**GENERAL PRODUCT DESCRIPTION**

AIS FR Acrylic Sealant - FP 505 is designed to prevent the spread of fire, smoke and gases through openings in fire rated walls and floors, specifically linear joints and openings for building service penetrations.

FP 505 should be applied over suitable backing materials to ensure correct width to depth ratio and to reduce shrinkage of the joint during hardening.

FP 505 is a 2 hour rated intumescent sealant formulated with fillers that provide noise reduction.

FP 505 cures when it is subjected to atmospheric conditions, however it will retain a small degree of elasticity for joint movement. Under fire exposure, FP 505 creates a robust fire seal by the formation of a durable intumescent char.

The sealant has undergone tests to BS EN 1366-3 with additional guidelines from BS EN 1366-4 for fire protection joints and tested in accordance with BS EN ISO 8339: 2005 and BS EN ISO 9046: 2004 to demonstrate its suitability for use in internal conditions.

**PROPERTIES**

* Fire rated in both horizontal & vertical joints
* No priming required for most construction substrates
* Joint movement capability of 7.5%
* For use in joints up to 50 mm wide
* Excellent slump resistance
* 18 months shelf life
* Fast cure - tack free within an hour
* Easy to apply and tool off
* Halogen free
* Paintable
* Excellent adhesion to most common building substrates
* Reduces sound transmission in joints

**SOUND INSULATION**

|  |  |
| --- | --- |
| Description | Sound Reduction |
| Double sided seal ≥ 12.5mm depth | Rw 40 dB |

A 20mm diameter polyethylene joint backer rod or similar is required.

**EMISSION DATA (INDOOR AIR QUALITY)**

|  |  |  |
| --- | --- | --- |
| COMPOUND | EMISSION RATE AFTER 3 DAYS | EMISSION RATE AFTER 4 WEEKS |
| TVOC | 14 µg/m3 | < 5 µg/m3 |
| TSVOC | < 5 µg/m3 | < 5 µg/m3 |
| VOC w/o NIK | 7.4 µg/m3 | < 5 µg/m3 |
| R Value | 0.0091 | 0 |
| Formaldehyde | < 3 µg/m3 | < 3 µg/m3 |
| Acetaldehyde | < 3 µg/m3 | < 3 µg/m3 |
| Sum for+ace | < 5 µg/m3 | n.d. |
| Carcinogenic | < 1 µg/m3 | < 1 µg/m3 |

**TECHNICAL SPECIFICATION**

|  |  |
| --- | --- |
| **Form** | Ready to use thixotropic paste |
| **Specific gravity** | 1.60 – 1.64 |
| **Flash point** | None |
| **Tack free** | Max. 60 minutes |
| **Skin forming** | Max. 20 minutes |
| **Flexibility** | 7.5% according to ISO 11600 |
| **Durability/service** | Class Z2 |
| **Storage** | 18 months stored in unopened cartridges. To be stored in temperatures between 100C and 300C |
| **Working life** | 25 years |
| **Compatibility** | Suitable for use with most materials, but should not be used In direct contact with bituminous materials |
| **Limitations** | Should not be used in permanently damp areas or in joints with movement |
| **Classification** | Sealant for fire rated joints and penetrations class EI 120 |
| **Standard colours** | White |
| **Packaging** | Box containing 25 cartridges each 310 ml |

**RESISTANCE TO FIRE – LINEAR SEALS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CONSTRUCTION | SEAL POSITION | MINIMUM SEAL DEPTH | BACKING MATERIAL | MAXIMUM SEAL WIDTH | FIRE RESISTANCE |
| Drywalls, masonry, aerated concrete or concrete walls (≥ 100 mm thick) | Both sides in horizontal seals | 20.0 mm | None necessary | 30 mm | EI 120 (E 120) |
| Both sides in vertical seals | 9.0 mm | Mineral stone wool minimum 20mm deep | 30 mm | EI 90 (E 90) |
| Drywalls, masonry, aerated concrete or concrete walls  (≥ 130 mm thick) | Both sides in vertical seals | 15.0 mm | None necessary | 30 mm | EI 90 (E 120) |
| 15.0 mm | Mineral stone wool minimum 15mm deep | 30 mm | EI 120 (E 120) |
| 30.0 mm | None necessary | 30 mm | EI 120 (E 120) |
| Rigid floors comprise aerated concrete or concrete within floors or between floors and walls  (≥ 150 mm thick) | Single sided top face | 25.0 mm | Mineral stone wool minimum 25mm deep | 100 mm | EI 120 (E 120) |