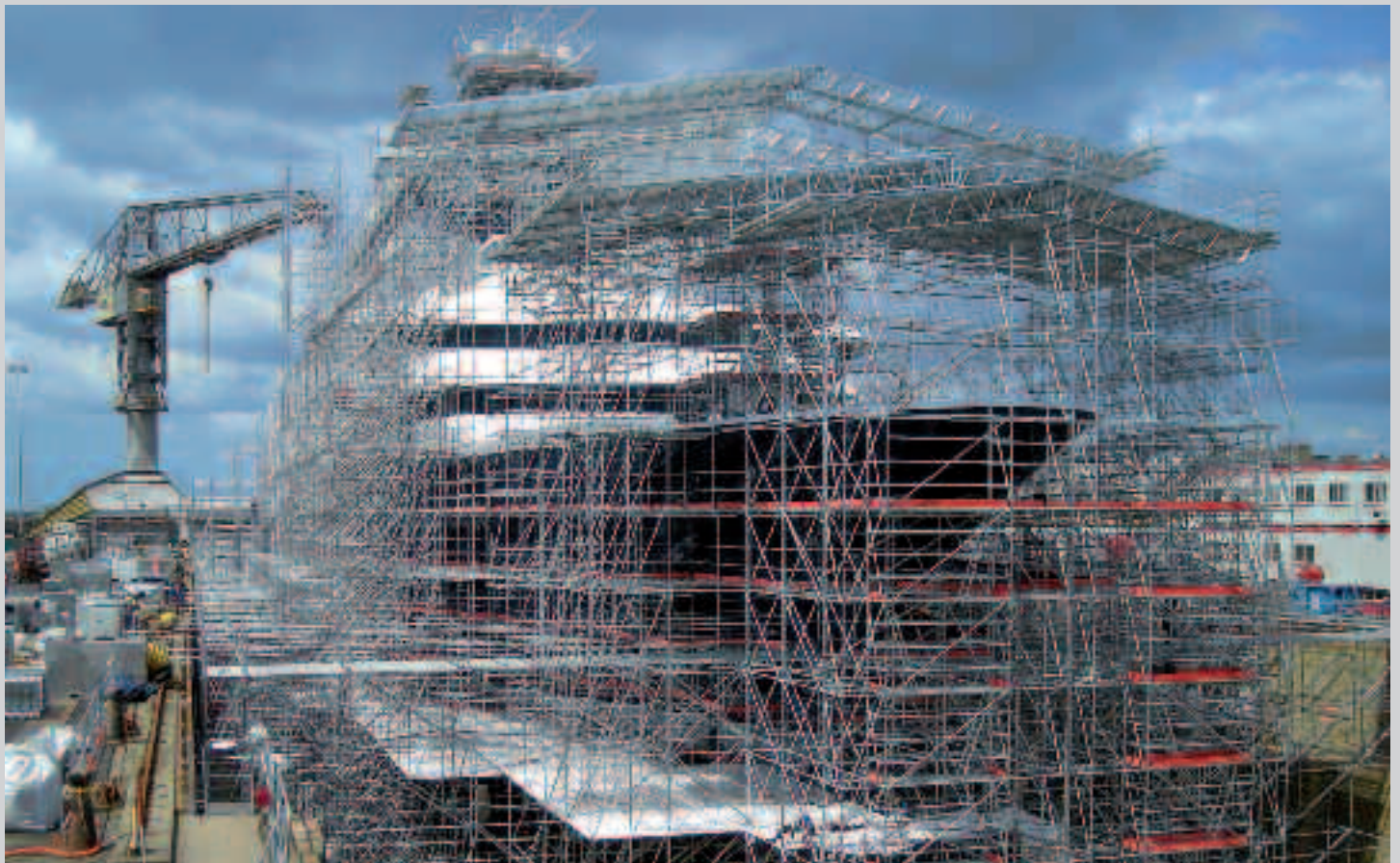


Metrix Plettac



**scaffolding
the future**

A tool for professionals for all types of activities



Our researches in the fields of scaffolding techniques, safety, ergonomics and efficiency have led to the development of a practical, robust and safe equipment.

This means improved safety on site, increased productivity, reduced strain for scaffolders and lowered labour cost.

The equipment is made in Altrad group workshops, certified ISO 9001.

It is used everywhere: building construction and renovation, chemical plants, nuclear power plants, shipyards, entertainment industry etc.

Our engineering department provides customers with advice, plans and calculations.



Building construction, public works, industry, shipyards...



- Front cover: a temple around 110 meters high (Europe Echafaudage)
Renovation of one of the world's biggest yachts (Comi Service)
- Left page: water tower, footbridge 33 m span
- Right page: scaffolding on building construction sites, and in the petrochemical industry.
- Back cover: LNG tank insulation in St Nazaire (Comi Service), Arles arena (Europe Echafaudage).



Metrix Plettac, the omnidirectional scaffolding system.

Components are designed to ensure ergonomy, safety and easy erection



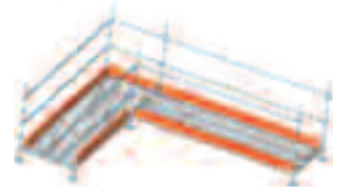
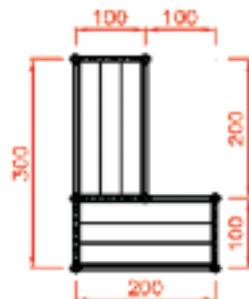
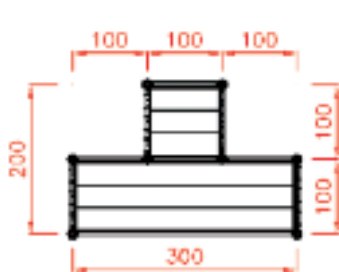
3-step assembly for permanent security guardrail

Metrix scaffolding components include permanent security guardrails, assembled from the secured level below. Guardrails are light and easy to handle

Bays have divisible dimensions: **1 + 1 = 2**

The divisibility brings a lot of advantages.

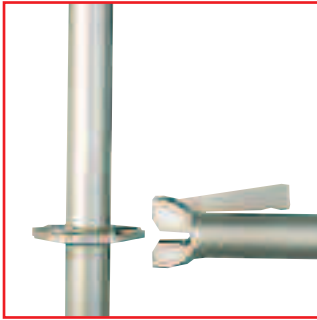
The following examples show savings in equipment and erection times. Angles, especially, need no tubes, clamps or bridging planks.



Decks fit onto tubular ledgers. They come with handles, anti-tipping device and wind clip



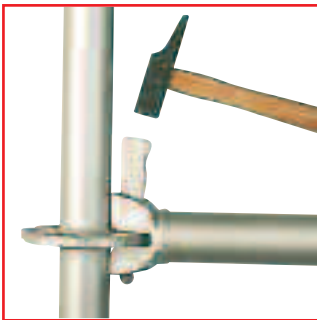
Patented Plettac rosette



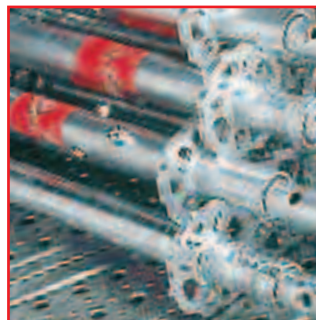
Ledger heads are connected to rosettes, welded onto standards every 50 cm



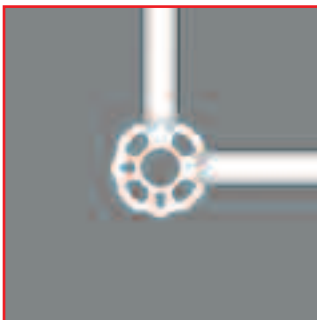
Specific shape of rosettes prevents standards from rolling, thus providing a higher safety level on platforms during erection



Wedges are locked using a hammer



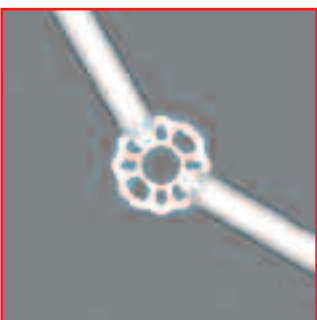
Ledger heads are connected to rosettes, welded onto standards every 50 cm



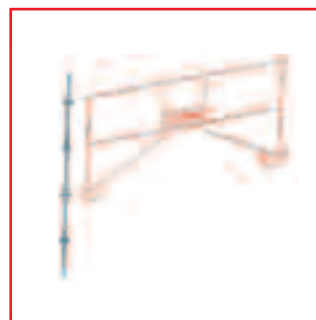
Each rosette comes with four narrow holes and four wide holes. Ledgers are placed in the narrow holes to form a right angle



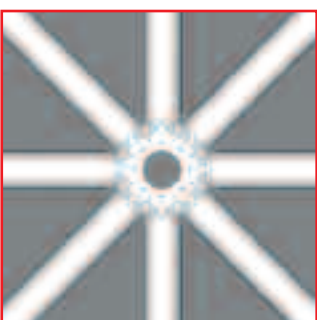
Ledger connection to standards



Ledgers are placed in the narrow and wide holes to form any angle. Metrix scaffolding is really omnidirectional, and this way, it follows any curve



Guardrail connection to standards

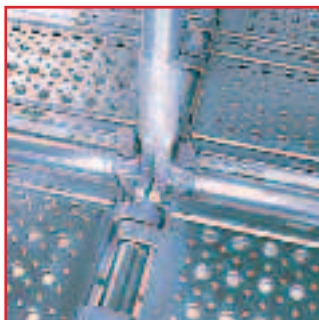


Up to 8 components, ledgers, diagonal braces or hop up brackets, can be connected to a single rosette



Guardrail connection to H frame

Main advantages



Decks are laid directly onto tubular ledgers. It cannot be more simple



handles provide safe and easy handling



Wind clips are part of the deck, safe and ready to use without any additional components



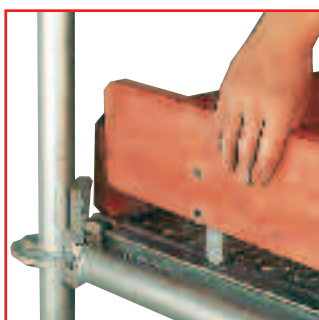
Guardrail with company logo upon request



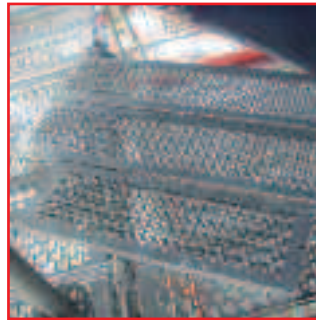
A device at the corner of the deck avoids tipping. Anti-slip holes reduce sand or rubble accumulation.



Adjustable ledgers for circular scaffolding dispense with tubes and fittings.



Wooden toe boards slot into the decks. The tight fit between deck and toe board prevents small objects from falling.

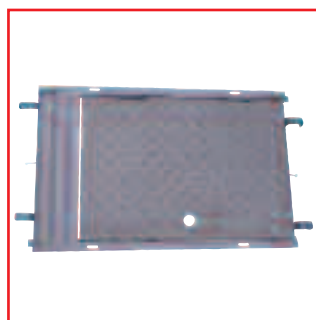


Toutacier steel boards are tough, anti-slip, equipped with a stud and security pin

Toutacier steel boards replace wooden boards.

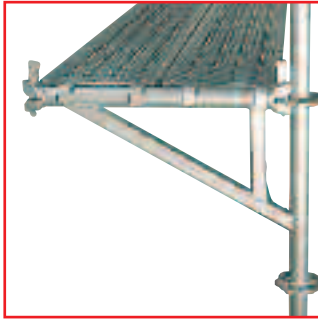


The tight fit between deck and toe board prevents small objects from falling.

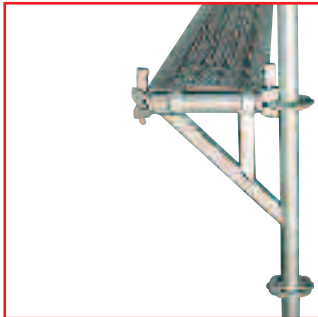


Aluminum light trapdoor (10.4 kg) fits anywhere on facade or tower scaffolding

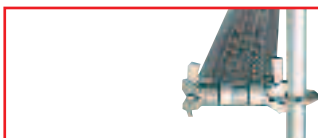
Main advantages



2 decks 30 cm wide, or one stairway, fit onto a bracket connected to a standard rosette



a 30 cm wide deck fits onto a 40 cm reinforced bracket



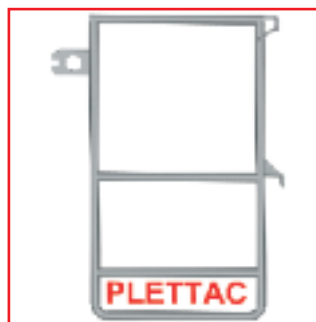
a 20 cm wide deck fits onto a 30 cm long ledger



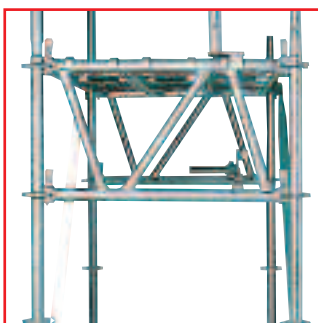
a 70 cm long ledger can be connected on one side to a collar supported by diagonal bracing



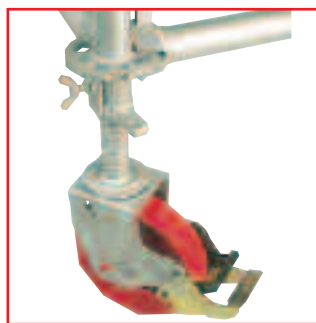
trapdoor; held closed by its own weight; door is positioned away from the end of the deck



swing gate including a toe board, closed by its own weight



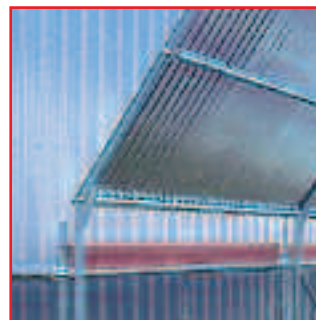
1 meter long bridging beam widens the scaffolding at street level to ease pedestrian circulation



full range of wheels.



1 meter long bridging beam can also be used as a cantilever on 70 cm wide scaffolding.



shields made of galvanized steel sheets to prevent rubble falling

Steel modular roofs



Galvanized steel modular roofing system

Roof components are assembled at ground level, then lifted by crane

Roof edge guardrails are connected at ground level, to ensure safety of staff working on the roof

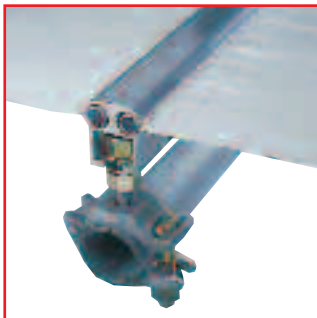
Depending upon the climatic conditions, roof width can be up to 30 m

Plettac modular system allows parts of the roof to be quickly removed, to allow the passage of loads, through the roof.



See working load capacities in the erection manual or ask for advise to our engineering office; drawings are not contractual; weights can vary

Translucent roof

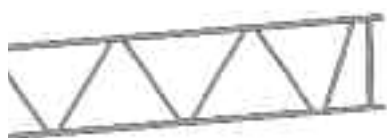


These roofs are made with lattice girders, equipped with an aluminium rail. The upper part of the rail is in the shape of 2 luff grooves. A bolt rope is welded onto a translucent tarpaulin, and is slipped into the groove. The lattice girders are made of steel or aluminium depending on technical erection constraints, width of the building to be covered and climatic conditions.



galvanized steel lattice girder

40 cm in height
chord members are 48.3 mm diameter tubes



heavy load galvanized steel lattice girder

70 cm in height
chord members are 48.3 mm diameter tubes



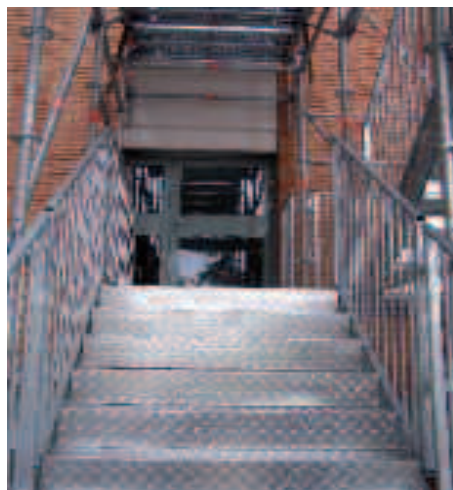
aluminium lattice girder

40 cm in height
chord members are 48.3 mm diameter tubes; 4 mm wall thickness








cm kg réf.

cm	kg	réf.
320	30,3	XPC3
420	39,4	XPC4
520	48,2	XPC5
620	57,1	XPC6
770	71,2	XPC7
500	52,9	XGC5
600	68,0	XGC6
700	73,2	XGC7
320	12,6	XPL3
420	16,3	XPL4
520	19,9	XPL5
620	23,6	XPL6
770	29,4	XPL7
820	31,2	XPL8

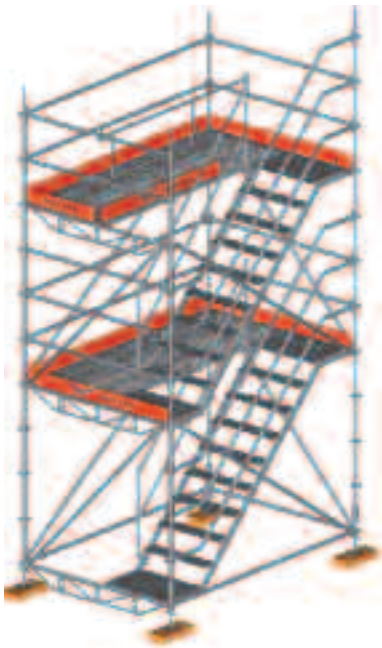
Public staircase



The heaviest component of Metrix public stairways weighs about 20 kilograms. 2 types of stair stringers are available: 3 steps to climb 0.5 m and 6 steps to climb 1 m
 Step and riser are attached
 Width of step is 1.21 m and 1.71 m corresponding to 1.5 m and 2.0 m bay widths

	cm	kg	réf.
 <p>6 steps stair stringer, left and right types</p>	100x150	8.8	KLD6
	100x150	8.8	KLG6
 <p>3 steps stair stringer, left and right types</p>	50x75	5.8	KLD3
	50x75	5.8	KLG3
 <p>Public stairway step, with riser included 2 bolts ref. KBES to be added. Step width 121 cm and 171 cm</p>	121	16.7	KMA3
	171	20.3	KMA4
 <p>Transversal guard rail for landings. Maximum open space 11 cm according to French standard NF P93-523. To be used perpendicular to stair stringers on landings.</p>	100x150	15.9	KAP3
	100x200	24.5	KAP4
 <p>Longitudinal guard rail for landings. Maximum open space 11 cm according to French standard NF P93-523. To be used parallel to stair stringers on landings</p>	100x150	16.5	KXP3
	100x200	25.0	KXP4
 <p>Guard rail for 6 steps stair stinger. Maximum open space 11 cm according to french standard NF P93-523. To be used on stair stingers 1 m vertically, 1.5 m horizontally</p>	100x150	17.6	KVG6
	100x150	17.6	KVD6
 <p>Guard rail for 3 steps stair stringer. Maximum open space 11 cm according to French standard NF P93-523. To be used on stair stringers 0.5 m vertically, 0.75 m horizontally</p>	100x150	17.1	KVG3
	100x150	17.1	KVD3

Staircase for construction site



Staircase with exit every 2 m in height



Staircase with exit on top only

Plettac staircases for construction sites use aluminum flyers with incorporated landings. 3 types of flyers: for bays of 3 m, 2.5 m and 1.5 m in length and 0.6 or 0.9 m in width
 Flyers are set inside the bay, outside on hop up brackets, or within rectangular towers, as shown.
 A special study is needed for each project



Aluminum flyer

70 cm between standard axis

100 cm between standards axis

	cm	kg	réf.
70 cm between standard axis	200x250	27,2	KEL5
	200x300	28,0	KEL6
	100x150	16,0	KEL3
100 cm between standards axis	200x250	32,4	KEL51
	200x300	33,6	KEL61
	100x150	19,0	KEL31
Inner guard rail	250	6,7	KG15
	300	7,5	KG16
Outer guard rail	250	12,5	KLE5
	300	14,0	KLE6
Stair head guardrail	195 x 50	8,7	KGCS
	240 x 50	10,4	KGCS6
Junction plank		0,5	KELP



Inner guard rail

made of aluminum, connected to the aluminum flyer with 4 bolts of 10 mm in diameter

Outer guard rail

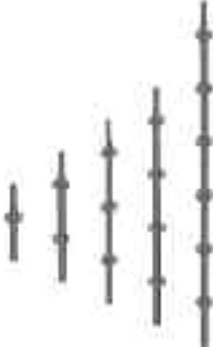






made of steel, equipped with wedge heads.

Stair head guardrail


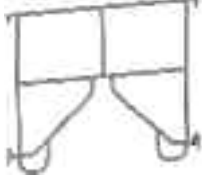

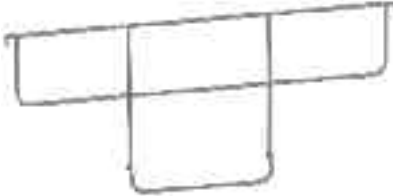


for the upper level, in a 2.5 m or 3.0 m bay.









Junction plank

to connect the landings of two adjacent flyers 90 cm wide.

	cm	kg	réf.
 <p>Standard Tube Ø48.3x3.2 mm, with a welded rosette every 50 cm Each rosette can be connected to 8 components (ledgers, diagonals, hop up brackets, etc.) Standards can be connected together with pins or bolts if necessary</p>	50	3,0	KPT1
	100	5,1	KPT2
	150	7,3	KPT3
	200	9,4	KPT4
	300	13,6	KPT6
 <p>Standard with bolted spigot for transmission of heavy tension loads (hung scaffolding for example)</p>	50	3,5	KPM1
	100	6,1	KPM2
	150	8,2	KPM3
	200	10,3	KPM4
 <p>Frame H18 Tube Ø48.3x2.7 mm Height 2 m Width 0.7 m 2 Metrix rosettes welded at transom level Ledgers can be connected every 50 cm</p>	200	18,2	KCH4*
 <p>Divisible metric ledger Tube Ø48.3 Wedge head welded at each end. Can be used as a transom to carry decks (see allowable loads page 22)</p>	18	1,3	KCDC
	30	1,8	KLC7
	40	2,1	KLC8
	50	2,4	KLC9
	70	3,2	KLC1
	74	3,2	KLC0
	100	4,1	KLC2
	150	5,8	KLC3
	200	7,5	KLC4
	250	9,2	KLC5
300	10,9	KLC6	
 <p>Reinforced ledger tube Ø48.3, used as a transom to carry decks with heavy loads on decks (see allowable loads page 22)</p>	100	5,0	KLR2
	150	9,9	KLR3
 <p>Vertical diagonal Tube Ø48.3 Swivelling wedge head at both ends Used to brace the scaffolding every 2 m in height One type of diagonal for each bay length</p>	70	7,6	KDV1
	100	8,4	KDV2
	150	9,2	KDV3
	200	10,1	KDV4
	250	11,2	KDV5
	300	12,4	KDV6
 <p>Base collar To be used with screw jacks Used to settle the scaffolding, and also for cantilevered scaffoldings for instance</p>	33	2,10	KEMB

Permanent safety guard rail

	cm	kg	réf.
 <p>Permanent safety guard rail Equipped with a permanent toe board. Installed from the secured level below</p>	70	3,0	KGH1
	100	5,0	KGH2
 <p>Permanent safety guard rail Installed from the secured level below</p>	150	9,0	KGH3
 <p>Permanent safety guard rail Installed from the secured level below company logo on request</p>	200	10,0	KGH4
	250	13,3	KGH5
	300	15,5	KGH6
 <p>Permanent side safety guard rail Installed from the secured level below, perpendicularly to the permanent safety guard rail, for towers more than 1 m wide</p>	150	7,5	KGL3
	200	8,9	KGL4
	250	9,9	KGL5
	300	11,1	KGL6
 <p>Safety swing gate Equipped with a permanent toe board, Safety swing gate closes automatically</p>	70x100	5,5	KSP1
	100x100	6,5	KSP2
 <p>Fencing with wedge heads Used around lift towers, loading bays and working platforms</p>	100	11.70	KPG2
	150	12.90	KPG3
	200	15.50	KPG4
	250	19.00	KPG5
	300	20.70	KPG6

	cm	kg	réf.
	30 cm wide galvanised steel deck		
	Allowable working load 600 daN/m ² according to European standards		
	Laid directly on tubular supports		
	Steel sheets 15/10 mm thick		
	All Metrix decks come with handles, wind clip, anti-tilting device and slots for toe boards		
	70	6,7	KMC1
100	8,9	KMC2	
150	11,9	KMC3	
200	15,2	KMC4	
250	18,2	KMC5	
300	21,3	KMC6	
	20 cm wide galvanised steel deck		
	Allowable working load 600 daN/m ² according to European standards		
	Laid directly on tubular supports		
	Steel sheets 15/10 mm thick		
	All Metrix decks come with handles, wind clip, anti-tilting device and slots for toe boards		
	70	5,4	KMH1
100	7,3	KMH2	
150	10,1	KMH3	
200	13,1	KMH4	
250	15,9	KMH5	
300	18,6	KMH6	
	30 cm wide "Toutalu" plank		
	Allowable working load 300 daN/m ² according to European standards, Aluminum sheet 18/10 mm thick		
	All Metrix decks come with handles, wind clip, anti-tilting device and slots for toe boards		
200	8,1	KML4	
250	9,5	KML5	
300	10,8	KML6	
	Trapdoor deck with ladder		
	60 cm wide		
	Comes with aluminum ladder.		
	Trapdoor closes automatically		
250	25,4	KPE5	
300	24,1	KPE6	
	Trapdoor deck without ladder		
	60 cm wide,		
	Trapdoor closes automatically		
	All Metrix decks come with handles, wind clip, anti-tilting device and slots for toe boards		
150	14,0	KPA3	
200	17,3	KPA4	
	"Toutalu" trapdoor deck without ladder		
	60 cm wide		
	trapdoor closes automatically		
	Aluminum sheet		
100	10,4	KPE2	
	Aluminum ladder		
	for trapdoor decks KPA3 and KPA4 Distance between two levels: 2 m		
207	4,1	KECH	
	"Toutacier" steel board		
	30 cm wide, 4.5 cm thick		
	Replaces wooden decks		
	Equipped with spigots for connections		
	(See allowable load see page 22)		
	100	6.5	KMP2
150	9.5	KMP3	
200	12.5	KMP4	
250	15.5	KMP5	
300	18.5	KMP6	

Toe boards



Wooden toe board

15 cm high
Plain wood
Wooden toe boards fit into slots in the decks



"Toutacier" steel toe board

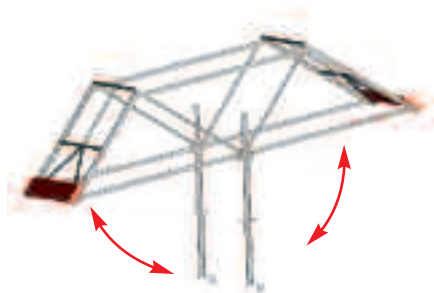
15 cm high
Zinc coated steel
Steel toe boards are blocked between standards

cm kg réf.

70	1,7	KPI1
100	2,2	KPI2
150	3,2	KPI3
200	4,3	KPI4
250	4,9	KPI5
300	6,3	KPI6

70	1.8	KCI1D
100	2.4	KCI2D
150	3.3	KCI3D
200	4.3	KCI4D
250	5.3	KCI5D
300	6.3	KCI6D

Swinging guardrail for loading bays



Swinging guardrail

Provide protection to workers, going up and down during loading
Toe board included

cm kg réf.

200	76.6	KRS4
250	82.5	KRS5
300	88.8	KRS6



guardrail fits into 2.0 m, 2.5 m or 3.0 m deep loading bays

1st step:

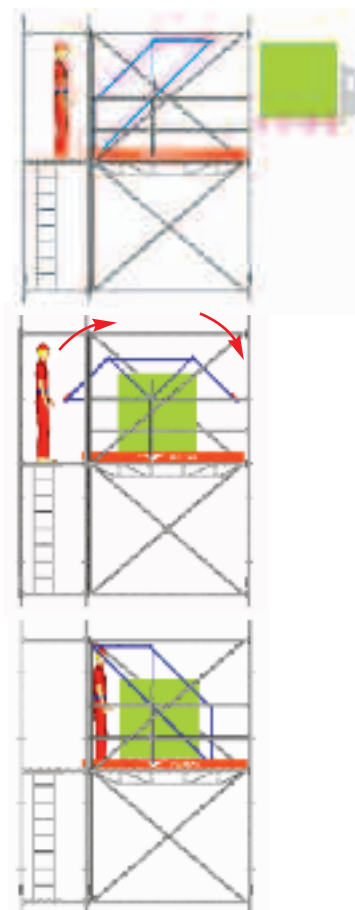
inner side of the guard rail is down and outer side is up; operator is safe, load can be put on the platform

2nd step:


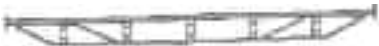







when the load is on the platform, the operator lifts the inner guard rail

3rd step:









when the outer guard rail is down, the operator takes the load




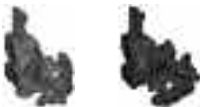
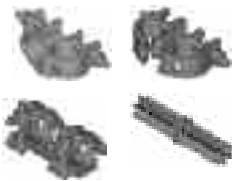




Accessories

		cm	kg	réf.
	Intermediate transom ledger to ledger Ø48.3 tube	70	3,8	KCM1
		100	4,7	KCM2
		150	6,1	KCM3
		200	10,4	KCM4
	Reinforced ledger Metrix decks fit directly on tubular upper chord member	150	9,4	KPP3
		200	12,5	KPP4
		250	15,7	KPP5
		300	18,8	KPP6
	Clamped hop-up bracket For one 20 cm wide deck	22	1,3	AKC7
	Clamped hop-up bracket For one 30 cm wide deck	40	3,2	KKR8
	Reinforced hop-up bracket For two 30 cm wide decks, or one 60 cm wide trapdoor access deck, or an aluminum stair stringer	70	4,9	KKR1
	1 meter hop up bracket For different combinations: > three 30 cm wide decks > one 60 cm wide trapdoor access deck, plus plus one 30 cm wide deck > an aluminum stair stringer, plus one 30 cm wide deck	100	9,7	KKR2
	Intermediate side bracket Supported by 2 ledgers one above the other. Placed anywhere between 2 standards, unlike the 3 previous models, which are attached directly to standards	40	5,2	KKN8
		50	5,9	KKN9
		70	6,7	KKN1
	Protection fan bracket For ledgers and steel sheets, or Metrix decks	224	12,5	KKPT
	Ledger to ledger side bracket Supported by 2 ledgers on the same level. Placed anywhere between 2 standards	70 x 70	9,4	KK77
		70 x 100	10,5	KK71
		40 x 70	7,2	KK47
		40 x 100	8,3	KK41

Accessories

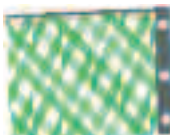




	cm	kg	réf.
 <p>Pad for steel base plate 2 cm thick 270°C proof</p>	22 x 22	0,4	ACPI
 <p>Base plate without screw jack 15cmx15cm</p>	6	1,1	ASBA
 <p>Base plate with screw jack Ø38 mm diameter tube Rolled thread Hot dip galvanized Security lock to limit the nut position 15cmx15cm base plate</p>	30 50 80	2,6 3,2 3,9	ASV3 ASV5 ASV7
 <p>Swivelling base plate with screw jack Ø38 mm diameter tube Rolled thread Hot dip galvanized Security lock to limit the nut position 15cmx15cm base plate</p>	55	5,4	ASVO
 <p>Swivelling wheel with a screw jack 20 cm diameter allowable load 1200 daN</p>	75	9,5	AR12
 <p>U head for formwork with a screw jack 20 cm wide</p>	50	4,9	AFV5
 <p>Fitting for suspended standard</p>	42	1,6	KCRM
 <p>Support spigot for a standard Attached on a ledger</p>	25	1,6	KCDM

	cm	kg	réf.
 <p>U head support spigot for a standard Supported by a ledger To be used with KCH22</p>		2,0	KETR
 <p>Intermediate transom deck to ledger To create an opening in a platform between a deck and a ledger</p>	70 100	3,9 5,1	ALP1 ALP2
 <p>Intermediate transom deck to deck To create an opening in a platform between 2 decks</p>	70 100	3,7 4,9	APP1 APP2
 <p>Wedge connection coupler To connect Ø48.3 tubes to standard rosette fixed type swivel type</p>		1,1 1,2	KCD9 KCV9
 <p>Couplers made of forged steel for Ø48.3 tubes hot dip galvanised normal coupler swivel coupler tension coupler with tube connecting spigot</p>	10 6 12 15	1,1 1,2 1,4 1,3	L99P O99P RJ9G RB9G
 <p>Galvanised steel scaffold tube 6 m long 48.3 mm diameter 3.25 mm wall thickness Cut to size on request</p>	600	22,6	UC60
 <p>Aluminum scaffold tube 6 m long 48.3 mm diameter 4.0 mm wall thickness cut to size on request</p>	600	9	UL60




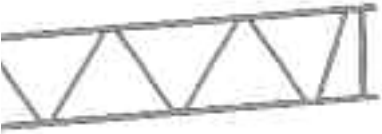






Ties

	cm	kg	réf.
 <p>Scaffold tie Hook for 16 mm eye bolt Connected to standards with normal couplers</p>	40 110	2,0 3,9	AA04 AA11
 <p>Weather shelter tie 48.3 mm diameter connected to the wall through chemical or expansion anchors 18 mm diameter; Technical checking necessary</p>	150	10,5	AAPP
 <p>Eye bolts 12 mm diameter Zinc coated steel 25 mm internal diameter of the ring</p>	12 16 23	0,2 0,2 0,3	APA2 APA6 APA3
 <p>Plastic expansion anchor 14 mm diameter 70 mm length</p>	7		ACHE
 <p>Plastic cap</p>	2		ACAP
 <p>Wooden pad CTBX plywood 15 mm thickness</p>		0,2	ACAM
 <p>Reveal tie For use between window openings.</p>	40	2,4	AVAM

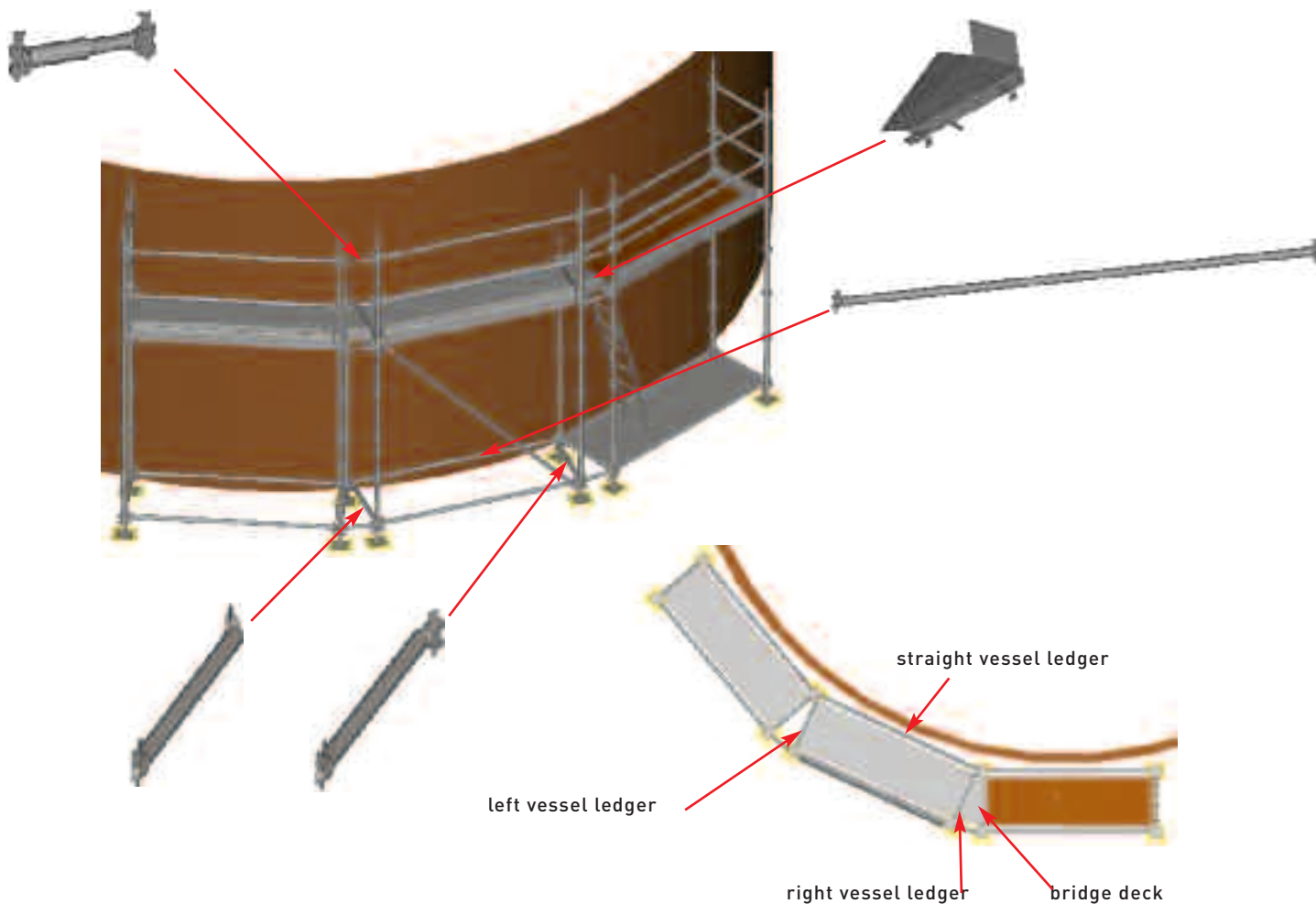
Covering, cladding





	cm	kg	réf.
 <p>Mesh 3 m wide Rolls length 20 m and 100 m weight 180 g/m² Green or white Eyelets for ties.</p>		3,0 15,6	FSP6 FSR6
 <p>Ties Reinforced plastic 250 mm long 250 units in each box</p>	25	1,1	FLFA
 <p>Fitting for steel cladding sheets attached to Ø48.3 tube</p>	12	0,2	AET9
 <p>Steel cladding sheet 2 m high 90 cm wide useful width 75 cm wall thickness 75/100 mm</p>		11,5	AT04
 <p>Plastic translucent cladding sheet 2 m high, 90 cm wide Useful width 75 cm Reinforced polyester</p>		4,0	ATT4

Lattice girders

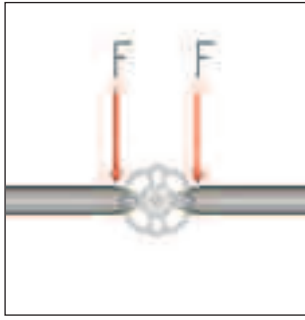
	cm	kg	réf.
 <p>Galvanised steel lattice girder with 4 wedge heads To change the width of a scaffolding from 0.7 m to 1.0 m; U head support spigot is needed Poutre en acier galvanisé Hauteur 40 cm,</p>	100x50	7,0	KCH2
 <p>Galvanised steel lattice girder without wedge heads 40 cm high Upper and lower chord members 48.3 mm tubes</p>	320 420 520 620 770	30,3 39,4 48,2 57,1 71,2	XPC3 XPC4 XPC5 XPC6 XPC7
 <p>Galvanised steel lattice girder with 4 wedge heads 50 cm high Upper and lower chord members 48.3 mm tubes Connection to standards on rosettes</p>	100 150 200 300 400 500 600 700 800 900 1000	13,2 17,8 23,8 34,5 42,5 55,8 66,5 77,1 81,5 99,1 109,8	KPX1 KPXP KPX2 KPX3 KPX4 KPX5 KPX6 KPX7 KPX8 KPX9 KPX0
 <p>Heavy load galvanised steel lattice girder without wedge heads 70 cm high Upper and lower chord members 48.3 mm tubes Connection to standards with normal couplers</p>	500 600 700	52,9 68,0 73,2	XGC5 XGC6 XGC7
 <p>Aluminum lattice girder without wedge heads 40 cm high Upper and lower chord members 48.3x4 mm tubes Connection to standards with normal couplers</p>	320 420 520 620 770 820	12,6 16,3 19,9 23,6 29,4 31,2	XPL3 XPL4 XPL5 XPL6 XPL7 XPL8
 <p>Connecting plate for lattice girders without wedge heads Connected to the wall with chemical or expansion bolts 18 mm diameter Technical checking necessary</p>		5,1	XPLT
 <p>Straight connecting spigot for lattice girders without wedge heads</p>	45	2,2	XMJP
 <p>Curved connecting spigot for lattice girder without wedge heads upper chord member</p>	60	3,5	XMCL
 <p>Connecting spigot curved for lattice girder without wedge heads lower chord member</p>	60	2,8	XMCC
 <p>Special bolt M12x60 mm with self locking nut; 100 units in each box</p>	6	0,1	KB12

Circular scaffolding

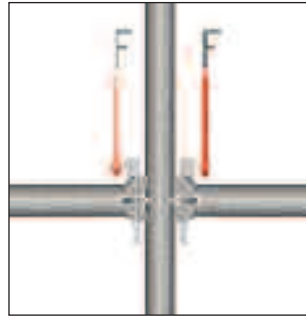


	cm	kg	réf.
 <p>Vessel ledger For circular scaffoldings right and left types</p>	70	3,3	KC1D
	70	3,3	KC1G
	100	4,6	KC2D
	100	4,6	KC2G
 <p>Straight vessel ledger Required for circular scaffolding</p>	210	7.3	KLC41
	260	8.9	KLC51
	310	10.5	KLC61
 <p>Adjustable handrail for vessel From 28 to 38 cm</p>		2.4	KLCR
 <p>Bridge deck Toe board included Adjustable angle</p>	70	7.0	KMCC1
	100	12.0	KMCC2

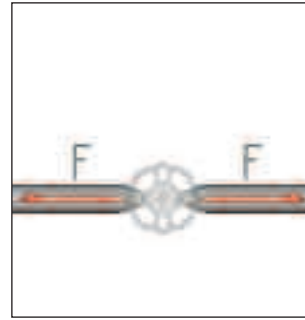
All allowable loads



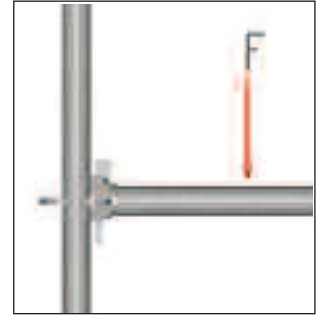
allowable horizontal shear
strength : 620 daN



allowable vertical
shear strength: 1950 daN



allowable tension
: 1940 daN

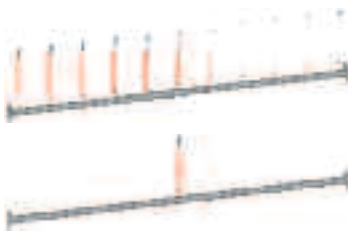


allowable bending moment
: 63 daN.m

Standards

buckling length	1,00 m	1,50 m	2,00 m	3,00 m	
allowable compression load	6460 daN	4370 daN	2810 daN	1370 daN	
allowable tension load (4 bolts)					3160 daN

Ledgers



length	0,70 m	1,00 m	1,50 m	2,00 m	2,50 m	3,00 m
total uniform load	1940 daN	1340 daN	915 daN	680 daN	550 daN	450 daN
concentrated load at mid span	840 daN	600 daN	420 daN	320 daN	260 daN	220 daN

Reinforced ledgers



length	0,70 m	1,00 m	1,50 m	2,00 m	2,50 m	3,00 m
total uniform load	-	-	2985 daN	2900 daN	2075 daN	1380 daN
single load at mid span	-	-	1610 daN	1120 daN	980 daN	660 daN

Vertical diagonal 2 m vertically

length horizontaly	0,70m	1,00m	1,50m	2,00m	2,50m	3,00m
allowable tension	1420 daN	1420 daN	1420 daN	1420 daN	1420 daN	1420 daN
allowable compression	1390 daN	1170 daN	930 daN	740 daN	600 daN	500 daN

screw jack

visible thread length	0,10 m	0,20 m	0,30 m	0,40 m	0,50 m	0,60 m
Vertical load*	6000 daN	5000 daN	4000 daN	3250 daN	2250 daN	1500 daN

* hypothesis: 50 daN applied horizontaly on the base plate and 2.5% deviation between screw and standard axis

Other allowable loads

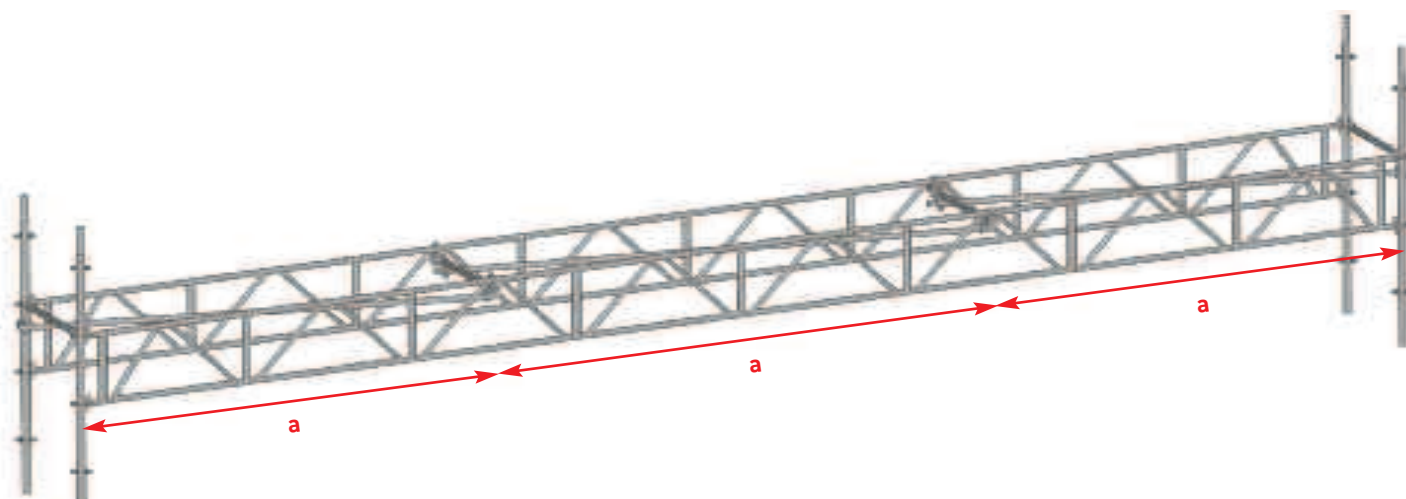
Decks						
	KMC	KPC	KMH	KPH	KML	
length	steel deck		steel deck		aluminum deck	aluminum and plywood deck
0,70 m	600 kg/m ²	600 kg/m ²	600 kg/m ²	600 kg/m ²	-	-
1,00 m	600 kg/m ²	600 kg/m ²	600 kg/m ²	600 kg/m ²	-	-
1,50 m	600 kg/m ²	600 kg/m ²	600 kg/m ²	600 kg/m ²	-	600 kg/m ²
2,00 m	600 kg/m ²	600 kg/m ²	600 kg/m ²	600 kg/m ²	300 kg/m ²	450 kg/m ²
2,50 m	600 kg/m ²	600 kg/m ²	600 kg/m ²	600 kg/m ²	300 kg/m ²	300 kg/m ²
3,00 m	600 kg/m ²	450 kg/m ²	600 kg/m ²	450 kg/m ²	300 kg/m ²	200 kg/m ²

deck combinations for one bay									
bay width	0,30m	0,40m	0,50m	0,70m	1,00m	1,50m	2,00m	2,50m	3,00m
30 cm wide deck	0	1	0	2	3	4	5	8	9
20 cm wide deck	1	0	2	0	0	1	2	0	1

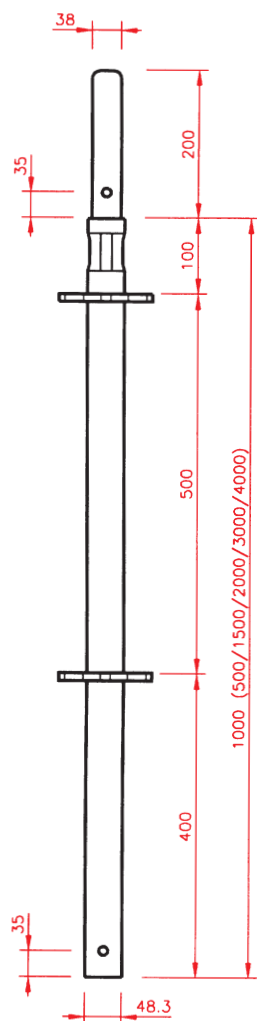
"Toutacier" steel board, with a supporting area 20 cm long on each side					
length	1,00 m	1,50 m	2,00 m	2,50 m	3,00 m
total uniform load	600 daN/m ²	600 daN/m ²	600 daN/m ²	500 daN/m ²	300 daN/m ²
single load at mid span	500 daN	400 daN	300 daN	200 daN	200 daN

Steel lattice girder with 4 wedge connections								
	girder length							
distance between bracings	1.00 à 3.00m	4.00m	5.00m	6.00m	7.00m	8.00m	9.00m	10.00m
a= 1m	3930 daN	3760 daN	3650 daN	3480 daN	2940 daN	2560 daN	2250 daN	2000 daN
a= 2m	3930 daN	3760 daN	3000 daN	2520 daN	2100 daN	1840 daN	1620 daN	1500 daN
a= 3m	3930 daN	3760 daN	2350 daN	1440 daN	1190 daN	1040 daN	900 daN	800 daN

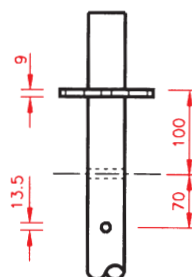
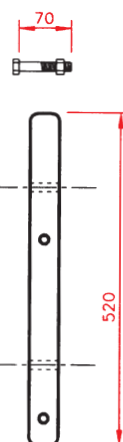
Allowable total uniform load applied on upper chord member, according to the span and distance between bracings



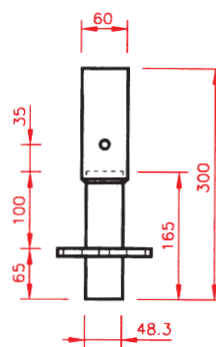
All useful dimensions



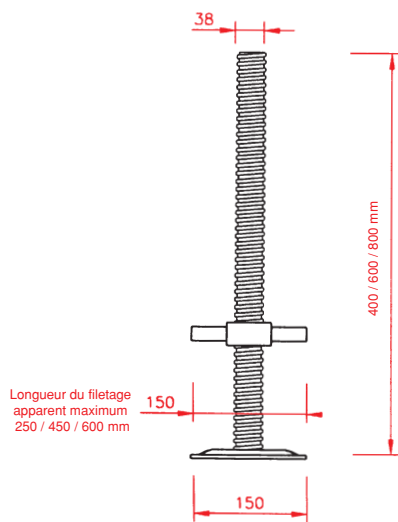
standards



connecting spigot for standard

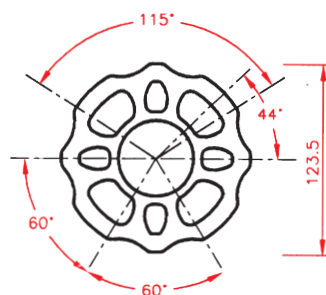


base collar



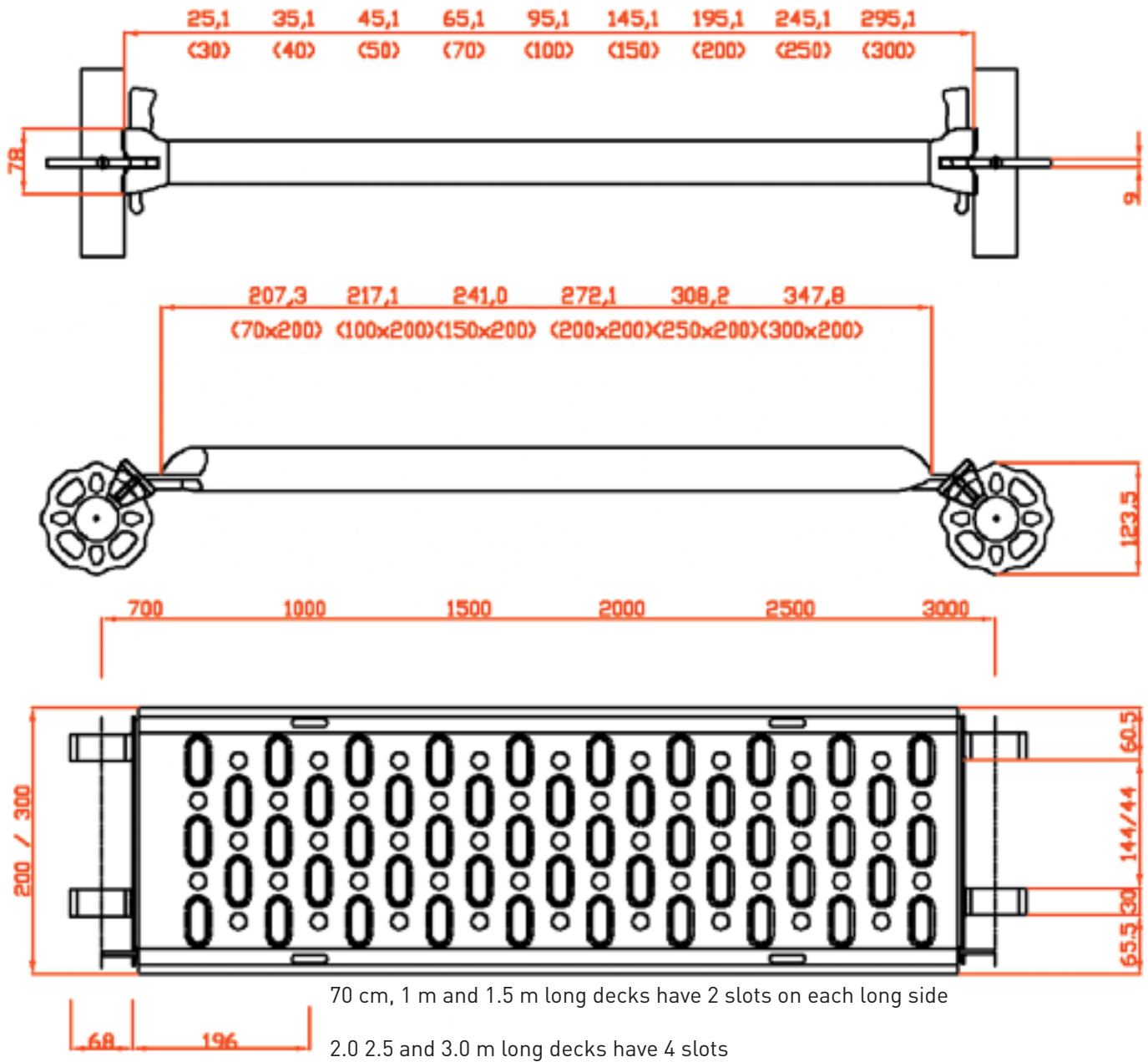
Longueur du filetage apparent maximum 250 / 450 / 600 mm

screw jack



rosette

All useful dimensions



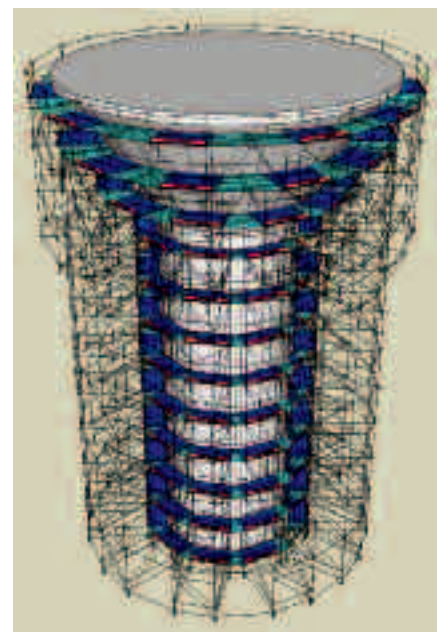
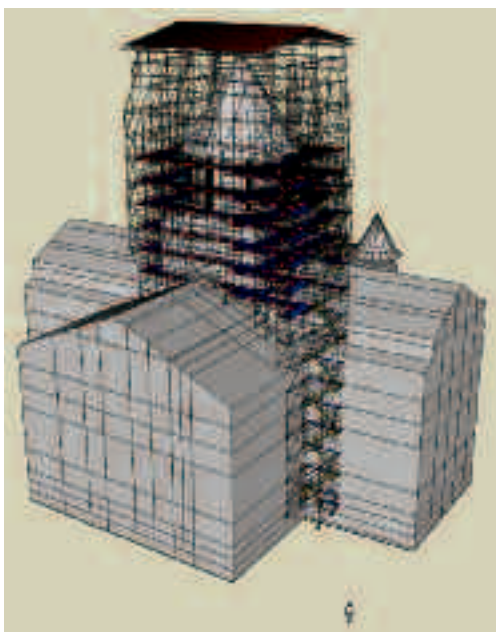
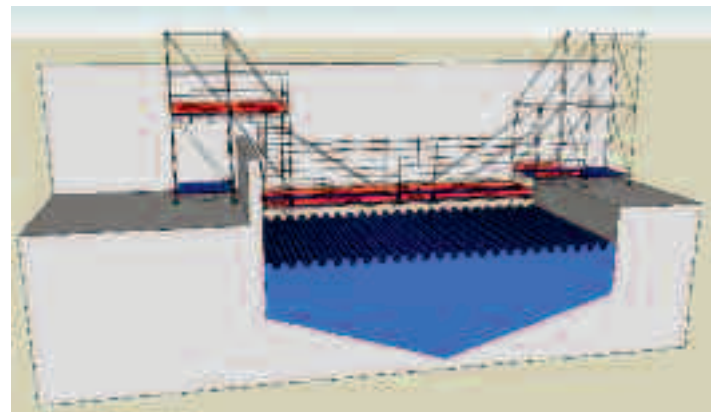
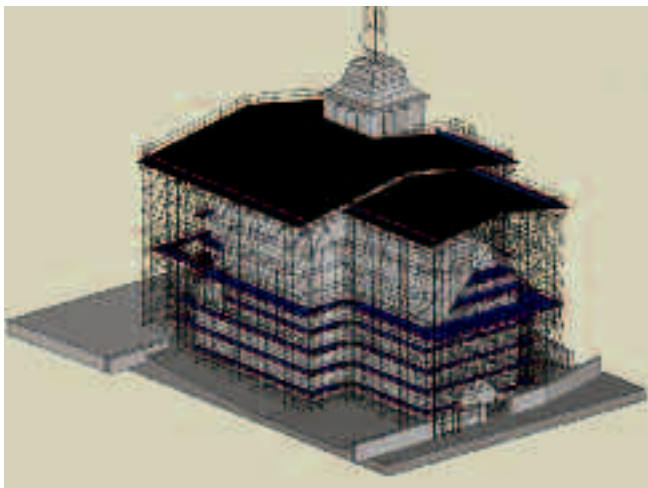
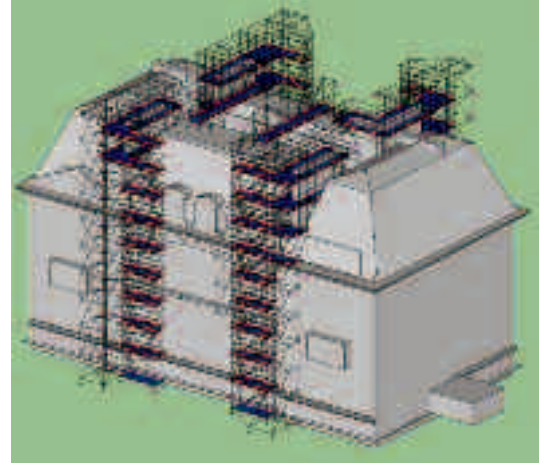
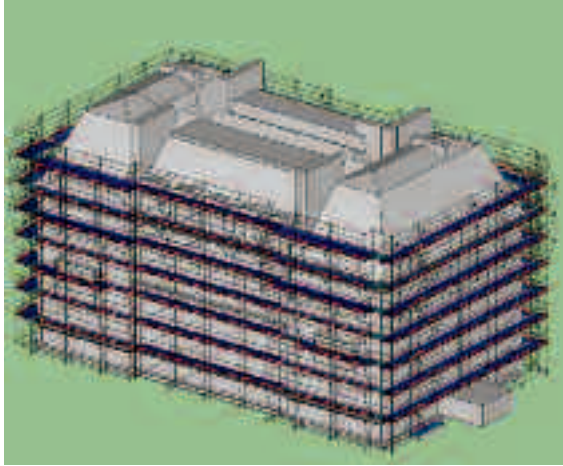
Scaffolding and computing

Precise preparation, with drawings and calculations, is a key to success

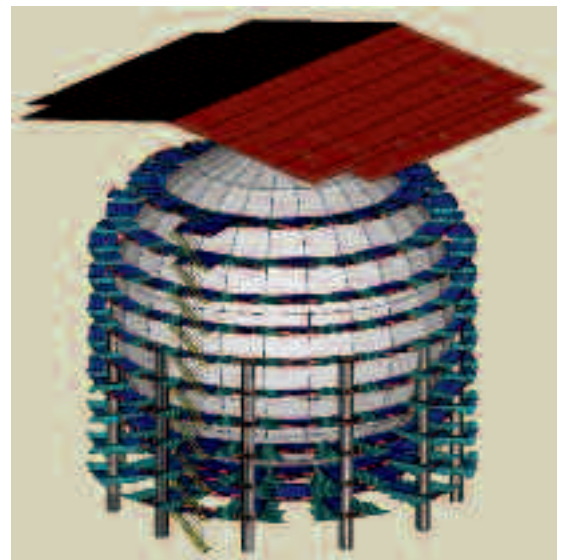
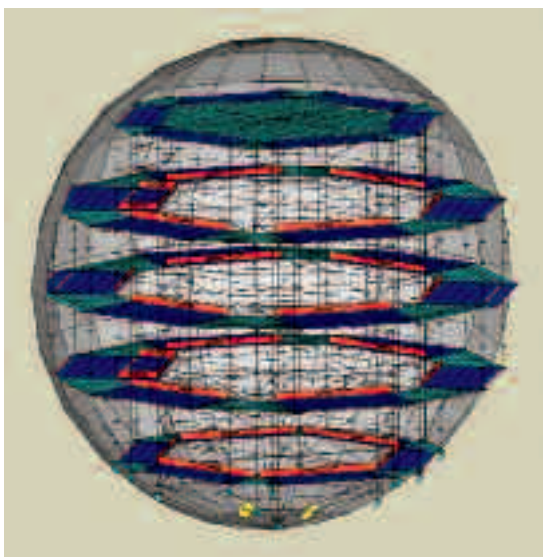
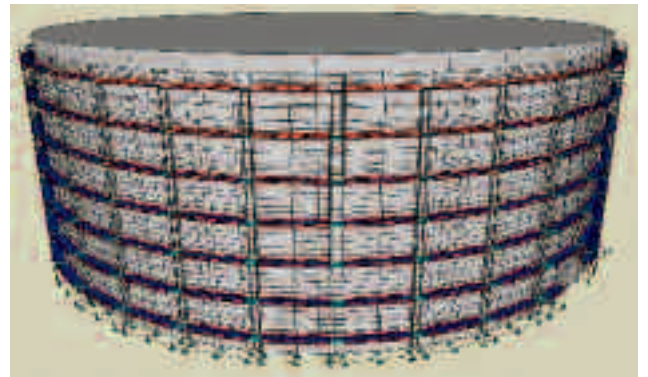
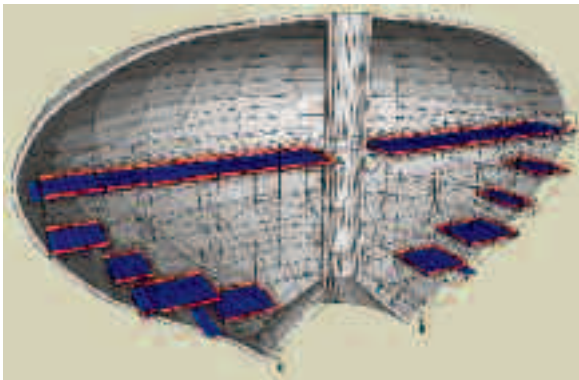
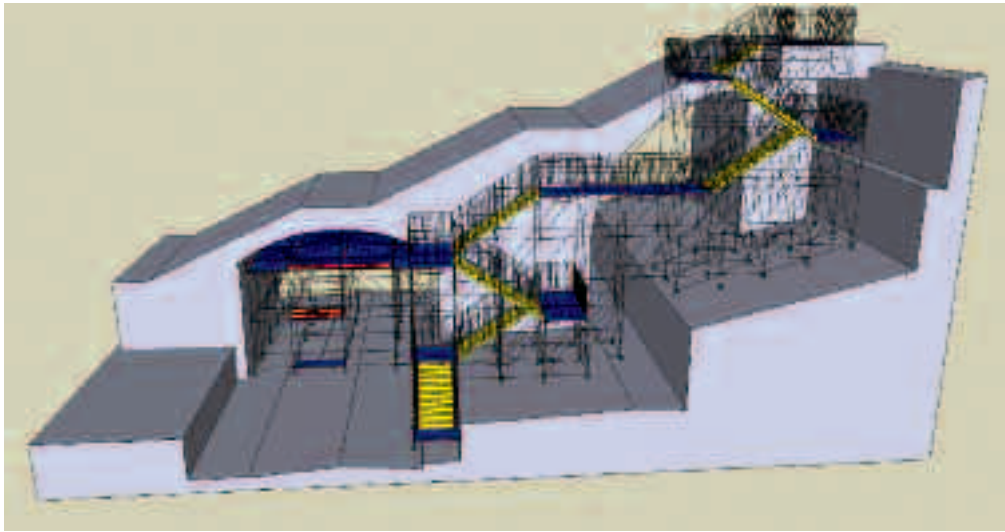
CAD is a precious tool. Plettac offers its own computer program and plug-ins for other current softwares.

3d modeling is currently used in our engineering office, with the following advantages:

- the project can be shown in its environment, with different points of view
- each level and gridline can be represented on clear and understandable sketches
- list of components comes automatically with the modeling
- the global behaviour of the structure can be taken into account in the structural analysis



Scaffolding examples



Scaffold erection service partners and sales network



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Scaffolds

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