Before you start
A suspended ceiling can be used to conceal installations, to provide acoustic insulation or simply lower a ceiling to give the room better functional properties.

The system
The system is ergonomic and easy to use. The products in the system reduce the time required for assembly.

Fixing
The suspended ceiling mainly uses click-lock solutions. Screws for fixing onto an existing ceiling and joining are not included. Use self-drilling screws for profiles with over 1 mm thick material.

Storage
The pallet carrying the steel profiles should be stored slightly at an angle for better water run-off. Protect the profiles from dust and dirt.

Cutting
The steel profiles can be cut with a profile shear or a pair of metal shears. To simplify the assembly, the studs should be ordered in pre-cut lengths.

Fire
Steel is unaffected up to 350 °C and at 550 °C the steel has lost 50% of its load capacity and therefore its safety marginal before collapsing. The time to achieve these temperatures in a fire depends on how the steel is exposed. To build against fire, isolate the products of the suspended ceiling system and build the surface layers with fire-insulating materials. Build tight to prevent spreading to the steel products and build with materials that have a documented fire resistance. If insulation is used under the surface layer, it must be installed so that it is prevented to fall down if the surface material is burned off.

<table>
<thead>
<tr>
<th>Fire rating EI 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 layer plasterboard 13 mm</td>
</tr>
<tr>
<td>1 layer fire protected plaster board 15mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fire rating EI 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 layers fire protected plaster boards 15mm</td>
</tr>
</tbody>
</table>

Example of protection against fire from below
Product overview

Components

**P**
Primary channel for suspended ceiling.

**S 25**
Hat profile for secondary grid or as roof batten. Available in 25/45 mm height and 0.5/0.7 thickness.

**PSBE**
Connection clip for P and S25 profiles.

**LP**
L-profile for connection between wall and ceiling.

**PSTAG**
Breakable suspender in three different lengths: 295, 445 and 1045 mm.

**PSFP**
Suspension bracket with spring lock. Suspender length is determined by PSTAG.

**PSFD**
Direct brackets with fixed dimensions 100, 125 and 150 mm from ceiling to back of S25.
Assembly – Suspended ceiling

Assembly with suspension bracket with 240 to 1150 mm suspension

LP, PSTAG, PSFD, PSBE, P

Fixed LP in wall with CC 600 mm.

Measure out the position of suspension brackets from table below (a and b dimensions).

Suspension spacing and dead load

<table>
<thead>
<tr>
<th>Recommended board widths (plaster 13 mm)</th>
<th>Number of board layers</th>
<th>a spacing suspension (PSTAG) [mm]</th>
<th>b spacing primary grid [P] [mm]</th>
<th>c spacing secondary grid [S25] [mm]</th>
<th>Dead load incl. underlay [kg/m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>600/900/1200</td>
<td>1</td>
<td>900</td>
<td>1200</td>
<td>Rec: 300</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>900</td>
<td>1200</td>
<td>Rec: 300 Max: 600</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>900</td>
<td>900</td>
<td>Rec: 300 Max: 450</td>
<td>31*</td>
</tr>
</tbody>
</table>

* S25 are replaced with S725 to meet the requirements.

NB
- The PSFP + PSTAG is dimensioned for 25 kg per unit
- The connection from either PSFP or PSBE to a S25 is dimensioned for 16 kg per unit
- Note that PSFP + PSTAG should support all the weight from the suspended ceiling to the screw fixing
- The screw fixing is dimensioned depending on the underlay

Fulfils requirements for SS-EN 13964:2014
Assembly – Suspended ceiling

PSTAG can easily be broken off to a suitable length at the perforations. Available in three standard lengths.

Fix PSTAG in the cross between a and b. Use fasteners adapted to ceiling type as well as the load for the complete installation. Use washer with a diameter of 14 mm.

When PSTAG is fixed it can easily be bent down into a vertical position.

Assemble all PSTAGs as in table on previous page.

Squeeze the spring lock on PSFD and fit onto PSTAG. PSFD is attached when the spring lock is released.

Assembling all PSTAGs and PSFDs.

Screw P firmly into PSFD.

Fit P through all PSFPs. It is important that the P stud does not rest against LP.

Put PSBE between each PSFD. PSBE is locked in the upper edge, while PSFD is locked in the lower edge. Together, they ensure that P cannot be twisted free, and it is therefore not necessary to screw P into place.

Where P needs to be joined, fix it with two screws through PSBE or PSFD.

Press S25 together and draw it upwards into PSBE and/or PSFD. S25 should also rest (not be fixed) in the LP profile.

Suspension lengths [mm]

<table>
<thead>
<tr>
<th>PSTAG</th>
<th>L Suspension lengths [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>295</td>
<td>240–400</td>
</tr>
<tr>
<td>445</td>
<td>240–650</td>
</tr>
<tr>
<td>1045</td>
<td>240–1150</td>
</tr>
</tbody>
</table>
Assembly – Suspended ceiling

Assembly with direct bracket with 100-150 mm suspension

LP, PSFD, P, PSBE, S25

Fixed LP in wall with CC 600 mm.

Measure out the position of suspension brackets from table below (a and b dimensions).

Suspension spacing and dead load

<table>
<thead>
<tr>
<th>Recommended board widths (plaster 13 mm)</th>
<th>Number of board layers</th>
<th>a spacing suspension (PISTAG) [mm]</th>
<th>b spacing primary grid (P) [mm]</th>
<th>c spacing secondary grid (S25) [mm]</th>
<th>Dead load incl. underlay [kg/m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>600/900/1200</td>
<td>1</td>
<td>900</td>
<td>900</td>
<td>Rec: 300</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>900</td>
<td>900</td>
<td>Rec: 300 Max: 600</td>
<td>22</td>
</tr>
</tbody>
</table>

NB
- Each PSFD is dimensioned for 18 kg per unit
- The connection from either PSFP or PSBE to a S25 is dimensioned for 16 kg per unit
- The screw fixing is dimensioned depending on the underlay
Assembly – Suspended ceiling

Fix PSFD in the cross. Choose screw holes depending on suspension length. Use fasteners adapted to ceiling type as well as the load for the complete installation. Use washer with a diameter of 14 mm.

PSFD suspension lengths for different screw holes.

When PSFD is fixed it can easily be bent down into a vertical position.

Fit all PSFDs as in table on previous page.

Screw P firmly into PSFD.

Fit P through all PSFPs. It is important that the P stud does not rest against LP.

Put PSBE between each PSFD. PSBE is locked in the upper edge, while PSFD is locked in the lower edge. Together, they ensure that P cannot be twisted free, and it is therefore not necessary to screw P into place.

Where P needs to be joined, fix it with two screws through PSBE or PSFD.

Press S25 together and draw it upwards into PSBE and/or PSFD. S25 should also rest (not be fixed) in the LP profile.
At Lindab, good thinking is a philosophy that guides us in everything we do. We have made it our mission to create a healthy indoor climate – and to simplify the construction of sustainable buildings. We do that by designing innovative products and solutions that are easy to use, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment.

We use steel in our products. It’s one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

We simplify construction