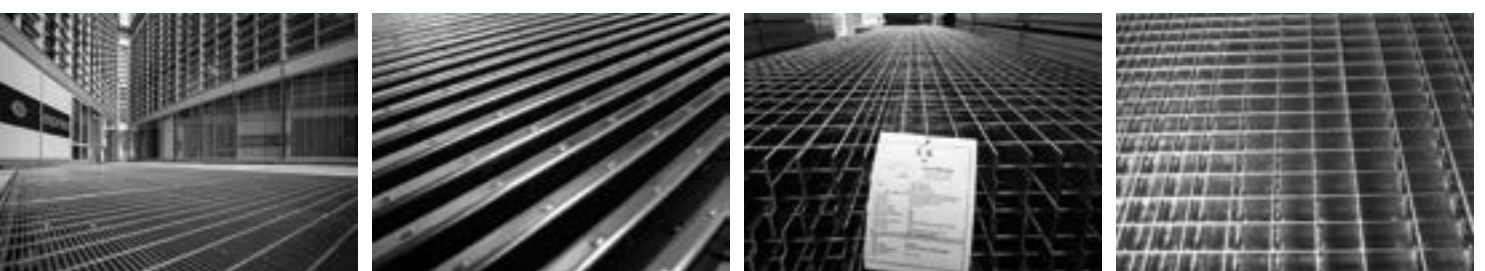




≡ Grating

Design and functionality



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GRATING [link: www.nuovadefim.com/en/content/download-area](http://www.nuovadefim.com/en/content/download-area)



CE CE Certified
NO. 0948-CPR-0287

**POTISSIMUM
ELECTRO-WELDED**_ P. 20
POTISSIMUM® FOR
RESIDENTIAL APPLICATIONS
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BARROTTO ANTIQUUM®

**UTILIOR
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UTILIOR®

GRATING STEPS_ P. 24
STANDARD GRATING STEPS®
ANTIVERTIGO SYSTEM



POTISSIMUM® FOR RESIDENTIAL APPLICATIONS

Thanks to its special manufacturing process, POTISSIMUM® residential electro-welded steel grating system offers exceptional sturdiness combined with a great aesthetic value. With its wide range of ready from stock mesh sizes, it can respond to every need and situation, mainly for residential buildings.

Tailored, framed and shaped grating panels are realized to complete from the simplest, to the more complex project with the support of our unique in-house technical office, assisting the customers at the design stage to provide the most economic and appropriate solutions.

Both the standard semi-finished grating mats called GEA, sized 6100x1000 mm and the cut-to-size panels are supplied CE marked and with the relevant Italian Protected Designation of Origin (PDO).



TECHNICAL DETAILS

Material

> S235JR UNI EN 10025 Steel

Coating

> Hot-dip galvanizing according to UNI EN ISO 1461

Painting

> RAL colours

Accessories

> Fixing clips > see page 67

APPLICATIONS

- > Walkways
- > Stair treads
- > Light grilles
- > Drain covers
- > Open steel flooring
- > Mezzanines

PRODUCT SPECIFICATIONS

ORSOGRIL POTISSIMUM® residential electro-welded grating - GES Cut-to-size framed panels (bearing bar - mesh)

Mesh mm: 11/15/22/25 x ...

Bearing flat bar mm: ...

Round cross bar Ø mm: ...

Edges framing flat bar, ... mm with continuous groove, forge-welded to the grating (on regular squared panels)

Weight kg/m²: ...

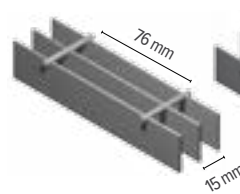
Material: S235JR UNI EN 10025 Steel

Finish: hot-dip galvanizing, according to UNI EN ISO 1461

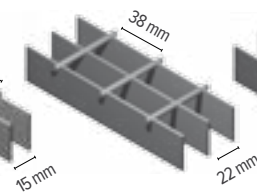
AGLAIA fixing clip for ... mm mesh - bottom or top fixing

CE certified (Ref. Factory Manufacturing Control Certificate 0948-CPR-0287)

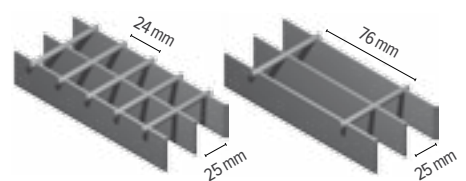
HEEL PROOF



BALL PROOF



BUILDING



BEARING BAR			CROSS BAR DIRECTION	N. bearing bars	HEEL PROOF		BALL PROOF		BUILDING	
H	S	L			Mesh	Weight	Weight	Weight	Weight	Weight
mm	mm	mm			kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	
25	2	998		67	25.2	-	18.0	18.4	15.8	
30	2	998		47	30.1	-	21.5	-	18.9	
40	2	998		47	40.1	-	-	-	25.0	
25	3	999		47	38.1	-	-	-	23.6	
30	3	999		47	45.7	-	32.2*	-	28.2	
40	3	999		47	61.0	-	-	-	37.6	
50	3	999		47	76.2	-	-	-	46.9	
60	3	999		47	92.4	-	-	-	57.1	
70	3	999		47	107.8	-	-	-	66.5	
80	3	999		47	123.2	-	-	-	-	
40	4	1000		41	-	-	57.6	-	50.4	
50	4	1000		41	-	-	72.0	-	63.0	
60	4	1000		41	-	-	87.2	-	76.3	
70	4	1000		41	-	-	101.8	-	89.0	

GEA MAT SIZE 6100x1000 mm, UNFRAMED - SELF COLOURED

*offered also with serrated bearing bar

Weights kg/m² are theoretical and subject to dimensional tolerances of raw materials (page 16 of UNI 11002, Point 5.3, Prospect 1)

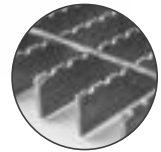
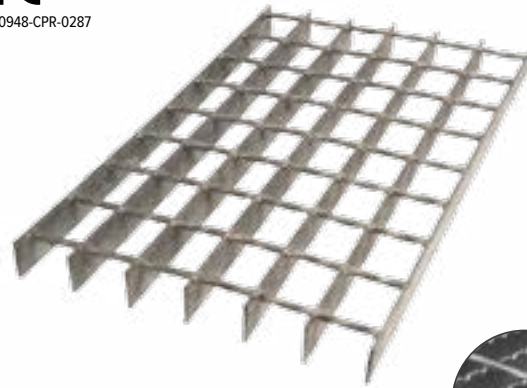


POTISSIMUM® INDUSTRY



Thanks to its special manufacturing process, POTISSIMUM® INDUSTRIAL electro-welded steel grating system offers exceptional sturdiness combined with a great versatility. With its wide range of ready from stock mesh sizes, it can respond to every need and situation, mainly for industrial applications.

Tailored, framed and shaped grating panels are realized to complete from the simplest, to the more complex project with the support of our unique in-house technical office, assisting the customers at the design stage to provide the most economic and appropriate solutions. Both the standard semi-finished grating mats called GEA, sized 6100x1000 mm and the cut-to-size panels are supplied CE marked and with the relevant Italian Protected Designation of Origin (PDO).



Detail for serrated version (anti-skid Class R10 no. 5648/14)

TECHNICAL DETAILS

Material

> S235JR UNI EN 10025 Steel

Coating

> Hot-dip galvanizing according to UNI EN ISO 1461

Painting

> RAL colours

Accessories

> Fixing clips > see page. 67

APPLICATIONS

- > Walkways
- > Stair treads
- > Drain covers
- > Industrial floors
- > Mezzanines

PRODUCT SPECIFICATIONS

ORSOGRIL POTISSIMUM® industrial electro-welded grating - GES Cut-to-size framed panels (bearing bar - mesh)

Mesh mm: 30/34 x ...

Bearing flat bar mm: ...

Twisted square cross bar mm: ...

Edges framing flat bar, ... mm with continuous groove, forge-welded to the grating (on regular squared panels)

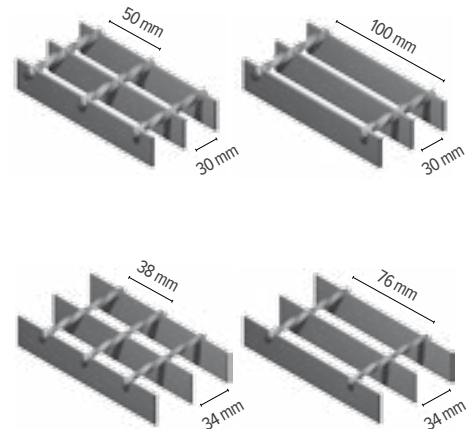
Weight kg/m²: ...

Material: S235JR UNI EN 10025 Steel

Finish: hot-dip galvanizing, according to UNI EN ISO 1461

AGLAIA fixing clip for ... mm mesh - bottom or top fixing

CE certified (Ref. Factory Manufacturing Control Certificate 0948-CPR-0287)



BEARING BAR		CROSS BAR DIRECTION	N. bearing bars	Mesh			
H	S			L			
mm	mm	mm	Mesh	34*	34*	30*	30*
			Weight	kg/m ²	kg/m ²	kg/m ²	kg/m ²
25	2	998	-	-	-	14.0	12.4
30	2	998	-	-	-	16.2	14.6
40	2	998	-	-	-	20.7	-
25	3	999	21*	19.8*	-	19.6	18
30	3	999	24.9*	23.7*	23.1*	-	21.4
40	3	999	32.6	31.4	29.9*	-	28.3
50	3	999	-	-	-	36.7	35.1
40	4	1000	43	41.8	-	39.1	37.4
25	5	1000	34.4*	32.4*	-	-	-
30	5	1000	40.9*	38.9*	-	-	-
32	5	1000	43.5*	41.5*	-	-	-



GEA MAT SIZE 6100x1000 mm, UNFRAMED - SELF COLOURED

*cross bars twisted

*offered also with serrated bearing bar

Weights kg/m² are theoretical and subject to dimensional tolerances of raw materials (page 16 of UNI 11002, Point 5.3, Prospect 1)

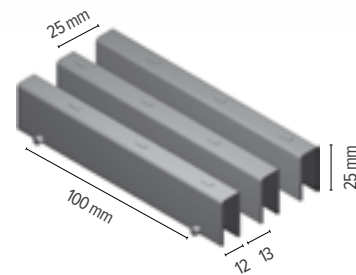


Download

BARROTTO ANTIQUUM®

Thanks to the peculiar anti-slip notched bearing bars and its unique aesthetic appearance, the BARROTTO ANTIQUUM® electro-welded grating represents a natural practical and quality choice. Its handcrafted look is best suited to down town applications. DEFIM ORSOGRIL service includes the possibility to produce custom-made panels, framed and shaped, with the technical support of its unique in-house design office that is one of its kind in the industry. Both the standard semi-finished grating mats called GEA, sized 6100x1000 mm and the cut-to-size panels are supplied CE marked and with the relevant Italian Protected Designation of Origin (PDO).

CE
NR 0948-CPR-0287



TECHNICAL DETAILS

Material

> S235JR UNI EN 10025 Steel

Coating

> Hot-dip galvanizing according to UNI EN ISO 1461

Painting

> RAL colours

Section

> U profile bearing bar, sized 25x12x25x1.5mm (heel-proof)

Weight

> Unframed semi-finished self-colour material 28.6 kg/m²

Capacity load (kg)

> Class 1 - pedestrian load on maximum net span of 1300 mm

APPLICATIONS

- > Pedestrian open steel flooring for traditional and stylish down town environments
- > Drainage covers
- > Ventilation grilles

PRODUCT SPECIFICATIONS

BARROTTO ANTIQUUM® electro-welded grating - Cut-to-size framed panels
Mesh mm: 25 (empty 13 mm - full 12 mm) x 100. U profile bearing bar, sized 25x12x25x1.5 mm anti-slip grooved. Round cross wire Ø 4 mm. Edges framing flat bar 25x2 mm. Weight kg/m²: 34.9 (galvanized or painted). Material: S235JR UNI EN 10025 steel. Finish: hot-dip galvanizing according to UNI EN ISO 1461

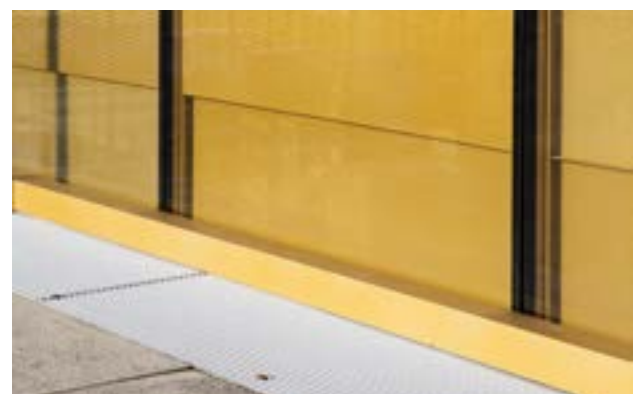
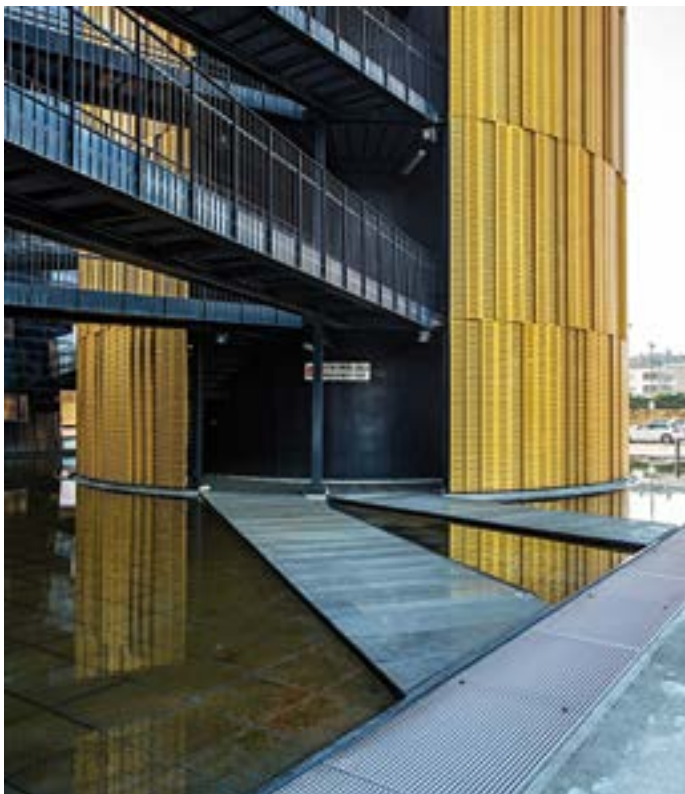
AS AN ALTERNATIVE:

Finish: micaceous grey RAL 223 polyester powder painting on hot-dip galvanized material. AGLAIA fixing clip for 15 mm mesh - bottom fixing

CE certified (Ref. Factory Manufacture Control Certificate 0948-CPR-0287)

ANTI-SKID to DIN 51130 - CLASS R9

BALL-PROOF to Italian Ministerial Decree no. 236 of June 14, 1989





UTILIOR® press-locked gratings versatile manufacturing process offers an extremely wide mesh opening range to choose from, in order to combine attractive design with loading requirements. With the support of NUOVA DEFIM's in-house technical office, that is one of its kind in the industry, it is also provided framed and shaped panels service.



TECHNICAL DETAILS

Material

- > S235JR UNI EN 10025 Steel
- > Steel - stainless steel - aluminium - COR-TEN

Coating

- > Hot-dip galvanizing according to UNI EN ISO 1461

Painting

- > RAL colours

Accessories

- > Fixing clips > see page 67

APPLICATIONS

- > Drain covers
- > Open steel floors
- > Walkways
- > Stair treads
- > Light gratings
- > Mezzanines

PRODUCT SPECIFICATIONS

ORSOGRIL UTILIOR® press-locked grating - GP (pressed grating) Cut-to size framed panels (bearing bar - mesh). Mesh mm: ... Bearing flat bar mm: ... Flat cross bar mm: ... Edges framing flat bar... Weight kg/m²: ... Material: S235JR UNI EN 10025 Steel. Finish: hot-dip galvanizing according to UNI EN ISO 1461. AGLAIA fixing clip for ... mm mesh - bottom or top fixing



BEARING BAR		CROSS BAR DIRECTION		Mesh													
H	S	H	S	AxB	11x66	15x66	17x66	22x22	22x66	25x66	33x33	33x66	44x11	66x11	66x22	66x33	
mm	mm	mm	mm		kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	kg/m ²	
20	2				34.1	26.2	23.6	24.3	19.3	17.6	16.8	14.3	24.5	21.9	14.4	11.9	
25	2				42	32.1	28.8	28.5	23.5	21.4	19.8	17.3	26.9	23.6	16.1	13.6	
30	2				49.9	38	34.1	32.6	27.6	25.2	22.7	20.2	29.3	25.3	17.8	15.3	
35	2				57.7	43.9	39.3	36.8	31.8	28.9	25.7	23.2	31.7	27	19.5	17.1	
40	2				65.6	49.8	44.5	41	36	32.7	28.6	26.1	34	28.8	21.3	18.8	
45	2	10	2		73.5	55.7	49.8	45.2	40.2	36.5	31.6	29.1	36.4	30.5	23	20.5	
50	2				81.3	61.6	55	49.4	44.4	40.2	34.5	32	38.8	32.2	24.7	22.2	
25	3				59.6	45	40.2	37.3	32.3	29.2	25.7	23.2	31.4	26.6	19.1	16.6	
30	3				71	53.5	47.7	43.2	38.2	34.6	29.8	27.3	34.7	28.9	21.4	18.9	
35	3				82.4	62	55.2	49.1	44.1	39.9	33.9	31.4	38	31.2	23.7	21.2	
40	3				93.8	70.5	62.7	55.1	50.1	45.2	38	35.5	41.2	33.5	26	23.5	
45	3				105.1	78.9	70.2	61	56	50.6	42.1	39.6	44.5	35.8	28.3	25.8	
50	3				116.5	87.4	77.7	66.9	61.9	55.9	46.3	43.8	47.8	38.1	30.6	28.1	
60	3				139.8	104.9	93.2	80.3	74.3	67	55.5	52.5	57.3	45.6	36.7	33.7	
70	3	12	2		162.5	121.8	108.2	92.2	86.2	77.7	63.7	60.7	63.8	50.2	41.3	38.3	
80	3				185.3	138.7	123.2	104	98	88.3	72	69	70.4	54.8	45.9	42.9	
90	3				208	155.7	138.3	115.9	109.9	99	80.2	77.2	76.9	59.5	50.5	47.5	
100	3				230.8	172.6	153.3	127.8	121.8	109.7	88.4	85.4	83.4	64.1	55.1	52.1	
30	4				96.6	73.4	65.6	64.2	53	48.2	44.1	38.5	59.6	51.8	35.1	29.6	
40	4				126.8	95.9	85.6	79.9	68.8	62.4	55	49.5	68.3	58	41.3	35.7	
50	4				157.1	118.4	105.5	95.7	84.6	76.5	66	60.4	77	64.1	47.4	41.8	
60	4				187.3	140.9	125.4	111.5	100.3	90.7	76.9	71.3	85.7	70.2	53.5	47.9	
70	4				217.5	163.4	145.4	127.2	116.1	104.8	87.8	82.3	94.3	76.3	59.6	54	
80	4	15	3		247.7	185.9	165.3	143	131.8	119	98.8	93.2	103	82.4	65.7	60.1	
90	4				277.9	208.4	185.3	158.7	147.6	133.1	109.7	104.1	111.7	88.5	71.8	66.3	
100	4				308.2	230.9	205.2	174.5	163.4	147.3	120.7	115.1	120.4	94.7	78	72.4	
110	4				338.4	253.4	225.1	190.3	179.1	161.4	131.6	126	129.1	100.8	84.1	78.5	
120	4				368.6	276	245.1	206	194.9	175.6	142.5	137	137.8	106.9	90.2	84.6	
40	5				157.7	119.3	106.5	100.5	85.8	77.8	69.1	61.8	87.3	74.5	52.5	45.1	
50	5				195.2	147.2	131.3	120	105.3	95.3	82.7	75.3	98.1	82.1	60.1	52.7	
60	5				232.7	175.2	156	139.5	124.8	112.9	96.3	88.9	108.9	89.7	67.7	60.3	
70	5				270.1	203.1	180.7	159.1	144.4	130.4	109.8	102.5	119.7	97.3	75.3	67.9	
80	5	15	4		307.6	231	205.4	178.6	163.9	148	123.4	116	130.4	104.9	82.8	75.5	
90	5				345.1	258.9	230.2	198.2	183.5	165.5	136.9	129.6	141.2	112.5	90.4	83.1	
100	5				382.5	286.8	254.9	217.7	203	183.1	150.5	143.2	152	120.1	98	90.7	
110	5				420	314.7	279.6	237.2	222.5	200.6	164.1	156.7	162.8	127.7	105.6	98.3	
120	5				457.5	342.6	304.3	256.8	242.1	218.2	177.6	170.3	173.5	135.2	113.2	105.8	

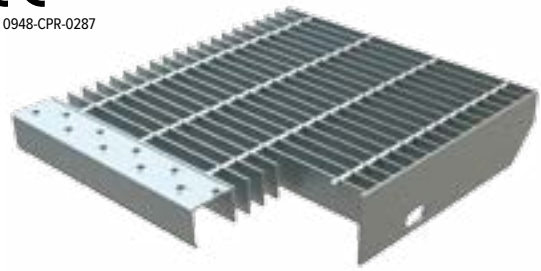




STANDARD GRATING STEPS®

For outdoor and emergency stairs are mainly used STANDARD GRATING STEPS due to their compliance with loading requirements and to the empty-to-full ratio ensuring fire smokes rapid evacuation.

All NUOVA DEFIM ORSOGRIL grating steps are supplied CE marked and with the relevant Italian Protected Designation of Origin (PDO).



TECHNICAL DETAILS

Material

> S235JR UNI EN 10025 Steel

Coating

> Hot-dip galvanizing according to UNI EN ISO 1461

APPLICATIONS

- > Emergency security stairs
- > Service stairs

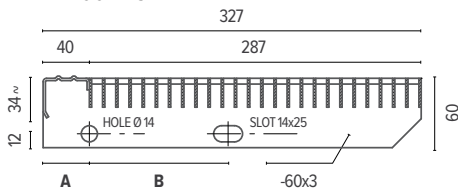
PRODUCT SPECIFICATIONS

Welded ORSOGRIL GRATING STEPS to be bolted - STD. Mesh mm: ... Bearing flat bar mm: ... Round cross wire mm: ...

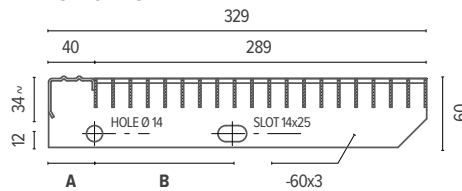
Dimensions mm: ... Grating panel provided with a special front profile called "nosing" and two perforated side plates for bolting it to the steel stair supports. Weight kg/each: ...

Material: S235JR UNI EN 10025 Steel
Finish: hot-dip galvanizing according to UNI EN ISO 1461

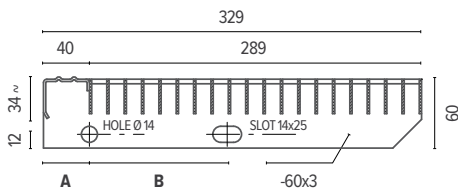
11x100 - 25x2



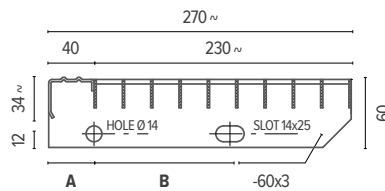
15x76 - 25x2



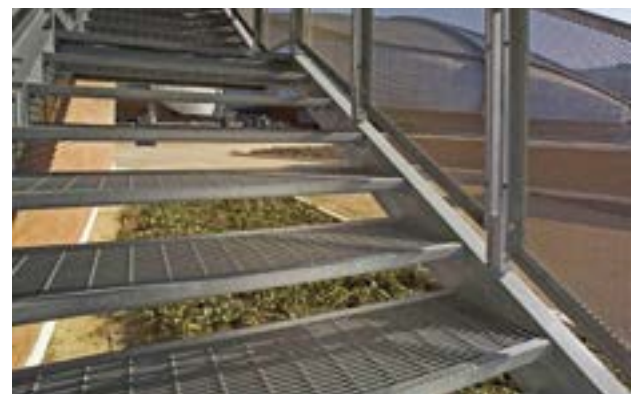
15x76 - 30x2



25x76 - 25x2



DESCRIPTION	MESH		BEARING BAR		DIMENSIONS			DRILLING UNI NORMS	
	H mm	L mm	H mm	S mm	H mm	L mm	Weight kg/ea	A mm	B mm
Slip-resistance nosing with profiled upwards facing holes*	15	76	25	2	1000	329	11.0	40	120
Slip-resistance nosing with profiled upwards facing holes*	15	76	25	2	1200	329	13.1	40	120
Slip-resistance nosing with profiled upwards facing holes**	15	76	30	2	1200	329	15.1	40	120
Slip-resistance nosing with profiled upwards facing holes	25	76	25	2	600	267	4.3	40	120
Slip-resistance nosing with profiled upwards facing holes	25	76	25	2	700	267	4.9	40	120
Slip-resistance nosing with profiled upwards facing holes	25	76	25	2	800	267	5.5	40	120
Slip-resistance nosing with profiled upwards facing holes	25	76	25	2	900	267	6.1	40	120
Slip-resistance nosing with profiled upwards facing holes	25	76	25	2	1000	267	6.7	40	120



*EXODUS® STEPS FOR SECURITY STAIRS (HEEL PROOF MESH - TYPE TO BE BOLTED).

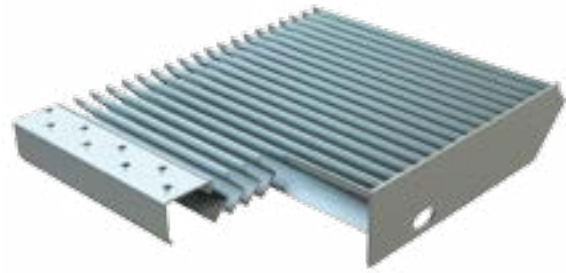
* According to the D.M. 236 dated 14 June 1989

**According to the UNI 11001-1 norm, test reported from Milan Polytechnic (P.54/2-8.112)

ANTIVERTIGO SYSTEM



The no-panic ANTIVERTIGO GRATING is a patented exclusive system by NUOVA DEFIM ORSOGRIL. The special shaped profiles provide total screening down, while keeping the typical airflow grating characteristics. The step designed using this grating type complies with current anti-skid norms; ANTIVERTIGO landings and walkways grating are also available upon request. For landings composition, the system foresees a starting panel provided with "nosing" and a variable number of interlocked panels to reach the desired length. The panels are joined together by a "dovetail" system between the frames. This solution grants the visual continuity between adjacent panels, hiding the junction points.



TECHNICAL DETAILS

Material

> S235JR UNI EN 10025 Steel

Coating

> Hot-dip galvanizing according to UNI EN ISO 1461

Weight

> 18.3 kg/each, galvanized

Capacity load (kg)

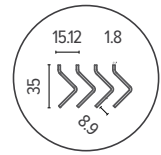
> Stair tread load on maximum net span of 1200 mm

APPLICATIONS

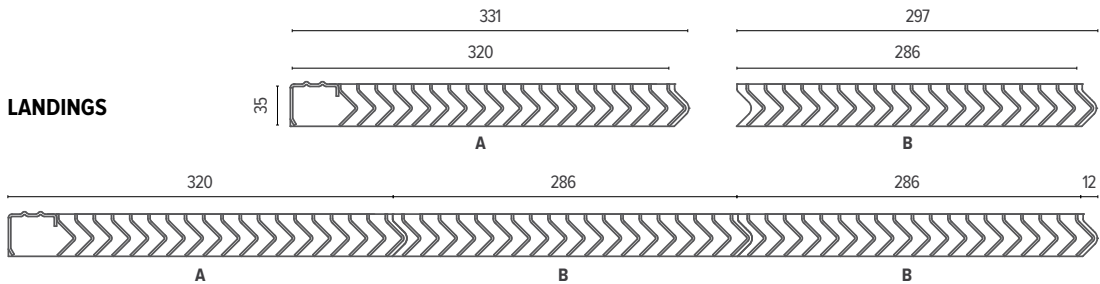
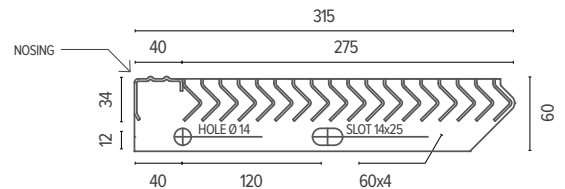
- > Light gratings
- > Floors
- > Walkways
- > Stair treads
- > Drainage covers
- > Mezzanines

PRODUCT SPECIFICATIONS

ANTIVERTIGO ORSOGRIL Stair tread for bolting Mesh mm: 15. Bearing bar mm: special V profile. Round cross bar mm: Ø 6. Dimensions mm: 1200x315
Grating panel provided with a special front profile called "nosing" and two perforated side plates for bolting it to the steel stair supports. Weight kg/each: 17.8 galvanized. Material: S235JR UNI EN 10025 Steel.
Finish: hot-dip galvanizing according to UNI EN ISO 1461



"NO PANIC" STEP



LANDINGS

For landings composition, the system foresees a starting panel provided with "nosing" and a variable number of interlocked panels to reach the desired length. The panels are joined together by a "dovetail" system between the frames. This solution grants the visual continuity between adjacent panels, hiding the junction points.

A_ Starting panel with "nosing"

Dimensions Width (W): 1200 mm
Depth (D): 320 mm
Weight kg/each. 16.8 (self-colour)
kg/each. 17.8 (galvanized)

B_ Standard panel

Dimensions Width (W): 1200 mm
Depth (D): 286 mm
Weight kg/each. 15.2 (self-colour)
kg/each. 16.2 (galvanized)

