

DORPA

Frame scaffolding



// Maximum safety and high assembly efficiency

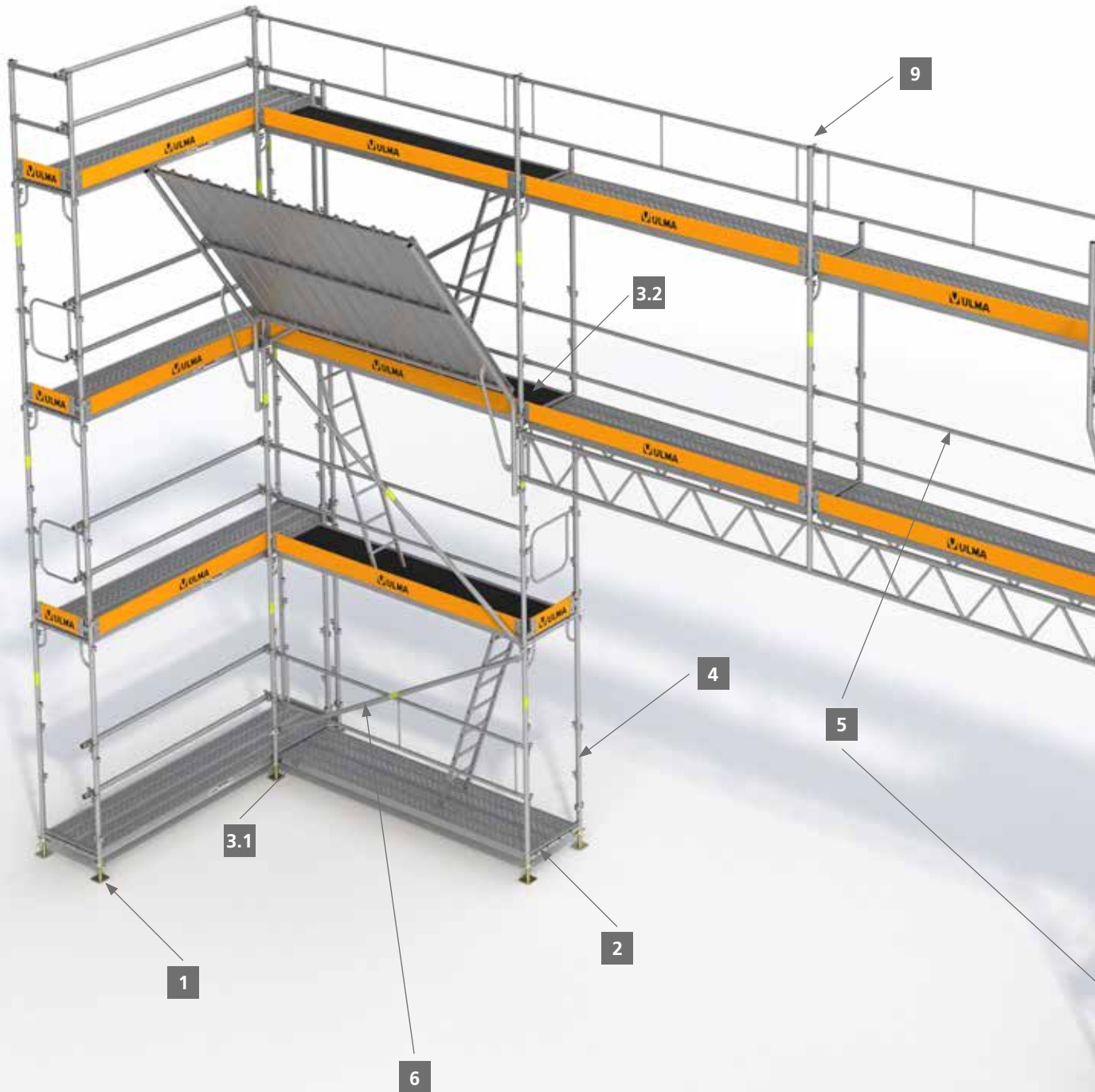


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- ▶ **Certified façade scaffolding**, mainly composed of frames joined by means of platforms, guardrails and diagonals, simplifying assembly.
- ▶ This system has been **designed and manufactured** in accordance with the requirements of European regulations, **EN 12810-1/2 and EN 12811-1/2/3**.
- ▶ High-performance hot-dip **galvanised modular scaffolding**.
- ▶ Designed for all types of work for covering façades in **total safety**: renovation, restoration, cladding, maintenance and masonry in general.





System Components:



1	Adjustable Jack Base	Quick scaffolding height levelling thanks to the adjustable jack. Assembly is possible on surfaces with potential irregularities or small gradients. Perfect adaptation to the ground.
2	Initial support	It supports the first level of platforms.
3.1	Metal platform	Guaranteed safety thanks to the non-slip surface and the frame that prevents the platform from accidentally rising.
3.2	Trapdoor platform	It has its own ladder and allows access through the inner part of the scaffolding, without leaving gaps between platforms.
4	Frame	Made of galvanised steel, it is available for each type of use, with different scaffolding heights and widths. Additionally, it is ready for placing guardrails, ledgers, consoles... It allows placing guardrails on both sides of the frame, thanks to the hooks fitted onto it.
5	Guardrail	Guardrails are swiftly and easily placed on the assembly points fitted onto the frames.
6	Diagonal	It braces the vertical plane parallel to the façade. It facilitates the levelling of the scaffolding.
7	Corner guardrail	It guarantees the lateral protection of the work area.
8	Guardrail frame	It is used for the lateral fencing of the top level.
9	Guardrail post	Guardrail posts are placed above the intermediate frames to protect the upper work surface.
10	Toeboard	Measuring 15 cm in height, it prevents objects from falling off the platform level.



// Features

- ▶ **Certified by AENOR**, 34/000016, in accordance with European standard EN 12810-1/2, EN 12811-1/2/3.
- ▶ Main components: frame, guardrail, diagonal, platform, screw jack and toeboard.
- ▶ **Spans** measuring 0.7 m; 1.02 m; 1.5 m; 2 m; 2.5 m; 3 m.
- ▶ **Widths** measuring 0.7 m and 1.02 m, with a height of 2 m between platforms.
- ▶ **Class 4, 5 or 6 platforms**, in accordance with EN 12810-1/2 and EN 12811-1/2/3.

EN 12810-1/2 // EN 12811-1/2/3 Working Load (kN/m ²)				
	Length (mm)			
	3000	2500	2000	1500
STEEL PLATFORM	4.5 Class 5	4.5 Class 5	6 Class 6	6 Class 6
PLATFORM WITH TRAPDOOR	2 Class 3	3 Class 4	4.5 Class 5	6 Class 6



* During the assembly process.





// Advantages

- ▶ **High levels of safety.** Scaffolding certified by AENOR, in accordance with European standards EN 12810-1/2 and EN 12811-1/2/3:

During assembly and dismantling:

Assembly guardrail. Its assembling from the lower level protects against potential falls when accessing the upper level. It has been checked and tested in accordance with standard EN 795 (*fall protection in anchor devices*).



During use:

Guardrails. Both for the outer and the inner part (if necessary). They facilitate levelling during assembly.

Platforms. Fully safe access thanks to non-slip platforms. In addition, no gaps are generated and the frames itself ensure that platforms are prevented from raising or becoming dislodged.

Toeboard. Measuring 15 cm in height, this protection component prevents objects from falling off the platform level.



- ▶ **High assembly efficiency.** Its optimised design and its lightweight components allow swift and easy assembly, thus reducing assembly and dismantling times.

- ▶ **Compatible with the BRIO modular scaffolding;** many common components.

- ▶ **High durability for multiple reuse,** thanks to the materials employed and to anti-corrosion protection through hot-dip galvanising.

- ▶ **Cost-effective system,** thanks to the reduced number of components and the swiftness and ease of assembly.

- ▶ **Free access points.** They allow working brackets at different heights.





// Solutions

| Access

Access between scaffolding levels is via the trapdoor platforms or BRIO ladders, which are fully compatible with the DORPA system.

Internal access:

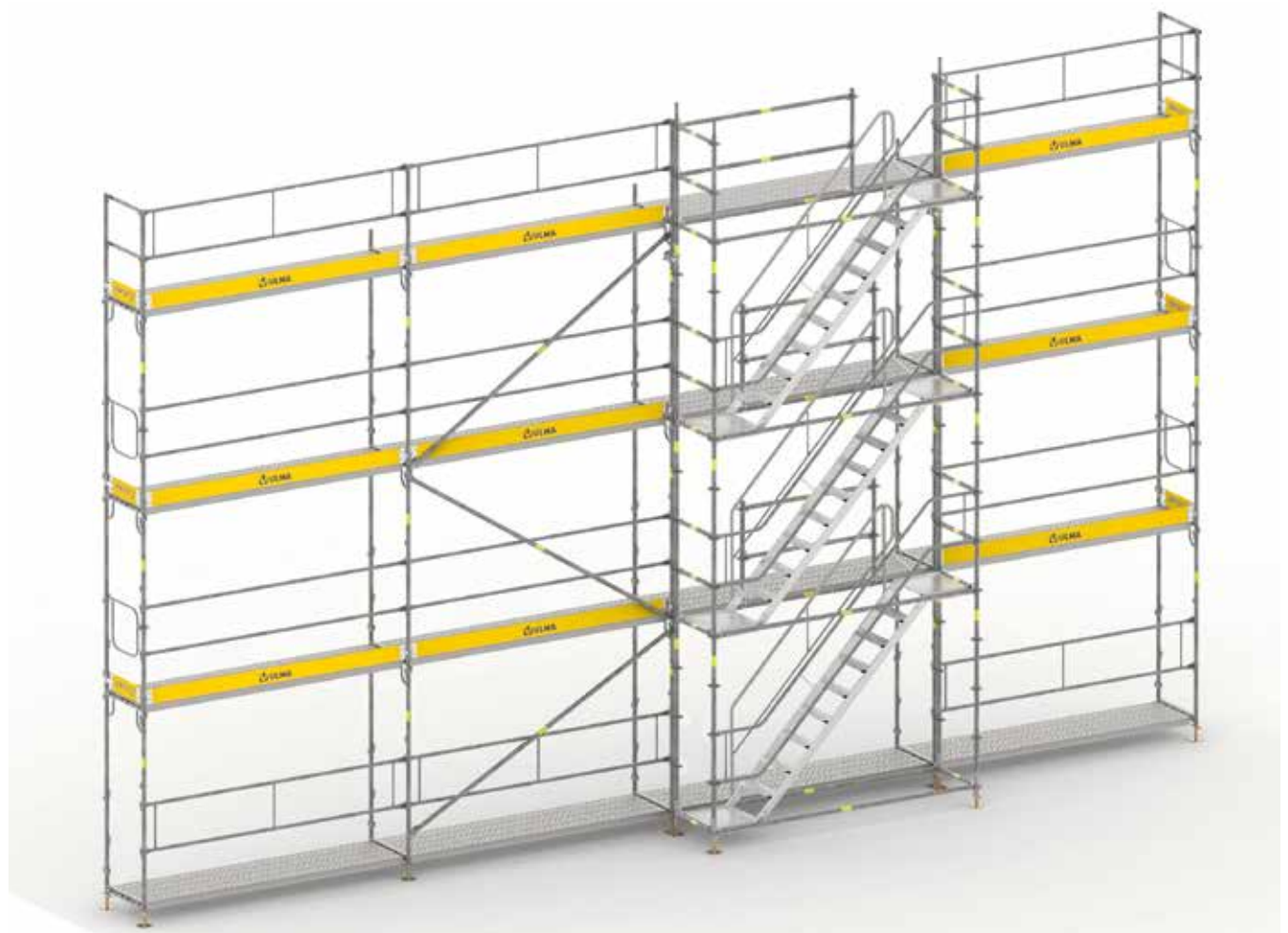
Trapdoor platform. It allows access through the inner part of the scaffolding, without leaving gaps between platforms at the same level. It is fitted with its own ladder in order to be able to move up or down safely between levels.

It is made of aluminium and fire-resistant plywood with a non-slip surface. Also, the trapdoor closes automatically, preventing potential accidents linked to horizontal gaps.

External access:

BRIO ladders. Thanks to the compatibility offered by this system, BRIO access towers can be used for those cases where more convenient and wider access points to the jobsite are required.

Aluminium or steel stringers may be used.





Safety

Of others:

Protection fans. They prevent the fall of objects and protect pedestrian traffic while work is being carried out on the scaffolding.

Of users:

Guardrails. This protection component prevents users from falling from the working platforms. These protections may consist of a frame with two tubes or of a ledger with a single tube.

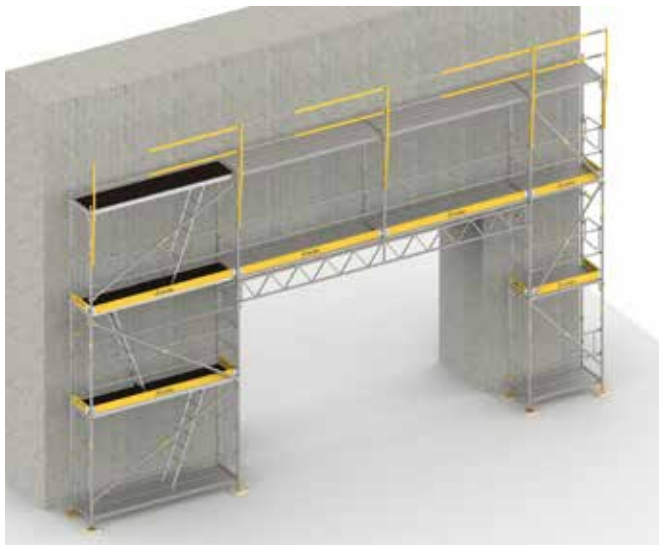
Toeboard Measuring 15 cm in height, this protection component prevents objects from falling off the platform level.



Passageways

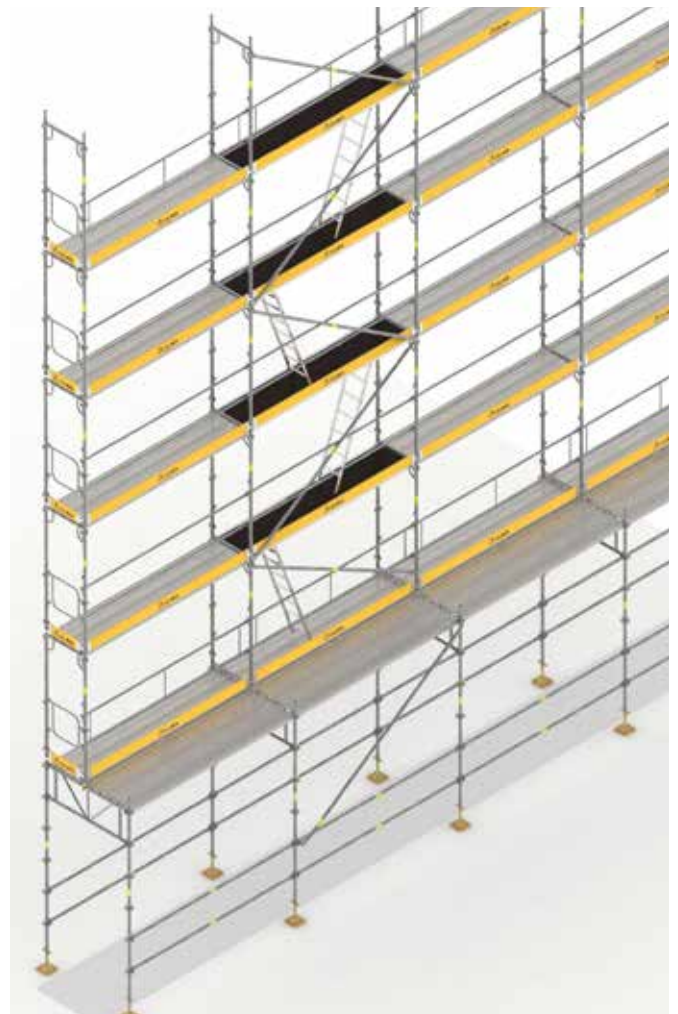
Transversal Passageways:

On sites where a permanent access passageway needs to be generated, a lattice beam is used.



Pedestrian Passageways:

A pedestrian passageway with considerable width to allow pedestrian traffic under the scaffolding. The BRIO modular scaffolding, which is fully compatible with the DORPA frame scaffolding, must be used.





Adaptation to façade geometry

Console:

It allows extending the work space using a homogeneous surface, both towards the inside and the outside of the scaffolding at any height.

4 sizes are available: 0.2 m; 0.32 m; 0.7 m and 1.02 m.



Cantilevers:

They allow adapting the scaffolding to projections or cantilevered areas that a building may have.

Modules measure 0.7 m and 1.02 m in width.



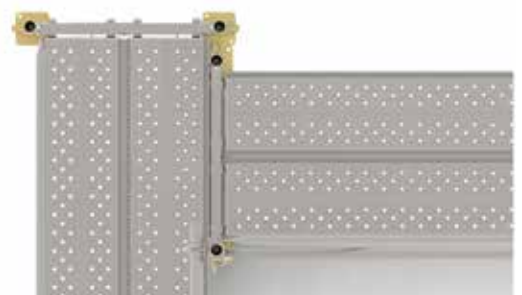
Circular solutions:

This system makes it possible to adapt to circular geometry through independent towers. Thanks to the wide range of platforms available, all gaps generated are covered, creating a work space with no interferences.



Corners:

Solutions for corner intersections use the system's own components and allow continuous passage without staggering. The position of safety components (guardrails and toeboards) also remains continuous.



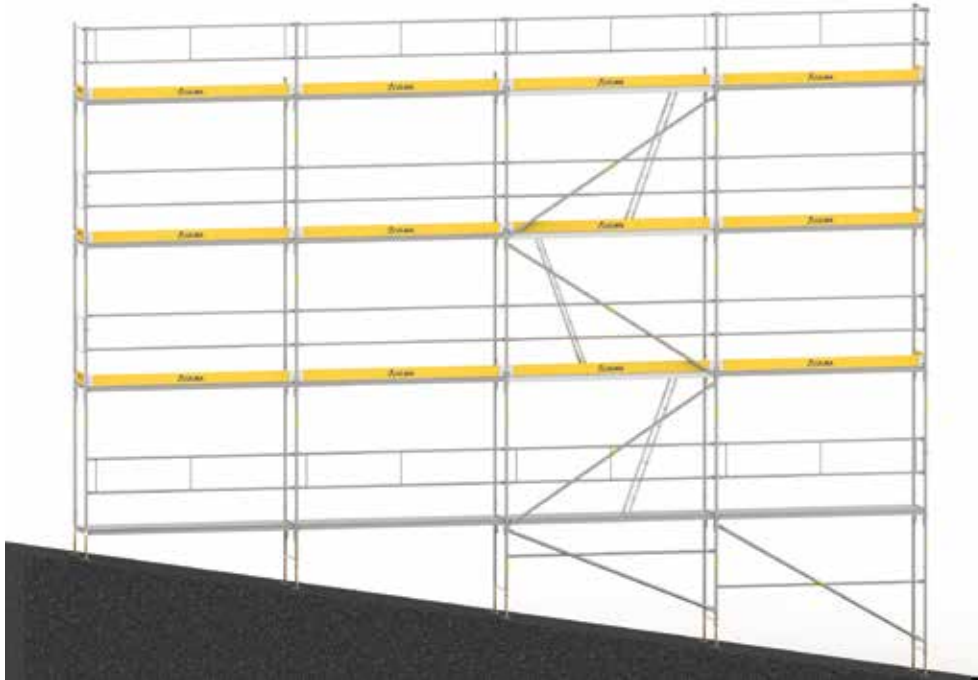


Adaptation to the ground

Varying levels:

In case of sloping ground, the system offers a wide range of frames that allow perfect adjustment of the scaffolding to the ground.

In addition, adjustable jacks and adjustable swivel bases provide the scaffolding with adequate support.



Tying solutions

Ties:

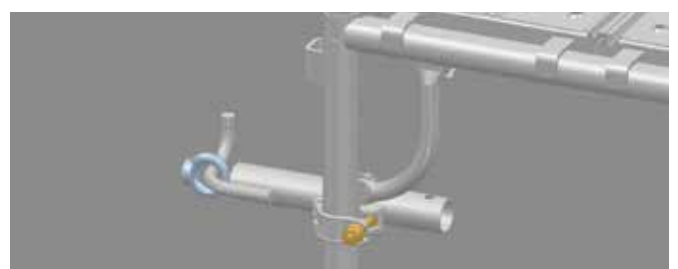
In order to ensure the stability of the scaffolding, it must be tied to a surface that is strong enough to bear the anchoring forces.

Anchoring forces must be calculated based on each individual configuration, since the combination of the following factors generates different results for stresses:

- Scaffolding dimensions
- Covering: Thick mesh, intermediate-thickness mesh, billboard canvas...
- Climatic conditions

This system offers several types of ties depending on the type of solution required:

- Ties to the wall face. The optimal type of tie shall be used in accordance with the characteristics of the wall.
- Ties between slabs. A prop is used as a fastening point.
- Ties at window openings. A screw jack is used as a fastening component.
- Collar ties. A structural component is surrounded, guaranteeing the tying of the scaffolding.
- Ties at supports. When it is not possible to use any of the ties enumerated above, parallel scaffolding is erected, which is then used for holding the façade scaffolding.





// Assembly process

1. Place the adjustable bases and the initial supports on the ground, according to the blueprint. Add wooden blocks where necessary.



2. Place the frames, guardrails and diagonals. Place the platforms and trapdoor platforms for the first level.



3. Level the structure.



4. Place the assembly guardrail on the next level.



5. Climb to the next level to begin assembling said next level.



6. Place the frames, guardrails and corner guardrails.



7. Raise the safety ledgers and posts to the next level.



8. Place the diagonals and toeboards.



9. Place the platforms for the next level and tie the scaffolding to the façade.



10. Continue and repeat the process until reaching the desired height.

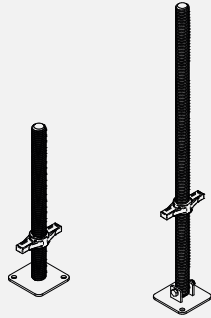
11. On the top level, place frames, guardrails and guardrail posts and remove the safety ledgers and posts.



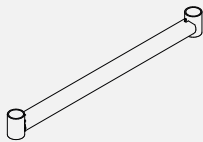


Basic components

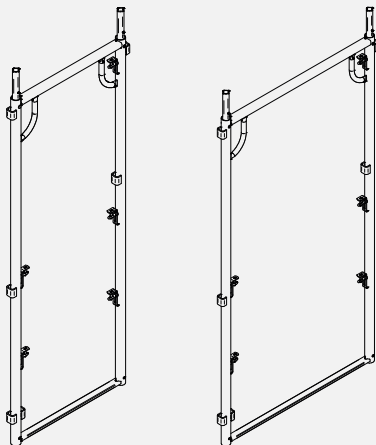
		kg
SCREW JACKS		
Adjustable Base 0.5	2124902	4.9
Adjustable Base 1	2124907	8.7
Adjustable Swivel Base 1	2127766	7.8



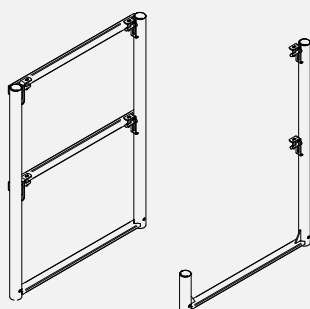
		kg
FRAMES		
Initial Support P-70	2124922	2.4
Initial Support P-100	2124923	3.4



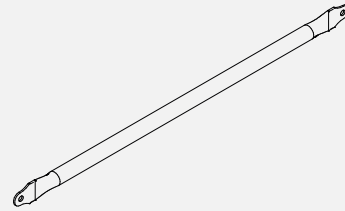
Frame M-70 2	2124945	19.6
Frame M-100 2	2124946	21



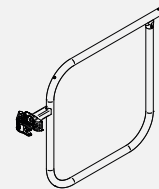
Guardrail Frame M-70	2125022	10.6
Guardrail Frame M-100	2125023	11.8
Guardrail Post M-70	2125024	5.6
Guardrail Post M-100	2125025	5.9



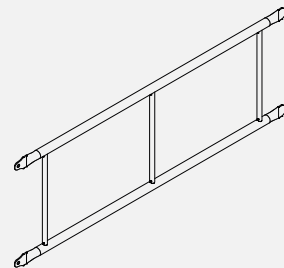
		kg
SAFETY GUARDRAIL		
Ledger 0.7	2125525	1.2
Ledger 1.02	2125524	1.8
Ledger 1.5	2124909	2.6
Ledger 2	2124910	3.5
Ledger 2.5	2124911	4.4
Ledger 3	2124912	5.3



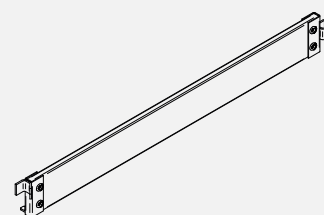
DORPA Corner Guardrail 0.7	2125097	2.8
DORPA Corner Guardrail 1.02	2125098	3.5



DORPA Guardrail 1.5	2124917	6.5
DORPA Guardrail 2	2124918	8.3
DORPA Guardrail 2.5	2124919	10
DORPA Guardrail 3	2124920	11.8



Toeboard 0.7	2124998	2.6
Toeboard 1.02	2124999	3.2
Toeboard 1.5	2124994	4.2
Toeboard 2	2124995	5.2
Toeboard 2.5	2124996	6
Toeboard 3	2124997	6.8

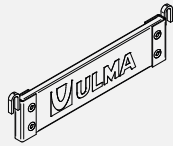


* Wooden Toeboard also available.



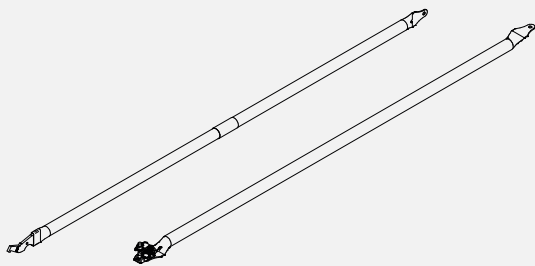
Basic components

		kg
DORPA Inner Toeboard 0.7	2125489	2.4
DORPA Inner Toeboard 1.02	2125494	3.3
DORPA Inner Toeboard 1.5	2125496	4.3
DORPA Inner Toeboard 2	2125497	5.2
DORPA Inner Toeboard 2.5	2125498	6.2
DORPA Inner Toeboard 3	2125499	7.4



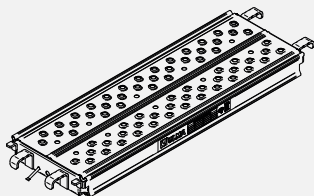
DIAGONALS

Fix Pinned Diagonal 1.5x2	2125295	5.5
Fix Pinned Diagonal 2x2	2125294	6.5
Fix Pinned Diagonal 2.5x2	2125293	7.4
Fix Pinned Diagonal 3x2	2125292	8.4
Diagonal with Coupler 1.5x0.5	2125217	4.4
Diagonal with Coupler 1.5x1	2125218	4.5
Diagonal with Coupler 1.5x1.5	2125219	5.1
Diagonal with Coupler 1.5x2	2124983	6.2
Diagonal with Coupler 2x0.5	2125220	5.5
Diagonal with Coupler 2x1	2125221	5.7
Diagonal with Coupler 2x1.5	2125222	6.2
Diagonal with Coupler 2x2	2124984	6.8
Diagonal with Coupler 2.5x0.5	2125223	6.7
Diagonal with Coupler 2.5x1	2125224	6.8
Diagonal with Coupler 2.5x1.5	2125225	7.2
Diagonal with Coupler 2.5x2	2124985	8
Diagonal with Coupler 3x0.5	2125226	7.8
Diagonal with Coupler 3x1	2125227	7.9
Diagonal with Coupler 3x1.5	2125228	8.1
Diagonal with Coupler 3x2	2124986	9

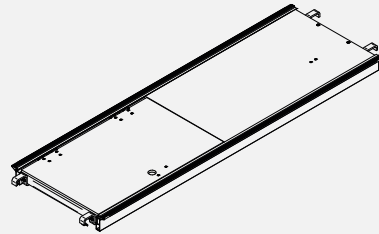


PLATFORMS

Platform 0.7	2127718	6.6
Platform 1.02	2127717	9
Platform 1.5	2127716	12.4
Platform 2	2127715	17
Platform 2.5	2127714	20.2
Platform 3	2127713	22.2

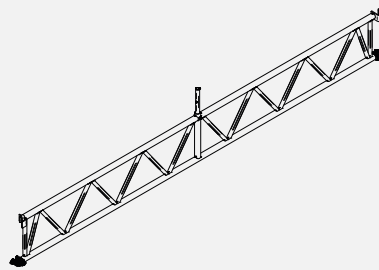


		kg
Trapdoor Platform 1.02	2129617	15.2
Trapdoor Platform 1.5	2128152	19.3
Trapdoor Platform 2	2127868	23.3
Trapdoor Platform 2.5	2127867	26.5
Trapdoor Platform 3	2127712	30.6

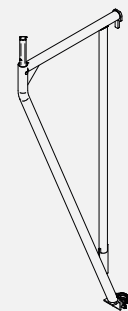


DORPA COMPONENTS

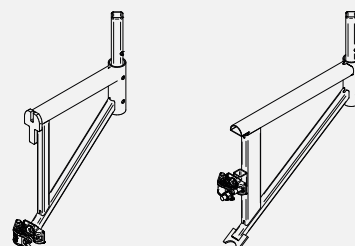
DORPA Bridging Beam 4	2125060	41.2
DORPA Bridging Beam 5	2125058	49.5
DORPA Bridging Beam 6	2125044	59



DORPA Cantilever 0.7	2125337	13.3
DORPA Cantilever 1.02	2125398	14.6

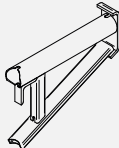
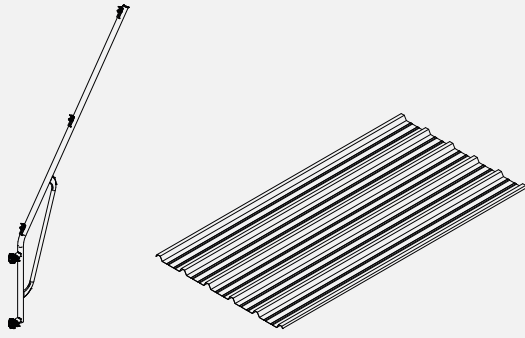

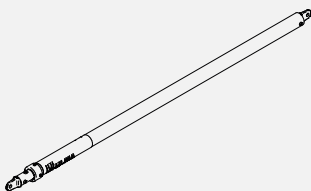

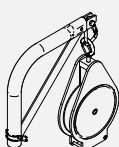


F 0.32 Console	2125583	3.7
F 0.7 Console	2125592	4.9
F 1,02 Console	2125597	6.1
M 0.32 Console	2125602	4
M 0.5 Console	2125695	4.6
M 0.7 Console	2125608	5.3
M 1.02 Console	2125612	6.5





Basic components

0.3 Working Bracket	2125382	2.8
		
PROTECTION FAN		
Cover Shield	2125316	13.1
Covering Sheet	2125322	12.4
PL sheet	2125705	12.8
		
SAFETY COMPONENTS FOR ASSEMBLY		
DORPA Safety Post	2128071	4.6
		
Safety Ledger 2-3	2128194	4.7
Safety Ledger 1-2	2129310	3.6
		
Securing shackle for lifting material	2129172	0.8
		
Pulley with Support	2129173	6.8
		

BRIO/DORPA SCAFFOLDING COMPLEMENTS		
Two-Colour Net 6x12	2125549	7.2
		
CONNECTING ELEMENTS		
Right Angle Coupler 48/48	2125148	1.2
Swivel Coupler 48/48	2125147	1.3
		
Coupler 48 with Spigot	2125309	1.4
		
IPN Coupler	2125309	1.6
		
14x70 Plastic Block	9371777	0.01
14x100 Plastic Block	9371774	0.01
14x140 Plastic Block	9371773	0.01
12x120 Ring	9371772	0.18
12x160 Ring	9371778	0.22
12x230 Ring	9371779	0.29
		
4.8x190 B Plastic Clamp (100 units)	9372811	0.5
4.8x290 B Plastic Clamp (100 units)	9372809	0.8
7.6x540 N Plastic Clamp (100 units)	9372810	0.5



// Reference projects



► La Laguna Cathedral - TENERIFE



► Pelli Tower - SEVILLE



► Building in the Canyelles neighbourhood - BARCELONA



► Xeral Hospital - GALICIA



► San Martín Market - SAN SEBASTIÁN



► Building on Autonomía street, 53 - BILBAO



► Cibeles Palace - MADRID



► Libero Shopping Centre - POLAND



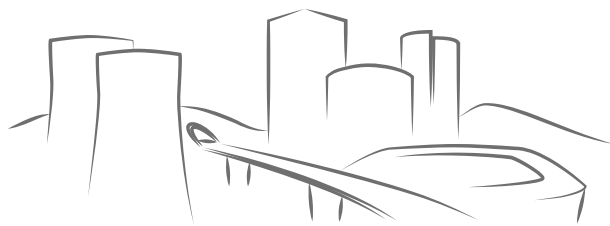
► Caja Cívica - CHILE



► La Puntilla - CHILE



► Havana Cathedral - CUBA



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