

# Smart Fire Block



www.smartfireblock.rs

### About us

The company SmartFireBlock Ltd is a new company established by an enthusiastic team of young people with a background in polymer technology, finance and management. We approach this endeavor with experience, competence and determination. Our business philosophy is to become a strategic and well-organized company that will provide novel technology products and eco-technological solution for the market.

With the growing trend of increased worldwide consumption of Passive Fire Protection (PFP) products, our goal is to establish a modern company for industrial production of PFP products. The increased number of construction sites, requirements for buildings refurbishment and deep renovation with the stricter implementation of fire protection regulations, is opening the room for innovative products on the market. Our aim is to develop quality products and to maintain constant research efforts in order to comply with the goals for sustainable development, environmental protection and green economy.

## **SMART FIRE COLLAR**



#### Introduction

Smart fire collar is made of 0.8mm stainless steel housing with a flexible insert made of a graphite-based material which swells under the influence of temperature above 150°C.

#### **Application**

Smart Fire Collar is used for fire protection of penetrations with copper, plastic pipes (PVC, PVC-U, San+PVC, PE, HDPE, MDPE, PVC-U, PP, PP-RCT, and others) as well as combination of plastic/copper pipes and electric/network cables running through flexible or rigid wall and floors). EASY RETROFIT AT ANY TIME. Horizontal and vertical application. Performance unaffected by weathering (Type X Durability). Innovative technology.

**Approvals:** EN 1366-3; EN 13501/1-2; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to masonry walls and floors as well as speed panels with 90° and 45° pipe penetrations.

Basic tech data	Color and appereance	dark grey, black, red
	Reaction to fire (EN 13501-1)	Class E
	Density	1.1+/-0.2g/cm <sup>3</sup>
	Application and storage	from -5°C to 80°C
	Expansion rate (ratio) and pressure	unrestircted up to 1:17, 1.8 N/mm²
	Expansion temperature	>150
	Durability class	"X" (Performance unaffected by weathering)

Pipe diameter	Collar inner diameter (mm)	Height mm	Art. No.	Description	Fire clasification
32	37		SFC-32	Smart fire collar, 32mm	
50	55	60	SFC-50	Smart fire collar, 50mm	
80	85		SFC-80	Smart fire collar, 80mm	
110	115		SFC-110	Smart fire collar, 110mm	-/90/90
160	165		SFC-160	Smart fire collar, 160mm	
200	210		SFC-200	Smart fire collar, 200mm	
250	260		SFC-250	Smart fire collar, 250mm	

## SMART FIRE ACRYLIC SEALANT

#### Introduction

Smart fire AS is an acrylic-based, single component fire stopping sealant used for non-movement joints.

#### **Application**

- Construction walls and/or floor joints
- Gaps behind fire resistant door casings
- Seating of smart fire grill or collar
- Gaps around metallic pipes and cable penetrations

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to all kinds of joints requiring fire resistance. Can be painted once is cured. Great unprimed adhesion characteristics. Bigger gaps should be filled with stone wool, fire wrap or strip.

Basic tech data	Color and appereance	white
	Reaction to fire	Class E
	Wet density	1.8g/cm <sup>3</sup> (+/- 0.2g/cm <sup>3</sup> )
	Dry density	1.6g/cm <sup>3</sup> (+/- 0.2g/cm <sup>3</sup> )
	Application and storage temperature	+5°C - +50°C

300 ml	SFAS 300	Smart fire acrylic sealant 300 ml	nylon cartrige	-/120/ 120 min
Volume	Art. No.	Description	Packaging	Fire clasification

## **SMART FIRE MASTIC**



#### Introduction

Smart Fire mastic is an acrylic based, intumescent, single component fire stopping sealant which creates high pressure on expansion allowing the sealing of combustible pipes (up to Ø50 mm).

#### **Application**

Smart fire Mastic is a fire stopping sealant for walls and floors.

It is designed for use with cable bundles, combustible and non-combustible pipes with combustible insulation.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to masonry walls and floors as well as speed panels with cable bundles, combustible and non-combustible pipes with combustible insulation and joints without movement.

	Color and appereance	grey paste
Basic tech data	Reaction to fire	Class E
	Wet density	1.8g/cm <sup>3</sup> (+/- 0.2g/cm <sup>3</sup> )
	Dry density	1.6g/cm <sup>3</sup> (+/- 0.2g/cm <sup>3</sup> )
	Solid content	84 ± 5 wght.%
	Application and storage temperature	+5°C - +50°C
	Expansion ratio	1:11

300 ml	SFM 300	Smart fire mastic 300 ml	nylon cartrige	-/120/ 120 min
Volume	Art. No.	Description	Packaging	Fire clasification

# SMART FIRE PUTTY

#### Introduction

Smart Fire putty is graphite based powder which swells under the influence of temperature above 150°C.

Smart Fire putty is used for fire protection of penetrations with plastic pipes, metal pipes (both combustable and non combustable insulation) in combination with collars, grills, plug/brick where annular or any other gap need to be closed. Innovative technology.



#### **Application**

Smart Fire Putty is used for wall penetration of combustile and non-combustile pipes as well as cables installed in flexibe pipes.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to masonry walls and floors as well as speed panels penetrations in possible combination with other fire stopping products (collar, wrap, strip etc.)

Color and appereance	grey powder
Reaction to fire	Class E
рН	>6,0
Density	1 +/- 0.2 g/cm3
voc	0,0 g/l
Application and storage tem	perature +5 °C - +50 °C
Expansion ratio	1:11

Volume	Art. No.	Description	Packaging	Fire clasification
300 ml	SFM 300	Smart fire mastic 300 ml	nylon cartrige	-/120/ 120 min
4 kg	SFP 4000	Smart fire putty 4000ml	nylon cartrige	-/120/ 120 min
10kg	SFP 10000	Smart fire putty 10000ml	plastic bucket	-/120/ 120 min

## SMART FIRE GRILL SQUARE



#### <u>Introduction</u>

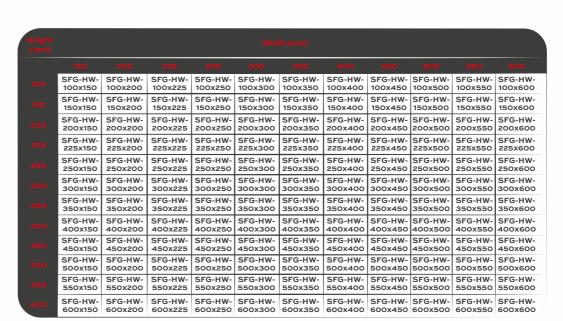
Smart Fire Grill are made from galvanized metal sheets partly filled with graphite based material that expands under the influence of high temperatures. Intumescent inserts completely fill remaining gaps when exposed to temperatures above 150°C thus preventing the spread of flame and smoke. Innovative technology.

#### **Application**

Smart fire grills are installed in the ventilation holes in walls, floors and doors.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005





Basic te	Basic tech data		
Thickness	46mm		
Free area	55% aprox.		
Fire ressistance	UPTO 120min		

## SMART FIRE GRILL ROUND

#### Introduction

Smart Fire Grill are made from galvanized metal sheets partly filled with graphite based material that expands under the influence of high temperatures. Intumescent inserts completely fill remaining gaps when exposed to temperatures above 150°C thus preventing the spread of flame and smoke. Innovative technology.



#### **Application**

Smart fire grills are installed in the ventilation holes in walls, floors and doors.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable as a part of HVAC systems in round pipes as well as masonry walls ventilation grill.

Basic te	Basic tech data		
Thickness	46mm		
Free area	55% aprox.		
Fire ressistance	UPTO 120min		

Diameter (mm)	
100	
125	
150	
160	
200	
225	UPTO
300	-/120/120 min.
315	
350	
400	
500	
550	
600	

## SMART FIRE WRAP/STRIP



#### Introduction

Smart fire wrap/strip is made of a graphite based material which swells under high temperature influence and fills the entire space left after burnt-out combustible installations. Innovative technology.

#### **Application**

Smart Fire Wrap/Strip is used for fire protection of penetrations with plastic pipes (PVC, PVC-U, San+PVC, PE, HDPE, MDPE, PVC-U, PP, PP-RCT, and others) running through flexible or rigid walls horizontal and vertical application. Performance unaffected by weathering (Type X Durability). It is applied in a single or multiple wraps depending on a pipe diameter.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Smart fire wrap is applicabe as metal pipes or cables penetration gap fill wrap. Smart Fire Strip is used for plastic pipes.

Basic tech data	Color and appereance	dark grey
	Reaction to fire	Class E
	Density	1.1+/-0.2 g/cm <sup>3</sup>
	Application and storage	+5°C +60°C
	Expansion rate and pressure	1:20, 0.13N/mm²
	Expansion temperature	above 150°C
	Durability class	"X" (Performance unaffected by weathering)

Pipe type	Pipe diameter	Wall//Floor/ceiling
PVC		
PP		
HDPE	32-160mm	-/120/120 min
PEX/AI/PEX		
PE-RT/AI/PE-RT		
PP-R/AI/PP-R		

Description	Art. No.	Dimensions
Smart fire wrap 450x855x7.5mm	SFW-4585	450x855x7.5mm
Smart fire wrap 350x805x7.5mm	SFW-3580	350x805x7.5mm
Smart fire wrap 350x605x7.5mm	SFW-3560	350x605x7.5mm
Smart fire wrap 855x6x2.5mm	SFS-85	855x6x2.5mm
Smart fire wrap 605x6x2.5mm	SFS-60	605x6x2.5mm

# SMART FIRE BRICK

#### **Introduction**

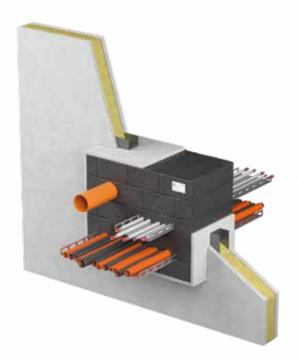
Smart fire brick is graphite based seal which swells under high temperature influence and fills the entire space left after burnt-out of combustible installations. Horizontal application.



#### **Application**

Smart fire brick is used as a seal for wall/floor/ceiling penetration of single cables as well as smaller cable bundles or small diameter pipes. It can be stacked to a maximum area of 1,4m<sup>2</sup>

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to masonry walls and speed panels on area up to 1,4m<sup>2</sup>.

SMART FIRE BRICK			
Dimensions (mm)	Art No	Fire classification	
200x140x60	SFB-200.140	UP TO -/120/120 min	

Color and appereance Reaction to fire Density Application and storage Expansion rate under load	Color and appereance	dark grey, brick red
	Reaction to fire	Class E
	Density	0.25+/-0.05 g/cm <sup>3</sup>
	-5°C +60°C	
asi	Expansion rate under load	1:2
ш	Expansion temperature	150°C





#### **Introduction**

Smart fire plug is graphite based shaped seal which swells under high temperature influence and fills the entire space left after burnt-out of combustible installations.

Horizontal application. Innovative technology.

#### **Application**

Smart fire brick is used as a seal for wall/floor/cealing penetration of single cables as well as smaller cable bundles or small diameter pipes.

**Approvals:** EN 1366-3; ETAG 026-2 (2011) according EN 1366-3 Penetration Seals AS 1530.4-2014; AS 4072.1-2005



Applicable to cable bundle and pipe penetrations in masonry walls.

Basic tech data	Color and appereance	dark grey, brick red
	Reaction to fire	Class E
	Density	0.25+/-0.05 g/cm <sup>3</sup>
	Application and storage	-5°C +60°C
	Expansion rate under load	1:2
	Expansion temperature	150°C

SMART FIRE PLUG			
Bottom/Top Diameter (mm)	Art No	Fire classification	
67/77	SFP-67.77		
82/92	SFP-82.92		
112/122	SFP-112.122		
127/137	SFP-127.137	UP TO -/120/120 min	
142/152	SFP-142.152	,	
172/182	SFP-172.182		
212/222	SFP-212.222		
222/272	SFP-262.272		

