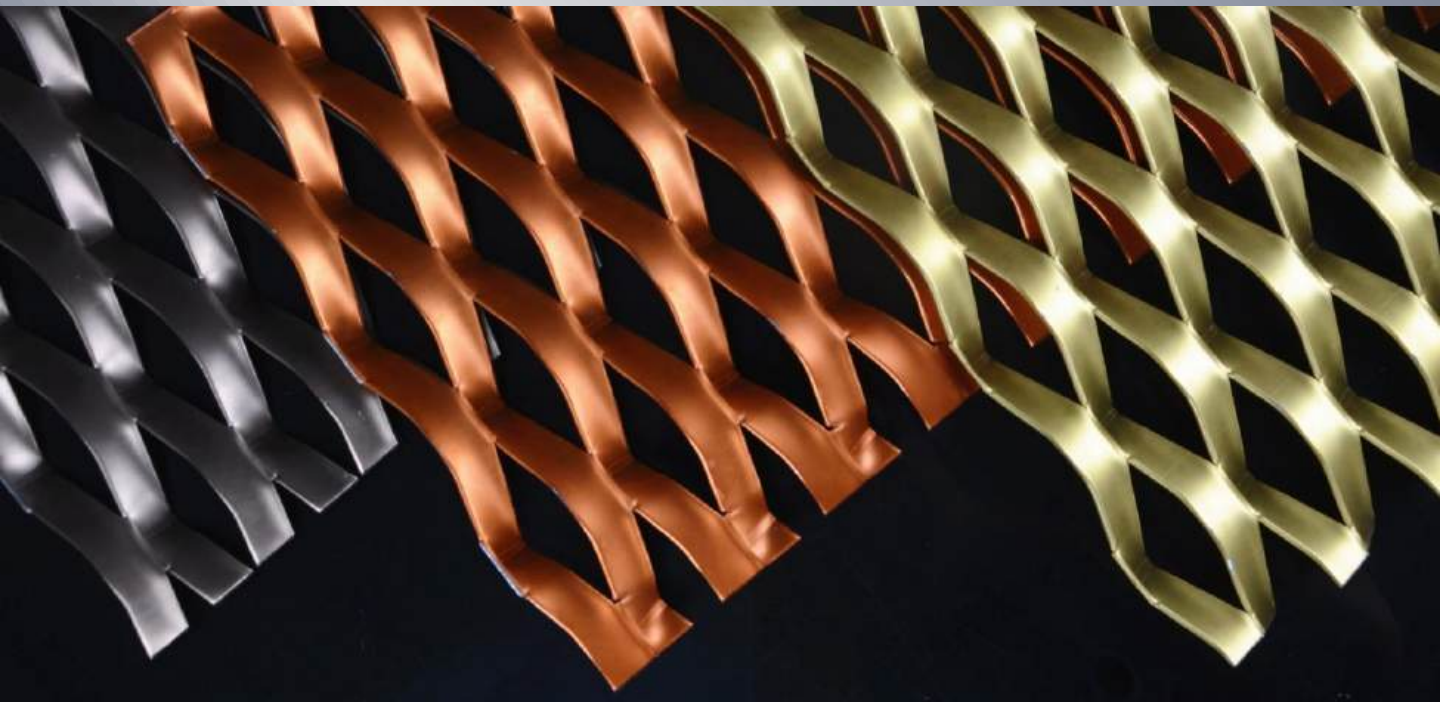
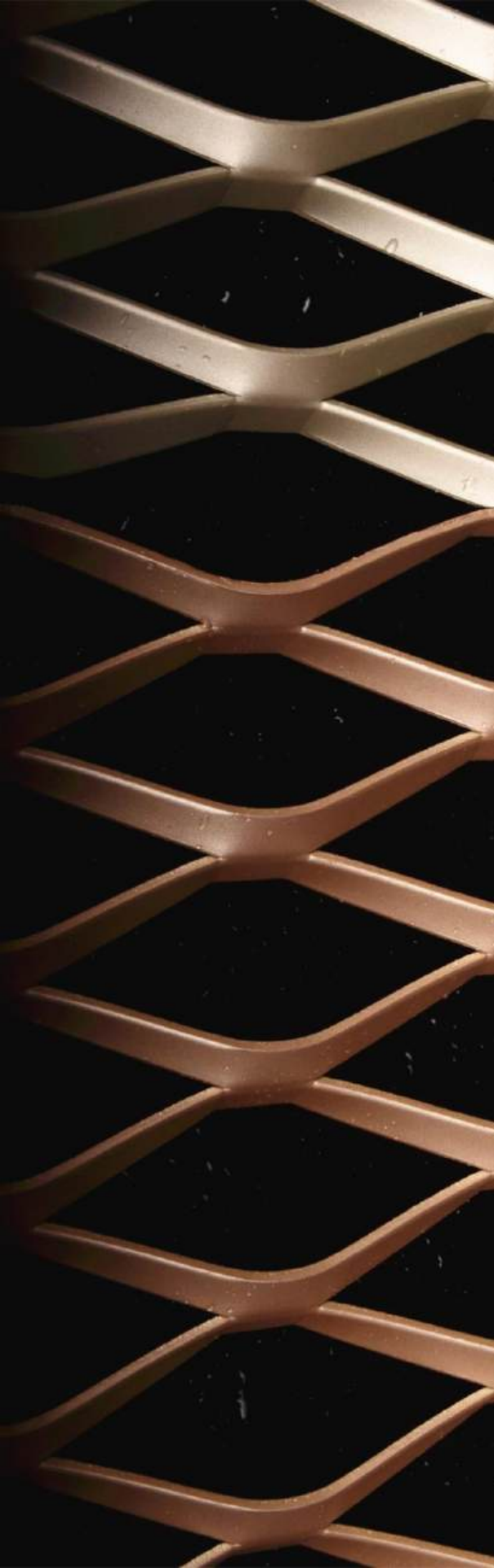


Expanded Metal



Hebei Martin Technology Co., Ltd



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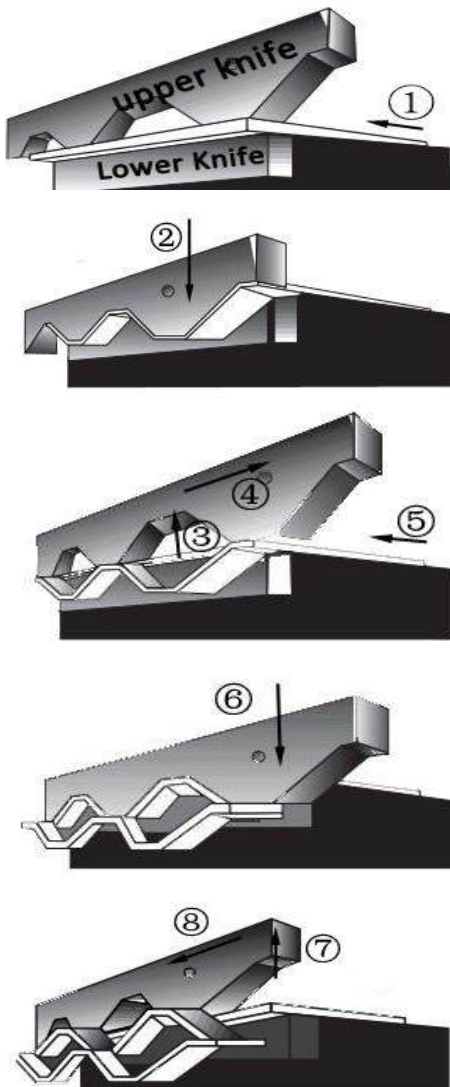
1.Introduction

Expanded metal is a form of metal stock made by shearing a metal plate in a press, so that the metal stretches, leaving diamond-shaped voids surrounded by interlinked bars of the metal. The most common method of manufacture is to simultaneously slit and stretch the material with one motion.

Expanded metal has multiple industrial, commercial and architectural applications. The mesh provides a heavy duty barrier yet allows light, heat, air, liquid and sound to pass through.

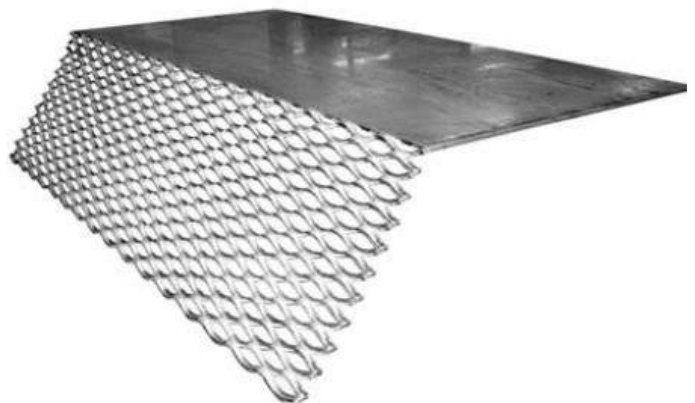
2.Manufacturing process

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



When manufactured, the metal sheet is simultaneously slit and stretched, expanding the slits into diamond shaped trusses of uniform size, shape and regularity.

No metal is lost in the expanding process and the final product is stronger per kilogram, and stronger per meter, than the original sheet.



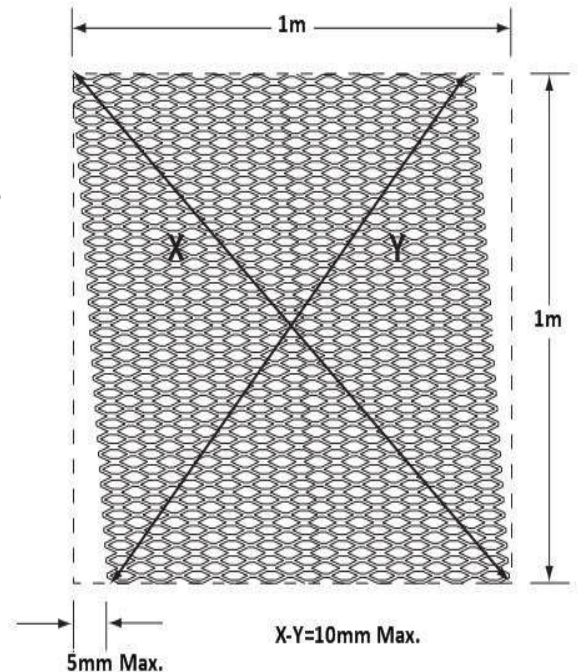
3.Manufacturing tolerance

General Tolerances

All references to sheet size, strand width, thickness and mass are approximate .Every effort has been made to ensure these figures are accurate however the manufacturing process is subject to standard tolerances

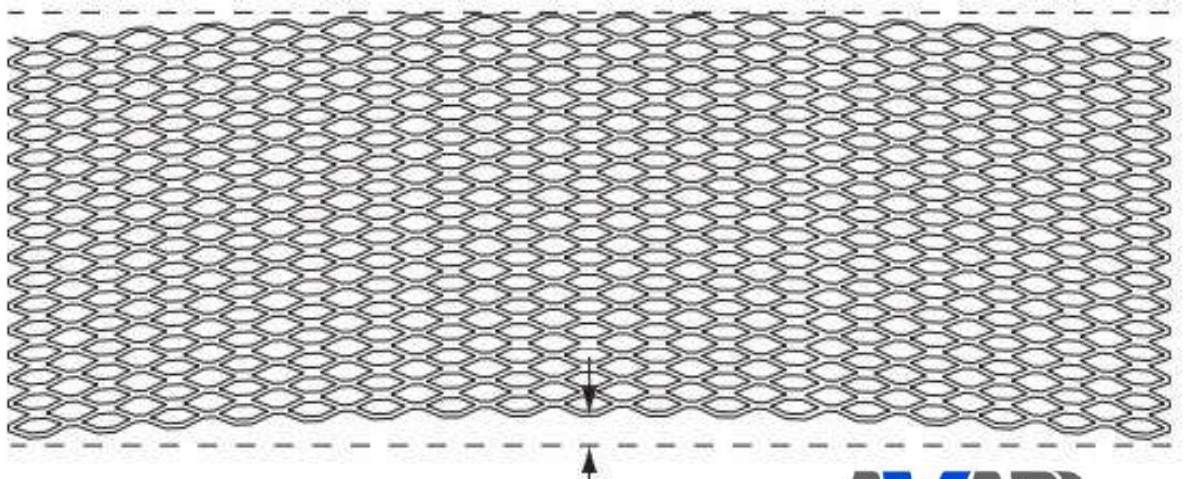
Out of Square

The nature of the manufacturing process means expanded metal sheet have a degree of out of squareness. The tolerance for out of square is a maximum of 5mm per 1 metre of length, or 10mm per square metre on diagonals. These tolerances are for both standard stock and made-to-order sizes. Sheets can be re-squared by shearing on all sides.



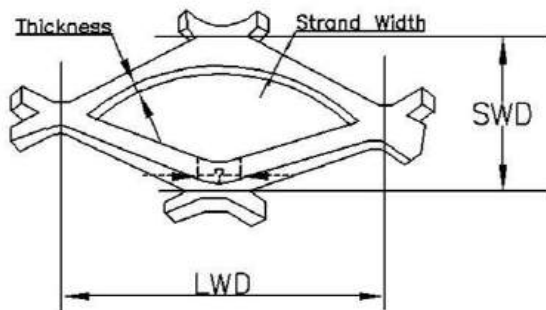
Camber

Camber refers to the bow in a sheet .It is 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. The tolerance for standard expanded mesh is 5 mm per 1 metre of length. For flattened expanded metal it is 7mm per 1 metre of length

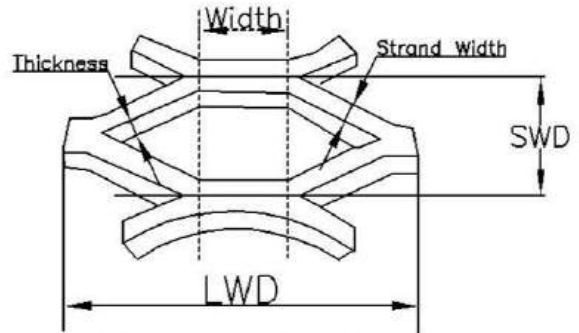


4.Terminology

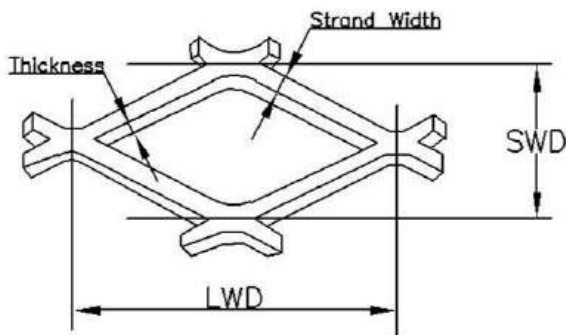
Mould of Expanded Metal



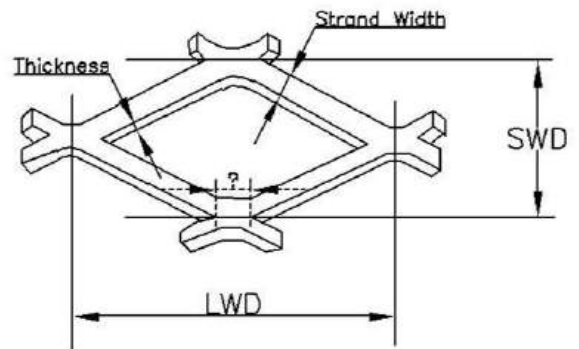
Sharp Knife



Hexagonal Knife



Plane Knife -1



Plane Knife -2

Material of Expanded Metal

- Low Carbon Steel , (Q195 etc)
- Stainless Steel (AISI 304, 316 ,316L etc.)
- Galvanized Steel (hot-dipped or electrol)
- Aluminum (AA 1050 , 1060 etc.)
- Others (copper, brass, aluminum alloys)

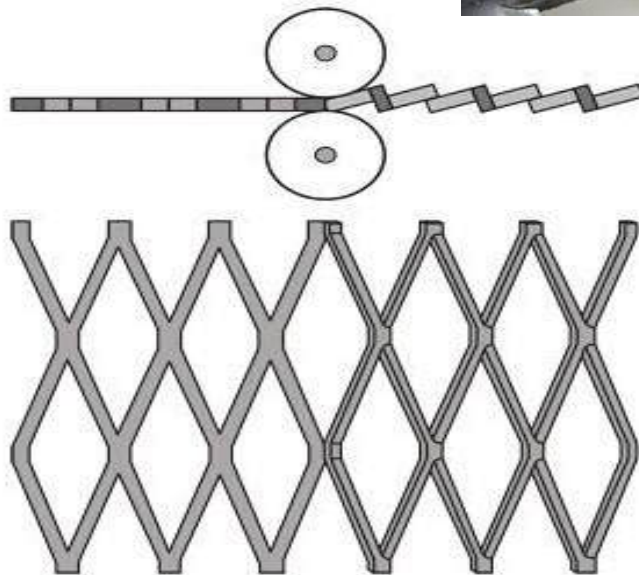
Raised Expanded Metal

Raised expanded metal is the form the product takes when it goes through the expanding process described earlier. 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. No additional pressing operations are needed.



Flattened Expanded Metal

Flattened expanded metal is manufactured by passing a raised expanded metal sheet through an additional cold roll reducing mill process. 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.



Surface Treatment of Expanded Metal

- PVC Coating
- Paint Spraying
- Epoxy Coating
- Anodize Coating
- PVDF Coating

For low carbon steel, it can use PVC coating, paint spraying;

For Aluminum, it can use paint spraying ,epoxy coating ,
anodize coating, PVDF coating



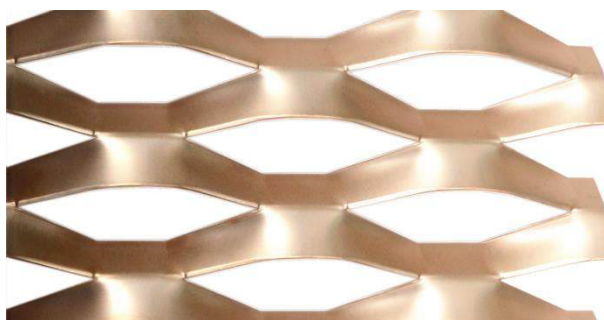
This color chip
apply to
PVC , Epoxy , PVDF coating.

5.Specification in stock

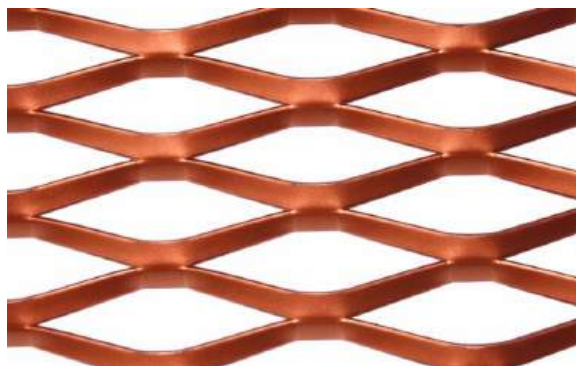
Plane Knife



Type	PL-1
Material	Aluminum
Thickness x Strand	3x16
LWD x SWD	120x36
Surface	Anodize
Weight(kgs/m ²)	7.2



Type	PL-2
Material	Aluminum
Thickness x Strand	3x30
LWD x SWD	200x80
Surface	Anodize
Weight(kgs/m ²)	6.0



Type	PL-3
Material	Aluminum
Thickness x Strand	3x13
LWD x SWD	140x55
Surface	Anodize
Weight(kgs/m ²)	3.8

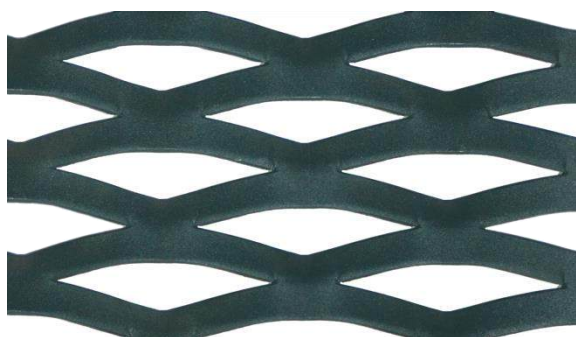


Type	PL-4
Material	Aluminum
Thickness x Strand	3x30
LWD x SWD	200x80
Surface	Nature
Weight(kgs/m ²)	6.0

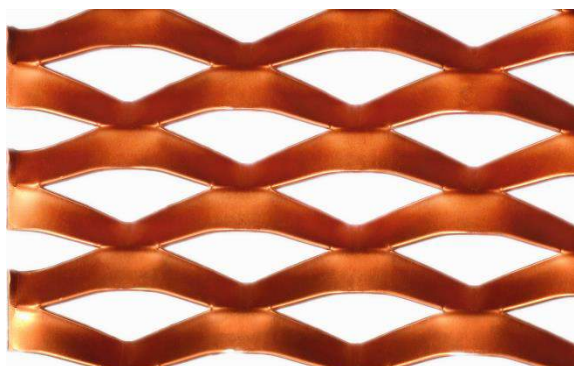
Sharp Knife



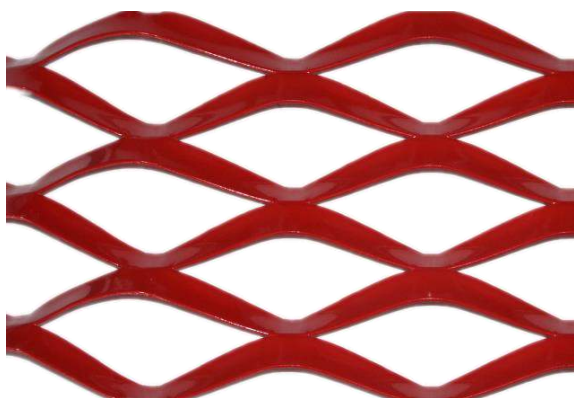
Type	SH-1
Material	Aluminum
Thickness x Strand	2x15
LWD x SWD	85x35
Surface	Anodize
Weight(kgs/m ²)	4.6



Type	SH-2
Material	Aluminum
Thickness x Strand	3x13
LWD x SWD	100x35
Surface	PVDF
Weight(kgs/m ²)	6.0



Type	SH-3
Material	Aluminum
Thickness x Strand	2x15
LWD x SWD	60x40
Surface	Anodize
Weight(kgs/m ²)	4.0

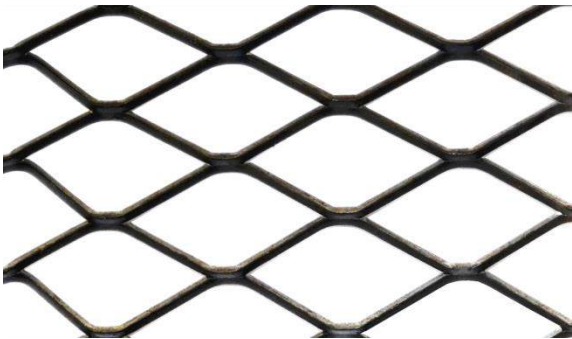


Type	SH-4
Material	Aluminum
Thickness x Strand	2x20
LWD x SWD	125x70
Surface	Epoxy
Weight(kgs/m ²)	3.1

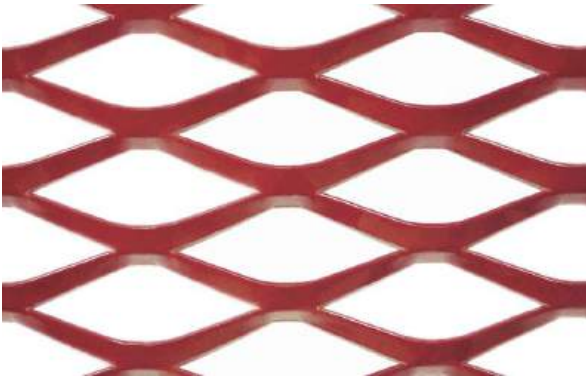
Sharp Knife



Type	SH-5
Material	Stainless Steel
Thickness x Strand	7x8
LWD x SWD	100x45
Surface	Nature
Weight(kgs/m ²)	19.5



Type	SH-8
Material	Q195
Thickness x Strand	3.5x5
LWD x SWD	100x50
Surface	Nature
Weight(kgs/m ²)	5.5



Type	SH-7
Material	Aluminum
Thickness x Strand	1.5x7.5
LWD x SWD	70x30
Surface	Epoxy
Weight(kgs/m ²)	2.0

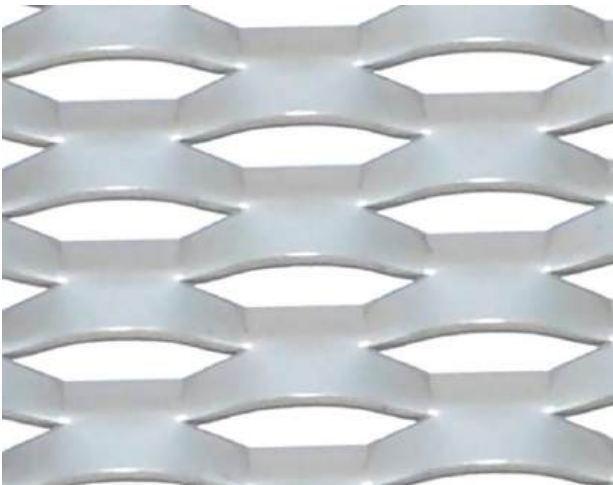


Type	SH-6
Material	Aluminum
Thickness x Strand	2x10
LWD x SWD	80x35
Surface	Epoxy
Weight(kgs/m ²)	3.1

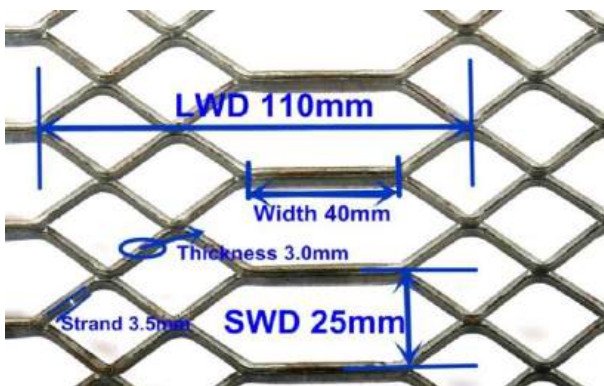
Hexagonal Knife



Type	HE-1
Material	Aluminum
Thickness x Strand	2x3
LWD x SWD	35x10
Surface	Nature
Weight(kgs/m ²)	3.2



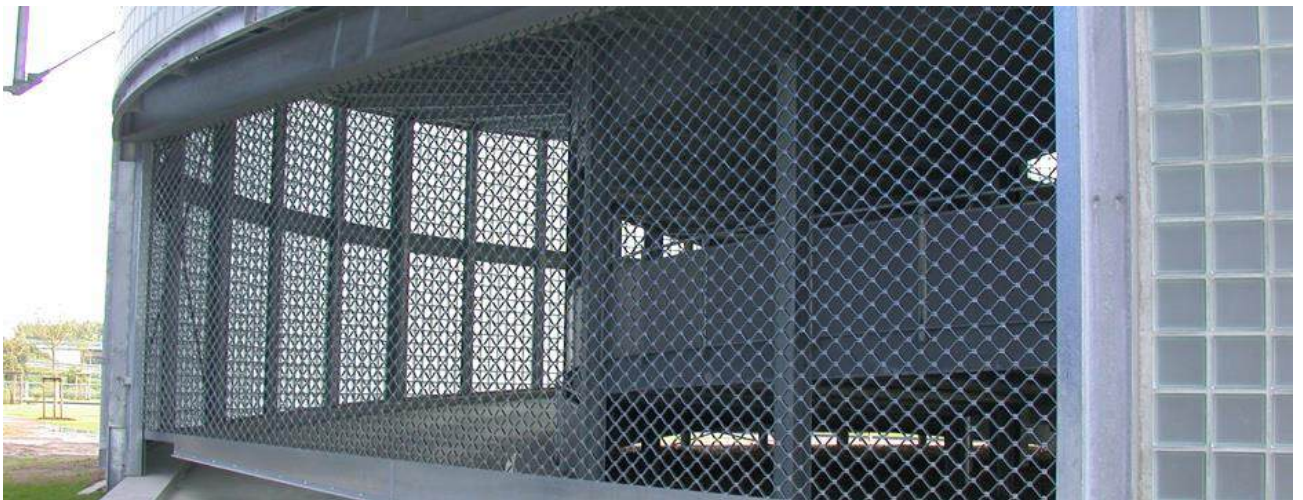
Type	HE-2
Material	Aluminum
Thickness x Strand	3x9
LWD x SWD	60x20
Surface	Nature
Weight(kgs/m ²)	7.3



Type	G-1
Material	Q195
Thickness x Strand	3x3.5
LWD x SWD	110x25
Surface	Nature
Weight(kgs/m ²)	6.6

6.Application

Expanded metal can be used in a variety of areas. Such as filter, architecture and building , screen and fence , flooring and furniture. And it also can be used in many areas you can imagine.









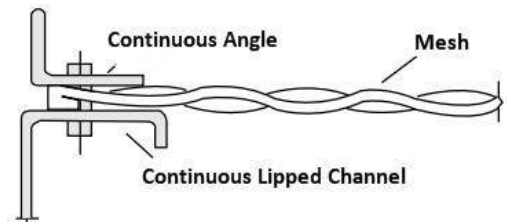
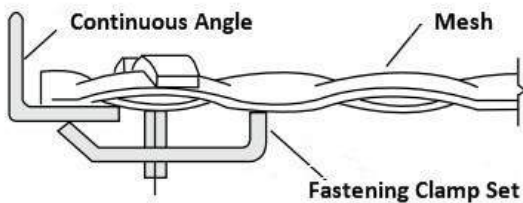
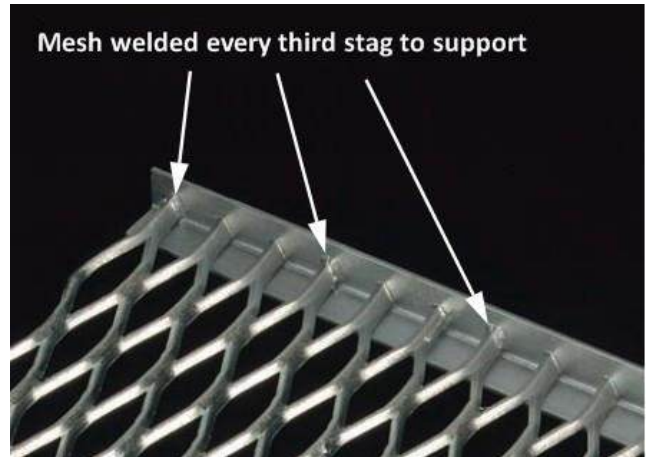
7. Installation

Welding to Support

Mesh should be welded to the support at a minimum of every third stag.

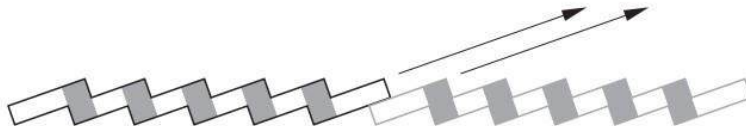
Overlapping expanded mesh can produce a raised edge. It is recommended that expanded mesh be butt joined with the joint positioned over a support.

Alternative clamping method for all types



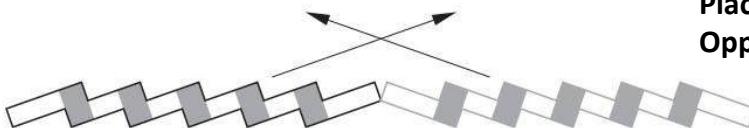
Placement of Adjacent Sheets

Correct Placement



Adjacent mesh panels correctly
Placed with their slopes aligned

Incorrect Placement



Adjacent mesh panels incorrectly
Placed with their slopes pointing in
Opposite directions.

Who we are ?

Hebei Martin Technology Co., Ltd is a **manufacture and trading company**. **Hebei Martin understands its role as an innovative problem solver**. We aim to serve new standards together with our customer and endeavor to make the largest contribution possible in making the world cleaner, safer, more beautiful and ultimately more worth living in.

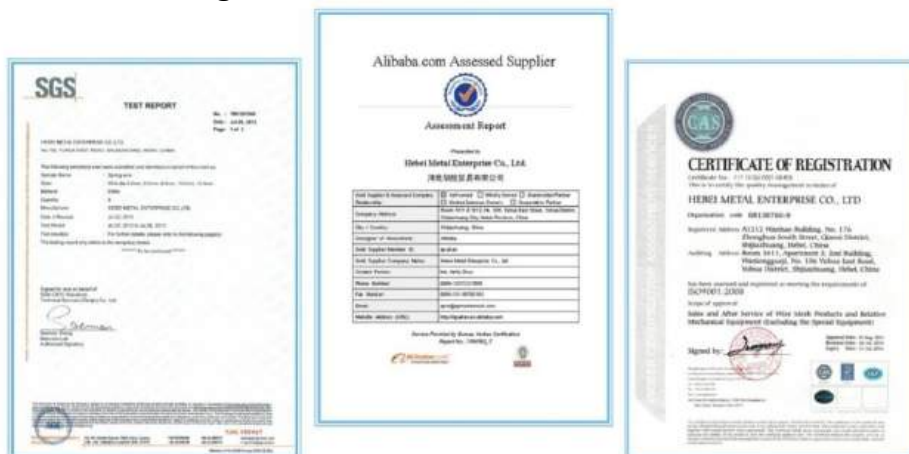
Our products range is filter mesh and decorative mesh.

Hebei Metal has acquired certifications of **ISO 9001:2008, BV (Bureau Veritas), SGS etc.**

Meeting international standards, **we make an effort to upgrade the skill and products efficiency with the advanced equipment from Italy, France, German and Japan**. In recent years, our products are valued highly abroad and export to U.S.A, Europe and South East Asia etc over 60 countries.

Our Service

- Raw Material Testing
 1. X-Ray system for quick testing
 2. Accurate Chemical testing
- Finished Goods Inspecting under the international standards
- We can keep your stocks according to your average consumption per month
- We can help you design and put new products to test by using CAD software and advanced testing instruments





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