

## 6. GALVANIZED DUCT PROTECTION

EI-60 / EI-120

### Service Facilities Fire Resistance

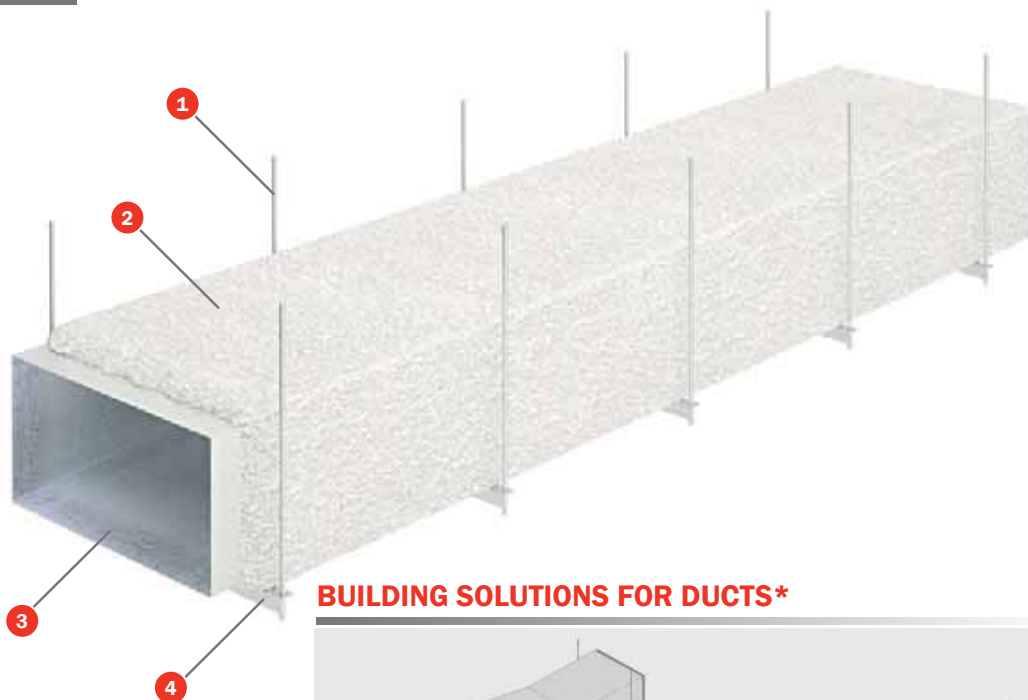
Most of new constructions are crossed by several installations such as: cables, pipelines, conduits, ventilation shafts, etc. These installations alter the subdivisions of the splitting elements, allowing fire and smoke to pass through different fire areas.

Both the Technical Building Code and the Safety Regulations against Fire in Industrial Facilities offer several solutions to prevent smoke and fire propagation throughout the installations.

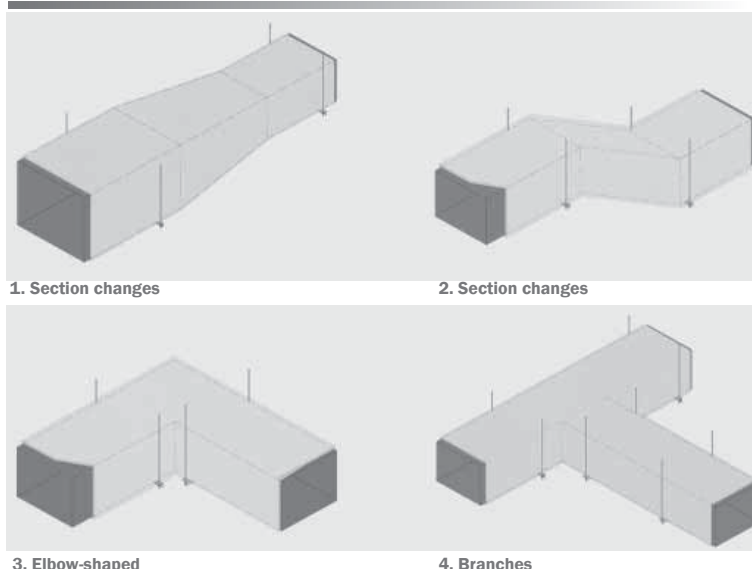
**Tecwool® F** mortar, the solution offered by **mercortecresa®**, consists in providing elements with a resistance equal to or above the resistance of crossed elements. That is, the mortar directly applied to the sheet provides the solution with the integrity and insulation established by the standard, ensuring full sealing lengthways.

In the specific case of these solutions, a 0.6 mm plated horizontal duct and a vertical one were tested, exposed to external fire according to UNE EN 1366-1 standard, obtaining EI-60 and EI-120 classification.

## 6.1 PROTECCIÓN DE CONDUCTOS DE CHAPA HORIZONTAL. EI-60



### BUILDING SOLUTIONS FOR DUCTS\*



1. Section changes

2. Section changes

3. Elbow-shaped

4. Branches

### TESTS

**Standard:** UNE EN 1366-1

**Laboratory:** APPLUS

**Test No:** 10/101513-1941

### SOLUTION

- 1 M12 Rod
- 2 Tecwool® F (43 mm thick)
- 3 0,6 mm thick metal plated horizontal duct.
- 4 Metal angle 50x50x5 mm.

### APPLICATION

Tecwool® F is spread with a pneumatic machine pursuant to the following technical specifications:

The surface to be protected requires no prior primer, mesh or any other type of support for the mortar adherence.

The surface to be protected should be free from dust, oil, waste, poorly attached particles, paint leftover, etc.

It is recommended to use water with the application hose to wash dirt away from the faces. This will also help achieve a thermal balance between the mortar and the applied surface.

Tecwool® F can provide different finishings: rugged, smooth, painted, etc., according to different aesthetic requirements. Once the spread is completed and in order to obtain a smooth finishing, a roller should be used and pressed slightly over the wet mortar until the desired finishing is obtained. It is possible to paint the mortar with elastic acrylic coatings to form a steam barrier. Before painting the mortar should be completely dry (28 days).

Once spread, mortar should be water sprayed superficially to ensure optimum settling of the cement.