



## Plafometal provides fire-resistant metal ceilings that ensure safety and comfort in premises subject to fire regulations.

It is vitally important to use safe and reliable systems, so that people can be evacuated in areas with an elevated fire risk at all times. Plafometal has developed four fire-resistant modular ceiling systems that are capable of remaining in place for at least 30 minutes without falling, subject to compliance with the installation requirements defined in the fire classification report.

### WHAT DO WE MEAN BY "FIRE RESISTANCE"?

Fire stability, fire resistance, REL... many different terms are currently in use, but they do not all cover the same concepts!

The fire resistance rating defines the time during which construction elements can perform their intended function despite the action of a fire: this ensures that none of the ceiling components will start falling down.

France and Belgium use two types of rating systems: REI and SF.

- The REI rating is used when the suspended ceiling acts as a protective barrier for the building's structural elements. According to the unified requirements defined in European standard EN 13501-2.
- The SF rating system is used when the suspended ceiling does not act as a protective barrier for the building's structural elements, but must nevertheless offer mechanical resistance to fire (no falling elements): this is the case with metal ceilings!

### EXISTING PLAFOMETAL SOLUTIONS

**IN FRANCE:** Section 2.5 of Appendix 1 in the Regulation of March 22, 2004 on the fire resistance of construction products describes tests for characterizing fire resistance performance (minimum rating of 15 minutes required).

Plafometal offers four metal ceiling systems with a 30-minute fire resistance rating, which go over and above applicable fire regulations for shared-use corridors in high-rise buildings:

- **Monobac SF** - Fire-resistant system of clip-in metal tiles and concealed carriers
- **PM8 SF Hook-on** - Fire-resistant system of panels fitted on bandrastrer carriers
- **PM8 SF** - Fire-resistant system of panels fitted on wall angles
- **Orial SF Plafometal** - Fire-resistant system of swing-down panels on both sides

**IN BELGIUM:** the NBN 713-020 standard describes tests for characterizing 30-minute fire resistance performance.

Plafometal offers three metal ceiling systems that meet applicable Belgian fire regulations for escape routes, public-access areas and collective kitchens:

- **Monobac SF** - Fire-resistant system of clip-in metal tiles and concealed carriers
- **PM8 SF Hook-on** - Fire-resistant system of panels fitted on bandrastrer carriers
- **PM8 SF** - Fire-resistant system of panels fitted on wall angles

### TESTS

Plafometal carries out all fire resistance tests at certified and independent laboratories (CSTB and EFECTIS in France, and WarringtonFireGent in Belgium). Contact us for a copy of our fire classification and test reports.

### INSTALLATION

In addition to fulfilling the requirements of the DTU 58-1 code of practice, fire-resistant metal ceilings must always be installed in accordance with the classification and test reports and their appendices (available on request).

The ceiling should not support any loads other than its own weight. Various fixtures (lighting, air vents, speakers, signs, etc.) can be fitted to the building's primary or secondary structure using hangers passing through the ceiling with the smallest possible gap. The secondary structure must then be verified at elevated temperatures through testing or design calculations according to applicable standards relating to the CSTB Fire Resistance Report.