

## Product Data Sheet

### **Firestop® AK - 318 CABLE PENETRATION FIRE SEALING & BARRIER SYSTEM TYPE "B"**

Firestop® - AK - 318 is an integrated Fire Proof Sealing & Barrier System which prevents the spread of fire within running cables & cable trays through various openings within Walls, floors, roofs, floor openings below panels, long run of cable trays, etc. The System is suitable for both indoor & outdoor application areas.

*The complete system has been tested & approved as per BS: 476 (20), UL:1479 & ASTM E814 for 04 hours by NABL accredited Lab.*

#### SYSTEM FEATURES & DETAILS:

|   |                   |  |
|---|-------------------|--|
| 1 | System Type       | Panel & Wool based integrated Fire Sealing System  |
| 2 | System Inclusions | One layer of Composite Fire Board 12 mm thick and 2 layers of Insulation boards 50 mm thick, Sealant, Top Coat Mastic & other ancillaries as required.   |
| 3 | System Rating     | Fire Rating up to 04 hours as per BS: 476 Part-20, tested & approved by CBRI, Roorkee & NABL Accredited Labs.  |
| 4 | Sizes             | Customized and erected at site as per the requirement of applications.   |
| 5 | Life expectancy   | 40 years Minimum unless damaged by Fire or Heavy mechanical impact   |
| 6 | Erection Pattern  | Nut bolt type system mechanically supported to parent Roof / Floor / Wall / Cable trays does not has any load impact over Cables, Electrical panels or any other equipment.  |
| 7 | Retrofitting      | Extremely supportive needs very less effort and can be done without any specialist, board can drilled cut & infilled insulation can be cut using a knife and new cables can be laid, further the sealant can be applied on small gaps left, after drying the system is ready.  |
| 8 | System strengths  | <p>Most advanced and accepted system, having excellent strength compared to the orthodox system of Mortar or Insulation/Coating based system.</p> <p>Has minimum limitations, is suitable for all types of applications irrespective of load, support availability, anti-gravity and indoor/outdoor applications.</p> <p>Has maximum life expectancy, is 100% water/moisture proof, resists maximum vibration no periodic maintenance required (unless a fire incident happens).</p> <p>Single product suitable for all the applications no multi-product/system is required for different applications, no multi-selection is required.</p> |

#### SYSTEM COMPONENTS & TECHNICAL DETAILS:

##### **(a) Firestop® Composite Fire Board**

|   |                           |   |
|---|---------------------------|---|
| 1 | Product Category          | Parent Product will be considered for measurement of supply/erection          |
| 2 | Standard Thicnkess        | 12 mm $\pm$ 10%   |
| 3 | Bulk Density              | 1400 kg./m <sup>3</sup> $\pm$ 15%   |
| 4 | Colour                    | Light Brownish Grey   |
| 5 | Property Against Moisture | 100% water proof, water emersion test of seven days is carried for each batch |

|    |                       |  |
|----|-----------------------|--|
| 6  | Flash Point           | NA   |
| 7  | Toxicity / Hazardous  | 100% non toxic, non hazardous, asbestos free, environment friendly   |
| 8  | Mechanical properties | Non Combustible & High density compressed composite fire board having great mechanical strength especially for high vibration areas.     |
| 9  | Testing / Codes       | Tested along with complete system as per IS:12458, BS: 476 (20) & UL: 1479 (ASTM E814) for 03 & 04 hours by GOVT./ NABL accredited Labs. |
| 10 | Shelf Life            | 5 Years from manufacturing (under prescribed storage conditions).  |

**(b) High Density Mineral Wool Panel**

|    |                           |  |
|----|---------------------------|--|
| 1  | Product Category          | Ancillary - will be supplied FOC (whatever qty required at site)   |
| 2  | Standard Thickness        | 50 mm (thk) $\pm$ 10%  |
| 3  | Bulk Density              | 120 kg. per cubic meter $\pm$ 15%  |
| 4  | Colour                    | Light Brown (as per rock shades)   |
| 5  | Property Against Moisture | 100% water proof, product is not exposed to fire / moisture directly   |
| 6  | Flash Point               | NA   |
| 7  | Toxicity / Hazardous      | 100% non toxic, non hazardous, asbestos free, environment friendly   |
| 8  | Mechanical properties     | Very Flexible having porous property to lock Air, Smoke & temperature  |
| 9  | Testing / Codes           | Tested along with complete system as per IS:12458, BS: 476 (20) & UL: 1479 (ASTM E814) for 03 & 04 hours by GOVT./ NABL accredited Labs. |
| 10 | Shelf Life                | 3 Years from manufacturing (under prescribed storage conditions).  |

**(c) Flame Seal Sealant & Top Coat Mastic**

|     |                           |  |
|-----|---------------------------|--|
| 1   | Product Category          | Ancillary - will be supplied FOC (whatever qty required at site)   |
| 2   | Standard Packing          | 20 Litre PVC Pails   |
| 3.1 | Sealant Bulk Density      | 1500 kg. $\pm$ 15% (min.)  |
| 3.2 | Mastic Bulk Density       | 1400 kg. $\pm$ 15% (min.)  |
| 4   | Colour                    | Off White  |
| 5   | Property Against Moisture | Water Based Product / 100% water proof   |
| 6   | Flash Point               | NA   |
| 7   | Toxicity / Hazardous      | 100% non toxic, non hazardous, asbestos free, environment friendly   |
| 8   | Application Method        | Can applied by spraying, brushing & trowel   |
| 9   | Testing / Approvals       | Tested along with complete system as per IS:12458, BS: 476 (20) & UL: 1479 (ASTM E814) for 03 & 04 hours by GOVT./ NABL accredited Labs. |
| 10  | Shelf Life                | 3 Years from manufacturing (under prescribed storage conditions).  |
| 11  | PH Factor                 | 7 to 10  |

**(d) Perforated MS Angles**

|   |                      |  |
|---|----------------------|--|
| 1 | Product Category     | Ancillary - will be supplied FOC (whatever qty required at site)                 |
| 2 | MOC                  | Mild Steel   |
| 3 | Size                 | 1.5 mm x 38 mm x 38 mm x 2000/2500/3000 mm                                       |
| 4 | Type of Construction | Perforated   |
| 5 | Use                  | To provide extra ordinary strength to system especially for high Vibration areas |
| 6 | Shelf Life           | 3 Years from manufacturing (under prescribed storage conditions).                |

**(e) Anchor Fasteners**

|   |                      |   |
|---|----------------------|---|
| 1 | Product Category     | Ancillary - will be supplied FOC (whatever qty required at site)  |
| 2 | MOC                  | Mild Steel with Cadmium Coated  |
| 3 | Size                 | m8 x 70 mm ± 10%  |
| 4 | Type of Construction | PIN TYPE  |
| 5 | Use                  | To provide extra ordinary strength to system especially for high Vibration areas for erection of system with support of Concrete and Brick Walls/floor. |
| 6 | Shelf Life           | 3 Years from manufacturing (under prescribed storage conditions).   |
| 7 | Packing              | (PVC / Gunny Bags) 1500 / 1750 nos.   |

**(f) Bolt, Nuts & Washers**

|   |                      |  |
|---|----------------------|--|
| 1 | Product Category     | Ancillary - will be supplied FOC (whatever qty required at site)   |
| 2 | MOC                  | Mild Steel   |
| 3 | Size                 | m8 x 40 mm   |
| 4 | Type of Construction | Hex Head   |
| 5 | Use                  | To provide extra ordinary strength to system especially for high Vibration areas for erection of system with metal structure / cable trays, etc. |
| 6 | Shelf Life           | 3 Years from manufacturing (under prescribed storage conditions).  |
| 7 | Packing              | (PVC / Gunny Bags) 50 kg. Or less  |

**Application Method**

Kindly refer to FQAP i.e. Field Quality Assurance Plan provided by AEFS.