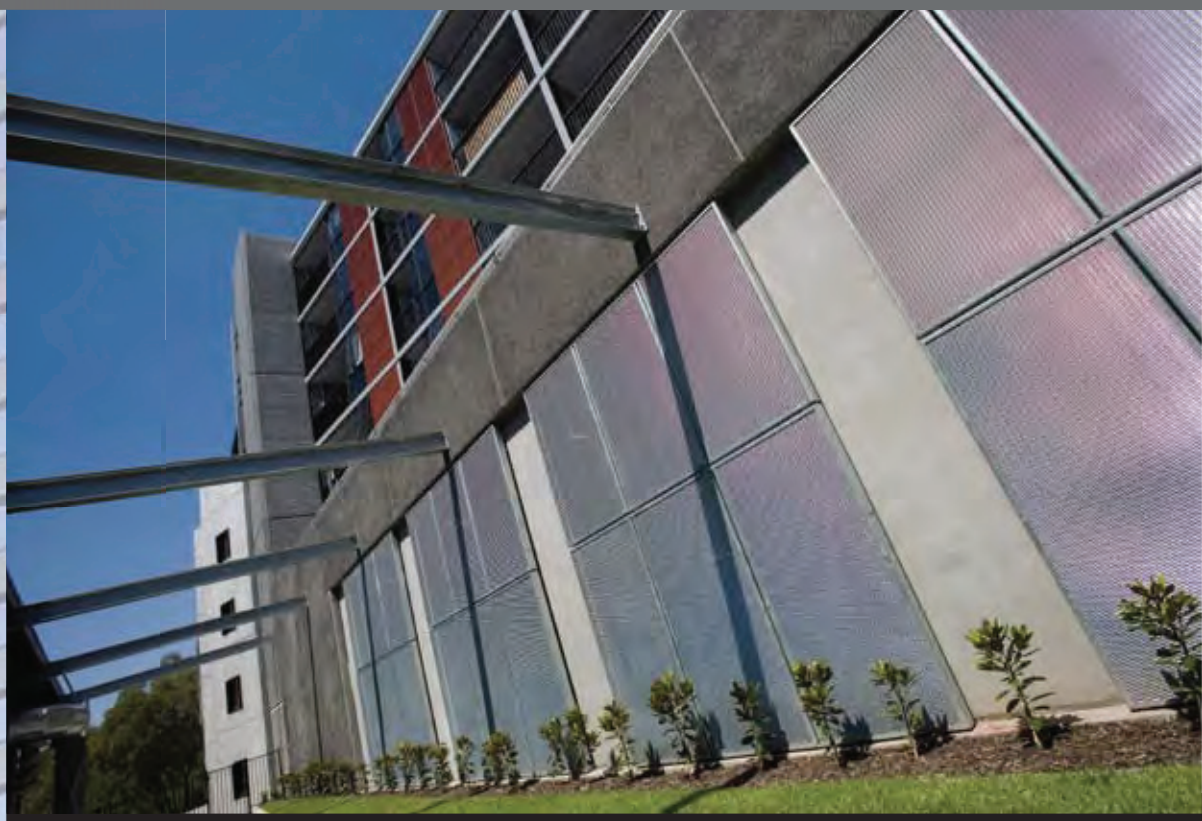
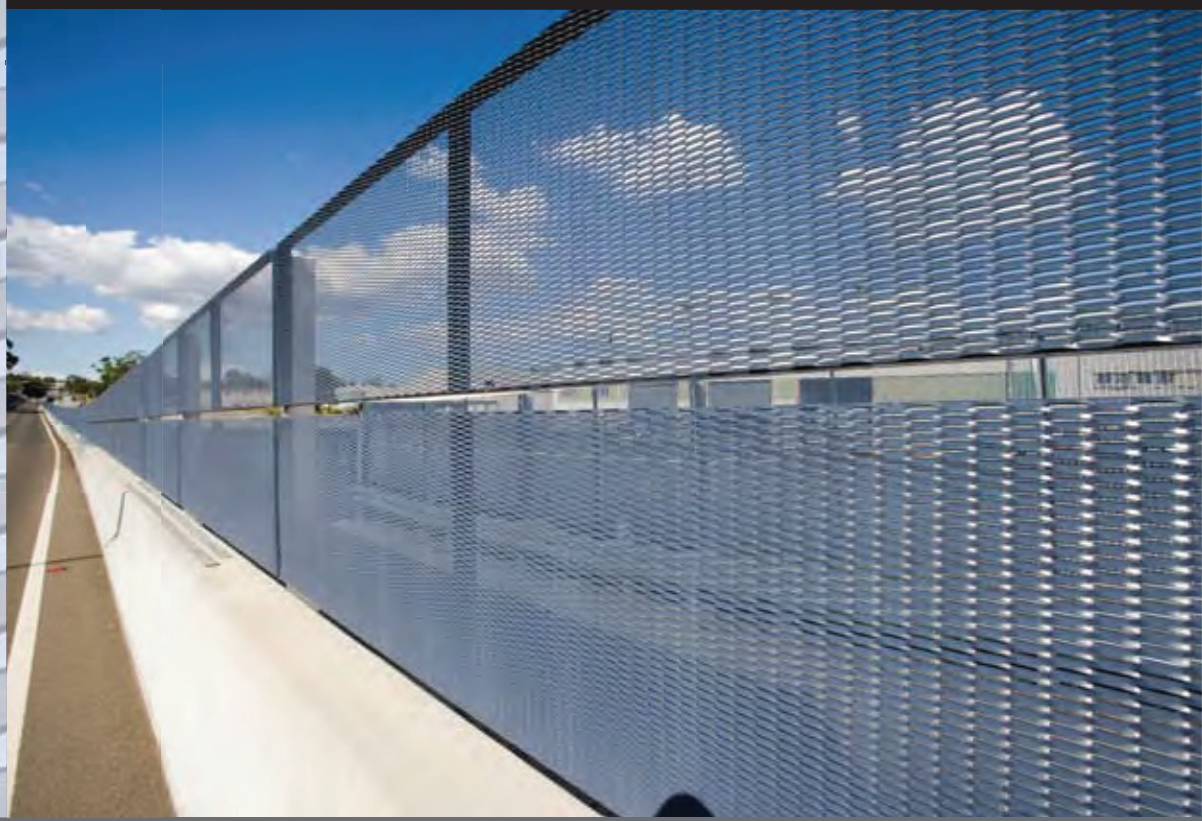
Perforated & Expanded Metal Company

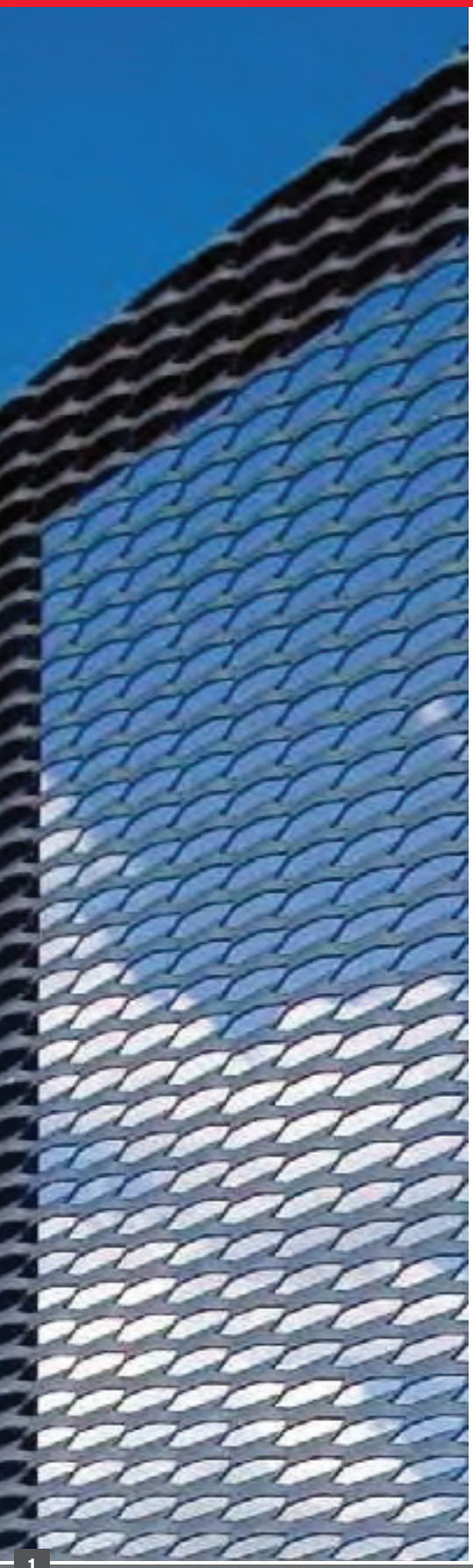
Expanded Metal Meshes



Technical Design Manual



Expanded, Perforated & Wire Products



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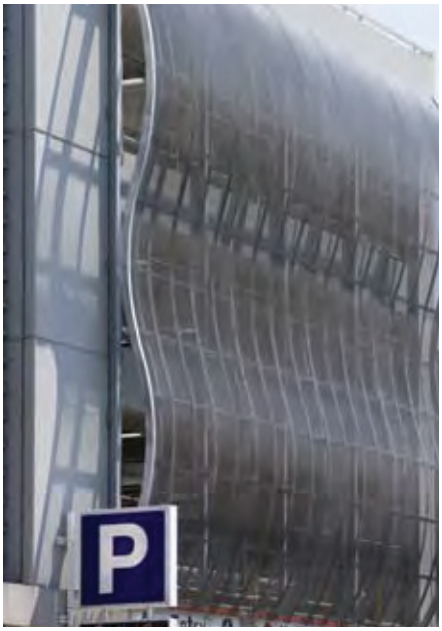
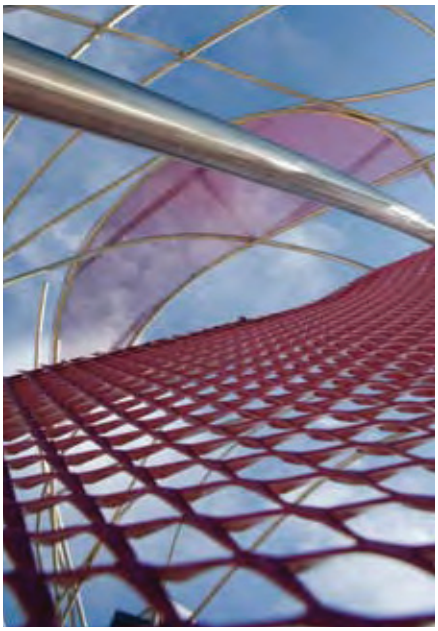
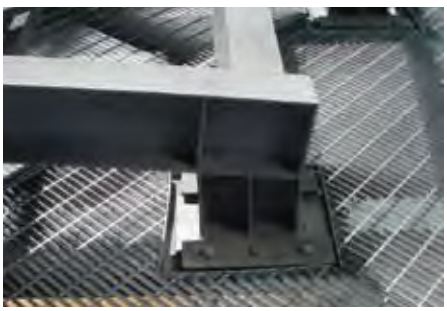






THE COMPANY

Locker Group Pty Limited is a modern manufacturer and supplier of industrial products such as high quality expanded metal, produced from the best available materials and according to high quality standards of manufacture.

The company has been in existence since 1956 and the Group's expanded metal manufacturing facilities are located at Revesby in Sydney South West with sales offices/warehouses in Melbourne, Perth, Adelaide, Darwin, Brisbane, Townsville and Auckland, New Zealand.

Locker Group is the largest manufacturer of expanded metal products in Australia and can produce expanded metal as fine as 0.30mm and up to 10mm thick. Expanded stainless steel can be produced up to 6mm in thickness and the company has the expanding capability to work with sheets up to 3600mm wide (LWD).

The aim of the company is to provide a high level of satisfaction to its customers, by producing the highest quality expanded metal materials that comply with all Australian Standards, and meet all specified technical requirements.

GENERAL INFORMATION

MANUFACTURING PROCESS

What is expanded metal?

Expanded metal is an extraordinarily versatile material – one with thousands of uses. It comes in four basic types, and it has four primary areas of application.

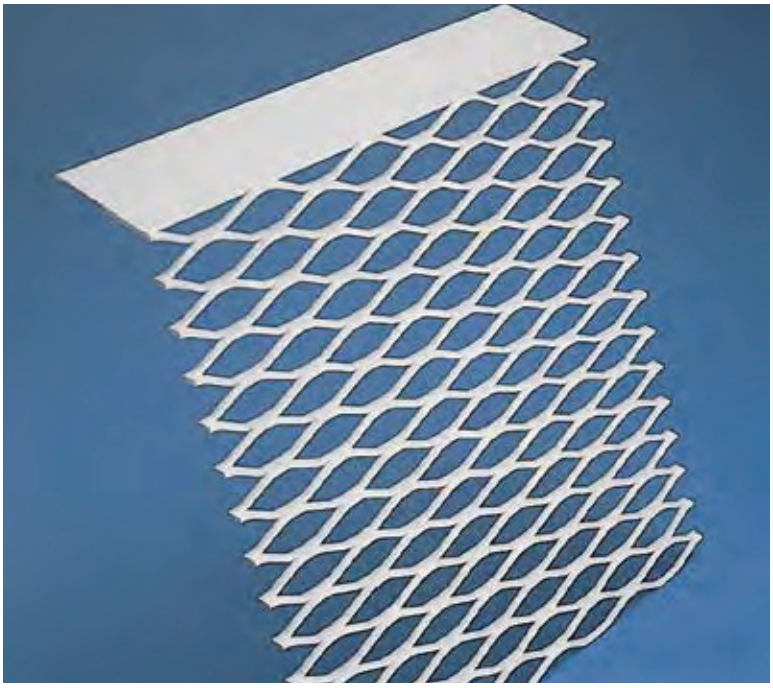
Basic types are raised (or standard), flattened, Gridwalk, and architectural (or decorative) meshes. The major areas of use are for enclosure, protection, support and decoration.

Expanded metal products are produced from solid sheets or plates of carbon, galvanized and stainless steel, as well as aluminium and a variety of alloys of copper, nickel, silver, titanium and other metals.

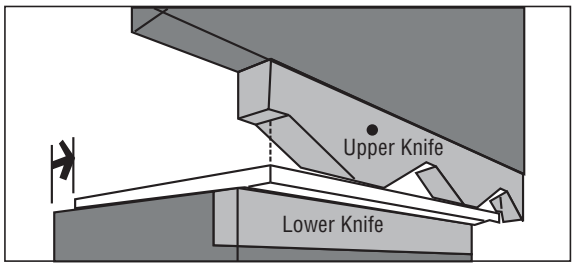
In an expanding process, the sheet or plate is simultaneously slit and stretched longitudinally – expanding the slits into diamond-shaped holes of uniform size, shape and regularity.

No metal is lost in the expanding process. Moreover, the final product is stronger per kilogram and lighter per metre than the original sheet or plate. The strands and knuckle of the diamond-shaped trusses form an angle to the original plane of the sheet, adding strength and rigidity.

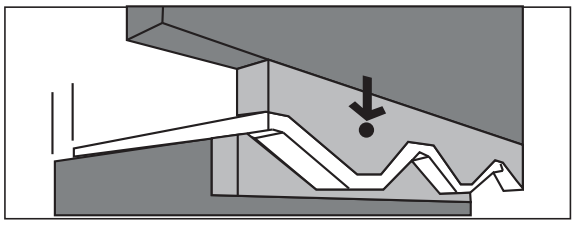
Because it is made from a solid sheet of metal, it can never unravel. The slender metal strands forming the open diamonds permit light, heat, air, liquid and sound to pass through – yet present a virtually impenetrable barrier to intruders. Even if cut at one or more points, the remaining strand intersections continue to hold.



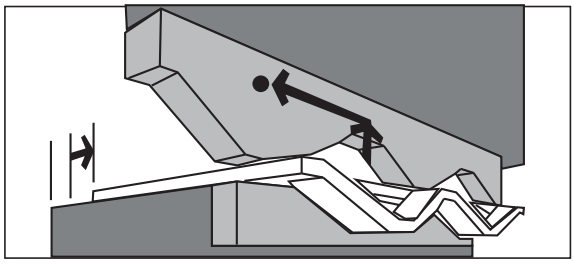
While the diamond design may vary, this illustration shows how a solid sheet of material becomes expanded metal without waste.
The result of this expanding operation is a product that is lighter and stronger than the original sheet or plate from which it came.



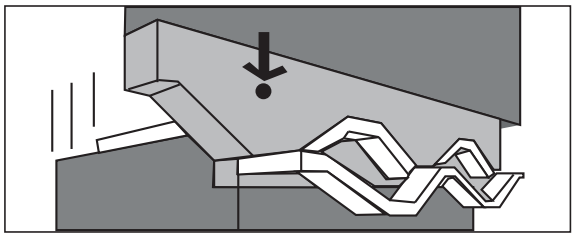
The sheet or plate advances between the knife one strand width beyond the lower.



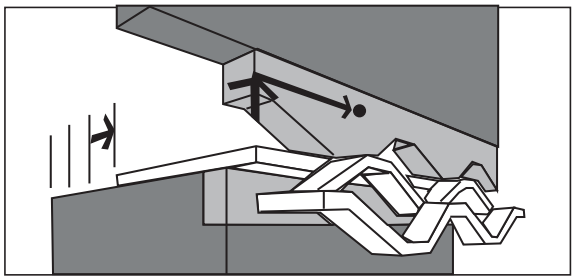
The upper knife descends to form one half of the diamond design. (SWD)



The upper knife then ascends fully and indexes one half diamond to the side (LWD) as the material advances another strand width.



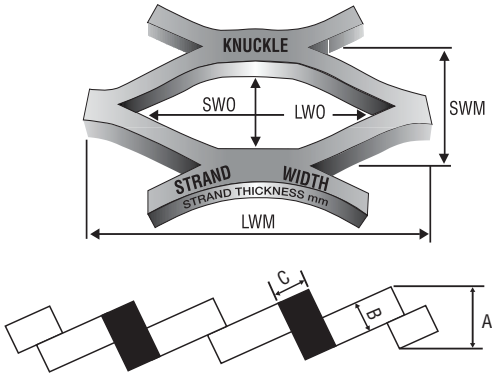
The upper knife descends again to form another row of half diamonds to complete the design.



The upper knife ascends again, indexing (LWD) to its original starting position. The cycle continues until the sheet of expanded metal is complete.

GENERAL INFORMATION

RAISED EXPANDED METAL

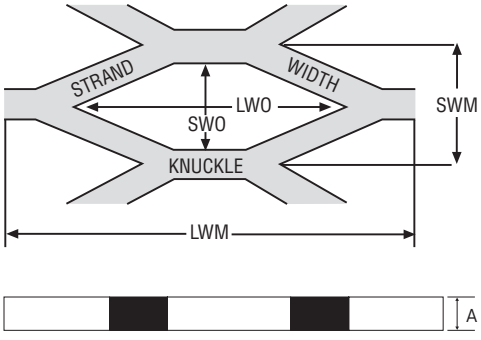


"A" Overall thickness "B" Strand Width
"C" Strand thickness

Raised Expanded Metal

Expanded metal as it comes off the machine. The strands and knuckles are set at a uniform angle to the plane of the sheet. This adds strength and rigidity, allows air circulation, and distributes the load on the metal to the supporting frames.

FLATTENED EXPANDED METAL



"A" Overall thickness and strand thickness

Flattened Expanded Metal

Manufactured by passing the raised expanded sheet through a cold roll reducing mill. By flattening the sheet, the knuckles and strands are turned down to produce a smooth and flat surface, reducing the overall thickness and elongating the diamond pattern (LWM).

LWM:
The distance from a point on a knuckle to a corresponding point on the following knuckle measured across the Long Way. This distance is also sometimes referred to as "pitch" LWM.

SWM:
The distance from a point on a knuckle to a corresponding point on the following knuckle measured across the Short Way. This distance is also sometimes referred to as "pitch" SWM.

LWO:
Long Way of Opening, the distance measured from the inside of the knuckle across to the inside of the knuckle LWO.

SWO:
Short Way of Opening, the distance measured from the inside of the knuckle across to the inside of the knuckle SWO.

Knuckle:
The intersection of two strands and it is always the width of two strands.

Overall Thickness:
The actual measurement of the thickness of the mesh measured at the knuckle. (Dimension 'A')

Open Area:
The percentage of open area given is approximate. For meshes of the conventional type with strands inclined from the plane of the sheet, two figures are shown:

a. For normal incidence i.e. when viewed with the sheet held at right angles to the line of vision.
b. For maximum incidence i.e. when viewed with the sheet slanting so that the thickness of strand is parallel to the line of vision, thus presenting a greater free area. For flattened meshes the normal incidence figure only is applicable.

Guillotining:
An operation carried out after expanding to cut expanded sheets exactly to size (within the guillotining tolerance). Shearing may leave "Stags" on a mesh.

Stag Ends:
Incomplete strands existing beyond the joints of a mesh either LWD, SWD or both.

Galvanising:
Hot dipped galvanising carried out to **AS/NZS4680:2006.** Distortion and windowing effect can occur to small steel range through to 15 profiles. Windowing effect is particularly prevalent on flattened meshes.

Material:
Expanded metal meshes are manufactured from materials that conform to the following standards; **AS/NZS1594:1997, AS/NZS1595:1998, AS/NZS1734:1997, AS1397:1993.**

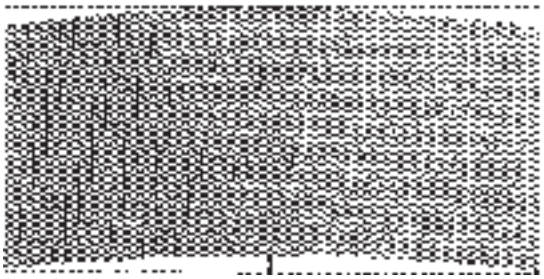
Design:
Locker Group walkway and platform range meet the requirements; **AS1657:1992, AS4100:1998.**

GENERAL INFORMATION

Camber

Bow in sheet. Measured by placing a straight edge along the concave side of the sheet parallel to LW, touching both ends of the sheet. The maximum distance between the edge of the expanded metal and the straight edge is the camber.

Standard expanded metal: 5mm per 1 metre of length. Flattened expanded metal: 7mm per 1 metre of length.

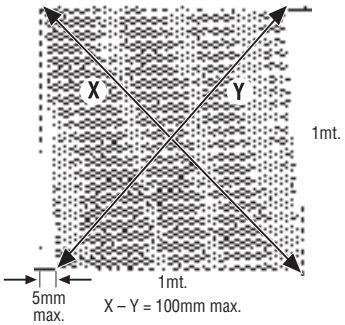


Out of Square

Expanded metal sheets are not perfectly square as manufactured. Stock size sheets and machine run non-standard size sheets will be produced to the following tolerances.

TOLERANCE:

Maximum out of square on edge of sheet 5mm per 1 metre of length OR 10mm on diagonals per square metre. Sheet must be re-squared by shearing on all sides for squareness.



Drawings are exaggerated to best illustrate

General Tolerances:

Reference to sheet size, strand width, thickness and weight are approximate only. Whilst every effort is made for these figures to be accurate, it must be understood that the specification of goods manufactured and supplied is subject to our standard tolerances. The company policy is one of continuous development: we therefore reserve the right to alter specifications, etc., without notice.

Stock Sheet Tolerances:

Raised Profiles		
Small Mesh Range LW: -0 + 3.5 mm SW: -0 + 1.5% per metre	Large Mesh Range LW: -0 + 10 mm SW: -0 + 2% per metre	Walkway LW: -0 + 25 mm SW: -0 + 50 mm

Flattened Profiles
LW: -0 + 140 mm SW: -5 + 25 mm

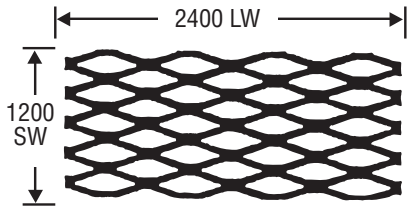
Order Procedure

When ordering Expanded Metals, give complete profile specifications to avoid possible error.

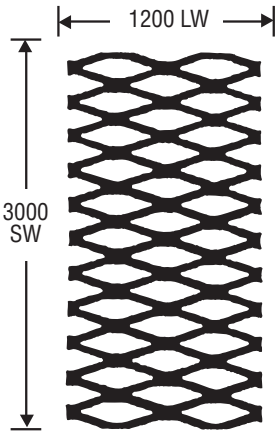
When ordering please state:

1. **Mesh reference**
2. **Quantity of sheets**
3. **Sheet Size (LW dimensions first – see diagram)**
4. **Type of material e.g. steel, aluminium, etc.**
5. **Finish, e.g. untreated or galvanised**
6. **Tolerances (if required)**
7. **Where applicable specify raised or flat**

EXAMPLE A
12-16
2400 LW x 1200 SW



EXAMPLE B
Gridwalk WK 3419G
1200 LW x 3000 SW



These examples show the importance of specifying which dimensions are LW and SW.

DISCLAIMER

Products furnished shall be subject to standard manufacturing variations, seller warrants that the materials furnished shall conform to specifications ordered by buyer. Seller makes no other warranties, express or implied and specifically excludes all warranties of merchantability and fitness for a particular purpose.
Buyer's exclusive remedy and seller's sole liability shall be limited to seller's replacing materials that do not conform to order. The seller shall not be liable for damages in connection with a sale for an amount exceeding the purchase price of the materials sold.
The seller shall not be liable for consequential damages, or for any loss or damage directly or indirectly arising.

ALLOWABLE LOAD TABLE

Reference Code No.	Load	Span (mm) LW			
		600	750	900	1200
WK4519 & GRIP4519	U D C	15.33 3.00 3.10	9.60 3.75 2.34	4.62 4.50 1.56	2.65 6.00 –
WK4514 & GRIP4514	U D C	13.87 3.00 1.40	5.55 3.75 1.22	2.62 4.50 1.03	1.17 6.00 0.66
WK3428 & GRIP 28	U D C	20.40 3.00 3.47	12.00 3.75 2.69	7.90 4.50 2.08	3.60 6.00 0.73
WK3422 & GRIP 22	U D C	17.93 3.00 3.12	9.89 3.75 2.64	6.31 4.50 2.12	2.70 6.00 1.15
WK3419 & GRIP 19	U D C	16.65 3.00 2.45	7.79 3.75 2.05	4.04 4.50 1.67	1.73 6.00 0.80
WK3414 & GRIP 14	U D C	11.13 3.00 2.17	5.07 3.75 1.60	3.09 4.50 1.10	1.50 6.00 –
WK3028	U D C	17.07 3.00 3.79	8.93 3.75 3.04	4.84 4.50 2.25	3.10 6.00 0.75
WK3022	U D C	12.47 3.00 2.38	7.50 3.75 1.90	3.91 4.50 1.42	1.37 6.00 0.45
AG3012	U D C	9.33 3.00 0.68	4.75 3.75 0.63	2.62 4.50 0.57	1.43 6.00 0.46
WK2517	U D C	7.33 3.00 2.43	4.75 3.75 1.65	3.02 4.50 0.87	1.05 6.00 –
AG2515	U D C	7.37 3.00 0.92	3.73 3.75 0.62	2.36 4.50 0.30	1.10 6.00 –
AG1930SP	U D C	5.43 3.00 0.37	2.83 3.75 0.28	1.94 4.50 0.18	0.52 6.00 0.12

These meshes, whilst safe for the span shown, may be springy underfoot.

1. The tables below and left provide load capacities for Gridwalk & Gripwalk™ based on the LWM direction over a clear span, with every fourth strand welded to the support with a minimum landing of 30mm.

2. The uniformly distributed values shown are based on loads causing a deflection of 10mm or Span/200, whichever is less.

3. Gridwalk and Gripwalk™ expanded metal walkway meshes behave like a net; even when heavily overloaded they can carry loads far in excess of the recommended data shown. The inherent properties of expanded metal walkway meshes provided maximum safety pursuant to complete failure.

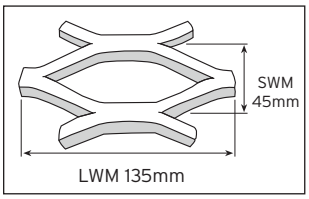
4. A load of 102kgs approximates 1kN force. A load of 102kgs/m² approximates 1kPa.

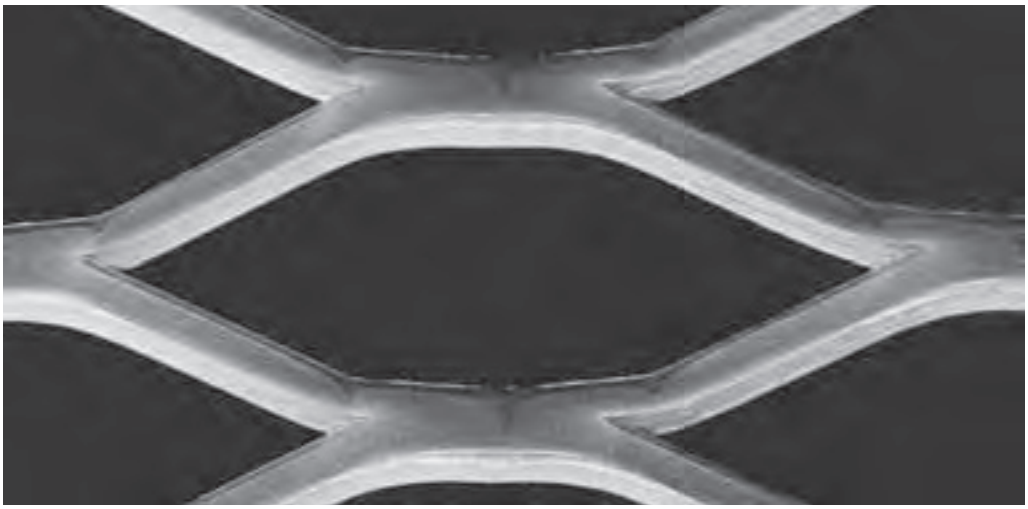
5. U = Uniformly distributed load in Kilopascals.
   D = Deflection in Millimetres
   C = Concentrated loads in Kilonewtons have been applied through a 100mm diameter plate. They correspond to a localised deflection of 10mm.

Locker Group is the only Australian manufacturer who can offer longway widths of over 2.4 metres; reducing welding requirements and therefore installation times.

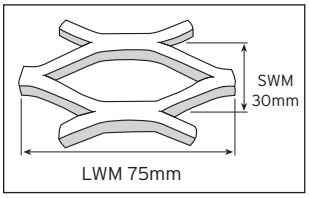
WALKWAY & PLATFORM RANGE

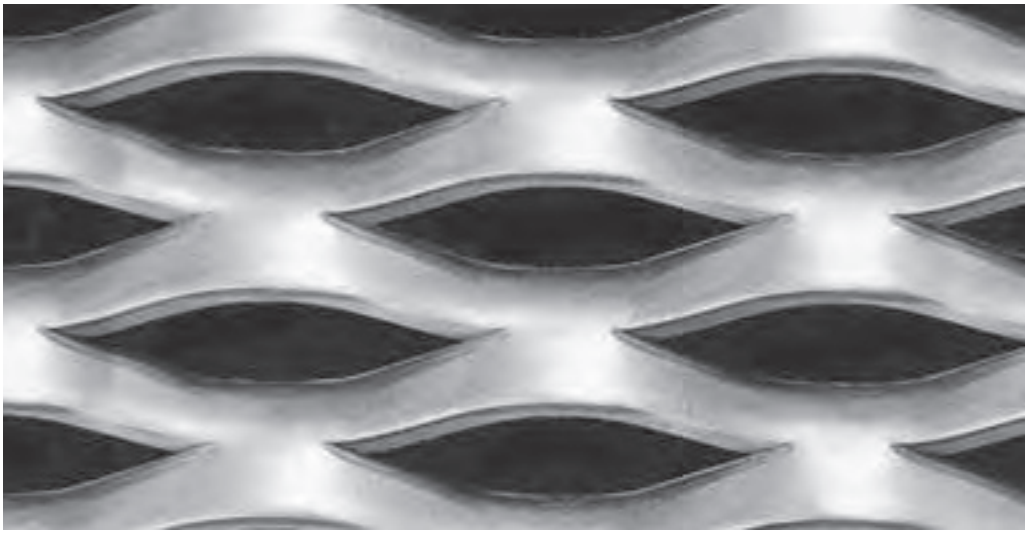
WK 45 Profile



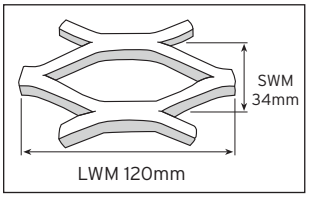


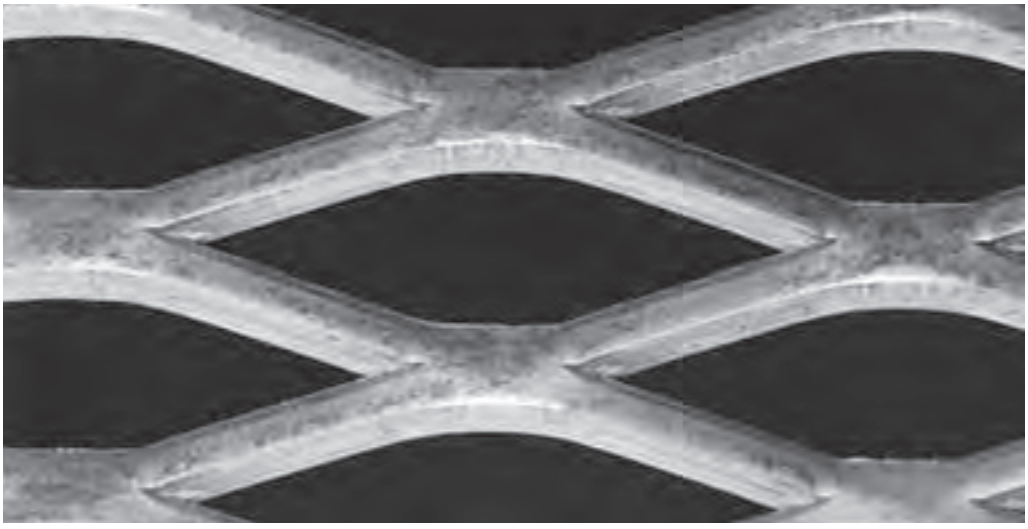
WK 30 Profile





WK 34 Profile





WALKWAY & PLATFORM RANGE

GRIDWALK™(WK) - STEEL

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m2	Overall Height (mm)
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick		
WK4514	*	2000, 3000	135	45	96	32	8.0	5.0	14.0	15.0
WK4519	*	2300, 3000	135	45	96	32	11.0	5.0	19.0	20.5
WK3022	*	2000, 2300, 3000	75	30	53	15	7.8	5.0	22.0	13.0
WK3028	*	2300, 3000	75	30	50	12	10.5	5.0	28.0	15.0
WK3414	*	3000	120	34	85	24	6.4	5.0	14.0	13.0
WK3419	*	3000	120	34	84	23	8.4	5.0	19.0	15.3
WK3422	*	3000	120	34	80	19	9.6	5.0	22.0	18.0
WK3428	*	3000	120	34	80	19	10.4	6.0	28.0	19.0
WK2517	*	2000, 3000	60	25	42	16	5.6	5.0	17.0	11.0
WK2517F	1200	1800	60	25	44	15	5.6	5.0	17.0	5.0
WK1225	1200	3000	30	12	16	5	4.7	2.5	14.0	6.0

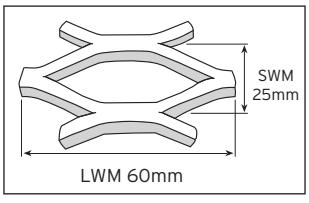
Gridwalk LW Stock Sizes 600, 750, 900 and 1200

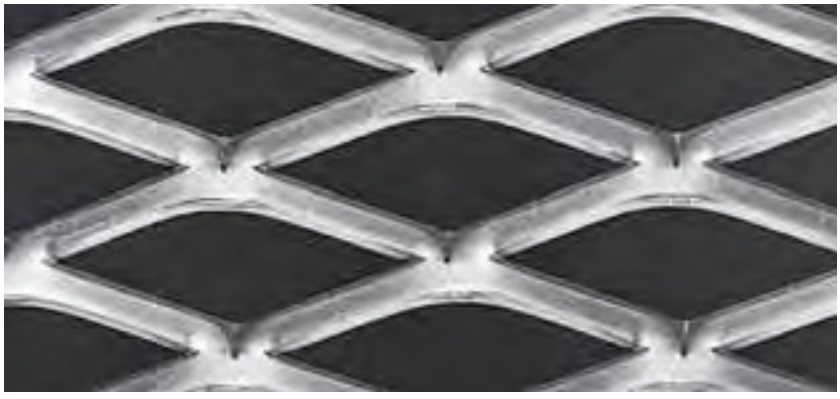
Non standard sheet sizes available. Conditions apply

GRIDWALK™(WK) - ALUMINIUM

WK4505A	1200	3000	135	45	96	32	8.0	5.0	5.0	15.0
WK4507A	1200	3000	135	45	96	32	11.0	5.0	7.0	20.5
WK3007A	1200	3000	75	30	53	15	7.5	5.0	7.0	13.0
WK3010A	1200	3000	75	30	50	12	11.0	5.0	10.0	15.0
WK3012A	1200	3000	75	30	50	12	11.0	6.0	12.0	15.0

WK25 Profile





WALKWAY & PLATFORM RANGE

GRIPWALK™ (GWK) - STEEL

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick		
GRIP 14	*	3000	120	34	85	24	6.4	5.0	14.0	12.5
GRIP 4514	*	3000	135	45	96	32	8.0	5.0	14.0	15.0
GRIP 19	*	3000	120	34	84	23	8.4	5.0	19.0	15.5
GRIP 4519	*	3000	135	45	96	32	11.0	5.0	19.0	20.5
GRIP 22	*	3000	120	34	80	19	9.6	5.0	22.0	18.0
GRIP 28	*	3000	120	34	80	19	10.4	6.0	28.0	19.5

Gripwalk LW Stock Sizes 600, 750, 900 and 1200

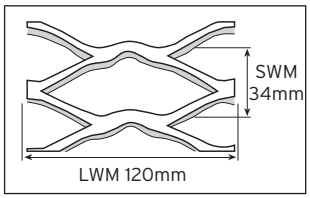
Non standard sheet sizes available. Conditions apply.

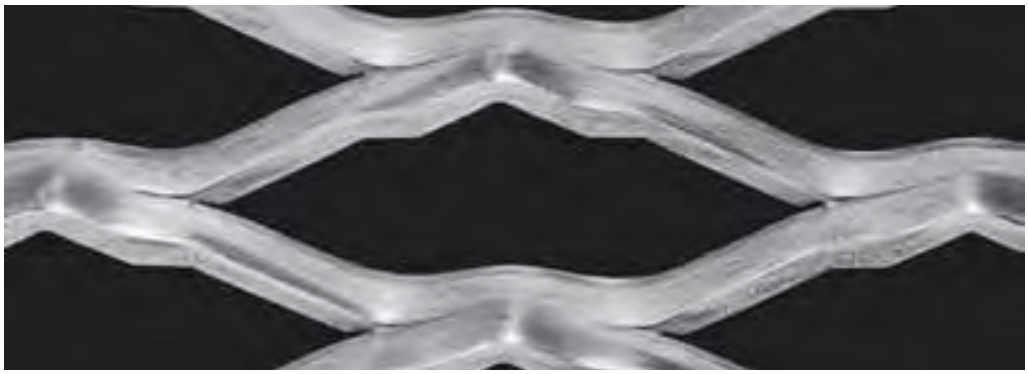
GRIPWALK™ (GWK) - ALUMINIUM

GRIP 05A	1200	3000	120	34	85	24	6.4	5.0	5.0	12.5
GRIP 07A	1200	3000	120	34	84	23	8.4	5.0	7.0	15.5
GRIP 08A	1200	3000	120	34	80	19	9.6	5.0	8.0	18.0
GRIP 10A	1200	3000	120	34	80	19	10.4	6.0	10.0	19.5

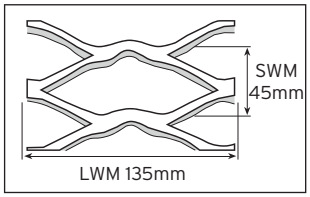
Non standard sheet sizes available. Conditions apply

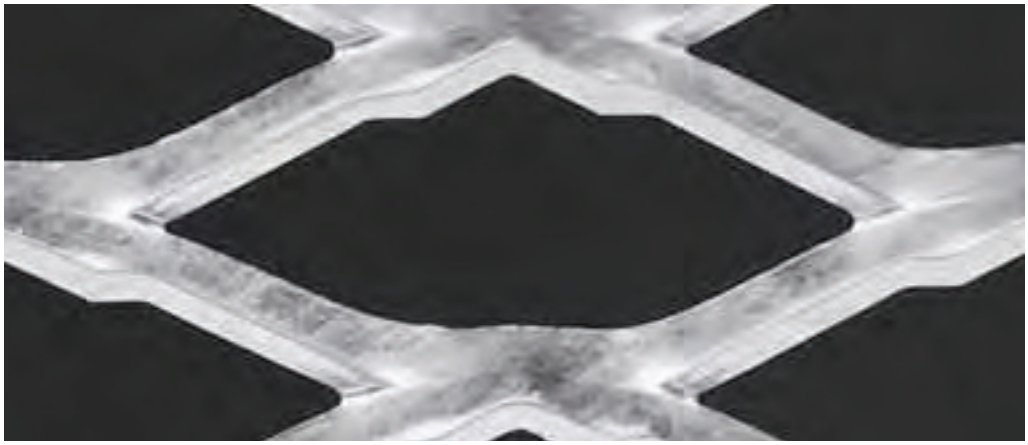
Grip 14 Profile





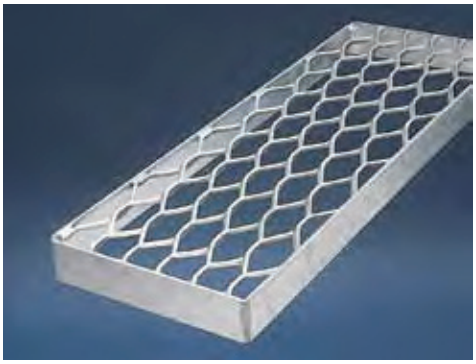
Grip 4514 Profile



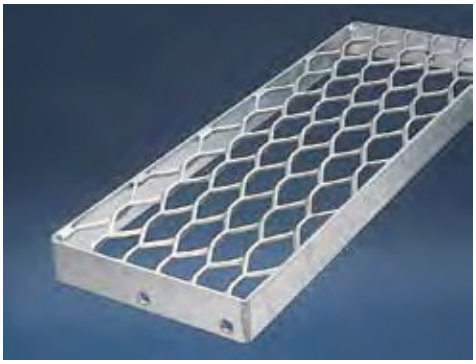


Stairtreads can be supplied in all walkway profiles as listed under walkway and platform range. Custom stairtreads are also available to suit individual requirements. Contact your nearest **Locker Group** sales office for more details.

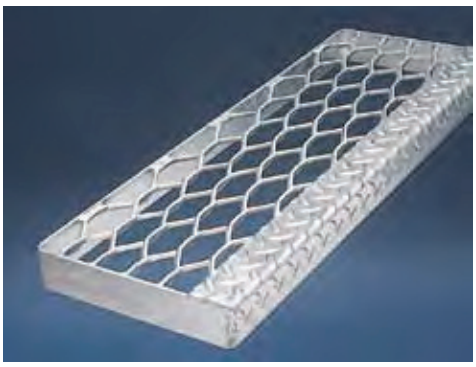
When ordering stairtreads specify the style of tread plus the walkway profile and size required to suit your application, e.g. EMT1 600 x 250 WK4514.



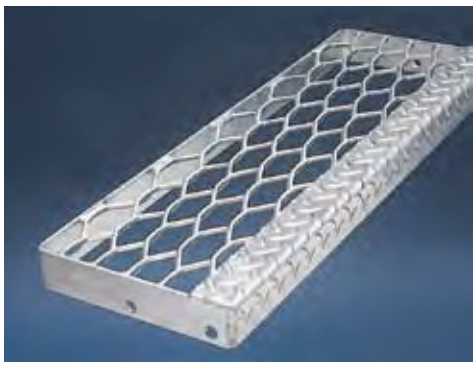
EMT1 – Welded fixing, banded ends, no nosing.



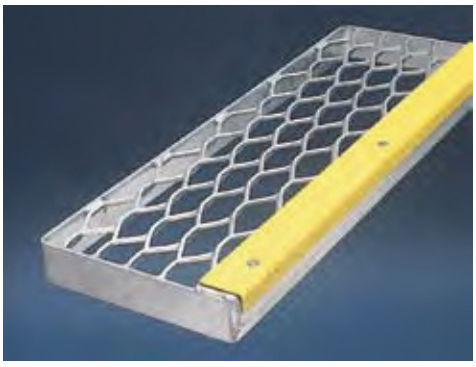
EMT2 – Bolted fixing, holed end plates, no nosing.



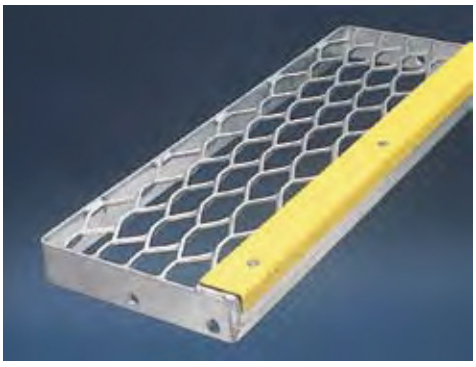
EMT3 – Welded fixing, banded ends, floor plate nosing.



EMT4 – Bolted fixing, holed end plates, floor plate nosing.



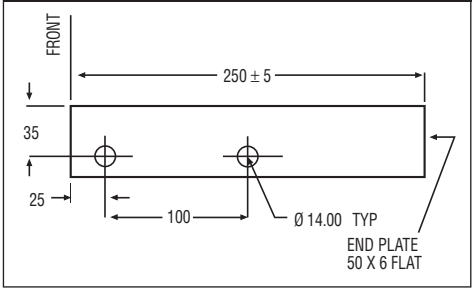
EMT5 – Welded fixing, banded ends, abrasive nosing.



EMT6 – Bolted fixing, holed end plates, abrasive nosing.

Standard Tread Sizes	
LW (mm)	SW (mm)
600	250
750	250
900	250
1000	250
1200	250

Standard Endplate Detail

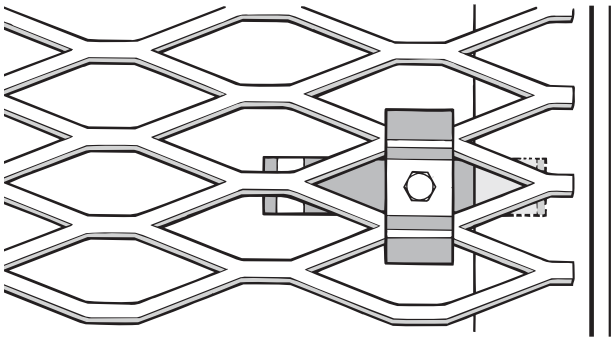


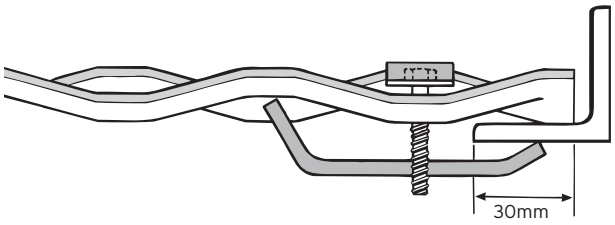
Fixing details using removable fixings

A clip for fixing sheets of expanded metal grating direct to structural steelwork is available. This consists of an upper saddle engaging over two knuckles of the grating with a screw passing through the saddle and tightening into a lower clamping strip which engages with the bottom edge of a knuckle. The advantage of this arrangement is that the need to tighten a nut from below is eliminated. With saddle and clamping strip held together by the screw, the end of the clamping strip is worked through the grating, positioned correctly and screw tightened.

LRD Fixing Clip
To suit the following profiles: WK3414, WK3419, WK3422, WK3428, WK2517, WK1225, GRIP14, GRIP19, GRIP22, GRIP28

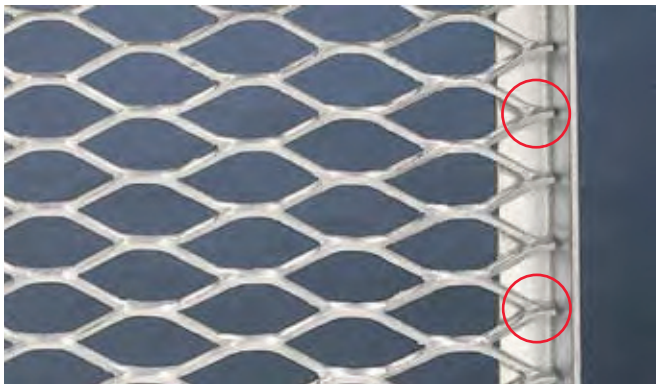
WK45 Fixing Clip
To suit the following profiles:- WK4514, WK4519, WK3022, WK3028, GRIP4514, GRIP4519.



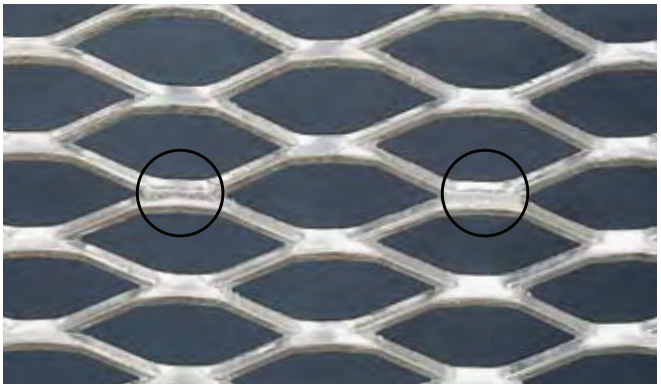


The ends of Gridwalk grating should bear on structural supports. Minimum overlap 30mm.
Adjoining sheets must be lapped at least one mesh and clamped.
The strands of adjoining sheets should slope in same direction.
Note: Maximum recommended distance between fixing clips is 750mm.

Fixing details for welded situations



Welded to support
Each fourth stag should be welded to structural support or at 150mm centres.

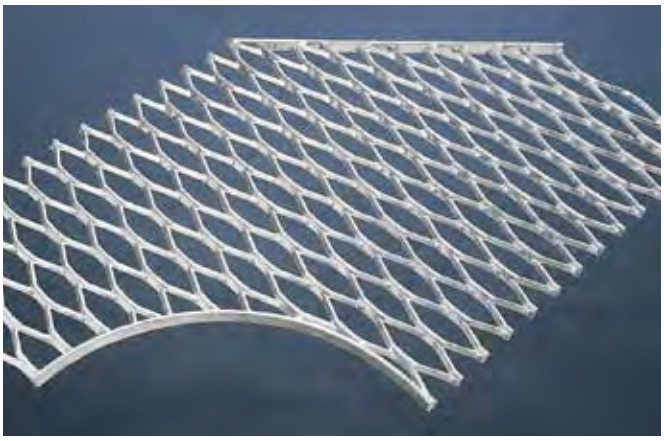


Sheets joined by butt weld

Sheets joined by overlap and weld, minimum overlap one full mesh (SWD)

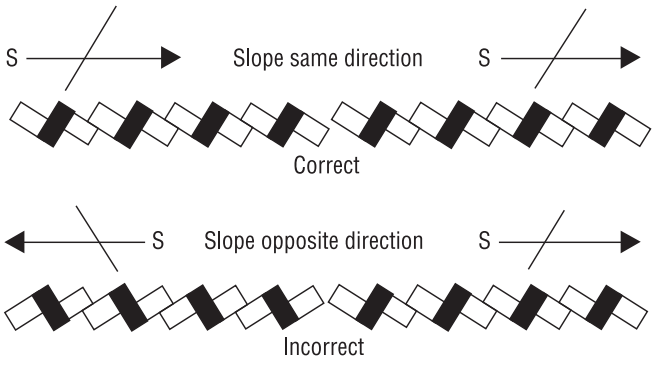
Note 1.: Overlapping Gripwalk can produce a raised edge.
It is recommended that Gripwalk is butt jointed. Position join over support.

Note 2.: Adjoining (butting or lapped) sheets can be welded together or a support can be welded beneath the join of the grating.



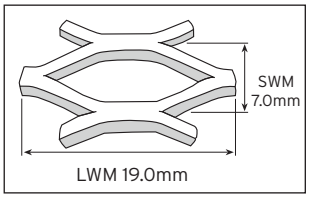
Banding of cut edges
It is comparatively simple to shape Gridwalk grating and to cut holes for pipes or structural members. Cut-outs should be edged with flat bar welded at all contact points.

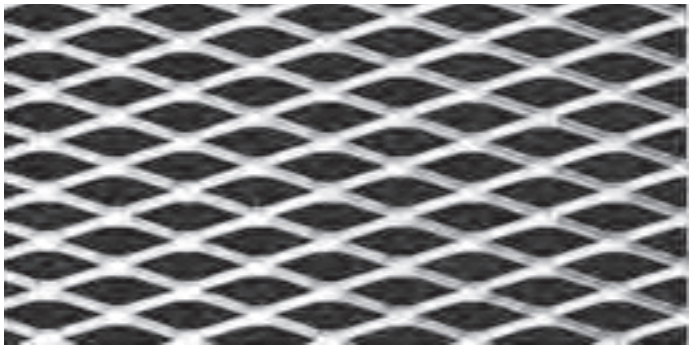
Direction for placing grating



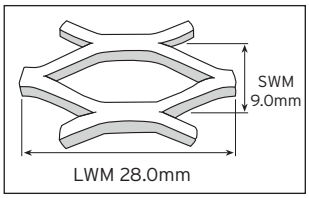
LARGE MESH RANGE

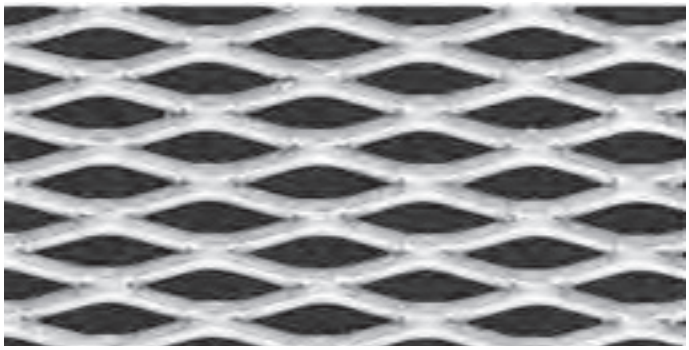
07 Profile



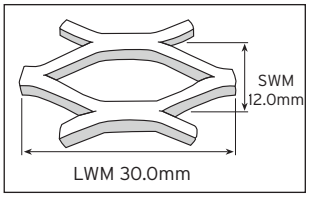


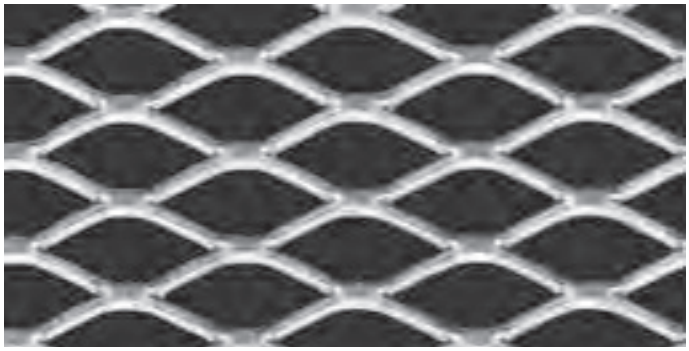
09 Profile



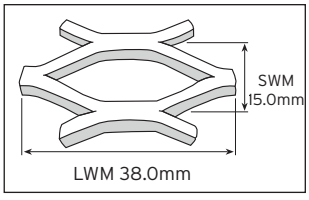


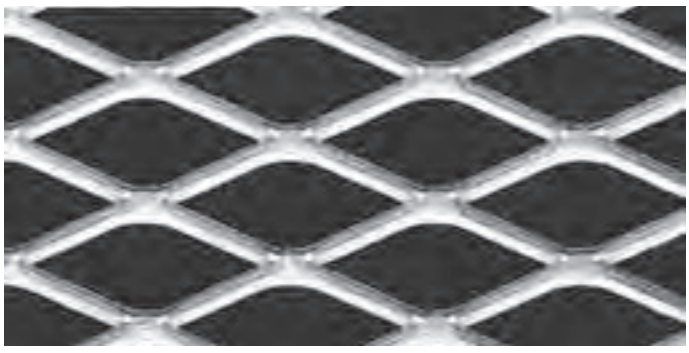
12 Profile





15 Profile





LARGE MESH RANGE

LARGE STEEL

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area	
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick			Raised Norm-Max	Flat
07-08	1200	1200	19	7	14	5	1.0	0.8	1.8	2.0	75-80	54
07-10	1200	2400	19	7	14	4	1.7	1.0	3.7	3.0	60-73	54
09-10	2400	1200	28	9	22	7	1.5	1.0	2.7	3.0	75-89	67
09-16L	2400	1200	28	9	20	6	1.6	1.6	4.4	3.2	48-56	59
09-16	2400	1200	28	9	19	5	2.2	1.6	6.2	4.0	48-56	53
12-09	2400	1200	30	12	24	10	1.5	1.0	1.9	3.0	81-87	70
12-12	2400	1200	30	12	23	9	2.2	1.2	3.3	4.0	68-78	65
12-16	2400	1200	30	12	23	9	2.2	1.6	4.4	4.2	67-75	63
12-20	2400	1200	30	12	22	9	2.2	2.0	5.5	4.2	64-71	62
15-10	2400	1200	38	15	31	14	2.0	1.0	1.8	3.8	68-74	70
15-16	2400	1200	38	15	30	13	2.0	1.6	3.3	3.8	68-78	65
15-20	2400	1200	38	15	29	12	2.7	2.0	5.1	5.1	68-74	60

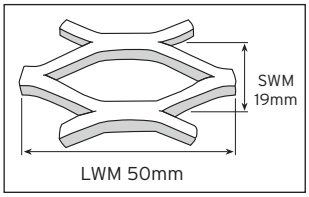
LARGE ALUMINIUM

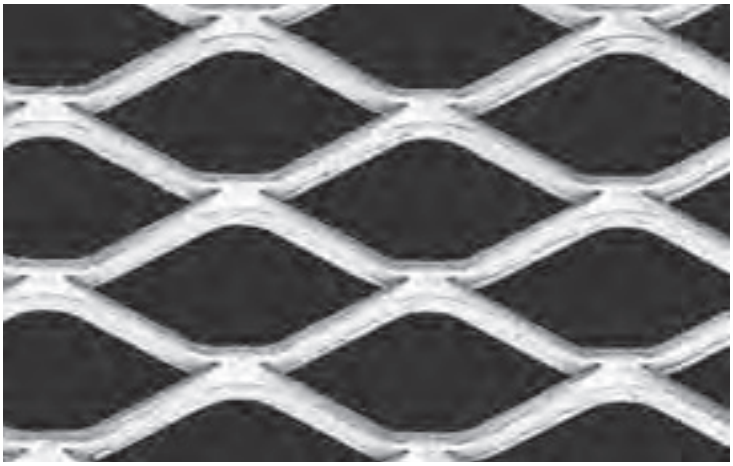
07-10A	1200	2400	19	7	14	14	1.7	1.0	1.3	3.0	60-73	54
09-10A	2400	1200	28	9	22	7	1.5	1.0	0.94	3.0	75-89	67
09-16AL	2400	1200	28	9	20	6	1.6	1.6	1.61	3.2	48-56	59
09-16A	2400	1200	28	9	19	5	2.2	1.6	2.2	4.0	48-56	53
12-09A	2400	1200	30	12	24	10	1.5	1.0	0.7	3.0	78-82	70
12-12A	2400	1200	30	12	23	9	2.2	1.2	1.2	4.0	70-75	65
12-12AL	2400	1200	30	12	23	9	1.2	1.2	0.6	4.0	80-82	68
12-16A	2400	1200	30	12	23	9	2.2	1.6	1.6	4.2	64-68	63
12-20A	2400	1200	30	12	22	9	2.2	2.0	2.0	4.2	64-71	62
15-10A	2400	1200	38	15	31	14	2.0	1.0	0.68	3.8	68-78	70
15-16AL	2400	1200	38	15	30	13	2.0	1.6	1.09	3.8	68-78	67
15-16A	2400	1200	38	15	29	12	2.2	1.6	1.2	5.1	68-78	65

• Non standard sheet sizes available. Conditions apply.
• Most of the above mesh can be supplied flattened only Locker Group can supply mesh up to 3600mm LW of design

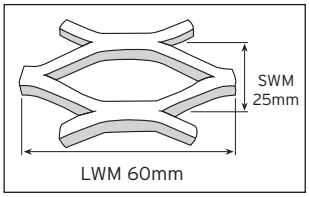
LARGE MESH RANGE

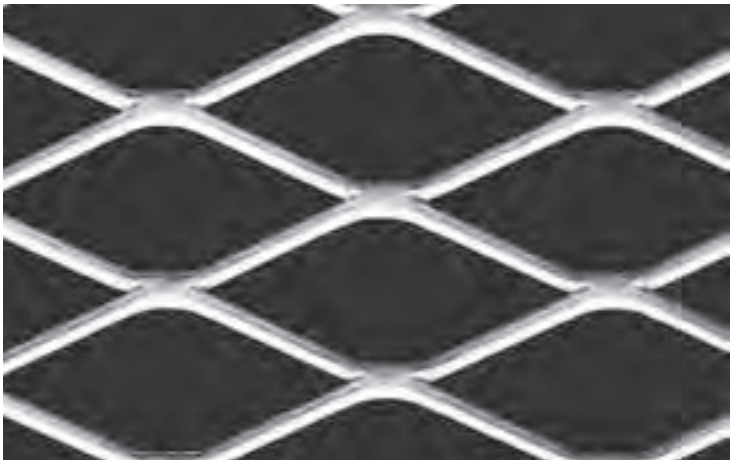
19 Profile



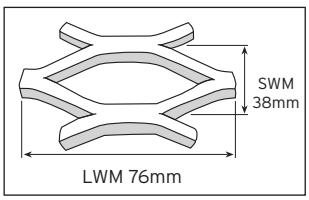


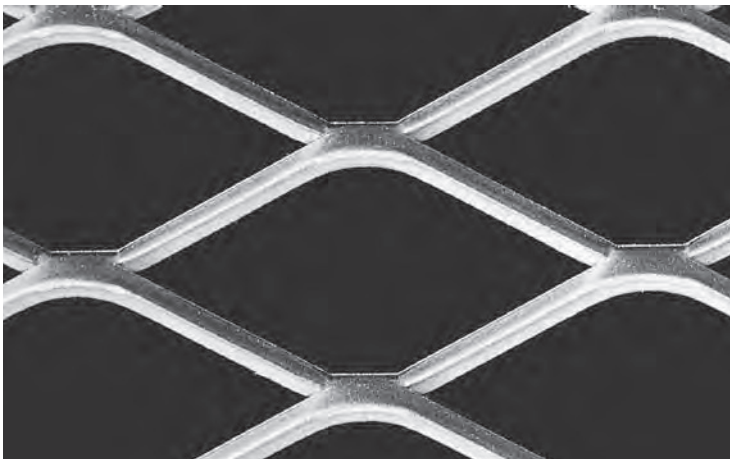
25 Profile





38 Profile





LARGE MESH RANGE

LARGE STEEL

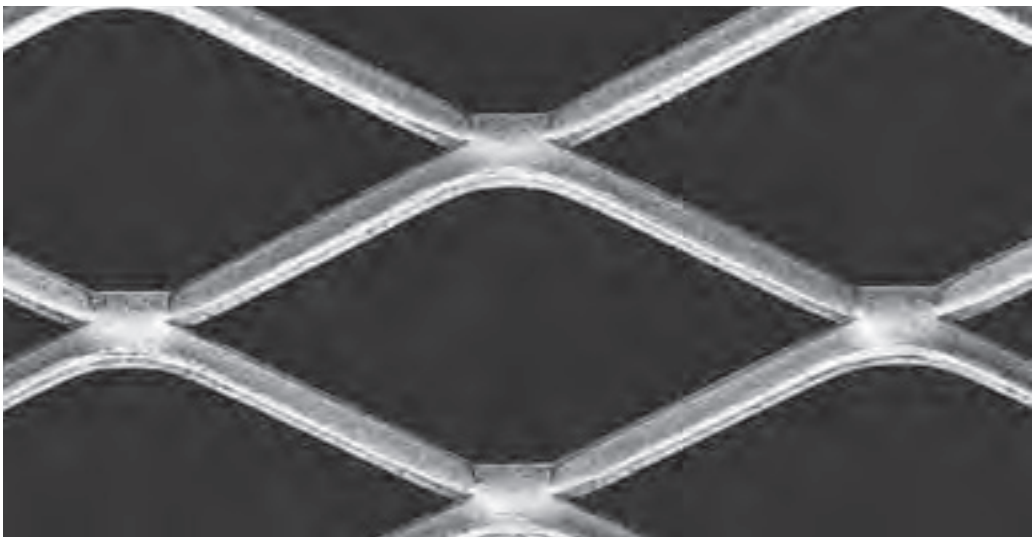
Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area	
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick			Raised Norm Max	Flat
19-16	2400	1200	50	19	40	20	2.1	1.6	2.3	4.5	81-87	76
19-20	2400	1200	50	19	40	18	2.7	2.0	3.8	5.6	77-81	74
19-30	2400	1200	50	19	37	16	3.9	3.0	8.3	7.5	67-74	66
25-16	2400	1200	60	25	50	21	2.2	1.6	2.2	4.2	82-87	81
25-20	2400	1200	60	25	48	19	2.8	2.0	3.5	6.1	73-80	70
38-20	2400	1200	76	38	62	28	2.9	2.0	2.7	6.0	81-84	83
38-30	2400	1200	76	38	62	28	3.5	3.0	5.0	7.5	76-81	83
38-30CY	2400	1200	76	38	60	25	4.5	3.0	6.7	9.0	75-79	61

LARGE ALUMINIUM

19-16A	2400	1200	50	19	40	20	2.1	1.6	0.8	4.5	86-88	43
19-20A	2400	1200	50	19	40	18	2.7	2.0	1.3	5.6	77-81	74
19-30A	2400	1200	50	19	37	16	3.9	3.0	2.9	7.5	67-74	66
25-16A	2400	1200	60	25	50	21	2.2	1.6	0.8	4.2	83-84	79
25-20A	2400	1200	60	25	48	19	3.0	2.0	1.4	6.1	73-80	70
38-20A	2400	1200	76	38	62	28	2.9	2.0	1.0	6.0	81-84	83
38-30A	2400	1200	76	38	62	28	3.5	3.0	1.8	7.5	76-81	83
38-30ACY	2400	1200	76	38	60	25	4.5	3.0	2.3	9.0	75-79	61

- *Non standard sheet sizes available. Conditions apply.*
- *Most of the above mesh can be supplied flattened –*
  Only Locker Group can supply mesh up to 3600mm LW of design.

LARGE MESH RANGE



50 Profile

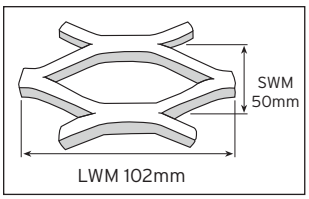
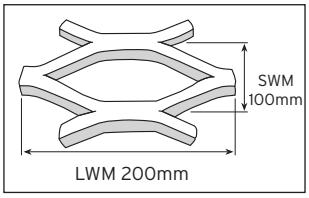


Photo shown 12% smaller than actual size

100 Profile



LARGE MESH RANGE

LARGE STEEL

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area	
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick			Raised Norm Max	Flat
50-20	2400	1200	102	50	87	43	4.0	2.0	2.5	8.0	82-87	85
50-30	2400	1200	102	50	83	41	5.6	3.0	5.7	11.0	76-83	77
100-30	2400	1200	200	100	180	94	6.0	3.0	3.7	12.0	–	–
100-50	2400	1200	200	100	172	97	5.0	5.0	5.2	10.0	–	–

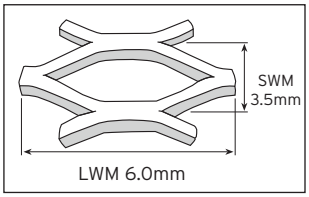
LARGE ALUMINIUM

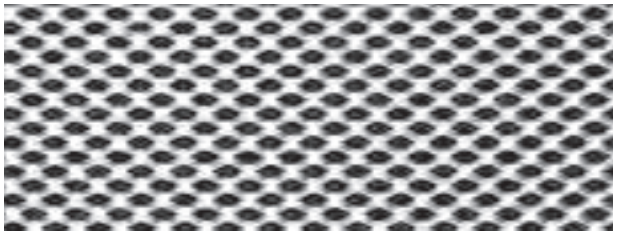
50-30A	2400	1200	102	50	83	41	5.6	3.0	2.01	11.0	76-83	77
50-50A	2400	1200	102	50	80	38	5.0	5.0	3.00	10.0	75-83	–
100-50A	2400	1200	200	100	172	97	5.0	5.0	1.8	10.0	–	–

- *Non standard sheet sizes available. Conditions apply.*
- *Most of the above mesh can be supplied flattened – Only Locker Group can supply mesh up to 3600mm LW of design.*

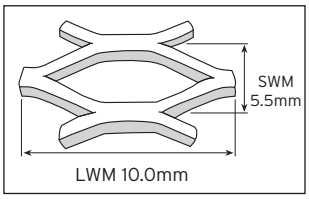
SMALL MESH RANGE

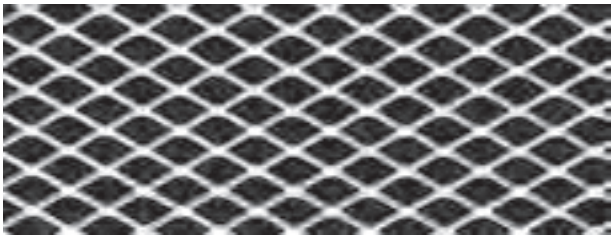
220



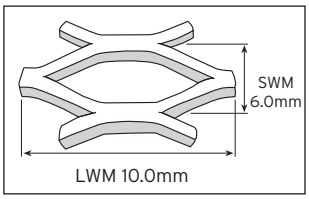


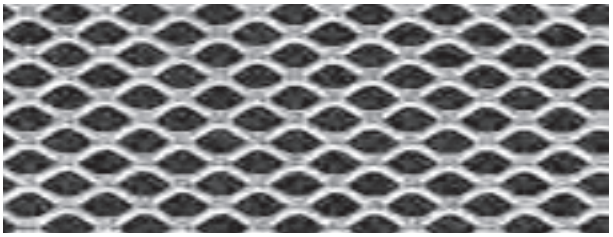
203



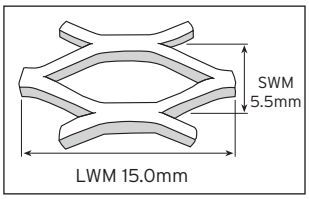


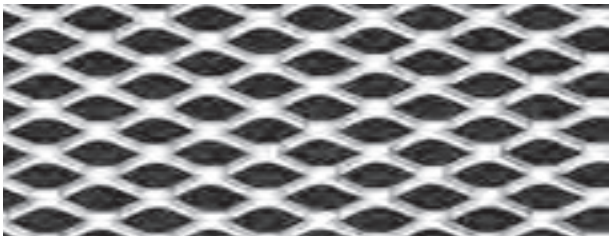
217F



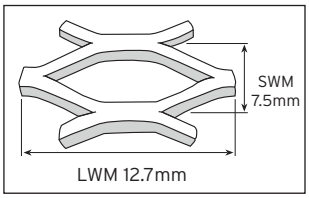


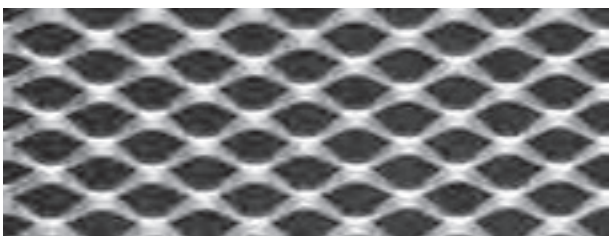
199





R0908





SMALL MESH RANGE

SMALL STEEL - RAISED

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Approx. Strand Size (mm)		Weight Kg/m²	% Open Area	
	LW	SW	LWM	SWM	Width	Thick		Raised Norm-Max	Flat
213	1200	900	6.0	3.5	0.60	0.50	1.39	62-68	–
220	1200	900	6.0	3.5	0.76	0.60	2.02	50-59	–
225	1200	900	6.0	3.5	0.79	0.30	1.10	58-71	–
202	1200	900	10.0	5.5	1.20	0.60	2.00	65-75	–
203	1200	900	10.0	5.5	0.79	0.60	1.31	66-71	–
206	1200	1200	10.0	5.5	1.17	0.70	2.43	60-68	–
207	1200	900	10.0	5.5	1.55	0.70	3.22	46-61	–
209	1200	900	10.0	5.5	1.55	0.90	4.10	40-54	–
198	1200	1200	15.0	5.5	1.35	0.50	1.88	60-75	–
199	1200	1200	15.0	5.5	1.17	0.90	3.00	54-65	–
R0908	1200	1200	12.7	7.5	2.00	0.90	3.96	55-65	–

SMALL STEEL - FLATTENED

226F	1200	1200	6.0	3.7	0.79	0.60	2.00	–	44
217F	1200	2400	10.0	6.0	1.14	0.90	3.00	–	52

SMALL ALUMINIUM - RAISED

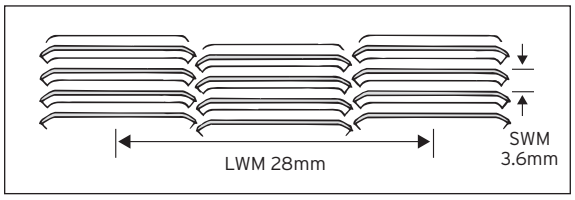
213A	1200	900	6.0	3.5	0.56	0.56	0.53	68-75	–
601A	1200	1200	6.0	3.5	0.80	0.56	0.70	51-62	–
602A	1200	1200	6.0	3.5	1.17	0.56	1.05	26-40	–
350A	1200	1200	10.0	5.5	1.50	0.56	0.85	50-68	–
351A	1200	1200	10.0	5.5	1.55	0.90	1.35	42-57	–
356A	1200	1200	10.0	5.5	1.0	0.56	0.70	70-80	–
354A	1200	1200	10.0	5.5	1.17	0.70	0.80	58-68	–

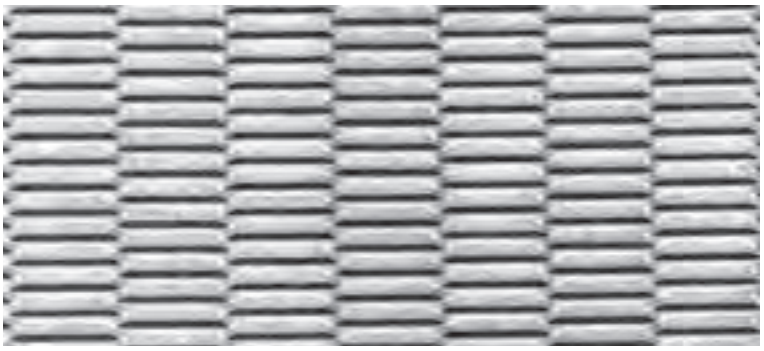
SMALL ALUMINIUM - FLATTENED

217AF	1200	2400	10.0	6.0	1.17	0.90	1.00	–	52

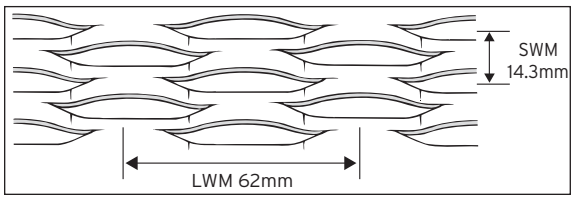
SUNSCREENING RANGE

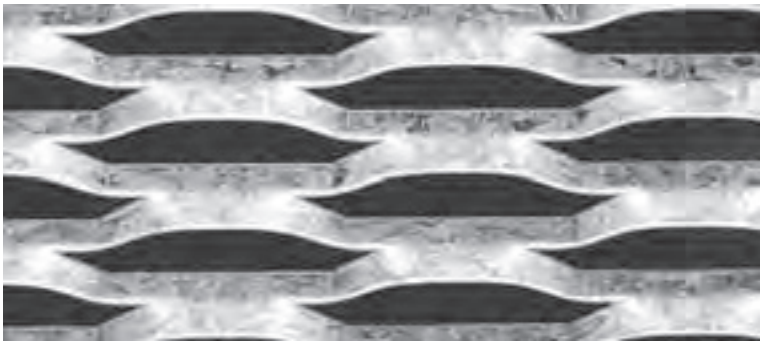
Sun 401 Profile



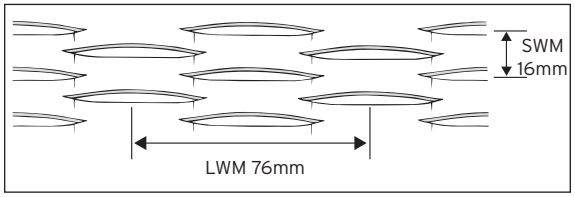


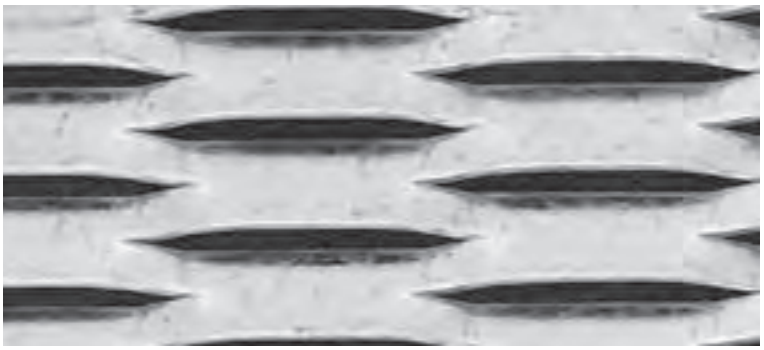
LV Profile



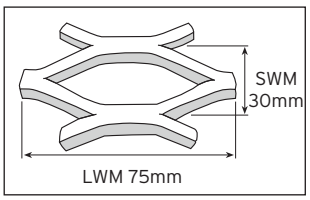


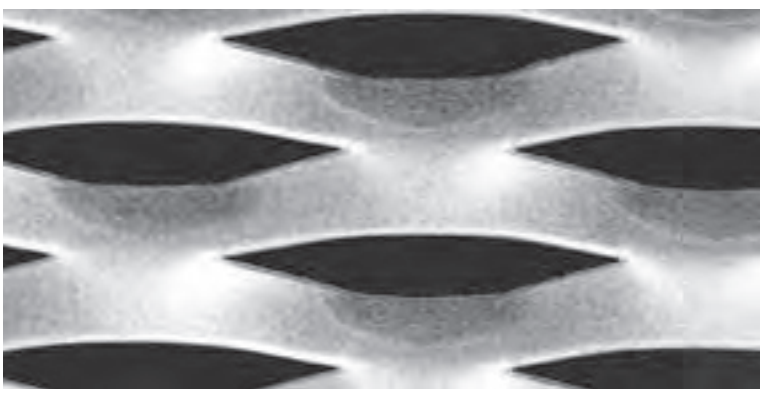
L76 Profile





Sun 636 Profile





SUNSCREENING RANGE

SUNSCREEN - STEEL

Mesh Reference	Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick			Raised Norm Max
Sun 401	1200	2400	28	3.6	13	1.3	2.31	0.7	3.85	2.2	35-55
401	1200	900	28	3.6	13	2.0	2.31	0.7	3.50	2.2	42-64
403	1200	900	62	6.3	33	4.0	3.45	0.9	3.70	4.0	53-77
LV10G Louvre	2440	1200	62	14	41	10	4.80	1.0	5.20	6.5	37-88
LV16G Louvre	2440	1200	62	14	33	4	6.30	1.6	11.08	6.0	18-60
L7609G Louvre	2440	1200	76	13	50	7	4.80	0.9	5.20	7.0	41-91
L7616G Louvre	2440	1200	76	16	41	4	6.30	1.6	11.08	6.5	21-66
Sun 636G	2440	1200	75	30	51	15	10.70	1.6	9.68	13.0	40-65
Sun 16G	2440	1200	120	34	83	22	11.80	1.6	8.20	16.5	34-71

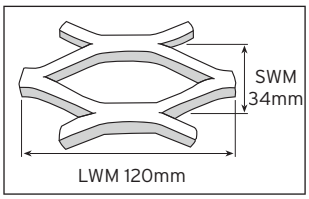
**G Denotes Galvabond material.*

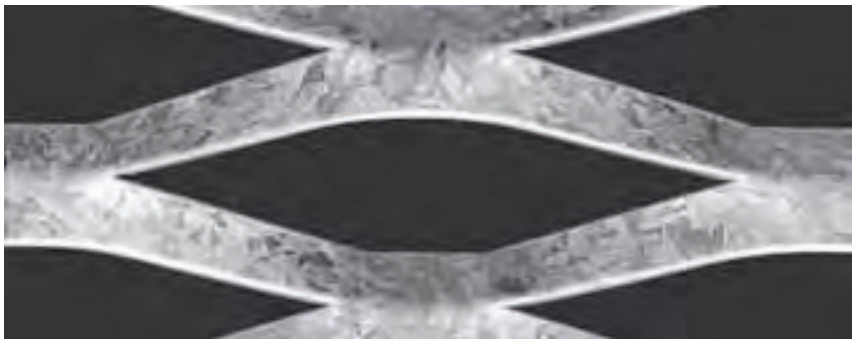
SUNSCREEN - ALUMINIUM

Sun 401A	1200	2400	28	3.6	13	1.3	2.31	0.9	1.65	2.2	33-55
401A	1200	1200	28	3.6	13	2	2.31	0.9	1.50	2.2	40-61
406A	1200	1200	62	6.3	33	4	3.45	1.2	1.75	4.0	52-72
LV10A Louvre	2400	1200	62	14	41	10	4.80	0.9	1.90	6.5	37-88
LV16A Louvre	2400	1200	62	14	33	4	6.30	1.6	4.02	6.0	18-60
L7609A Louvre	2400	1200	76	13	50	7	4.80	0.9	1.90	7.0	41-91
L7616A Louvre	2400	1200	76	16	41	4	6.30	1.6	4.02	6.5	21-66
Sun 636A	2400	1200	75	30	51	15	10.70	1.6	3.52	13.0	40-65
Sun 20A	2400	1200	120	34	80	20	11.80	2.0	3.70	17.0	34-71

Non standard sheet sizes available. Conditions apply.

Sun 16 Profile





SUNSCREENING RANGE

Sunscreen . . .

a better way to control temperature, glare and privacy.

What is sunscreen? Locker Group Sunscreen is a shading device formed from the expanded metal process and is supplied in steel and aluminium.

The louvres of the expanded metal block transmitted rays of solar radiation. In fact, the finer louvres block up to 85% of the solar load that normally penetrates windows.

It cuts down glare, makes better use of the natural light, increases air-conditioning efficiency and reduces energy wastage, as well as performing other important functions.

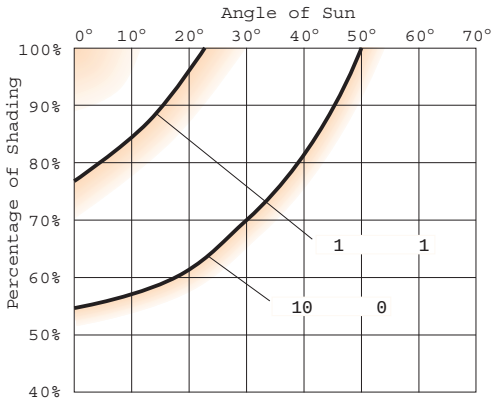
A Sunscreen adds an aesthetic visual appeal to windows, enhancing the architectural design.

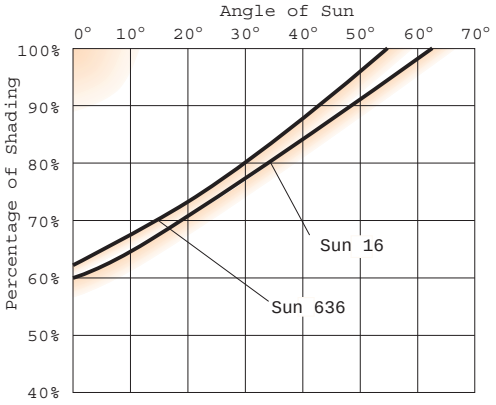
The many applications of this innovative shading device are important to today's architects, engineers, builders - the building and construction industries at large.

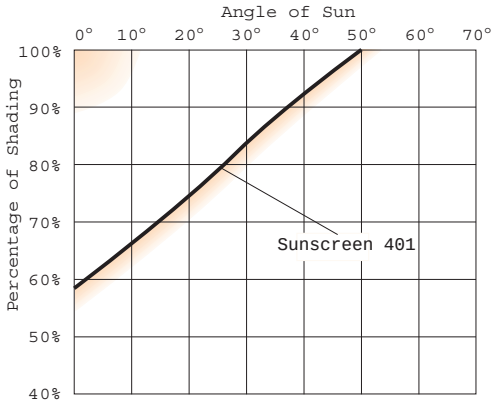
How does it work?

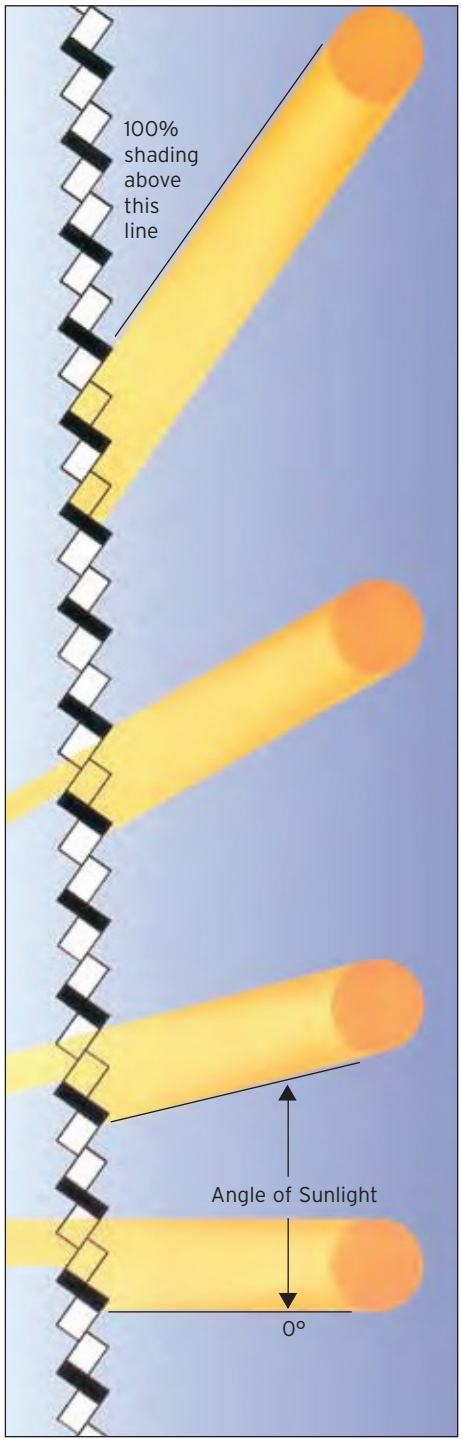
Sunscreens when installed vertically (as shown in diagram) with the LWM running parallel to the horizon will help to achieve the maximum results.

The graphs show the shading characteristics of each profile for varying angles of sunlight.



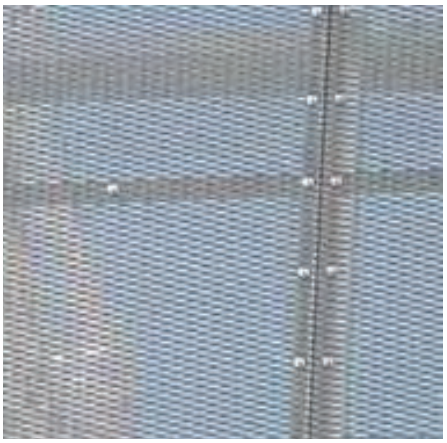


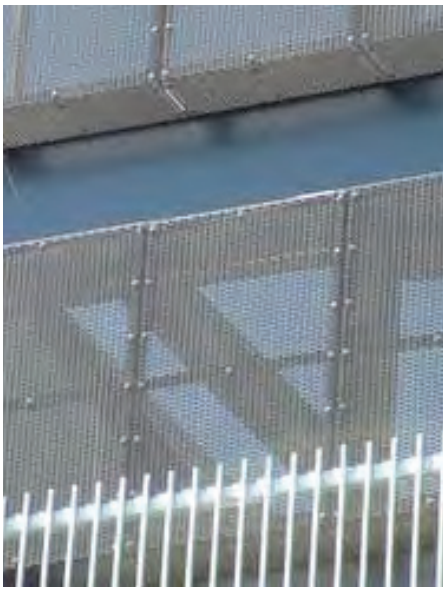


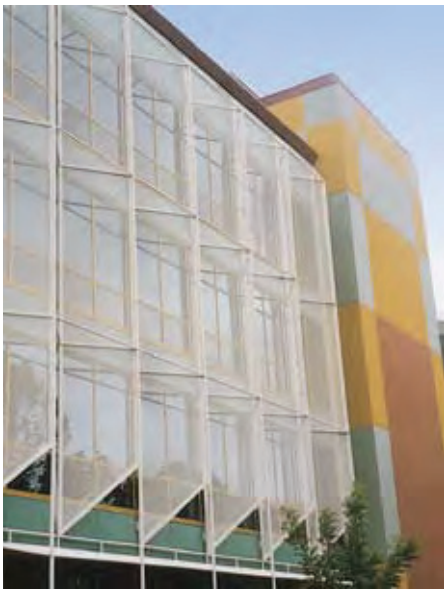


Shading effect of Sunscreen

SUNSCREENING RANGE

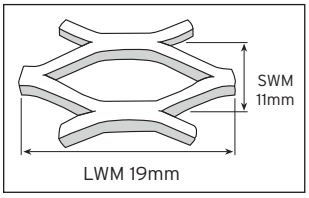




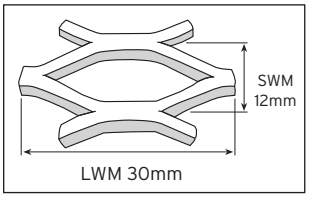


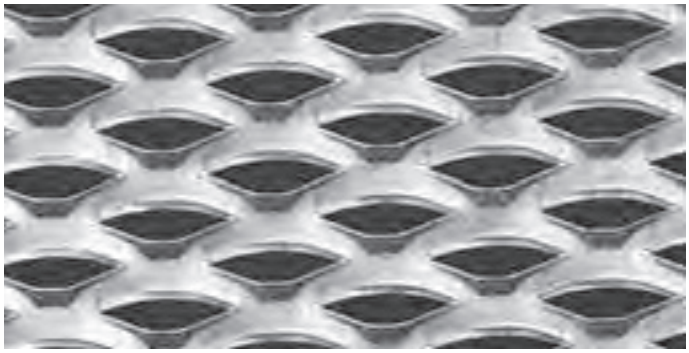
SECURITY & FENCING MESH RANGE

JE Profile

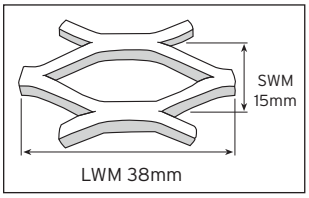


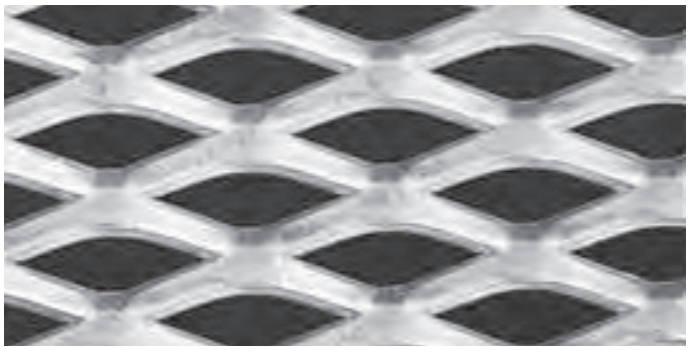
12 Profile



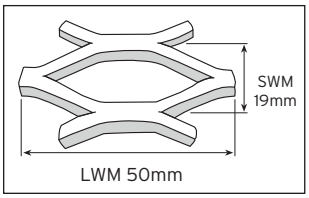


HVO Profile



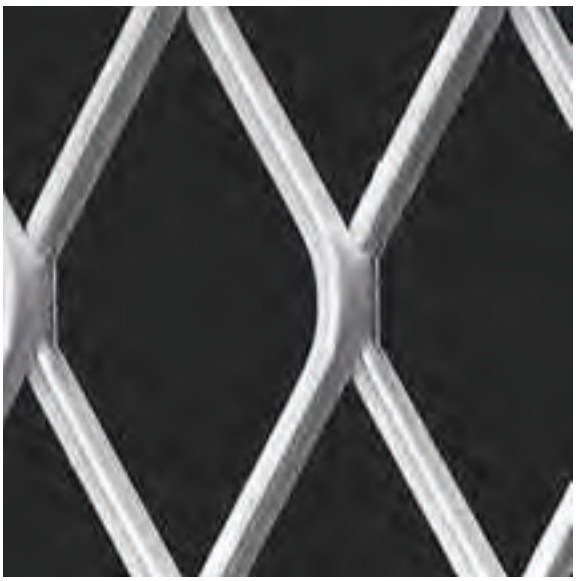


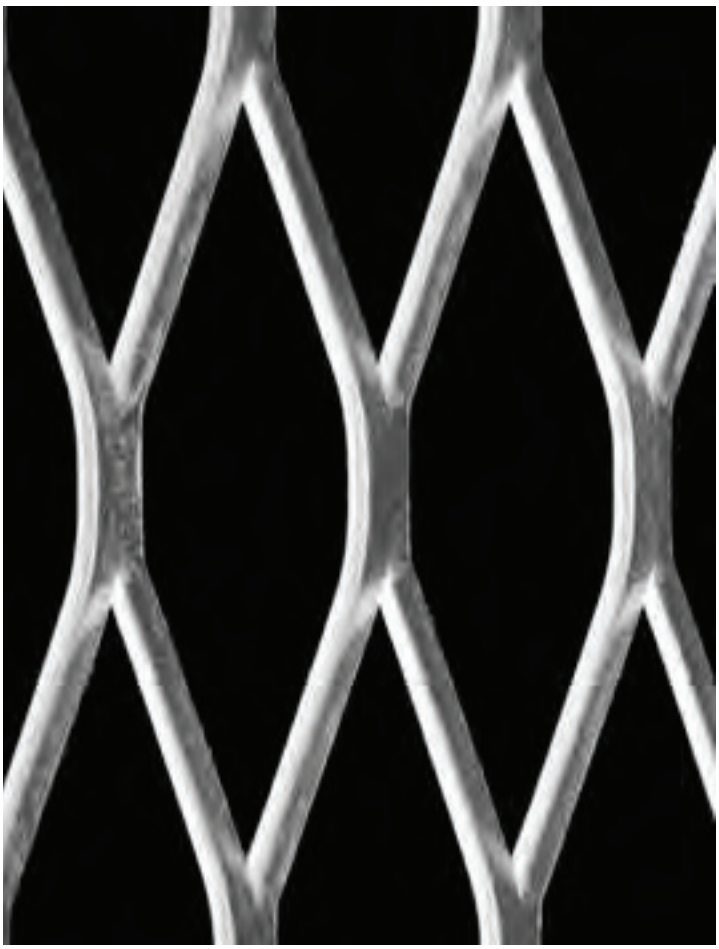
DMS & HDMS Profile



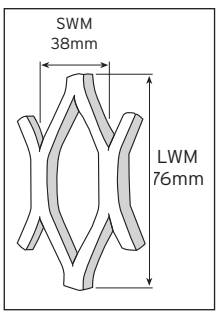
SECURITY & FENCING MESH

Mesh Reference	Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height
	LW	SW	LWM	SWM	Width	Thick		
HV 030 HV 040	1800	UP TO 5500	38 38	15 15	5 5	3 4	14.1 18.8	9.0 9.0
DMS 30 HDMS 30	1800 1800	UP TO 5000 UP TO 5000	50 50	19 19	4 5	3 3	9.4 11.0	7.0 9.0
JE 1116 JE 1112	1200	UP TO 5500	19 19	11 11	4 3	3 3	16 12	5.5 5.5
USI 3830 CY	3600	1800	76	38	4.5	3	7	6.0
1225	1200	3600	30	12	4.7	2.5	14	6.0
3430	3600	1800	120	34	6	3	8.5	9.5

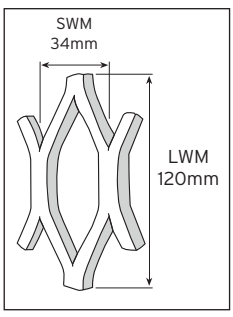




USI 3830 CY Profile

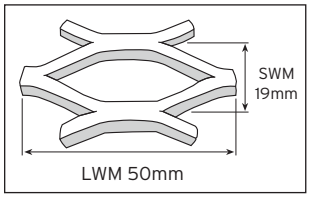


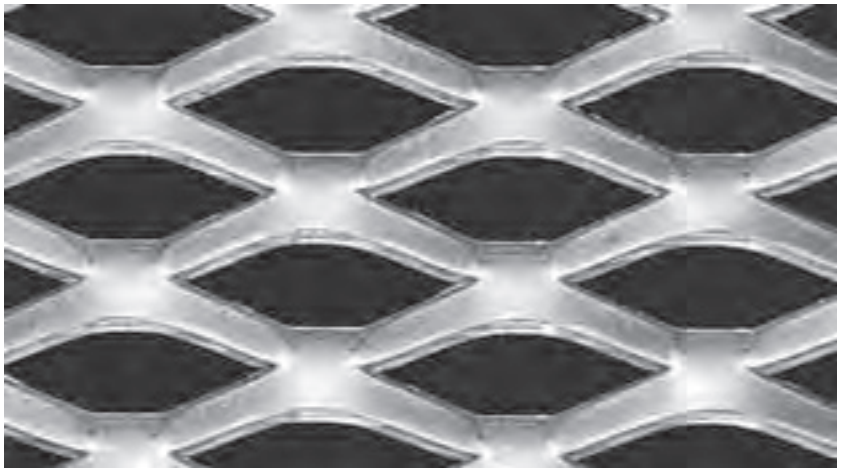
3430 Profile



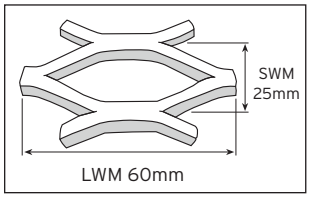
AGRICULTURAL MESH RANGE

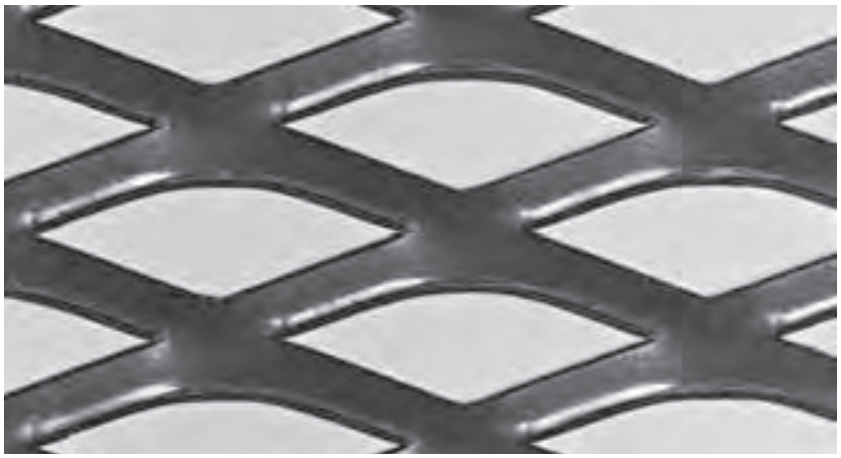
AG1930SP



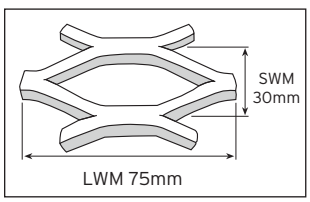


AG2515





AG3012



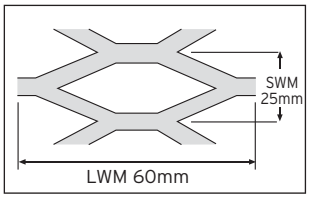
AGRICULTURAL MESH RANGE

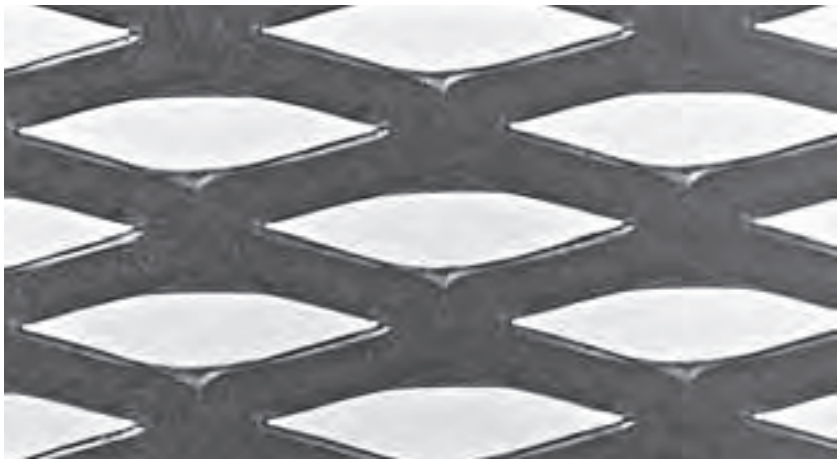
AGRICULTURAL MESH (AG) - STEEL

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m2	Overall Height (mm)
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick		
AG1930SP	1200	3150	50	19	33	11	6	3	12.5	9
AG2511	1200	2400	60	25	45	19	5.6	3	11.0	10
AG2515	1200	2400	60	25	45	15	8	3	15.0	15
AG2515F	1200	2400	60	25	45	9	8	3	15.0	3
AG3012	1200	2400	75	30	59	19	8	3	13.5	12
AG3012F	1200	2400	75	30	55	7	8	3	13.5	3

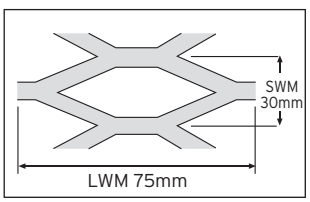
'F' Denotes Flattened Mesh

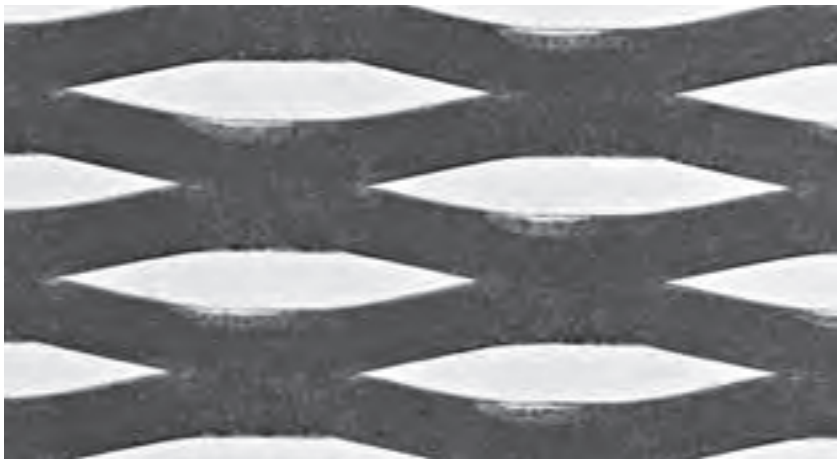
AG2515F



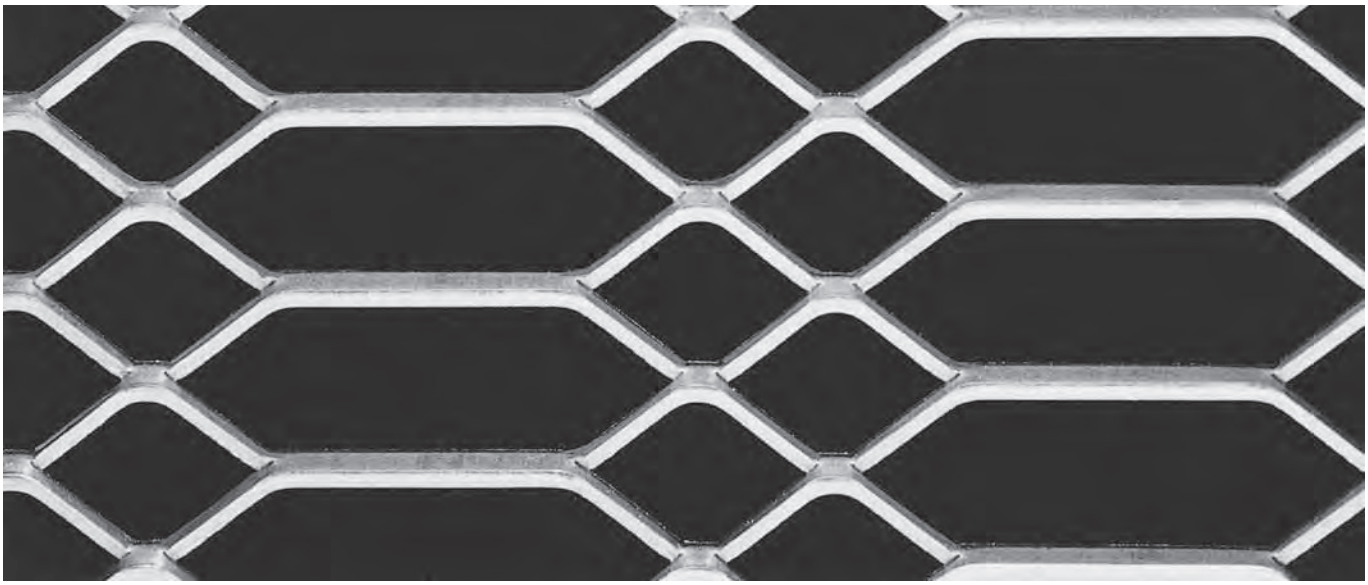


AG3012F

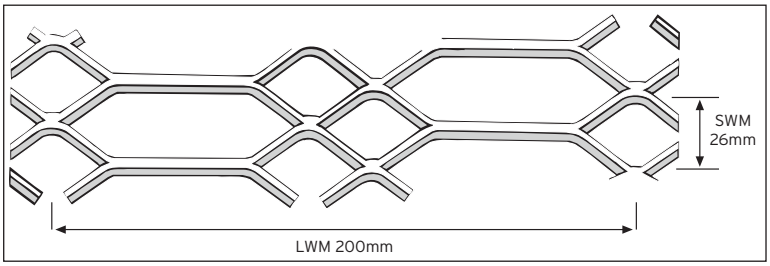


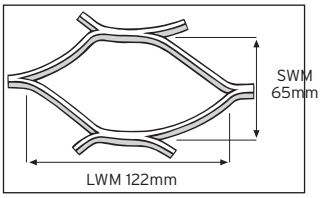


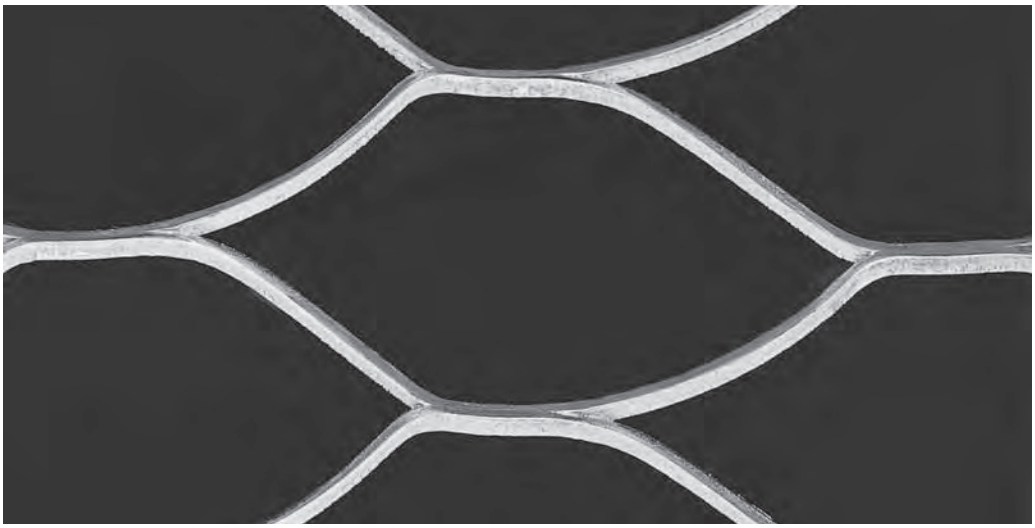
DECORATIVE MESH RANGE



Wentworth profile shown
Refer to specifications for details on Tasman and Macarthur profiles







Minaret profile shown
Refer to specifications for details on Victoria profile.

DECORATIVE MESH RANGE

BALUSTRADING & SECURITY SCREENING - STEEL

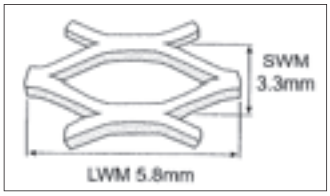
Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area
	LW	SW	LWM	SWM	Width	Thick			Raised Norm-Max
Tasman 25	2400	1200	150	21	2.5	2.5	4.60	5.0	77-81
Tasman 30	2400	1200	150	21	3.0	3.0	6.60	6.7	73-77
Wentworth 30	2400	1200	200	26	3.2	3.0	5.72	6.5	78-95
Macarthur 30	2400	1200	266	36	3.0	3.0	4.00	6.3	–
Victoria 30	2400	900	102	31	3.0	3.0	4.50	5.7	–
Minaret 30	2400	1200	122	65	4.0	3.0	3.20	9.4	86-90

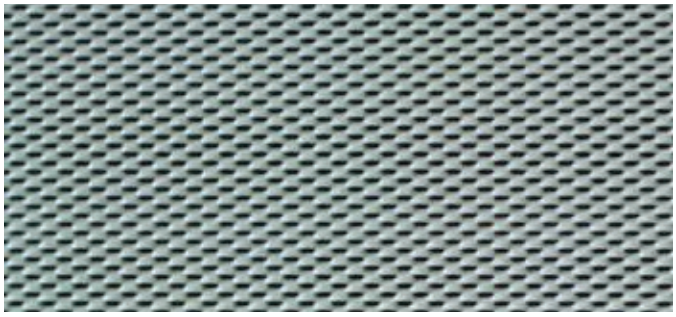
BALUSTRADING & SECURITY SCREENING - ALUMINIUM

Tasman 25A	2400	1200	150	21	2.5	2.5	1.60	5.0	79-81
Tasman 30A	2400	1200	150	21	3.0	3.0	6.60	6.7	73-77
Wentworth 30A	2400	1200	200	26	3.2	3.0	2.08	6.5	78-95
Macarthur 50A	2400	1200	266	36	5.0	5.0	3.80	6.3	–
Victoria 30A	2400	900	102	31	3.0	3.0	1.6	5.7	–
Minaret 50A	2400	1200	136	65	5.0	5.0	2.00	9.4	80-85

ONEWAY VISION MESH

Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Approx. Strand Size (mm)		Weight Kg/m²	Overall Height (mm)	% Open Area
	LW	SW	LWM	SWM	Width	Thick			Raised Norm-Max
602DVA	750	2000	5.8	3.3	1.17	.50	1.00	-	23-36
	825	2000	5.8	3.3	1.17	.50	1.00	-	23-36
	900	2200	5.8	3.3	1.17	.50	1.00	-	23-36
	1200	2200	5.8	3.3	1.17	.50	1.00	-	23-36





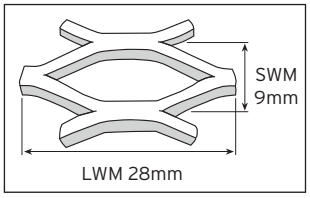
LATH RANGE

LATH - STEEL (GALVABOND)

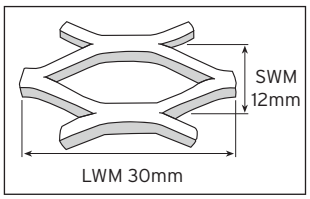
Mesh Reference	Standard Sheet Sizes (mm)		Nominal Size of Mesh (mm)		Nominal Size of Mesh Opening (mm)		Approx. Strand Size (mm)		Weight Kg/m^2
	LW	SW	LWM	SWM	LWO	SWO	Width	Thick	
9mm Lath	2400	700	28	9	22	7	1.7	0.70	1.85
12mm Lath	2400	700	30	12	25	10	1.5	0.55	1.06
15mm Lath	2400	700	38	15	32	14	1.5	0.50	0.90
Riblath 269*	3000	600	10	5	-	-	1.4	0.40	1.85

**600mm max. centres between supports.*

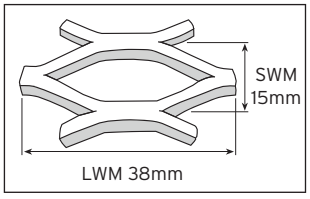
9mm Lath



12mm Lath



15mm Lath

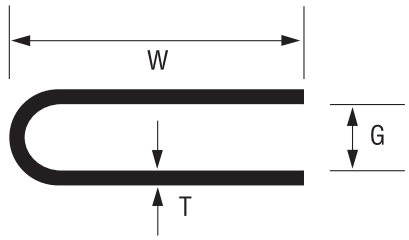


Riblath 269

Edge Trim Sections

This product has been specially produced for expanded steel mesh and offers several alternatives to conventional methods of framing. All Edge Trim Sections are supplied in a Galvabond finish.

EDGE TRIMS - STEEL



Reference	Stock Length (mm)	Width "W" (mm)	Gap "G" (mm)	Thickness "T" (mm)	Mass per Length (kg)
Met 4	3000	19	4	1.2	1.2
Met 6	3000	25	6	1.6	2.3
Met 8	3000	25	8	1.6	2.6
Met 10	3000	25	10	1.6	3.0

Edge Trim Selection Guide			
Met 4	Met 6	Met 8	Met 10
07-08	12-20	LV10G	50-20
07-10	15-20	LV16G	50-30
09-10	19-20	L7609G	100-30
09-16	19-30	L7616G	100-50
12-09	25-16	38-20	
12-12	25-20	38-30	
12-16		38-30CY	
15-10			
15-16			

BUILDING PRODUCTS

Super-Rib® Formwork Mesh

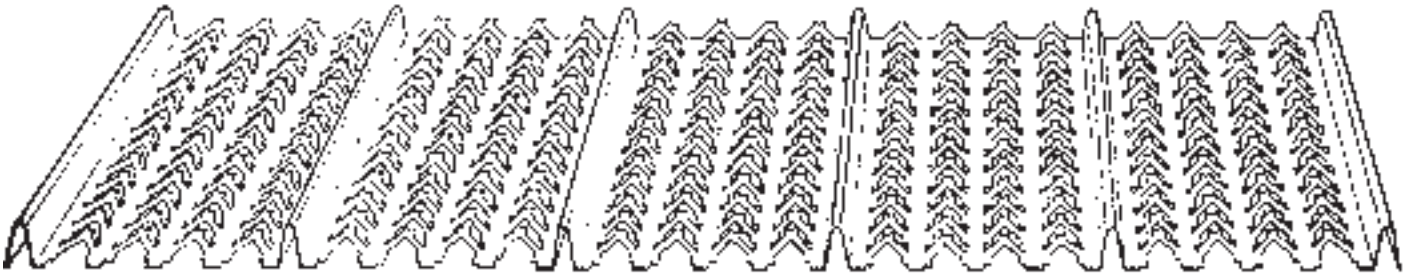
Permanent formwork for concrete. Minimal stripping or preparation of joint surface for bonding to the next pour.

Unique design incorporates mesh and roll-formed ribs to retain poured concrete.

Versatile, lightweight. Easy to cut, bend and shape.

Openwork mesh design can reduce concrete pressure by up to a half, thus formwork supports are considerably reduced.

Can be installed in less time than traditional plywood or steel formwork.

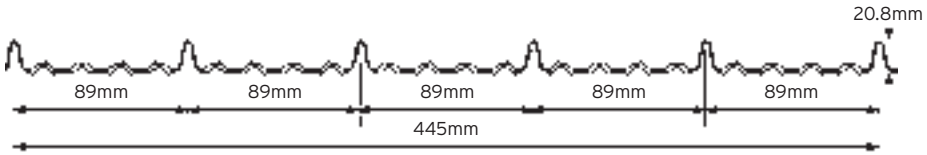


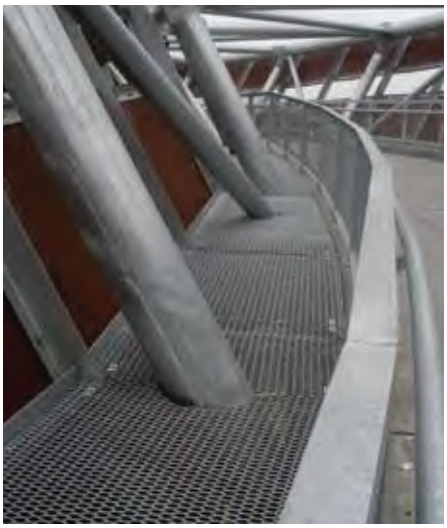
Manufacturing Specification

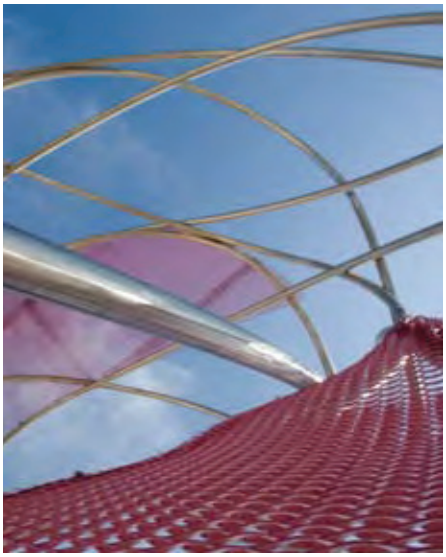
Super-Rib is manufactured from pre-galvanised steel sheet to BS EN10142 (Ref. 1) Fe PO2 G Z 275 and Fe PO3 G Z 275. The mesh and ribs are formed on machines which first cut and press the mesh and then roll-form the ribs. In the same operation the material is stretched to form an expanded mesh.

Two grades of Super-Rib are available to suit different applications. Although formed in identical ways each grade is made from a different material thickness to give the user a choice of structural properties. They are known as grades 2411 and 2811.

Super-Rib® FORMWORK MESH			
Property	Units	Profile	
		2411	2811
Weight per area	kg/m2	6.34	3.39
Weight per metre	kg/m	2.82	1.51
Thickness	mm	0.75	0.4
Sheet Width	mm	445	445
Available Lenghts	mm	2500	2500
Minimum Radius (curved along the length of the rib)	mm	500	500







Perforated & Expanded Metal Company

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