Heavy Duty Expanded Mesh is made from a sheet metal uniformly slit and expanded, forming diamond shaped openings in the sheet. The strands and bonds of the diamond-shaped trusses add strength and rigidity. The process of manufacturing by expansion helps to maintain uniform properties to the unit. It comes in a standard (raised) diamond pattern in variety of gauges, opening sizes, materials and sheet sizes.

Applications:
- Walkways, Gratings and Safety Stairs
- Safety Guards
- Fencing
- Partitions
- Ceiling Tiles
- Grills for vehicles
- Beneath flooring tile / marble
- Security Mesh
- Shelving & Rack
- Facade System for parking garage

Note:
All dimensions are in mm.
Stainless Steel [SS]: up to 2.0 (SS304/316)
Mild Steel [MS]: up to 4.0
Galvanized Iron [GI]: up to 4.0
Aluminium [AL]: up to 5.0
Maximum width: 2440
Special lengths are available upon request.
Other openings (LWD x SWD) can be made depending on orders volume.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Strand Width</th>
<th>LWD (mm)</th>
<th>SWD (mm)</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDEM 2010</td>
<td>1.5/2</td>
<td>20</td>
<td>10</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 2814</td>
<td>1.5/2/3/4/5</td>
<td>28</td>
<td>14</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 3015</td>
<td>1.5/2/3/4/5</td>
<td>30</td>
<td>15</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 4020</td>
<td>1.5/2 up to 6</td>
<td>40</td>
<td>20</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 5015</td>
<td>1.5/2 up to 10</td>
<td>50</td>
<td>15</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 6224</td>
<td>1.5/2 up to 10</td>
<td>62</td>
<td>24</td>
<td>MS/GI/SS/AL</td>
</tr>
<tr>
<td>HDEM 9035</td>
<td>1.5/2 up to 11</td>
<td>90</td>
<td>35</td>
<td>MS/GI/SS/AL</td>
</tr>
</tbody>
</table>

“Heavy Duty Expanded Mesh, a diamond shaped openings in the sheet.”

Technical Metal Industrial Co. Ltd.
The Heavy Duty Expanded Walkways, Gratings and Safety Stairs are effective products for the industrial use. They are made from expanded metal sheet, manufactured from a single piece of high strength and rigidity metal, which distributes the load uniformly. If safety aspect is of prime concern to achieve, then it can be relied upon to a great extent.

The unique one-piece diamond shaped construction provides slip resistance in all directions of the mesh. It is ideally suited for all walking / working surfaces, where mud, grease, oil, water, detergent, etc., create slippery or hazardous scenes. The perforations allow spillage to drain the water or any other liquid.

**Fixing details for welded situations**

Welded to support
Each fourth stag should be welded to structural support or at 150 mm centres.

Sheets joined by butt weld

**FEATURES:**

1. Economical.
2. Light weight.
3. Available in Steel & Aluminium.
4. Available in custom made sizes.
5. Available in framed or unframed forms.
6. Option to weld or join the sheets at site.

7. Allow free flow of light, air and fluids.
8. Raised pattern adds to anti slip protection.
10. Finish by Hot Dip Galvanizing and / or Powder Coating, upon request.
The Heavy Duty Expanded Mesh as Safety Guards are widely accepted, mainly in industries. These barriers are strong and economical solutions to plant safety needs. The versatility of this system allows easy integration of access doors. The pattern of mesh enhances proper ventilations, as well as easy vision to the enclosed machinery.

It can also be used in staircases and balconies as safety barriers.

The hot dip galvanized or powder coated finish, adds a corrosion resistance protective layer to the expanded steel mesh, as well as beauty and durability. It is suitable to work in both indoor and outdoor environments.

**FEATURES:**
1. Economical.
2. Light weight.
3. Available in Steel & Aluminium.
4. Available in custom made sizes.
5. Available in framed or unframed form.
6. Flexible.
7. Proper ventilation.
8. Easy visions to the enclosed motors / machineries.
9. Finish by Hot Dip Galvanizing and / or Powder Coating, upon request.
Heavy Duty Expanded Mesh is attached to a fence framework of roll formed channel, which connects to round pipes with series of fittings. This kind of installation is strong and hence difficult to intrude.

Wherever the option is for through-vision fencing, Heavy Duty Expanded Mesh is ideal, as it is made from a metal sheet uniformly slit and expanded.

“As Rigidity, Security & Beauty are of prime concerns, Heavy Duty Expanded Mesh Fencing is the right choice.”

FEATURES:
1. Economical.
2. Light weight.
3. Available in custom made sizes.
4. Difficult to intrude / penetrate.
5. Strong & durable.
7. Excellent throughout vision.
8. More aesthetically pleasing.
10. Finish by Hot Dip Galvanizing and / or Powder Coating, upon request.

Additional Products
Airport Noise Abatement Barrier
**Partitions**

Heavy Duty Expanded Mesh Partitions System ensures excellent rigidity and quality. They offer a large percentage of open area for clear ventilation, light diffusion, sprinkler coverage and visibility.

There is an unobstructed view of the entire interior of the Mesh Partition cage at all times while still providing security to the contents of the entire enclosure. Expanded Metal Mesh Doors with locking facilities are provided for accessing.

They are finished with Hot Dip Galvanizing and / or Powder Coating, upon request.

Proper colour selection for powder coating will add to the beauty of the partition cage.

---

**Ceiling Tiles**

The structure of Expanded Mesh helps the disruption of sound waves, minimising noise and reducing echo.

These practical features of the material, in conjunction with its already proven architectural features, make it perfect for decorative ceiling tiles.
Beneath flooring Tiles / Marbles

Heavy Duty Expanded Mesh System ensures excellent base during the laying of the floor tiles / marbles. Manufactured from a single piece of high strength and rigidity metal, which distributes the load uniformly.

Heavy Duty Expanded Mesh

Grills for vehicles

Heavy Duty Expanded Mesh is widely accepted for radiator grills and air vents of cars & trucks. Made from expanded metal sheet, which is manufactured from a single piece of high strength and rigidity metal. The aluminium grills, powder coated in black has very good resistance to corrosion.

These can also be used as protective grills for the body of trucks.

Available in Steel and Aluminium according to the customers’ requirements. They are finished with Hot Dip Galvanizing or Powder Coating. Proper colour selection for powder coating will add to the beauty to the work.
Security Mesh

Security Mesh acts as cost effective, preventive measures to secure internal and external walls, ceiling and roofs from intruders. It can be fixed with Metal or Timber Stud with heavy duty staples, screws or nails with suitable washers.

Shelving & Rack

Heavy Duty Expanded Mesh is used effectively for fabricating shelves or racks. Made from expanded metal sheet, which is manufactured from a single piece of high strength and rigidity metal, which distributes the load uniformly. Storage and picking of small & medium sized goods can never be easier and economical.

Applications:

- Ideal for office use as filing cabinet. Powder Coating finish with appropriate colour adds to the beauty of the office interiors.
- Ideal for grain storage as they allow the circulation of air, while keeping the vermin out.

FEATURES:

1. Economical.
2. Light weight.
4. Available in custom made sizes.
5. Allows free flow of light and air.
6. Available in Steel & Aluminium.
7. Finish by Hot Dip Galvanizing and / or Powder Coating, upon request.
Facade System for Parking Garage

Heavy Duty Expanded Mesh System ensures excellent ventilation while providing security, safety and visibility throughout the parking structure. The Aluminium Expanded Metal provides a durable & virtually maintenance-free solution to any parking structure exterior. Powder Coating finish with chosen colours adds to the structure’s beauty.

Heavy Duty Expanded Metal Lath

Technical Specifications:

Manufactured to:
BS EN 13658-1&2:2005. ASTM C 847

Materials:
Aluminium: ASTM B209/B209M.
Mild Steel to: BS EN 10149-3:1996; BS EN 10268:2006;
ASTM A1008/A1008M.
Galvanized Steel to: BS EN 10346:2009 (formerly BS
EN 10142); ASTM A653/A653M.
Stainless Steel to: BS EN 10088-2:2005; ASTM
A240/A240M in Grade: 304,316,316L.

Finishes:
Hot Dip Galvanizing to:
BS EN ISO 1461:1999 (formerly BS 729);
ASTM A123/A123M, A153/A153M.

Powder Coating at client’s request.

Contact Us
E-mail: tmi@tmico.ae
Website: www.tmi-co.com

TMi - Abu Dhabi
Tel.: +971 (2) 5502025
Fax: +971 (2) 5502024
P.O. Box: 41558
Abu Dhabi

TMi - Al Ain
Tel.: +971 (3) 7224768
Fax: +971 (3) 7224769
P.O. Box: 99155
Al Ain

TMi - Dubai
Tel.: +971 (4) 8852243
Fax: +971 (4) 8852249
P.O. Box: 86029
Dubai

TMi - Ras Al Khaimah
Tel.: +971 (7) 2443855
Fax: +971 (7) 2442657
P.O. Box: 33239
Ras Al Khaimah