Stretch Metal Lay-On Corridor

Stretch Metal from Hunter Douglas is a highly versatile designer material giving extra visual effects to ceilings. It is very easy to customise ceilings by varying the types of mesh, their arrangement, the lighting and the colour.
Lay-On Corridor

PLANKS
Stretch Metal planks designed to be installed on conventional wall angle profiles. The planks can be lifted and easily removed without the aid of tools. The panels are recyclable, lightweight and strong.

SUSPENSION
The panels are supported at their ends by wall angle profiles (2 & 3). The panels have straight upstands at the panel ends. Depending on panel length the panel sides are re-inforced with spot-welded steel angle profiles.

CONSTRUCTION DETAILS
Steel L or W shaped edge profiles can be used as perimeters.

BASE MATERIAL
Stretch Metal planks are available in steel. The Stretch Metal plank (Version-I) can be re-inforced with a welded support profile on the inside (Version-II).

OVERVIEW AVAILABLE EXECUTIONS / MAXIMUM DIMENSIONS

<table>
<thead>
<tr>
<th>Mesh Type</th>
<th>% Open</th>
<th>Version-I, no reinforcement: D1</th>
<th>Version-II, with reinforcement: D4-D6/D4S-D6S</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS6</td>
<td>40</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
<tr>
<td>LD6</td>
<td>40</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
<tr>
<td>LS8</td>
<td>54</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
<tr>
<td>LS10</td>
<td>57</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
<tr>
<td>LS12</td>
<td>66</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
<tr>
<td>LS16</td>
<td>46</td>
<td>500 x 1200 mm</td>
<td>600 x 2800 mm</td>
</tr>
</tbody>
</table>

Remark: due to differences in deflection, one shall never mix Version-I and Version-II panels in one area

MATERIAL REQUIREMENT PER M²

<table>
<thead>
<tr>
<th>Components</th>
<th>Unit</th>
<th>Version-I, max. 500 x 1200 mm</th>
<th>Version-II, max. 600 x 2800 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretch Metal Lay-on</td>
<td>pcs</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>Edge trim profile L/W</td>
<td>lm</td>
<td>1.67</td>
<td>0.71</td>
</tr>
</tbody>
</table>
Acoustics

ACOUSTIC PERFORMANCE
Using acoustic pads on top of the Stretch Metal panels offers exceptional acoustic performance. The thickness of the pads can be chosen depending on the required acoustical values. The acoustic absorption value can reach \( \alpha_w \) with an acoustical pad of 85 mm.

Material

TRANSPARENCY
The tiles can be made from various mesh types. This results in different optical effects if the natural or artificial light comes from the plenum. It is important to realise that stretch metal meshes do have a direction. Depending on viewing direction the mesh appears more or less open. This influences light coming through the material but also the visibility of installations in the plenum. The physical transparency can also be used for smoke extraction and sprinkler operation in case of fire.

FIRE BEHAVIOUR
HunterDouglas® metal ceilings are classified incombustible, and will therefore not contribute to fires. When ceilings need to protect the structural integrity of a building, HunterDouglas® ceilings offer a wide range of practical solutions with regards to fire resistance and fire stability. Further information is available on request.

COATING
Stretch Metal tiles are all powder coated materials. Durable powder coatings for exterior use are optionally available.

COLOUR RANGE
The standard colour range consists of RAL and NCS colours, including chrome. Other special colours are available on request.

QUALITY
Our focus on quality ensures the highest standard of production process, material, machinery and finished product. The superior durability of Hunter Douglas products translates into lower costs during the life cycle of the product due to longer life expectancy and lower maintenance costs. Our company processes are ISO 9001 certified.

INSTALLATION
It is necessary for all versions that qualitative suspension systems are used. The systems must be stable, aligned and leveled so that they comply with the requirements of the panels. For information on installation, refer to the applicable assembly instruction leaflets.

Acoustic tests Stretch Metal
Plenum depth 300 mm

<table>
<thead>
<tr>
<th>Freq. Hz.</th>
<th>Absorption value ( \alpha_w )</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0.0</td>
</tr>
<tr>
<td>160</td>
<td>0.2</td>
</tr>
<tr>
<td>250</td>
<td>0.4</td>
</tr>
<tr>
<td>400</td>
<td>0.6</td>
</tr>
<tr>
<td>630</td>
<td>0.8</td>
</tr>
<tr>
<td>1000</td>
<td>1.0</td>
</tr>
<tr>
<td>1600</td>
<td>1.2</td>
</tr>
<tr>
<td>2500</td>
<td>1.4</td>
</tr>
<tr>
<td>4000</td>
<td>1.6</td>
</tr>
</tbody>
</table>

| Mesh LD6, Tile 600x600, Ac.Pad 25 mm, \( \alpha_w \) 0.85 |
| Mesh LS10, Tile 800x800, Ac.Pad 85 mm, \( \alpha_w \) 1.0 |
| Mesh L58, Tile 600x600, Ac.Pad 25 mm, \( \alpha_w \) 1.05 |
Mesh Types Tiles & Planks

Stretch Metal consists of metal sheet with diamond or square shaped holes. The stretch metal material is made with a tool that simultaneously cuts and stretches the sheets. As a result the mesh is created without any waste of material.

MESH TYPES

Standard

The standard mesh types are a square mesh (LS) or a diamond shaped mesh (LD) with a variation in openness of the mesh. The range starts with the smallest LS6/LD6 up to LS16. All mesh types are available in steel, with types LS8 and LS12 also available in aluminium.

Key

\[
\begin{align*}
LS &= LW \\
LW &= \text{Long diagonal of mesh} \\
SW &= \text{Short diagonal of mesh} \\
W &= \text{Strand width} \\
t &= \text{Strand Thickness} \\
L &= \text{Inner size}
\end{align*}
\]

Special

Several other mesh types are available on request, depending on technical requirements and availability. Hexagonal mesh, Round mesh and Ornamental meshes are examples of the possibilities.

STANDARD MESH TYPES:

- **LD6 (Fe) open area 40%, thickness 1.7 mm**
  dimensions: 6 x 3.5 - 1.1 x 0.8 - 1.6 kg/m²

- **LS6 (Fe) open area 36%, thickness 1.7 mm**
  dimensions: 6 x 4.5 - 1.2 x 1.0 - 1.3 kg/m²

- **LS8 (Fe+Al) open area 54%, thickness 1.9 mm**
  dimensions: 8 x 6.0 - 1.2 x 1.0 - 1.7 kg/m²

- **LS10 (Fe) open area 57%, thickness 2.0 mm**
  dimensions: 10 x 7.0 - 1.5 x 1.0 - 1.3 kg/m²

- **LS12 (Fe+Al) open area 66%, thickness 2.0 mm**
  dimensions: 12 x 9.5 - 1.6 x 1.0 - 1.7 kg/m²

- **LS16 (Fe) open area 46%, thickness 2.0 mm**
  dimensions: 16 x 11.0 - 3.0 x 2.0 - 2.0 kg/m²