Stretch Metal Sports hall

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.
Sports hall

PLANKS
Stretch Metal planks designed as Lay-On panels supported by an omega-profile. The Sports hall system combines visual and technical quality into a specific design. The system is impact resistant for all types of balls normally used in indoor sports activities. The Stretch Metal Sports hall system is extensively tested on impact resistance and conforms to the requirements of DIN 18032 and impact resistance class 1A according EN 13964.

The fully accessible Stretch Metal Sports hall system was specially designed for use in sports halls and to withstand the impacts of balls. Panels are locked in place through the locking bracket fitting over the panel ends and the omega profile. The slots in the profile allow the locking brackets to be removed to demount the panels.

CONSTRUCTION DETAILS

BASE MATERIAL
Stretch Metal planks are available in steel*). The Stretch Metal planks are strengthened with a welded support profile inside (Version-II)

OVERVIEW AVAILABLE EXECUTIONS / MAXIMUM DIMENSIONS

<table>
<thead>
<tr>
<th>Mesh Type</th>
<th>% Open</th>
<th>Version-II, with reinforcement: D5/D5S</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD28x14-2.5x1.5</td>
<td>34</td>
<td>300 x 1800 mm</td>
</tr>
</tbody>
</table>

MATERIAL REQUIREMENT PER M²

<table>
<thead>
<tr>
<th>Components</th>
<th>Unit</th>
<th>Version-II, max 300 x 1800 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretch Metal Lay-On</td>
<td>pcs</td>
<td>1.85</td>
</tr>
<tr>
<td>Omega profile</td>
<td>lm</td>
<td>0.55</td>
</tr>
<tr>
<td>Omega profile splice</td>
<td>pcs</td>
<td>0.11</td>
</tr>
<tr>
<td>Locking brackets</td>
<td>pcs</td>
<td>3.70</td>
</tr>
<tr>
<td>Suspension</td>
<td>pcs</td>
<td>0.46</td>
</tr>
</tbody>
</table>

* optionally the system is also available in aluminium to be used in swimmingpool applications
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 $\alpha_w 1$ with an acoustical pad of 85 mm.

![Acoustic tests Stretch Metal](image)

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.

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.

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.

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.
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.

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

Key

LS = LW
LW = Long diagonal of mesh
SW = Short diagonal of mesh
W = Strand width
t = Strand Thickness
L = Inner size