

Top Dalle®

FORMWORK



SAFETY

| ERGONOMICS

| PRODUCTIVITY

| QUALITY

HIGH-PERFORMANCE SAFETY SLAB FORMWORK



Alphi
Formwork and solutions

TopDalle | High-performance safety slab formwork

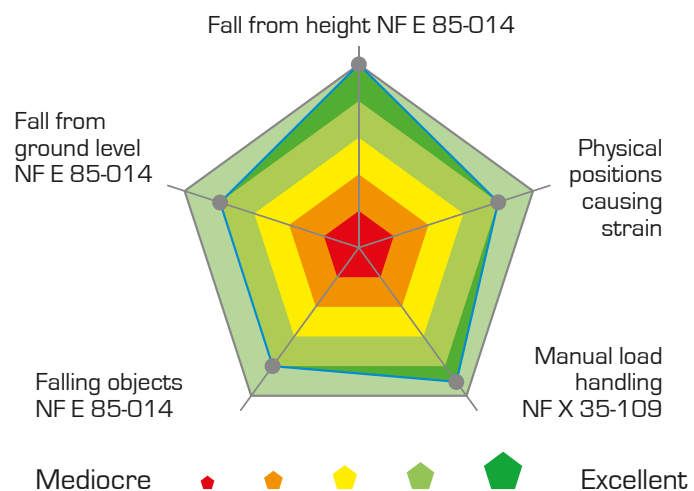


TopDalle®

The versatile TopDalle system suits every types of building: offices, housing, residential care homes, correctional facilities, etc.

Simple and quick to install, the TopDalle system offers productivity of 30 m²/person/day at a height of 2.50 m.

Designed by the Alphi R&D office in collaboration with CARSAT Rhône-Alpes, TopDalle formwork is **compliant with the decree of September 2004 on falls from height** thanks to its anti-tipping system for the secondary frames and controlled spacing of 13 cm between frames.



SAFETY AND ARDUOUSNESS PERFORMANCE CHARACTERISTICS

TopDalle is the best-performing framework of its generation in terms of the constraints of the NF E 85-014 and NF X 35-109 standards.

Site:
Eurêka service hub
Client:
GFC Construction
(Bouygues Group)
Location:
Montpellier



**COMPLIANT
WITH THE DECREE
OF SEPTEMBER 2004
CONCERNING FALLS
FROM HEIGHT
AND WITH THE
NF E 85-014
AND NF X 35-109
STANDARDS.**

**ALL TOPDALLE
ELEMENTS HAVE
BEEN TESTED BY
THE INDEPENDENT
LABORATORY LOCIE
AT THE UNIVERSITY
SAVOIE MONT BLANC.**



UNIVERSITÉ
SAVOIE
MONT BLANC

SAFETY

Worker safety

Protection against falling at ground level and falling from height by an anti-tipping system for the C2+ secondary frames and controlled spacing of 13 cm.

Frames are installed and removed from ground level.

With TopPerche, formwork is installed and removed from ground level up to 3 m (no need for rolling safety ladder depending on heights).

Free-standing system

The unique design of the TopDalle system guarantees optimum stability.

Theft protection

The chemical process patented by Alphi is a protective measure against the fraudulent recycling of aluminium beams.



The installation (and removal) of C2+ frames using the TopPerche provides a dual safety advantage:

- the fitter works at ground level;
the risk of falls from height is eliminated,
- controlled 13 cm spacing

ERGONOMICS

Lightest weight per m² formwork on the market

Made of aluminium, the frames and beams contribute to the lightness of the TopDalle hand-portable formwork system.

Less repetitive strain injury

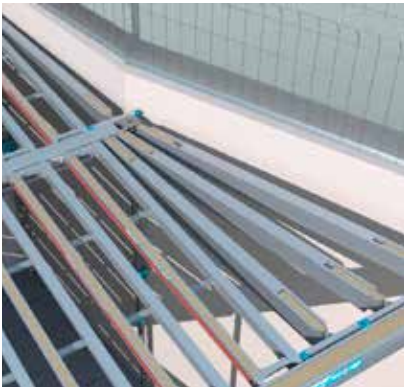
- Better weight distribution.
- Ergonomic handles on the C2+.
- Accommodates 15 mm plywood.

Less noise pollution

Complies with the European noise directive (2003/10/EC dated 6 February 2003).

Easier identification

The beams are colour-coded, in compliance with the layout drawings provided.



PRODUCTIVITY

30 m²/person/day at a height of 2.50 m

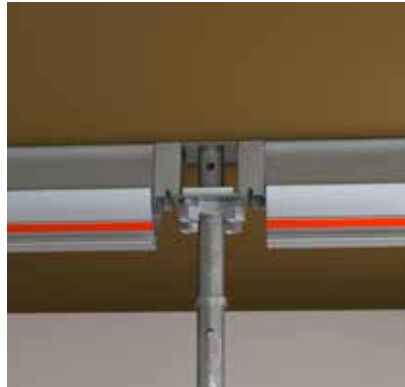
(formwork, adjustment, cladding, and formwork removal)

Easy removal

The drop-head for fast removal integrated in the technical support (Alphi patented system) keeps the slab supported during formwork removal. The turnaround of the aluminium structure is accelerated.

Flexible use to satisfy all technical requirements

- "Primary on primary" assembly allows the TopDalle system to adapt to the exact dimensions of the cells.
- The extendable primary beams and secondary corner beams complete the range to handle any complex shape requirements.



QUALITY

Superior concrete soffit quality

Superior quality to DTU 21 guidelines for concrete floors.

Nailing on timber insert

Plywood (15 mm authorised) secured using nails.

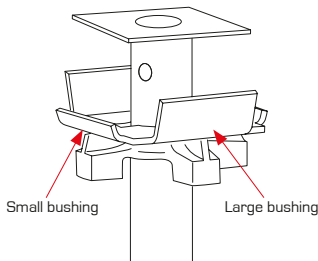





Regulations

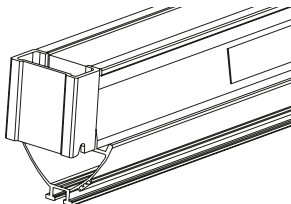




The beams are designed in compliance with the formwork standard NF P 93-322.

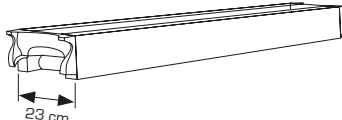



Cast concrete thickness of up to 1.23 m.

The drop-head integrated in the prop allows fast formwork removal without releasing pressure on the slab


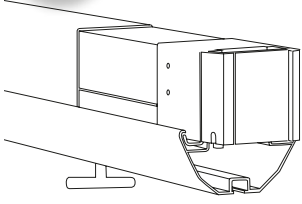

3 COMPONENTS FOR SIMPLE SHAPES


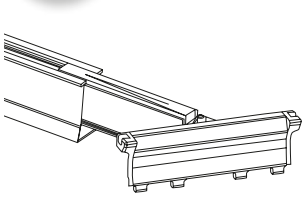



1	Technical support (ST) with integrated drop-head	Name	Colour	Height (cm)	Unit weight (kg)	Description
Technical supports		ST1		197-300	18.50	<ul style="list-style-type: none">Integrated drop-head for fast removal (patented system)Base webHot-dip galvanisedCast iron sleeve
		ST2		225-350	20.50	
		ST3		250-400	23.50	
	Aluminium props	Aluminium prop with insulated head				
		ST1 Alu		164-267 + 33 for the insulated head	15.00	<ul style="list-style-type: none">33 cm insulated head attached to the end of the propFull-height runner thread, self-cleaningEasy height adjustment by means of the gauge incorporated into the runner
		ST3 Alu		270-400 + 33 for the insulated head	19.40	

2	Primary beam	Name	Colour	Length (cm)	Unit weight (kg)	Description
Primary		PP 90		90	5.40	<ul style="list-style-type: none">Theft protectionCan be mounted using drawer system30 mm timber inserts, for nailing on plywood using 40 mm nails
		PP 110		110	6.60	
		PP 150		150	9.00	
		PP 180		180	10.80	

3	Secondary frame C2+	Name	Colour	Length (cm)	Unit weight (kg)	Description
Secondary		C2+ 110		110	5.00	<ul style="list-style-type: none">Anti-tip safety23 cm widthTheft protectionTimer inserts for nailing on plywood using 40 mm nails
		C2+ 150		150	6.00	
		C2+ 180		180	8.00	

2 COMPONENTS FOR COMPLEX SHAPES (OPTIONAL)

1	Extendable primary beam	Name	Colour	Length (cm)	Unit weight (kg)	Description
Primary	 	PPE 90-110		90-110	7.10	<ul style="list-style-type: none"> From 90 to 110 cm, to adapt to all cell sizes Can be mounted using drawer system Continuous resting of secondary beams on primary beam

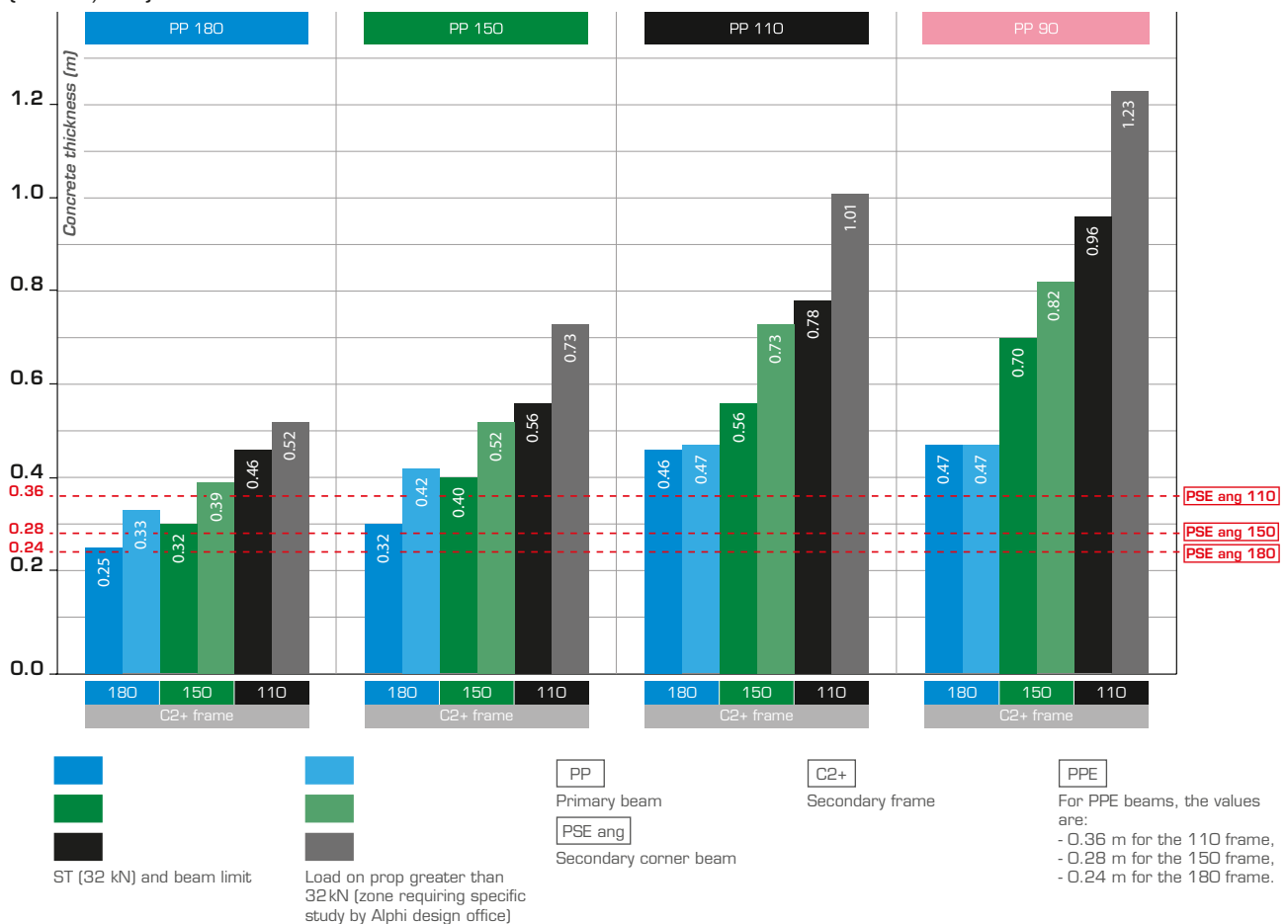
2	Extendable secondary corner beam	Name	Colour	Length (cm)	Unit weight (kg)	Description
Secondary	 	PSE ang 110		110-135	5.40	<ul style="list-style-type: none"> Each secondary corner beam must be associated with the secondary beam of the same size (e.g.: PSE ang 110 with PS 110)
		PSE ang 150		150-180	6.60	<ul style="list-style-type: none"> Adjustable length Timber inserts for nailing on plywood
		PSE ang 180		180-220	7.50	<ul style="list-style-type: none"> Modular orientation as close as possible to the concrete skin by rotating the tip Working angles of 0° to 35°

USE CALCULATION CHARTS






The values appearing in these charts must be complied with to ensure the safety of operators and compliance with the applicable standards (NFP 93-322 for beams and EN 1991 1-6 for all loads).

Beams

Value given for superior quality as per DTU 21 guidelines for concrete floors, accounting for the site load [2.5 kN/m²].

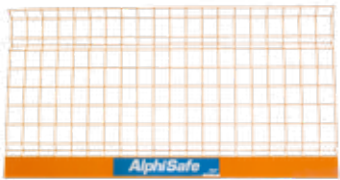










Technical supports ST with integral shuttering head / Aluminium props with insulated head


Name	Colour	Height (cm)	Weight (kg)	Shored height (m) / Working load (kN)																											
		min-max		1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.3					
ST1 *		197-300	18.5	40	39	38	37	36	35	35	34	33	33	32	32																
ST2 *		225-350	20.5				40	39	39	38	37	36	36	35	35	34	34	33	32	32											
ST3 *		250-400	23.5							40	40	40	40	40	40	40	40	40	38	38	34	34	30	30	26						
ST1 Alu		164-267 + 33 for the insulated head	15			40	40	40	40	40	40	40	40	40	40																
ST3 Alu		270-400 + 33 for the insulated head	19.40									40	40	40	40	40	40	40	40	40	40	39	37	36	34						

* Hot galvanised - Identified by colour coding on sleeve or nut
Corresponds to Eurocode safety coefficients 0 and 3.



TOPDALLE ACCESSORIES

Safety	Mesh *		Dimensions w x h (m)	Weight (kg)	Description	
			1.25 x 1.30	7.60	<ul style="list-style-type: none"> The wire mesh is galvanised, with polyester powder coating 	
			2.50 x 1.30	14.50		
	Galvanised post *		Section (cm ²)	Height (m)	Weight (kg)	
			3.5 x 3.5	1.34	3.50	
	Alphi formwork adapters		Weight (kg) Primary adapter		Weight (kg) ST adapter	Weight (kg) Corner adapter
	Primary adapter*	ST adapter*	Corner adapter			
				2.30	2.10	2.10
*Compliant with EN 13374 standard						
	AlphiSafe pole		Length (cm)	Unit weight (kg)	Description	
			1.94 to 3.50	2.73	<ul style="list-style-type: none"> Work from ground level Risk of falls from height eliminated 	

Additional	Electrogalvanised insulated head		Holes drilled (mm)	Height (cm)	Unit weight (kg)	Maximum allowable load (kN)	
			4 x Ø12 x 80	33	3.80	40	
	Bracket	Non-tilt safety fork (FSAB)	Unit weight diagonal strut (kg)	Maximum allowable load (kN)	Unit weight FSAB (kg)	Tube diameter (mm)	Description
			1.05	3.5	1.150	35	<ul style="list-style-type: none"> Bracket: butterfly fastening nut FSAB: hammer head screw

Installed from the ground	TopPerche		Length (cm)	Unit weight (kg)	Description	
			155	3.20	<ul style="list-style-type: none"> Work from ground level Risk of falls from height eliminated Controlled spacing of 13 cm Compatible with frames C2+ and primary beams 	

TOPDALLE ACCESSORIES

Leborgne tools	Nanovib® range	Description
		<ul style="list-style-type: none"> Tools suitable for fitting and removing Alphi formwork: hammers, hammer holder, prop key Vibration and noise reduction <div data-bbox="751 539 1070 591">  </div> <p>Click here to view details of Leborgne Tools</p>

Handling	Racks	Ranges
		<ul style="list-style-type: none"> Vertical storage rack Galvanised rack on wheels Galvanised handling rack <p>Click here to view details of racks</p>
	TransÉtais Logement	Description
		<ul style="list-style-type: none"> Easier prop handling Makes it possible to pass through door openings <p>Click here to view details of TransÉtais Logement</p>

Aids for use	Plywood cutting support	Dimensions w x L x h (m)	Description
		1.40 x 2.06 x 0.86	<ul style="list-style-type: none"> For sale only Circular saw kit and electrical extension available as an option
	Rolling safety ladder	Working height (m)	Description
		2.50 to 4.33	<ul style="list-style-type: none"> For sale only

ALPHISAFE COLLECTIVE PROTECTION

AlphiSafe is a collective protection system for formwork and slab edges. The technical innovations in the system allow **safe installation** and **automatic locking**.

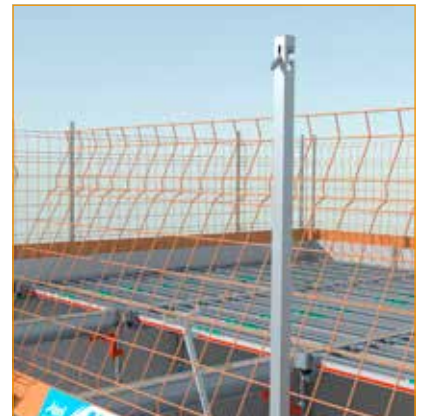
Robust AlphiSafe is certified by Ginger CEBTP, as per the **EN 13374 standard of July 2013**, as class A and B for some components.

AlphiSafe is distinguished by its **height of 1.30 m**, which is above the minimum height of 1.00 m set by the standard, and protects traditional slab formwork up to 30 cm thick.



The mesh is locked at the top by the anti-lifting pin and locked in rotation at the base.

Installation of AlphiSafe safety system in cantilever configuration



Installation of AlphiSafe safety system on technical support (progressive fitting)



CLAMPING

Depending on the configuration, stabilisers may be recommended.
Contact Alpha design department to validate the solution.
 See below for the various systems proposed.

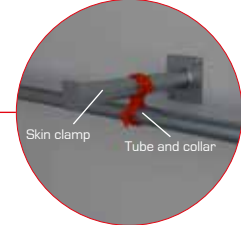
Skin clamp



- Skin clamp + tube system.



- Set up the stabilisation of the first components.
 - When the stabilising is installed, you can remove the tripods.



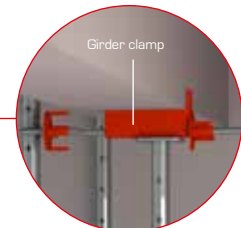
Girder clamp



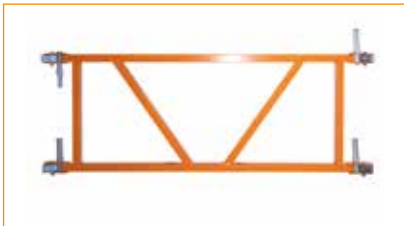
- Girder clamp + tube system.



- Set up the stabilisation of the first components.
 - When the stabilising is installed, you can remove the tripods.



Aluminium prop frame



- The prop frame provides a rigid link between 4 props.



- Position the 4 props as desired then fasten the prop frame.

Aluminium prop clamp



- Used with the wall clamp, this part stabilises props ST1 alu and ST3 alu.

Prop clamp



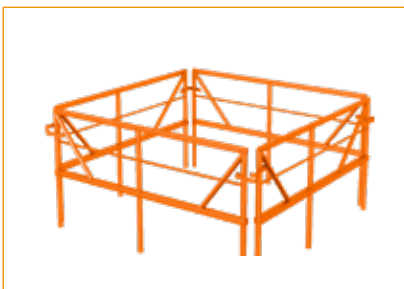
- Prop clamp to be driven into the wall with concrete screws.



- This clamp can be fitted before or after positioning the prop.



Prop frame



- The prop frame provides a rigid link between 4 props.



- Position the 4 props as desired then fasten the prop frame.



FOR YOUR SAFETY

WARNING

- To use our products safely, please observe the regulations in force in each country.
- The elements and assemblies presented in this document correspond to the equipment specifications when the document was issued. There might have been some changes since then.
- The use of our systems combined with those of other manufacturers may involve risk and requires specific inspection.
- Please contact the design office for all uses not covered by the following procedure.

Personal protection

- Use of PPE is mandatory.
- Operators setting up and removing equipment must be familiar with the relevant technical user documentation and have understood the steps.



Secure the working area

- Ensure the zone is safe before starting erection.
- Only authorised personnel are allowed to access the working area.
- Check that the collective slab edge protection has been installed.



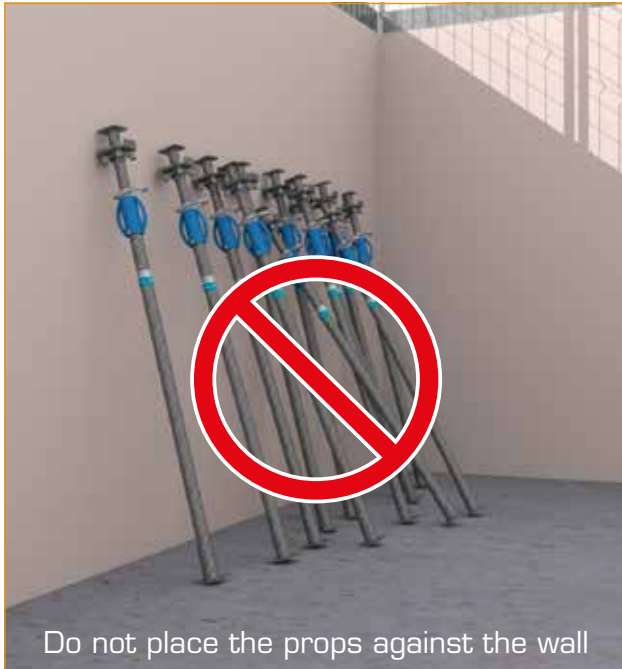
Installation of Alphi equipment

- Respecting equipment utilisation recommendations, safety instructions and specified maximum loads governs the **proper running of the work site**.
- The **layout drawings** provided by the Alphi design department are not essential for slabs less than 24 cm thick, but they optimise the use of the equipment. Their adaptation for reasons relating to the progress of construction remains possible, by following the recommendations of the technical documentation for using the equipment.
- The **stability** of the formwork elements must be checked at each phase of the erection.
- The TopDalle formwork system may be used on **gradients of up to 5%**.
- The equipment should be used taking into account **weather conditions**.
- **Equipment servicing and repair** should only be carried out by Alphi or by users trained by Alphi.
- Alphi recommends that professional tools are used to install the equipment.



Click [here](#) or scan the QR code to view the video of the procedure.

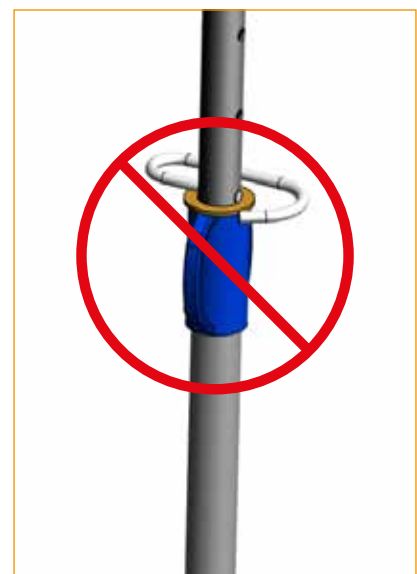
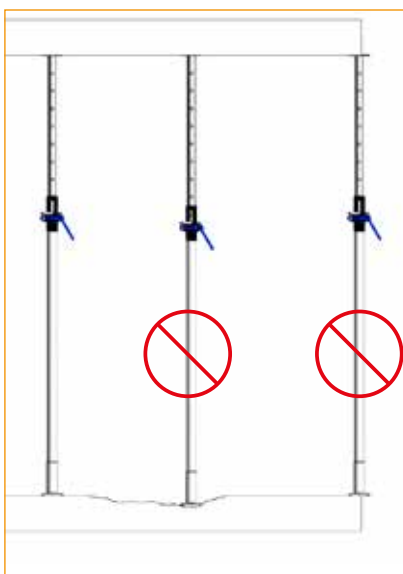
PREPARATORY STAGE



N.B.: even if they are not always shown in the image, TopDalle is to be installed by 2 form fitters.

- Reception of equipment on the worksite: check quantities and validate delivery note.
- Precise distribution of the equipment according to the first phases of formwork defined by the layout drawing.
- Adjustment of prop height and positioning of formwork heads in formed position: locking with hammer.
- Adjust props to the correct height by positioning them horizontally.
- Do not remove pins while the props are under load.

INSTALLATION OF PROPS



Verticality tolerance $\leq 1^\circ$ Equivalents	
Allowable offset at the foot = d (cm)	For a height of... (m)
4	2.50
5	3.00
6	3.50

USER GUIDE: FORMWORK



- Starting from one corner of the room, mount one primary beam on 2 technical supports (ST) stabilised by tripods.
- Mount a second primary beam on 2 STs stabilised by tripods.
- Use a rolling safety ladder in compliance with the regulations.

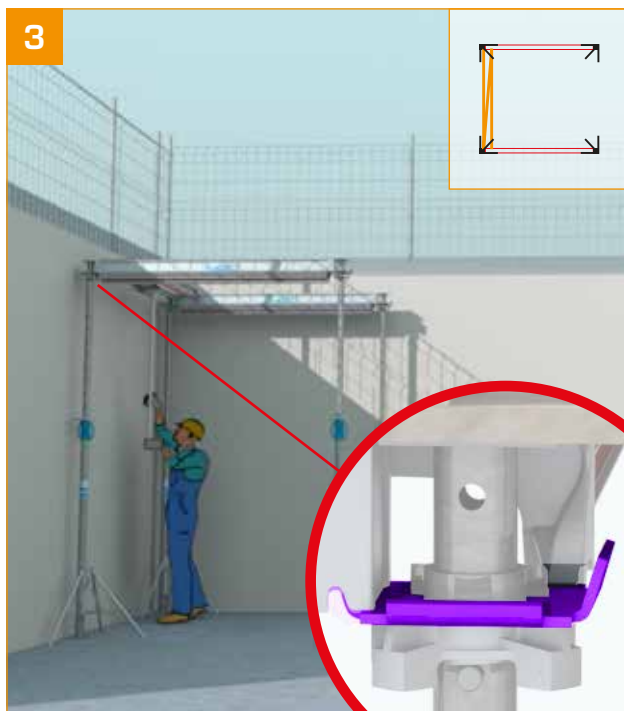
Caution: engage the primary beams on the large bushings of the technical support.

→ Refer to the layout plan.



- Mount the C2+ secondary frames using TopPerche.
- Position a frame on the pole.

→ Refer to the layout drawing.

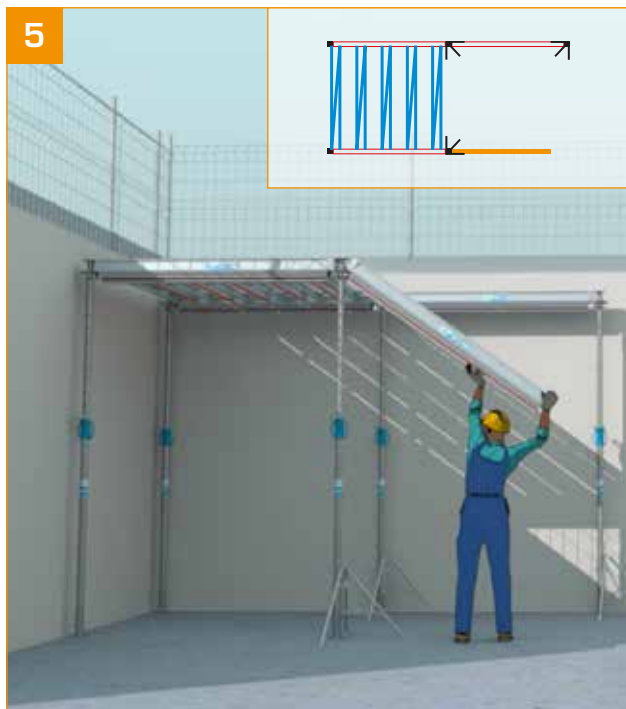


- Start mounting a C2+ or C4+ secondary frame.
- The fitter lifts the frame between the 2 primary beams then lowers the TopPerche ensuring that the frame tips are engaged on the primary beams.

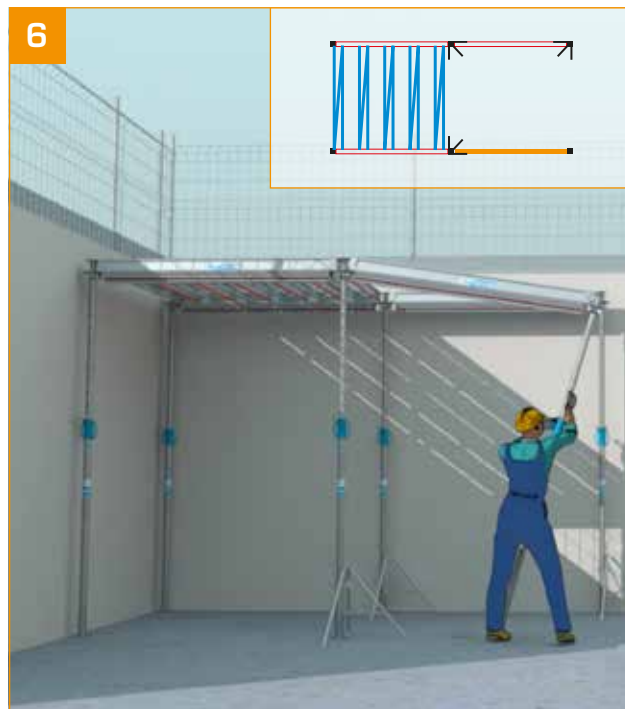


- Position the C2+ frames from one to the next using the TopPerche.
- Do not exceed a gap of 13 cm between each frame.

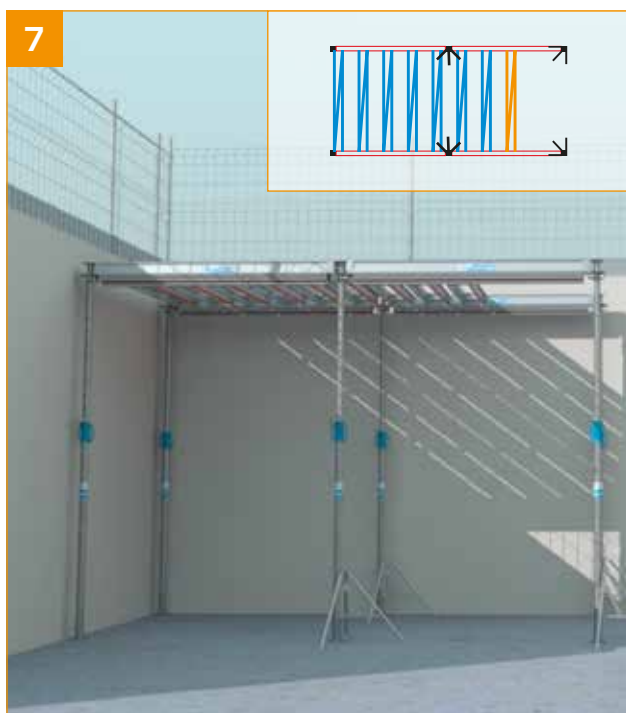
USER GUIDE: FORMWORK



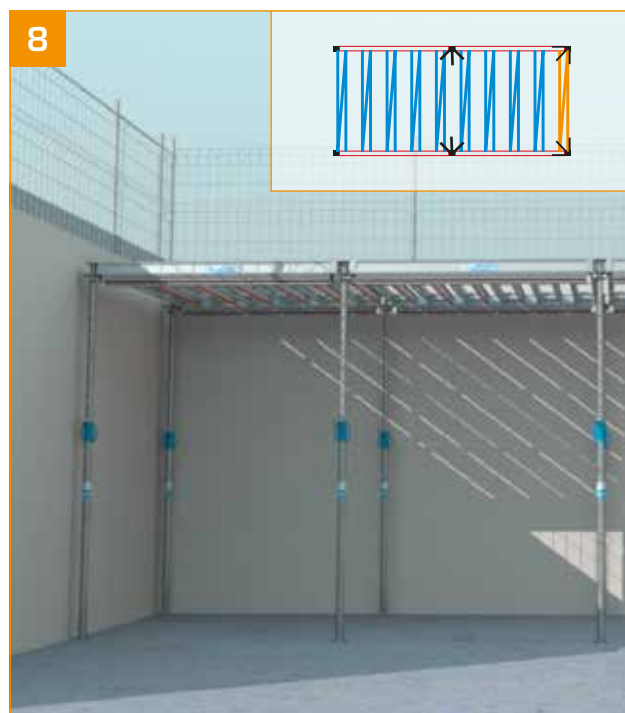
- Mount a primary beam on ST stabilised by tripods.



- The fitter uses the prop to position the primary beam.
- Stabilise temporarily with a tripod.



- Adjust the position of the C2+ or C4+ secondary frames.



- Finish setting up the C2+ or C4+ secondary frames.

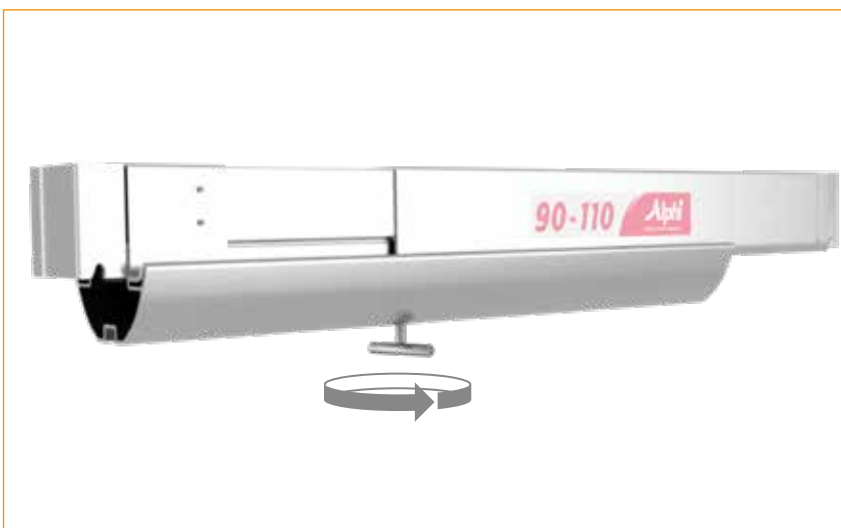
EXTENDABLE BEAM ADJUSTMENT



- Release the beam by unfastening the butterfly screw.



- Adjust the beam to the desired size.



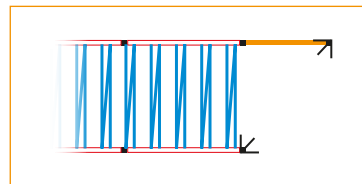
- Lock the beam by fastening the butterfly screw.

USER GUIDE: FORMWORK

9



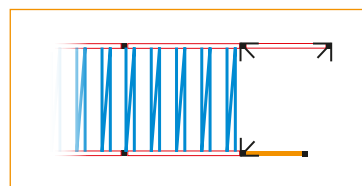
- Close to the wall, mount the extendable primary beam on stabilised props.
- The extendable primary beam should be adjusted and locked prior to mounting.



10






- The fitter uses the prop to position the second extendable primary beam.

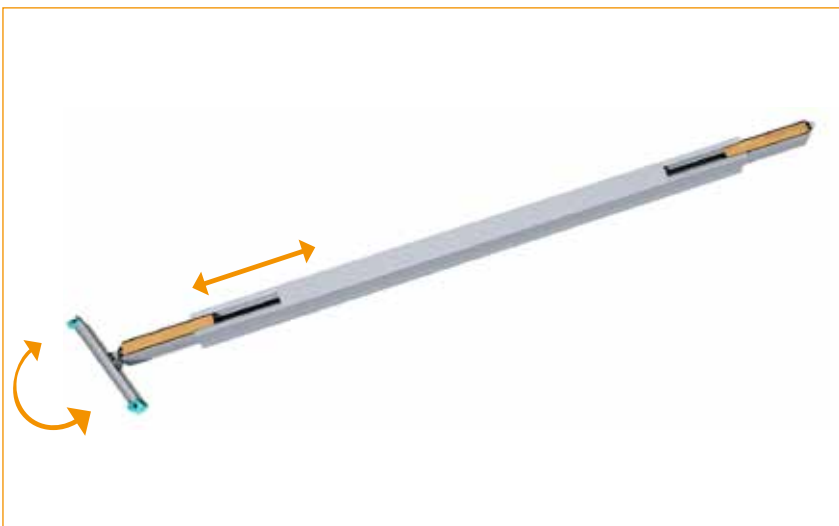


EXTENDABLE SECONDARY CORNER BEAM ADJUSTMENT

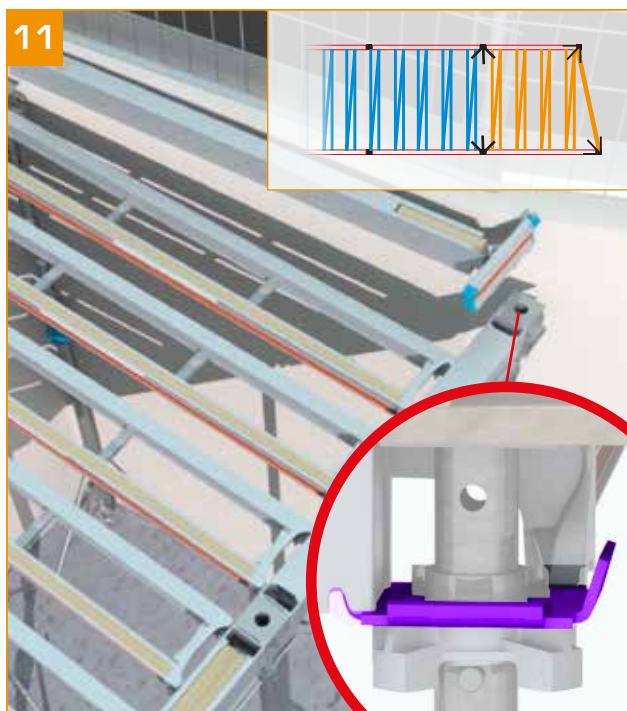


- An extendable secondary corner beam is associated with a C2+ frame type.
- The colour code of the extendable secondary corner beam matches that of the panel for easy identification.
- A symmetrical extension deployment length is preferable.
- The wide tip, including four bearing areas, promotes stability.
- The installation procedure involves joining the wide tips to apply a 19 cm gap.

C2+ secondary frames	Extendable secondary corner beams	Colour
110	PSE ang 110	
150	PSE ang 150	
180	PSE ang 180	



PROCEDURE: FORMWORK, FINISHING



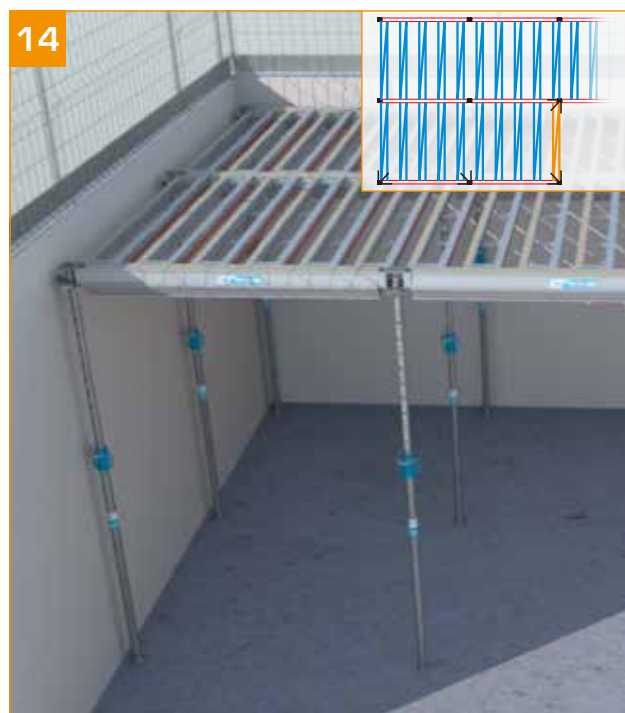
- Mount the secondary corner beam.



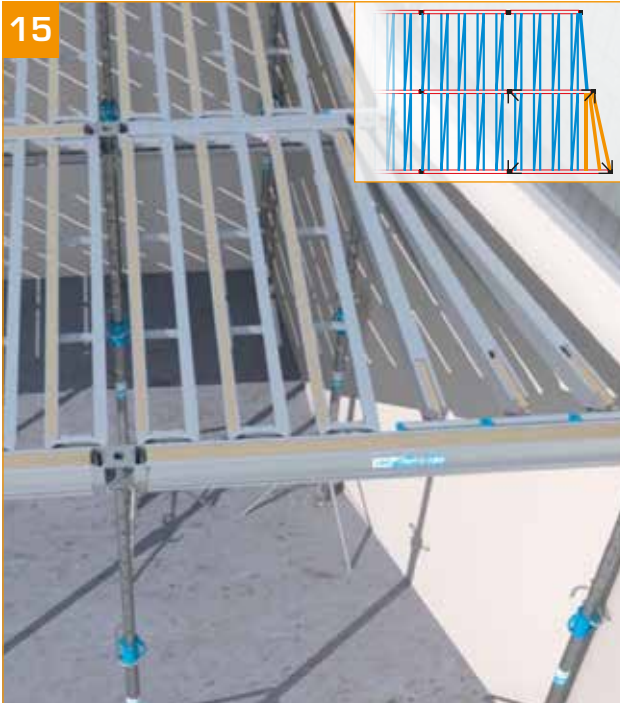
- The hinged heads of the secondary corner beam can be adapted to all configurations.



- Adjust the position of the C2+ or C4+ secondary frames.



- Continue to mount the C2+ progressively using the TopPerche, or C4+ frames from one to the next.



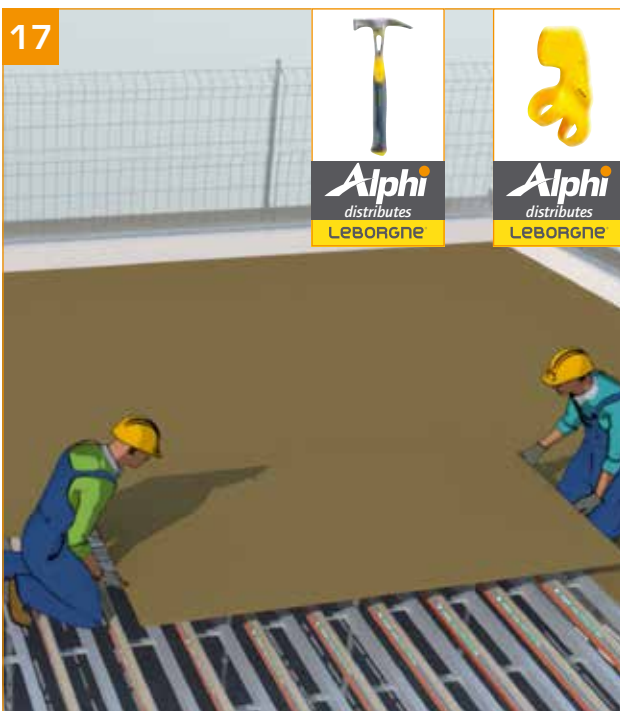
- Repeat step 6 and finish setting up the C2+ or C4+ secondary frames.



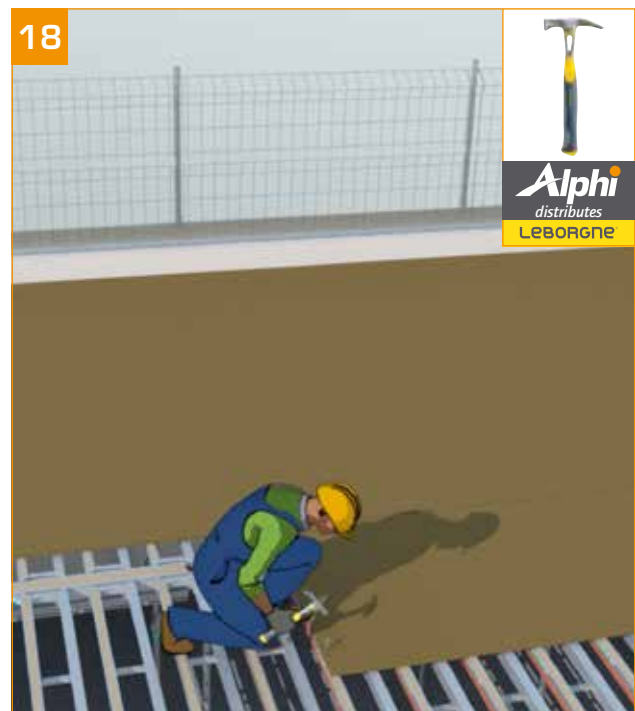
Conduct an inspection

- Conduct a general inspection of the verticality of the props, the locking of the heads, the proper mounting of the primary beams on the heads and of the secondary elements on the primary.
- Check the alignment of the beams and the insulated head or the ST.
- Adjust the level using a laser level, ST by ST.
- A gauge stick hanging from the formwork allows laser level adjustment to be performed by one person.

→ Steps to be repeated for each prop.



- When the structure is finished and the height has been adjusted: lay the plywood.
 - Use the plywood cutting support (see Accessories p. 9-10).
- Peripheral safety (skin, girder, etc.) ensured beforehand.
- Use of the plywood cutting support.



- Nailing using 40 mm (max.) nails.
- Ensure that a load-bearing member is present under the plywood sheet joins.
- Check that there are no formwork leaks between plywood panels and the periphery. Do not walk on the plywood panels, except for trained personnel, qualified to install plywood panels.

PROCEDURE: POURING, FORMWORK REMOVAL



- Concrete slab formation after reinforcement and incorporations.
- Spread the concrete on the formwork without overloading the beams and the technical supports.



- Formwork removal from slab: strike down the formwork heads from the STs as you progress.
- The primary beams and the C2+ or C4+ frames drop by 14 cm.
- The STs remain in position.



- Formwork removal from slab: remove the C2+ frames and finally the primary beams as you progress using the TopPerche.
- Store them in the wheeled racks.



- Formwork removal from slab: remove the STs placed at the edge of the cells.
- Leave the other STs in place for **at least 3 days** (depending on the type of concrete and the external temperature).

23



- Lower the panel elevator to mid-height.
- Remove the plywood sheet.

24



- Install the first drying prop, allowing one prop per 5 m² (general case).

25



- Repeat steps 23 and 24.

26



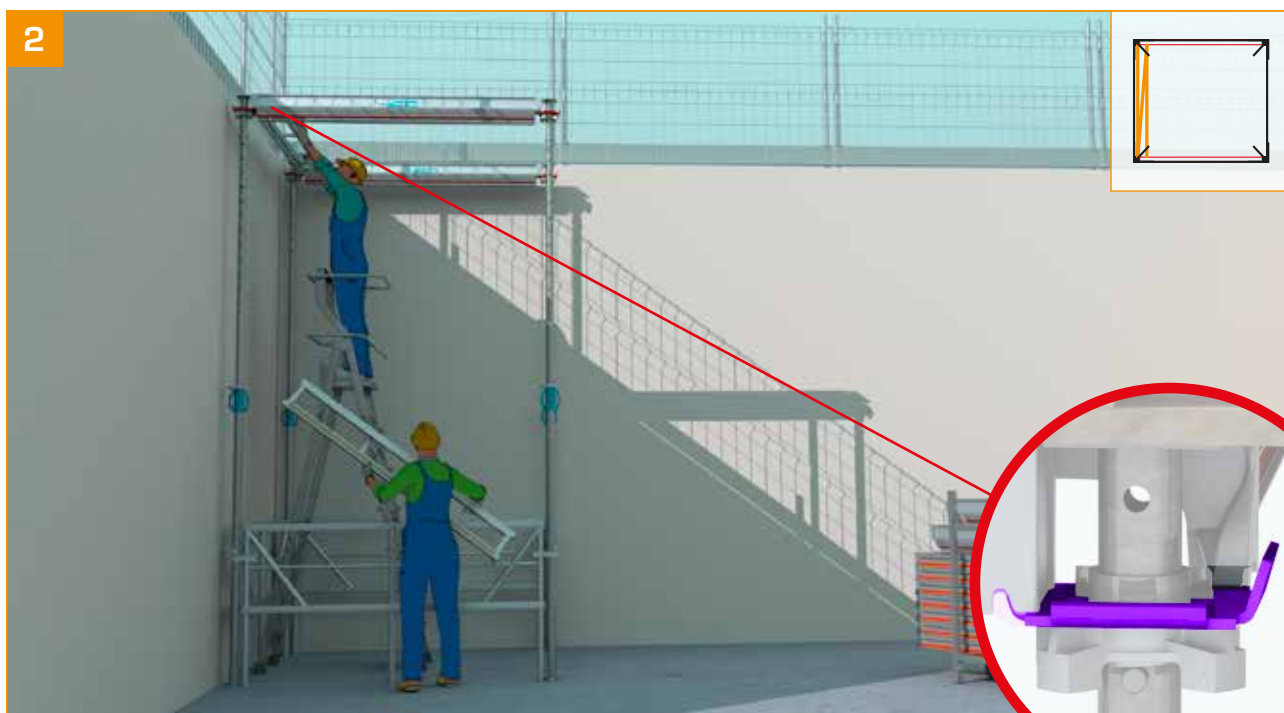
- For the higher level, repeat the operations from step 1.

TOPDALLE FORMWORK INSTALLATION AT EXTRA-HIGH HEIGHTS



- Starting from one corner of the room, mount 4 technical supports (ST) stabilised by a prop frame.
- Mount the first two primary beams.
- Store the plywood panels on the floor or in wheeled racks.
- Use the rolling safety ladder in compliance with regulations.

→ Refer to the layout plan.



- Do not leave gaps greater than 13 cm.
- Use a template to ensure compliance with 13 cm spacing.

→ Refer to the layout drawing.

3



- Finish setting up the secondary frames.

4



- Do not leave gaps greater than 13 cm.
 - Use a template to ensure compliance with 13 cm spacing.
- Refer to the layout drawing.

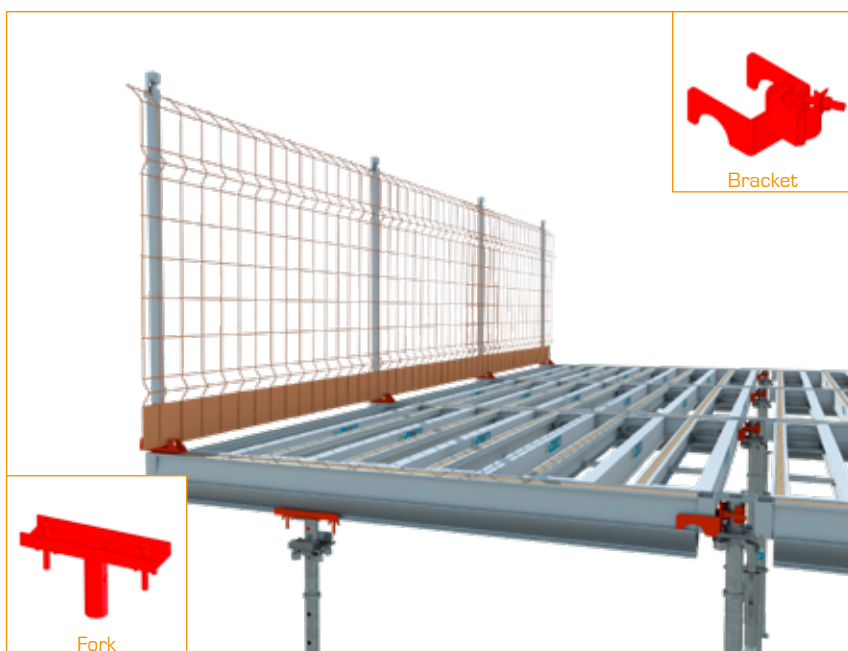
SPECIAL CASES

REDUCED GAP



- Using the fork under the primary (assembly without using fast removal).
- The fork allows you to position the STs under the primary beams and not at the ends, thus offering additional adjustment.

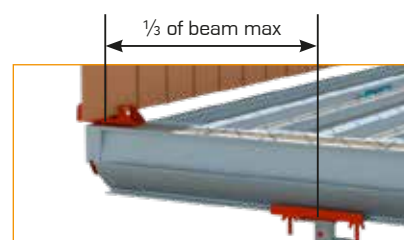
HANDLING FACE OVERHANGS



- Use in cantilever configuration with fork and bracket.

- Steps:

- 1 mount the bracket on the prop
- 2 install the prop
- 3 position the fork in the desired place
- 4 attach the primary beam to the prop, with the tip in the bracket
- 5 raise the beam, positioning a prop in the fork



BLANKING GAPS IN END OF ASSEMBLY



For gaps of 11.5 cm or more, a beam H20 can be inserted on props equipped with forks.



For gaps of 12 cm or more, a beam AL100 can be inserted on the props.



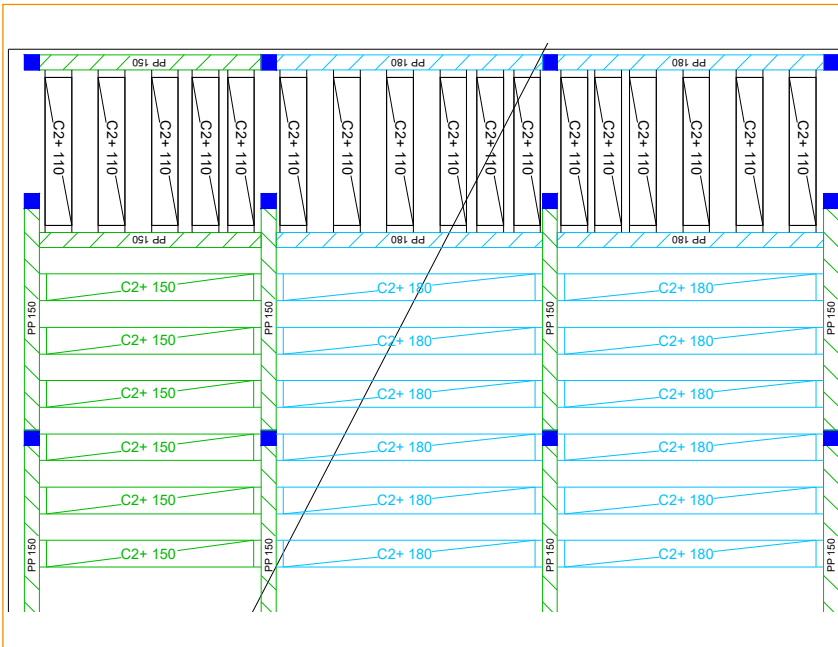
For gaps of 17 cm or more, a primary beam can be inserted on the props.

Note

According to the decree of 2004 concerning falling from height, gaps are authorised up to a maximum of 20 cm.

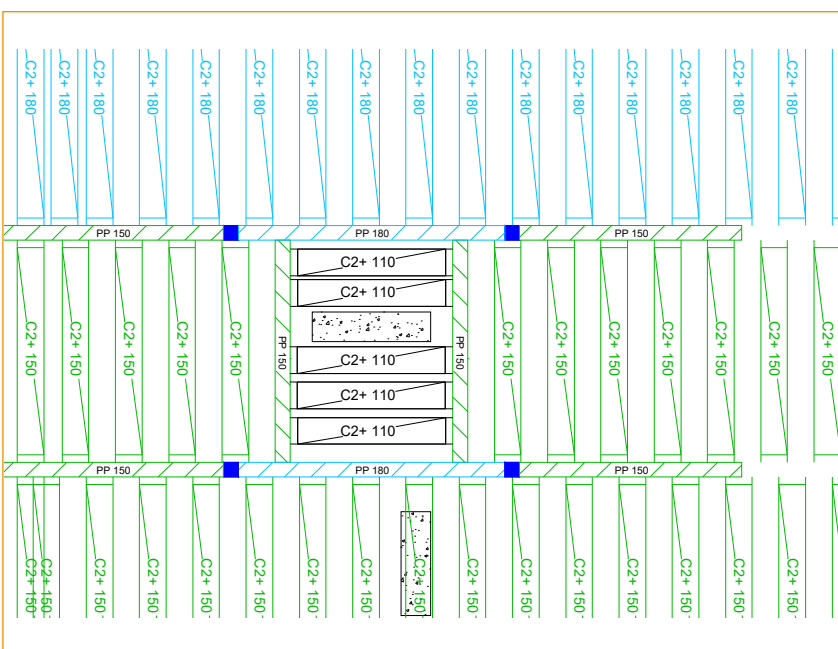
SPECIAL APPLICATIONS

PRIMARY ON PRIMARY IN-DRAWER SET-UP



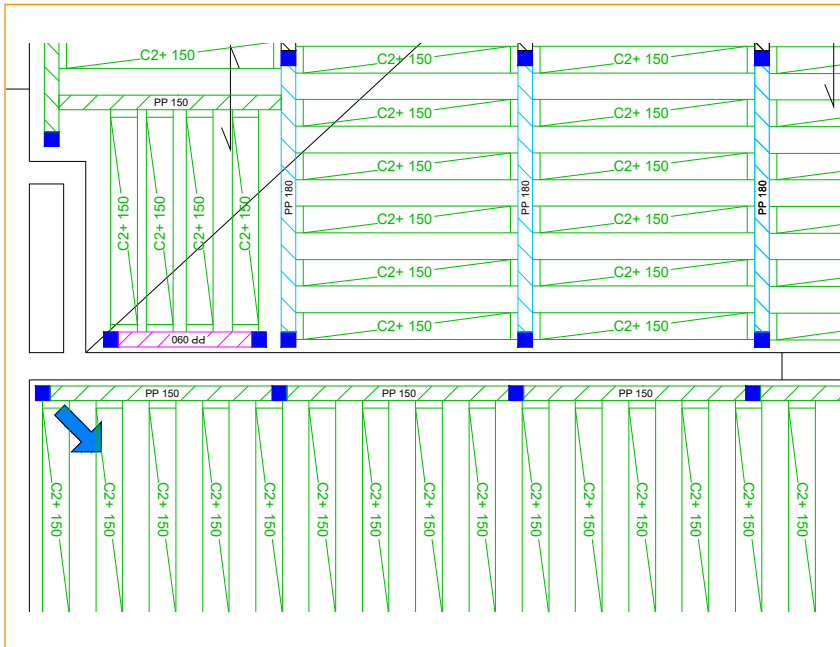
In-drawer set-up enables the formwork to be adjusted as closely as possible to the walls by means of a primary beam resting perpendicularly on two primary beams.

IN-DRAWER SET-UP FOR POSTS



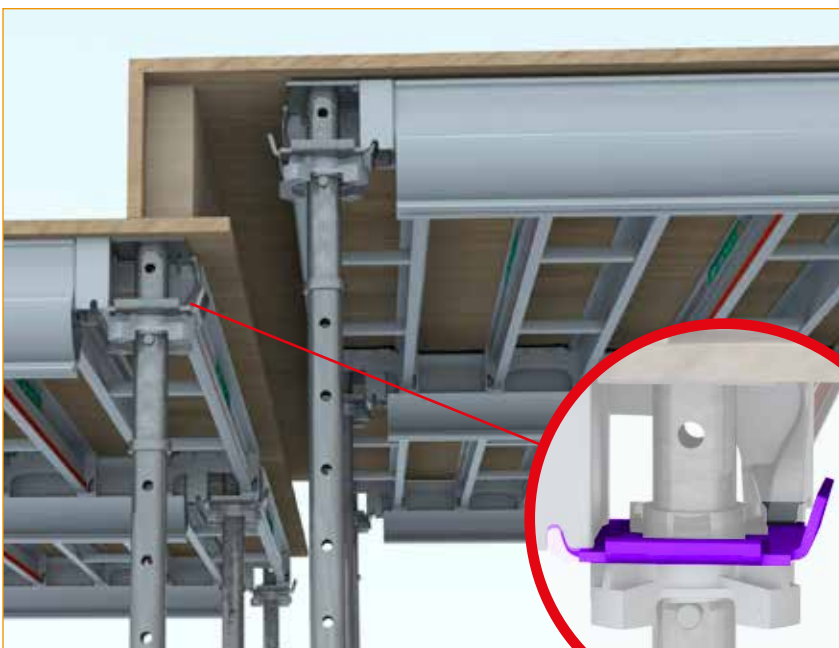
- In the presence of a pillar, when the greatest length of the pillar is parallel to the primary beam, gaps can be limited by a drawer assembly.
- Conversely, when the greatest length is perpendicular to the primary beam, the secondary elements are simply installed adjacent to the pillar.

IN-DRAWER SET-UP FOR SERVICE DUCTS



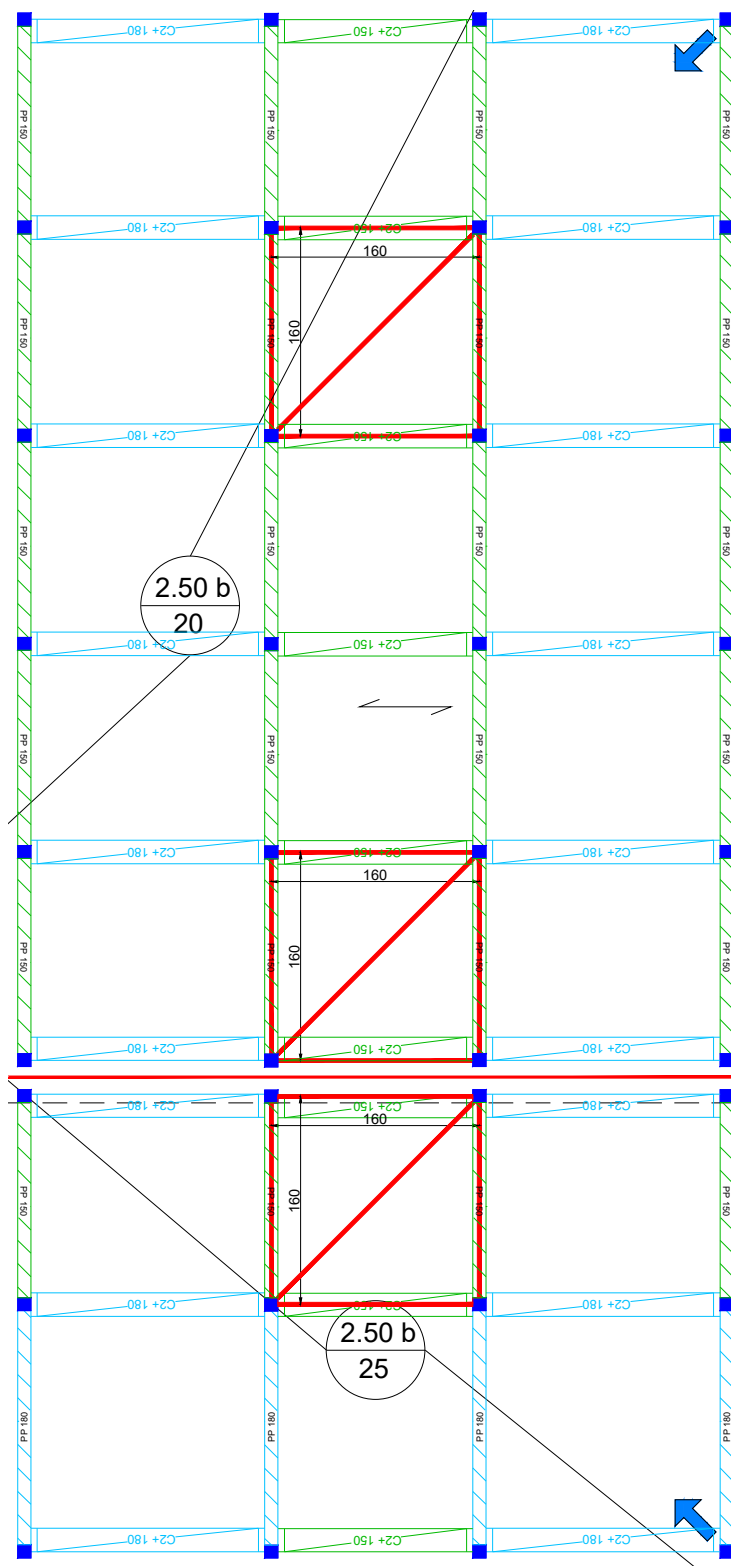
In order to get as close as possible to a tank, such as a service duct, it is possible to use an in-drawer set-up to minimise gaps.

RECESS ON THE UNDERSIDE OF THE SLAB



As the slab levels are different on the underside, it is advisable to install the 2 formwork sections as close as possible to the recess. In this way, the gap will be limited to 20 cm, in compliance with the decree of 2004 relating to falls from height.

PRE-SLAB SHORING



Caution: engage the primary beams on the technical support's large bushings.

PACKING

PRIMARY BEAMS

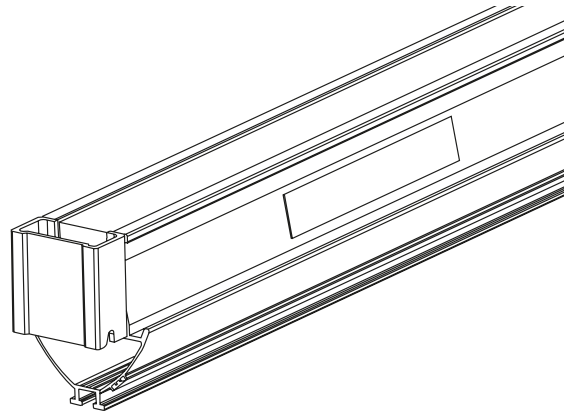
PP90	Quantity	Basket max. load PAN MAN 1T500	Basket galvanised or painted PAN MAN NO PAN MAN P NO
	Storage	5 rows x 8 beams	5 rows x 8 beams
	Weight (kg)	303	283
	Dimensions L x w x h (m)	1.23 x 1.10 x 1.21	1.16 x 1.03 x 1.04

PP110	Quantity	35 beams	35 beams
	Storage	5 rows x 7 beams	5 rows x 7 beams
	Weight (kg)	318	295
	Dimensions L x w x h (m)	1.15 x 1.10 x 1.21	1.15 x 1.03 x 1.04

PP150	Quantity	35 beams	35 beams
	Storage	5 rows x 7 beams	5 rows x 7 beams
	Weight (kg)	415	392
	Dimensions L x w x h (m)	1.55 x 1.10 x 1.21	1.55 x 1.03 x 1.04

PP180	Quantity	35 beams	35 beams
	Storage	5 rows x 7 beams	5 rows x 7 beams
	Weight (kg)	556	533
	Dimensions L x w x h (m)	1.85 x 1.10 x 1.21	1.85 x 1.03 x 1.04

PPE90-110	Quantity	22 beams	22 beams
	Storage	1 row x 6 beams 1 row x 5 beams 1 row x 6 beams 1 row x 5 beams	1 row x 6 beams 1 row x 5 beams 1 row x 6 beams 1 row x 5 beams
	Weight (kg)	206	183
	Dimensions L x w x h (m)	1.23 x 1.10 x 1.21	1.16 x 1.03 x 1.04



In order to ensure optimum safety and stability, equipment handled using racks must be tethered and the weight distributed.

PACKING

SECONDARY FRAMES C2+



C2+110		Basket max. load PAN MAN 1T500	Basket galvanised or painted PAN MAN NO PAN MAN P NO
	Quantity	32 beams	28 beams
	Storage	8 rows x 4 beams	7 rows x 4 beams
	Weight (kg)	210	167
	Dimensions L x w x h (m)	1.23 x 1.10 x 1.21	1.16 x 1.03 x 1.04

C2+150		32 beams	28 beams
	Quantity	32 beams	28 beams
	Storage	8 rows x 4 beams	7 rows x 4 beams
	Weight (kg)	259	210
	Dimensions L x w x h (m)	1.55 x 1.10 x 1.21	1.55 x 1.03 x 1.04

C2+180		32 beams	28 beams
	Quantity	32 beams	28 beams
	Storage	8 rows x 4 beams	7 rows x 4 beams
	Weight (kg)	292	239
	Dimensions L x w x h (m)	1.85 x 1.10 x 1.21	1.85 x 1.03 x 1.04



TECHNICAL SUPPORT (ST) PROPS

		Prop basket PAN ETAI	Basket max. load PAN MAIN 1T500
ST1	Quantity	48 props	72 props
	Storage	6 rows x 8 props	9 rows x 8 props
	Weight (kg)	997	1 043
	Dimensions L x w x h (m)	1.95 x 1.05 x 0.95	1.95 x 1.10 x 1.21

ST2	Quantity	48 props	64 props
	Storage	6 rows x 8 props	8 rows x 8 props
	Weight (kg)	1 035	1 371
	Dimensions L x w x h (m)	2.25 x 1.05 x 0.95	2.25 x 1.10 x 1.21

ST2N	Quantity	48 props	64 props
	Storage	6 rows x 8 props	8 rows x 8 props
	Weight (kg)	1 099	1 456
	Dimensions L x w x h (m)	2.25 x 1.05 x 0.95	2.25 x 1.10 x 1.21

ST3	Quantity	48 props	56 props
	Storage	6 rows x 8 props	7 rows x 8 props
	Weight (kg)	1 235	1 440
	Dimensions L x w x h (m)	2.50 x 1.05 x 0.95	2.50 x 1.10 x 1.21

ST3N	Quantity	48 props	64 props
	Storage	6 rows x 8 props	8 rows x 8 props
	Weight (kg)	1 213	1 414
	Dimensions L x w x h (m)	2.50 x 1.05 x 0.95	2.50 x 1.10 x 1.21



In order to ensure optimum safety and stability, equipment handled using racks must be tethered and the weight distributed.

PRIMARY BEAM GRID

Grid for primary beams from 0 to 10 m				
P180	P150	P110	P90	Distance between walls (cm)
0	0	0	1	120
0	0	1	0	140
0	1	0	0	180
1	0	0	0	210
0	0	0	2	220
0	0	1	1	240
0	0	2	0	260
0	1	0	1	280
0	1	1	0	300
1	0	0	1	310
0	0	0	3	320
1	0	1	0	330
0	2	0	0	340
0	0	1	2	340
0	0	2	1	360
1	1	0	0	370
0	1	0	2	380
0	0	3	0	380
2	0	0	0	400
0	1	1	1	400
1	0	0	2	410
0	1	2	0	420
0	0	0	4	420
1	0	1	1	430
0	2	0	1	440
0	0	1	3	440
1	0	2	0	450
0	2	1	0	460
0	0	2	2	460
1	1	0	1	470
0	1	0	3	480
0	0	3	1	480
1	1	1	0	490
2	0	0	1	500
0	3	0	0	500
0	1	1	2	500
0	0	4	0	500
1	0	0	3	510
2	0	1	0	520
0	1	2	1	520
0	0	0	5	520
1	2	0	0	530
1	0	1	2	530
0	2	0	2	540
0	1	3	0	540
0	0	1	4	540
1	0	2	1	550
2	1	0	0	560
0	2	1	1	560
0	0	2	3	560

P180	P150	P110	P90	Distance between walls (cm)
1	1	0	2	570
1	0	3	0	570
0	2	2	0	580
0	1	0	4	580
0	0	3	2	580
3	0	0	0	590
1	1	1	1	590
2	0	0	2	600
0	3	0	1	600
0	1	1	3	600
0	0	4	1	600
1	1	2	0	610
1	0	0	4	610
2	0	1	1	620
0	3	1	0	620
0	1	2	2	620
0	0	5	0	620
0	0	0	6	620
1	2	0	1	630
1	0	1	3	630
2	0	2	0	640
0	2	0	3	640
0	1	3	1	640
0	0	1	5	640
1	2	1	0	650
1	0	2	2	650
2	1	0	1	660
0	4	0	0	660
0	2	1	2	660
0	1	4	0	660
0	0	2	4	660
1	1	0	3	670
1	0	3	1	670
2	1	1	0	680
0	2	2	1	680
0	1	0	5	680
0	0	3	3	680
3	0	0	1	690
1	3	0	0	690
1	1	1	2	690
1	0	4	0	690
2	0	0	3	700
0	3	0	2	700
0	2	3	0	700
0	1	1	4	700
0	0	4	2	700
3	0	1	0	710
1	1	2	1	710
1	0	0	5	710
2	2	0	0	720
2	0	1	2	720
0	3	1	1	720
0	1	2	3	720

Using the non-tilt safety fork provides an additional adjustment allowance of 15 cm (see page 26).

P180	P150	P110	P90	Distance between walls (cm)
0	0	5	1	720
0	0	0	7	720
1	2	0	2	730
1	1	3	0	730
1	0	1	4	730
2	0	2	1	740
0	3	2	0	740
0	2	0	4	740
0	1	3	2	740
0	0	6	0	740
0	0	1	6	740
3	1	0	0	750
1	2	1	1	750
1	0	2	3	750
2	1	0	2	760
2	0	3	0	760
0	4	0	1	760
0	2	1	3	760
0	1	4	1	760
0	0	2	5	760
1	2	2	0	770
1	1	0	4	770
1	0	3	2	770
4	0	0	0	780
2	1	1	1	780
0	4	1	0	780
0	2	2	2	780
0	1	5	0	780
0	1	0	6	780
0	0	3	4	780
3	0	0	2	790
1	3	0	1	790
1	1	1	3	790
1	0	4	1	790
2	1	2	0	800
2	0	0	4	800
0	3	0	3	800
0	2	3	1	800
0	1	1	5	800
0	0	4	3	800
3	0	1	1	810
1	3	1	0	810
1	1	2	2	810
1	0	5	0	810
1	0	0	6	810
2	2	0	1	820
2	0	1	3	820
0	5	0	0	820
0	3	1	2	820
0	2	4	0	820
0	1	2	4	820
0	0	5	2	820
0	0	0	8	820

P180	P150	P110	P90	Distance between walls (cm)
3	0	2	0	830
1	2	0	3	830
1	1	3	1	830
1	0	1	5	830
2	2	1	0	840
2	0	2	2	840
0	3	2	1	840
0	2	0	5	840
0	1	3	3	840
0	0	6	1	840
0	0	1	7	840
3	1	0	1	850
1	4	0	0	850
1	2	1	2	850
1	1	4	0	850
1	0	2	4	850
2	1	0	3	860
2	0	3	1	860
0	4	0	2	860
0	3	3	0	860
0	2	1	4	860
0	1	4	2	860
0	0	7	0	860
0	0	2	6	860
3	1	1	0	870
1	2	2	1	870
1	1	0	5	870
1	0	3	3	870
4	0	0	1	880
2	3	0	0	880
2	1	1	2	880
2	0	4	0	880
0	4	1	1	880
0	2	2	3	880
0	1	5	1	880
0	1	0	7	880
0	0	3	5	880
3	0	0	3	890
1	3	0	2	890
1	2	3	0	890
1	1	1	4	890
1	0	4	2	890
4	0	1	0	900
2	1	2	1	900
2	0	0	5	900
0	4	2	0	900
0	3	0	4	900
0	2	3	2	900
0	1	6	0	900
0	1	1	6	900
0	0	4	4	900
3	2	0	0	910
3	0	1	2	910

PRIMARY BEAM GRID

P180	P150	P110	P90	Distance between walls (cm)
1	3	1	1	910
1	1	2	3	910
1	0	5	1	910
1	0	0	7	910
2	2	0	2	920
2	1	3	0	920
2	0	1	4	920
0	5	0	1	920
0	3	1	3	920
0	2	4	1	920
0	1	2	5	920
0	0	5	3	920
0	0	0	9	920
3	0	2	1	930
1	3	2	0	930
1	2	0	4	930
1	1	3	2	930
1	0	6	0	930
1	0	1	6	930
4	1	0	0	940
2	2	1	1	940
2	0	2	3	940
0	5	1	0	940
0	3	2	2	940
0	2	5	0	940
0	2	0	6	940
0	1	3	4	940
0	0	6	2	940
0	0	1	8	940
3	1	0	2	950
3	0	3	0	950
1	4	0	1	950
1	2	1	3	950
1	1	4	1	950
1	0	2	5	950
2	2	2	0	960
2	1	0	4	960
2	0	3	2	960
0	4	0	3	960
0	3	3	1	960
0	2	1	5	960
0	1	4	3	960
0	0	7	1	960
0	0	2	7	960
5	0	0	0	970
3	1	1	1	970
1	4	1	0	970
1	2	2	2	970
1	1	5	0	970
1	1	0	6	970
1	0	3	4	970
4	0	0	2	980
2	3	0	1	980

P180	P150	P110	P90	Distance between walls (cm)
2	1	1	3	980
2	0	4	1	980
0	6	0	0	980
0	4	1	2	980
0	3	4	0	980
0	2	2	4	980
0	1	5	2	980
0	1	0	8	980
0	0	8	0	980
0	0	3	6	980
3	1	2	0	990
3	0	0	4	990
1	3	0	3	990
1	2	3	1	990
1	1	1	5	990
1	0	4	3	990
4	0	1	1	1000
2	3	1	0	1000
2	1	2	2	1000
2	0	5	0	1000
2	0	0	6	1000

GRID FOR SECONDARY FRAMES C2+

Grid for secondary frames C2+ from 0 to 10 m			
C+180	C+150	C+110	Distance between walls (cm)
0	0	1	140
0	1	0	180
1	0	0	210
0	0	2	260
0	1	1	300
1	0	1	330
0	2	0	340
1	1	0	370
0	0	3	380
2	0	0	400
0	1	2	420
1	0	2	450
0	2	1	460
1	1	1	490
0	3	0	500
0	0	4	500
2	0	1	520
1	2	0	530
0	1	3	540
2	1	0	560
1	0	3	570
0	2	2	580
3	0	0	590
1	1	2	610
0	3	1	620
0	0	5	620
2	0	2	640
1	2	1	650
0	4	0	660
0	1	4	660
2	1	1	680
1	3	0	690
1	0	4	690
0	2	3	700
3	0	1	710
2	2	0	720
1	1	3	730
0	3	2	740
0	0	6	740
3	1	0	750
2	0	3	760
1	2	2	770
4	0	0	780
0	4	1	780
0	1	5	780
2	1	2	800
1	3	1	810

C+180	C+150	C+110	Distance between walls (cm)
1	0	5	810
0	5	0	820
0	2	4	820
3	0	2	830
2	2	1	840
1	4	0	850
1	1	4	850
0	3	3	860
0	0	7	860
3	1	1	870
2	3	0	880
2	0	4	880
1	2	3	890
4	0	1	900
0	4	2	900
0	1	6	900
3	2	0	910
2	1	3	920
1	3	2	930
1	0	6	930
4	1	0	940
0	5	1	940
0	2	5	940
3	0	3	950
2	2	2	960
5	0	0	970
1	4	1	970
1	1	5	970
0	6	0	980
0	3	4	980
0	0	8	980
3	1	2	990
2	3	1	1,000
2	0	5	1,000

ALPHI, THE LEADING FRENCH MANUFACTURER OF SLAB FORMWORK



TopDalle formwork is particularly suitable for residential construction projects. The safety conditions for workers are optimal thanks to the controlled spacing between frames of 13 cm. The flexible use and simplicity of the system offer high productivity.

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