



JAPMESH

Making your home...

JAP *mesh*[™]

JAPMESH

Making your home...

table of contents

.....**Welded Steel Fabric** P02 ~P05

.....**Expanded Metal** P06 ~P09

.....**Perforated Metal Sheets** P10 ~P13

.....**BRC Fencing** P14 ~P17

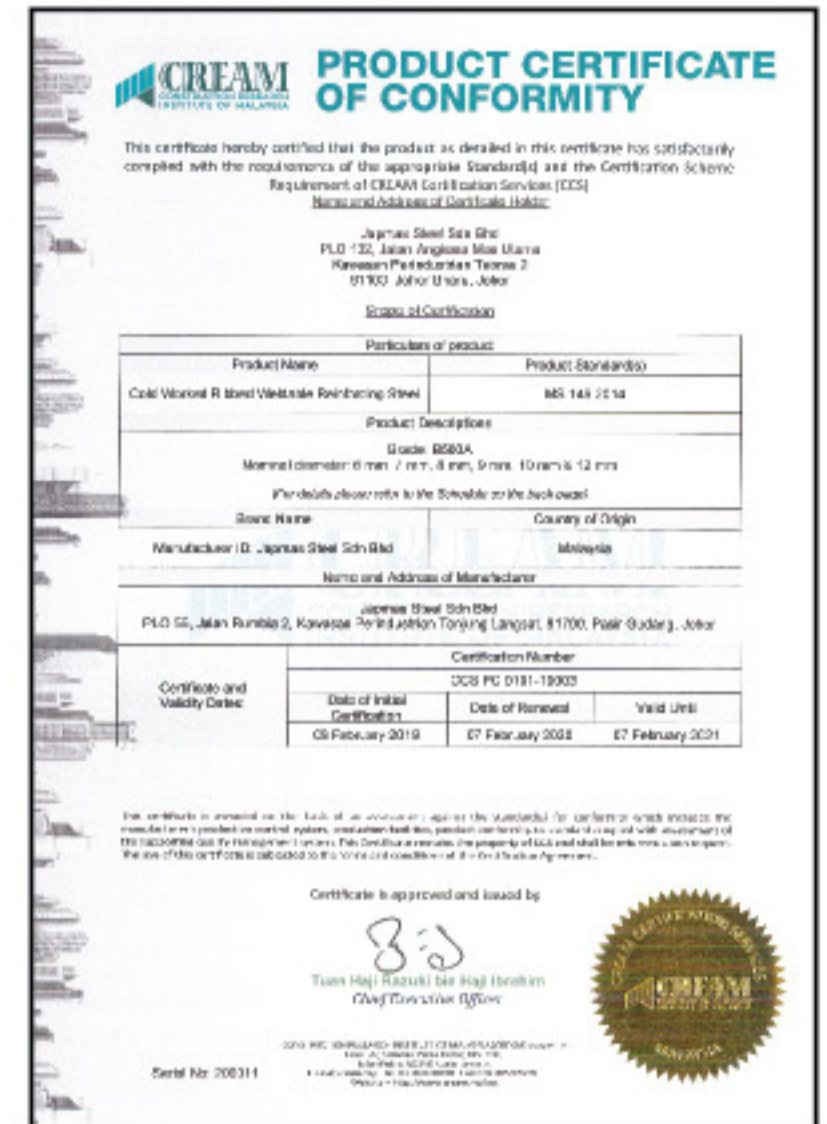
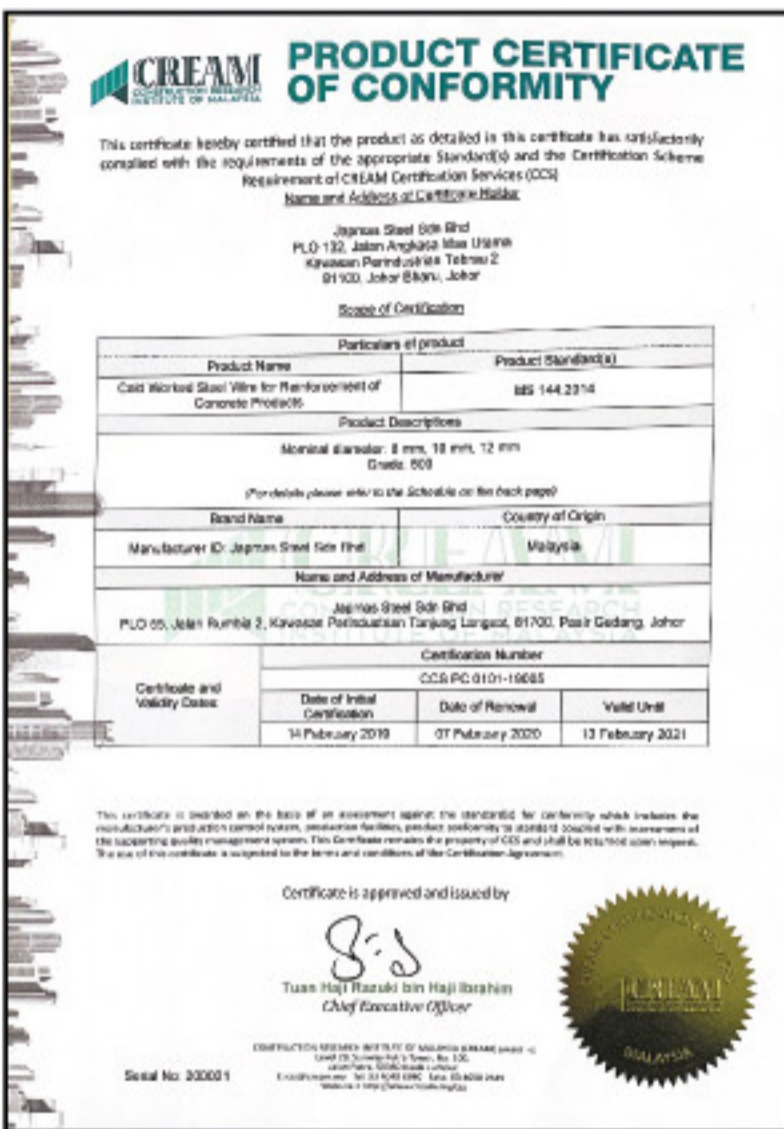
About Us

Japmas Steel Sdn Bhd, an integrated steel product manufacturer established since 1990.

From steel coil services to steel hollow manufacturing, today Japmas Steel has further expanded its capability to manufacture many type of welded steel fabrics and sheet meshes in compliance with adequate product standard.

Apart from awarded with the latest ISO System Certification, both ISO 9001:2015 and ISO 14001:2015, Japmas Steel's steel fabric has also successful obtained production certification under MS 145:2014 (made of MS 146:2014) with CIDB PPS registration.

Japmas Steel always positioning its role as the comprehensive steel solution provider, not only from its matured product ranges initiated since the beginning in early 90's, but also covering many others, such as value-added steel sheet products and concrete reinforcement.



JAPMESH
Making your home...

Welded Steel Fabric

Welded Steel Fabric For The Reinforcement of Concrete

JAP*mesh*[™] welded steel fabric is a pre-fabricated steel mesh for concrete reinforcement which manufactured from hard-drawn with high yield strength steel ribbed wire rod. Welded steel fabrics are welded by automatic electric resistance welding with uniform spacing of wire and consistent cross-sectional areas that eventually formed a flat sheet with square and rectangular grid patterns. The process is also employing the principle of fusion combined with pressure, which actually fuses the intersecting wires into a homogeneous section without loss of strength.

Welded steel fabric provides designer, engineers and contractors with an established convenient and economical reinforcement for modern concrete structures. Nowadays, it has been commonly applied for the reinforcement of concrete floorings, pre-cast walls, footings, roads, and any pre-cast concrete components.

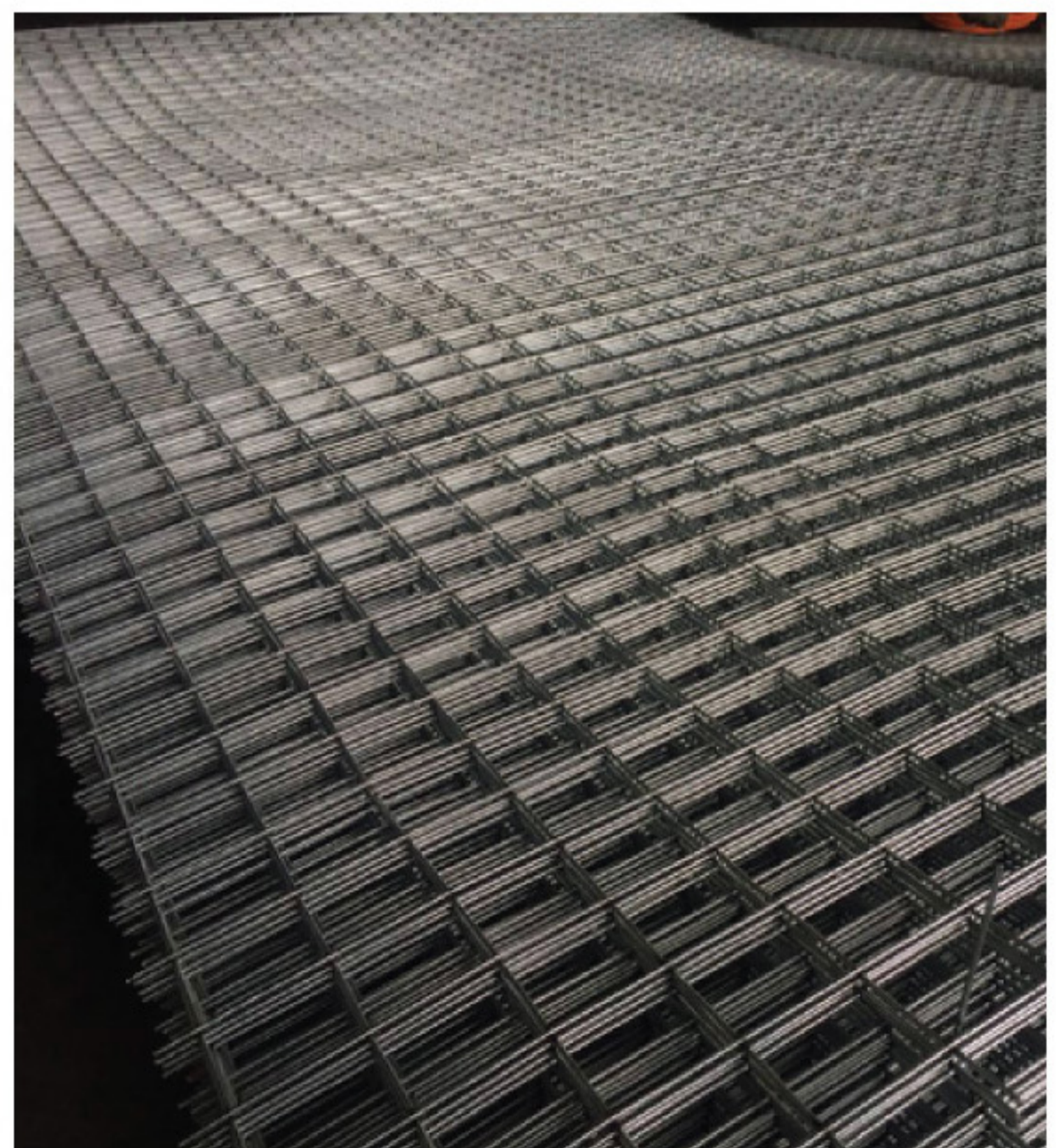




JAPmesh™ welded steel fabric complies with the requirements of the Malaysia Standard MS 145:2014, which is equivalent to SS 561:2010. All steel fabric conforming to this standard is to be made using hard-drawn ribbed bar in accordance with MS 146:2013 or made from wire in accordance to MS 144:2013.

Equivalent Comparison Table for Regional Standards

Product/Standard	Steel For Concrete Reinforcement	Steel Fabric For Concrete Reinforcement
Malaysia Standard	MS 146 : 2014	MS 145 : 2014
Singapore Standard	SS 560 : 2016	SS 561 : 2010
NZ & Australia Standard	AS / NZS 4671 : 2001	



The 3 types of mesh fabricated are as follows:

“ **A** ” **Series:** Square Mesh Fabric with wires at 200mm spacing. These are ideal for short, two-way suspended slabs and pavements or canal linings.

“ **B** ” **Series:** Rectangular Short Mesh Fabrics with main wire spacing of 100mm and cross wire spacing of 200mm. This series is normally used for suspended slabs and similar applications.

“ **C** ” **Series:** Rectangular ‘Long Mesh’ fabrics with main wire spacing of 100mm and a very light cross wire spacing at 400mm center. These fabrics are useful in long-span two-way suspended slabs and road pavements.



Where standard fabrics do not meet a particular design requirement, special pre-designed fabric pattern can be specially fabricated. Special pattern usually eliminates the cutting of fabric onsite, this will minimize manpower and waste as well promotes time saving. Proposed abnormal fabrics should be discussed with **JAP^{mesh}**™ R&D personnel to confirm that they can be manufactured before being incorporated into a design.

The Range of JAP^{mesh}™ Welded Steel Fabrics

Mesh Type	Fabrics Ref. MS 145		Longitudinal Bars		Area mm ² /M	Longitudinal Bars		Area mm ² /M	MASS kg/M ²
	2014	2016	DIA	Pitch		DIA	Pitch		
Square Mesh	A142	A6	6	200	142	6	200	142	2.22
	A193	A7	7	200	193	7	200	183	3.03
	A252	A8	8	200	252	8	200	252	3.95
	A318	A9	9	200	318	9	200	318	4.99
	A393	A10	10	200	393	10	200	393	6.16
	A565	A12	12	200	565	12	200	565	8.88
Structure Mesh	B283	B6	6	100	283	7	200	193	3.73
	B385	B7	7	100	385	7	200	193	4.53
	B503	B8	8	100	503	8	200	252	5.93
	B636	B9	9	100	635	8	200	252	6.97
	B785	B10	10	100	785	8	200	252	8.14
	B1131	B12	12	100	1131	8	200	252	10.85
Long Mesh	C283	C6	6	100	283	6	400	49	2.78
	C385	C7	7	100	385	6	400	49	3.58
	C503	C8	8	100	503	6	400	49	4.51
	C636	C9	9	100	636	6	400	70.8	5.55
	C785	C10	10	100	785	6	400	70.8	6.72
	C1131	C12	12	100	1131	8	400	128	9.87
Wrapping Mesh	D283	D6	6	100	283	6	100	283	4.44
	D385	D7	7	100	385	7	100	385	6.04
	D503	D8	8	100	503	8	100	503	7.90
	D636	D9	9	100	635	9	100	636	9.98
	D785	D10	10	100	785	10	100	785	12.32
	D1131	D12	12	100	1131	12	100	1131	17.76

* Common stock sheets size is 6.0M x 2.2M

Expanded Metal

JAP^{mesh}™ Expanded Metal Industrial Meshes

Expanded metal is a unique material with a fascinating production process that can transform any flat metal sheet into wide varieties of mesh. The process of stretching and slitting gives the commonly seen diamond shaped pattern and also many other decorative shaped meshes. This can vary in diamond size, from tiny gauze to massive walkway, from thin foil to heavy duty walkway with massive gauge.

Japmas Steel Sdn Bhd is the first expanded metal mesh manufacturer in Southern region of Peninsular Malaysia under a brand namely, **JAP^{mesh}™**. This production is an extend of its steel coil services operation, therefore wide selection of high quality materials is certainly an strong advantage to sustain the most comprehensive range of meshes required by different applications.

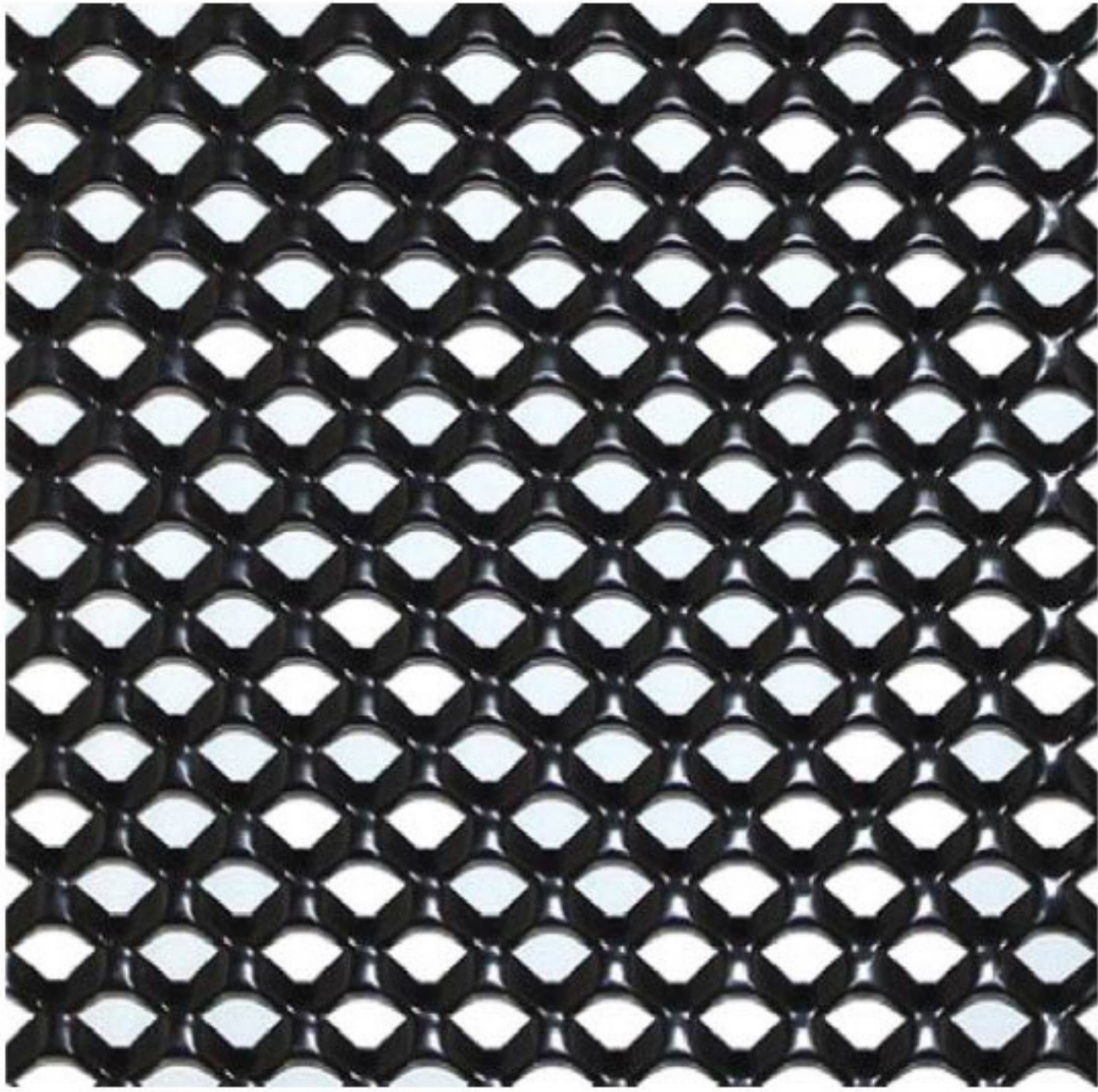
Materials

All of **JAP^{mesh}™** expanded metals are made from:-

1. Hot-rolled steel (JIS G3101 / ASTM A283 / EN 10025 & equivalent);
2. Cold-rolled steel (JIS G3141 / ASTM A366 & equivalent);
3. Coated steel (Electro/Hot-dipped Galvanized, ZAM, Superdyma & etc);
4. Aluminium Alloys (AA 1-series, 3-series, 5-series & etc);
5. Stainless Steel (Ferritic / Martensitic / Austenitic / Duplex);
6. Meshes made from non-standard materials also can be produced to order.

Features and Advantages

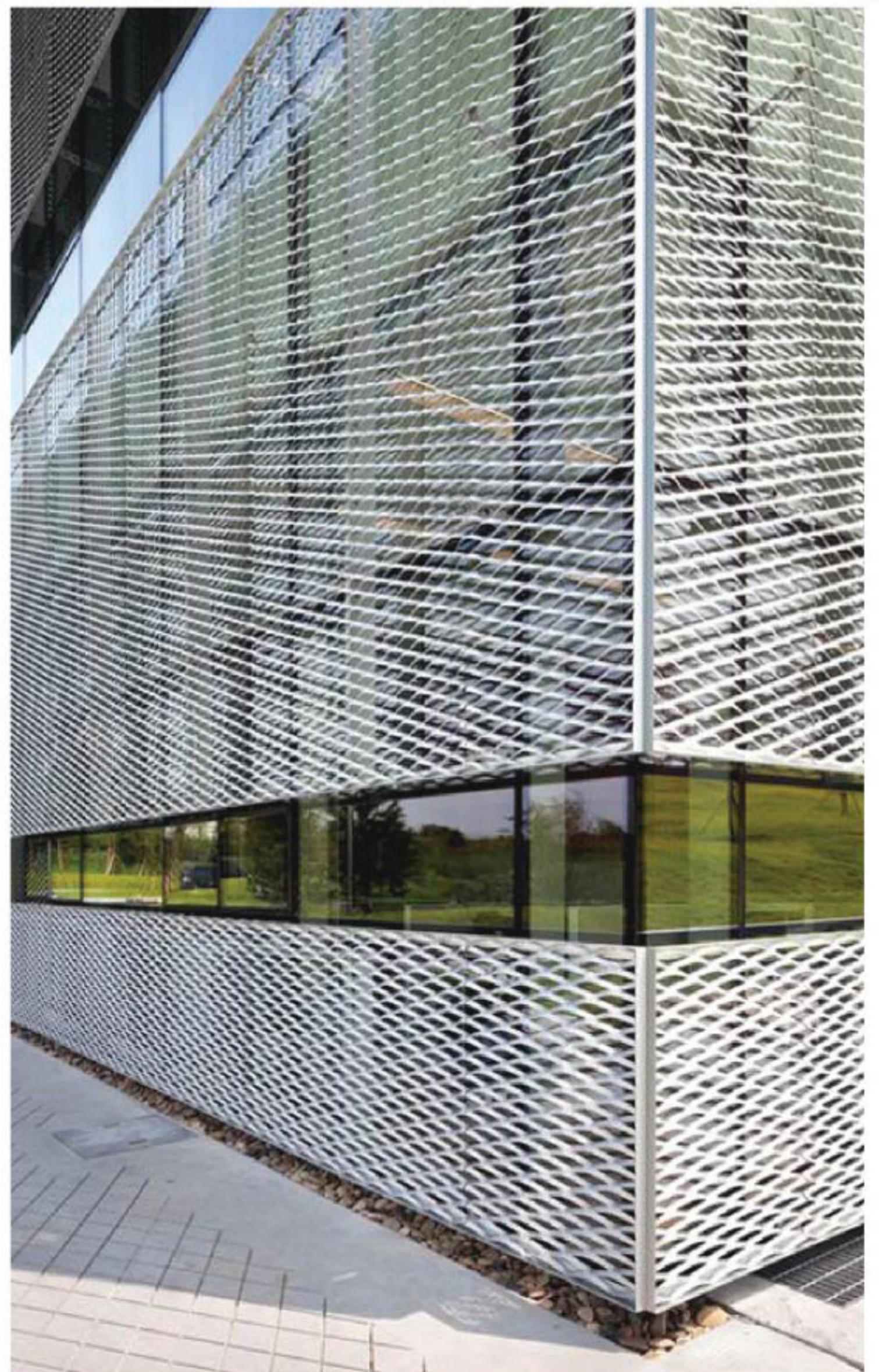
- **Highly cost saving**, every mesh is made from a single piece of materials, no strained joints, no welds and no wastage. It is also ideally for further processing such as bending, pressing and shearing.

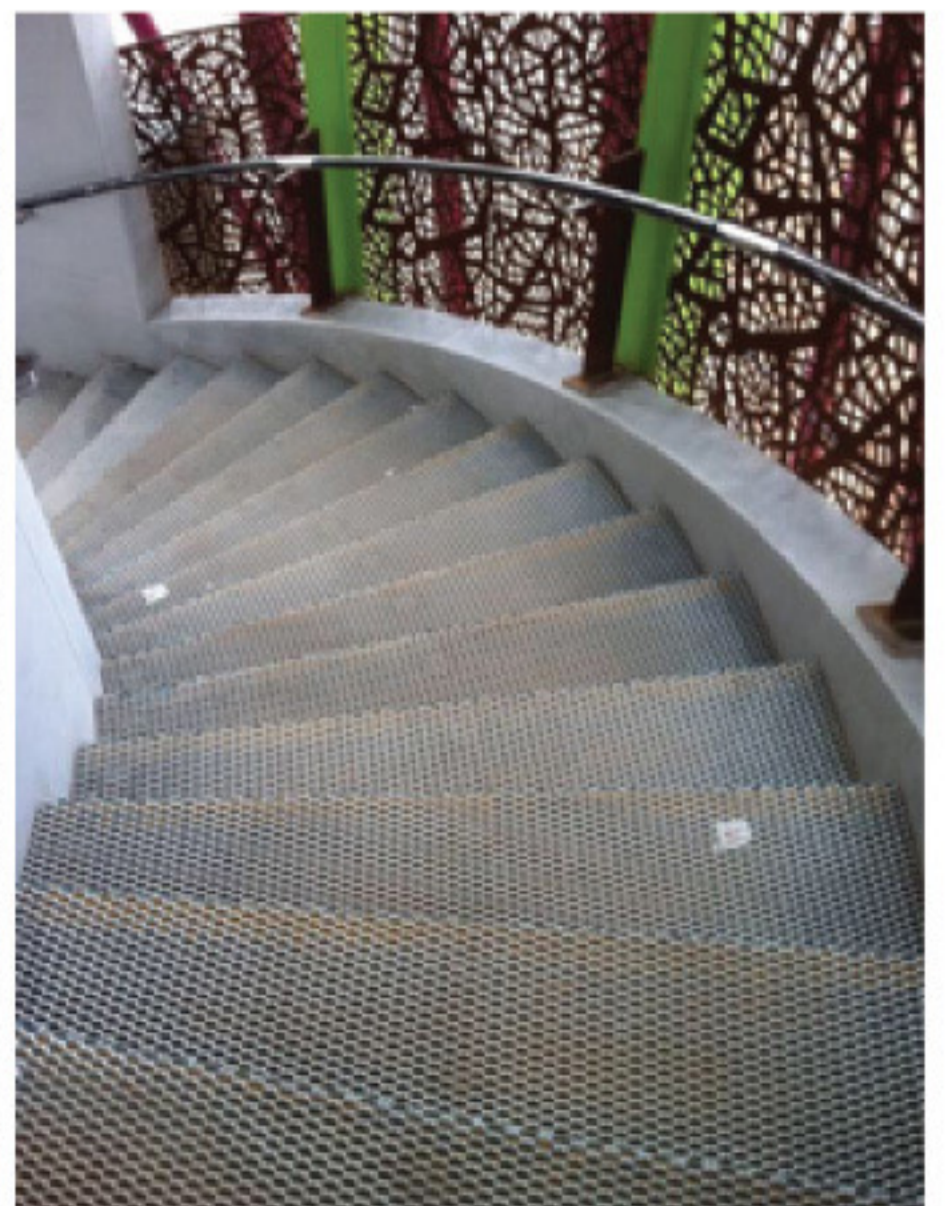
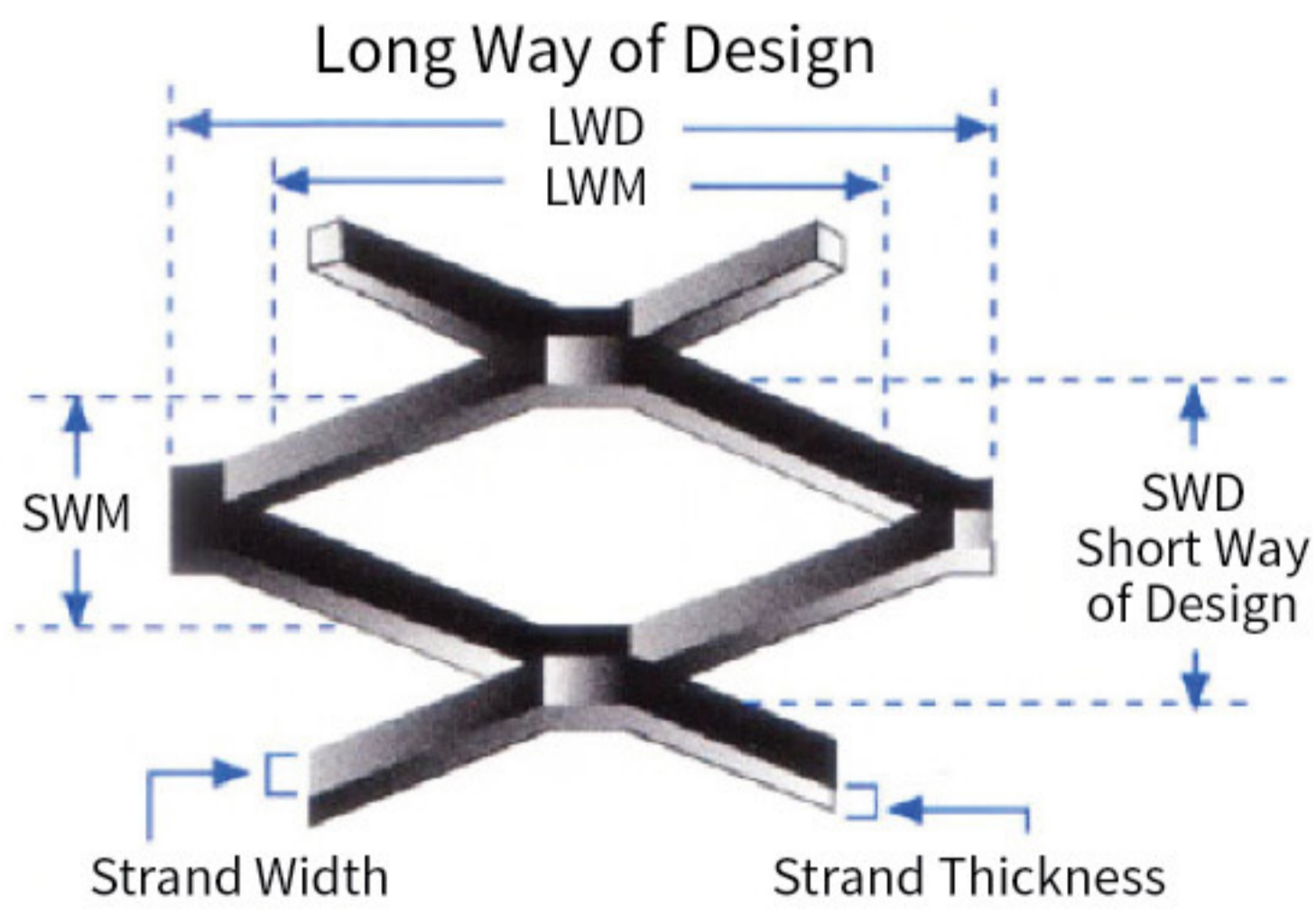
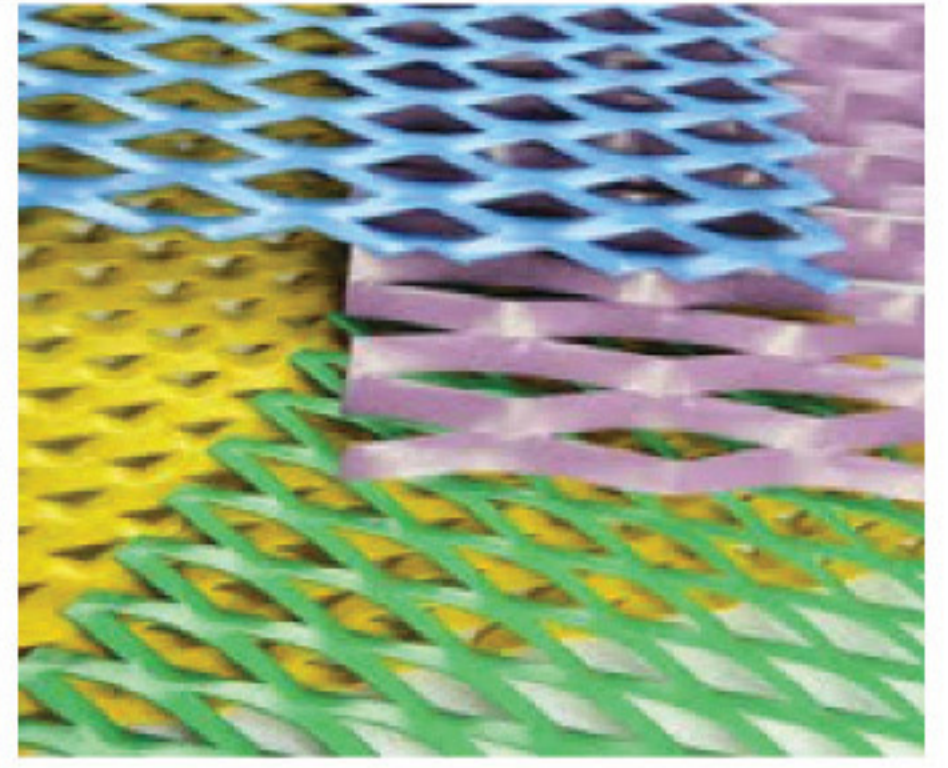


- **Higher strength-to-weight** has been scientifically proven than other form of metal sheets. This makes it an ideal for walkways, ramps and platforms. The uncut strands of expanded mesh withstand stress better than welds or joints.

- **Good reinforcement properties**, it can be combined with other materials to achieve strength required by individual application. For example, concrete cement, glasses and many type of composites in form of either built-in or bonded with meshes for increased strength, enhanced security feature and sometimes to promote aesthetic appearance.

- Wide strand meshes are used in **architectural solar screens** on the exterior of buildings and throughout interiors for decorative grilles.





Models and sizes of JAP^{mesh}™ Expanded Metal Meshes

No.	THK (MM)	Mesh Size			THK (MM)	WTH (MM)	SHT Size			Quantity Per Bundle
		SWM	X	LWM			SWM	X	LWM	
1	J0515	11	X	19	0.5	1.5	2440	X	1220	350
2	J0715	11	X	19	0.7	1.5	2440	X	1220	250
3	J1/2 x 18G	13	X	28	1.2	1.5	2440	X	1220	150
4	J1015	9	X	29	1.0	1.5	2440	X	1220	150
5	J1515	9	X	29	1.5	1.5	2440	X	1220	100
6	J2015	9	X	29	2.0	1.5	2440	X	1220	70
7	J1020	16	X	38	1.0	2.0	2440	X	1220	200
8	J1520	16	X	38	1.5	2.0	2440	X	1220	130
9	J1063	16	X	76	1.0	6.3	2440	X	1220	40
10	J1563	16	X	76	1.5	6.3	2440	X	1220	60
11	J1523	22	X	57	1.5	2.3	2440	X	1220	160
12	J1528	22	X	57	1.5	2.8	2440	X	1220	130
13	J1528/6	22	X	57	1.5	2.8	1830	X	2440	90
14	J2028	22	X	57	2.0	2.8	2440	X	1220	100
15	J3030	22	X	57	3.0	3.0	2440	X	1220	60
16	J3030/6	22	X	57	3.0	3.0	1830	X	2440	40
17	J3035	22	X	57	3.0	3.5	2440	X	1220	50
18	J30045	22	X	57	3.0	4.5	2440	X	1220	40
19	J3032	25	X	40/81	3.0	3.2	2440	X	1220	60
20	J50075	25	X	75	5.0	7.5	2440	X	1220	30
21	J30080	30	X	75	3.0	8.0	2440	X	1220	30
22	J50105	30	X	75	5.0	10.5	2440	X	1220	15
23	J15030	35	X	76	1.5	3.0	2440	X	1220	200
24	J15030/6	35	X	76	1.6	3.0	1830	X	2438	130
25	J2030	35	X	76	2.0	3.0	2440	X	1220	150
26	J30030	35	X	76	3.0	3.0	2440	X	1220	100
27	J30030/6	35	X	76	3.0	3.0	1830	X	2438	65
28	J3045	35	X	76	3.0	4.5	2440	X	1220	60
29	J45060	35	X	76	4.5	6.0	2440	X	1220	30
30	J45010	35	X	76	4.5	10.0	1830	X	1220	30
31	J1000	30	X	76	4.5	6.0	2440	X	1220	30
32	J1000(3.8)	30	X	76	4.5	10.0	1830	X	1220	30
33	J1000CQ	40	X	76	4.5	6.0	2440	X	1220	35
34	J4590	42	X	115	4.5	9.0	2440	X	1220	30
35	J4575	42	X	115	4.5	7.5	2440	X	1220	30
36	J4560	42	X	115	4.5	6.0	2440	X	1220	40
37	J3060	42	X	115	3.0	6.0	2440	X	1220	60
38	J3545	42	X	115	3.0	4.5	2440	X	1220	80
39	J1506	42	X	115	3.0	3.0	2440	X	1220	120
40	J1509	42	X	115	1.5	3.0	2440	X	1220	230
41	J150080	45	X	135	5.0	8.0	2440	X	1220	30
42	J50110	45	X	135	5.0	11G	2440	X	1220	20
43	J75060	76	X	200	5.0	6.0	2440	X	1220	60
44	J74560	76	X	200	4.5	6.0	2440	X	1220	70
45	J74545	76	X	200	4.5	4.5	2440	X	1220	90
46	J73060	76	X	200	3.0	6.0	2440	X	1220	100
47	J73030	76	X	200	3.0	3.0	2440	X	1220	200
48	J93030	95	X	200	3.0	3.0	2440	X	1220	200
49	J52030	13	X	75	2.0	3.0	2440	X	1220	100
50	J54060	34	X	135	4.0	6.0	2440	X	1220	60

Perforated Metal Sheets

Application of Metal Perforated Sheets

Perforated metal sheets can be used for numerous functional and decorative purposes, including:

Automotive

Protective automotive engine grills and other automotive parts are made from metal sheets with special engineered perforation.

Acoustic & Sound Control

With an ability to break down sound decibels to a good extent, perforated sheets are used for commercial and manufacturing industries as acoustic systems, for instance, diesel generator set, loudspeakers, heavy duty engines etc.

Furniture and Accessories

Perforated Metal Sheets are commonly used to make different kind of interior and exterior furniture such as chairs, benches, exterior panels, partition panels, shutters, facades, dustbins, kitchen baskets, cutlery products and many more. Nowadays, It has become a popular choice for decorative designers, manufacturers and end-users of patio furniture due to its endless design possibilities that nicely complement outdoor décor.

Construction, Architecture and Agriculture

Perforated Metal products have been extensively used in steel fabrication & engineering jobs, may it be Industrial, architectural, civil, agricultural purposes and so for, as and when it suited to requirement.

Filters and Screens

Almost all kind of filters & strainers, various kinds of screens, clean room systems, are utilizing perforated metal sheets as main material for its filtering or screening mechanism. For example, separating ore or rock in mining applications.

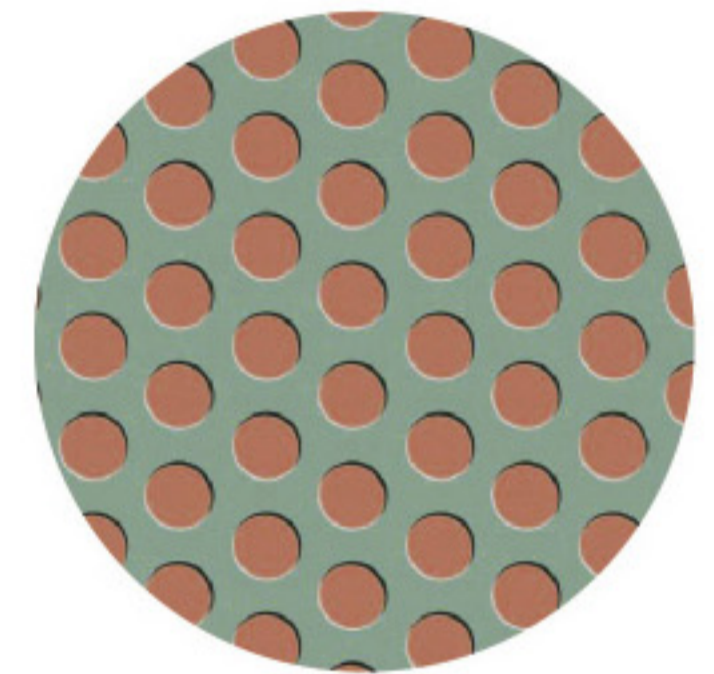
Food Processing and Pharma

Many different type of machinery spares and accessories for food processing and pharma machines are made from Perforated Sheets. Grinding spices, seeds and other food products.

Major Type of Perforations:

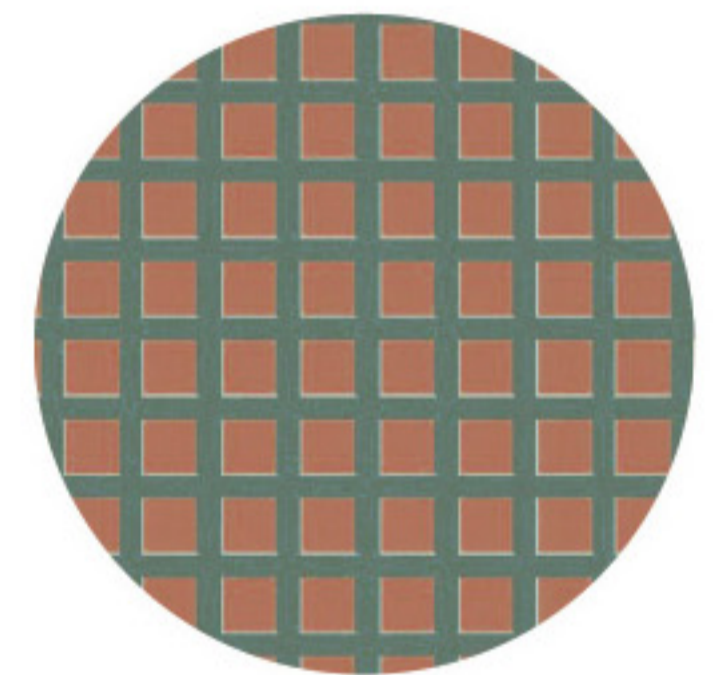
1. Round Hole Perforations:

Among the three standard perforated patterns — round, square and slotted — round is the most popular and most frequently selected option. Japmesh offers high-quality round-hole metal products that will deliver results and exceed your expectations. Round perforation has claimed as the most popular pattern type because of its versatility and broad selection of gauges, diameters and material choices for customization. Regardless of what kind of project, this pattern can be custom punched to fit the exact sizes and specifications.



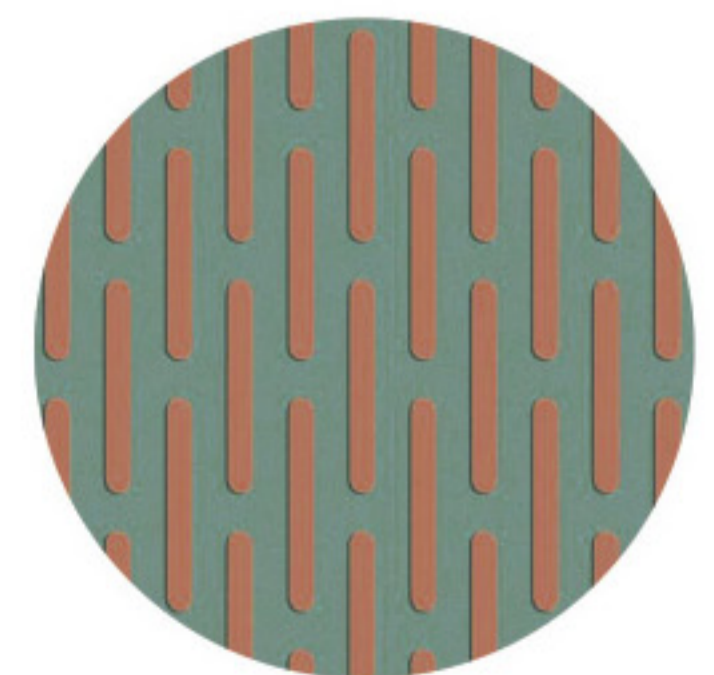
2. Square Hole Perforations:

Square perforated metal sheets provide a larger open area, making it easier for bulkier materials or, in the case of audio equipment, enabling sound to pass through. Another key benefit of square hole metal is its high strength-to-weight ratio. The sheets allow heavy material filtration without sacrificing strength and performance. Generally speaking, perforated metal sheet with square holes have numerous functional and decorative applications in industries such as electronics and pharmaceuticals.



3. Slotted Hole Perforations:

Slotted holes are more oblong and look like an oval or rectangle when they are custom-punched. Slotted type perforated metal sheet is designed specifically for materials and airflow to pass through without making the metal less reliable and sturdy. Common applications including vents, filters, diffusers, speaker grilles and many others. This pattern type is very flexible and can be formed into unique shapes. Additionally, perforation design also can be developed with combination of side-staggered, end-staggered and straight-line. In most instances, the longer slot dimensions can be furnished with either the width or the length of the metal sheet.



JAP^{mesh}™ Offers Custom Punching:

Japmesh has the in-house development capabilities to provide a custom perforated square and slotted hole pattern for unique or specialty applications, if required, from a simple to a more complex customized perforation. Whether it's a stock inventory of round hole metal products, or a customized solution for square & slotted holes you're looking for, you're always assured of getting a high-quality product from Japmesh. As a respected perforated metal sheet manufacturer, Japmesh offers products made from the best and most durable materials, including:

- Stainless Steel: 304, 316L & etc;
- Carbon Steel: Hot-Rolled, Cold-Rolled, Pickled & Oiled and etc;
- Alloy Coated Steel: Galvanized, Aluzinc, Aluminized, Superdyma, ZAM & etc;
- Aluminium Alloy: AA1100, AA3003, AA3105, AA5052 and etc.

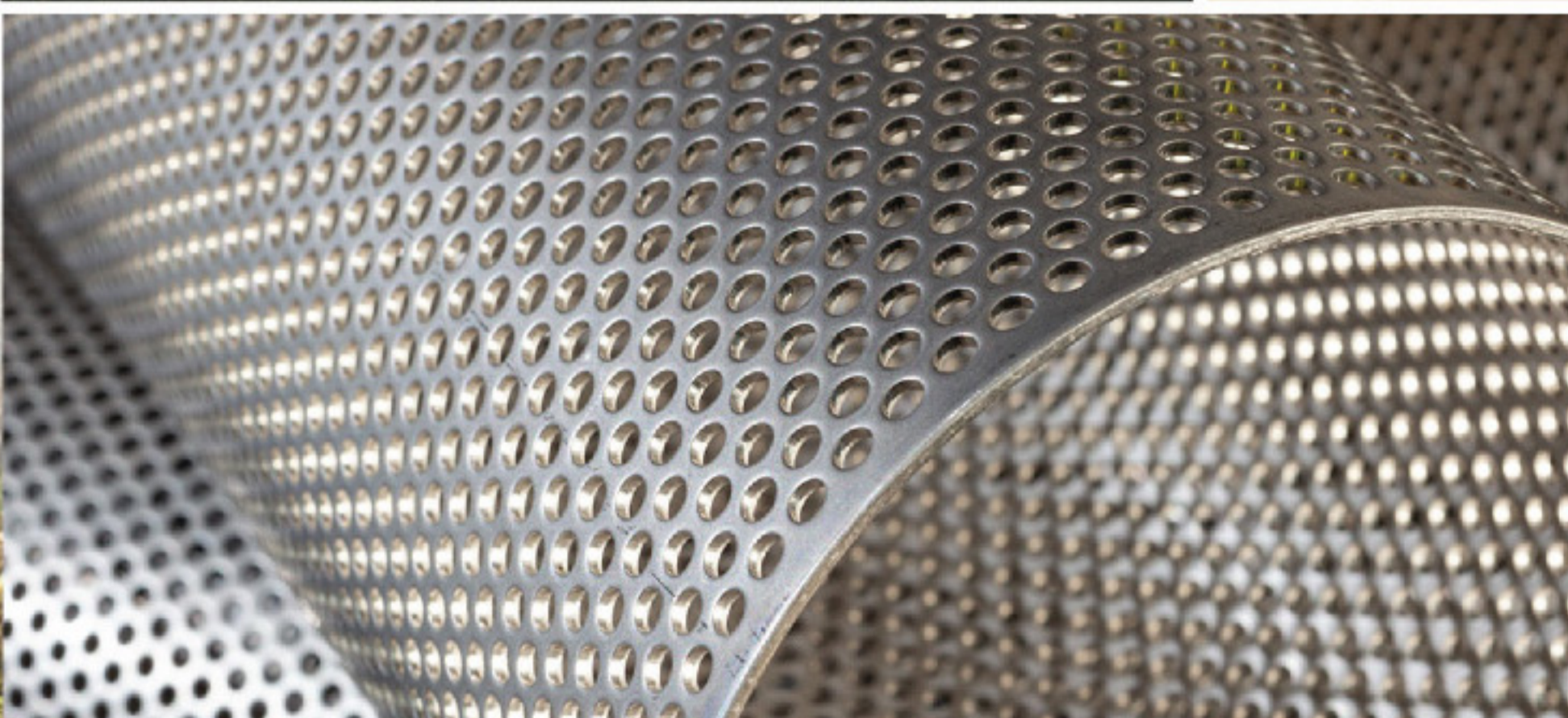
The customization options are endless when considering shape, size, material and texture. Put a creative mind behind it, and metal perforated sheet can be one of your creation's most stunning and recognizable features.



Artistic Creations – Engineering paired with creativity



Acoustic Barrier Ceiling – Reduces echo



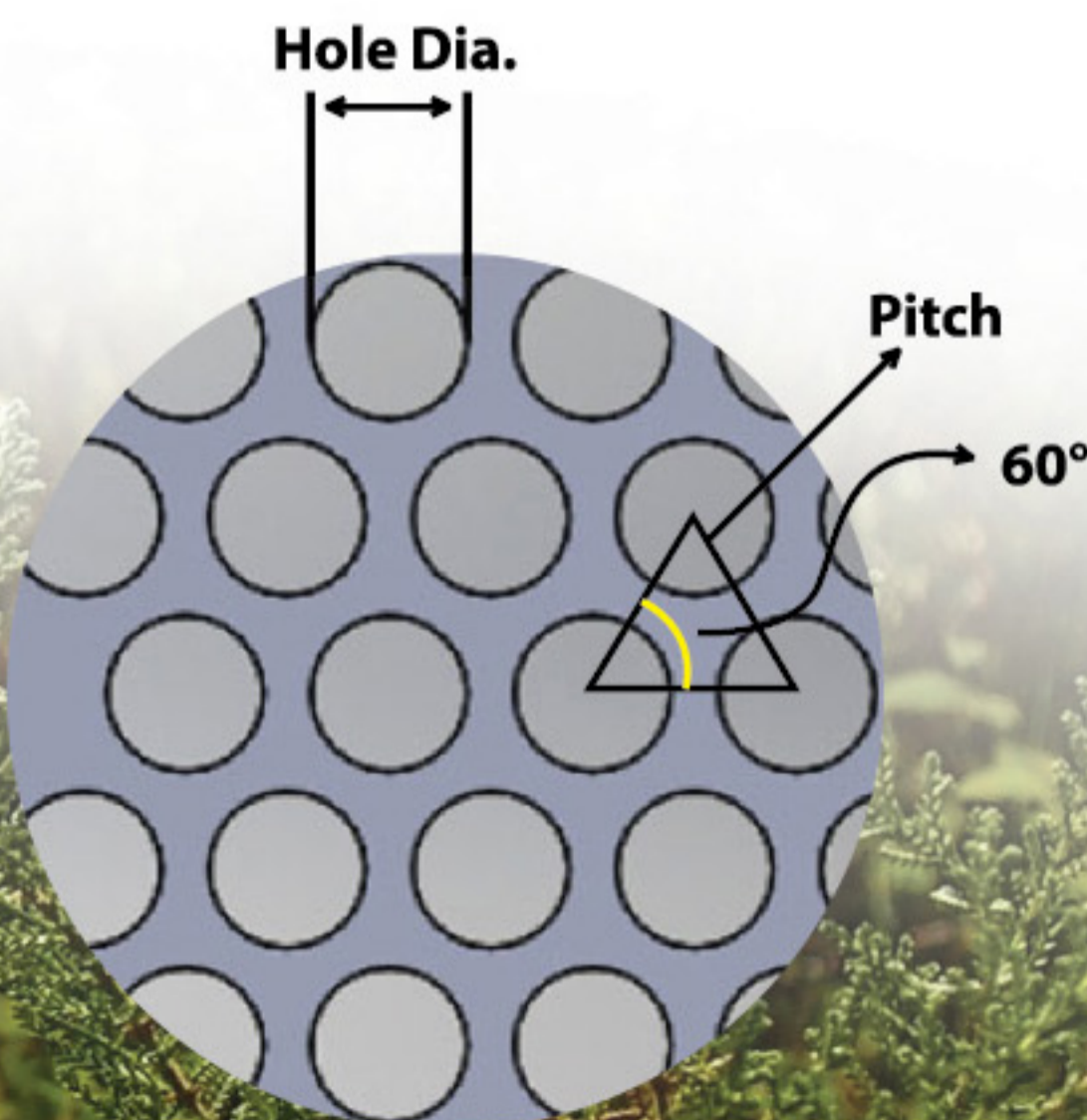
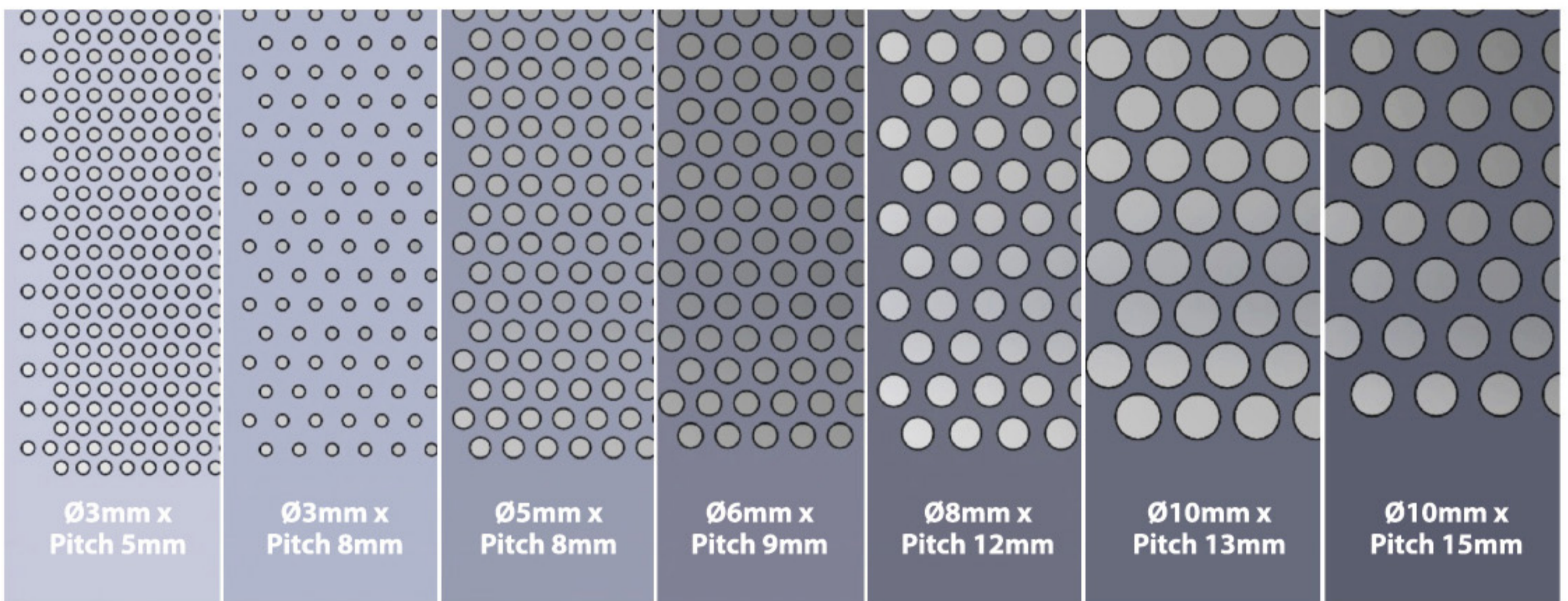
Structural uses of Perforated Sheet Metal

Safety Barriers – Strong, durable and allows light to pass through

Common JAP^{mesh}™ Perforated Metal Sheet Sizes

Ø Hole Dia.(mm)	Pitch(mm)	Open Area(%)	Degree	Thickness(mm) (Stainless Steel)
3	5	32.6	60°	1.5
3	8	12.8	60°	1.5
5	8	35.4	60°	Up to 3.0
6	9	40.3	60°	3.0
8	12	40.3	60°	3.0 - 4.5
10	13	53.7	60°	6.0
10	15	40.3	60°	3.0 - 4.5

Common Sheet Dimension 4 feet x 8 feet | Max Sheet Dimension: 5 Feet x 10 Feet | Custom sheet dimension within the above range is also available.



60° Circular Holes Perforated Sheet Metal

$$Open\ Area\ \% = \frac{Hole\ Size.^2}{Pitch.^2} \times 90.69$$



JAPMESH
Making your home...

Fencing Mesh

JAP^{mesh}™ BRC Fencing

JAP^{mesh}™ galvanized fence is a panel which manufactured by using cold-drawn high-strength wires that electronically pre-welded via a fully-automated ERW systems. The life-span of all fences are significantly enhanced by further hot-dipped galvanizing process under the standard of EN ISO 1461.

A unique rolled beam section at the top and bottom of the fence providing a user friendly surface, no sharp or raw edges. It has been widely used in public and private properties areas which includes: car parks, park's fence, schools, playground, and pedestrian zone. It's an open mesh system that allow excellent visibility making it widely popular among communities. A pre-galvanized round tube is popular being used as a post with the fence panels. Using a strong screw with two U-clips to fix the fence panels with the post. The post can be 40-50cm longer than the panels to implant the post dip under the concrete slab. Or welding a steel plate with holes, to fix it to the ground by screws.





There are 2 major popular series of these meshes known as JFA and JFB

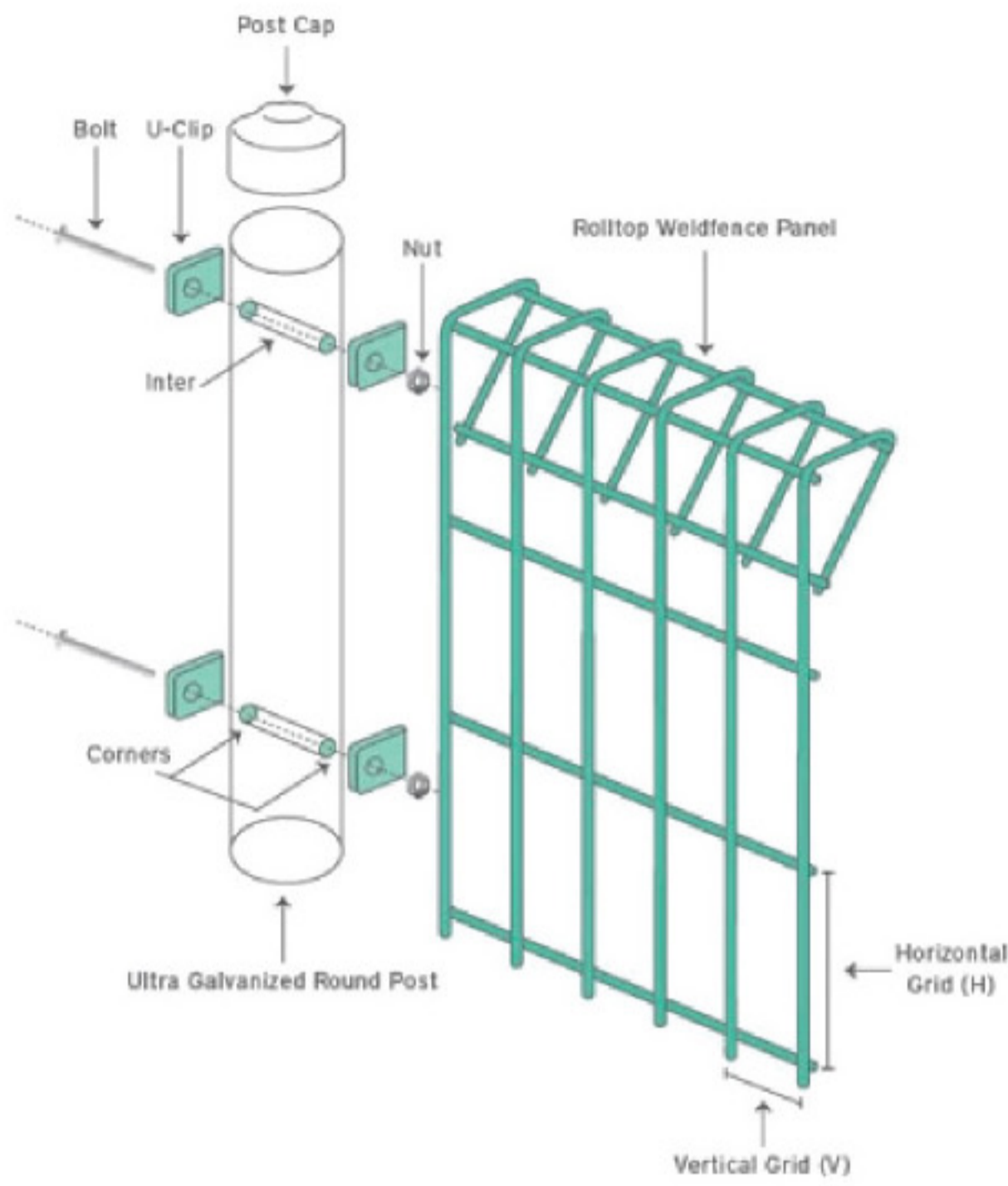
JAP^{mesh}™ JFA Series

Mesh Spacing (mm)	Vertical (50)	Horizontal (150)
Wire Diameter (mm)	Ø5.0	Ø5.0
Panel Size Height x Length (mm)	900 X 2400	900 X 2400
	1200 X 2400	1200 X 2400
	1500 X 2400	1500 X 2400
	1800 X 2400	1800 X 2400
	2100 X 2400	2100 X 2400
	2400 X 2400	2400 X 2400
Post Specification (mm)	PRE GALVANIZED POST Ø60 (SS304 U-Clip & M8 Bolt, Nuts)	PRE GALVANIZED POST Ø60 (SS304 U-Clip & M8 Bolt, Nuts)

JAP^{mesh}™ JFB Series

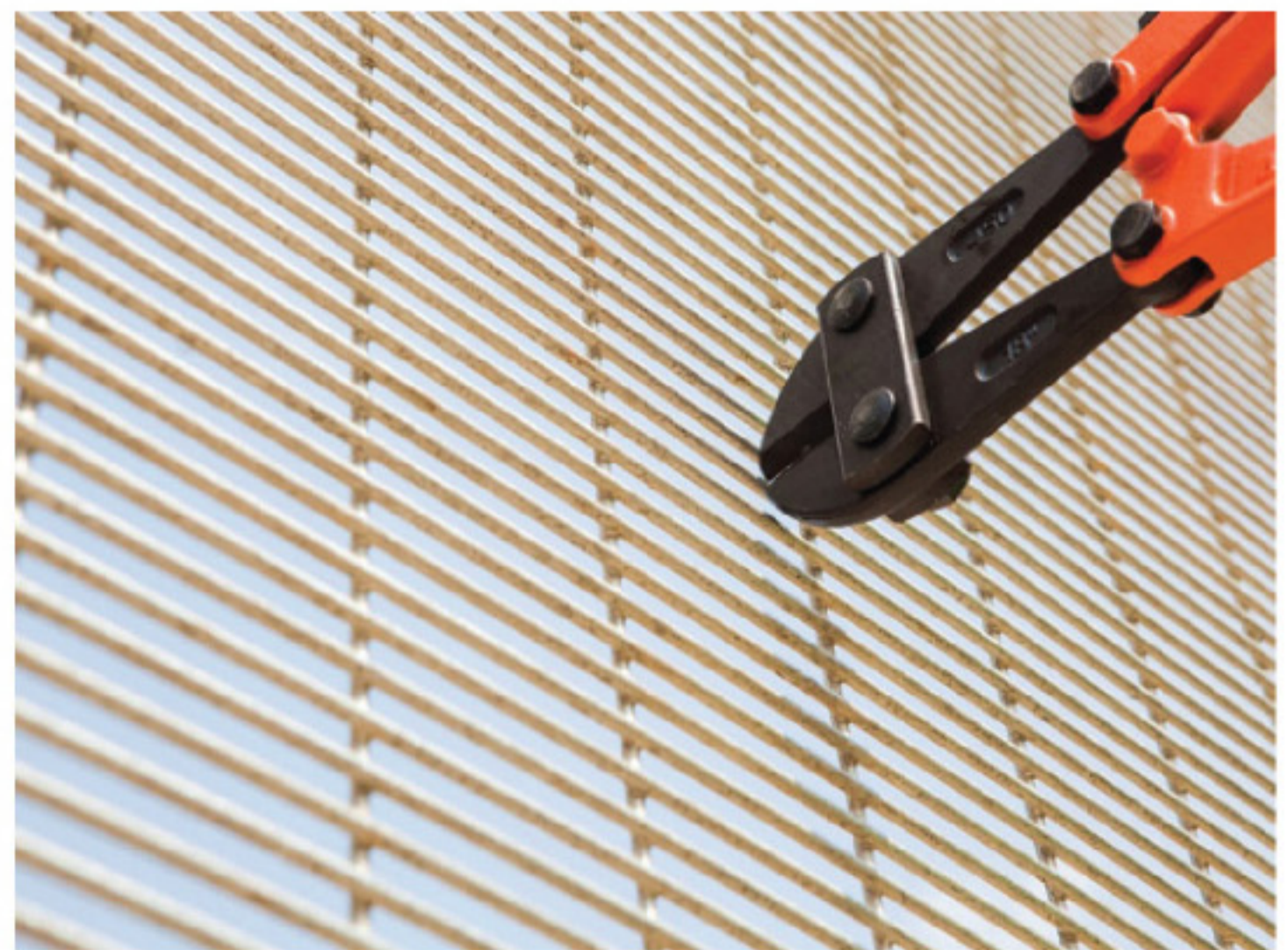
Mesh Spacing (mm)	Vertical (75)	Horizontal (300)
Wire Diameter (mm)	Ø6.0	Ø6.0
Panel Size Height x Length (mm)	900 X 2400	900 X 2400
	1200 X 2400	1200 X 2400
	1500 X 2400	1500 X 2400
	1800 X 2400	1800 X 2400
	2100 X 2400	2100 X 2400
	2400 X 2400	2400 X 2400
Post Specification (mm)	PRE GALVANIZED POST Ø60 (SS304 U-Clip & M8 Bolt, Nuts)	PRE GALVANIZED POST Ø60 (SS304 U-Clip & M8 Bolt, Nuts)

INSTALLATION DETAIL FOR **JAPmesh™** FENCING

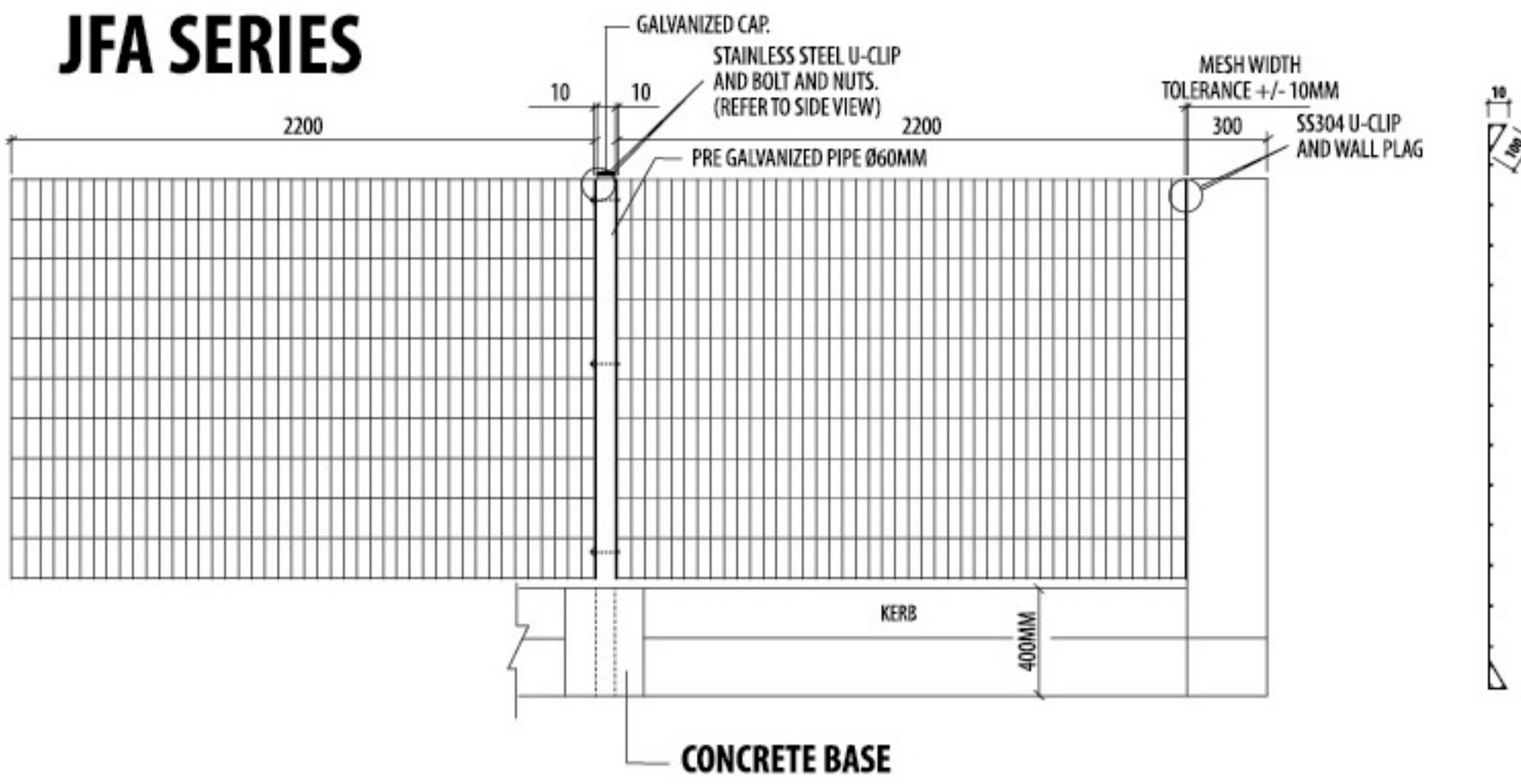


JAPmesh™ Anti-Climb Fencing Panel

Anti-Climb fencing panel combines meshes to prevent climbing and cutting that can support a total security platform, this distinguishing feature is performed by the narrow constructed scales between welded wires. It's very difficult to get fingers and footholds on this fence and the cutting implements required to sever its welded heavy steel wire just can't fit into the minimal spaces of the mesh.



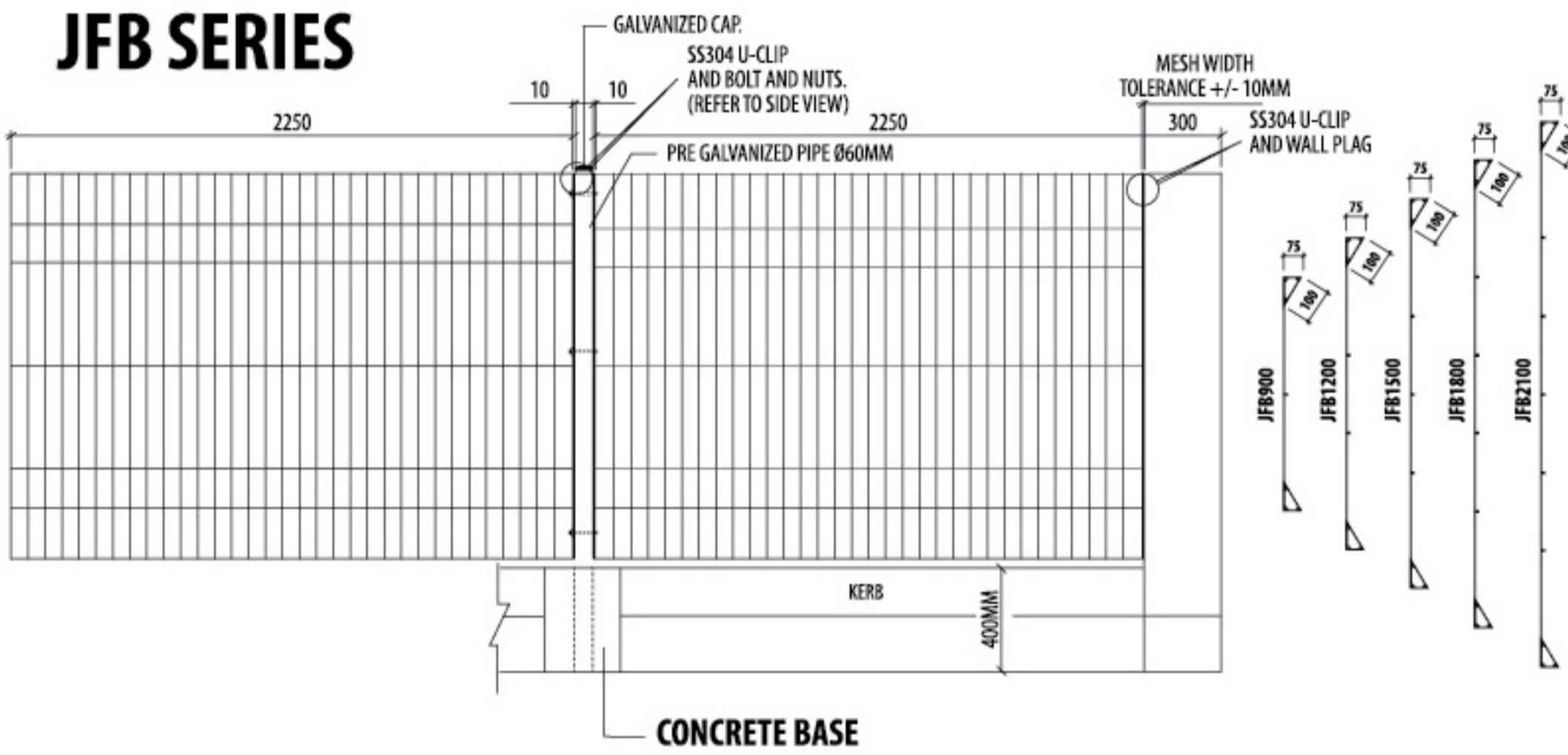
JFA SERIES



Hot-dipped Galvanized
Comply to BS EN 1461 : 2009

Wire Diameter	5 mm
Pitch of Vertical Wire	50 mm
Pitch of Horizontal Wire	150mm
PRODUCTION CODE	MESH HEIGHT
JFA-900	900 mm
JFA-1200	1200 mm
JFA-1500	1500 mm
JFA-1800	1800 mm
JFA-2100	2100 mm

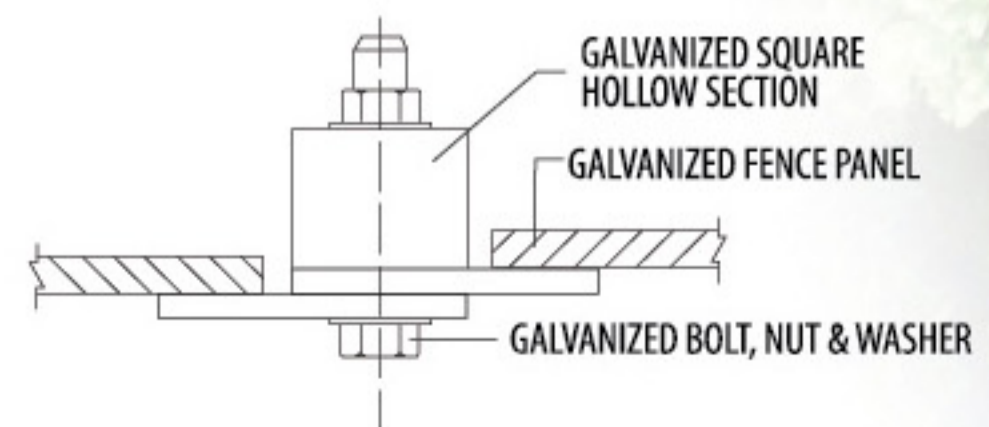
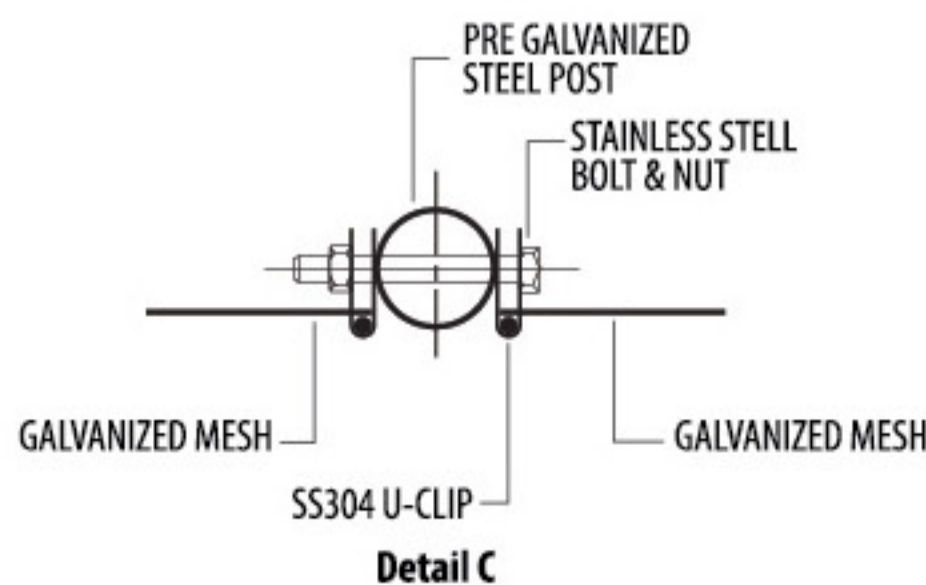
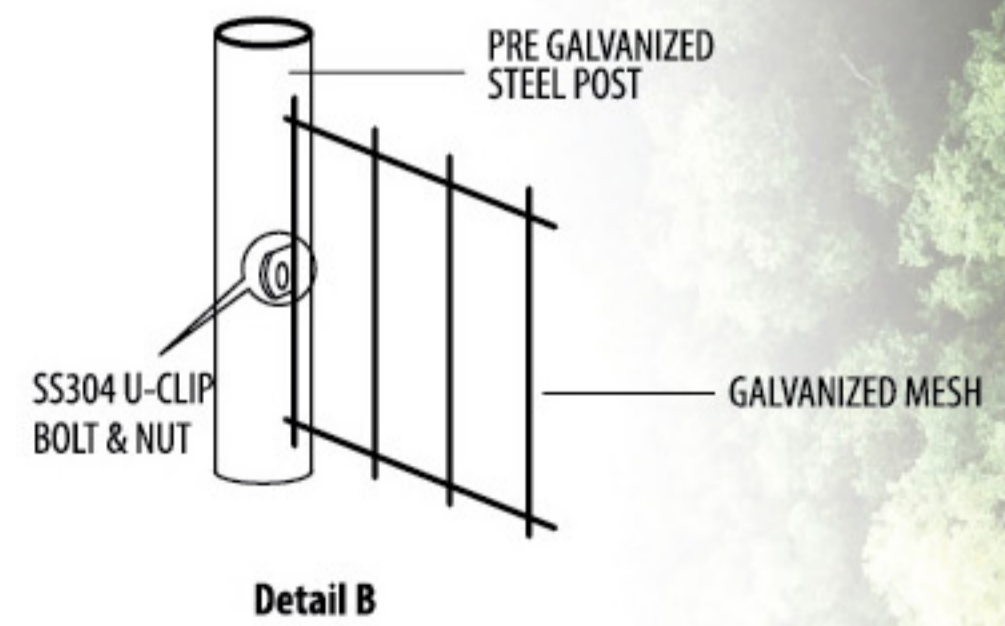
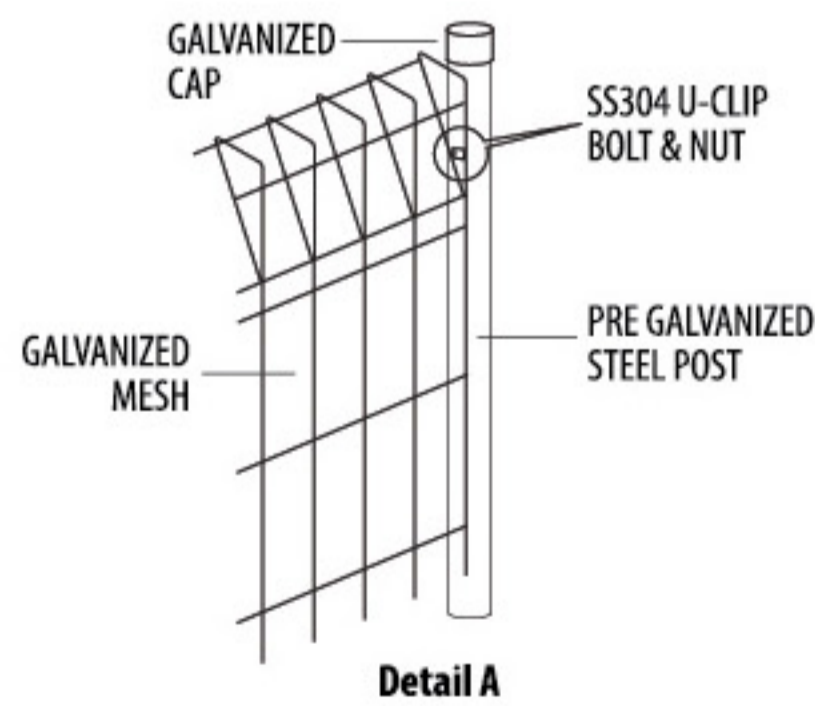
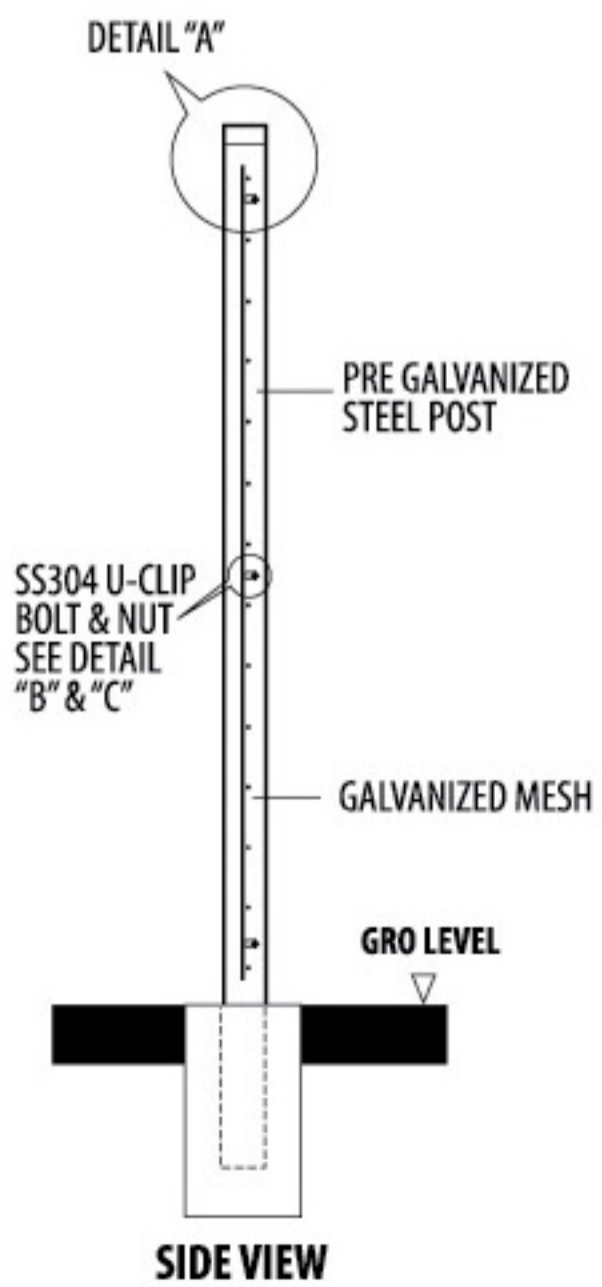
JFB SERIES



Hot-dipped Galvanized
Comply to BS EN 1461 : 2009

Wire Diameter	6 mm
Pitch of Vertical Wire	75 mm
Pitch of Horizontal Wire	Varies
PRODUCTION CODE	MESH HEIGHT
JFB-900	900 mm
JFB-1200	1200 mm
JFB-1500	1500 mm
JFB-1800	1800 mm
JFB-2100	2100 mm

INSTALLATION DETAILS





Manufactured by:

JAPMAS STEEL SDN BHD (196574-X)

PLO 55, Jalan Rumbia 2, Kawasan Perindustrian Tanjung Langsat,
81700 Pasir Gudang, Johor, Malaysia.

Tel: +607- 353 7312 (12 Line) Fax : +607-353 7323 / 7324 / 7002

Email: salesdiv@lcgjapmas.com Website : www.lcgjapmas.com



Marketed by:

LEE CHUAN GUAN STEEL SDN BHD (93090-X)

PLO 132, Jalan Angkasa Mas Utama, Kawasan Perindustrian Tebrau II,
81100 Johor Bahru, Johor, Malaysia.

Tel: +607- 353 7312 (12 Line) Fax : +607-353 7323 / 7324 / 7002

Email: salesdiv@lcgjapmas.com Website : www.lcgjapmas.com

Distributed by: