

Other products and accessories



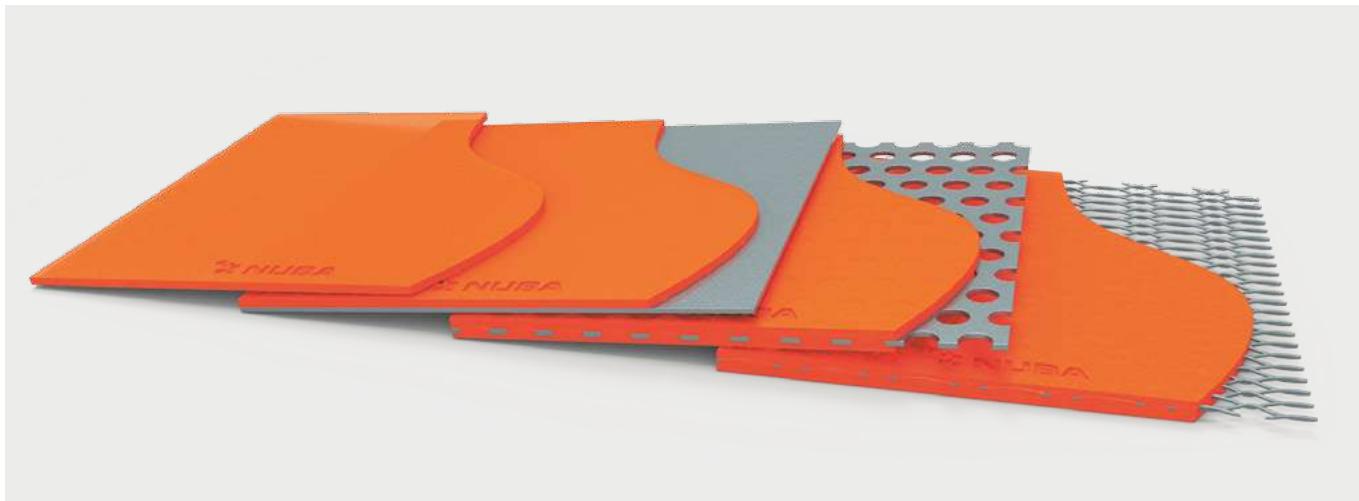
Screening
Media

12

 **NUBA**
Screening Media

 **NUBA**
Technical Advice





Abrasion Resistant Lining

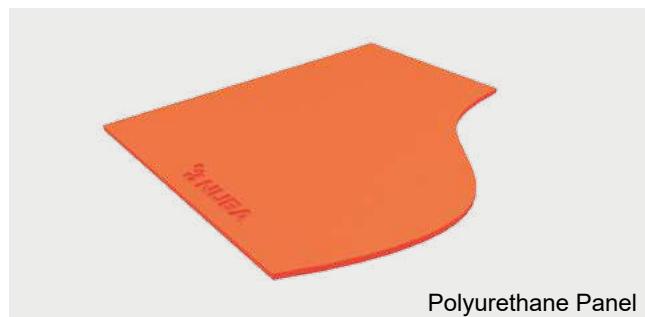
To prevent wear on metallic surfaces that are in contact with abrasive materials, such as pipes, gutters, hoppers, trommels, cyclones, mills and conduits in general, it is advisable to line these surfaces with abrasion resistant materials easy to replace.

These linings not only reduce abrasive wear, they also reduce impact on the metallic surfaces they protect, reducing wear and noise.

The most advisable materials for these linings are **rubber** and **polyurethane** depending on the application and the material being screened.

Polyurethane linings:

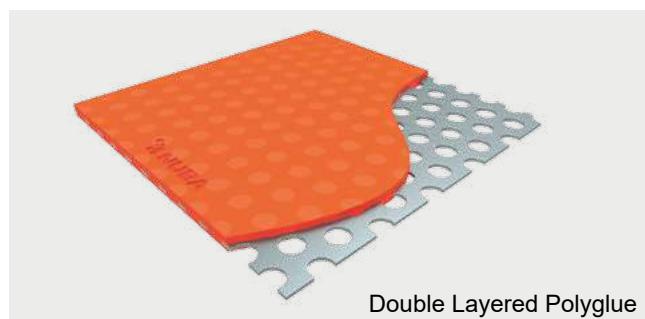
- **Polyurethane panels** (without metallic structure): manufactured with high abrasive resistant polyurethane, these products are available in different standard Hardness (°Shore A) and panel thickness.
- **Polyglue®**: These are Polyurethane Panels with a metallic plate base. The metallic base gives the panel added strength and it is easier to install on the required surfaces with simple hardware. This product can be supplied in standard sizes or customized to clients' requirements.
- **Double-layer Polyglue®**: These Polyurethane panels have an interior metallic plate structure, being covered in PU on both faces. This is recommended when it's necessary to create a tight bond with the installation surface, or in application when the panels need to have a specific curvature.
- **Deployé Polyurethane**: Polyurethane panels with an expanded metal mesh structure. This abrasion resistant lining is easily adapted to any surface.



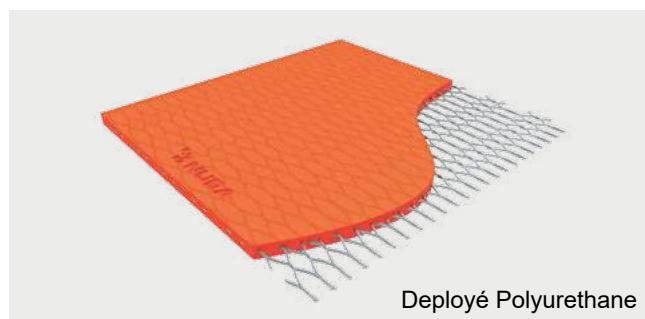
Polyurethane Panel



Polyglue®



Double Layered Polyglue



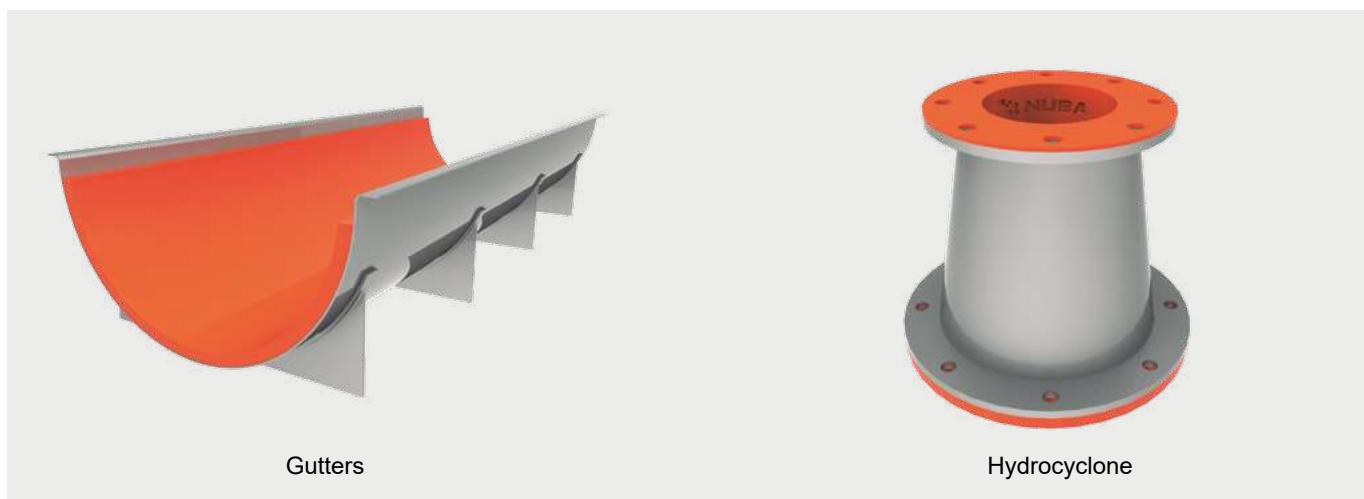
Deployé Polyurethane

Applications

Polyurethane is one of the materials that gives us the best versatility when lining a product. In other occasions High Abrasive Resistant Polyethylene is used.



Discharge chute lined
with PU Panels



Gutters

Hydrocyclone

Polyurethane Lined Silo

Lining with individual pieces allows us to line the complete required surfaces even in complex objects.



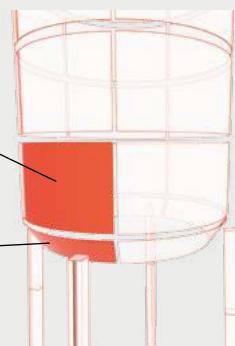
Silo, exterior view



Silo, interior view

In order to do this, NUBA Screening Media:

- 1) Measures, analyses and diagnoses the project adapting the necessary solutions to the problem in a comprehensive manner.
- 2) Generates adequate parts and pieces necessary for the project.
- 3) They check and assemble the parts insuring a simple assembly and disassembly of the complete silo, guaranteeing this way, that any part can be replaced at the end of its working life.



Custom lined silo



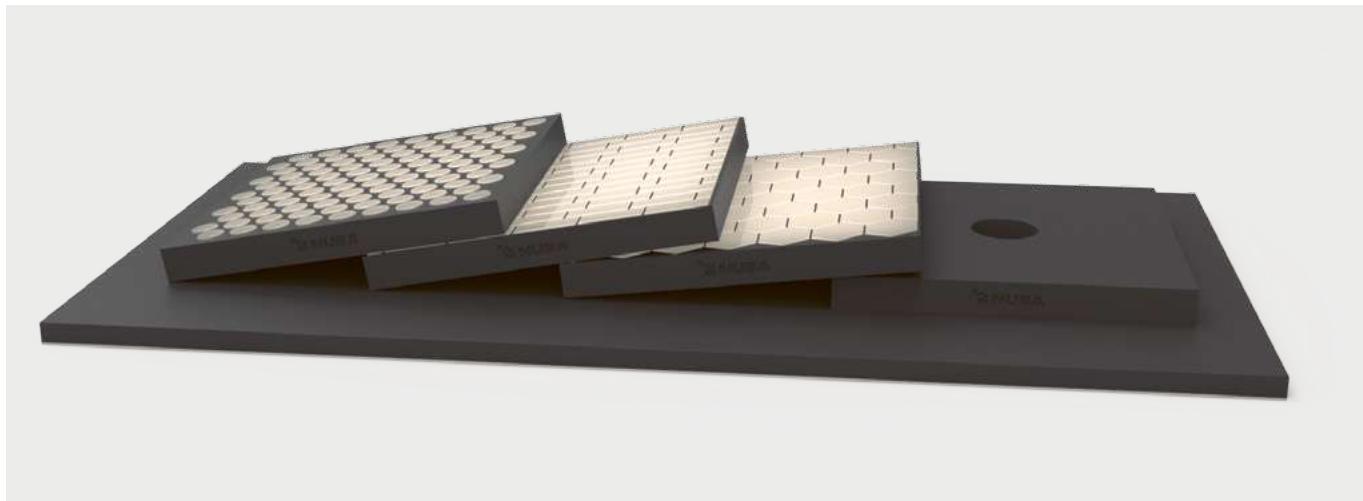
Tension side plates

Polyurethane lined side plates, extending their working life.



Axe linings

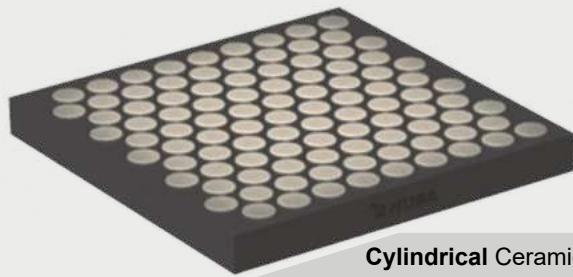
Abrasion resistant lining for the protection of metal axes or profiles of the machine.



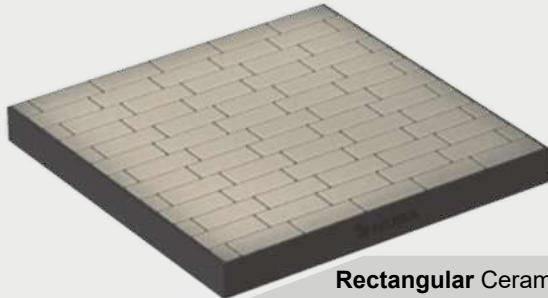
Rubber lining:

Manufactured with Abrasion Resistant Rubber available in different standard Hardness and panel thickness. The panels and modular blocks in standard formats allow a quick installation and achieve an effective protection against abrasion and noise.

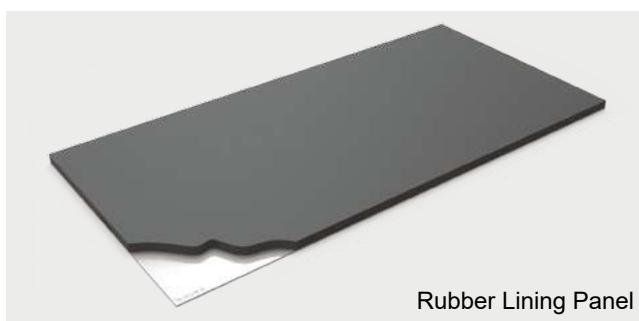
- **Rubber Lining Panels:** available in 2000x1000mm standard format, other sizes on demand.
- **Rubber Modular Tiles:** available in 300x300mm format, with central fixing hole for easy installation. Also available with ceramic inserts for extreme abrasion resistance.
- **Custom made lining:** designed for each specific case.



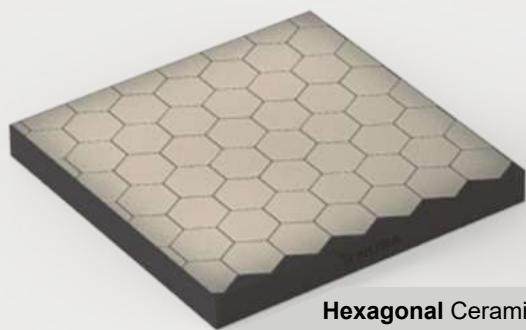
Cylindrical Ceramic Inserts



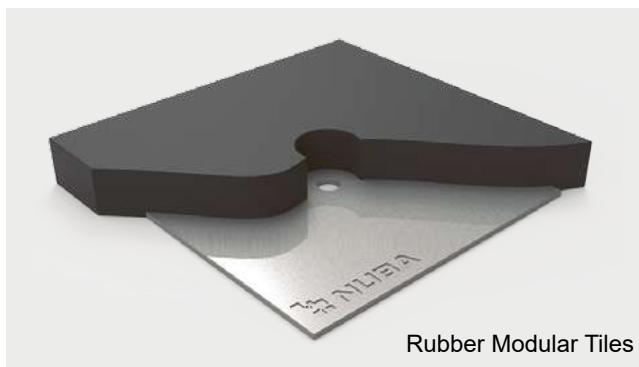
Rectangular Ceramic Inserts



Rubber Lining Panel



Hexagonal Ceramic Inserts



Rubber Modular Tiles

Rubber Modular Tiles with Ceramic Inserts

Applications

For certain specific applications, it is necessary to study each case in depth, designing vulcanized moulds to achieve the necessary geometries and dimensions.



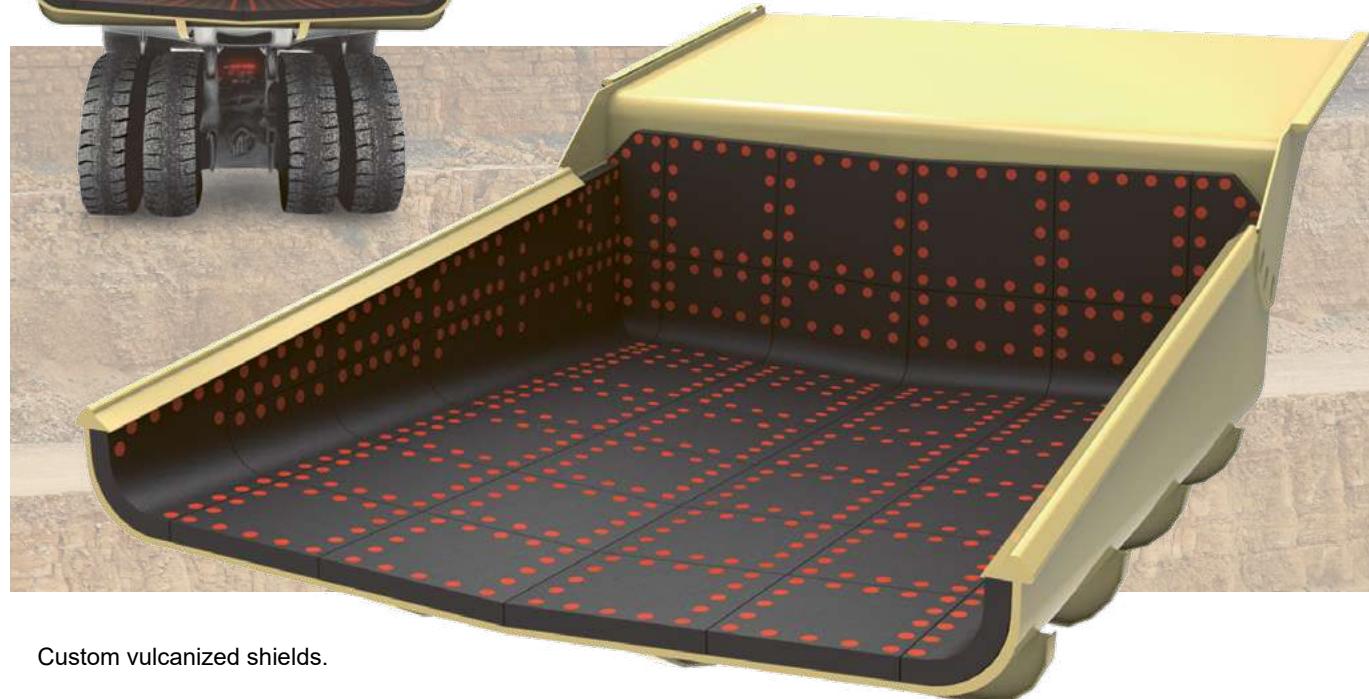
Ball or bar mill



Custom vulcanized linings.



Dumper



Custom vulcanized shields.

Declogging Rods

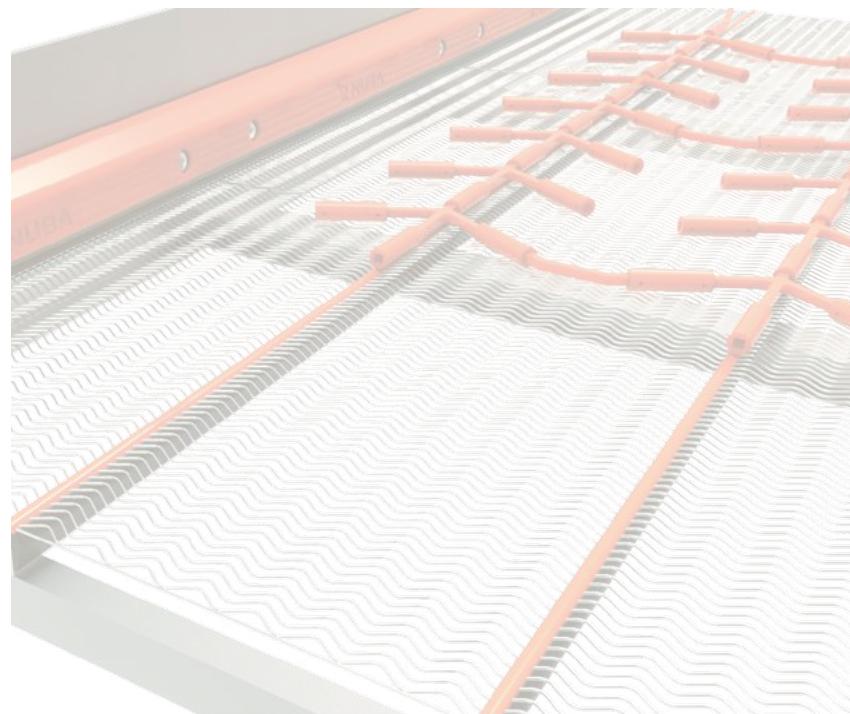
To maintain a full productivity of the screen mesh it's necessary to keep them clear of material build-up or clogging of material particles. Declogging Rods have been developed to do exactly this, they reduce maintenance stops and maximize the screens productivity.

They are manufactured in abrasion resistant Polyurethane with high elastic properties. They use the machine's vibration to move and bounce on the screen medias' surface. This additional shock on the surface of the screen helps to shake off any stubborn or sticky material, avoiding blinding and clogging of material particles.

Installation Requirements

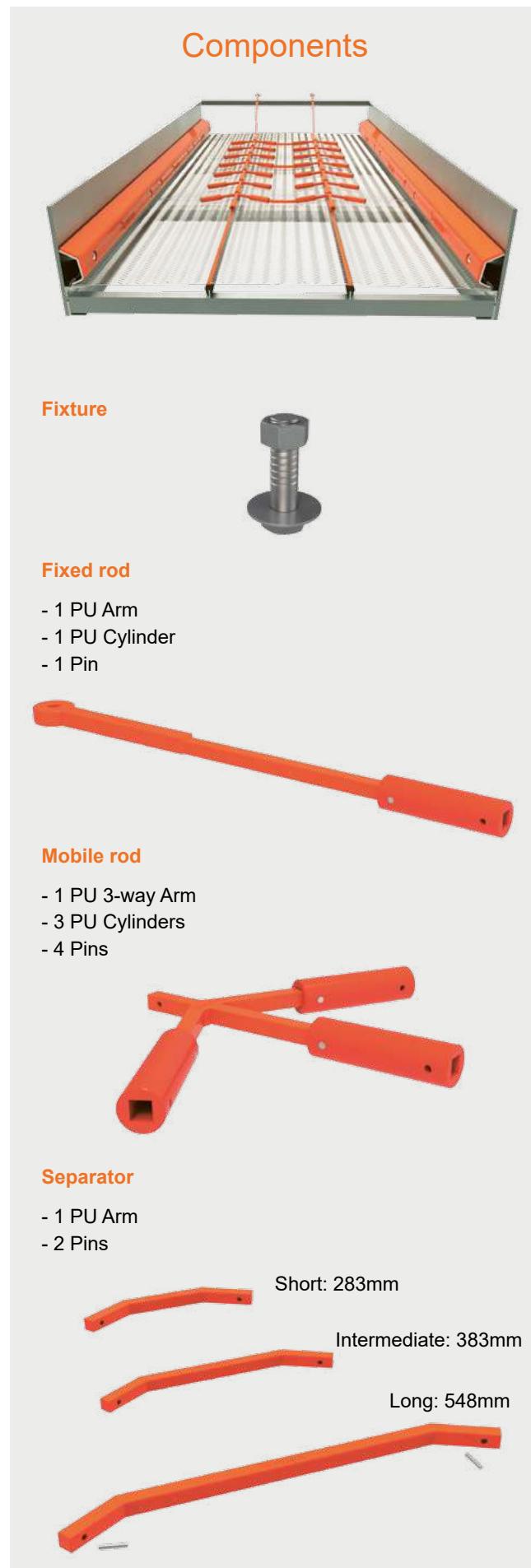
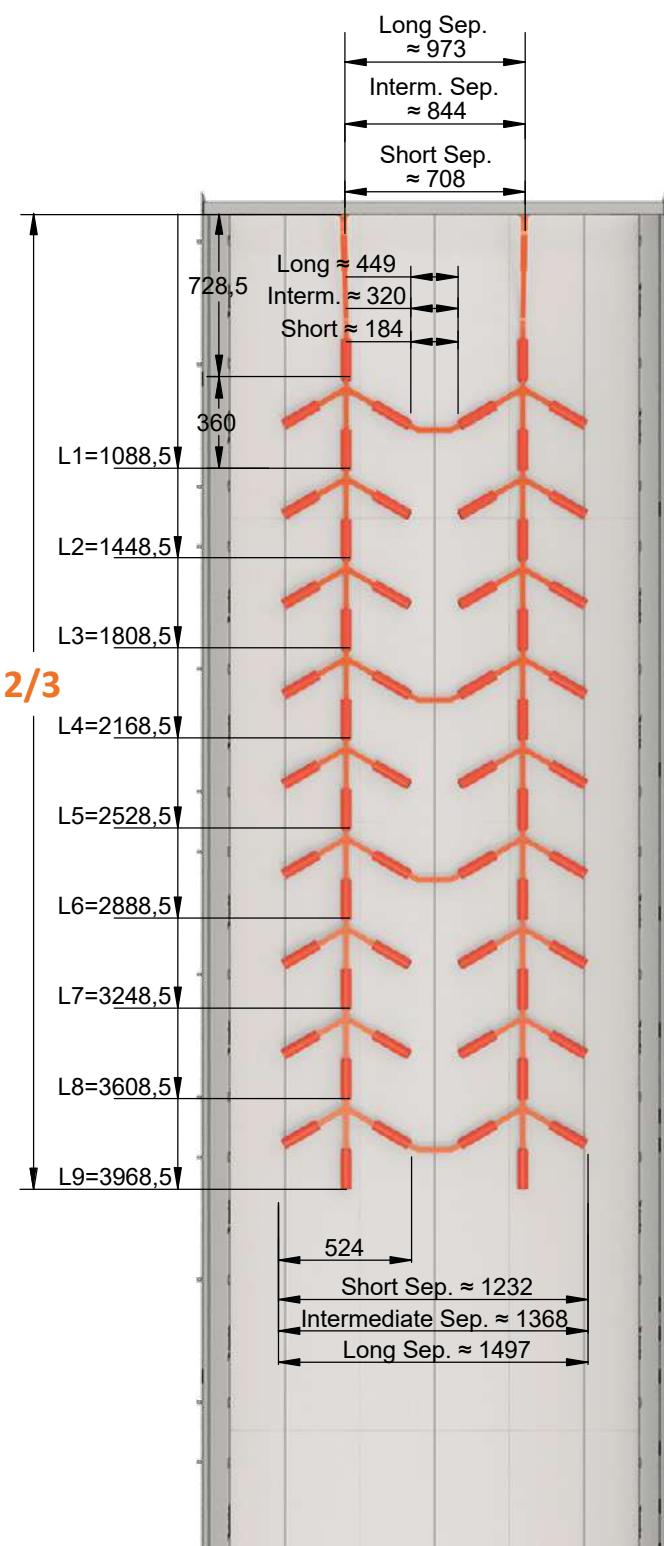
In order to obtain maximum clearing efficiency with the use of these rods, certain requirements must be met.

- The surface covered by the mobile rods must not exceed 2/3 of the length of the screens' deck and the use of more than 9 mobile rods together is not recommended.
- In screens with fine wires it is advisable that the fixed rods coincide with the support bar of the machine's deck. Use with screen meshes with wire diameters under 2,5mm is not recommended.
- To avoid tangling of the Declooging Rods, they are joined using separators. The amount of separators needed will be according to the amount of mobile rods used.



Declogging Rods System Measurements

The number of Mobile Rods to be calculated (L1, L2, etc.) must not exceed 2/3 of the total length of the machines deck.



Polyurethane Accessories

NUBA Screening Media currently has sufficient means to manufacture any technical part in Polyurethane. The technical department designs the execution of suitable moulds for each mechanism, the most common accessories are:

Hydrocyclone Cones

Interior Lining.



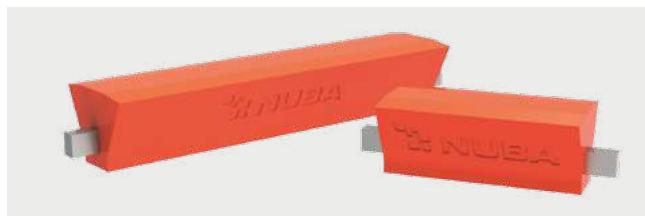
Hammers

Recommended for the correct installation of the TN Modular system and other PU Modular systems.



Conveyor Belt Safety Skids

Safety Skid replacement part for rollers on conveyor belts.



Spray Nozzles

Specially designed by NUBA, working with a circular flow intake and elliptical flow expulsion which enhances the spray angle of the water fan; they have a reinforced structure for greater durability.

Coupling sizes: 3/4" and 1/2".



U and J Bolts

Clamping of screening medias.



Omega

Polyurethane lining to extend the life of the omega.



Disc tracker for conveyor belts

Mounted on rollers to centre conveyor belts.



Plugs

For protection of screw heads or bolts.



PU knocking balls

For declogging knocking ball tray systems.



Side Plates for Nuba's TN and INDALO systems

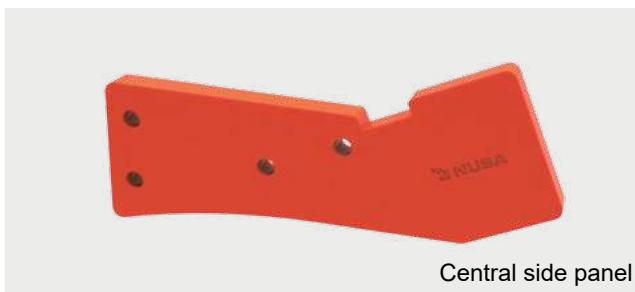
Side plates for fixing various PU modular systems, including TN and INDALO. Very important for the protection of the machines side plates.



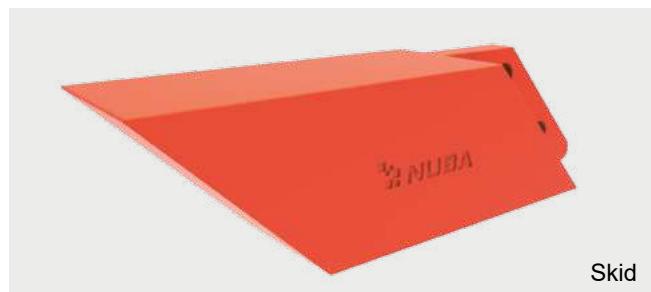
Snowploughs blades and various accessories

Polyurethane is a material with excellent mechanical qualities and high abrasion resistance, making it the perfect material for snowplough blades, providing strength, flexibility and durability, and eliminating unnecessary deterioration of the asphalt.

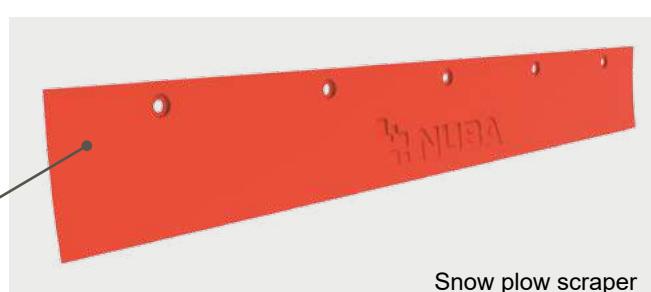
Adding this to the extensive experience of **NUBA Screening Media** in the development of technical accessories in polyurethane, we offer our range of snowplough blades and our service for the development and creation of solutions, covering any brand or shape of blade on the market. All this following the highest quality standards that characterize our production.



Central side panel



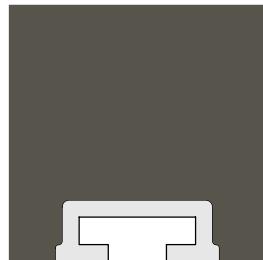
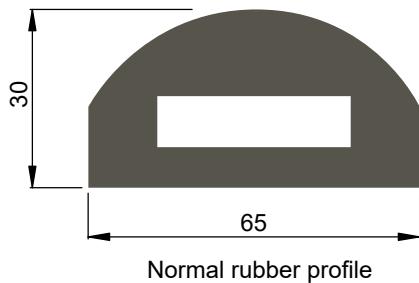
Skid



Snow plow scraper

Rubber Accessories

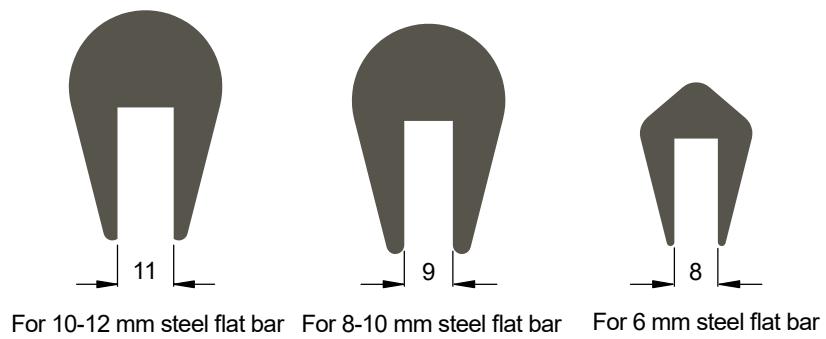
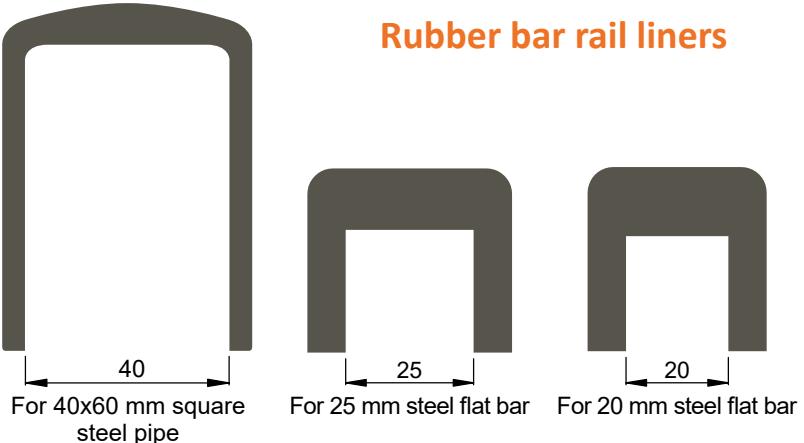
Rubber profiles for central hold-down bar



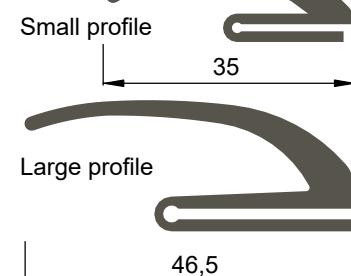
Universal central hold-down bar
Standard measurements:
50x50, 70x70, 100x100
Other dimension available on request



Rubber bar rail liners



Rubber side seal profile



Rubber side plate



Manufactured under the following standards:

- Hardness (°Shore) (ISO 868)
- Density (g/cm³) (ISO 2781 / UNE 53526)
- Breaking load (Kg/cm²) (ISO 37 / UNE 53510)
- Rupture elongation (%) (ISO 37 / UNE 53510)
- Abrasion (%) (ISO 4649 / UNE 53527)

Laboratory sieves

To carry out laboratory granulometric tests, NUBA Screening Media supplies sieves made according to the standards ISO 3310/1 with a metallic mesh and ISO 3310/2 with perforated sheet, all made from stainless steel.

Mesh Sieves (Fig. 1)

Weight: 1 kg

Dimensions: 24 x 24 x 9 cm

Diameter (mm):

100, 150, 200, 203 (8"), 250, 300x50 H, 300x80 H, 305 (12"), 400, 450, 500, 75

Apertures (mm):

0,020 - 0,025 - 0,032 - 0,036 - 0,038 - 0,040 - 0,045 - 0,050 - 0,053
 - 0,056 - 0,063 - 0,071 - 0,075 - 0,080 - 0,090 - 0,100 - 0,106 - 0,112
 - 0,125 - 0,140 - 0,150 - 0,160 - 0,180 - 0,200 - 0,212 - 0,224 - 0,250
 - 0,280 - 0,300 - 0,315 - 0,355 - 0,400 - 0,425 - 0,450 - 0,500 - 0,560
 - 0,600 - 0,630 - 0,710 - 0,800 - 0,850 - 0,900 - 1,00 - 1,12 - 1,18 -
 1,25 - 1,40 - 1,60 - 1,70 - 1,80 - 2,00 - 2,24 - 2,36 - 2,5 - 2,8 - 3,15
 - 3,35 - 3,55 - 4,00 - 5,00

Standard: ISO 3310/1, ASTM E 11-04

Square Sheet Sieves (Fig. 2)

Weight: 1 kg

Dimensions: 24 x 24 x 9 cm

Diameter (mm):

200, 203 (8"), 300x50 H, 300x80 H, 400, 450

Apertures (mm):

4,00 - 4,50 - 4,75 - 5,00 - 5,60 - 6,30 - 6,70 - 7,10 - 8,00 - 9,00 - 9,50
 - 10,00 - 11,20 - 12,50 - 13,20 - 4,00 - 16,00 - 18,00 - 19,00 - 20,00
 - 22,40 - 25,00 - 26,50 - 28,00 - 31,50 - 35,50 - 37,50 - 40,00 - 45,00
 - 50,00 - 53,00 - 56,00 - 63,00 - 71,00, 75,00 - 80,00 - 90,00 - 100,00
 - 106,00 - 112,00 - 125,00

Standard: ISO 3310/2, ASTM E323-80

Round Sheet Sieves (Fig. 3)

Weight: 1 kg

Dimensions: 24 x 24 x 9 cm

Diameter (mm):

200, 203 (8"), 300x50 H, 300x80 H, 400, 450

Apertures (mm):

0,50 - 1 - 1,80 - 2 - 2,50 - 3,55 - 4,00 - 4,50 - 4,75 - 5,00 - 5,60 - 6,30 -
 6,70 - 7,10 - 8,00 - 9,00 - 9,50 - 10,00 - 11,20 - 12,50 - 13,20 - 14,00
 - 16,00 - 18,00 - 19,00 - 20,00 - 22,40 - 25,00 - 26,50 - 28,00 - 31,50
 - 35,50 - 37,50 - 40,00 - 45,00 - 50,00 - 53,00 - 56,00 - 63,00 - 71,00
 - 75,00 - 80,00 - 90,00 - 100,00 - 106,00 - 112,00 - 125,00

Standard: ISO 3310/2, ASTM E323-80

Bottoms (Fig. 4)

Weight: 1 kg

Dimensions: 24 x 24 x 9 cm

Diameter (mm):

75, 100, 150, 200, 203 (8"), 250, 300, 305 (12"), 400, 450, 500



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Architectural meshes

Meshes weaved with cable

We produce a complete range of flexible solutions for architecture in the form of woven nets. They are ideal for using on the inside and outside of buildings. They can perfectly cover large façades and wall surfaces. Various interweave patterns and types enable you to play freely with space, light and composition itself.

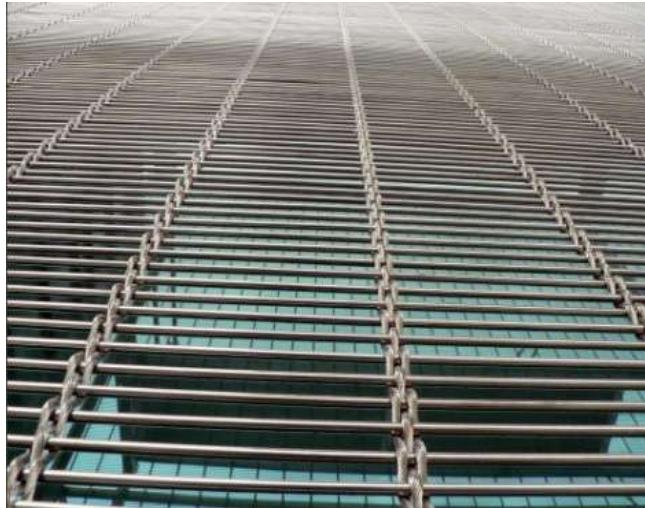
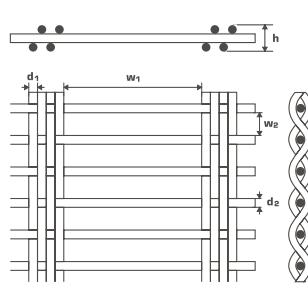
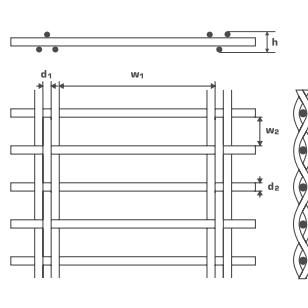
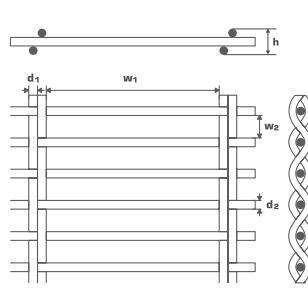
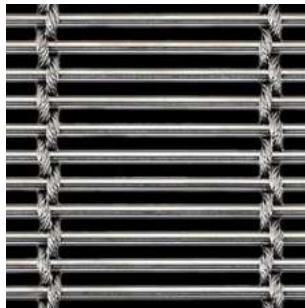
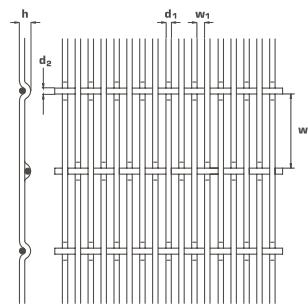
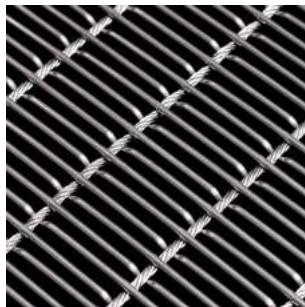
Material:

AISI 316L / AISI 304L

Use:

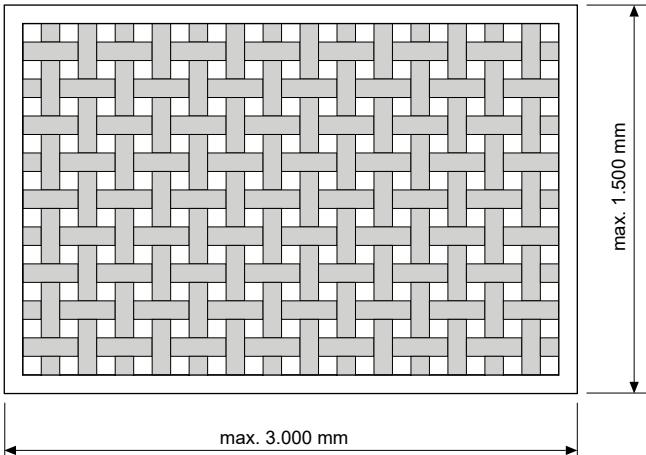
- Facades.
- Metallic false ceilings.
- Parasols.
- Guard rails and balconies.
- Fences and meshes.
- Roofs and bodies.
- Separating walls.
- Furniture.
- Ventilation gratings.
- Gratings for floors.
- Drains.

There is the possibility of implementing other mesh variants with different technical parameters and designs according to the project requirements.

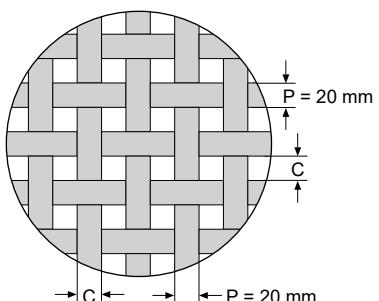


TN Decor

Perforated sheet which looks like a braided lattice for internal and external decoration, with easy application and low cost.

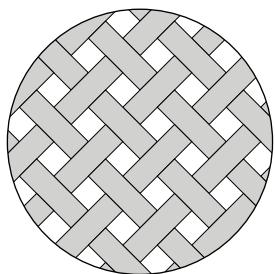


Inline square hole

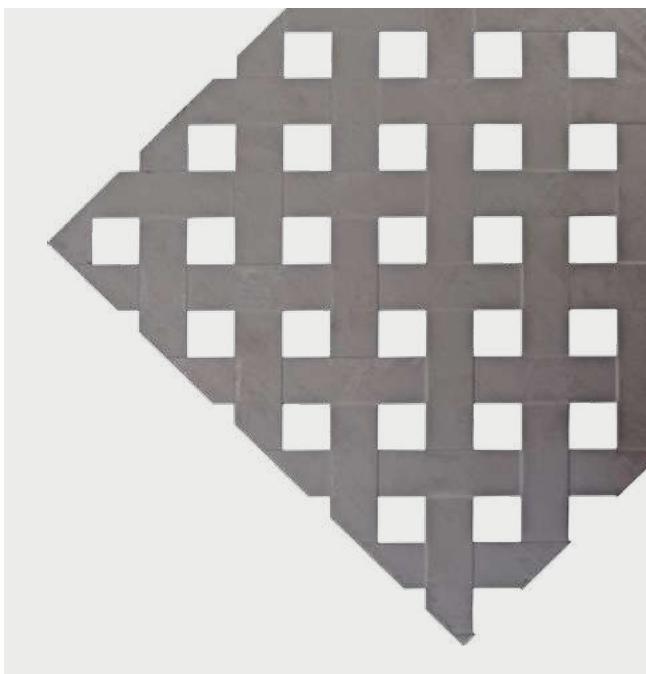


C= Square side, variable (20-30-40-50 mm)
P = distance, 20-30 mm.

Staggered square hole



It can be produced in different raw materials (mild steel, galvanised steel, aluminium, stainless steel, brass...) with thickness from 0.8 to 2 mm.



Decorative steel plates

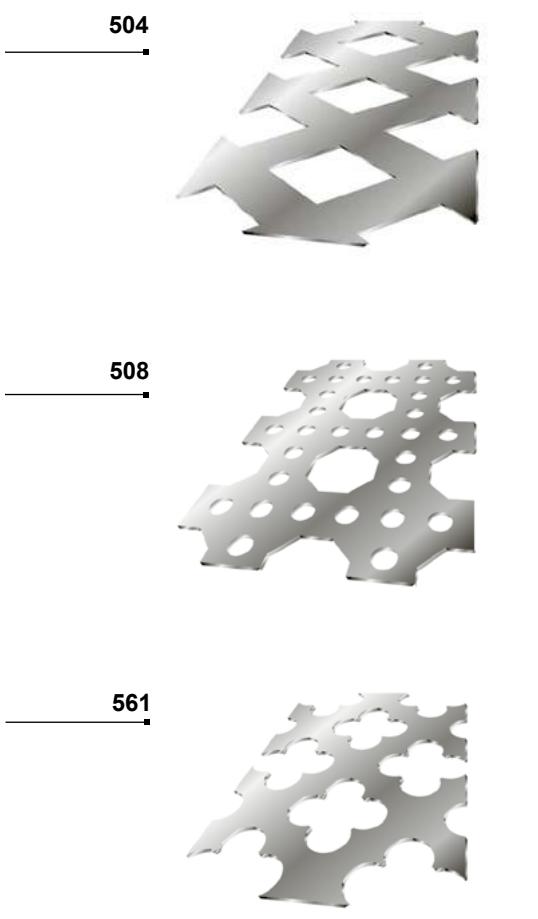
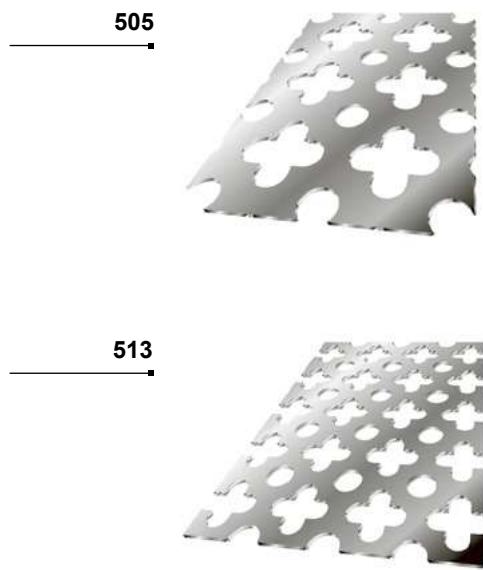
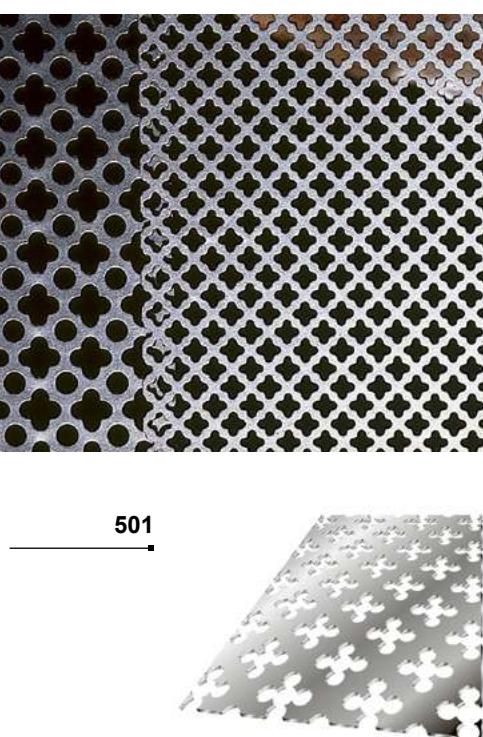
- Perforations: Depends on design.
- Thickness: From 0,5 mm to 1,5 mm (*according to perforation*).
- Dimensions: Plates up to 1.250 mm wide (*according to perforation*).
Rolled to 1.250 mm wide (*according to perforation*).

Please contact us for other available perforations.

Perforated plates: Available standard dimensions 2.000 x 1.000 mm

Coef. Perforation	D	Thickness			
		0,5	0,8	1	1,5
41,7 %	501		•	•	•
43,22 %	504		•	•	•
47 %	505	•	•	•	•
39,57 %	508		•	•	•
40,8 %	513	•	•	•	•
42,13 %	561		•	•	•

Mild steel sheets



Expanded metal

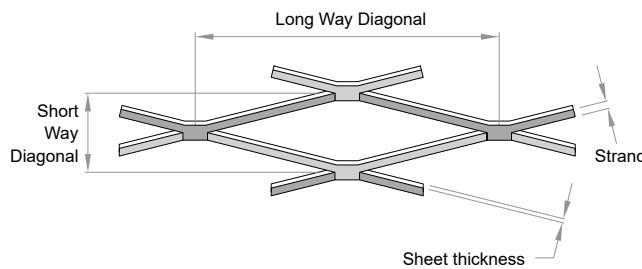
Calculation of open area

$$SD / 2 \times \text{Strand} = X$$

$$100 / X = Y$$

$$Y - 100 = \% \text{ Open area}$$

Mesh measurement



We currently have diamond and hexagonal shaped holes made from expanded metal which may be laminated (flat surfaced) or standard.

To define the diamond shape, we must identify the 4 parameters which form the mesh nomenclature.

- Short way diagonal (SD):** distance between centres of two vertical rhombuses.
- Long way diagonal (LD):** distance between centres of two horizontal rhombuses.
- Strand:** distance between one rhombus and the next rhombus.
- Thickness (T):** sheet thickness.

Materials and measurements

The expanded metal may be made from different materials such as carbon steel, galvanised steel, aluminium, stainless steel, copper etc.

It can be made in rolls or sheets, the maximum width can vary depending on the thickness of the material.

The long way diagonal always has to be parallel to the material width.

FE/AL	2.500	1.500	1.250	1.000 ó lower
Thick. 0'5 mm	•	•	•	•
Thick. 1 mm	•	•	•	•
Thick. 2 mm	•	•	•	•
Thick. 3 mm	•	•	•	•
Thick. 4 mm		•	•	•
Thick. 5 mm				•

Widths

INOX	2.500	1.500	1.250	1.000 or less
Thick. 0'5 mm		•	•	•
Thick. 1 mm		•	•	•
Thick. 2 mm		•	•	•
Thick. 3 mm			•	•

Widths

Expanded metal uses the materials elasticity to conform its shape. For this reason the tolerances for the panel's dimension will be:

Length tolerance:

5x10	8x16	9x25	10x20	10x44	12x40	13x30	15x43	20x43	20x60
10mm/ml	10mm/ml	10mm/ml	10mm/ml	10mm/ml	12mm/ml	13mm/ml	15mm/ml	20mm/ml	20mm/ml
22x50	25x60	28x75	30x62	40x114	50x150	75x200	100x250	120x300	
1 mesh									

Width tolerance:

- Nominal width tolerance will be: - 0 + 15 for iron and galvanised
- Nominal width tolerance will be: - 0 + 5 for aluminium and stainless steel.
- The final width tolerance will be: - 0 + 2 mm.

Flattened expanded metal

Expanded metal is, because of its manufacturing process, a non-flat surface. As the metal sheet is expanded it deforms and twists. The mesh can be flattened using a cold roll reducing mill; this will make strands and bonds to flatten, turning them into a smooth and flat surface. This process will also elongate the Long Way Diagonal (DL) and reduce the thickness of the mesh.



Flattened expanded metal



Standard expanded metal

Dimension specification for flattened expanded metal.

Width:

Effective minimum = 300 mm

Effective maximum = 1.500 mm

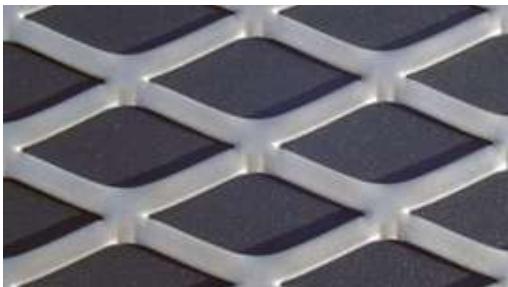
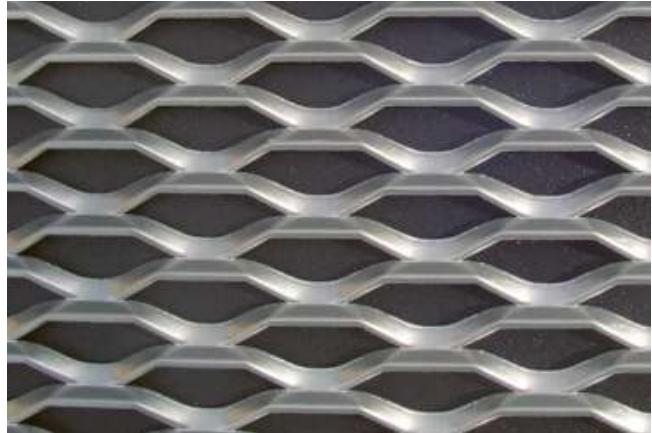
Thickness:

Iron: 3 mm

Aluminium: 4 mm

Stainless steel: 2 mm

Applications and examples in expanded metal mesh



Hexagonal Mesh

SD	LD	S	T
Mesh 9x25			
9	25	1	1
9	25	1,5	1
9	25	2	1
9	25	2,5	1
9	25	3	1
9	25	1,5	1,5
9	25	2	1,5
9	25	2,5	1,5
9	25	3	1,5
Mesh 11x44			
11	44	2,5	1
11	44	3	1
11	44	2,5	1,5
11	44	3	1,5
11	44	2,5	2
11	44	3	2

(SD) Short way diagonal

(LD) Long way diagonal

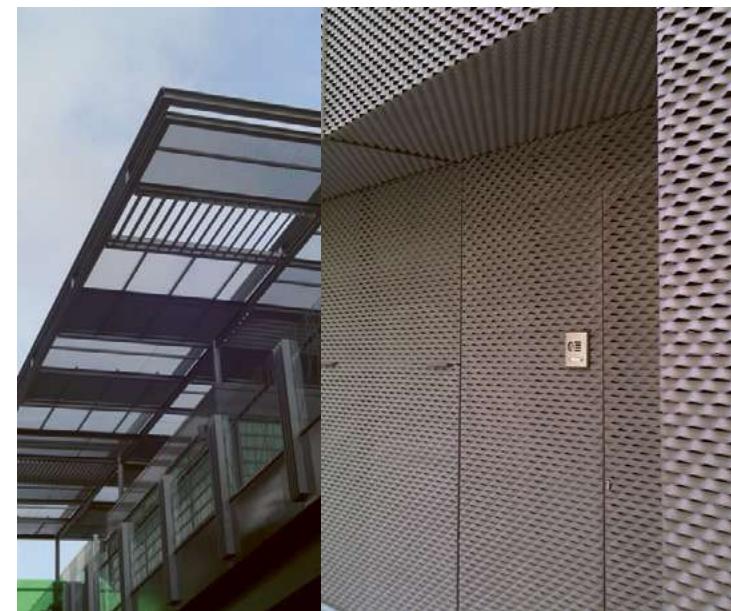
(S) Strand

(T) Thickness

Architectural Mesh

SD	LD	S	T
Mesh 40x40			
40	40	20	1,5
40	40	20	2
Mesh 24x43			
24	43	10	1,5
24	43	10	2
Mesh 30x60			
30	60	10	1,5
30	60	10	2
Mesh 33x75			
33	75	10	1,5
33	75	10	2
Mesh 46x75			
46	75	18	1,5
46	75	18	2
46	75	20	1,5
46	75	20	2
Mesh 53x75			
53	75	24	1,5
53	75	24	2
Mesh 48x114			
48	114	13	1,5
48	114	13	2
48	114	15	1,5
48	114	15	2
48	114	18	1,5
48	114	18	2
Mesh 50x114			
50	114	20	1,5
50	114	20	2
53	114	24	1,5
53	114	24	2

New Mesh
Mesh 50x150
TN 15015 Thick. 1,5
TN 15015 Thick. 2
TN 15020 Thick. 1,5
TN 15020 Thick. 2
TN 15025 Thick. 1,5
TN 15025 Thick. 2
Mesh 75x200
TN 20015 Thick. 1,5
TN 20015 Thick. 2
TN 20020 Thick. 1,5
TN 20020 Thick. 2
TN 20025 Thick. 1,5
TN 20025x2 Thick. 2
Mesh 100x250
TN 25015 Thick. 1,5
TN 25015 Thick. 2
TN 25020 Thick. 1,5
TN 25020 Thick. 2
TN 25025 Thick. 1,5
TN 25025 Thick. 2
Mesh 120x300
TN 30015 Thick. 1,5
TN 30015 Thick. 2
TN 30020 Thick. 1,5
TN 30020 Thick. 2
TN 30025 Thick. 1,5
TN 30025 Thick. 2
TN 30030 Thick. 1,5
TN 30030 Thick. 2
TN 30035 Thick. 1,5
TN 30035 Thick. 2



Tramex grating (F.G.R.P.)



Fiberglass Reinforced Polyester (F.G.R.P.) is a material that has managed to substitute traditional construction elements in demanding environments.

The advantages they provide are many:

- Light.
- Excellent strength / weight ratio.
- Electrical isolation.
- Minimum thermal expansion.
- Electromagnetic transparency.
- Good reaction to fire.
- Minimal fatigue effect.
- Resistant to chemical agents.
- Resistant to UVA rays.
- Resistant to weathering and salt water.
- Free of harmful substances.
- No maintenance.

The manufacturing process of fiberglass gratings (tramex) allows a wide variety of geometries and finishes:

Standard	Standard Non-slip
Blind Non-slip	Non-slip Safety

Tramex tailored according to your needs:

Ref N°	Distance between axis	Mesh aperture	Height	Measures	Drawing
4	38x38	31x31	30	1000x2000 1000x3000	
				38	
18	12,7x12,7 38x38	7x7	30	1000x2000	

Measure in mm.

We cut to required sizes to facilitate installation purposes.



TN-Sold Gratings

TN-Sold Gutters

Mesh	Bearing bar	Cross bar	Dimensions	Finishes
30 X 30	30 X 2	Ø 5 mm	200 X 1000	Galvanized
30 X 30	30 X 2	Ø 5 mm	250 X 1000	"
30 X 30	30 X 2	Ø 5 mm	300 X 1000	"
30 X 30	30 X 3	Ø 5 mm	250 X 1000	"
30 X 30	30 X 3	Ø 5 mm	300 X 1000	"



TN-Sold Gratings

Mesh	Bearing bar	Cross bar	Dimensions	Finishes
30 X 30	30 X 2	Ø 5 mm	400 X 1000	Galvanized
30 X 30	30 X 2	Ø 5 mm	500 X 1000	"
30 X 30	30 X 2	Ø 5 mm	600 X 1000	"
30 X 30	30 X 2	Ø 5 mm	700 X 1000	"
30 X 30	30 X 2	Ø 5 mm	800 X 1000	"
30 X 30	30 X 2	Ø 5 mm	900 X 1000	"
30 X 30	30 X 2	Ø 5 mm	1000 X 1000	"
30 X 30	30 X 2	Ø 5 mm	1200 X 1000	"
30 X 30	30 X 2	Ø 5 mm	1500 X 1000	"
30 X 30	30 X 2	Ø 5 mm	2000 X 1000	"
30 X 30	30 X 2	Ø 5 mm	3000 X 1000	"
30 X 30	30 X 3	Ø 5 mm	400 X 1000	"
30 X 30	30 X 3	Ø 5 mm	1000 X 1000	"
30 X 30	30 X 3	Ø 5 mm	1200 X 1000	"
30 X 30	30 X 3	Ø 5 mm	1500 X 1000	"
30 X 30	30 X 3	Ø 5 mm	2000 X 1000	"
30 X 30	30 X 3	Ø 5 mm	3000 X 1000	"

TN-Sold Steps

Mesh	Bearing bar	Cross bar	Dimensions	Finishes
30 X 30	30 X 2	Ø 5 mm	600 X 240	Galvanized
30 X 30	30 X 2	Ø 5 mm	700 X 240	"
30 X 30	30 X 2	Ø 5 mm	700 X 270	"
30 X 30	30 X 2	Ø 5 mm	800 X 240	"
30 X 30	30 X 2	Ø 5 mm	800 x 270	"
30 X 30	30 X 3	Ø 5 mm	900 x 270	"
30 X 30	30 X 3	Ø 5 mm	1000 x 270	"
30 X 30	30 X 3	Ø 5 mm	1000 x 300	"
30 X 30	30 X 3	Ø 5 mm	1200 x 300	"

Evenly distributed loads in Kg/m² on a 30x30 mm aperture grating

Distance between supports	Dimensions of the supporting rolls in mm									
	20/2	20/3	25/2	25/3	30/2	30/3	35/2	35/3	40/2	40/3
500 mm	1920	2880	3055	4595	4270	6390	5785	8690	7655	11485
600 mm	1315	1990	2095	3130	2950	4420	4080	6110	5305	7955
700 mm	970	1465	1515	2275	2190	3275	2950	4420	3865	5785
800 mm	*760	1135	1160	1745	1670	2500	2300	3435	3055	4595
900 mm		900	910	1390	1315	1970	1820	2755	2325	3485
1000 mm		*700	*740	1110	1060	1590	1465	2215	1920	2880
1100 mm		590	605	910	885	1340	1215	1840	1575	2365
1200 mm				*780	*740	1110	1010	1515	1315	1990
1300 mm				*650	*630	960	850	1265	1110	1680
1400 mm					555	835	*745	1110	975	1465
1500 mm						*600	*655	985	*850	1265
1600 mm							*445	*525	*710	*670
1700 mm							340	405	*545	*545
1800 mm									*440	*455
1900 mm									350	360
2000 mm									295	300
Kg/m ²	16.14	21.50	18.99	25.68	21.84	29.87	24.69	34.06	27.54	38.25

*Recommended for staff use.

Evenly distributed load in Kgs/m²

F ≤ 0,4 cm.

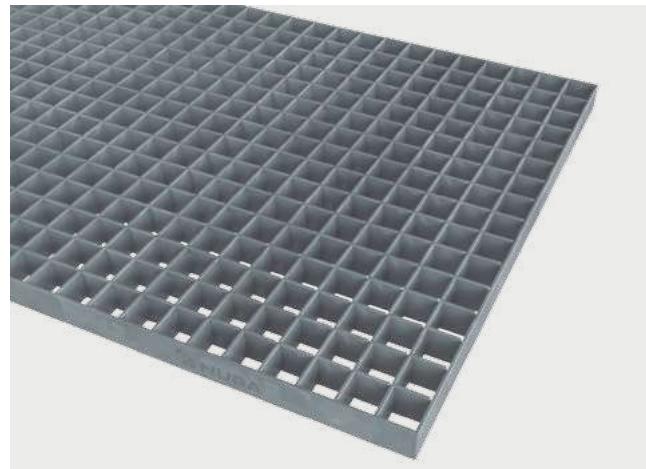
F ≤ 1,0 cm.

F ≤ 1/200 aperture

F = excessive

TN Gratings

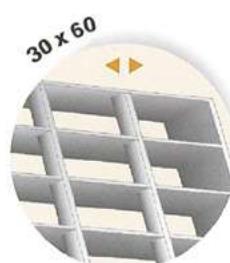
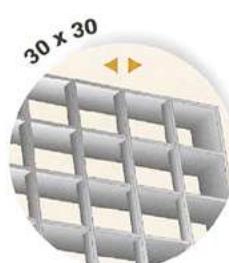
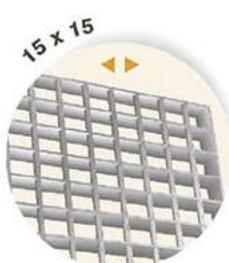
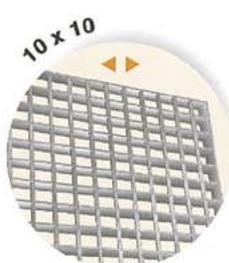
Our gratings are supplied: hot-galvanised, painted or black. The direction of the arrow ($\blacktriangle \triangleright$) indicates the position of the bearing flat-bar.



Evenly distributed loads in Kg/m² on a 30x30 mm aperture grating

Distance between supports	Dimensions of the supporting rolls in mm											
	20/2	20/2	30/2	35/2	40/2	50/2	20/3	25/3	30/3	35/3	40/3	50/3
500 mm	1610					1930	3050	4350				
600 mm	1105	1800				1340	2115	3850				
700 mm	750	1310	1800	2635	3260	4400	980	1950	2400	3400	4255	6250
800 mm	600	1000	1370	1950	2450	3910	765	1500	2050	2910	3630	4745
900 mm	455	805	1100	1565	1955	3000	600	1200	1660	2425	3040	3725
1000 mm	370	650	880	1360	1650	2510	485	975	1320	2045	2465	3000
1100 mm	310	550	725	1055	1300	2105	395	820	1080	1575	1960	2475
1200 mm		455	600	870	1110	1810	330	675	900	1310	1650	2080
1300 mm		375	525	750	920	1550	280	560	785	1120	1385	1775
1400 mm		320	440	645	810	1325		480	670	965	1210	1525
1500 mm			375	550	705	1075		415	560	830	1050	1365
1600 mm			330	470	650	885		360	480	715	975	1160
1700 mm				425	545	705		310	425	635	815	1000
1800 mm				370	475	550			370	550	705	920
1900 mm				330	430	500			330	495	640	825
2000 mm				300	375	465			300	455	565	755
Kg/m ²	21	24,2	27,5	31	34	41	27	31,2	35,5	40	44,2	53

The first measurement determines the bearing flat-bar. Other measurements available on request.



Available standard TN Gratings

Mesh	Bearing bar	Cross bar	Dimensions	Finishes
30 X 30	25 X 2	10 x 2	500 X 1000	Galvanized
30 X 30	25 X 2	10 x 2	1000 X 1000	"
30 X 30	25 X 2	10 x 2	1000 X 2000	"
30 X 30	30 X 2	10 x 2	1000 X 2000	"
30 X 30	30 X 2	10 x 2	1000 x 3000	"
30 X 30	30 X 2	30 x 2	2000 x 1000	"
30 X 30	30 X 3	30 x 3	2000 x 1000	"

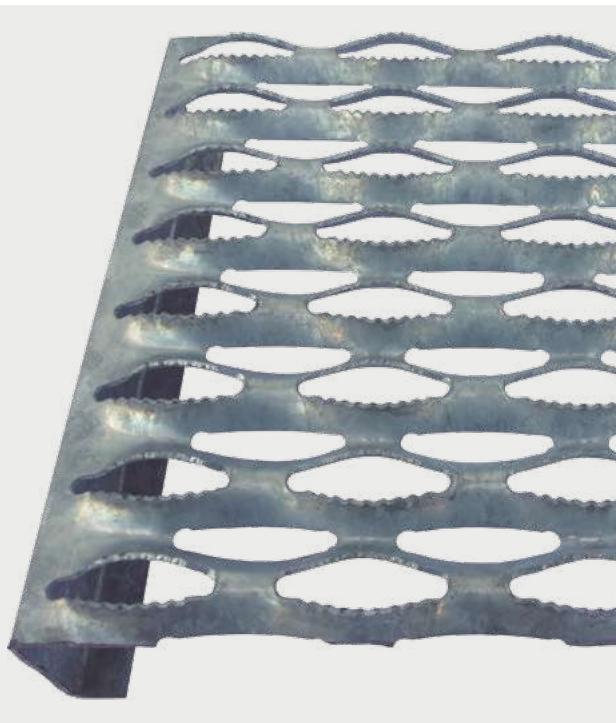
Metallic Floors

Stepbloc

To avoid the risk of slipping, the industrial Stepbloc floor provides a jagged surface which ensures the maximum adherence of footwear. Its design allows the evacuation of ice, snow, clay and rain, making it ideal under the worst atmospheric conditions giving it excellent antiskid properties.

It has a 37% pitch coefficient in its apertures, which allows light to go through, but the apertures are small enough to avoid a 15mm diameter ball to go through, making it very safe in avoiding hazardous objects falling. These small apertures also prevent vertigo as you can't see directly through the Stepbloc.

The shape of the apertures makes maintenance very easy with just air or water.



Width mm	Height mm	Load*	Support Points					
			500	750	1000	1250	1500	1750
240	50	CC	462	289	205	161	131	111
		CR	6186	2742	1540	987	683	500
360	50	CC	462	289	205	161	131	111
		CR	4171	1848	1038	665	456	339
480	50	CC	462	289	205	161	131	111
		CR	3126	1358	778	499	342	254

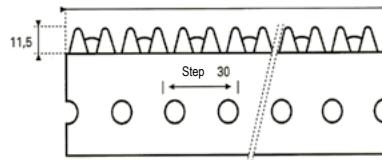
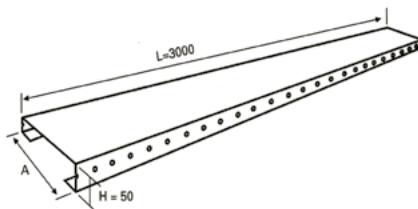
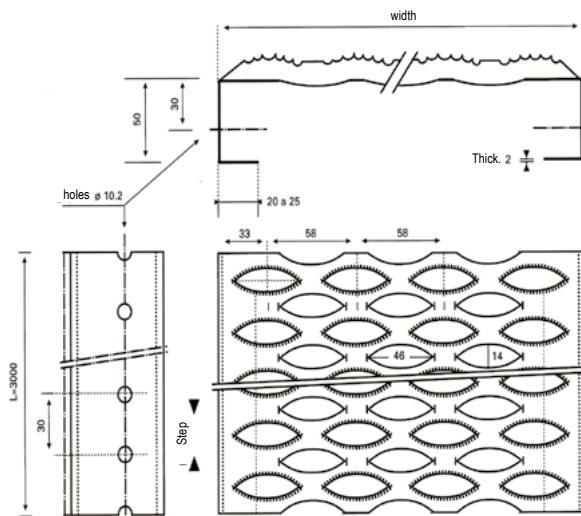
* CL: Concentrated load in Kg

* DL: Evenly distributed load in Kg/m².

Stock available in lengths of 3000 mm.

Possibility of manufacture from aluminium and stainless steel.

Other measurements available on request.

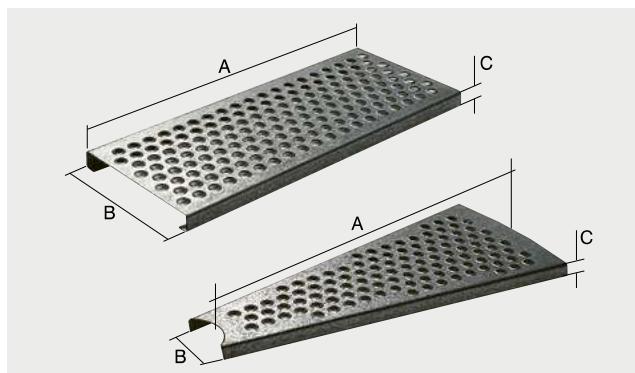


Metallic Floors

TN-Light, TN-Block and TN-Norm

Designed to withstand distributed loads of around 500 Kg/m², it is recommended to use our metallic floors to replace embossed plates. It is easy and economical to install and may be assembled by means of screws or by welding them to the beams. Panels of 1 to 2 m² can also be formed by means of a handrail welded to the lower part, obtaining a dismountable floor without any securing element.

TN-Light



Dimensions A X B X C	Thickness	Floor weight		Load evenly distributed with 1m aperture in kg per m ²	Concentrated load in middle of an isolated element with 1m aperture in Kg.
		By element 1m in length Kg/m.l.	By m ² Kg/m ²		
2000 X 250 X 30					
1000 X 250 X 30					
800 X 250 X 30					
700 X 250 X 30					
600 X 250 X 30					

Floor

Dimensions			Thickness
A	B	C	
600 X 2	110	25	2
700 X 2	110	25	2
800 X 2	110	25	2

Spiral

TN-Block



Dimensions A X B X C	Thickness	Floor weight		Load evenly distributed with 1m aperture in kg per m ²	Concentrated load in middle of an isolated element with 1m aperture in Kg.
		By element 1m in length Kg/m.l.	By m ² Kg/m ²		
2000 X 250 X 30					
1000 X 250 X 30					
800 X 250 X 30					
700 X 250 X 30					
600 X 250 X 30					

Floor

Dimensions			Thickness
A	B	C	
600 X 2	110	25	2
700 X 2	110	25	2
800 X 2	110	25	2

Spiral

TN-Norm



Dimensions A X B X C	Thickness	Floor weight		Load evenly distributed with 1m aperture in kg per m ²	Concentrated load in middle of an isolated element with 1m aperture in Kg.
		By element 1m in length Kg/m.l.	By m ² Kg/m ²		
2000 X 250 X 30					
1000 X 250 X 30					
800 X 250 X 30					
700 X 250 X 30					
600 X 250 X 30					

Floor

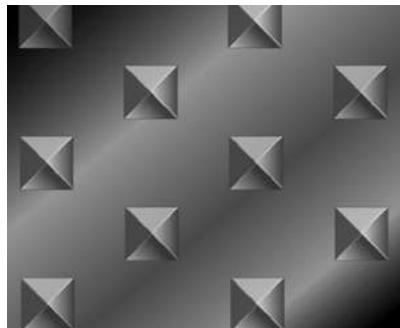
Embossed steel plates

- Dimensions: Made of 2,000 x 1,000 mm sheet for immediate delivery.
- Material: It is supplied in iron, aluminium, stainless steel etc.
- Uses: Metallic constructions, Shipbuilding Industry, Bodywork.



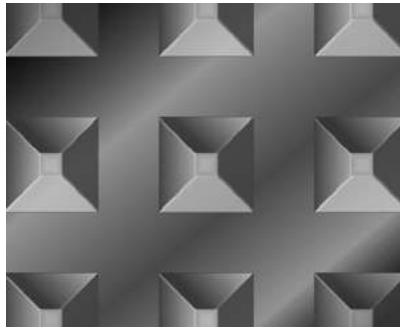
Model A

Thickness of 1'5 and 2 mm.



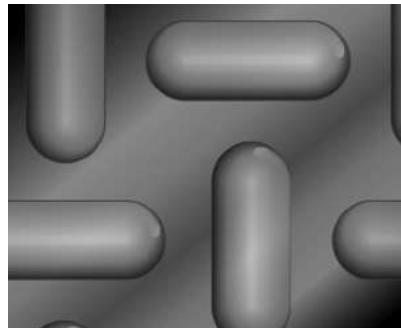
Model B

Thickness of 1, 1'5, 2 and 3 mm.



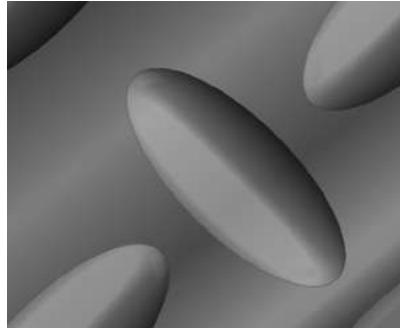
Model C

Thickness of 1, 1'5, 2, 3 and 4 mm.



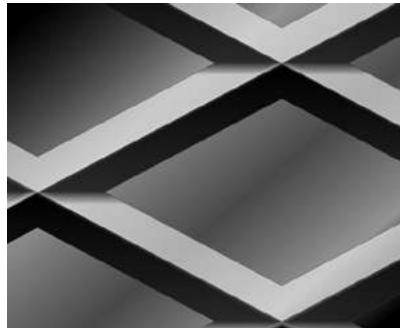
Model D

Thickness of 1, 1'5, 2, 3 and 4 mm.



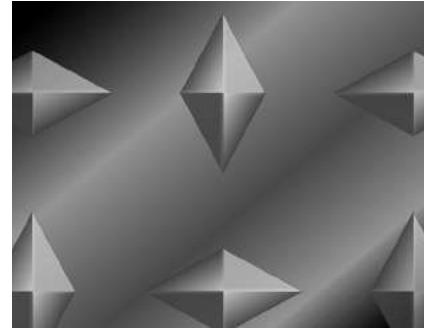
Model E

Thickness of 2, 3 and 4 mm.



Model F

Thickness of 2 mm.



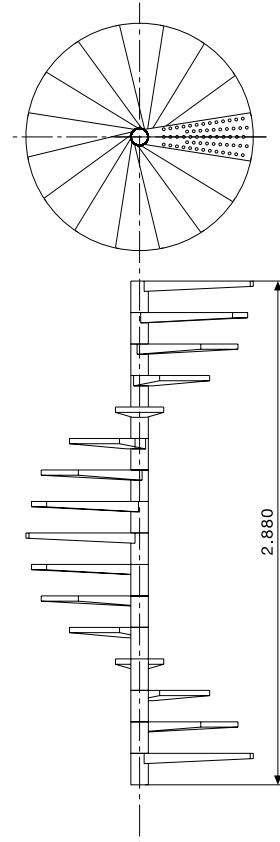
TN Kit

TN-Kit is an easy design solution for the quick assembly of all kinds of stairs. TN-Kit combines ease and economy.

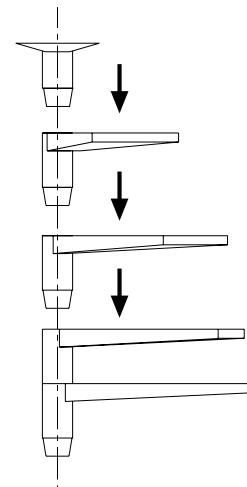
Spiral (perforated or embossed steel plates)



16 steps = full revolution (360°)
16 steps = 2,880 mm.

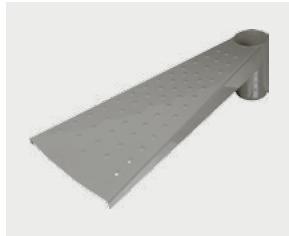


Spiral R	600 x 3	700 x 3	800 x 3
Spiral P	600 x 3	700 x 3	800 x 3
Step R	600 x 2	700 x 2	800 x 2
Step P	600 x 2	700 x 2	800 x 2



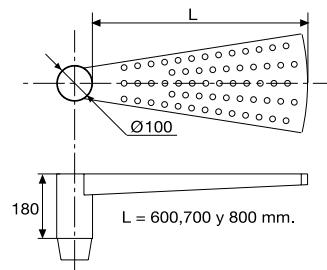
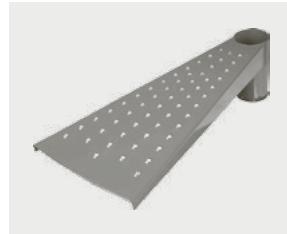
Perforated Spiral

The lightest antislip spiral staircase for exteriors.



Embossed Spiral

The spiral with the greatest robustness.



* These steps comply with Spanish safety standards

