

# LANGFULTON



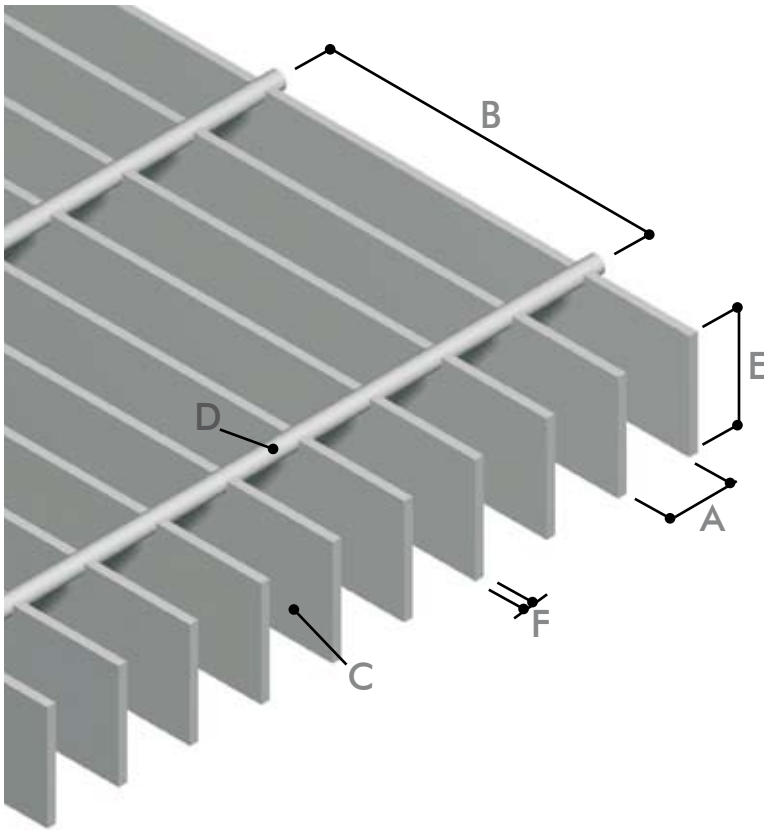
## Horizontal Gratings

### Pressure Locked and Electrofused Products

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## GLOSSARY OF TERMS

A - pitch of bearing bars (centre-to-centre distance in mm between two bearing bars).

B - pitch of transverse bars (centre-to-centre distance between two transverse bars).

C - bearing bars (main structural elements, placed in parallel; the height and width influence the loading capacity).

D - transverse bars (fixed at right angles to bearing bars; provide lateral restraint and help to distribute the load uniformly on the grating).

E - height of bearing bar.

F - width of bearing bar.

**Weights: kg/m<sup>2</sup> are nominal.**

**Standards: all gratings are manufactured in accordance with the dimensional and manufacturing tolerances of UNI 11002-1.**

**Loading and tolerance information is printed separately.**



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URBAN PEDESTRIAN GRATING & ANTIVERTIGO





Gwyneth Paltrow, Chelsea Flower Show 2011  
Pressure Locked Grating by Lang+Fulton

Lang+Fulton supply a comprehensive range of pressure locked and electrofused gratings to the construction industry for both vertical and horizontal applications, specializing in high quality products to satisfy the most varied requirements.

With over thirty years experience, the Technical Department is able to recommend the most appropriate product for a particular project before preparing a panel layout which will make the most economical use of the selected material. Lang+Fulton work closely with the architect from inception to the final design, preparing CAD drawings and advising on support steelwork, alternative fixing methods and loading specifications to current British Standards.

All panels are bespoke: cut and framed to custom sizes before the application of a hot-dip galvanized finish (BS EN ISO 1461) with optional polyester powder coating in any RAL colour. Lang+Fulton prides itself on service and attention to detail and provides a complete package of panels, ancillary steelwork, accessories and fabrication drawings for site installation.

Gratings are generally made from Steel S 235 JR UNI EN 10025; pressure locked are also made in aluminium or stainless steel.



## PRESSURE LOCKED GRATINGS

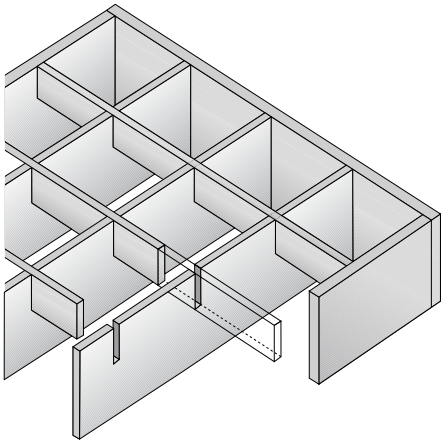
Pressure locked gratings are constructed entirely from flat bars by pressing an arrangement of cross bars into notched bearing bars. The bars are further secured by a choice of flat or C-shaped edging bar, producing a custom-sized grating panel with perfectly formed intersections.

This manufacturing method is extremely adaptable and the production process can promptly provide grating panels in custom sizes and to non-standard specifications of weight, aperture and performance.

In spite of the high quality and pleasing aesthetic of the product, it is surprisingly economical as the fabrication method allows a panel to be made with little or no wastage. It is therefore often the grating of choice for all types of projects: from prestigious urban developments to practical industrial flooring.

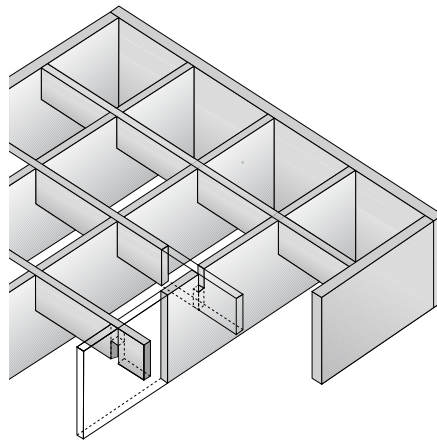
Applications: extra small Heel-Proof apertures, Pedestrian Areas, Non-Standard panel and aperture sizes, Unusual Loading requirements. Gratings can also be supplied in aluminium and stainless steel.

Approx 3-week delivery for panels made from stock sections of flat bar: 25x2, 25x3, 30x2, 30x3, 40x2, 40x3 and 50x3mm.  
Approx 5-week delivery for panels made from non-stock sections of flat bar.



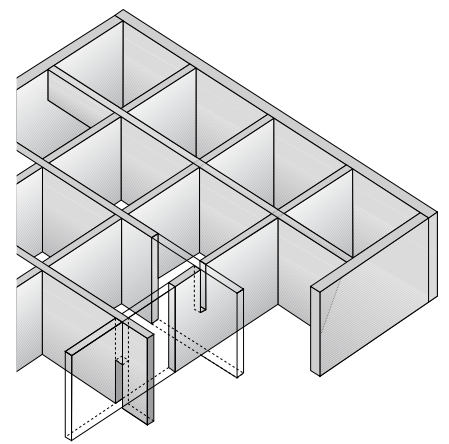
TYPE-PL  
PRESSURE-LOCKED  
PRESSED

The bearing bars of a PL single pressed grating are notched before the transverse bar is inserted under pressure. The panel is then framed on all four sides with either a flat bar or a C-section bar.



TYPE-PLX  
PRESSURE-LOCKED  
CROSS-PRESSED

The PLX cross-pressed grating is made with bars of an unequal depth, both of which are notched to produce a very secure joint. This provides greater strength under stress for locations such as the turning point of a heavy vehicle.

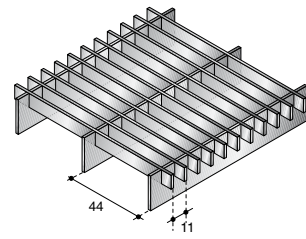
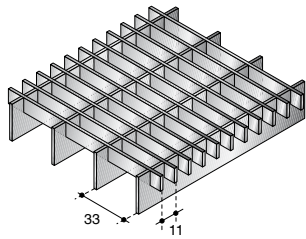


TYPE-PLXE  
PRESSURE-LOCKED  
CROSS-PRESSED  
EQUAL BARS

The PLXE cross-pressed grating is made from bars of equal depth, both of which are notched. This 'Eggcrate' grating has the same visual appearance from both sides and is therefore very often used for vertical applications.



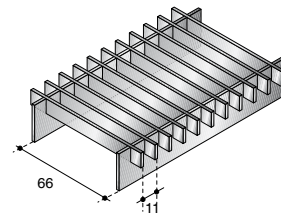
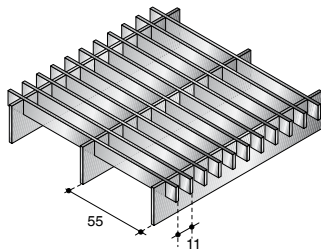
**TYPE-PL**  
PRESSURE-LOCKED  
PRESSED



**HEEL-PROOF**

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 11	25 x 2	10 x 2	25 x 3	29,1
	25 x 3	10 x 2	25 x 3	34,7
	30 x 2	10 x 2	30 x 3	32,0
	30 x 3	10 x 2	30 x 3	38,8
	40 x 2	10 x 2	40 x 3	37,8
	40 x 3	10 x 2	40 x 3	46,9
	50 x 3	10 x 2	50 x 3	54,9
	60 x 3	10 x 2	60 x 3	63,0
	70 x 3	10 x 2	70 x 3	71,1
80 x 3	10 x 2	80 x 3	79,2	

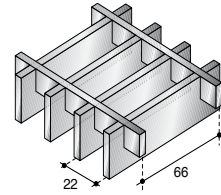
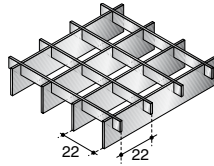
MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
44 x 11	25 x 2	10 x 2	25 x 3	26,1
	25 x 3	10 x 2	25 x 3	30,4
	30 x 2	10 x 2	30 x 3	28,4
	30 x 3	10 x 2	30 x 3	33,6
	40 x 2	10 x 2	40 x 3	33,1
	40 x 3	10 x 2	40 x 3	40,0
	50 x 3	10 x 2	50 x 3	46,4
	60 x 3	10 x 2	60 x 3	52,7
	70 x 3	10 x 2	70 x 3	59,1
80 x 3	10 x 2	80 x 3	65,5	



MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
55 x 11	25 x 2	10 x 2	25 x 3	24,0
	25 x 3	10 x 2	25 x 3	27,4
	25 x 4	10 x 3	25 x 4	39,3
	30 x 2	10 x 2	30 x 3	25,9
	30 x 3	10 x 2	30 x 3	29,9
	30 x 4	10 x 3	30 x 4	42,7
	40 x 2	10 x 2	40 x 3	29,8
	40 x 3	10 x 2	40 x 3	35,1
	40 x 4	10 x 3	40 x 4	49,4
	50 x 3	10 x 2	50 x 3	40,2
	50 x 4	10 x 3	50 x 4	56,2
	60 x 3	10 x 2	60 x 3	45,4
	60 x 4	10 x 3	60 x 4	63,0
	70 x 3	10 x 2	70 x 3	50,5
	70 x 4	15 x 3	70 x 4	80,7
	80 x 3	10 x 2	80 x 3	55,7
	80 x 4	15 x 3	80 x 4	87,5
	90 x 4	15 x 3	90 x 4	94,3
	100 x 4	15 x 3	100 x 4	101,1
120 x 4	15 x 3	120 x 4	114,6	
150 x 4	15 x 3	150 x 4	134,9	

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
66 x 11	25 x 2	10 x 2	25 x 3	22,8
	25 x 3	10 x 2	25 x 3	25,5
	25 x 4	10 x 3	25 x 4	36,8
	30 x 2	10 x 2	30 x 3	24,4
	30 x 3	10 x 2	30 x 3	27,7
	30 x 4	10 x 3	30 x 4	39,8
	40 x 2	10 x 2	40 x 3	27,8
	40 x 3	10 x 2	40 x 3	32,1
	40 x 4	10 x 3	40 x 4	45,6
	50 x 3	10 x 2	50 x 3	36,5
	50 x 4	10 x 3	50 x 4	51,4
	60 x 3	10 x 2	60 x 3	41,0
	60 x 4	10 x 3	60 x 4	57,2
	70 x 3	10 x 2	70 x 3	45,4
	70 x 4	15 x 3	70 x 4	74,0
	80 x 3	10 x 2	80 x 3	49,8
	80 x 4	15 x 3	80 x 4	79,8
	90 x 4	15 x 3	90 x 4	85,6
	100 x 4	15 x 3	100 x 4	91,4
120 x 4	15 x 3	120 x 4	103,0	
150 x 4	15 x 3	150 x 4	120,4	

**TYPE-PL**  
PRESSURE-LOCKED  
PRESSED



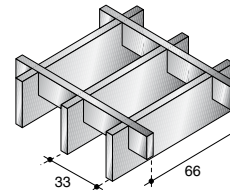
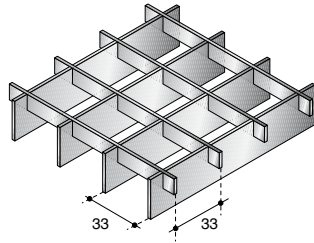
**SAFETY GRATING** to prevent the passage of a 20mm sphere (BS 4592-0 : 2006)

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
22 x 22	25 x 2	10 x 2	25 x 3	28,0
	25 x 3	10 x 2	25 x 3	36,6
	25 x 4	10 x 3	25 x 4	49,7
	30 x 2	10 x 2	30 x 3	32,1
	30 x 3	10 x 2	30 x 3	42,5
	30 x 4	10 x 3	30 x 4	57,5
	40 x 2	10 x 2	40 x 3	40,4
	40 x 3	10 x 2	40 x 3	54,2
	40 x 4	10 x 3	40 x 4	72,9
	50 x 3	10 x 2	50 x 3	66,0
	50 x 4	10 x 3	50 x 4	88,4
	60 x 3	10 x 2	60 x 3	77,7
	60 x 4	10 x 3	60 x 4	103,9
	70 x 3	15 x 2	70 x 3	92,9
	70 x 4	15 x 3	70 x 4	124,7
	80 x 3	15 x 2	80 x 3	104,7
	80 x 4	15 x 3	80 x 4	140,2
	90 x 4	15 x 3	90 x 4	155,7
100 x 4	15 x 3	100 x 4	171,1	
150 x 4	15 x 3	150 x 4	248,5	

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
22 x 66	25 x 2	10 x 2	25 x 3	23,1
	25 x 3	10 x 2	25 x 3	31,8
	25 x 4	10 x 3	25 x 4	42,3
	25 x 5	10 x 4	25 x 5	52,7
	30 x 2	10 x 2	30 x 3	27,3
	30 x 3	10 x 2	30 x 3	37,6
	30 x 4	10 x 3	30 x 4	50,1
	30 x 5	10 x 4	30 x 5	62,8
	40 x 2	10 x 2	40 x 3	35,6
	40 x 3	10 x 2	40 x 3	49,4
	40 x 4	10 x 3	40 x 4	65,5
	40 x 5	10 x 4	40 x 5	81,5
	50 x 3	10 x 2	50 x 3	61,1
	50 x 4	10 x 3	50 x 4	81,0
	50 x 5	10 x 4	50 x 5	100,7
	60 x 3	10 x 2	60 x 3	72,9
	60 x 4	10 x 3	60 x 4	96,5
	60 x 5	10 x 4	60 x 5	119,8
	70 x 3	15 x 2	70 x 3	85,7
	70 x 4	15 x 3	70 x 4	113,6
	70 x 5	20 x 4	70 x 5	143,5
	80 x 3	15 x 2	80 x 3	97,5
	80 x 4	15 x 3	80 x 4	129,1
	80 x 5	20 x 4	80 x 5	162,7
	90 x 4	15 x 3	90 x 4	144,6
	90 x 5	20 x 4	90 x 5	161,9
	100 x 4	15 x 3	100 x 4	160,0
	100 x 5	20 x 4	100 x 5	201,0
	150 x 4	15 x 3	150 x 4	237,4
	150 x 5	20 x 4	150 x 5	296,9



**TYPE-PL**  
PRESSURE-LOCKED  
PRESSED



**GENERAL PURPOSE**

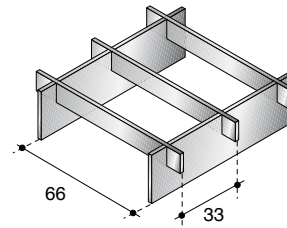
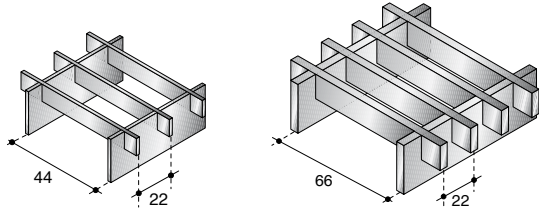
MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 33	25 x 2	10 x 2	25 x 3	19,3
	25 x 3	10 x 2	25 x 3	25,5
	25 x 4	10 x 3	25 x 4	33,9
	25 x 5	10 x 4	25 x 5	42,6
	30 x 2	10 x 2	30 x 3	22,2
	30 x 3	10 x 2	30 x 3	29,0
	30 x 4	10 x 3	30 x 4	39,2
	30 x 5	10 x 4	30 x 5	49,2
	40 x 2	10 x 2	40 x 3	28,0
	40 x 3	10 x 2	40 x 3	37,1
	40 x 4	10 x 3	40 x 4	49,9
	40 x 5	10 x 4	40 x 5	62,4
	50 x 3	10 x 2	50 x 3	45,2
	50 x 4	10 x 3	50 x 4	60,5
	50 x 5	10 x 4	50 x 5	75,6
	60 x 3	10 x 2	60 x 3	53,2
	60 x 4	10 x 3	60 x 4	71,1
	60 x 5	10 x 4	60 x 5	88,7
	70 x 3	15 x 2	70 x 3	63,6
	70 x 4	15 x 3	70 x 4	85,3
	70 x 5	20 x 4	70 x 5	111,3
	80 x 3	15 x 2	80 x 3	71,7
	80 x 4	15 x 3	80 x 4	95,9
	80 x 5	20 x 4	80 x 5	124,5
	90 x 4	15 x 3	90 x 4	106,6
	90 x 5	20 x 4	90 x 5	137,6
	100 x 4	15 x 3	100 x 4	117,2
	100 x 5	20 x 4	100 x 5	150,8
	120 x 4	15 x 3	120 x 4	138,5
	120 x 5	20 x 4	120 x 5	177,2
150 x 4	15 x 3	150 x 4	170,4	
150 x 5	20 x 4	150 x 5	216,8	

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 66	25 x 2	10 x 2	25 x 3	16,9
	25 x 3	10 x 2	25 x 3	22,5
	25 x 4	10 x 3	25 x 4	30,2
	25 x 5	10 x 4	25 x 5	37,7
	30 x 2	10 x 2	30 x 3	19,8
	30 x 3	10 x 2	30 x 3	26,6
	30 x 4	10 x 3	30 x 4	35,5
	30 x 5	10 x 4	30 x 5	44,3
	40 x 2	10 x 2	40 x 3	25,6
	40 x 3	10 x 2	40 x 3	34,7
	40 x 4	10 x 3	40 x 4	46,1
	40 x 5	10 x 4	40 x 5	57,5
	50 x 3	10 x 2	50 x 3	42,7
	50 x 4	10 x 3	50 x 4	56,8
	50 x 5	10 x 4	50 x 5	70,7
	60 x 3	10 x 2	60 x 3	50,8
	60 x 4	10 x 3	60 x 4	67,4
	60 x 5	10 x 4	60 x 5	83,9
	70 x 3	15 x 2	70 x 3	60,0
	70 x 4	15 x 3	70 x 4	79,8
	70 x 5	20 x 4	70 x 5	101,5
	80 x 3	15 x 2	80 x 3	68,1
	80 x 4	15 x 3	80 x 4	90,4
	80 x 5	20 x 4	80 x 5	114,7
	90 x 4	15 x 3	90 x 4	101,0
	90 x 5	20 x 4	90 x 5	127,9
	100 x 4	15 x 3	100 x 4	111,7
	100 x 5	20 x 4	100 x 5	141,1
	120 x 4	15 x 3	120 x 4	132,9
	120 x 5	20 x 4	120 x 5	167,5
150 x 4	15 x 3	150 x 4	164,9	
150 x 5	20 x 4	150 x 5	207,0	





# TYPE-PL PRESSURE-LOCKED PRESSED



## GENERAL PURPOSE

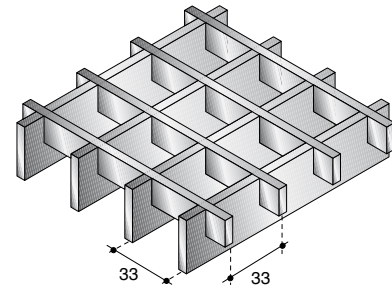
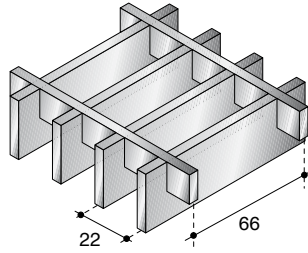
MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
44 x 22	25 x 2	10 x 2	25 x 3	18,7
	25 x 3	10 x 2	25 x 3	23,1
	30 x 2	10 x 2	30 x 3	21,1
	30 x 3	10 x 2	30 x 3	256,2
	40 x 2	10 x 2	40 x 3	25,7
	40 x 3	10 x 2	40 x 3	32,6
	50 x 3	10 x 2	50 x 3	39,0
	60 x 3	10 x 2	60 x 3	45,3
	70 x 3	15 x 2	70 x 3	55,2
	80 x 3	15 x 2	80 x 3	61,6

MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
66 x 33	25 x 2	10 x 2	25 x 3	13,0
	25 x 3	10 x 2	25 x 3	15,7
	25 x 4	10 x 3	25 x 4	21,8
	30 x 2	10 x 2	30 x 3	14,6
	30 x 3	10 x 2	30 x 3	17,9
	30 x 4	10 x 3	30 x 4	24,7
	40 x 2	10 x 2	40 x 3	18,0
	40 x 3	10 x 2	40 x 3	22,3
	40 x 4	10 x 3	40 x 4	30,5
	50 x 3	10 x 2	50 x 3	26,8
	50 x 4	10 x 3	50 x 4	36,3
	60 x 3	10 x 2	60 x 3	31,2
	60 x 4	10 x 3	60 x 4	42,1
	70 x 3	15 x 2	70 x 3	37,9
	70 x 4	15 x 3	70 x 4	51,4
	80 x 3	15 x 2	80 x 3	42,3
	80 x 4	15 x 3	80 x 4	57,2
	90 x 4	15 x 3	90 x 4	63,0
	100 x 4	15 x 3	100 x 4	68,9
	120 x 4	15 x 3	120 x 4	80,5
150 x 4	15 x 3	150 x 4	97,9	

MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
66 x 22	25 x 2	10 x 2	25 x 3	15,4
	25 x 3	10 x 2	25 x 3	18,1
	25 x 4	10 x 3	25 x 4	25,5
	30 x 2	10 x 2	30 x 3	17,1
	30 x 3	10 x 2	30 x 3	20,3
	30 x 4	10 x 3	30 x 4	28,4
	40 x 2	10 x 2	40 x 3	20,4
	40 x 3	10 x 2	40 x 3	24,8
	40 x 4	10 x 3	40 x 4	34,2
	50 x 3	10 x 2	50 x 3	29,2
	50 x 4	10 x 3	50 x 4	40,0
	60 x 3	10 x 2	60 x 3	33,6
	60 x 4	10 x 3	60 x 4	45,8
	70 x 3	15 x 2	70 x 3	41,5
	70 x 4	15 x 3	70 x 4	57,0
	80 x 3	15 x 2	80 x 3	45,9
	80 x 4	15 x 3	80 x 4	62,8
	90 x 4	15 x 3	90 x 4	68,6
	100 x 4	15 x 3	100 x 4	74,4
	120 x 4	15 x 3	120 x 4	86,0
150 x 4	15 x 3	150 x 4	103,4	



# TYPE-PLX PRESSURE-LOCKED CROSS-PRESSED



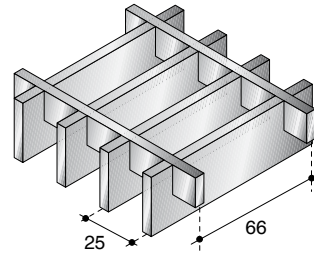
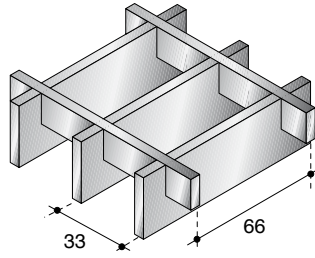
## HEAVY DUTY - VEHICLE

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
mm	mm	mm	mm	kg/m <sup>2</sup>
22 x 66	30 x 4	15 x 4	30 x 4	53,4
	30 x 5	15 x 5	30 x 5	62,2
	30 x 6	15 x 6	30 x 6	79,0
	40 x 4	15 x 4	40 x 4	68,9
	40 x 5	15 x 5	40 x 5	85,4
	40 x 6	15 x 6	40 x 6	101,9
	50 x 4	15 x 4	50 x 4	84,4
	50 x 5	15 x 5	50 x 5	104,6
	50 x 6	15 x 6	50 x 6	124,7
	60 x 4	15 x 4	60 x 4	99,8
	60 x 5	15 x 5	60 x 5	123,8
	60 x 6	15 x 6	60 x 6	147,6
	70 x 4	15 x 4	70 x 4	115,3
	70 x 5	15 x 5	70 x 5	142,9
	70 x 6	15 x 6	70 x 6	170,5
	80 x 4	15 x 4	80 x 4	130,5
	80 x 5	15 x 5	80 x 5	162,1
	80 x 6	15 x 6	80 x 6	193,3
	90 x 4	30 x 4	90 x 4	153,0
	90 x 5	30 x 5	90 x 5	189,7
	90 x 6	30 x 6	90 x 6	226,2
	100 x 4	30 x 4	100 x 4	168,5
	100 x 5	30 x 5	100 x 5	208,8
	100 x 6	30 x 6	100 x 6	249,1
	120 x 4	30 x 4	120 x 4	199,4
	120 x 5	30 x 5	120 x 5	247,2
	120 x 6	30 x 6	120 x 6	294,8
	150 x 5	30 x 5	150 x 5	304,7
150 x 6	30 x 6	150 x 6	363,4	

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
mm	mm	mm	mm	kg/m <sup>2</sup>
33 x 33	30 x 4	15 x 4	30 x 4	46,2
	30 x 5	15 x 5	30 x 5	57,3
	30 x 6	15 x 6	30 x 6	68,3
	40 x 4	15 x 4	40 x 4	56,8
	40 x 5	15 x 5	40 x 5	70,5
	40 x 6	15 x 6	40 x 6	84,1
	50 x 4	15 x 4	50 x 4	67,5
	50 x 5	15 x 5	50 x 5	83,6
	50 x 6	15 x 6	50 x 6	99,8
	60 x 4	15 x 4	60 x 4	78,1
	60 x 5	15 x 5	60 x 5	96,8
	60 x 6	15 x 6	60 x 6	115,5
	70 x 4	15 x 4	70 x 4	88,7
	70 x 5	15 x 5	70 x 5	110,0
	70 x 6	15 x 6	70 x 6	131,2
	80 x 4	15 x 4	80 x 4	99,4
	80 x 5	15 x 5	80 x 5	123,2
	80 x 6	15 x 6	80 x 6	147,0
	90 x 4	30 x 4	90 x 4	124,0
	90 x 5	30 x 5	90 x 5	153,8
	90 x 6	30 x 6	90 x 6	183,5
	100 x 4	30 x 4	100 x 4	134,6
	100 x 5	30 x 5	100 x 5	167,0
	100 x 6	30 x 6	100 x 6	199,2
	120 x 4	30 x 4	120 x 4	155,9
	120 x 5	30 x 5	120 x 5	193,3
	120 x 6	30 x 6	120 x 6	230,7
	150 x 5	30 x 5	150 x 5	232,9
	150 x 6	30 x 6	150 x 6	277,8



**TYPE-PLX**  
PRESSURE-LOCKED  
CROSS-PRESSED



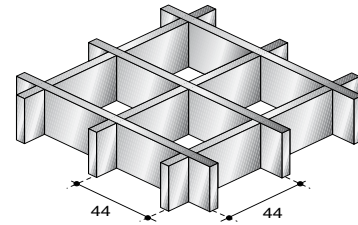
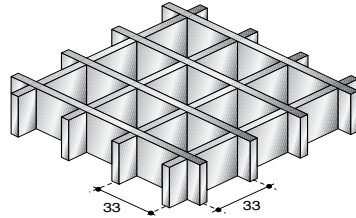
**HEAVY DUTY - VEHICLE**

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
mm	mm	mm	mm	kg/m <sup>2</sup>
33 x 66	30 x 4	15 x 4	30 x 4	38,9
	30 x 5	15 x 5	30 x 5	48,2
	30 x 6	15 x 6	30 x 6	57,5
	40 x 4	15 x 4	40 x 4	49,5
	40 x 5	15 x 5	40 x 5	61,4
	40 x 6	15 x 6	40 x 6	73,2
	50 x 4	15 x 4	50 x 4	60,1
	50 x 5	15 x 5	50 x 5	74,6
	50 x 6	15 x 6	50 x 6	69,0
	60 x 4	15 x 4	60 x 4	70,8
	60 x 5	15 x 5	60 x 5	87,8
	60 x 6	15 x 6	60 x 6	104,7
	70 x 4	15 x 4	70 x 4	81,4
	70 x 5	15 x 5	70 x 5	100,9
	70 x 6	15 x 6	70 x 6	120,4
	80 x 4	15 x 4	80 x 4	92,1
	80 x 5	15 x 5	80 x 5	114,1
	80 x 6	15 x 6	80 x 6	136,1
	90 x 4	30 x 4	90 x 4	109,5
	90 x 5	30 x 5	90 x 5	135,7
	90 x 6	30 x 6	90 x 6	161,9
	100 x 4	30 x 4	100 x 4	120,1
	100 x 5	30 x 5	100 x 5	148,9
	100 x 6	30 x 6	100 x 6	177,6
	120 x 4	30 x 4	120 x 4	141,4
	120 x 5	30 x 5	120 x 5	175,3
	120 x 6	30 x 6	120 x 6	209,1
	150 x 5	30 x 5	150 x 5	214,8
150 x 6	30 x 6	150 x 6	256,2	

MESH	SECTION			WEIGHT
	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
mm	mm	mm	mm	kg/m <sup>2</sup>
25 x 66	30 x 4	15 x 4	30 x 4	48,6
	30 x 5	15 x 5	30 x 5	60,2
	30 x 6	15 x 6	30 x 6	71,8
	40 x 4	15 x 4	40 x 4	62,4
	40 x 5	15 x 5	40 x 5	77,4
	40 x 6	15 x 6	40 x 6	92,3
	50 x 4	15 x 4	50 x 4	76,3
	50 x 5	15 x 5	50 x 5	94,6
	50 x 6	15 x 6	50 x 6	112,8
	60 x 4	15 x 4	60 x 4	90,1
	60 x 5	15 x 5	60 x 5	118,8
	60 x 6	15 x 6	60 x 6	133,3
	70 x 4	15 x 4	70 x 4	104,0
	70 x 5	15 x 5	70 x 5	128,9
	70 x 6	15 x 6	70 x 6	153,8
	80 x 4	15 x 4	80 x 4	177,9
	80 x 5	15 x 5	80 x 5	146,1
	80 x 6	15 x 6	80 x 6	174,3
	90 x 4	30 x 4	90 x 4	138,5
	90 x 5	30 x 5	90 x 5	171,7
	90 x 6	30 x 6	90 x 6	204,8
	100 x 4	30 x 4	100 x 4	152,3
	100 x 5	30 x 5	100 x 5	188,9
	100 x 6	30 x 6	100 x 6	225,3
	120 x 4	30 x 4	120 x 4	180,0
	120 x 5	30 x 5	120 x 5	223,2
	120 x 6	30 x 6	120 x 6	266,2
	150 x 5	30 x 5	150 x 5	274,7
150 x 6	30 x 6	150 x 6	327,7	



**TYPE-PLXE**  
**PRESSURE-LOCKED**  
**CROSS-PRESSED**  
**EQUAL FLATS**



MESH	SECTION		WEIGHT
	BEARING BARS	EDGING BAR	GALVANIZED
mm	mm	mm	kg/m <sup>2</sup>
33 x 33	25 x 2	25 x 3	26,0
	25 x 3	25 x 3	38,1
	30 x 2	30 x 3	31,1
	30 x 3	30 x 3	45,7
	30 x 4	30 x 4	60,2
	40 x 2	40 x 3	41,5
	40 x 3	40 x 3	60,8
	40 x 4	40 x 4	80,2
	40 x 5	40 x 5	99,5
	50 x 3	50 x 3	76,0
	50 x 4	50 x 4	100,1
	50 x 5	50 x 5	124,2
	60 x 3	60 x 3	91,1
	60 x 4	60 x 4	120,1
	60 x 5	60 x 5	149,0
	70 x 3	70 x 3	106,3
70 x 4	70 x 4	104,1	
70 x 5	70 x 5	173,8	

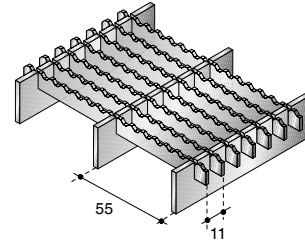
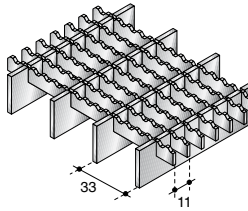
MESH	SECTION		WEIGHT
	BEARING BARS	EDGING BAR	GALVANIZED
mm	mm	mm	kg/m <sup>2</sup>
44 x 44	25 x 2	25 x 3	20,1
	25 x 3	25 x 3	29,5
	30 x 2	30 x 3	24,1
	30 x 3	30 x 3	35,4
	30 x 4	30 x 4	46,6
	40 x 2	40 x 3	32,1
	40 x 3	40 x 3	47,1
	40 x 4	40 x 4	62,1
	40 x 5	40 x 5	77,0
	50 x 3	50 x 3	58,8
	50 x 4	50 x 4	77,5
	50 x 5	50 x 5	96,2
	60 x 3	60 x 3	76,6
	60 x 4	60 x 4	93,0
	60 x 5	60 x 5	115,4
	70 x 3	70 x 3	82,3
70 x 4	70 x 4	108,5	
70 x 5	70 x 5	134,6	



# TYPE-PLS

## PRESSURE-LOCKED

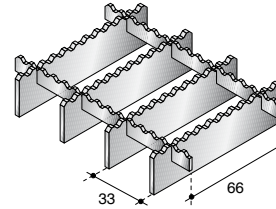
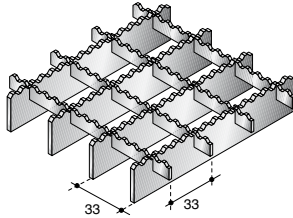
### SERRATED



### ANTI-SLIP

MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 11	25 x 2	10 x 2	25 x 3	28,5
	25 x 3	10 x 2	25 x 3	32,3
	30 x 2	10 x 2	30 x 3	31,2
	30 x 3	10 x 2	30 x 3	35,8
	40 x 2	10 x 2	40 x 3	36,5
	40 x 3	10 x 2	40 x 3	43,2

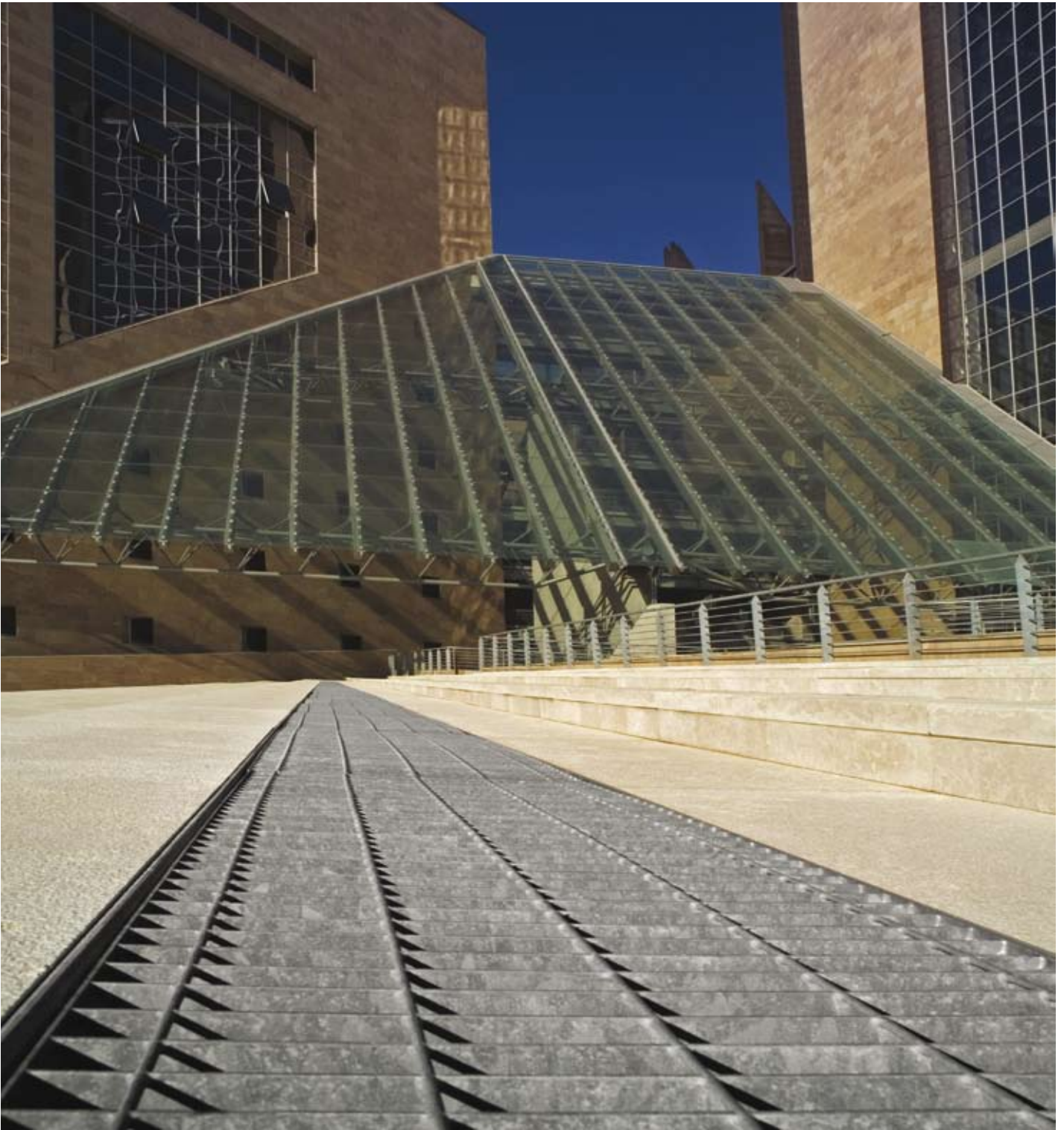
MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
55 x 11	25 x 2	10 x 2	25 x 3	23,3
	25 x 3	10 x 2	25 x 3	25,5
	30 x 2	10 x 2	30 x 3	25,0
	30 x 3	10 x 2	30 x 3	27,6
	40 x 2	10 x 2	40 x 3	28,4
	40 x 3	10 x 2	40 x 3	32,2



MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 33	25 x 2	10 x 2	25 x 3	19,0
	25 x 3	10 x 2	25 x 3	24,1
	30 x 2	10 x 2	30 x 3	21,7
	30 x 3	10 x 2	30 x 3	27,0
	40 x 2	10 x 2	40 x 3	27,0
	40 x 3	10 x 2	40 x 3	34,2

MESH	SECTION			WEIGHT
mm	BEARING BAR	TRANSVERSE BAR	EDGING BAR	GALVANIZED
	mm	mm	mm	kg/m <sup>2</sup>
33 x 66	25 x 2	10 x 2	25 x 3	16,7
	25 x 3	10 x 2	25 x 3	21,8
	30 x 2	10 x 2	30 x 3	19,4
	30 x 3	10 x 2	30 x 3	25,4
	40 x 2	10 x 2	40 x 3	24,8
	40 x 3	10 x 2	40 x 3	32,8





## ELECTROFUSED GRATINGS

**Manufacturing Process:** high voltage electricity combined with pressure totally amalgamates the flat bearing bars with the transverse bars without using any unsightly welding material. The fusion of each intersection produces a material which has complete integrity, thus allowing it to be cut or shaped without compromising its overall strength.

Mats are generally 6100mm long and 1000mm wide

The manufacturing production lines, as well as cutting and framing processes, are all fully automated for quality control and maximum cost-efficiency. All panels are supplied framed and fully finished.

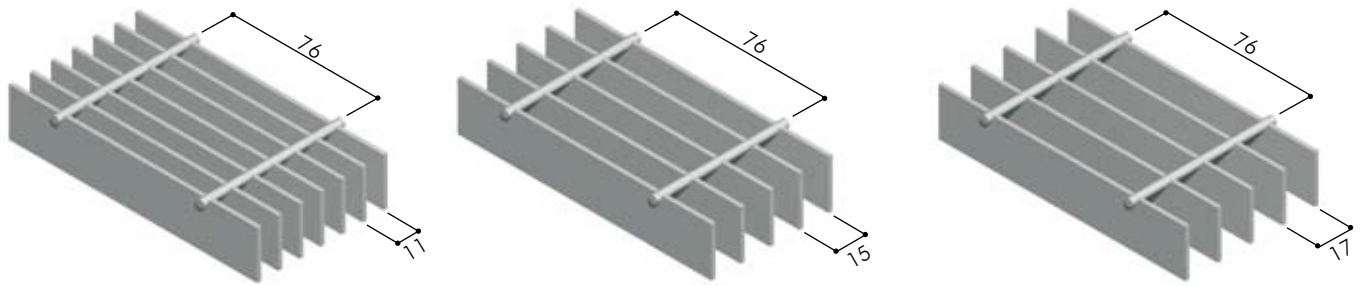
**Applications:** gratings are made with round bars for normal Pedestrian applications, with twisted bars for Industrial locations and with serrated bearing bars for maximum anti-slip properties in Off-Shore and extreme applications.

Stock Grating: 2-3 days delivery

Standard Grating: 2-3 weeks ex works

Special Grating: minimum quantities of 200m<sup>2</sup> or 400m<sup>2</sup> depending on bearing bar section

# TYPE-EF ELECTROFUSED

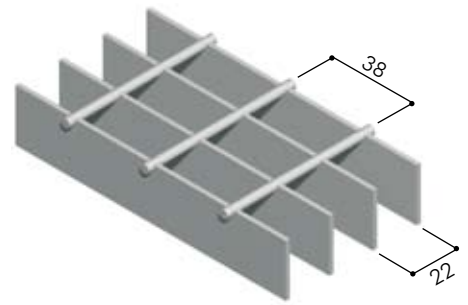
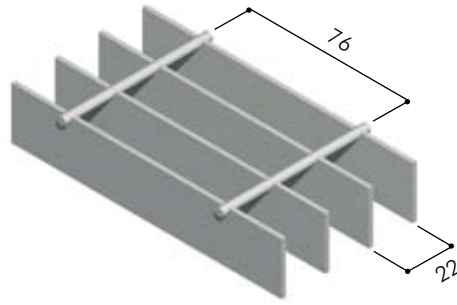


## HEEL-PROOF

MESH	BEARING BAR	TRANSVERSE BAR	MAT SIZE	WEIGHT	
				GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
11 x 76	20 x 2	Ø 3	6100 x 1000	30,4	28,7
	25 x 2	Ø 4		38,3	36,1
15 x 76	20 x 2	Ø 4	6100 x 1000	23,5	22,2
	25 x 2	Ø 4		29,0	27,4
	30 x 2	Ø 4		34,6	32,6
	25 x 3	Ø 5		43,7	41,2
	30 x 3	Ø 5		52,0	49,0
	40 x 3	Ø 5		68,7	64,8
	50 x 3	Ø 5		85,3	80,5
	50 x 4	Ø 5		116,3	109,7
	60 x 4	Ø 5		138,9	131,0
	70 x 4	Ø 5		161,5	152,3
17 x 76	20 x 2	Ø 4	6100 x 1000	20,8	19,7
	25 x 2	Ø 4		25,8	24,3
	30 x 2	Ø 4		30,7	28,9
	25 x 3	Ø 5		38,7	36,5
	30 x 3	Ø 5		46,1	43,5
	40 x 3	Ø 5		60,8	57,3

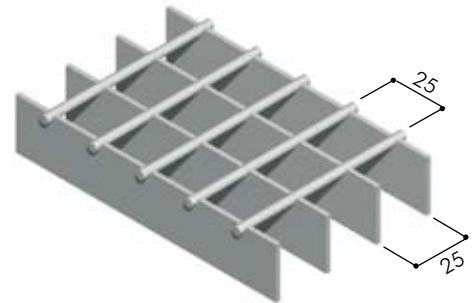
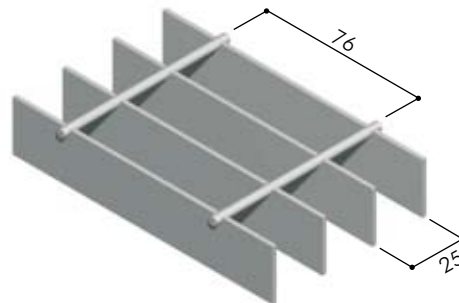


# TYPE-EF ELECTROFUSED



SAFETY GRATING to prevent the passage of a 20mm sphere (BS 4592-0 : 2006)

MESH	BEARING BAR	TRANSVERSE BAR	MAT SIZE	WEIGHT	
				GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
22x76	25 x 3	Ø 5	6100 x 1000	32,2	30,3
	30 x 3	Ø 5		38,2	36,0
	40 x 3	Ø 5		50,3	47,4
	50 x 3	Ø 5		62,3	58,8
	40 x 4	Ø 6		68,3	64,5
	50 x 4	Ø 6		84,6	79,8
	60 x 4	Ø 6		100,8	95,1
	70 x 4	Ø 6		117,1	110,4
22 x 38	25 x 2	Ø 4	6100 x 1000	22,6	21,3
	30 x 2	Ø 4		26,7	25,1
	40 x 2	Ø 4		34,7	32,7
	25 x 3	Ø 5		34,2	32,2
	30 x 3	Ø 5		40,2	37,9
	40 x 3	Ø 5		52,3	49,3

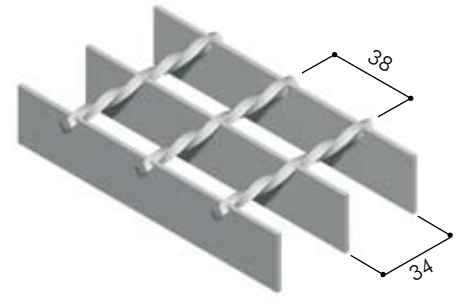
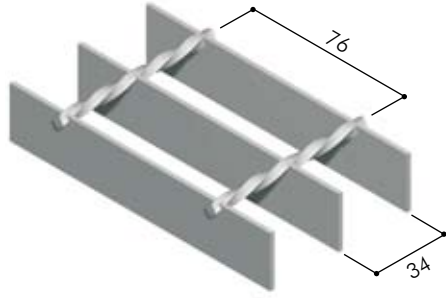
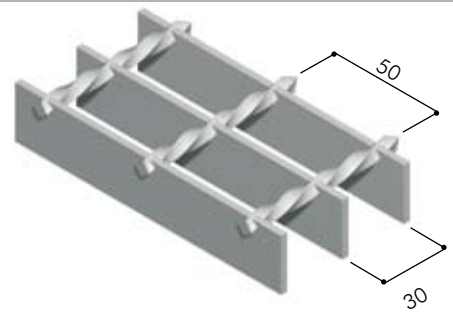
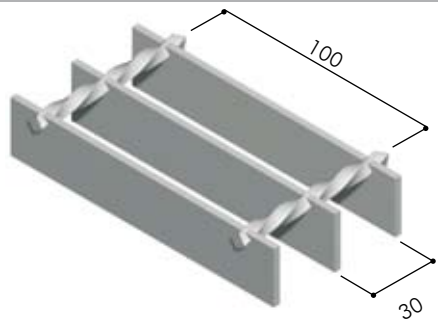


# GENERAL PURPOSE

MESH	BEARING BAR	TRANSVERSE BAR	MAT SIZE	WEIGHT	
				GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
25 x 76	25 x 2	Ø 4	6100 x 1000	18,2	17,2
	30 x 2	Ø 4		21,6	20,4
	25 x 3	Ø 5		27,4	25,9
	30 x 3	Ø 5		32,5	30,7
	40 x 3	Ø 5		42,7	40,2
	40 x 4	Ø 6		57,8	54,5
	50 x 4	Ø 6		71,4	67,3
	60 x 4	Ø 6		85,0	80,1
	70 x 4	Ø 6		98,5	93,0
	80 x 4	Ø 5		110,1	106,3
25 x 25	25 x 2	Ø 4	6100 x 1000	20,9	19,7
	30 x 2	Ø 4		24,3	22,9
	25 x 3	Ø 4		29,4	27,7
	30 x 3	Ø 4		34,4	32,5



**TYPE-EF  
ELECTROFUSED**



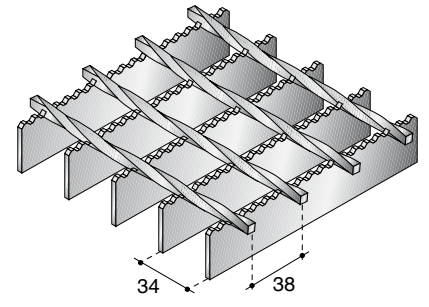
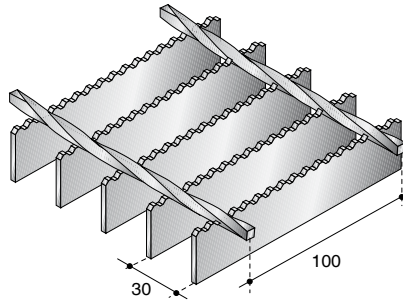
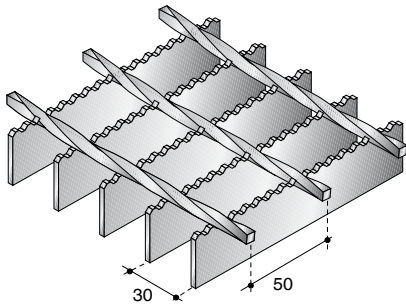
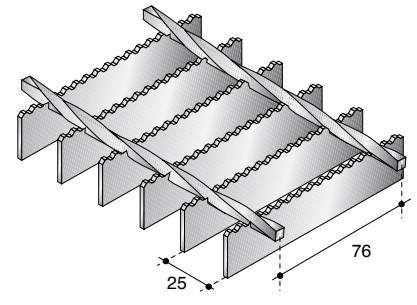
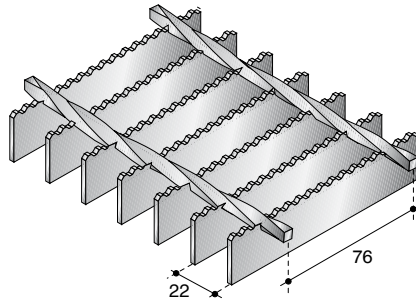
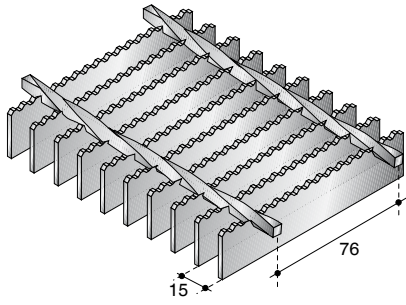
**INDUSTRIAL**

MESH	BEARING BAR	TRANSVERSE BAR	MAT SIZE	WEIGHT	
				GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
30 x 100	25 x 3	∅ 5	6100 x 1000	23,9	22,5
	30 x 3	∅ 5		28,1	26,5
	40 x 3	∅ 5		36,6	34,6
	40 x 4	∅ 5		48,0	45,2
	50 x 4	∅ 5		60,4	57,0
	60 x 4	∅ 5		71,8	67,7
	70x4	∅ 5		84,7	78,00
30 x 50	25 x 3	∅ 5	6100 X 1000	26,5	25,0
	30 x 3	∅ 5		30,7	29,0
	40 x 3	∅ 5		39,2	37,0
	40 x 4	∅ 5		50,5	47,7
	50 x 4	∅ 5		63,9	60,3
	60 x 4	∅ 5		75,3	71,0
	70 x 4	∅ 5		87,7	80,7
34 x 76	25 x 2	∅ 4	6100 x 1000	14,5	13,7
	30 x 2	∅ 4		17,0	16,0
	40 x 2	∅ 4		22,0	20,7
	25 x 3	∅ 5		22,2	20,9
	30 x 3	∅ 5		25,9	24,4
	40 x 3	∅ 5		33,4	31,5
	50 x 3	∅ 5		40,9	38,6
	40 x 4	∅ 6		44,5	42,0
	50 x 4	∅ 6		54,5	51,4
	60 x 4	∅ 6		64,5	60,9
	70 x 4	∅ 6		74,5	70,3
34 x 38	25 x 2	∅ 4	6100 x 1000	16,5	15,6
	30 x 2	∅ 4		19,0	17,9
	40 x 2	∅ 4		24,0	22,6
	25 x 3	∅ 5		25,6	24,1
	30 x 3	∅ 5		29,3	27,7
	40 x 3	∅ 5		36,8	34,8
	50 x 3	∅ 5		44,3	41,8
	40 x 4	∅ 6		49,2	46,4
	50 x 4	∅ 6		59,1	55,8
	60 x 4	∅ 6		69,1	65,2

# TYPE-EFS

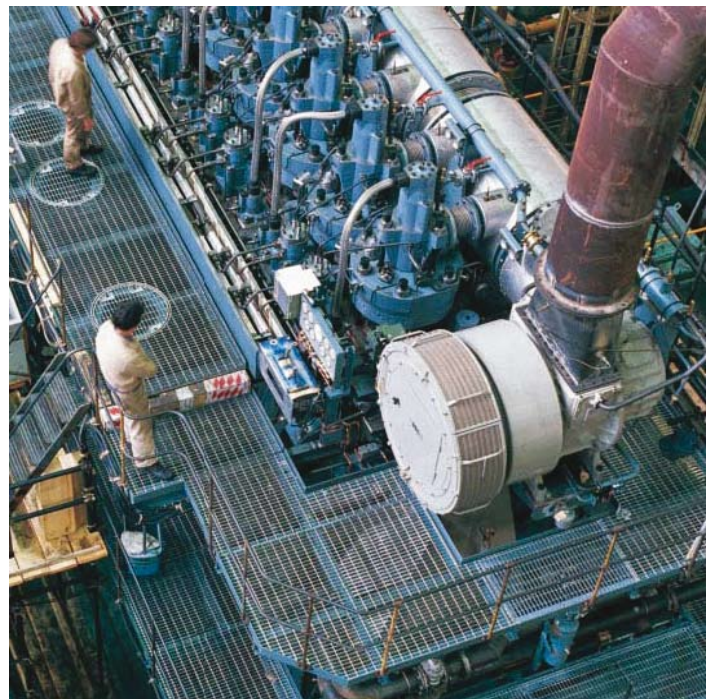
## ELECTROFUSED

### SERRATED



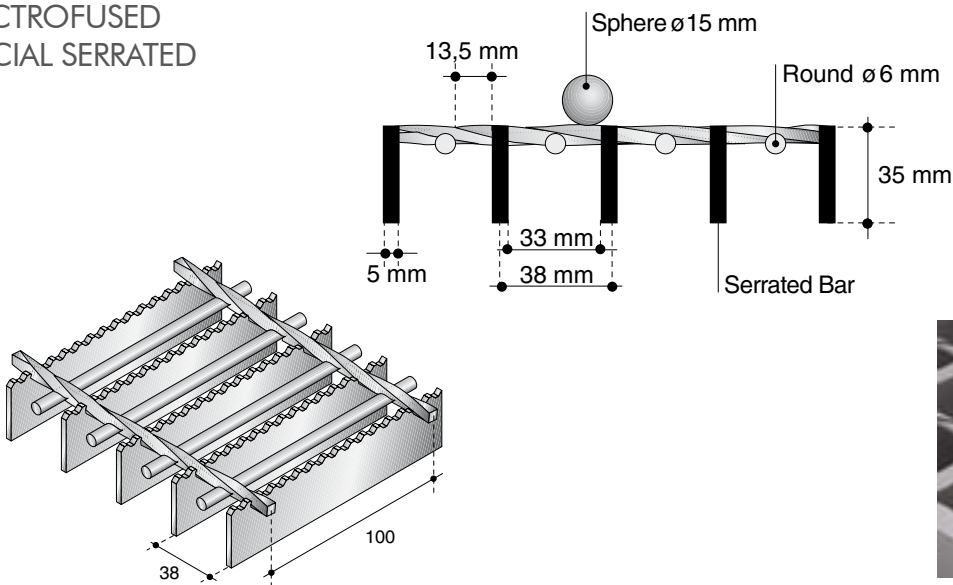
### ANTI-SLIP

MESH	BEARING BAR	TRANSVERSE BAR	MAT SIZE	WEIGHT	
				GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
15 x 76	30 x 3	◇ 5	6100 x 1000	50,8	48,3
22 x 76	30 x 3	◇ 5	6100 x 1000	36,2	34,4
25 x 76	40 x 3	◇ 5	6100 x 1000	41,4	39,4
30 x 50	30 x 3	◇ 4,5	6100 x 1000	35,9	26,0
	30 x 4	◇ 6		37,4	27,4
30 x 100	25 x 5	◇ 6	6100 x 1000	35,2	34,0
	30 x 3	◇ 5		26,0	24,7
	30 x 5	◇ 6		42,1	40,7
34 x 38	30 x 3	◇ 4,5	6100 x 1000	25,5	24,2





**TYPE-EFSS**  
ELECTROFUSED  
SPECIAL SERRATED



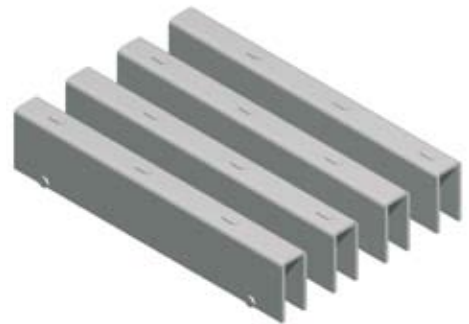
OFF-SHORE - bearing bars are alternated with round bars for a lighter panel which retains the performance of fine mesh

MESH	BEARING BAR	TRANSVERSE BAR	INTERMEDIATE BAR	SIZE	WEIGHT	
					GALVANIZED	SELF-COLOURED
mm	mm	mm	mm	mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
38 x 100	35 x 5	◇ 6	Ø 6	6100 x 1000	47,5	45,3



## URBAN PEDESTRIAN GRATING - BARROT ANTIQUUM

A totally new concept in the design of steel grating for pedestrian areas which will also accept a standard car loading up to a maximum span of 367mm. The exceptional characteristic of the Barrot grating is achieved by incorporating bearing bars which are shaped to a reversed U-profile providing a broad surface area which is both safe and comfortable for walking on. This can be particularly relevant for applications such as domestic balconies where traditional gratings are painful to bare feet. The innovative design also includes a unique dimpled surface which provides particularly good anti-slip properties in the transverse direction.



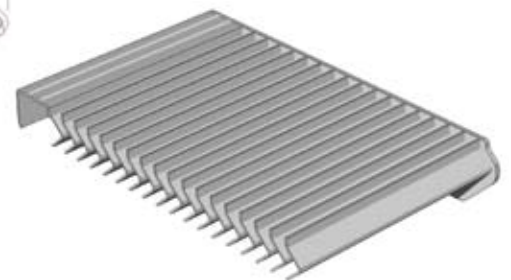
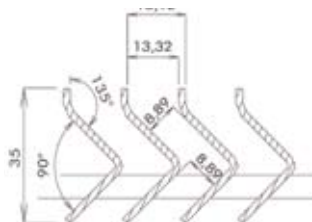
HEEL-PROOF: (DM 236 1989)  
 ANTI-SLIP: in compliance with  
 DIN 51130 Class R9

BEARING BAR	SECTION	TRANSVERSE BAR	FREE AREA	SIZE	WEIGHT	
					GALVANIZED	SELF-COLOURED
mm	mm	mm		mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
U25x12x25	1.5	Ø 4	50%	6100 span x 1010	30	29.1



## ANTI-VERTIGO GRATING - 100% VISUAL SCREENING

The Anti-Vertigo system has been designed for suspended stairs and flooring where height might cause problems from dizziness. The principal feature of the grating is that the bearing bar is shaped so that transparency is obstructed from any viewing angle while retaining an open area between the bars for ventilation, drainage and the prevention of ice formation. The product is available either as a stair tread or as a flooring plank with framing bars which are shaped to slide together without any lateral fixing. A landing or platform is composed of several intermediate panels and an end panel with a nosing extension.



HEEL-PROOF: (DM 236 1989)  
ANTI-SLIP: in compliance with  
DIN 51130 Class R10

PANEL TYPE	WIDTH (mm)	LENGTH (mm)	WEIGHT (kg/m <sup>2</sup> )
Standard Intermediate	1000-2000	286	47,2
End Panel or Tread (with nosing)	1200	315	46,4

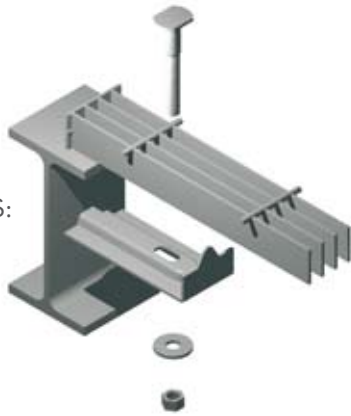
Any width greater than 1500mm will require additional support

# FIXING CLIPS FOR FLOOR GRATINGS

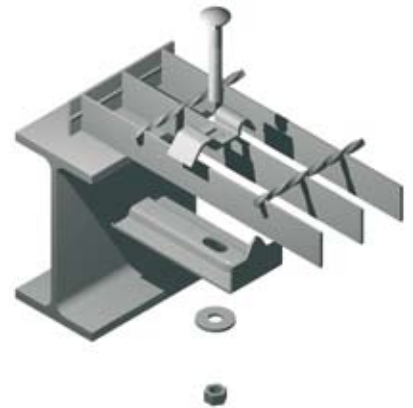
Supplied in a galvanized finish BS EN ISO 1461

## HOLDING DOWN CLIPS

BEARING BAR CENTRES:  
11, 15, 17  
for bottom fixing

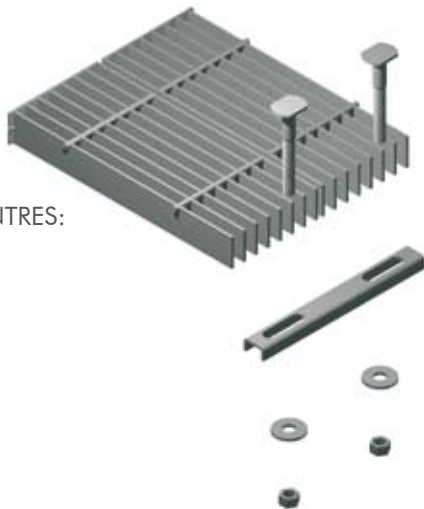


BEARING BAR CENTRES:  
22, 25, 30, 34mm  
available for top or bottom fixing



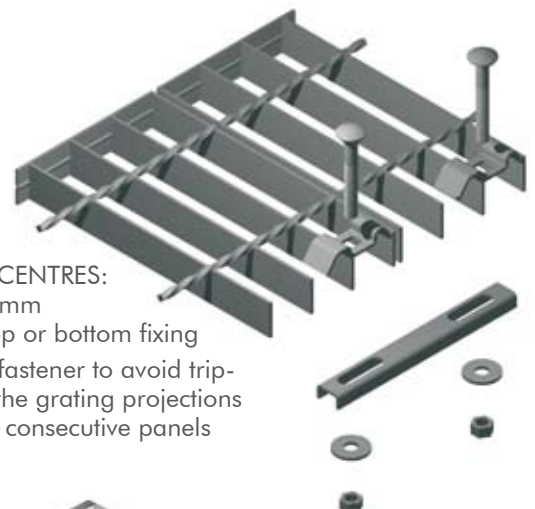
## CONNECTING CLIPS

BEARING BAR CENTRES:  
11, 15, 17  
for bottom fixing



BEARING BAR CENTRES:  
22, 25, 30, 34mm  
available for top or bottom fixing

Double clamp fastener to avoid trip-up edges with the grating projections of two or more consecutive panels



## ALTERNATIVE HOLDING DOWN METHOD

HILTI (Type: X-FCM-M grating disk)  
shot fired into flange of supporting steelwork



## VERTICAL GRATINGS & STEEL LOUVRED PRODUCTS



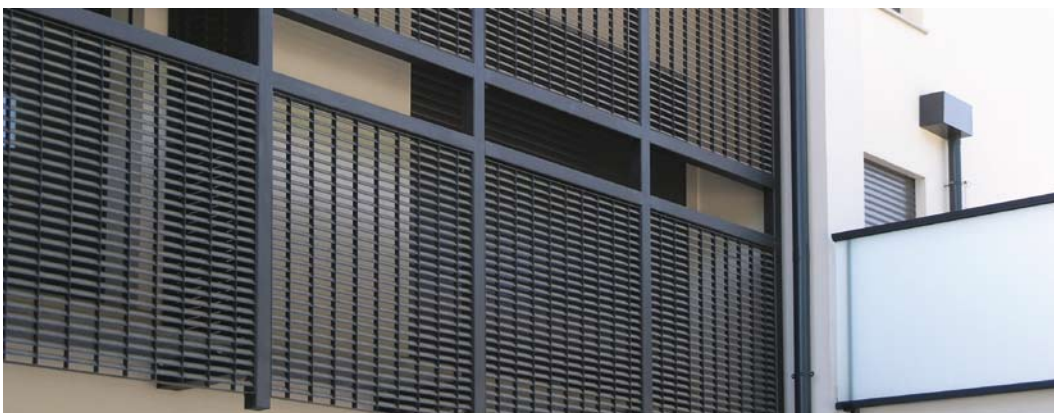
Micro-15 & Stereo-4  
Roof-top Plant Housing  
Hilton Hotel, Tower Hill



Torino-33  
Perimeter Fencing made from  
pressure locked grating



Italia-100  
Louvred Screening  
North Kent Police HQ



DeltaBox-70  
Louvre Balustrade & Sun Screen  
Private Housing Development

Lang+Fulton offer a comprehensive range of open mesh and louvred gratings which are suitable for all types of vertical application including wall cladding, balcony balustrades, plant housing, screens, wheelie-bin stores and fencing.

Custom sized panels are supplied with ancillary steelwork, providing a practical and economical solution for all building projects that require security, visual screening and through-ventilation.





# LANG & FULTON

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