Aluminium Perforated Sheet Stock Patterns

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- Produce as bespoke panel sizes
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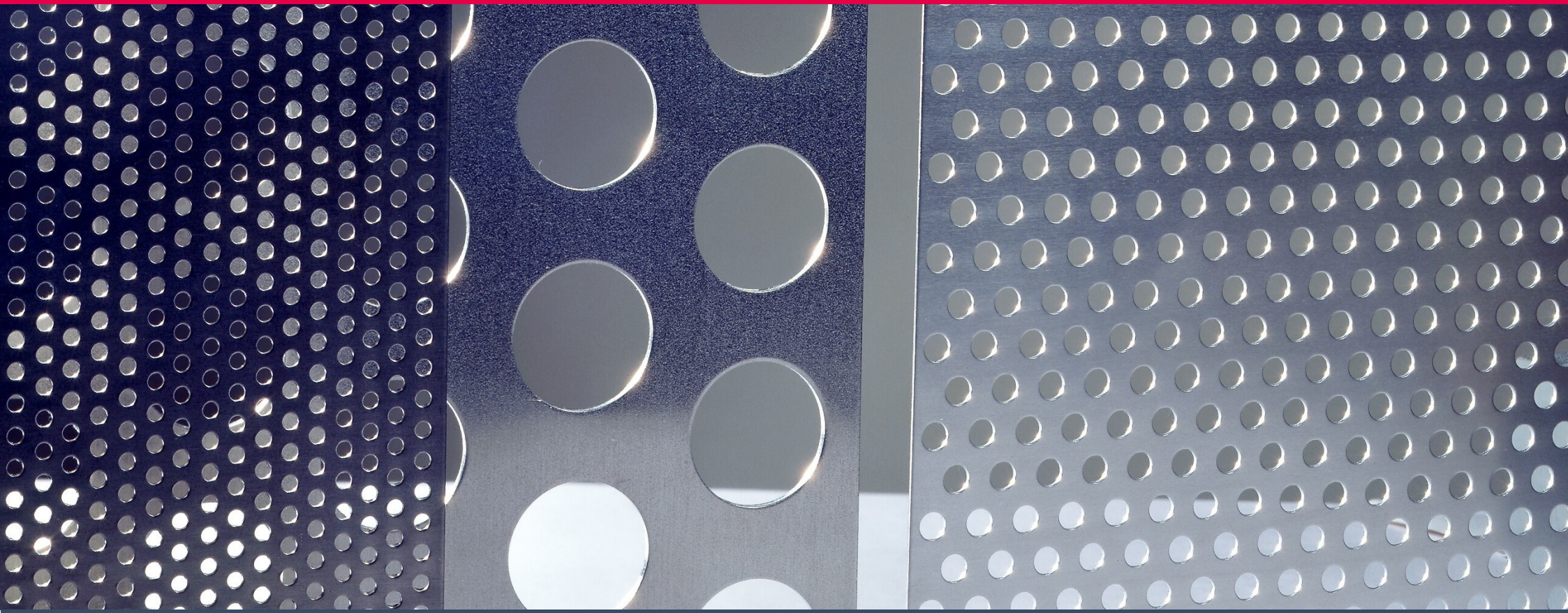
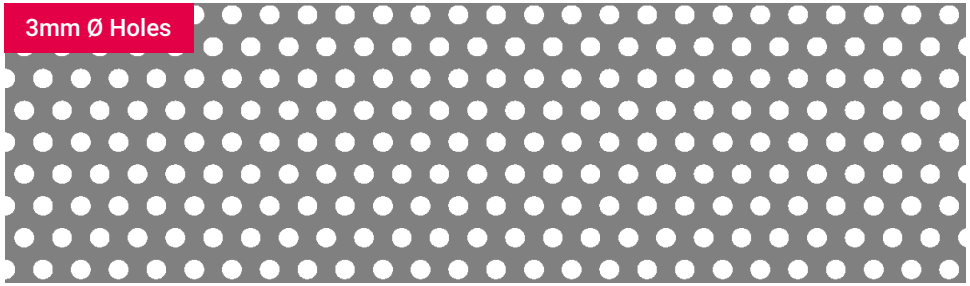


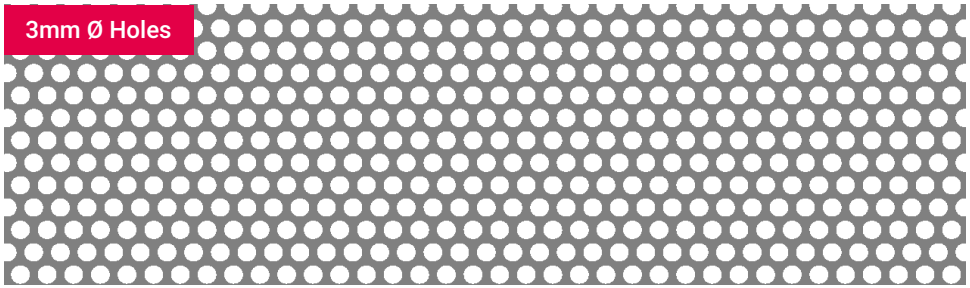
Call our sales team on **020 8692 2255** or visit **www.goodingalum.com**

3mm Ø Holes



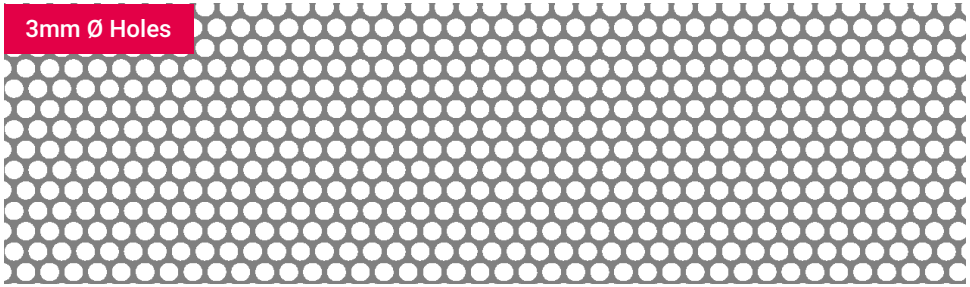
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1601	2000mm x 1000mm x 1.2mm	23%	2.5
GA P1632	2000mm x 1000mm x 2.0mm	23%	4.2

3mm Ø Holes



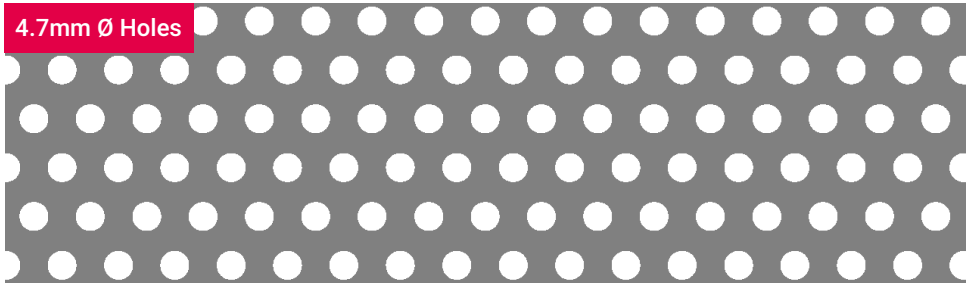
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1651	2000mm x 1000mm x 1.2mm	40%	1.9
GA P1602	2500mm x 1250mm x 1.2mm	40%	1.9
GA P1603	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1604	2500mm x 1250mm x 2.0mm	40%	3.2

3mm Ø Holes



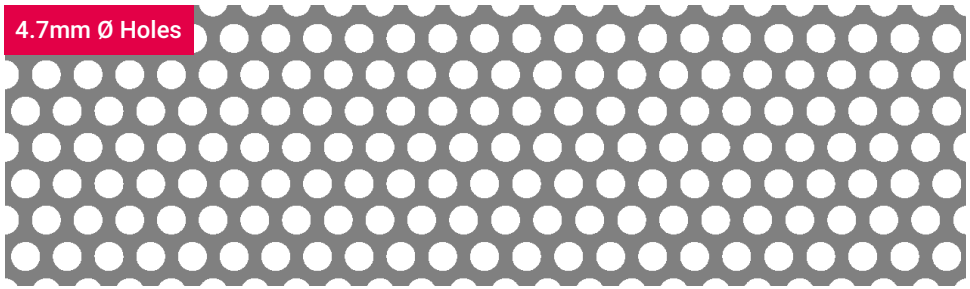
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1605	2000mm x 1000mm x 1.2mm	50%	1.6

4.7mm Ø Holes



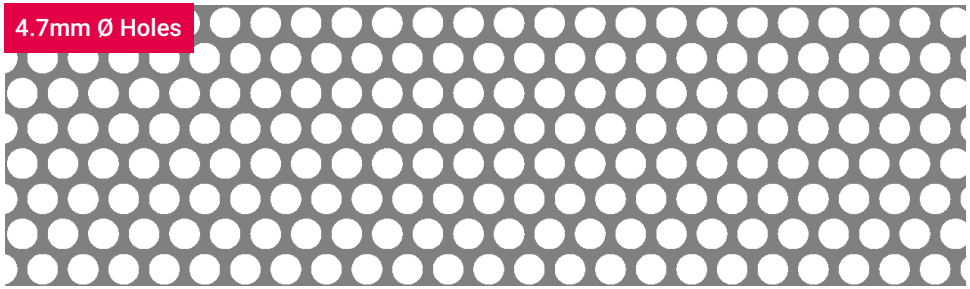
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1694	2000mm x 1000mm x 1.2mm	21%	2.6
GA P1695	2000mm x 1000mm x 2.0mm	21%	4.3
GA P1620	2500mm x 1250mm x 2.0mm	21%	4.3

4.7mm Ø Holes



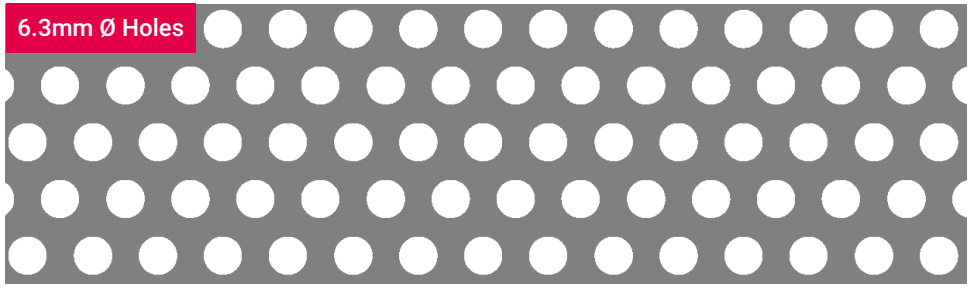
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1652	2000mm x 1000mm x 1.2mm	40%	1.9
GA P1670	2500mm x 1250mm x 1.2mm	40%	1.9
GA P1606	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1607	2500mm x 1250mm x 2.0mm	40%	3.2

4.7mm Ø Holes



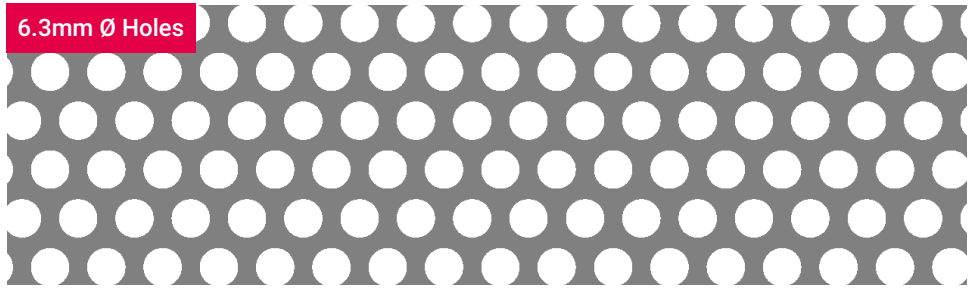
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1608	2000mm x 1000mm x 1.2mm	49%	1.7
GA P1609	2000mm x 1000mm x 2.0mm	49%	2.8

6.3mm Ø Holes



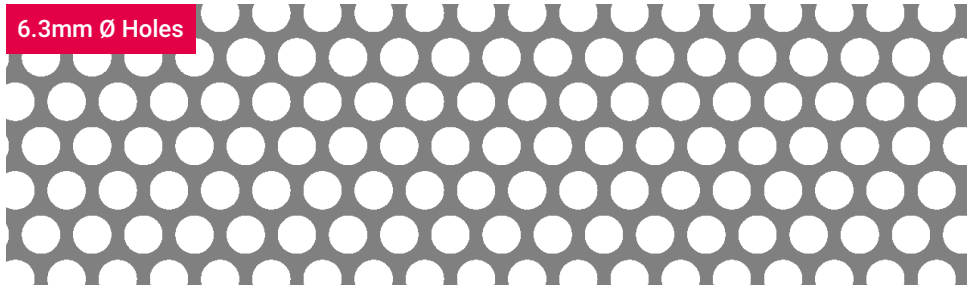
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1696	2000mm x 1000mm x 1.2mm	29%	2.3
GA P1697	2000mm x 1000mm x 2.0mm	29%	3.8
GA P1621	2500mm x 1250mm x 2.0mm	29%	5.8

6.3mm Ø Holes



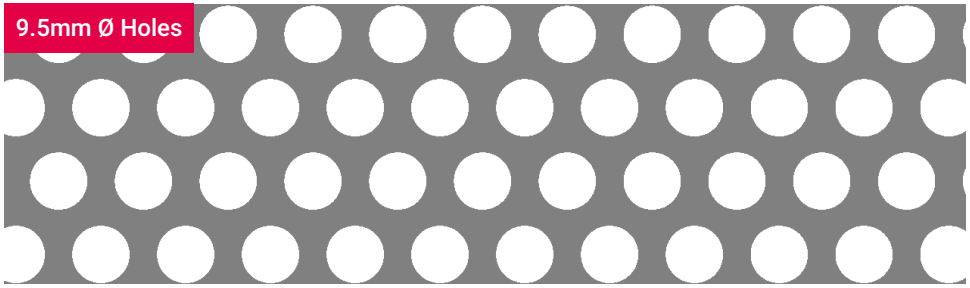
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1653	2000mm x 1000mm x 1.2mm	40%	1.9
GA P1671	2500mm x 1250mm x 1.2mm	40%	1.9
GA P1683	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1681	2500mm x 1250mm x 2.0mm	40%	3.2
GA P1640	2000mm x 1000mm x 3.0mm	40%	4.9
GA P1641	2500mm x 1250mm x 3.0mm	40%	4.9

6.3mm Ø Holes



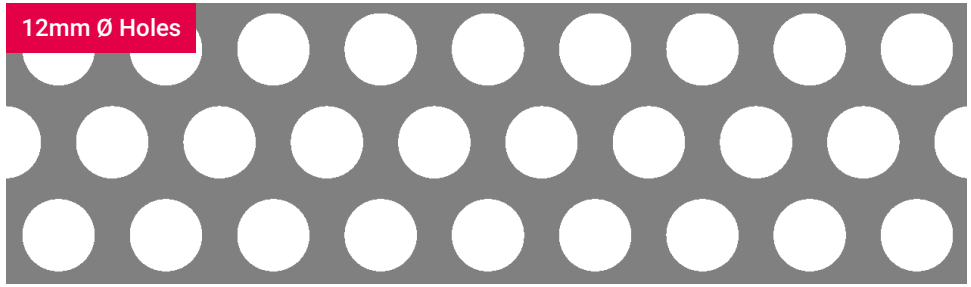
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1698	2000mm x 1000mm x 1.2mm	49%	1.7
GA P1699	2000mm x 1000mm x 2.0mm	49%	2.8

9.5mm Ø Holes



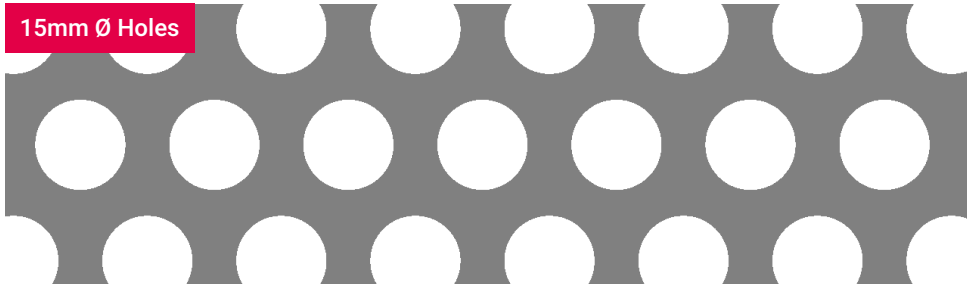
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1654	2000mm x 1000mm x 1.2mm	35%	2.1
GA P1625	2500mm x 1250mm x 1.2mm	35%	2.1
GA P1684	2000mm x 1000mm x 2.0mm	35%	3.5
GA P1685	2500mm x 1250mm x 2.0mm	35%	3.5
GA P1642	2000mm x 1000mm x 3.0mm	35%	5.3
GA P1643	2500mm x 1250mm x 3.0mm	35%	5.3

12mm Ø Holes



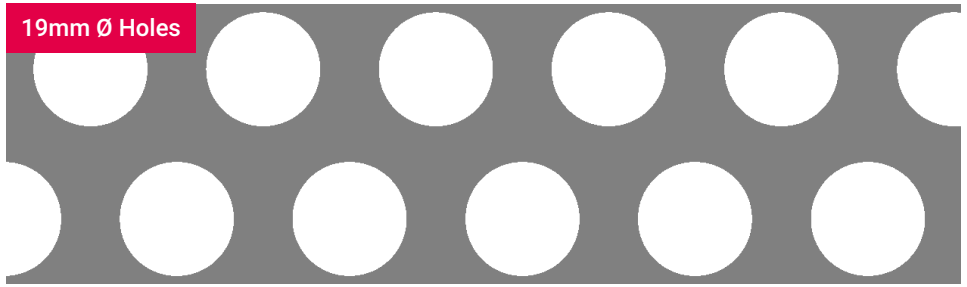
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1656	2000mm x 1000mm x 1.2mm	40%	1.9
GA P1687	2500mm x 1250mm x 1.2mm	40%	1.9
GA P1686	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1688	2500mm x 1250mm x 2.0mm	40%	3.2
GA P1674	2000mm x 1000mm x 3.0mm	40%	4.9
GA P1675	2500mm x 1250mm x 3.0mm	40%	4.9

15mm Ø Holes

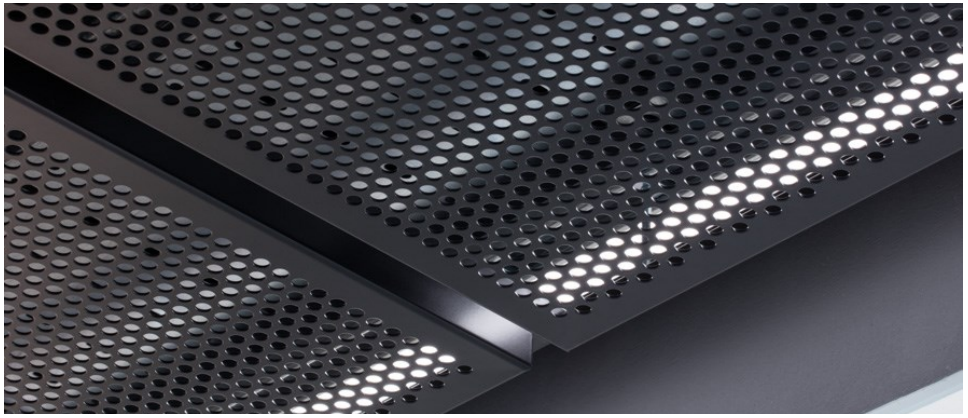


Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1689	2000mm x 1000mm x 1.2mm	40%	1.9
GA P1690	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1691	2500mm x 1250mm x 2.0mm	40%	3.2
GA P1676	2000mm x 1000mm x 3.0mm	40%	4.9
GA P1677	2500mm x 1250mm x 3.0mm	40%	4.9

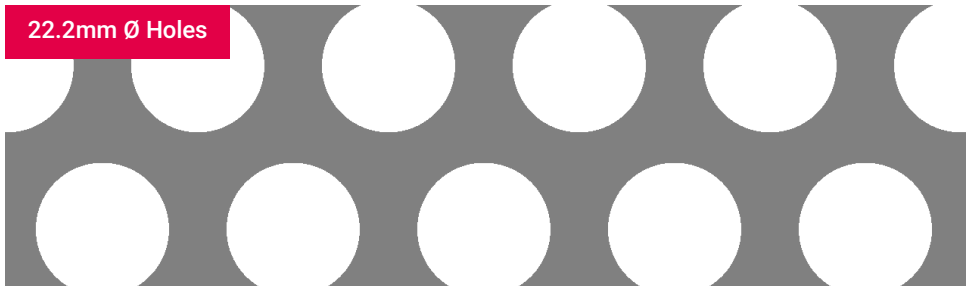
19mm Ø Holes



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1623	2000mm x 1000mm x 2.0mm	40%	3.2
GA P1692	2500mm x 1250mm x 2.0mm	40%	3.2
GA P1678	2000mm x 1000mm x 3.0mm	40%	4.9
GA P1679	2500mm x 1250mm x 3.0mm	40%	4.9

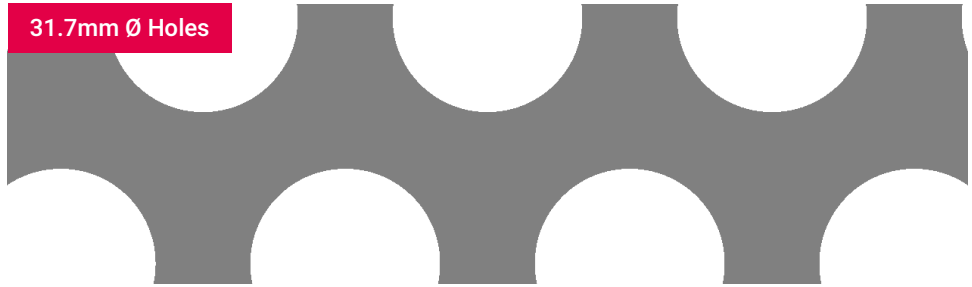


22.2mm Ø Holes



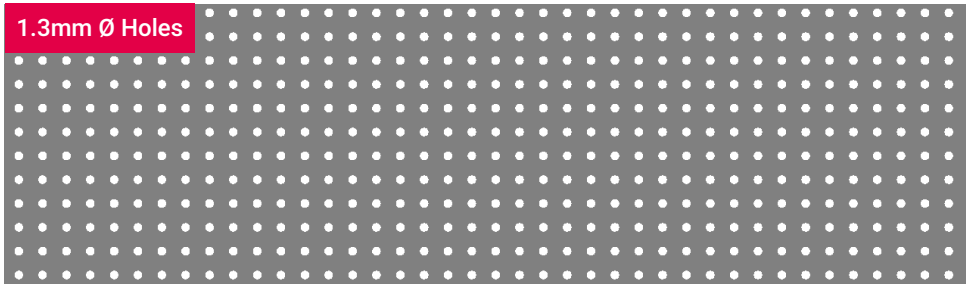
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1624	2000mm x 1000mm x 2.0mm	44%	3.0
GA P1672	2500mm x 1250mm x 2.0mm	44%	3.0
GA P1628	2000mm x 1000mm x 3.0mm	44%	4.5
GA P1673	2500mm x 1250mm x 3.0mm	44%	4.5

31.7mm Ø Holes



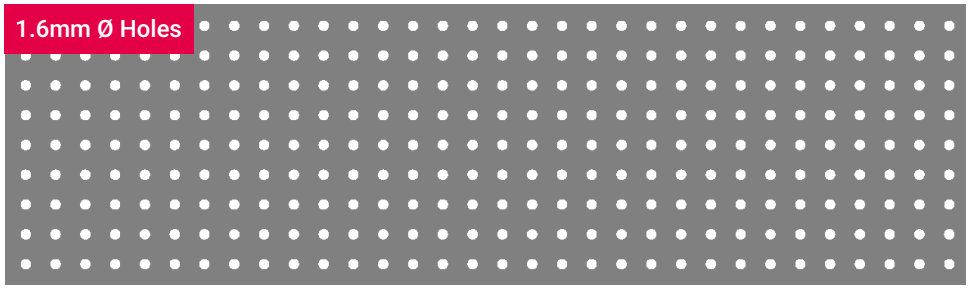
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA P1629	2000mm x 1000mm x 2.0mm	44%	3.0
GA P1626	2500mm x 1250mm x 2.0mm	44%	3.0
GA P1630	2000mm x 1000mm x 3.0mm	44%	4.5
GA P1636	2500mm x 1250mm x 3.0mm	44%	4.5

1.3mm Ø Holes



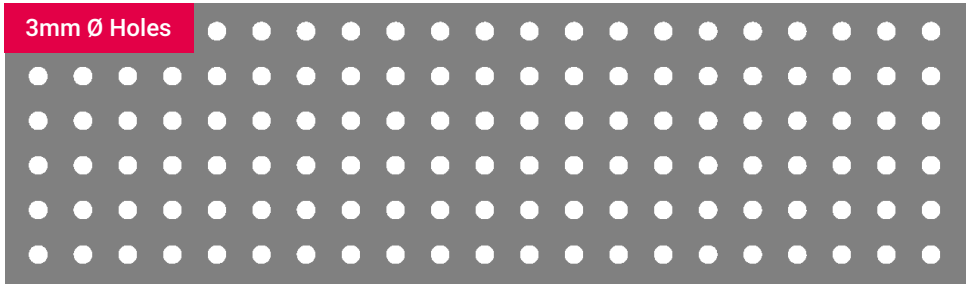
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP613	2000mm x 1000mm x 1.2mm	8%	3.0

1.6mm Ø Holes



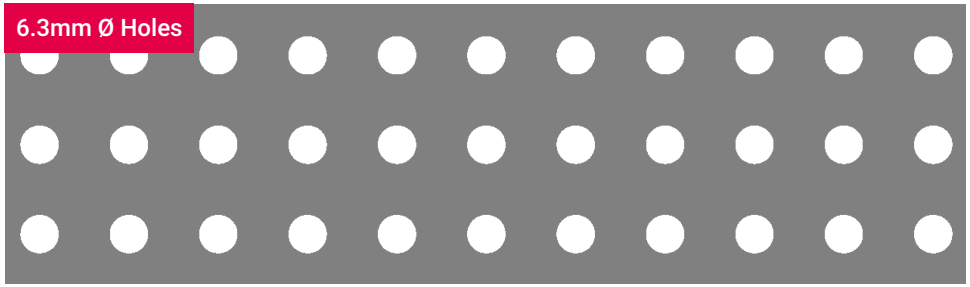
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP616	2000mm x 1000mm x 1.2mm	8%	3.0

3mm Ø Holes



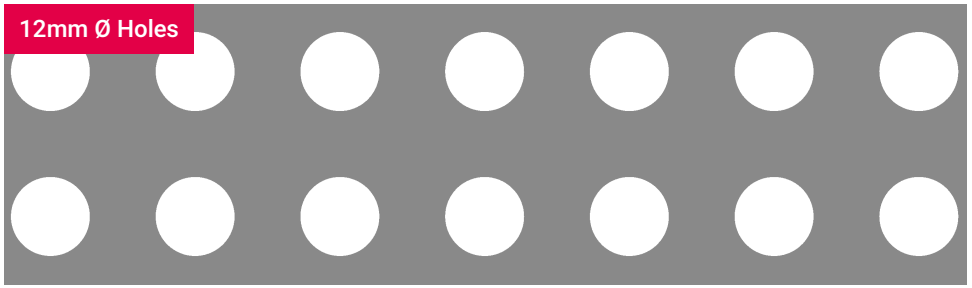
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP631	2000mm x 1000mm x 1.2mm	12%	2.9
GA PSP632	2000mm x 1000mm x 2.0mm	12%	4.7

6.3mm Ø Holes



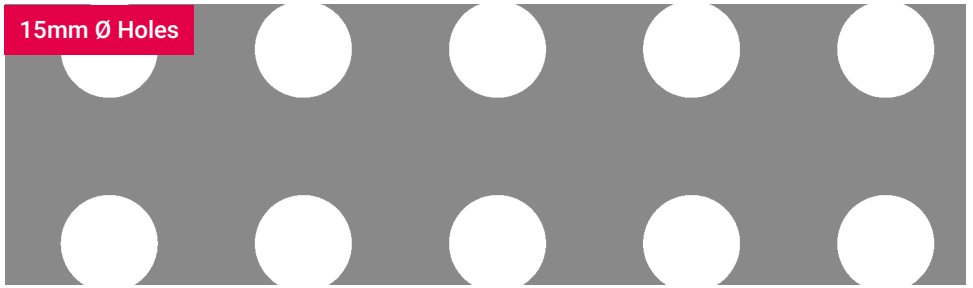
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP641	2000mm x 1000mm x 1.2mm	15%	2.8
GA PSP642	2000mm x 1000mm x 2.0mm	15%	4.6
GA PSP644	2000mm x 1000mm x 3.0mm	15%	6.9
GA PSP645	2500mm x 1250mm x 3.0mm	15%	6.9

12mm Ø Holes



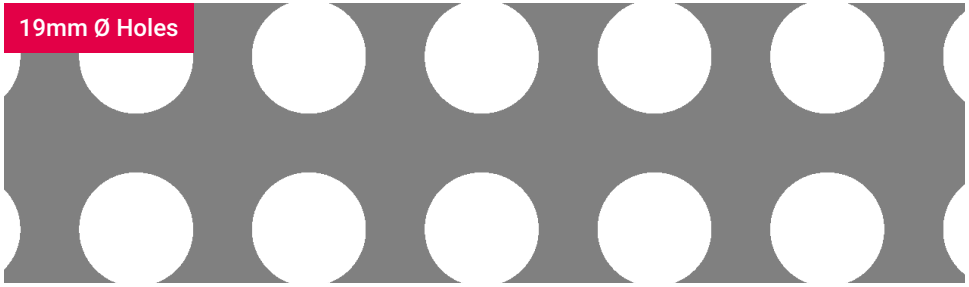
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP650	2000mm x 1000mm x 2.0mm	23%	4.2
GA PSP651	2500mm x 1250mm x 2.0mm	23%	4.2
GA PSP652	2000mm x 1000mm x 3.0mm	23%	6.2
GA PSP653	2500mm x 1250mm x 3.0mm	23%	6.2

15mm Ø Holes



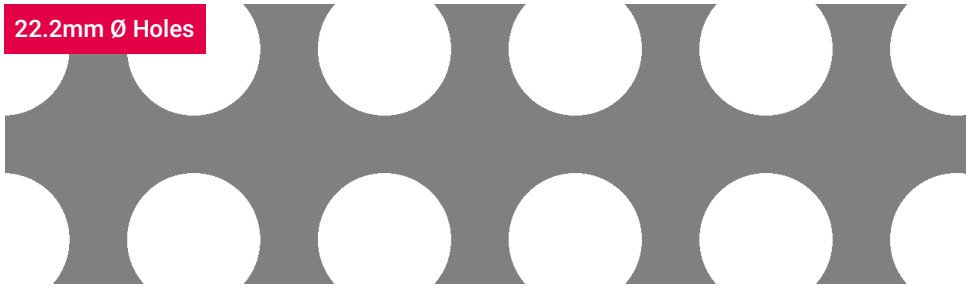
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP654	2000mm x 1000mm x 2.0mm	20%	4.3
GA PSP655	2500mm x 1250mm x 2.0mm	20%	4.3
GA PSP656	2000mm x 1000mm x 3.0mm	20%	6.5
GA PSP657	2500mm x 1250mm x 3.0mm	20%	6.5

19mm Ø Holes



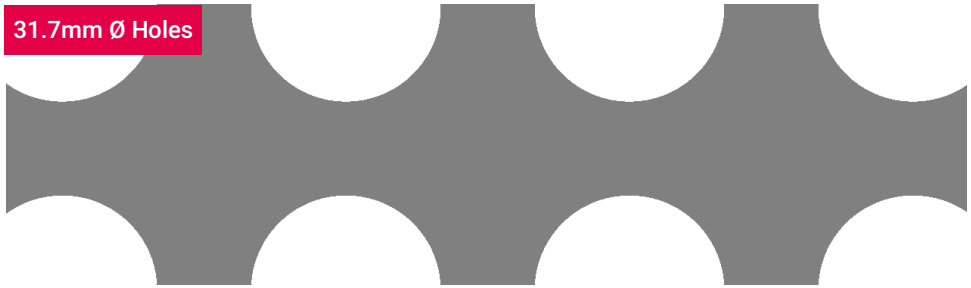
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP692	2000mm x 1000mm x 2.0mm	34%	3.6
GA PSP658	2500mm x 1250mm x 2.0mm	34%	3.6
GA PSP659	2000mm x 1000mm x 3.0mm	34%	5.4
GA PSP660	2500mm x 1250mm x 3.0mm	34%	5.4

22.2mm Ø Holes



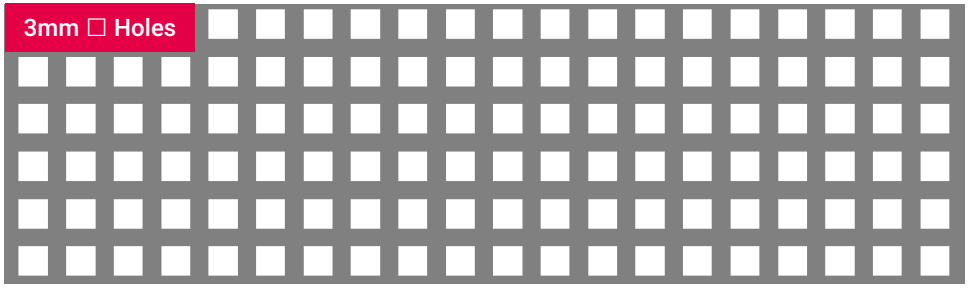
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP672	2000mm x 1000mm x 2.0mm	37%	3.4
GA PSP674	2500mm x 1250mm x 2.0mm	37%	3.4
GA PSP673	2000mm x 1000mm x 3.0mm	37%	5.1
GA PSP675	2500mm x 1250mm x 3.0mm	37%	5.1

31.7mm Ø Holes



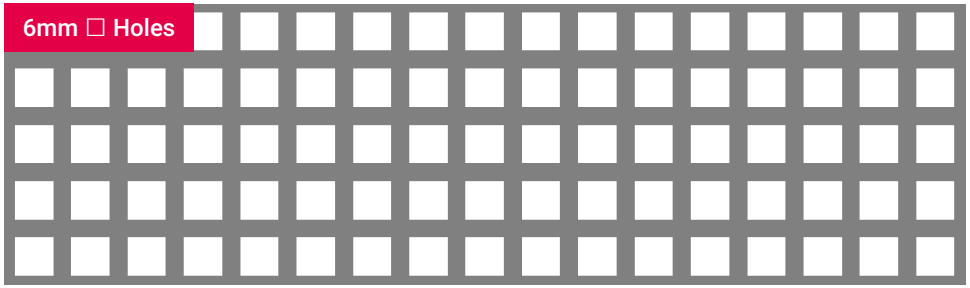
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSP626	2000mm x 1000mm x 2.0mm	35%	3.5
GA PSP627	2500mm x 1250mm x 2.0mm	35%	3.5
GA PSP636	2000mm x 1000mm x 3.0mm	35%	5.3
GA PSP637	2500mm x 1250mm x 3.0mm	35%	5.3

3mm ☐ Holes



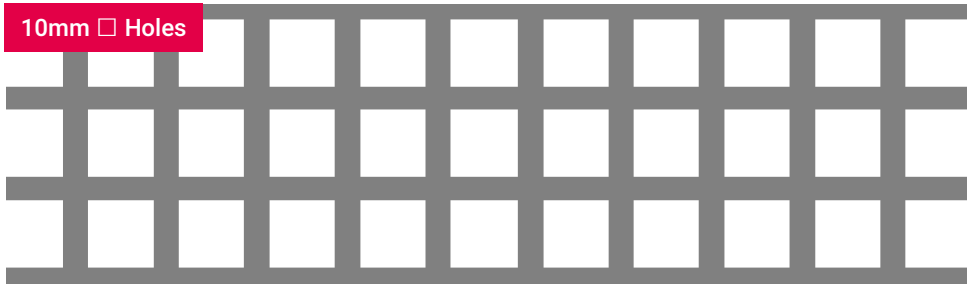
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1660	2000mm x 1000mm x 1.2mm	44%	1.8

6mm ☐ Holes



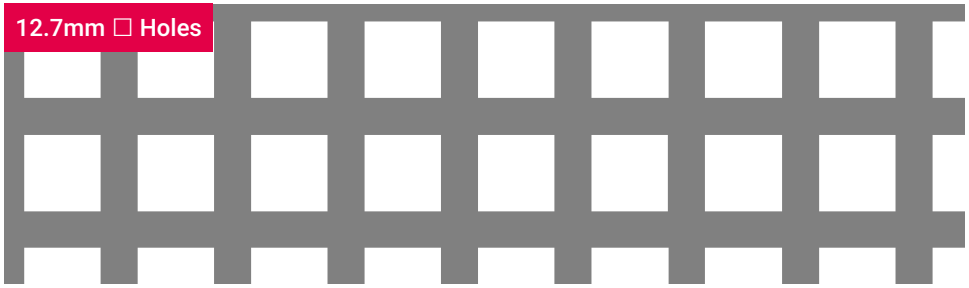
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1661	2000mm x 1000mm x 1.2mm	44%	1.8
GA PS1612	2000mm x 1000mm x 2.0mm	44%	3.0
GA PS1614	2000mm x 1000mm x 3.0mm	44%	4.5
GA PS1615	2500mm x 1250mm x 3.0mm	44%	4.5

10mm ☐ Holes



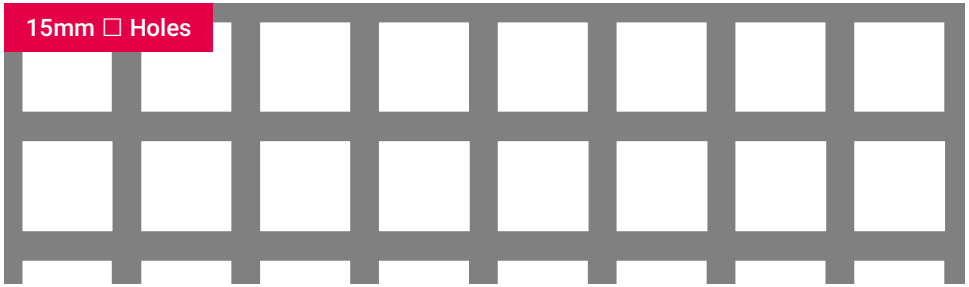
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1621	2000mm x 1000mm x 1.2mm	44%	1.8
GA PS1622	2000mm x 1000mm x 2.0mm	44%	3.0
GA PS1624	2000mm x 1000mm x 3.0mm	44%	4.5
GA PS1627	2500mm x 1250mm x 3.0mm	44%	4.5

12.7mm ☐ Holes



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1662	2000mm x 1000mm x 1.2mm	44%	1.8
GA PS1663	2500mm x 1250mm x 1.2mm	44%	1.8
GA PS1670	2000mm x 1000mm x 2.0mm	44%	3.0
GA PS1693	2500mm x 1250mm x 2.0mm	44%	3.0
GA PS1694	2000mm x 1000mm x 3.0mm	44%	4.5
GA PS1671	2500mm x 1250mm x 3.0mm	44%	4.5

15mm ☐ Holes

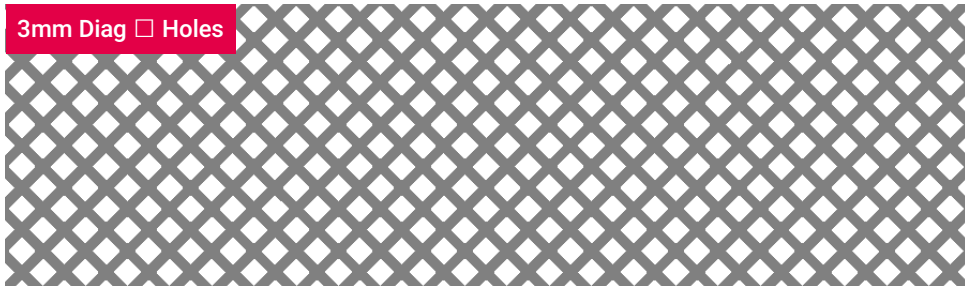


Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1695	2000mm x 1000mm x 2.0mm	56%	2.3
GA PS1634	2000mm x 1000mm x 3.0mm	56%	3.6
GA PS1635	2500mm x 1250mm x 3.0mm	56%	3.6

19mm ☐ Holes

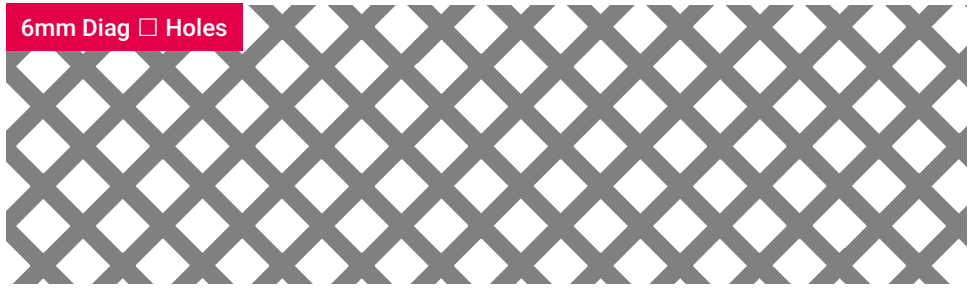
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PS1674	2000mm x 1000mm x 2.0mm	44%	1.8
GA PS1664	2500mm x 1250mm x 2.0mm	44%	3.0
GA PS1675	2000mm x 1000mm x 3.0mm	44%	4.5
GA PS1665	2500mm x 1250mm x 3.0mm	44%	4.5

3mm Diag ☐ Holes



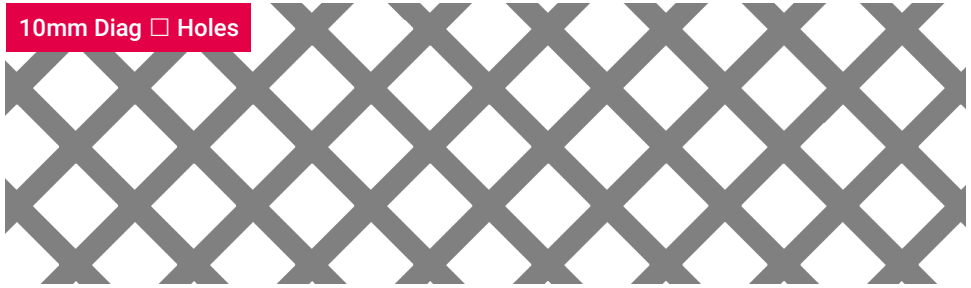
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD100	2000mm x 1000mm x 1.2mm	44%	1.8

6mm Diag ☐ Holes



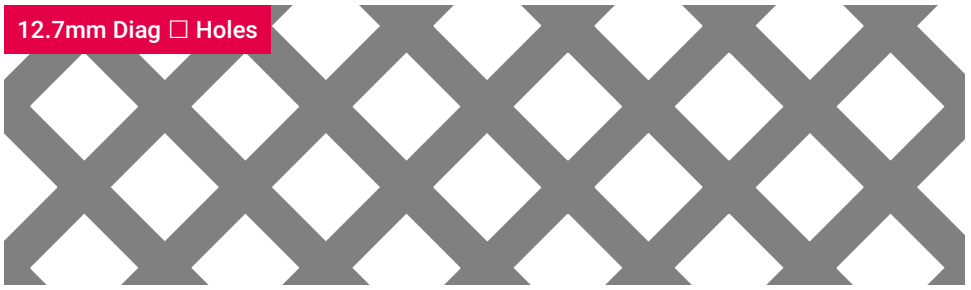
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD101	2000mm x 1000mm x 1.2mm	44%	1.8
GA PD102	2000mm x 1000mm x 2.0mm	44%	3.0

10mm Diag ☐ Holes



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD103	2000mm x 1000mm x 1.2mm	44%	1.8
GA PD104	2000mm x 1000mm x 2.0mm	44%	3.0

12.7mm Diag ☐ Holes

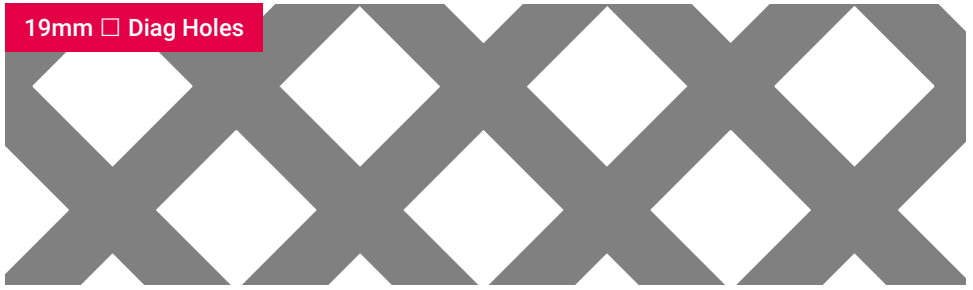


Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD105	2000mm x 1000mm x 1.2mm	44%	1.8
GA PD106	2000mm x 1000mm x 2.0mm	44%	3.0
GA PD117	2000mm x 1000mm x 3.0mm	44%	4.5
GA PD118	2500mm x 1250mm x 3.0mm	44%	4.5

15mm Diag ☐ Holes

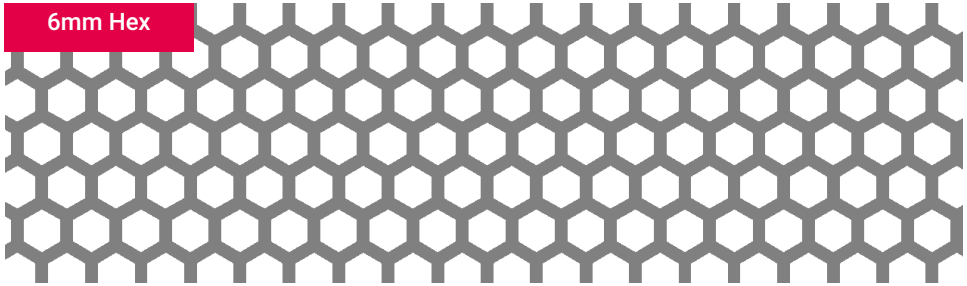
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD107	2000mm x 1000mm x 2mm	56%	2.3
GA PD119	2000mm x 1000mm x 3mm	56%	3.6
GA PD120	2500mm x 1250mm x 3mm	56%	3.6

19mm ☐ Diag Holes



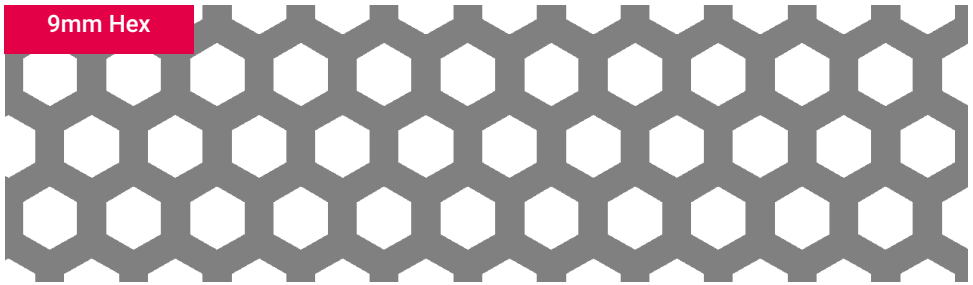
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PD108	2000mm x 1000mm x 2.0mm	44%	3.0
GA PD121	2500mm x 1250mm x 2.0mm	44%	3.0
GA PD122	2000mm x 1000mm x 3.0mm	44%	4.5
GA PD123	2500mm x 1250mm x 3.0mm	44%	4.5

6mm Hex



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PX301	2000mm x 1000mm x 1.2mm	52%	1.6

9mm Hex



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PX302	2000mm x 1000mm x 1.2mm	41%	1.9
GA PX303	2000mm x 1000mm x 2.0mm	41%	3.2
GA PX304	2500mm x 1250mm x 2.0mm	41%	3.2

12mm Hex

Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PX305	2000mm x 1000mm x 2.0mm	56%	2.4
GA PX306	2500mm x 1250mm x 2.0mm	56%	2.4

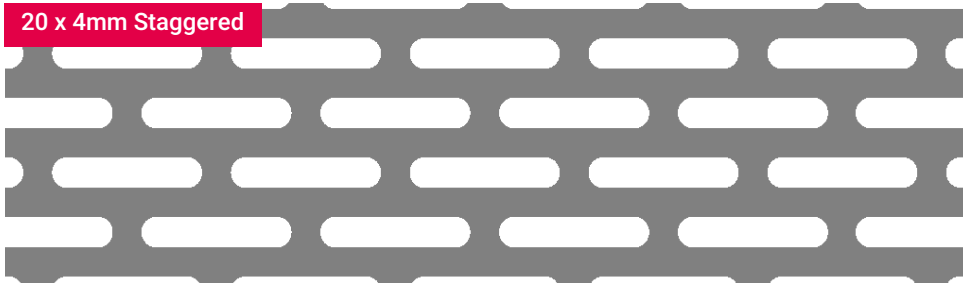
15mm Hex

Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PX307	2000mm x 1000mm x 2.0mm	56%	2.4
GA PX308	2500mm x 1250mm x 2.0mm	56%	2.4

20mm Hex

Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PX309	2000mm x 1000mm x 2.0mm	59%	2.2
GA PX310	2500mm x 1250mm x 2.0mm	59%	2.2

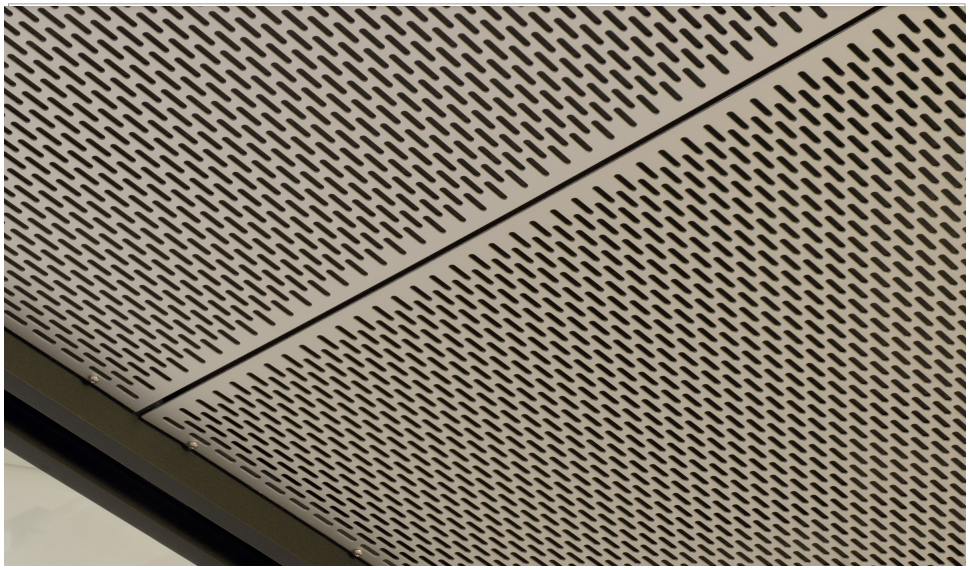
20 x 4mm Staggered



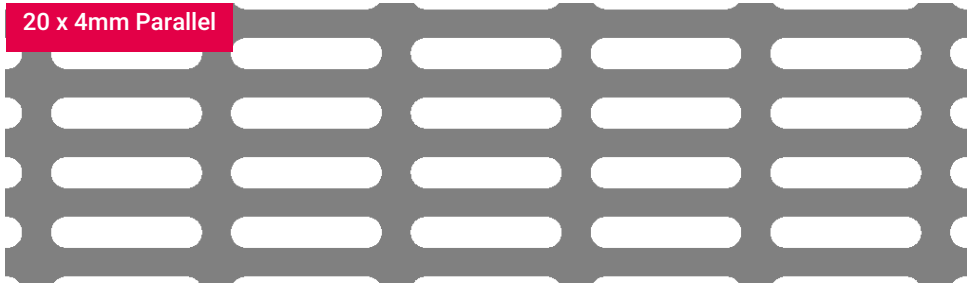
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSS201	2000mm x 1000mm x 1.2mm	40%	1.9
GA PSS202	2000mm x 1000mm x 2.0mm	40%	3.2

25 x 6mm Staggered

Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSS251	2000mm x 1000mm x 1.2mm	44%	1.8
GA PSS252	2000mm x 1000mm x 2.0mm	44%	3.0

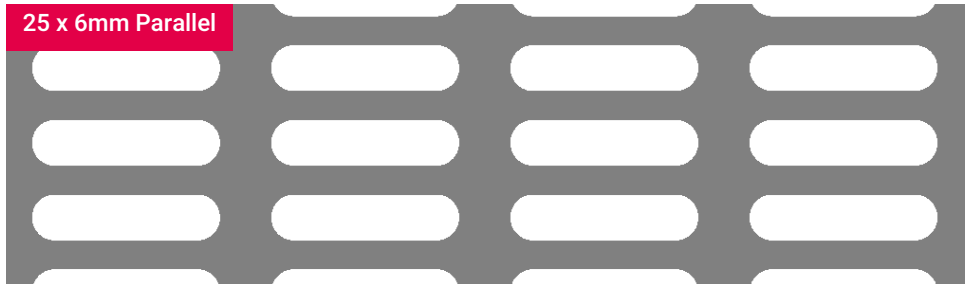


20 x 4mm Parallel

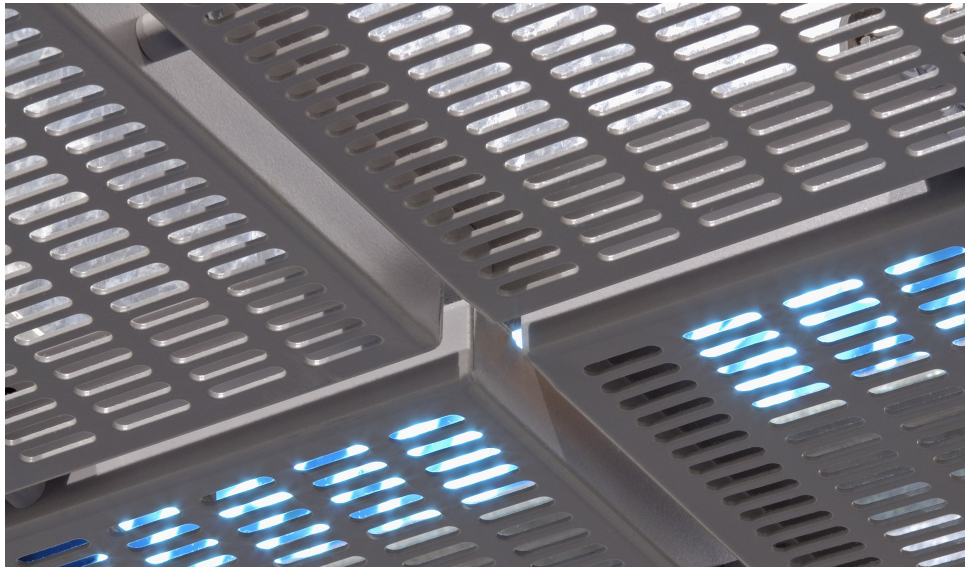


Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PPS201	2000mm x 1000mm x 2.0mm	40%	1.9
GA PPS202	2500mm x 1250mm x 2.0mm	40%	3.4

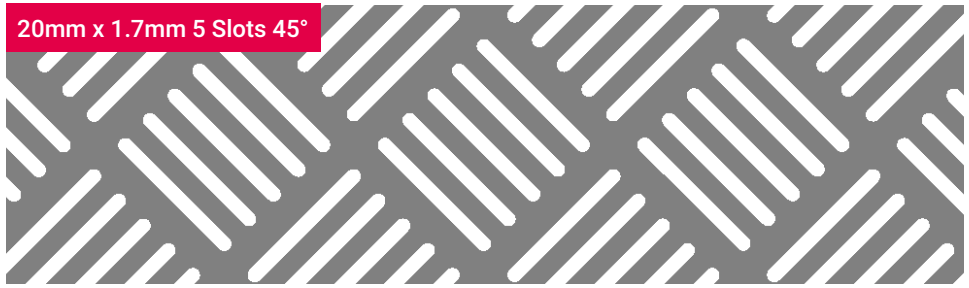
25 x 6mm Parallel



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PPS251	2000mm x 1000mm x 1.2mm	44%	1.8
GA PPS252	2500mm x 1250mm x 2.0mm	44%	3.0

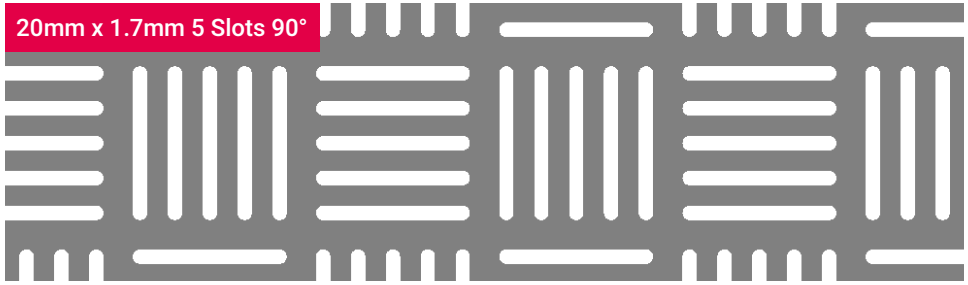


20mm x 1.7mm 5 Slots 45°



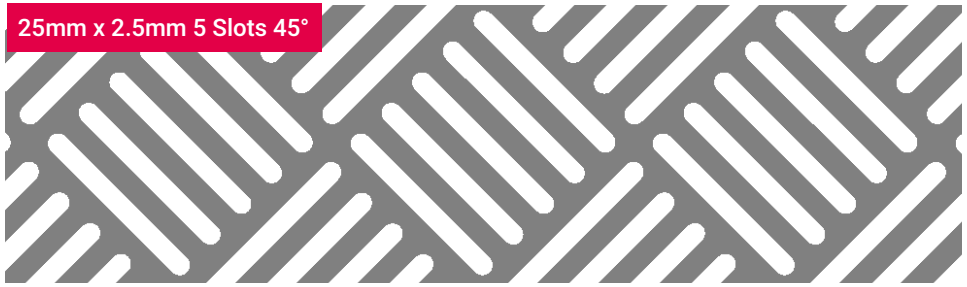
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSL540	2000mm x 1000mm x 1.2mm	29%	2.3

20mm x 1.7mm 5 Slots 90°



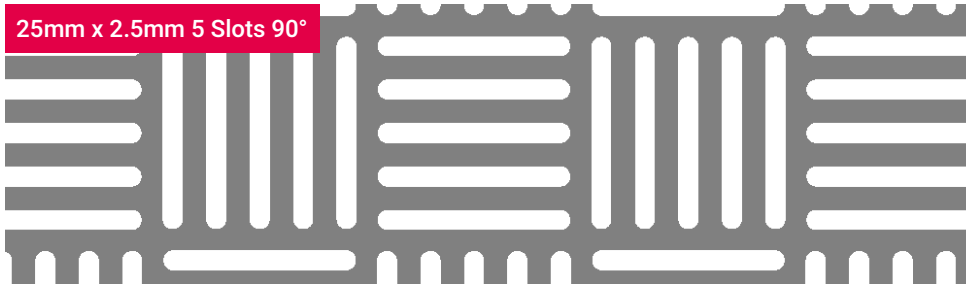
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSL590	2000mm x 1000mm x 1.2mm	29%	2.3

25mm x 2.5mm 5 Slots 45°



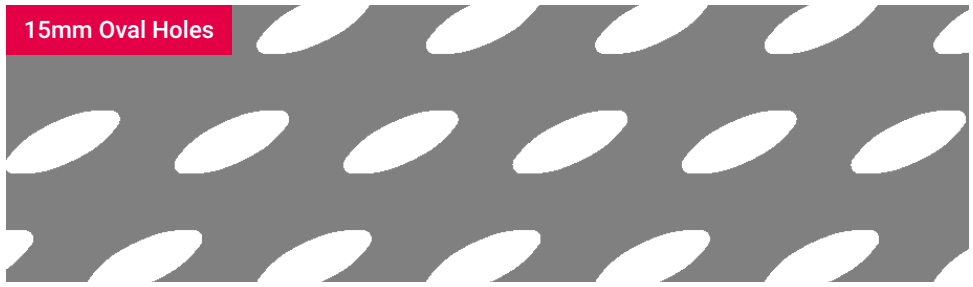
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSL541	2000mm x 1000mm x 1.2mm	39%	2.0
GA PSL542	2000mm x 1000mm x 2.0mm	39%	3.3

25mm x 2.5mm 5 Slots 90°



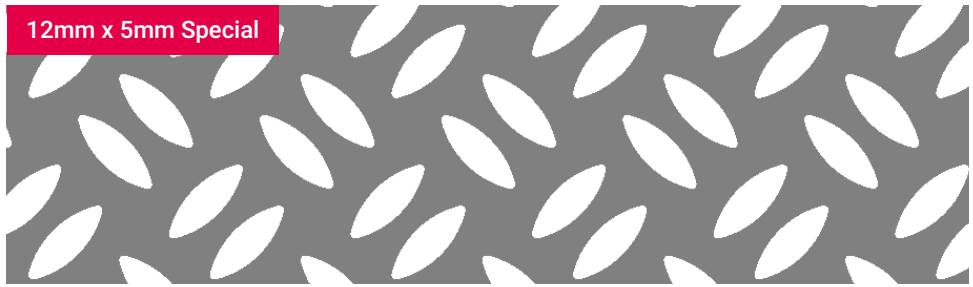
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PSL591	2000mm x 1000mm x 1.2mm	39%	2.0
GA PSL592	2000mm x 1000mm x 2.0mm	39%	3.3

15mm Oval Holes



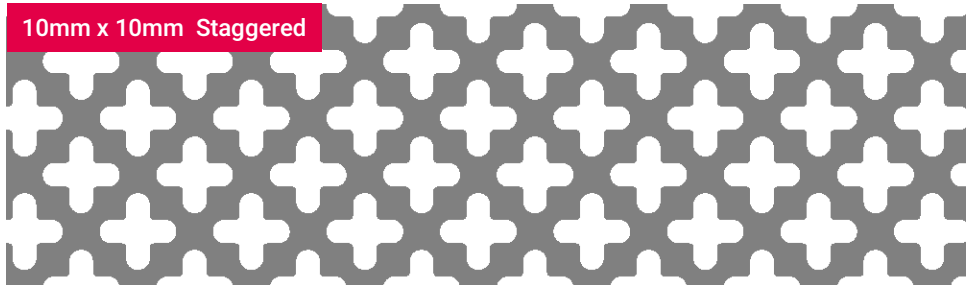
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA POV151	2000mm x 1000mm x 1.2mm	20%	2.6
GA POV152	2000mm x 1000mm x 2.0mm	20%	4.3

12mm x 5mm Special



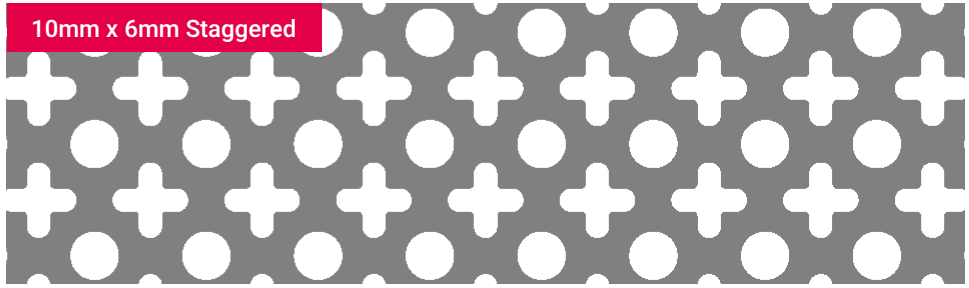
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PGR121	2000mm x 1000mm x 1.2mm	29%	2.3
GA PGR122	2000mm x 1000mm x 2.0mm	29%	3.8

10mm x 10mm Staggered



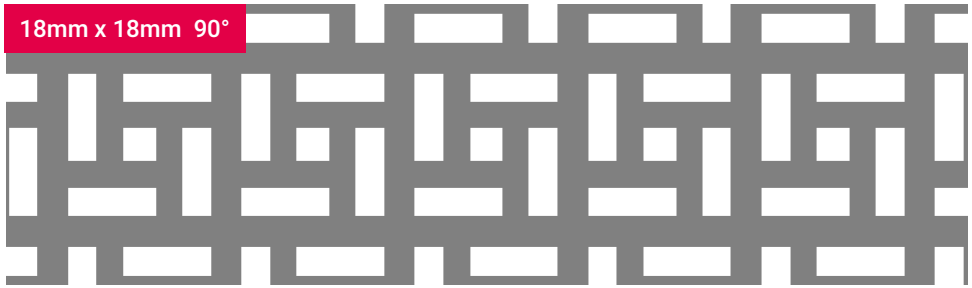
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PCL101	2000mm x 1000mm x 1.2mm	46%	1.8
GA PCL102	2000mm x 1000mm x 2.0mm	46%	2.9

10mm x 6mm Staggered



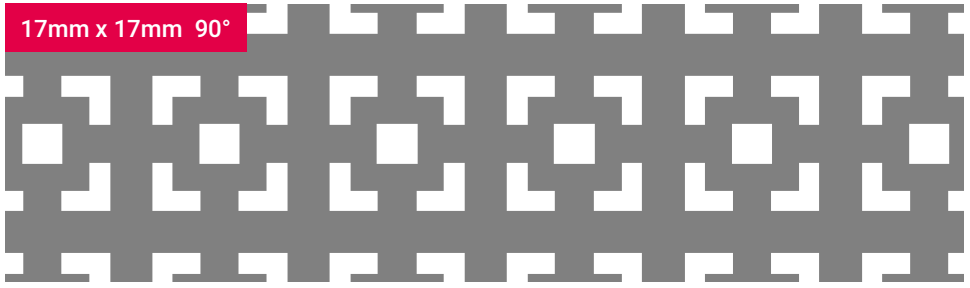
Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PCR101	2000mm x 1000mm x 1.2mm	43%	1.9
GA PCR102	2000mm x 1000mm x 2.0mm	43%	3.0

18mm x 18mm 90°

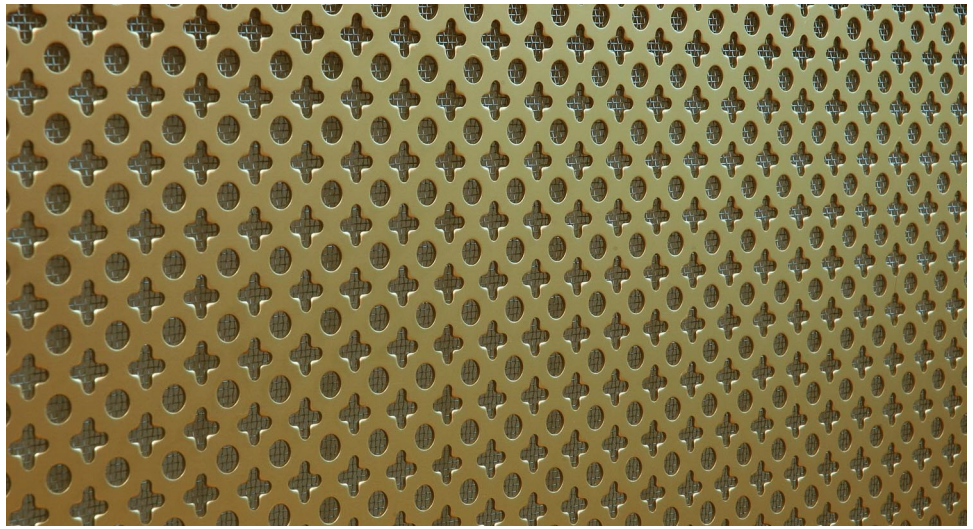


Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PQS181	2000mm x 1000mm x 1.2mm	35%	2.0
GA PQS182	2000mm x 1000mm x 2.0mm	35%	3.5

17mm x 17mm 90°



Product ref.	Sheet size	Open Area	Weight Kg/m²
GA PUC171	2000mm x 1000mm x 1.2mm	24%	2.5
GA PUC172	2000mm x 1000mm x 2.0mm	24%	4.0

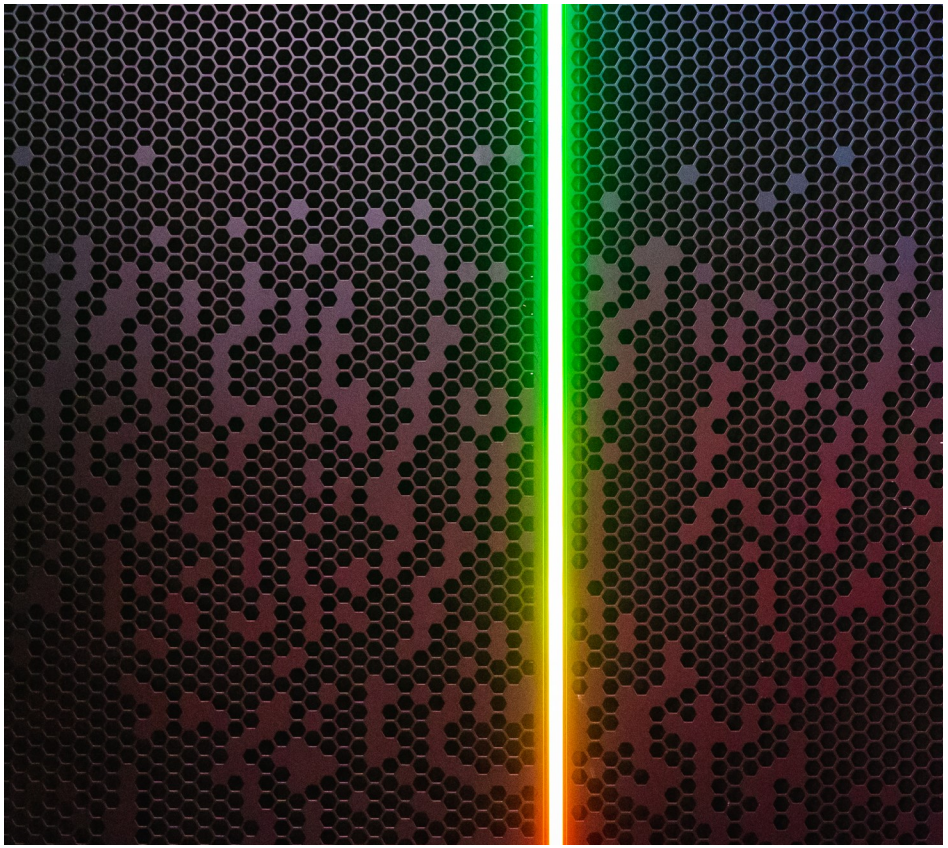


SPECIALLY PERFORATED PANELS

Our modern 5 Star Perforating Service accurately and rapidly fabricates Aluminium Specially Perforated Panels to meet your project specific requirements.

The following design elements can be included as part of a bespoke package.

- Made to order panel sizes
- Plain border margins or areas
- Cut outs to allow for M & E fixtures
- Return folds to panel edges
- Fixing holes in unperforated areas
- Folded edges to fit around design features
- Curved/rolled panels
- Pattern matching of holes to provide aesthetic continuity
- Apply powder coated finishes



UNDERSTANDING PERFORATING PROCESSES

Blank areas/margins can be incorporated into specially perforated panels. Always check with our technical personnel to ensure the suitability of your perforated / plain layout before committing to specification.

Broken edges (absence of border margins) are not supplied by GA on standard stock size or specially perforated panels. Shearing to size from stock panels may result in broken edges.

Cleanliness on mill finish materials may vary from a relatively dry finish to a light residue of water soluble lubricant (necessary for the perforating process). It is advisable to arrange for mill finish materials to be wiped over on site, after installation.

End margins with staggered hole arrangements can result in either a finished or unfinished pattern at each end of the work piece.

Flatness in perforated sheets is never absolute. Factors including overall panel size, the ratio of perforated to plain areas, the % open area, material thickness, all effect the degree of distortion. Our technologically advanced production methods minimise these difficulties and help to produce commercially and visually acceptable degrees of flatness.

Hole size relative to material thickness is an important consideration. Avoid approaching a 1:1 ratio, i.e. 3.5mm hole dia in 3mm thickness. Instances of similar hole size and material thickness result in a less than satisfactory appearance and possibly tool breakage, causing production delays and other complications.

Ideal perforating material thicknesses from a quality processing point of view are between 1 and 3mm.

Short lead times can be provided from the selection of stock sheet configurations.

Increased rigidity can be designed into a perforated panel by increasing material thickness, incorporating a plain border, and / or a surround frame.

Material costs can be minimised by selecting from our range of standard hole size / shape configurations. Specially perforated panels can be produced economically and quickly. Bespoke hole layouts can involve longer lead times and new tooling charges.

Missing or imperfect hole shapes result from broken or damaged punches. This is not an unusual occurrence when perforating large numbers of small holes. It is standard industry practice to supply an acceptable % spoilage factor. GA policy aims to provide as near possible 100% complete perforations.

When specifying perforated 'specials' please confer with our Technical Sales Department **before finalising a design**. Various min / max production ratios apply to hole size, bridge distance, material thickness, end and side margins etc, which need to be observed to avoid possible material distortion and or fracture.

'Open area' in many applications, is of critical importance for reasons of air flow, screening etc. Please refer to the percentage open areas given for each GA standard pattern.

Quoted percentage open areas given in our website relate to the ratio of the total area of the holes to the area of perforated sheet, excluding the unperforated margins.

Plain margins on pre-punched sheets might or will be lost once sheared to size.

Polythene film on the punch face side only, is applied to help protect the material surface from the rigours of the perforating process.

Production tolerances for bespoke items incorporating perforations are less precise than for plain sheet working. Please refer to our GA5* Processing Standard for details.

Round holes with a 60˚staggered pattern, are the most common hole arrangement, this is due to the inherent strength and wide range of available open areas.

Side margins should ideally be kept to an even dimension of less than 80mm, this helps to reduce surface camber and distortion.

Small quantities of 'specials' can often be economically and quickly produced by GA. Our bespoke software accurately calculates best use of materials and punching arrangements.

Standard size panels are shown with nominal overall dimensions, these can vary slightly depending on the necessity to 'square' sheets before perforating commences, and the degree of material 'stretch' during processing. Stock sheets are normally supplied with a minimum border margin.

The two sides of a perforated surface are not the same. The punch face side is where the punch enters the material and the burr side indicates the punch exit on the underside.

Visible faces should be indicated on unsymmetrical panels and fabrications as the punch face side is superior to the burr (underside). It is advisable to avoid specifying mill or anodised finishes when both sides of the sheet are to be closely viewed. Powder coating minimising these difficulties.

Square holes provide good visibility and air flow while providing decorative cover. Staggered patterns for rounds and squares will normally be the short dimension of the sheet.