



**BOSTIK**



KNOWLEDGE



EDUCATION

BETTER  
RESULTS  
THROUGH  
KNOWLEDGE

OUR MISSION



SUPPORTED BY

# Passive Fire Protection

## FACTSHEET



## GLOBAL LEADER IN ADHESIVE TECHNOLOGIES

Bostik is one of the largest adhesive and sealant companies. Worldwide, we employ some 6,000 people in 50 countries across five continents. Our customers come from diverse markets, most notably the industrial manufacturing, construction and consumer sectors.

## SMART INNOVATIONS

Our smart identity is underpinned by innovation. We pursue innovation vigorously, applying the latest technological advances to developing 'smart' adhesives. Our archives are laden with examples of Bostik technologies that have disrupted markets - from potato starch-based wallpaper paste to elastic attachment adhesive for diapers.

Today, our commitment to innovation is as strong as ever. We innovate with our customers through a global R&D network, comprising three international Smart Technology Centres and 8 regional centres. And we differentiate our business through this investment.

## Passive fire protection

### GENERAL INFORMATION

Products for Passive Fire Protection are the primary means, included in the construction of a building, limiting flames, heat and smoke to spread and significantly increase the fire safety. By the right application of these products the fundamental and legal requirements of creating fire compartments are met. These fire compartments contribute to the structural stability of a building and offer time to safely leave or clear a building. Passive Fire Protection prevents the fire, flames and smoke to leap over or through to the adjacent compartment.

### PASSIVE FIRE PROTECTION

- Saves lives
- Limits material damage
- Minimalizes business losses
- Protects the construction of a building, preserving accessibility after the fire

The creation of fire compartments in a building is an essential and mandatory part of Passive Fire Protection. The basic idea is to limit and delay the expansion of fire to one compartment. This allows present persons to safely leave the building, and offers firefighters time to master and extinguish the fire. Because the importance of Passive Fire Protection is significantly increasing in renovating or building new constructions, Bostik decided to heavily invest in product development and certifications for this market segment. With a huge experience concerning the sealing of linear joints (EN 1366-4), we proudly present, our completed assortment which also offers solutions for service penetrations (EN 1366-3).





## REACTION TO FIRE AND FIRE RESISTANCE

Reaction to fire is a completely different matter than fire resistance. Both classifications are strictly regulated in National and International norms.

- Reaction to fire indicates the degree of contribution of a material to the arise and expansion of a fire. In other words: How inflammable/flammable is a certain material. A well-known norm for reaction to fire is the German DIN4102 part 1, with classifications A1, A2, B1, B2 and B3.
- Fire Resistance is the time expressed in minutes which a compartment is able to fulfil its task; preventing the fire to expand out of the compartment. This fire resistance of (combined) products is tested and measured with standardized and frequently occurring situations. This means in fact, a product can have the highest classification for reaction to fire but does not offer any guarantee for a higher fire resistance.

On our website, in our brochure and in the technical datasheets as well as product leaflets, you can find all essential information about our product portfolio and accompanying certification. The certification offers a transparent indication of where the products can and cannot be applied to obtain a safe seal compliant with the required fire resistance. Besides we have clear application guidelines available.

CLASSIFICATION	ADDITIONAL CERTIFICATION		EN 13501-1	DIN 4102-1
Non-combustible without burning elements	No smoke production	No flaming droplets/particles	A1	A1
Non-combustible with burning elements	No smoke production	No flaming droplets/particles	A2 – s1 d0 <	A2
Flame resistant	No smoke production	No flaming droplets/particles	B, C – s1 d0	B1
Flame resistant		No flaming droplets/particles	A2, B, C – s2 d0	B1
Flame resistant		No flaming droplets/particles	A2, B, C – s2 d0	B1
Flame resistant	No smoke production		A2, B, C – s1 d1	B1
Flame resistant	No smoke production		A2, B, C – s1 d2	B1
Flame resistant			A2, B, C – s3 d2	B1
Normally inflammable	No smoke production		D – s1 d0	B2
Normally inflammable			D – s2 d0	B2
Normally inflammable			D – s3 d0	B2
Normally inflammable	No smoke production	No flaming droplets/particles	D – s1 d2	B2
Normally inflammable		No flaming droplets/particles	D – s2 d2	B2
Normally inflammable		No flaming droplets/particles	D – s3 d2	B2
Normally inflammable			E	B2
Normally inflammable			E – d2	B2
Easily inflammable			F	B3





### PORTFOLIO FOR LINEAR JOINTS (EN 1366-4)

A fire compartment exists of fire resistant walls, ceilings and floors. A compartment is completed by a solid and fire retardant sealing of movement and connection joints between these building components. Products and systems tested according EN1366-4 are applied to fully seal and close fire compartments where walls, floors and ceilings meet. Most of these products to seal linear joints are developed to adopt movements between the building components. Our solutions for sealing linear joints:

- BOSTIK FP401 FIRESEAL ACRYLIC
- BOSTIK FP402 FIRESEAL SILICONE
- BOSTIK FP403 FIRESEAL HYBRID
- BOSTIK FP404 FIRE RETARDENT PU GUN FOAM

The Fire resistance of our solutions to seal linear joints are tested by certified labs (notified bodies) conform National and International norms. The results of these tests are summarized in clear test reports and classification reports. These specifically developed products can be applied separately. We have also tested combinations of products offering a solution for every occurring situation.



### POSSIBLE SOLUTIONS EN 1366-4

For fire retardant linear joint Bostik is able to offer a resistance of EI30 up to EI240, depending on substrates, orientation of the joints and the product combinations. In our brochure complete tables, overviews and recommendations are displayed to provide the correct duration of the retardancy and the product combinations.

### SUBSTRATES

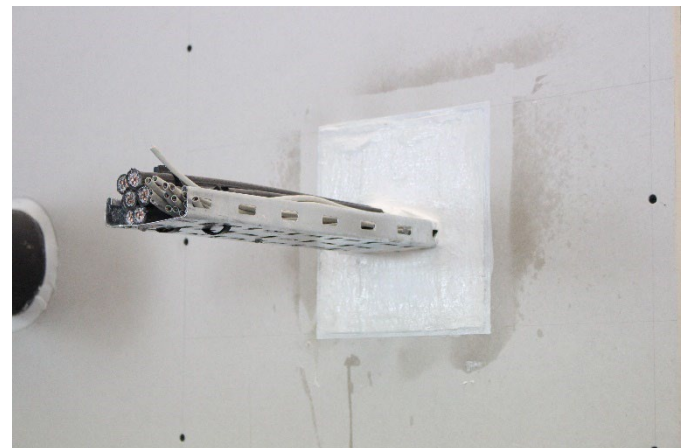
- Stone / metal (horizontal & vertical)
- Stone / wood (horizontal & vertical)
- Stony materials (vertical)
- Stone walls  $\geq 100$  mm (vertical)
- Stone walls  $\geq 115$  mm (vertical)
- Stone / plaster and plaster / plaster (horizontal & vertical)
- Stone walls and floors / ceilings (horizontal)

### PORTFOLIO FOR SERVICE PENETRATIONS (EN 1366-3)

Compartment walls and floors have recesses containing service installations as tubes and electrics. A Fire compartment is only completed and functional when these recesses are securely sealed with the right products. Our solutions for sealing service penetrations:

- BOSTIK FP310 INTUMESCENT ACOUSTIC ACRYLIC
- BOSTIK FP311 INTUMESCENT GRAPHITE
- BOSTIK FP312 FIRE RETARDANT COATING
- BOSTIK FP320 FIRE BATT
- BOSTIK FP330 PIPE COLLAR
- BOSTIK FP340 PIPE WRAP
- BOSTIK FP350 GRAPHITE PLATE
- BOSTIK FP360 PUTTY CORD
- BOSTIK FP370 FIRESEAL MORTAR

The Fire resistance of our solutions to seal recesses are tested by certified labs (notified bodies) conform National and International norms. The results of these tests are summarized in clear test reports and classification reports.





### **MORE INFORMATION**

If you need more information, please contact your local Bostik Sales Representative.

### **LIABILITY**

All supplied information is the result of our tests and experience and is of general nature. However they do not imply any liability. It is the responsibility of the user to verify by his own tests if the product is suitable for the application.