs.

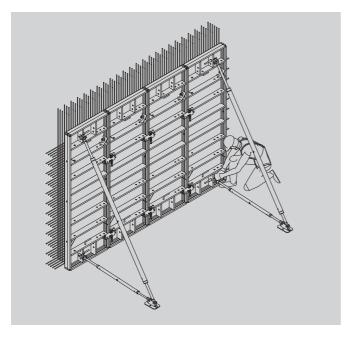
Handset assembly



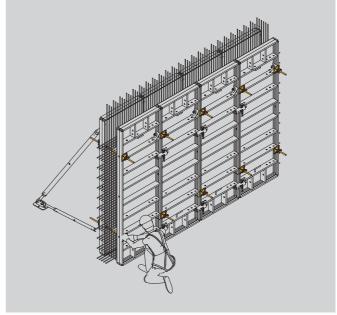
 \triangle · Move the panels by hand to the defined location.



- 2 · Stabilize the panel with the stabilizing equipment anchored to the ground.
 - · Assembly the rest of Panels joining them with clamps.

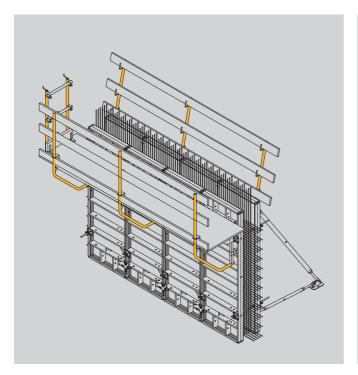


🛕 · Clean and apply release agent on the form face before placing reinforcing steel.

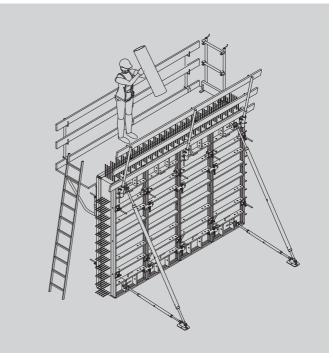


4 · Assemble the opposite formwork line, joining panels with clamps and walers.

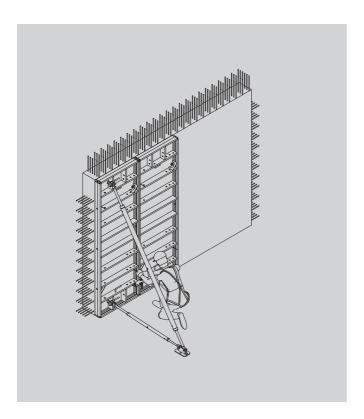
· Insert the tie rods.



A · Install the handrails and working platforms over the Panels using appropriate auxiliary equipment.



⚠ · Using appropriate auxiliary equipment to reach the walkway platform, pour the concrete.



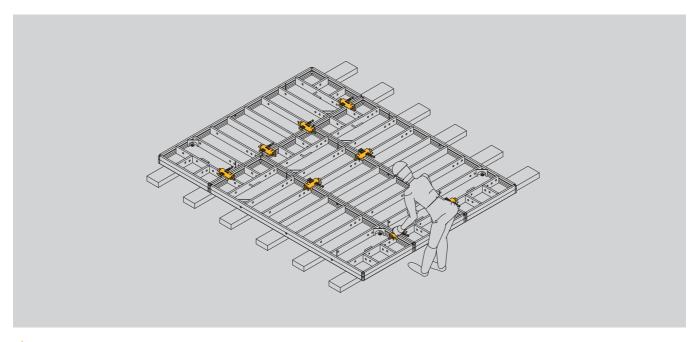
• Once the concrete has cured, stripping can begin.



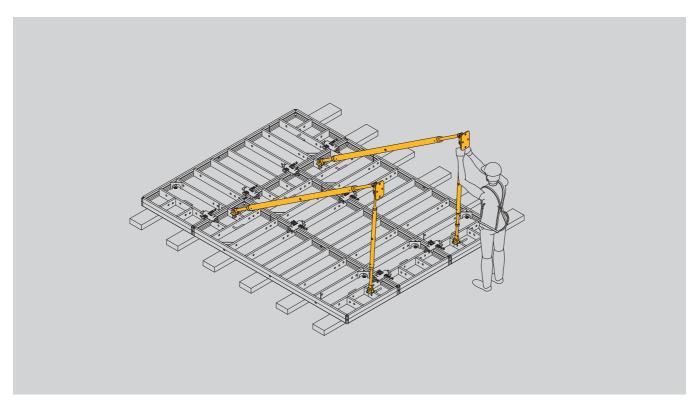
▲ The NEVI Modular Formwork lightweight allows handset assembly



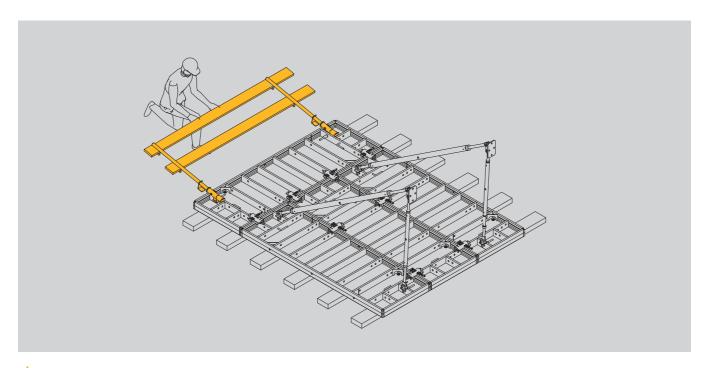
Gang assembly procedure



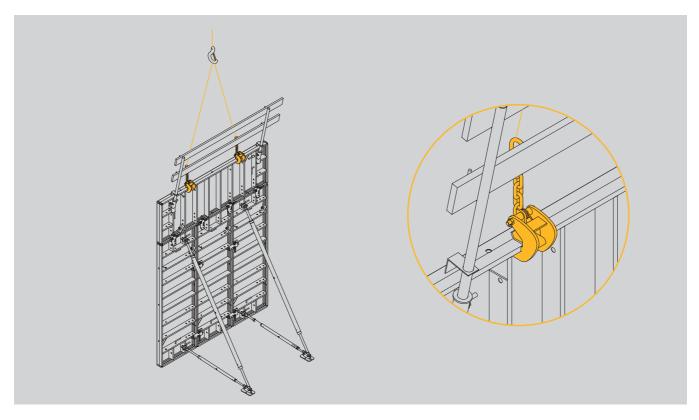
- $oldsymbol{\Lambda}$ · Place formwork Panels on top of the wood sills with the metal frame facing upward.
 - · Connect the panels with clamps on the vertical and horizontal joint and with walers if necessary.



🛕 · Assemble the stabilizing equipment with Push-pull Props, Heads and Push-pull Prop Shoes.

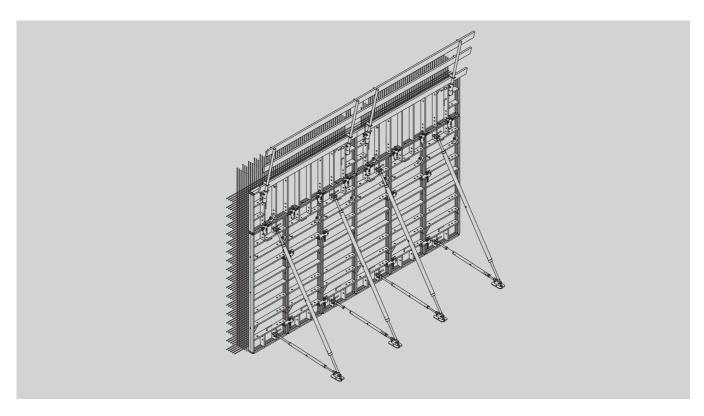


- 🛕 · Install handrails on the top of the gang using post brackets, safety handrails posts and wood planks or tubes.
 - · Alternatively Walkway Brackets can be used to form the working platform and the handrail.

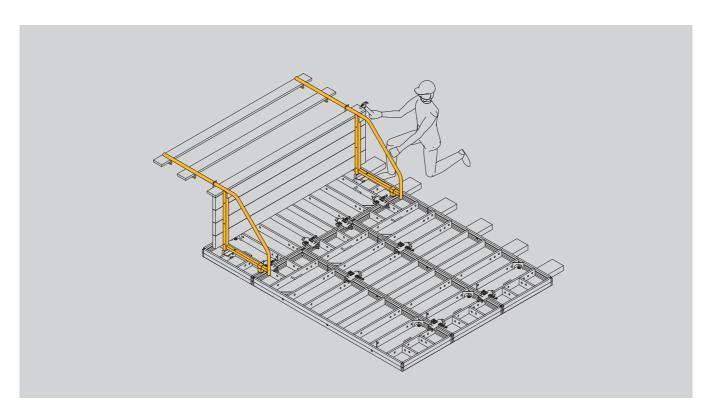


- △ · Fasten the lifting hooks.
 - \cdot Lift and place in position.
 - · Anchor to the ground.

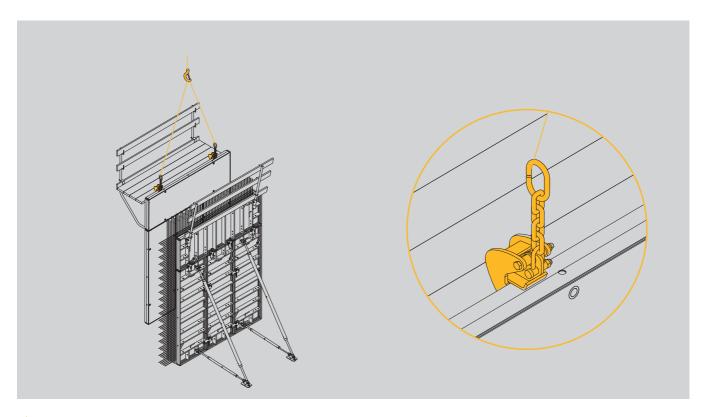




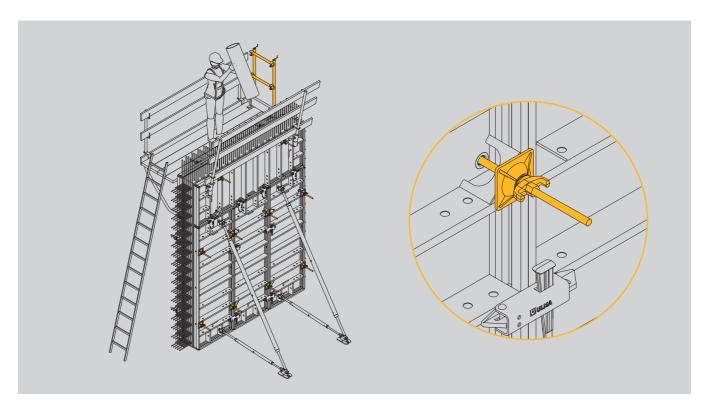
△ · Clean and apply release agent on the form face before placing reinforcing steel.



• Repeat the gang assembly process on the opposite side, building the working Platform using Walkways Brackets and the handrails with wooden planks.



⚠ · Lift the gang by the Lifting Hooks and place it face to face to the push-pull prop gang.



- Insert the Tie Rods and fix them using the Plate Washer Nuts.
 - · Install the lateral Handrails.
 - · Concrete can be poured after the bulkheads have been installed.



Technical Solutions:

A World of geometrical possibilities

grafsystem:

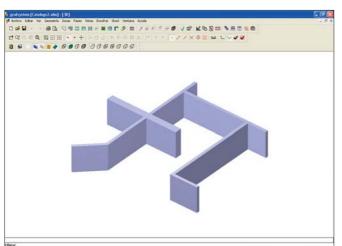
Application software

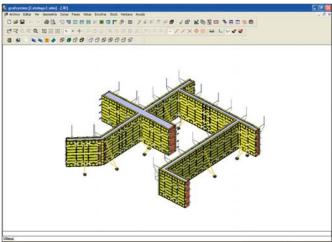
This software was developed by ULMA Construcción, and it facilitates the design of all construction site solutions that can possibly be solved with any product in the portfolio. **Grafsystem obtains, quickly and easily, the assembly drawings and a detailed budget of the materials required for each project.**





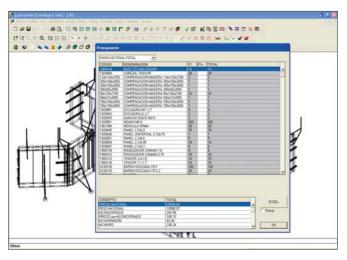
In short, by simply entering the desired structure geometry, this software provides the best solution for any case.





▲ Jobsite geometry

▲ Solution - 3D framed wall



▲ List of materials - budget



All imaginable wall geometries become reality with NEVI Modular Formwork.

90° Corners

The inside face of 90° corners is framed using the **Inside Corner.**

These corners provide a solution for wall thicknesses between 15cm and 60cm, with a standard deviation of 5cm. They also provide solutions for all wall dimensions, whether without compensation or with maximum compensation thickness of only 5 cm using Plate nut washers so walers are not required.

There are various solutions used to frame the **outside face** of 90° wall corners:

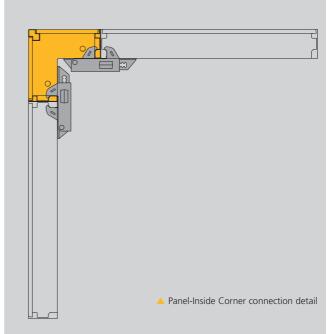
- Outside Corner
- Universal Panel

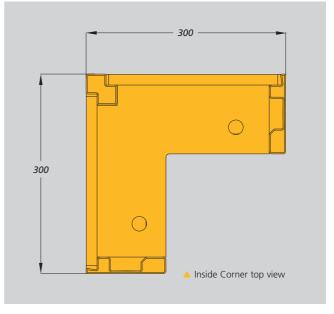


▲ Inside Corner with compensation



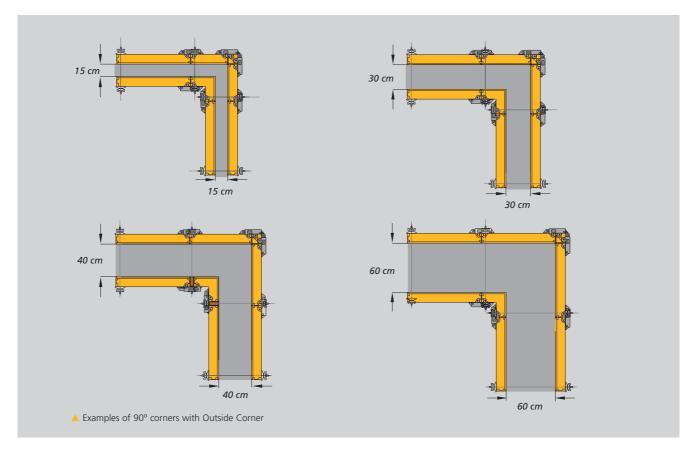
▲ Inside Corner joint with Adjustable Clamps



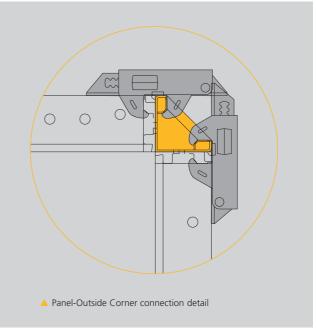


With Outside Corner

The outside face of 90° corners is framed with the Outside Corner, joining it to the adjacent Panels with Clamps in both directions.







▲ Panel-Outside Corner joint with Adjustable Clamps

With Universal Panel

Combining the Universal Panel with different wall panels facilitates **obtaining the desired thicknesses in every case**. It also reduces the need to use compensation.

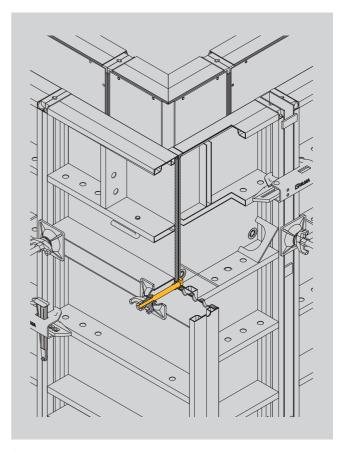
Both, the lateral holes of the wall panels and the holes of the Universal Panel's multipunched ribs, provide a wide range wall dimensions in increments that are multiples of 5cm.



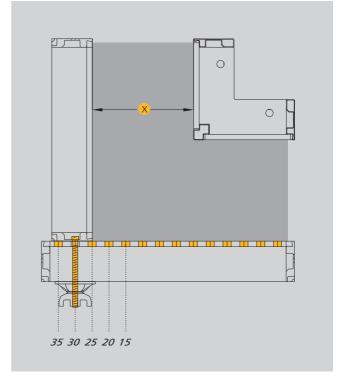
▲ The joint is tied using the Panel Bolt or Bulkhead Hook and Plate Washer Nut 15.



△ Corner with Universal Panel and standard Panel



🖕 Universal Panel- Wall Panel joint with Panel Bolt

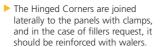




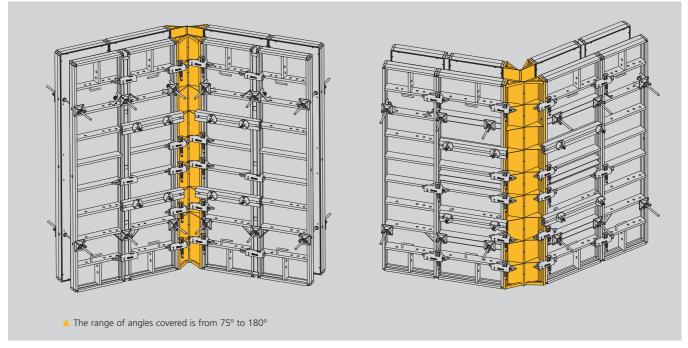
Hinged corners

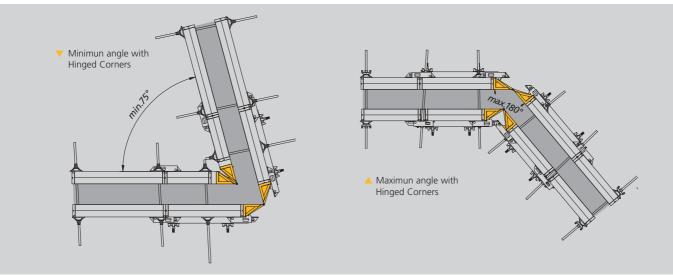
ULMA Construcción has provided to **NEVI** Vertical Formwork system with different elements that allow to be adapted to any type of angle, whether 90° or an angle other than 90°.

With this objective have been designed the **Hinged Corners** to be used on the inside and outside side of the wall regardless of the desired angle: acute or obtuse.



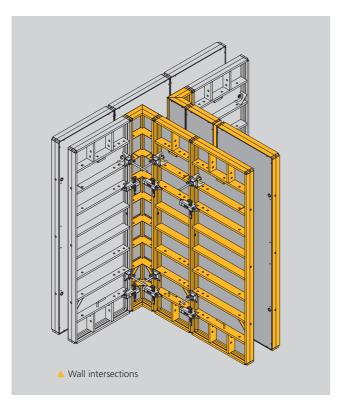




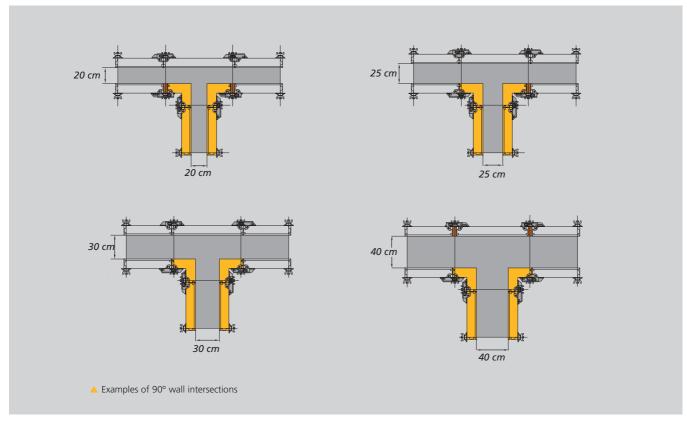


Wall intersections

Combining the **Inside Corner** with the different panel widths, it can be solved various wall thicknesses; thus it is possible to greatly reduce the use of compensations.







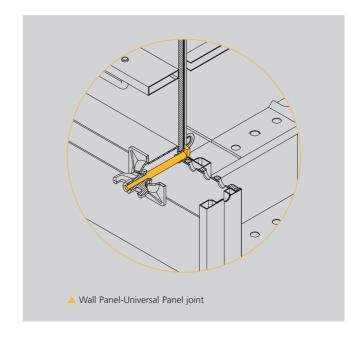
Bulkheads

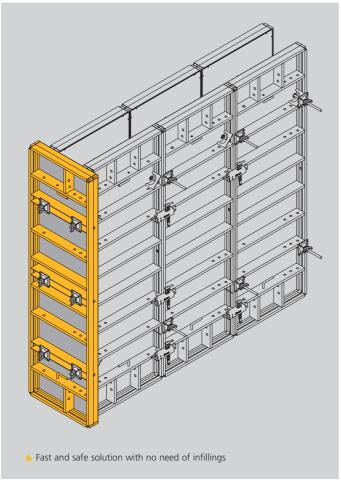
There are different options for solving bulkheads:

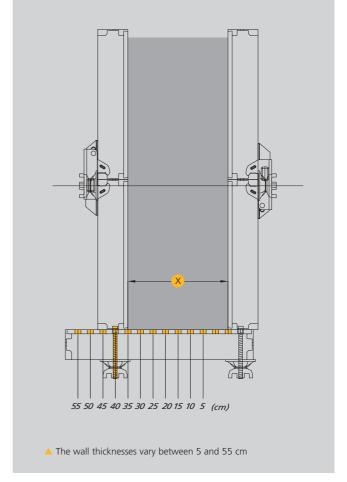
With Universal Panel

The Universal Panels design provides a fast and safe solution with no need of infillings.

The **Universal Panel** is fixed to the standard panels using the **Bulkhead Hook** and the **Plate Washer Nut 15.**

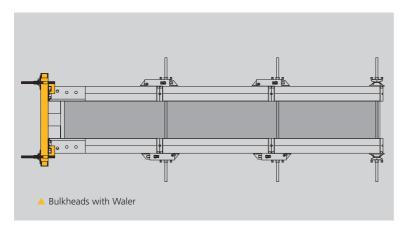






With Waler

The Walers are fixed to the Panels by passing the Bulkhead Hook through the lateral holes in the profile. The bulkhead plywood is nailed and supported on the Walers.





▲ Fixing the Waler to the Panel using Bulkhead Hooks

Other types of bulkheads:

With Outside Corner



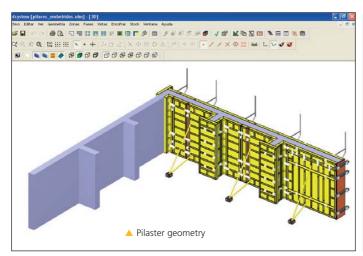


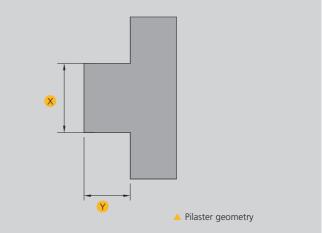




Pilasters

The pilasters can be solved with Inside Corners, Universal Panels and wall Panels depending on the desired pilaster's geometry.

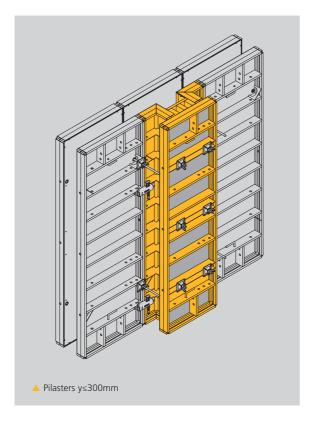


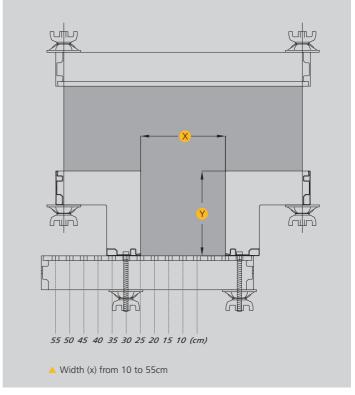


With Universal Panel

Inside corner with Universal Panel: y≤300mm

The pilaster with a depth less than 300mm is solved with **Inside Corner** and **Universal Panel**.

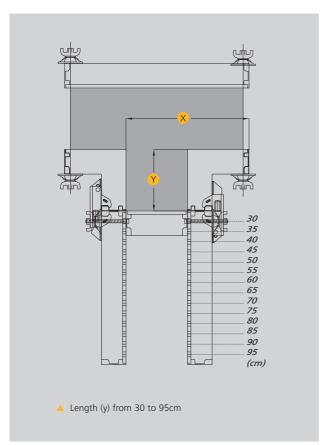


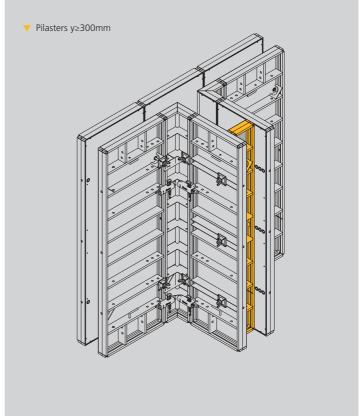


■ Universal Panel with standard Panel: y≥300mm

The pilaster with a depth greater than 300mm is solved with **Inside Corner, Universal Panel** and **standard wall panels**.

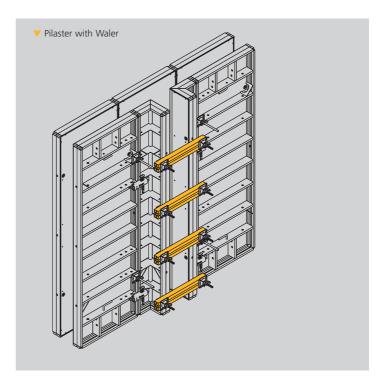
Universal Panel parallel to the wall





With Waler

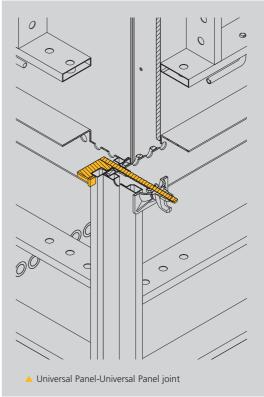
It is possible to make any kind of pilaster with this element.





Columns



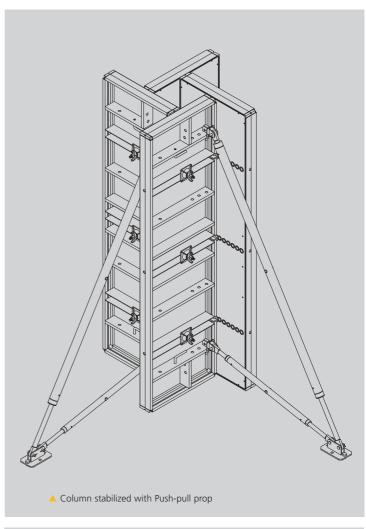


- The Universal Panel provides solutions for the following geometries: columns from 10x10cm to 65x65cm with the option to adjust every 5cm. It is also possible to make larger columns section joining two universal panels laterally.
- The range of heights for this type of panel is as follows: 2.7m; 2.4m; 1.2m.
- These support **60 kN/m²** of concrete pressure.
- Panels are joined with a **bulkhead hook and a Plate Washer Nut 15**, using the lateral holes and holes in U-shaped ribs
 spaced every 5cm on the panels.

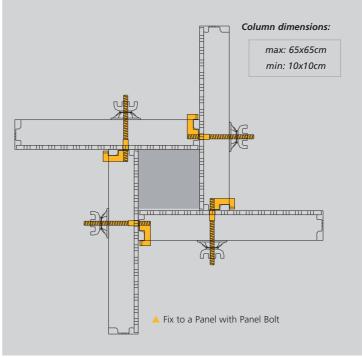


▼ Simple rectangular column



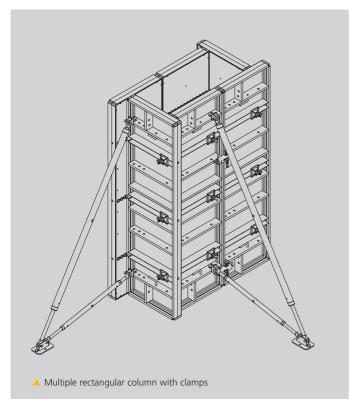


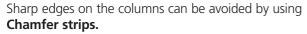




Multiple rectangular column

When the maximum dimensions of a panel are exceeded, it is possible to join laterally two Universal Panels with clamps to obtain bigger sections. In these cases, it is necessary to use tie rods.

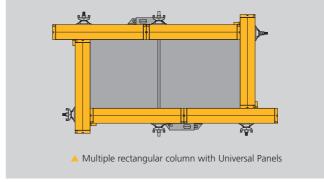


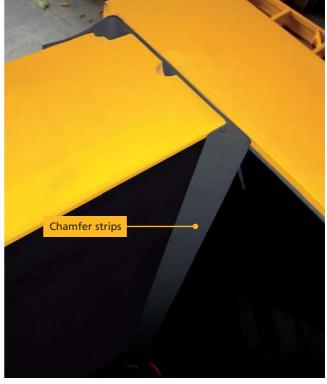


This is a plastic component that is placed between two panels joined together at 90° angles; it is not necessary to nail it to the plywood because **its special shape allows it to brace the profile.** It also has slotted holes necessary to permit passing the Universal Panel Bolt through the lateral holes of the Column Panel.









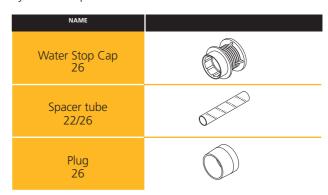
■ Tanks - Water stop solutions

There are two ways to provide water stop solutions for walls:

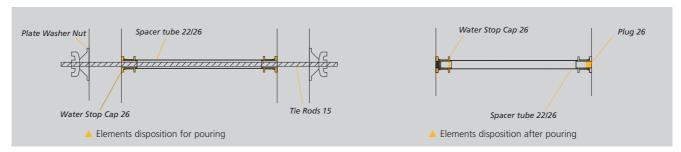
Water Stop System 26

Valid for pressures up to the equivalent of a 10m height of water.

System components:



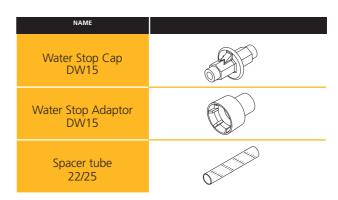
These components are placed on Tie Rods rather than the standard tube and cone.



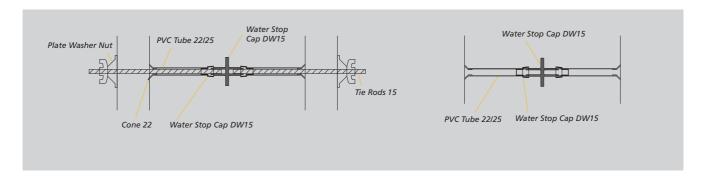
Water Stop System DW15

This component can support a pressure equivalent of a 70m height of water.

System components:



In this case, the **Water Stop DW15** and the **Water Stop Adaptor DW15** are installed in the middle of the wall and are used to connect the Tie Rods and corresponding standard consumable parts on both sides. These components remain in the concrete.



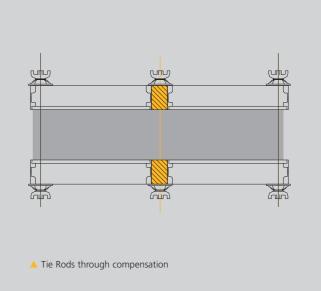


Filler between panels

Fillers up to 10cm:

■ Tie Rods through compensation + Plate Washer Nut 15
It is also possible to use metal compensation with holes for passing Tie Rods.



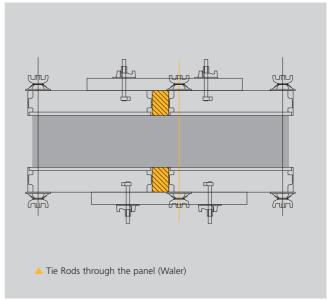


Wood compensation

■ Tie Rods through the panel:

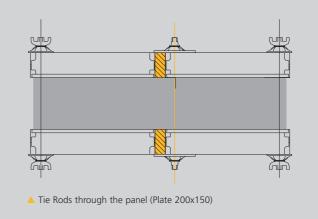
▶ With Waler





► With Plate Nut 200x150 Solution valid for fillers up to 5cm of compensation.

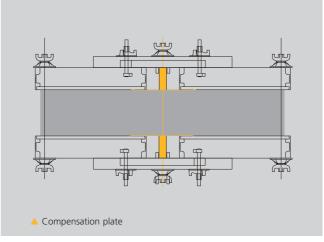




Filler wider than 10cm:

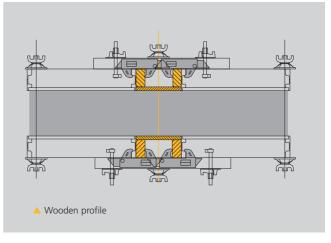
▶ NEVI Compensation Plate





▶ Wooden profile







One face formwork

For cases in which it is not possible to place Panels face to face, and thus it is impossible to use Tie Rods to support the pressure of the concrete, it is necessary to use exterior structures to support said forces.

UCAB Walers are used with NEVI Formwork for one face formwork.

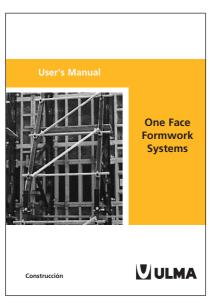
It is quick and easy to anchor the panels to the walers using hooks.

However, at the base, the trusses must be anchored to the ground by rods that were previously installed in the sills or foundation. These rods should support the concrete pressure.

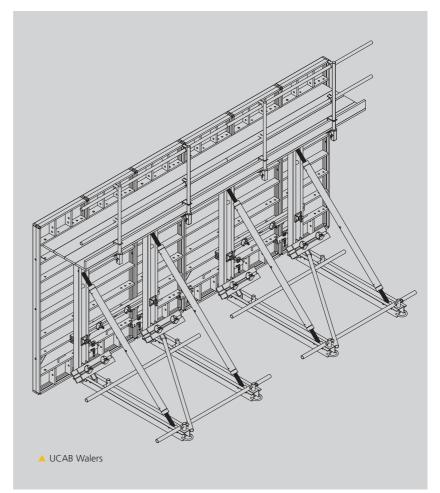
After assembly or installation, these systems, panels and trusses together, can be lifted and moved to be used in different positions or pourings.

For safety, when working at high elevations is required, working platforms can be incorporated into this system.

These one face formwork systems are compatible with other ULMA Construcción vertical formwork systems.



▲ For further information, see the One Face Formwork Systems User's Manual





▲ UCAB Walers



Climbing

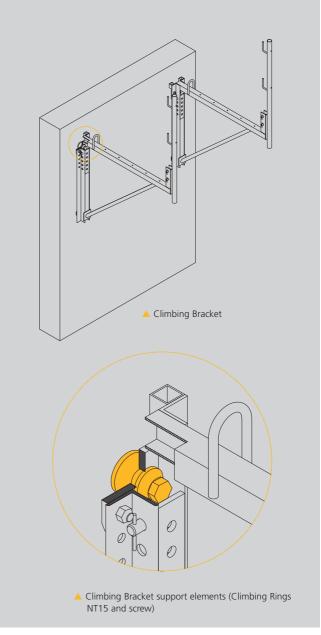
Climbing formwork rises vertically by stages to build walls that cannot be completed in a single pouring due to their height. Accordingly, a working platform is built at the required height, and the formwork is supported on it.

The **Climbing Bracket** supports the platform and the formwork.

Climbing Brackets are used for walls up to 20m height where maximum pouring height should be 3.9m. If it is necessary to build higher walls, where pouring height is also higher than 3.9m, ULMA Construcción has other climbing systems appropriate for these specific needs.

Brackets and formwork are moved and lifted separetely, connecting the brackets with bracing tubes.







The climbing bracket support on the **Climbing Rings NT15** should be screwed in to **Cones DW15/M24** embedded that remain in the wall since the previous pouring level.

For architectural walls, it is also possible to use a smaller cone: **Cone AWF**, which is assembled and used in the same way as the Cone DW15/M24.

The cone can be assembled without having to perforate the plywood, by placing it in the panel tie hole position. If the geometrical shape to be executed (holes, windows, etc.) requires fixing the cone at a different height, then the plywood can be perforated.

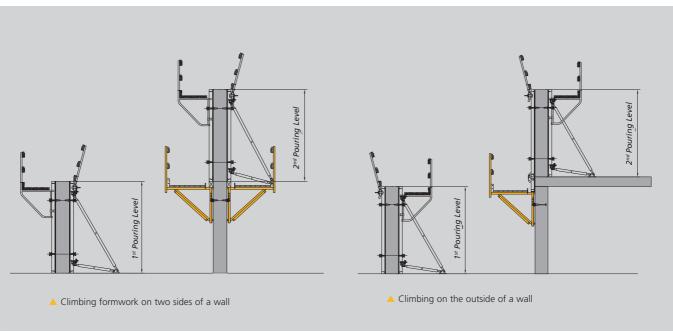
It is possible to climb on either one or two sides of the wall. If climbing on one face, the inside formwork will be supported by the interior slab. If climbing on both sides of the wall, brackets can be used on both sides, or interior platforms can be directly supported on the wall with gravity pawls (inside elevator shafts, stairs, etc.).

If climbing is required for higher walls and also higher pouring heights, other brackets, that allows moving and lifting together brackets and formwork, should be used because this way **assembling time can be considerably reduced.**



▲ Climbing Bracket support system





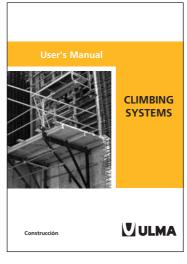


Among ULMA Construcción's **wide range of brackets**, the proper mode can be selected based on the following criteria: platform width, formwork surface, cone recovering platform and roll-back system, etc.







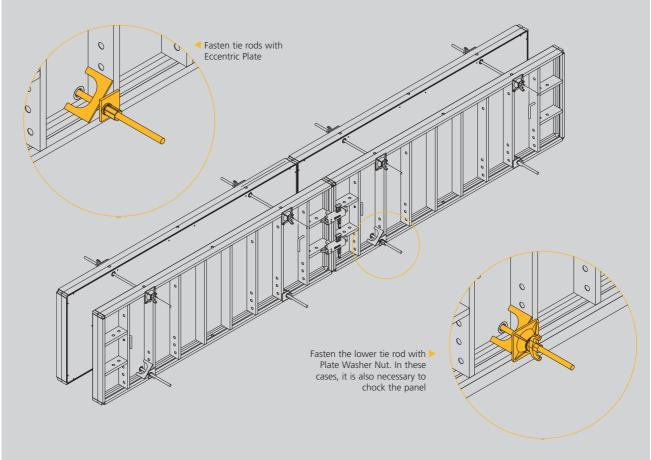


 For further information refer to the Climbing Systems User's Manual.



Foundations





Other solutions

FElevator shafts



Polygonal walls





Inclined walls





Large gangs with walers





Compatibility with circular column formwork





Other solutions



Handling and repair

Un sistema de fácil empleo

Shipping and handling

Material should be handled and transported with the proper auxiliary equipment, after **marking off the work area** and stopping the flow of pedestrian traffic in the area.

Transport small elements in crates or boxes to avoid losing them.



Stacking

Stack the plywood panels in such a way as to avoid damaging them. Place the panels on top of frames in order to maintain order, cleanliness and distribution. At this point, store the panel packets, alternating a block between them after use.



Lifting

Individual panels or gangs of panels always have to be lifted using Lifting Hook. It is recommended to use two hooks with the proper fixing to the panel.





Assembly

Assemble the panels horizontally after placing planks or wood sills on the ground.

Before pouring, steep the plywood surface with release agent.



Once materials have been stripped, clean the panels and store them properly.



Different components have to be cleaned and scraped on the jobsite as soon as they have been stripped. Before any pouring, steep the plywood with release agent as previously explained.

Repairing

ULMA Construcción has specific equipments for cleaning, repairing panels and replacing plywood.











WEIGHT (KG)

Components and accessories

WEIGHT (KG)

86

Panels

Range 2.70 NEVI Panel 2.7x0.9 (2.43 m²) NEVI Panel 2.7x0.6 (1.62 m²) NEVI Panel 2.7x0.45 (1.21 m²) NEVI Panel 2.7x0.3 (0.81 m²)

64 1920651 55 1920654 42.9 1920657

CODE

1920645

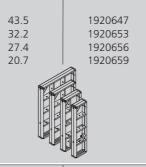
Range 2.40

NEVI Panel 2.4x0.9 (2.16 m²) NEVI Panel 2.4x0.6 (1.44 m²) NEVI Panel 2.4x0.45 (1.08 m²) NEVI Panel 2.4x0.3 (0.72 m²)

77	1920646
58	1920652
49.2	1920655
38.5	1920658

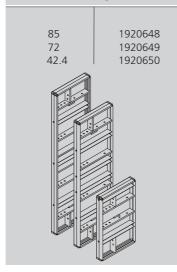
Range 1.20

NEVI Panel 1.2x0.9 (1.08 m²) NEVI Panel 1.2x0.6 (0.72 m²) NEVI Panel 1.2x0.45 (0.54 m²) NEVI Panel 1.2x0.3 (0.36 m²)



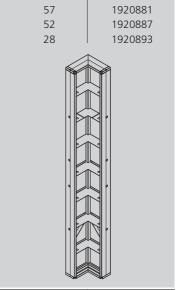
NEVI Universal Panel

NEVI Universal Panel 2.7x0.75 NEVI Universal Panel 2.4x0.75 NEVI Universal Panel 1.2x0.75



Corners

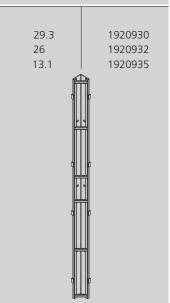
Inside Corners				
NEVI Inside Corner 2.7				
NEVI Inside Corner 2.4				
NEVI Inside Corner 1.2				



CODE

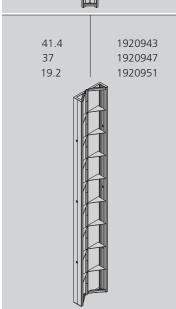
Outside Corners

NEVI Outside Corner 2.7 NEVI Outside Corner 2.4 NEVI Outside Corner 1.2



Hinged Corners

NEVI Hinged Corner 2.7 NEVI Hinged Corner 2.4 NEVI Hinged Corner 1.2



Tying Elements – Lifting Compensations WEIGHT (KG) CODE CODE **Compensation Tube NEVI Lifting Hook** 8 1920835 NEVI Compensation Tube 2.7 1920901 24 NEVI Compensation Tube 2.4 21.4 1920904 NEVI Compensation Tube 1.2 10.7 1920909 **NEVI Clamp** 3.4 1920851 **MEGALITE Clamp** 1.4 1920818 **Compensation Profile** NEVI Compensation Profile 2.7 24 1920863 1920867 NEVI Compensation Profile 2.4 21.4 NEVI Compensation Profile 1.2 10.8 1920871 Gang PESO (kg) CÓDIGO **COMAIN** waler COMAIN waler 3 18.2 1850433 COMAIN waler 1.6 9.8 1850159 1850162 COMAIN waler 0.75 4.8 **Compensation Plate** 1920916 NEVI Compensation Plate 2.7 39.3 NEVI Compensation Plate 2.4 35.5 1920920 Hook NEVI Compensation Plate 1.2 20 1920924 Hook 0.45 1850164 Long hook 0.7 1850183 **Fixed Plate Nut 15** 0.73 7238000

Push-pull Props –			Work Platforms –	Safety	
Push-pull Prop Head 25	WEIGHT (KG)	CODE 1920804	NEVI Post Bracket	WEIGHT (KG)	10200F4
Tush-pull Frop Head 23		1920004	MEVI FOST BIACRET	1.3	1920854
			Safety Handrail S-V	3.9	1860516
Push-pull Prop Shoe	4.3	1900144			
			Safety Handrail Post	3.4	1902210
Push-pull Prop Push-pull Prop 1.1-1.7 Push-pull Prop 2.4-3.5 Push pull Prop 3.6.4.8	7.8 24.2	1900134 1900123			
Push-pull Prop 3.6-4.8 Push-pull Prop 5-6	43.3 51	1908168 1900147	ORMA Walkway Bracket	14.8	1861094



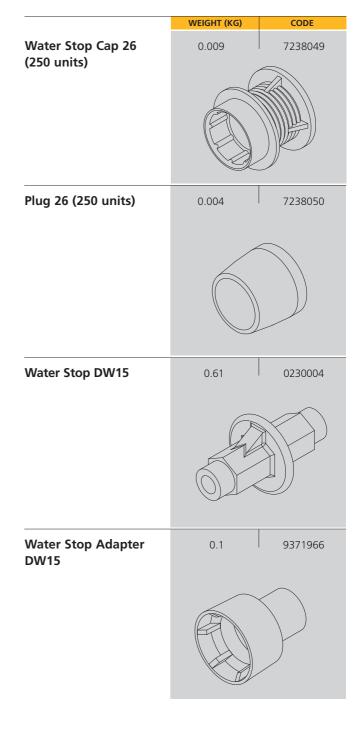
Climbing WEIGHT (KG) CODE **ORMA Climbing Bracket** 1900386 36.5 Cone DW 15/M24 1901080 **Climbing Ring NT 15** 1901083 0.8 **Cone-Waler Connector** 1901245 1.95 **Hexagonal Screw** 9053013 0.54 M24x120 DIN931-10.9 Lost Tie Rod 15/0.25 1900738

Anchors

Allehols	14(E) (1(C)		
	WEIGHT (KG)	CODE	
Tie Rod			
Tie Rod 15/1	1.7	0230100	
Tie Rod 15/1.2	2	0230120	
Tie Rod 15/1.5	2.2	0230150	
Tie Rod 15/2	3.3	0230200	
Tie Rod 15/6	8.6	0230600	
Tie Nou 15/0	0.0	0230000	
	OMMAN.		
NEV/I Desilehand Hank			
NEVI Bulkhead Hook	0.76	1920811	
	K	a \$ ~%	
	4		
Panel Bolt	0.39	1861122	
	0.55		
		ν -	
NEVI Eccentric Washer	0.22	1020004	
NEVI Eccentric washer	0.33	1920894	
		//	
	V		
DI 4 147 I N 4 4 5			
Plate Washer Nut 15	1.4	1900256	
	A -		
	KX	귀.	
	`		
Hexagonal Nut 15	0.22	7238001	
_			
	(€	≫ /	
Plate Nut D15 200x150	2.6	1908158	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.0		
	But	5	
)//	
	*		

Consumable parts

Consumable parts	1	
	WEIGHT (KG)	CODE
NEVI Chamfer Strip 2.7m (16 units)	0.63	1920720
Spacer Tube Spacer Tube 22/25 (75ml) Spacer Tube 26/29 (50ml) Spacer Tube 32/36 (50ml) Spacer Tube 22/26 (100ml)	0.3 0.25 0.3 0.4	7230455 1905814 9371968 7238047
Cone Cone 22 (250 units) Cone 26 (250 units) Cone 32 (250 units)	0.006 0.007 0.03	7230264 7238048 9371967
Plug Plug 20 (250 units) Plug 22 (250 units) Plug 30 (250 units) NEVI Plug	0.003 0.003 0.004 0.002	1861799 1900159 7238046 1920549
Plastic Collar NEVI Upper Plastic Collar NEVI Lower Plastic Collar	0.005 0.004	1920428 1920429







ULMA Worldwide

EUROPE

Germany ULMA Betonschalungen und Gerüste GmbH

Kronberger Str. 16 D-63110 RODGAU-DUDENHOFEN Phone: +49 6106 28677 0 Fax: +49 6106 28677 86 www.ulma-c.de

Nordwest Branch

Stresemannallee 4c D-41460 NEUSS Phone: +49 2131 40201 0 Fax: +49 2131 40201 99

Südwest Branch

Manfred – Wörner – Str. 115 D-73037 GÖPPINGEN Phone: +49 7161 50608 42 Fax: +49 7161 50608 43

France ULMA, S.A.R.L.

27, rue Gustave Eiffel Z.I. de la Marinière 91070 BONDOUFLE Phone: + 33 1 69 11 54 50 Fax: + 33 1 69 11 54 54 www.ulma-c.fr

IDF Échafaudages Branch

22 Bis, rue Gustave Eiffel Z.I. de la Marinière 91070 BONDOUFLE Phone: + 33 1 69 11 63 30 Fax: + 33 1 69 11 63 31

IDF Construction Branch

27, rue Gustave Eiffel Z.I. de la Marinière 91070 BONDOUFLE Phone: + 33 1 69 11 63 40 Fax: + 33 1 69 11 63 37

Eguilles Branch

50, allée Meulière Z.I. – Route de Berre 13510 EGUILLES Phone: + 33 4 42 64 62 30 Fax: + 33 4 42 64 62 31

Saint Herblain Branch

11, rue Fondeur Z.I. du Tisserand 44800 SAINT HERBLAIN Phone: + 33 2 51 80 48 04 Fax: + 33 2 51 80 48 05

La Chapelle d'Armentières Branch

Zone Industrielle Rue André Ampère 59930 LA CHAPELLE D'ARMENTIÈRES Phone: + 33 3 20 07 11 86 Fax: + 33 3 20 07 11 68

Tarnos Branch

40, rue de l'Industrie Z.I. de Tarnos 40220 TARNOS Phone: + 33 5 59 64 44 45 Fax: + 33 5 59 64 44 84

Lons Branch

9, Avenue Larregain Z.I. du Monhauba 64140 LONS Phone: + 33 5 59 62 71 97 Fax: + 33 5 59 13 84 33

Italy ALPI, S.P.A.

Zona Industriale Est I-39035 MONGUELFO (BZ) Phone: + 39 0474 947 400 Fax: + 39 0474 947 499 www.alpionline.net

KazakhstanULMA Kazakhstan

01000 ASTANA 6/2, Tashenova St. 4th floor, offices 7,9 Phone/Fax: + 7 7172 58 05 19 Phone: + 7 7172 37 93 48 www.ulma-c.kz

Poland

ULMA Construccion Polska S.A. 03-115 WARSAW

ul. Klasyków 10 Phone: + 48 22 506 70 00 Fax: + 48 22 814 31 31 www.ulma-c.pl

Białystok Branch

15-100 BIAŁYSTOK ul. 1. Armii Wojska Polskiego 9, lok. 203 Phone: + 48 85 676 73 00 Fax: + 48 85 675 06 53

Olsztyn Office

10-467 OLSZTYN ul. Sprzętowa 3, lok. 18 Phone: + 48 89 537 73 10 Fax: + 48 89 532 04 95

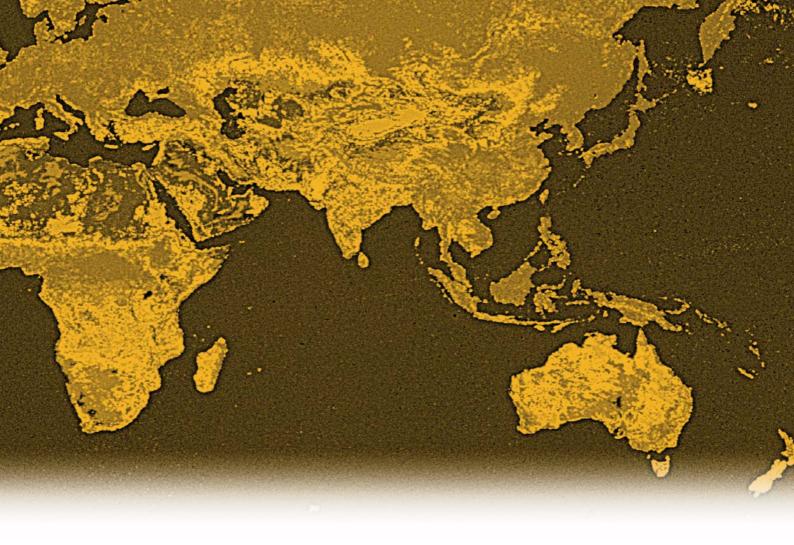
Gdańsk Branch

80-298 GDAŃSK ul. Budowlanych 27 Phone: +48 58 522 78 00 Fax: + 48 58 667 02 04

Szczecin Branch

70-676 SZCZECIN ul. Gerarda Merkatora 7 Phone: + 48 91 485 77 30 Fax: + 48 91 462 34 63





Katowice Branch

40-203 KATOWICE al. Roździeńskiego 188b Phone: + 48 32 356 74 80 Fax: + 48 32 353 33 90

Kraków Branch

31-670 KRAKÓW ul. Powstańców 66 Phone: + 48 12 620 73 70 Fax: + 48 12 647 34 22

Lublin Branch

20-327 LUBLIN ul. Wrońska 2 Phone: + 48 81 749 72 90 Fax: + 48 81 744 04 90

Łódź Branch

94-250 ŁÓDŹ ul. Żniwna 4/8 Phone: + 48 42 666 73 20 Fax: + 48 42 650 03 25

Poznań Branch

61-317 POZNAŃ ul. Ostrowska 484 Phone: + 48 61 838 75 30 Fax: + 48 61 863 01 60

Bydgoszcz Branch

85-831 BYDGOSZCZ ul. Toruńska 278 Phone: + 48 52 323 76 80 Fax: + 48 52 345 25 65

Warszawa Branch

03-197 WARSAW ul. Laurowa 39 Phone: + 48 22 506 72 50 Fax: + 48 22 747 19 10

Wrocław Branch

50-541 WROCŁAW ul. Armii Krajowej 53 Phone: + 48 71 391 76 30 Fax: + 48 71 367 30 90

Nowa Sól Branch

67-100 NOWA SÓL ul. Kościuszki 29 Phone: + 48 68 376 77 60 Fax: + 48 68 387 02 21 wew. 357

Portugal **ULMA Portugal Lda.**

Zona Industrial - Rua A, s/n Vale de Figueira 2695 SÃO JOÃO DA TALHA – LISBON Phone: + 351 219 947 850 Fax: + 351 219 558 022 www.ulma-c.pt

Porto Branch

Zona Industrial da Feiteira Rua das Casas Queimadas 717 Grijó 4415-439 VILA NOVA DE GAIA **PORTO**

Phone: +351 227 418 820 Fax: + 351 227 418 829

Czech Republic **ULMA Construccion CZ**

Prumyslova 1009 294 71 BENATKY NAD JIZEROU Phone: +420 326 910 600 Fax: +420 326 910 601

Romania ULMA Cofraje s.r.l.

Sos Chitilei, 200 012405 - Sector 1 - BUCHAREST Phone: +40 31 425 13 22 / 23 Fax: +40 31 425 13 24 www.ulma-c.ro

Russia **ULMA Rusia**

107005 MOSCOW 9/23, 2nd Baumanskava St. Phone/Fax: + 7 495 777 94 73 Phone: + 7 495 777 94 72

www.ulma-c.ru

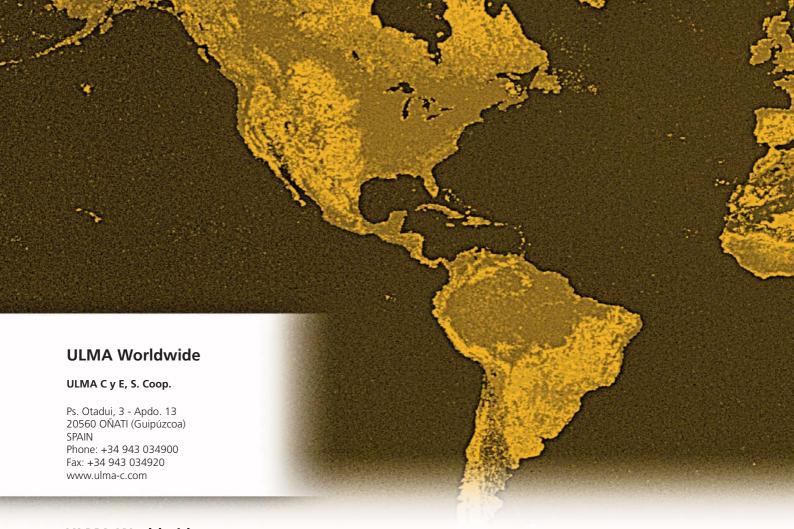
Ukraine

ULMA Formwork Ukraine Ltd. 01013 KIEV 3, Derevoobrobna St. Phone: + 380 44 255 14 92

Fax: + 380 44 255 14 94

www.ulma-c.com





ULMA Worldwide

AMERICA

Argentina ULMA Andamios y Encofrados Argentina, S.A.

Bernardo de Irigoyen 722 6A CP1072AAP CAPITAL FEDERAL Phone/Fax: + 541 14 3425132 www.ulma-c.com.ar

Brazil ULMA Brasil - Fôrmas e Escoramentos Ltda.

Rua João Dias Ribeiro, 210 Jd. Sagrado Coração de Jesus Itapevi – SP CEP: 06693-810 Phone/Fax: + 55 11 3883 1300 Phone/Fax: + 55 11 4619 1300 www.ulma-c.com.br

Rio de Janeiro Branch

Rua Sargento Silva Nunes, 137 Ramos – Rio de Janeiro - RJ CEP 21040-231 Phone/Fax: +55 21 2560 2757 Phone/Fax: +55 21 2560 5541

Centro-Oeste Branch

Quadra 3, Lotes 680/700 Setor Industrial Leste Gama – Brasilia DF CEP: 72445-030 Phone/Fax: +55 61 3556 6226

Sul Branch

Rua Dr. João Inácio, 195/199 Navegantes – Poa RS CEP:90230-180 Phone/Fax: +55 51 3337 1003

Chile ULMA Chile - Andamios y Moldajes, S.A.

Vizcaya nº 325 - Pudahuel (Ruta 68, Camino Noviciado) SANTIAGO Phone: + 56 2 5990530

Fax: + 56 2 5990535 www.ulma-c.cl

Norte Branch

General Borgoña 934 of. 70 ANTOFAGASTA Phone: +56 5 5246770 Fax: +56 5 5246960

Sur Branch

O'Higgins 940 of. 904 CONCEPCIÓN Phone: +56 4 12522930 Fax: +56 4 12228321

USA

ULMA Form Works, Inc.

58 Fifth Avenue Hawthorne, NEW JERSEY 07506 Phone: + 1 973 636 2040 Fax: + 1 973 636 2045 www.ulma-c.us

West (Phoenix) Branch

1530 West Houston Avenue Gilbert, ARIZONA 85233 Phone: + 1 480 304 4942 Fax: + 1 480 304 4948

Mid-Atlantic (Baltimore) Branch

8235 Patuxent Range Road Jessup, MARYLAND 20794 Phone: + 1 443 296 9852 Fax: + 1 443 296 9860

Mexico ULMA Cimbras y Andamios

de México S.A. de C.V. Vía Gustavo Baz Prada 2160 Acceso 5 54060 Col. La Loma TLALNEPANTLA (Mexico State) Phone: + 52 55 5361 6783 Fax: + 52 55 2628 3549 www.ulma-c.com.mx

Peru ULMA Encofrados Perú, S.A. Av. Argentina 2882

LIMA Phone: +51 1 613 6700 Fax: +51 1 613 6710 www.ulma-c.com.pe

Norte Branch

Ctra. Pomalca, km 2,7 Chiclayo- LAMBAYEQUE Phone: +51 7 460 8181 Fax: +51 7 460 8182

ASIA-AFRICA

P.R. China ULMA Formworks China R.O.

#1009 Fortunegate Mall 1701 West Beijing Road SHANGHAI, 200040 Phone: +86 21 62887070 Fax: +86 21 62885980 www.ulma-c.com

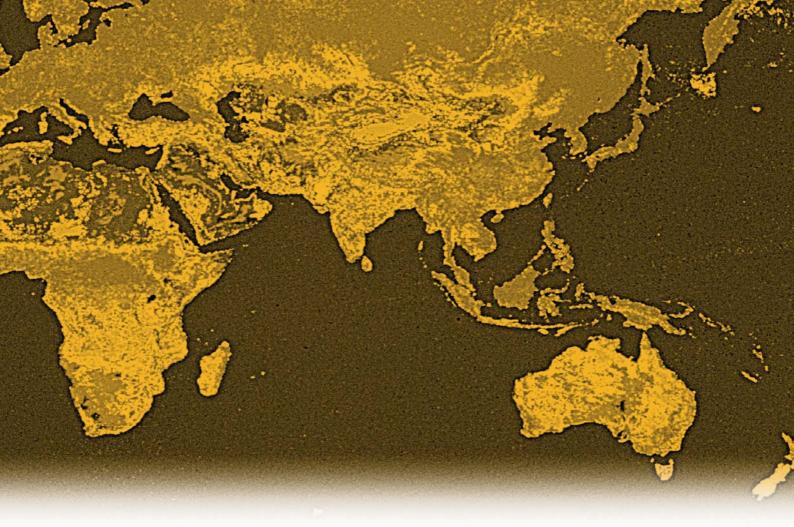
UAE ULMA Formworks UAE L.L.C.

Plot No. 597- 547 Dubai investments Park P.O. Box. 282286 DUBAI Phone: + 971 4 8858208 Fax: + 971 4 8858209 www.ulma-c.com

Singapore ULMA Formwork Singapore PTE. LTD.

2 Senoko Way 758027 SINGAPORE Phone: + 65 6758 2338 Fax: + 65 6758 8523 www.ulma-c.com





ULMA in Spain

ARAGÓN Branch

Pol. Ind. El Pradillo II Aneto, 2 - Parcela 23 50690 PEDROLA (Zaragoza) Phone: 976 654645 Fax: 976 654635

ASTURIAS Branch

Pol. Ind. de Roces, 5 Gustavo Eiffel, 46 33211 GIJÓN (Asturias) Phone: 98 5168038 Fax: 98 5167513

BALEARES Branch

Pol. Ind. Son Noguera Cas Rossos, 12-14 07620 LLUCMAJOR (Illes Balears) Phone: 971 669850 Fax: 971 121512

BARCELONA Branch

Pol. Ind. Sud – Est Pintor Velázquez, 7 y 9 08213 POLINYA (Barcelona) Phone: 93 7132727 Fax: 93 7133643

CASTILLA - LEÓN Branch

Ctra. Burgos – Portugal, km 116 47270 CIGALES (Valladolid) Phone: 983 581009 Fax: 983 581021

DERIO Branch

Iturritxualde, 3 48160 DERIO (Vizcaya) Phone: 94 4521425 Fax: 94 4522468

GALICIA Branch

Pol. Ind. Espíritu Santo Rua Bell, 24-26 15650 CAMBRE (La Coruña) Phone: 981 649802 Fax: 981 649060

GRANADA Branch

Camino Nuevo, s/n 18210 PELIGROS (Granada) Phone: 958 405028 Fax: 958 405328

LAS PALMAS Branch

Pol. Ind. Las Majoreras Los Llanillos, 33 35259 INGENIO (Las Palmas) Phone: 928 789212 Fax: 928 789538

MADRID Branch

Pol. Ind. Sur 28863 COBEÑA (Madrid) Phone: 91 6523199 Fax: 91 6528828

MÁLAGA Branch

Pol. Ind. Villarrosa Carril de las Serrerías, 32 29004 MÁLAGA Phone: 952 176389 Fax: 952 231047

MURCIA Branch

Pol. Ind. La Serreta Calí, s/n 30500 MOLINA DE SEGURA (Murcia)

Phone: 968 642679 Fax: 968 641276

NORTE Branch

Pol. Ind. Goiain Av. San Blas, 1 01170 LEGUTIANO (Álava) Phone: 945 001100 Fax: 945 001111

SEVILLA Branch

Pol. Ind. Fridex Autovía Sevilla – Málaga, km 4,2 41500 ALCALÁ DE GUADAIRA (Sevilla)

Phone: 95 5630044 Fax: 95 5630020

TENERIFE Branch

Pol. Ind. Valle de Güimar Manzana XIII – Parcelas 21 y 22 38509 GÜIMAR (Tenerife) Phone: 922 505020 Fax: 922 501101

VALENCIA Branch

Pol. Ind. Los Vientos Gregal, 7 - Apdo. 76 46119 NÁQUERA (Valencia) Phone: 96 1399130 Fax: 96 1399096



Our products

Vertical Formworks



ORMA Modular Formwork A system for large works and high performance



Circular Sheet Formwork BIRAFormwork system designed for circular wall configurations



ENKOFORM V-100 Bracing System Wall and Column Formwork with Steel Walers and Timber Beams



LGR Column FormworkColumn formwork using light panels



FormworkModular Formwork that is light and easy to handle by a single person

COMAIN Hand-held



CLR Circular Column Formwork Circular column formwork, designed to solve the different column diameters easily



NEVI Modular Formwork Vertical handset and gang formwork system



Formwork Climbing SystemsClimbing and self-climbing systems for any height





www.ulma-c.com