Conlit for Passive Fire Protection Systems

General Product Information

ROCKWOOL stone wool products are made of basalt, a volcanic stone.

ROCKWOOL stone wool products are non-combustible with a melting point of approximately 1000°C. They are particularly suitable for thermal insulation, fire protection and sound reduction/absorption.

ROCKWOOL stone wool is inorganic and contains no

nutritious substance. Therefore it will not be attacked by microorganisms. Stone wool will not rot and does not attract vermin.

No CFCs, HFCs, HCFCs or asbestos are used in the manufacture of ROCKWOOL stone wool products.



บริษัท ท็อป อินซูเลชั่น แอนด์ เทรดดิ้ง จำกัด

Conlit C and Conlit H



Fire demonstration showing Conlit products with standing temperature above 1000°C $\,$



Conlit products used in fire door application

Conlit products are used as part of the component in passive fire protection systems such as fire rated partitions, fire rated ceilings, fire doors, penetration seal systems and fire rated ducts. They are made up of specially formulated stone wool with specific chemical composition produced by ROCKWOOL.

The insulation properties of Conlit provides the key benefits to passive fire protection systems to achieve the desired fire insulation criteria in fire test standards whilst fulfilling the overall system fire rating to meet local building fire regulation.

Conlit C series is commonly used by passive fire protection system owners as part of the insulation component in their systems to meet the fire insulation criteria. Its insulation performance is optimize with the overall system still intact or maintaining its fire integrity during occurrence of fire. Conlit C products are also suitable to be used in combination with other firestop coating systems to provide a fire rated solution for penetration seals application.

Conlit H series is designated to be used by passive fire protection system owners as a fire barrier to withstand fire exposure for a longer period during fire should the other components in the systems give way or fail. This is crucial particularly when the system is on the edge of passing the fire test. The additional iron contents in Conlit H series makes the product slightly grayish in color, ensuring the stability of the fiber structures and provide a rigid surface when exposed directly to heat during a fire. The past research and development of fire test results of similar product type has shown the ability of the bare product to achieve the fire integrity and insulation criteria of up to two hours with a recorded unexposed surface temperature of less than 180°C when tested in accordance to BS476 Part 20 standards.

Handling and Installation

ROCKWOOL products are lightweight and easy to handle. To cut the product, it only requires a sharp knife with serrated edge or a hand saw, measuring tape and steel ruler. Installation method for the product is dependent on the type of application it is being used. The product is normally tight-fitted into cavities or openings without the need to use mechanical fixings and adhesive. However, if required in some instances, insulation pins are used to hold the product onto other construction element surface.

Distribution by



บริษัท ท็อป อินซูเลมั่น แอนด์ เทรดติ้ง จำกัด



Unexposed surface temperature of Conlit H is less than 180°C when subjected to fire resistance test

Technical Parameters

| onlit C Series | C80 | C100 | C120 | C140 | C160 | Standards |
|---|--------------------|--------------------------|---|--------------------------------|-------|--|
| imensions: | | | | | | |
| Thickness | 25, 50, 75, 100mm | | | | | EN823 |
| Length and Width | 1200mm x 600mm | | | | | EN822 |
| hermal Conductivity at 20°C (W/mK) | 0.034 | 0.034 | 0.035 | 0.037 | 0.037 | ASTM C177/C518 |
| ire Performance | Class A1 | | | | | EN13501-1 |
| 1elting point | = > 1000°C | | | | | ASTM E794 |
| later vapor absorption | Absorb <0.04%Vol | | | | | ASTM C1104/C1104M |
| Vater absortion (partial immersion) | Less than 0.5kg/m³ | | | | | EN1609:97 |
| | | | | | | |
| Conlit H Series | H110 | | | | | Standards |
| Dimensions: | | | | | | |
| Jimensions: | | | | | | |
| Thickness | | 25, | 50, 75, 100 |)mm | | EN823 |
| | | | 50, 75, 100 00mm x 600 | | | EN823 EN822 |
| Thickness Length and Width | | | | | | |
| Thickness | | 120 |)0mm x 600 |)mm | | EN822 |
| Thickness Length and Width Thermal Conductivity at 20°C (W/mK) Fire Performance | | 120 | 00mm x 600 0.036 |)mm tible | | EN822 ASTM C177/C518 |
| Thickness Length and Width Thermal Conductivity at 20°C (W/mK) Tire Performance Melting point | Up | 120 | 00mm x 600 0.036 on-combus = > 1000° | Omm tible C | steel | EN822 ASTM C177/C518 BS476 Part 4 |
| Thickness Length and Width Thermal Conductivity at 20°C (W/mK) | Up | 120 No to 850°C in | 00mm x 600 0.036 on-combus = > 1000° | Dmm tible C corroding | steel | EN822 ASTM C177/C518 BS476 Part 4 ASTM E794 |

Note: The additional iron contents in Conlit H series make the product slightly grayish in colour.

Distribution by



บริษัท ท็อป อินซูเลชั่น แอนต์ เทรตติ้ง จำกัต