

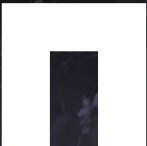
Weldlok®

**MASTERMESH®
EXPANDED
METAL**

Technical Guide



The Weldlok® brand
is proudly owned by



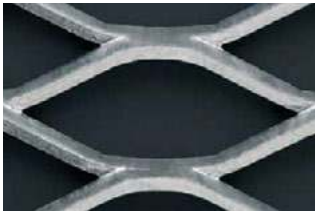
NEPEAN
Building &
Infrastructure

FLORMESH® WALKWAY MESH

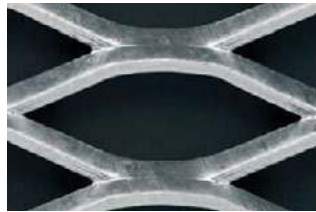
Flormesh® Product Range

| Product Code | Material | Nom. Mesh Dimensions | | Nom. Strand Dimensions | | Sheet Size LWMxSWM | Approx. Wt kg/m ² | Approx. % Open Area |
|--------------|----------|----------------------|-------|------------------------|-----------------|-----------------------|------------------------------|---------------------|
| | | LWM | SWM | Thickness mm | Strand Width mm | | | |
| FM14 | Steel | 135.00 | 45.00 | 5.00 | 8.00 | 600/750/900/1200x3000 | 14.00 | 64 |
| FM19 | Steel | 135.00 | 45.00 | 5.00 | 11.00 | 600/750/900/1200x3000 | 19.00 | 52 |
| FM22 | Steel | 75.00 | 30.00 | 5.00 | 7.50 | 600/750/900/1200x3000 | 22.00 | 50 |
| FM28 | Steel | 75.00 | 30.00 | 5.00 | 10.50 | 600/750/900/1200x3000 | 28.00 | 30 |

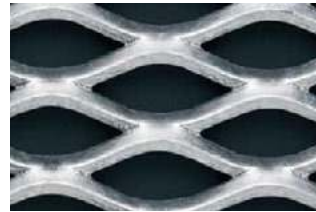
Open area percentages are approximations only.



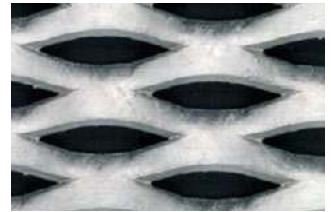
FM14



FM19



FM22



FM28

Flormesh® Safe Loads and Deflections

FM14

| Span (mm) | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|-------------------|-------|-------|-------|------|------|------|------|------|
| Uniform (kPa) | 18.49 | 13.63 | 10.16 | 7.67 | 5.63 | 4.09 | 2.67 | 1.70 |
| Deflection (kPa) | 1.24 | 0.97 | 0.78 | 0.64 | 0.52 | 0.44 | 0.37 | 0.31 |
| Concentrated (kN) | 1.89 | 1.65 | 1.44 | 1.21 | 0.99 | 0.77 | 0.55 | 0.33 |

FM19

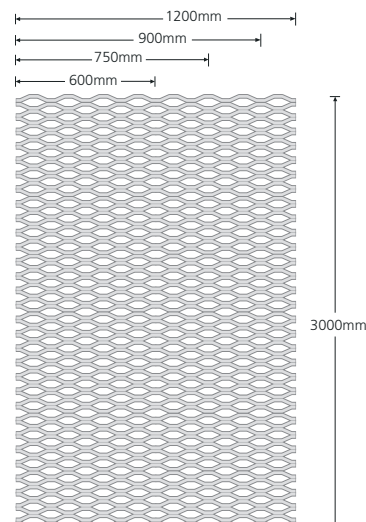
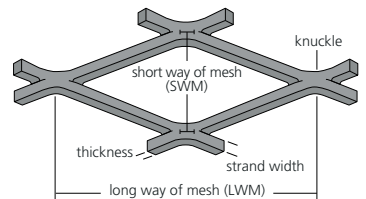
| Span (mm) | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|-------------------|-------|-------|-------|-------|------|------|------|------|
| Uniform (kPa) | 29.51 | 21.63 | 16.00 | 11.89 | 8.49 | 6.04 | 3.88 | 2.07 |
| Deflection (kPa) | 1.60 | 1.27 | 1.04 | 0.87 | 0.73 | 0.63 | 0.53 | 0.46 |
| Concentrated (kN) | 3.41 | 2.97 | 2.51 | 2.08 | 1.62 | 1.18 | 0.72 | 0.41 |

FM22

| Span (mm) | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|-------------------|-------|-------|-------|------|------|------|------|------|
| Uniform (kPa) | 25.50 | 18.54 | 12.32 | 9.69 | 6.81 | 3.63 | 2.61 | 0.94 |
| Deflection (kPa) | 1.55 | 1.22 | 0.99 | 0.81 | 0.68 | 0.57 | 0.48 | 0.41 |
| Concentrated (kN) | 2.41 | 2.16 | 1.92 | 1.67 | 1.46 | 1.18 | 0.88 | 0.70 |

FM28

| Span (mm) | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
|-------------------|-------|-------|-------|-------|------|------|------|------|
| Uniform (kPa) | 27.75 | 20.83 | 15.89 | 11.41 | 9.17 | 6.88 | 5.00 | 3.44 |
| Deflection (kPa) | 2.05 | 1.60 | 1.29 | 1.05 | 0.88 | 0.73 | 0.60 | 0.51 |
| Concentrated (kN) | 4.45 | 3.95 | 3.42 | 2.91 | 2.41 | 1.90 | 1.35 | 0.90 |



Notes

- Load capacities given in the table are for Flormesh® spanning the LWM direction over a clear span with every fourth strand welded to the support and a minimum landing of 25mm (preferred industry standard).
- Uniform distributed load is the maximum load just prior to permanent deflection (yield) of mesh. Permanent yield is span/500 or 0.80mm, whichever is greater.
- Deflections in the tables refer to uniform distributed loads causing a deflection of 10mm or span/360, whichever is less.
- Concentrated loads were applied through a 100mm diameter plate. They correspond to a localised deflection of 10mm.
- For large spans the load carrying capacity is generally governed by deflection; for double and triple spans by uniform or concentrated loads.
- A load of 102kg approximates to 1kN. A load of 102 kg/m² approximates to 1kPa.
- Flormesh® clip sets are available ex-stock.

MASTERMESH® EXPANDED METAL STOCK SHEETS

Flormesh®

| Product Code | Material | Nom. Mesh Dimensions | | Nom. Strand Dimensions | | Sheet Size LWMxSWM | Approx. Wt kg/m ² | Approx. % Open Area |
|--------------|----------|----------------------|-------|------------------------|-----------------|--------------------|------------------------------|---------------------|
| | | LWM | SWM | Thickness mm | Strand Width mm | | | |
| AG15F | Steel | 60.00 | 25.00 | 3.00 | 8.00 | 1200x2400 | 15.0 | 46 |
| FM17 | Steel | 60.00 | 25.00 | 5.00 | 5.50 | 1200x3000 | 17.0 | 51 |

Open area percentages are approximations only.

Diamond Range

| Product Code | Material | Nom. Mesh Dimensions | | Nom. Strand Dimensions | | Sheet Size LWMxSWM | Approx. Wt kg/m ² | Approx. % Open Area |
|--------------|----------|----------------------|-------|------------------------|-----------------|--------------------|------------------------------|---------------------|
| | | LWM | SWM | Thickness mm | Strand Width mm | | | |
| SD0608 | Steel | 6.00 | 3.50 | 0.60 | 0.76 | 1200x1200 | 2.02 | 57 |
| SD0916 | Steel | 10.00 | 5.50 | 0.90 | 1.55 | 1200x1200 | 4.10 | 44 |
| SD0912 | Steel | 15.00 | 5.50 | 0.90 | 1.17 | 1200x1200 | 3.00 | 58 |
| LD1616 | Steel | 28.00 | 9.00 | 1.60 | 1.60 | 1200x2400 | 4.40 | 65 |
| LD1620 | Steel | 38.00 | 15.00 | 1.60 | 2.00 | 1200x2400 | 3.30 | 73 |
| LD1621 | Steel | 50.00 | 19.00 | 1.60 | 2.10 | 1200x2400 | 2.30 | 77 |
| LD3039 | Steel | 50.00 | 19.00 | 3.00 | 3.90 | 1200x2400 | 8.30 | 59 |
| LD2028 | Steel | 60.00 | 25.00 | 2.00 | 2.80 | 1200x2400 | 3.50 | 77 |
| LD3045 | Steel | 76.00 | 38.00 | 3.00 | 4.50 | 2400x1200 | 8.30 | 59 |

Most of the above meshes can be supplied flattened (F). Open area percentages are approximations only.

Sunscreen and Security Mesh

| Product Code | Material | Nom. Mesh Dimensions | | Nom. Strand Dimensions | | Sheet Size LWMxSWM | Approx. Wt kg/m ² | Approx. % Open Area |
|--------------|----------|----------------------|-------|------------------------|-----------------|--------------------|------------------------------|---------------------|
| | | LWM | SWM | Thickness mm | Strand Width mm | | | |
| SUN1663 | Steel | 76.00 | 16.00 | 1.60 | 6.30 | 2400x1200 | 11.08 | 22 |
| SUN1611 | Steel | 75.00 | 30.00 | 1.60 | 10.50 | 2400x1200 | 9.68 | 30 |
| SM3030 | Steel | 19.00 | 12.00 | 3.00 | 3.00 | 1200x2400 | 11.45 | 50 |

Open area percentages are approximations only.



SD0608



SD0916



SD0912



LD1616



LD1620



LD1621



LD3039



LD2028



LD3045



SUN1663G



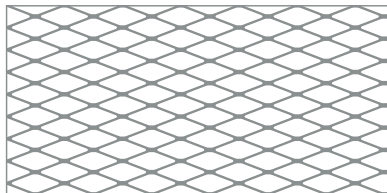
SUN1611G



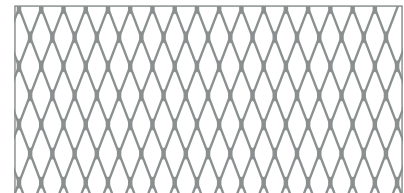
SM3030

GENERAL INFORMATION

Sheet Dimensions



2400 LWM x 1200 SWM
This sheet is 2400mm LWM x 1200mm SWM



1200 LWM x 2400 SWM
This sheet is 1200mm LWM x 2400mm SWM

Materials

Expanded metal sheets can be supplied in the following materials:

- > Untreated mild steel
- > Galvanised mild steel

Tolerances

All measurements specified are nominal and approximate only. Although every effort is made to ensure these dimensions are accurate, they are subject to standard industrial manufacturing tolerances.

NEPEAN Building and Infrastructure

Originally founded as Graham Group, NEPEAN Building & Infrastructure is one of Australia's largest fully integrated manufacturer and supplier of metal products for the industrial and commercial building sectors.

Weldlok®

Grating, handrail and drainage products

Galintel®

Galvanised steel lintels

Mastermesh®

Expanded and perforated metals

Galserv®

Hot-dip galvanising

National Sales Branches

New South Wales

137 Rookwood Road
PO Box 57
Yagoona NSW 2199
P: + 61 2 9707 5088
E: info@weldlok.com.au

Western Australia

98 Campbell Street
Belmont WA 6104
P: + 61 8 9230 8466
E: wa.bi@nepean.com

Victoria

171 Derrimut Drive
Derrimut VIC 3026
P: + 61 3 8353 3701
E: vic.bi@nepean.com

Head Office

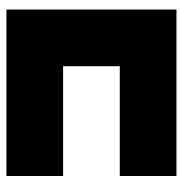
137 Rookwood Road
PO Box 57
Yagoona NSW 2199
P: + 61 2 9707 5000
E: bi@nepean.com

Queensland

967 Nudgee Road
PO Box 283
Banyo QLD 4014
P: + 61 7 3633 1333
E: qld.bi@nepean.com

Information contained in this brochure is supplied in good faith and with the view to assist the user in the correct selection of our products. While every care is taken to ensure that the information contained in this brochure is correct, no warranty is made nor is any condition expressed or implied. As the use of products sold is beyond our control, a condition of purchase is that the purchaser accepts responsibility for ensuring that products purchased are suitable for the intended use. NEPEAN Building & Infrastructure is committed to continual product improvement and therefore reserves the right to change details and designs without notice. All dimensions listed in this brochure are nominal sizes.

© NEPEAN Building & Infrastructure, May 2021.



NEPEAN
Building &
Infrastructure

Freecall 1800 WELDLOK
Visit us online weldlok.com.au