Design and technique

Product description
Gyptone Xtensiv is a pre-painted, acoustic suspended ceiling mounted in a semi concealed 24 mm grid system. The ceiling can be used for many applications like schools, offices and commercial settings. Gyptone Xtensiv is a fully demountable ceiling.

The product is subject to full recycling as raw material for new plaster boards. Gyptone Xtensiv is available with perforated and non-perforated surface. Thickness is 10 mm and the format is 300 x 1200 mm. and 300 x 2400 mm.

Plenum height
Minimum and maximum plenum heights with API grid system, is to be found on page 4.

Surfaces
The tiles surface is painted from the factory. Each Gyptone tile is painted with the colour NCS0500, with a gloss value of 5-9 according to ISO 2813. Future treatment is to be executed with a shorthair roller as spray painting will impair the acoustic performance. The colour of the API Cross-Lock Unipro grid system is snow-white (close to RAL9016 or RAL9003).

Grid system
Gyptone Xtensiv is installed in a API Cross-Lock Unipro grid system Cross-Lock T24. The system is suspended and need the hangers suitable for the system. Gyptone Xtensiv needs to be installed in accordance with this installation manual as well as the general specification of the project.

Fire resistance
A2-s1, d0.

Loading
Gyptone Xtensiv cannot support extra weight. If installations are required in an Xtensiv ceiling, the installation should be fixed to the slab above with dedicated suspensions. Maximum load equally spread on the main beams is 7 kg/m for T-24 mm grids. Maximum point load for the grid is 3 kg.

Stability
Gyptone Xtensiv is to be installed and used in rooms with relative humidity not exceeding permanently 70% or temperatures exceeding 45° C.

Weight
Non perforated Gyptone Xtensiv = 8 kg/m²
Perforated Gyptone Xtensiv = 7 kg/m²

Cleaning
Can be cleaned with a damp cloth. Do not use hard detergents. Always use gloves when installing Gyptone Xtensiv.

Maintenance
If damages on edges or surfaces occurs, the best solution is the replace the damaged Xtensiv plate, with a new one.
The placement of the shadow moulding is marked with a bubble level/chalk line and mounted with a flatheaded screw suitable for the foundation per max. 300 mm, the first one no more than 50 mm from a corner. The shadow mouldings should not be shorter than 300 mm. Cut the profiles in close mitre at the corner joint. If the foundation is uneven mount a thin wooden list behind the wall angle.

Hangers for the main beams are placed in rows per 1200 mm. The first main beam max. 300 mm from the wall. First hanger in main beam max. 300 from the wall. The other hangers per max. 1200 mm. See the illustration to the right. The hook of the hanger is squeezed together with a pair of nippers.

At the longitudinal assembly of the main beams the couplings should be pushed together until they click.

The cross lock connectors are to be placed with a centre distance of 300 mm on the main beam. The tap in the connector should aligned with the vertically slot in the main beam. The connectors should be pushed down on the main beam until they click.

Connect the cross profile to the main beam, by twisting the cross profile onto the Cross-Lock connector. This is done by placing the legs of the connector into the dedicated cut-outs on the cross profile.

For safety and for a stable connection between the main beam and the cross profile, fold the locking mechanism on the cross lock connector with a pair of nippers.
Installation of API Cross-Lock Unipro grid system and Gyptone Xtensiv. Prior to installation it is recommended to read the manual thoroughly.

Adjust the entire grid system, so the cross profiles is laying on the top step of the shadow moulding, like seen in the lower right corner. This means that the main profiles are located above the shadow moulding. Ones the grid system is adjusted, every second main beam should be connected to the wall for stability. This is done with a connecting bracket.

When installing the Gyptone Xtensiv, use cotton gloves. Lift one side of the Xtensiv up above the grid system. Then there is enough space to lift the other side of the Xtensiv up, laying it in place on the opposite cross profile. All installations should be finished before mounting the Xtensiv tiles.

It is possible to slide the Xtensiv along the cross profiles, ones it is in place in the grid system. This is needed when installing the Xtensiv tiles in the perimeter of the room.

Gyptone Xtensiv can be shortened with a knife. It is possible to shorten the Xtensiv by cutting in the perforated area, if it is necessary. It is not recommended to cut in the perforated area of an Xtensiv Line, as cutting into the Line perforation will weaken the Xtensiv.

In case lighting fittings are planned, supporting profiles have to be mounted using the light fitting XT-bracket. This bracket is needed to make long narrow light fixtures in the Xtensiv ceiling. The position of the brackets is related to the light fitting and ceiling layout. The light fitting XT-bracket needs to be secured with screws P14. To support the cut in the main beam, place a hanger near the light fitting XT-bracket.

It is also possible to make a 600x600 mm recess, for a light fitting in the Xtensiv ceiling system. The method is shown on page 4 and page 5. Page 5 shows the possible connections between the cross profile and the cross tee. In case of a square recess in the Xtensiv ceiling, the recess should be placed between the main profiles and not under the main profiles.
For estimated consumption of the grid system, go to page 6.

How to make a 600x600 mm recess in an Xtensiv ceiling

T-grid cross lock system with adjustable hangers

<table>
<thead>
<tr>
<th>Items</th>
<th>Min. height</th>
<th>Max. Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable 120-160</td>
<td>195 mm</td>
<td>245 mm</td>
</tr>
<tr>
<td>Adjustable 135-190</td>
<td>215 mm</td>
<td>275 mm</td>
</tr>
<tr>
<td>Adjustable 190-300</td>
<td>270 mm</td>
<td>385 mm</td>
</tr>
<tr>
<td>Adjustable 340-600</td>
<td>420 mm</td>
<td>685 mm</td>
</tr>
<tr>
<td>Adjustable 530-990</td>
<td>610 mm</td>
<td>1075 mm</td>
</tr>
<tr>
<td>Adjustable 650-1230</td>
<td>1120 mm</td>
<td>1395 mm</td>
</tr>
<tr>
<td>Adjustable 775-1480</td>
<td>1120 mm</td>
<td>1595 mm</td>
</tr>
</tbody>
</table>
Good advice

Corners with shadow moulding

Mitre joint

Butt joint

How to handle a box of tiles on the site

How to open a box, without damaging the tiles

How to connect Cross Tee and Cross Profile, when making a recess in the Cross Lock system
Check list for installing grid system and Gyptone Xtensiv.
Prior to installation it is recommended to read the manual thoroughly.

☐ Humidity in the room should not exceed 70% during installation or usage.
☐ Only usage of API Cross-Lock Unipro profiles as grid system.
☐ Fix wall angle to wall, with a maximum of 300 mm between the screws.
☐ For the best connection between the wall angles in the corners, make a mitre joint.

☐ Survey the room and position the hangers according to this manual and the general specification of the project.
☐ Remember to secure the cross lock connector by folding down the locking mechanism.
☐ Adjust the entire grid system into level. Recommended to use a laser.
☐ Every second main beam has to be connected to the walls, for better stability in the grid system.
☐ Always use clean gloves when installing Gyptone Xtensiv.
☐ It is possible to make 600x600 mm recesses in the Xtensiv ceiling by using a standard 600 mm cross tee and some angle brackets.

Estimated consumption suspended installation of grid system (10x10 m)

<table>
<thead>
<tr>
<th>Items</th>
<th>Term</th>
<th>Length mm</th>
<th>CC mm</th>
<th>usage/m² 300 x 1200-2400 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Main beam Unipro</td>
<td>4118181 / 5200670312</td>
<td>3600</td>
<td>1200</td>
<td>0.9 m</td>
</tr>
<tr>
<td>2 Cross profile Unipro</td>
<td>4118181 / 5200670312</td>
<td>3600</td>
<td>300</td>
<td>3.3 m</td>
</tr>
<tr>
<td>3 Shadow moulding</td>
<td>4140017 / 5200413156</td>
<td>3600</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4 Cross-Lock connector</td>
<td>4207005 / 5200670315</td>
<td>-</td>
<td>1200 x 300</td>
<td>3 pcs.</td>
</tr>
<tr>
<td>5 Hanger</td>
<td>Depends on suspension height</td>
<td>-</td>
<td>1200 x 1200</td>
<td>0.36 pcs.</td>
</tr>
<tr>
<td>6 Connecting bracket</td>
<td>4000013 / 5200670317</td>
<td>-</td>
<td>-</td>
<td>0.05 pcs.</td>
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<tr>
<td>7 Lighting fitting bracket XT</td>
<td>5200670318</td>
<td>-</td>
<td>-</td>
<td>By measurement</td>
</tr>
<tr>
<td>8 Cross profile (600 mm)</td>
<td>4810161 / 5200413137</td>
<td>-</td>
<td>-</td>
<td>By measurement</td>
</tr>
</tbody>
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