FIRECRYL FR

Technical Data:

Base	Acrylic Dispersion
Consistency	Pasta
Curing System	Physical drying
Skin formation (20°C/65% R.H.)	Approx. 20 min.
Shrinkage (DIN 52451)	Approx. 15%
Specific Gravity (DIN 53479B)	1,40 g/ml
Temperature Resistance	-20°C to +80°C
Maximum allowed Distortion	10%
Reaction to fire (EN 13501-1:2007+A1:2009)	B-s1, d0
Resistance to fire (EN13501-2:2007)	Up to 240min. **

* This varies according to ambient conditions such as temperature, humidity, substrate etc.
** Depending on joint configuration and joint dimensions.

Product:
Firecryl FR is a fire retardant, one-component, intumescent, plasto-elastic joint sealant based on acrylic dispersions.

Characteristics:
- Resist the passage of fire and smoke .
- Fire resistant up to 4 hours (tested according to EN 1366-4:2006).
- Intumescent in contact with fire - swells when exposed to temperatures over 120°C .
- Stays elastic.
- can be painted.
- Colourfast and waterproof after curing.
- Very good adhesion on most porous surfaces.

Applications:
- Fire resistant interior applications.
- Fire resistant sealing compound for cracks in concrete and plaster.
- Fire resistant connection joints in the building industry.
- Fire resistant joints with movements up to 10%.

Packaging:
Colour: white, grey
Packaging: cartridge 310 ml, foilbag 600 ml

Shelflife:
At least 12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C. Protect against frost!

Surfaces:
Type: all porous building surfaces. Not to be used on natural stone, bitumen, glass, plastics and glass.
State of Surface: clean, dry, free of dust and grease.
Preparation: prepare very porous surfaces such as plasterboard, cellular concrete etc. with diluted Firecryl FR (1 part Firecryl FR and 2 parts water)
We recommend a preliminary compatibility test.

Joint Size:
Minimum Width: 5mm
Maximum Width: 20mm
Minimum Depth: 5mm

Recommandation: jointh depth = joint width

Use PE/PU backer rods in case of large joint dimensions to avoid three-sided adhesion

Applying the sealant:
Method: Apply the sealant by means of a handheld or pneumatic caulking gun. Smoothen the sealant with a filling-knife.
Application temperature: +5°C to +30°C, do not apply when rain or frost are imminent
Clean: Uncured Firecryl FR may be removed from tools with water. Cured sealant must be removed mechanically.
Finishing: with soapy water
Repair: with Firecryl FR

Remarks:

- Do not use in applications where continuous water immersion is possible.
- Do not apply when rain or frost is imminent.
- Firecryl FR can be painted over with most paints.
- The paint should be sufficiently elastic to be applied on a plasto-elastic sealant.
  A preliminary test is recommended.

Health- and safety recommendations:
Apply the usual industrial hygiene.
Consult the label for more information.

Current Approvals:

- Fire resistance classification report 9297D of Warringtonfiregent, dated 31st of January 2012.
- Fire resistance classification report 13492B of Warrintonfiregent, dated 26th of January 2009.
- Classification of fire resistance in accordance with EN 13501-2:2007 of ITB, dated 22nd of February 2010.
- Classification of fire resistance in accordance with EN 13501-2:2007 of ITB, dated 23rd of February 2010.
- Classification report PK-10-074 of Centrum stavebniho inzenyrstvi a.s., dated 19th of August 2010: Classification of reaction to fire in accordance with EN 13501-1:2007+A1:2009.

A\ Linear joints in rigid walls

1. Firecryl FR with Soudafoam FR as backfilling material :

Thickness of the wall (mm)	Density (kg/m³)	Orientation of the joint	Symmetrical / Asymmetrical	Composition of the joint seal	Classification
115	600	Horizontal	Asymmetrical	The unexposed side is filled throughout a depth of 20 mm with Firecryl FR and is further filled width Soudafoam FR	EI 120 – T – X – F – W 0 to 20
115	600	Horizontal	Symmetrical	The joint is filled on both sides with 3 mm Firecryl FR and is further filled with Soudafoam FR	EI 120 – T – X – F – W 0 to 50
115	600	Vertical	Asymmetrical	The unexposed side is filled throughout a depth of 25 mm with Firecryl FR and is further filled width Soudafoam FR	EI 120 – V – X – F – W 0 to 30
115	600	Vertical	Symmetrical	The joint is filled on both sides with 3 mm Firecryl FR and is further filled with Soudafoam FR	EI 120–V–X-F - W 00 to 40
115	600	Vertical	Symmetrical	The joint is filled on both sides with 3 mm Firecryl FR and is further filled with Soudafoam FR	EI 60 -V-X-F - W 00 to 50
200	550	Vertical	Asymmetrical	The unexposed side is filled throughout a depth of 25 mm with Firecryl FR and is further filled with Soudafoam FR	EI 240–V–X-W 00 to 25
200	550	Horizontal	Asymmetrical	The unexposed side is filled throughout a depth of 15 mm with Firecryl FR and is further filled with Soudafoam FR	EI 240–V–X-W 00 to 15

2. Firecryl FR with a PE-backer / PU-backer rod as backfilling material:

Thickness of the wall (mm)	Density (kg/m³)	Orientation of the joint	Symmetrical / Asymmetrical	Composition of the joint seal	Classification
200	550	Vertical	Symmetrical	The joint is filled on both sides with 20 mm Firecryl FR with a PU backer rod	EI 240–V–X-W 00 to 20
100	550	Vertical	Symmetrical	The joint is filled on both sides with 20 mm Firecryl FR with a PU backer rod	EI 180–V–X-W 00 to 21 E240 – V-X-W 00 to 21
100	550	Vertical	Symmetrical	The joint is filled on both sides with 10 mm Firecryl FR with a PU backer rod	EI 180–V–X-W 00 to 11 E240 – V-X-W 00 to 11
115	600	Vertical	Asymmetrical	The unexposed side is filled throughout a depth of 20 mm and is further provided with a compressed PU backer rod	EI 60–V–X-F - W 00 to 20 E 90 – V – X – F – W 00 to 20
200	550	Vertical	Asymmetrical	The unexposed side is filled throughout a depth of 15 mm and is further provided with a compressed PE backer rod.	EI 240–V–X-W 00 to 15

B\ Linear joints in floor constructions

1. Firecryl FR with Soudafoam FR as backfilling material :

Thickness of the floor (mm)	Density (kg/m³)	Orientation of the joint	Symmetrical / Asymmetrical	Composition of the joint seal	Classification
150	600	Horizontal	Symmetrical	The joint is filled on both sides with 3 mm Firecryl FR and is further filled with Soudafoam FR	EI 120 – H – X –F W 00 to 50
150	600	Horizontal	Asymmetrical	The unexposed side is filled throughout a depth of 25 mm with Firecryl FR and is further filled width Soudafoam FR	EI 120 – H – X –F W 00 to 30

2. Firecryl FR with a PE-backer / PU-backer rod as backfilling material:

Thickness of the floor (mm)	Density (kg/m³)	Orientation of the joint	Symmetrical / Asymmetrical	Composition of the joint seal	Classification
150	600	Horizontal	Asymmetrical	The unexposed side is filled throughout a depth of 20 mm and is further provided with a compressed PU backer rod	EI 120 – H – X –F W 00 to 20