

PERFORATED MESH DATA SHEET



Perforated Mesh Cladding Systems

Cladding a building with perforated metal is a very effective way to enliven the facade of what would otherwise be a simple cubed structure. From uniform circular perforations to honeycomb-patterned latticework and mesh, through to three-dimensional forms, perforated cladding has the ability to add depth, texture and intrigue to a facade.



Perforated cladding provides a practical purpose, too. Depending on the size of perforations, the amount of natural light reaching the inside of the building can be managed. Large perforations allow more natural light to pass through the cladding, but still protect buildings that have large glazed elements from direct sunlight. In doing this they reduce the amount of solar gain, mitigating the need for energy intensive air conditioning systems.

Perforated or mesh panels have the ability to make a building stand out from the crowd. The material and colour options extend this choice further, including TECU copper and copper alloys, anodised and polyester powder coated aluminium in a wide range of colours, plus weathered steel (Cor-ten) and stainless steel.

Perforated metal specifications

Round hole perforation, triangular pitch.

Calculation of open area in %	R ² X 90.69
	т
Number of holes per m ²	1.154,700
	тт.





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Round hole perforation, triangular pitch.

Calculation of open area in %

Number of holes per m²

R² X 78.5 U1 X U2 1,000,000 U1 X U2

Round hole perforation, diagonal pitch. Calculation of open area in %

Number of hole per m²



M² 1,000,000 M²

R² X 78.5



Euro pattern round hole perforation.

R =	4.5
T 1 =	15
T ₂ =	12.5

 $T_3 = 25$ $T_4 = 25$

Square hole perforation, rectangular pitch.

Calculation of open area in %

Number of hole per m²



 $\begin{array}{r} C^2 X 100 \\
 U^2 X U^2 \\
 1,000,000 \\
 U^2 X U^2
\end{array}$



Square hole perforation, diagonal staggered pitch.

Calculation of open area in %

Number of hole per m²

CD X 100 M² 1,000,000 M²

Slot hole perforation, staggered pitch.

Calculation of open area in %

Number of hole per m²

 $\begin{array}{c} (L \times X - 0.2146 R^2) \times 100 \\ 0.5 \times Z_1 \times Z_2 \\ 1,000,000 \\ 0.5 \times Z_1 \times Z_2 \end{array}$





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Slot hole perforation, rectangular pitch.

Calculation of open area in %	<u>(L x X—0.2146R²) x 100</u>
	0.5 x Z ¹ x Z ²
Number of holes per m ²	1,000,000
	0 5 x 71 x 72

Utilising the latest computer software to pixelate images, logos, letters and numbers. Two Point Seven Facades Ltd can create a bespoke perforation pattern that can be applied to one panel or a number of panels to create a jigsaw that can be applied to a whole building facade. This offers a designer and building owner the ability to set their individual mark on a building facade.

Applications for Perforated Mesh Facades.

Protection:	Depending on the metal you use, perforated metal cladding can provide additional protection from the elements for base materials that are more susceptible to corrosion.
Sound Attenuation:	One of the key benefits of perforated metal is its acoustic qualities. Some exterior or interior walls might not be ideal for sound and echoes. The texture of perforated metal panels could give just the right buffer.
Aesthetics:	When it comes to looks that impress, perforated metal cladding never fails. Featureless walls can be turned it into a piece of art.
Solar Shading:	Especially when a facade has a southern exposure, perforated metal is an extremely effective method of solar shading.

With comprehensive in house design facilities we are able to offer a complete package from development of the architectural perforated mesh specification through to design, fabrication, supply and installation of the product.

