

6 - Suspended ceilings and slabs protection

Fireproof suspended ceilings are used mainly in two specific cases.

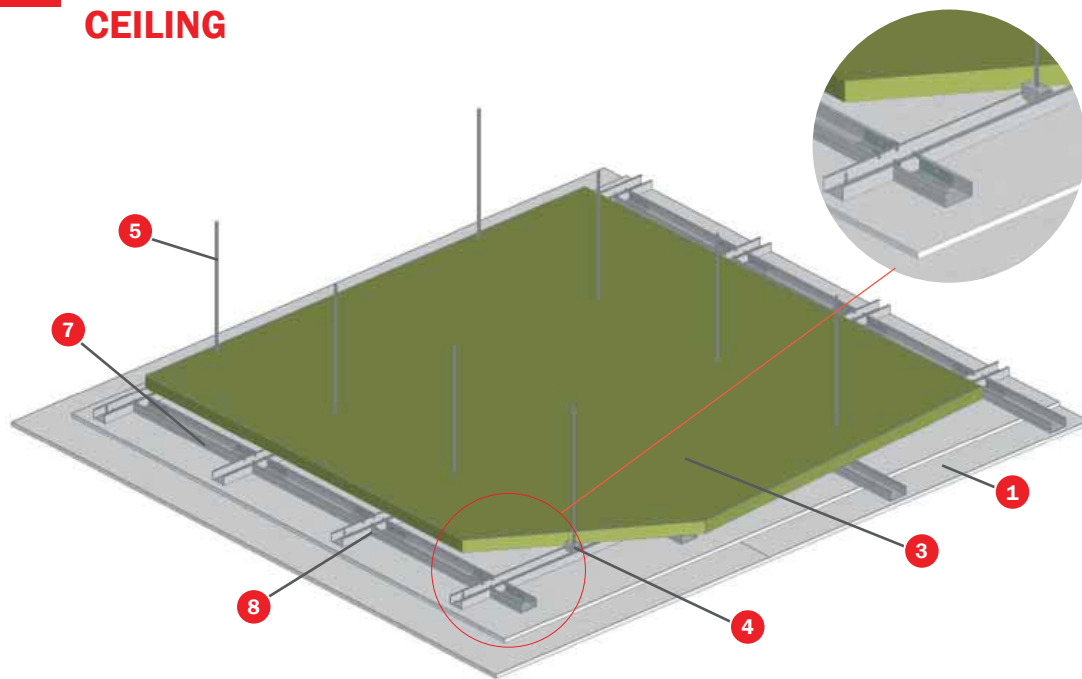
The first case is to isolate different fire sectors vertically. This action helps restrain fire to its starting point and avoids its propagation to other areas. This solution is highly useful in the case of high-rises since partial sector division might cause the fire to spread easily causing serious problems during evacuation.

The second case is to protect the various objects found above the ceiling; for example, installations, structures, slabs, etc.

According to our requirements, we shall use either application. Our solutions have been tested when fire strikes from below.



6.1 TECBOR® A 12+12 - EI 120 INDEPENDENT SUSPENDED CEILING



TEST

Standard: UNE EN 1364-2

Laboratory: CIDEMCO

Test N°: 20331-1/2-M1

SOLUTION

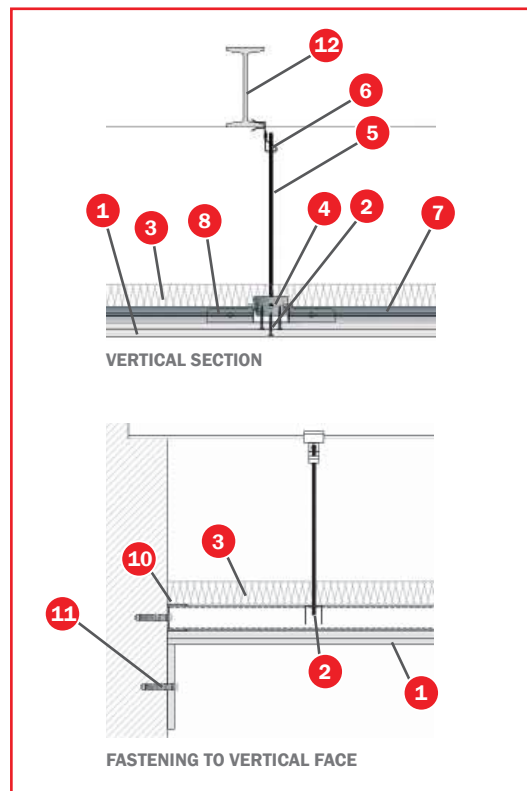
- 1 Tecbor® A 12 mm boards
- 2 3,5x45 mm self-tapping screw
- 3 40 mm and 40 Kg/m³ density rock wool
- 4 Steel grip for TC 60/27
- 5 M6 threaded rod
- 6 "Sinard" type clamp
- 7 TC 60/27
- 8 Steel grip for TC 60/27
- 9 Tecbor® joint paste
- 10 48x30x0,5 mm runner
- 11 10x100 mm metal plug
- 12 Metal profile

DESCRIPTION OF ASSEMBLY

Fix 48x30x0.5 mm runners with 10x100 mm plugs every 500 mm approximately around the ceiling's perimeter.

Then install TC 60/27 profiles at a distance of 610 mm between axes placing such sections crosswise through a steel grip for TC 60/27 forming 610x610 mm frames. Using the steel grips, the M6 rod and the clamps, fix the structure to the one supporting the ceiling.

Once the metal structure is finished, fix the first Tecbor® A 12 mm boards to the first layer alternating



it with the 40 mm and 40 kg/m³ rock wool above the structure. Then, place the second board layer using 3.5x45 mm self-tapping screws alternating it with the first layer.

Use Tecbor® A 12 mm to finish off the assembly with a 150 mm wide base-board.

Distance between screws will be approximately 250-300 mm.

Screw heads and inter-board joints will be covered with Tecbor® joint paste..

