

LCF AEROGELFILM

Water based intumescent paint

Product description

Aerogel, a Guinness record set for 15 times, is known as the "miracle material that changed the world" and is also an ideal fireproof green new material. Aerogel is a three-dimensional continuous porous material composed of nanopores and nanoskeleton, and its unique structure gives it super fire and heat insulation performance.

The aerogel fireproof coating series products produced by LCF, a new kind of indoor inflatable steel structure fireproof coating which is made of emulsion as film forming material, adding fireproof flame retardant material, high quality filler and auxiliary agent and pure water based, eco friendly.

Application

Application for steel structure components in industrial, commercial and residential buildings

Features

Fire resistance up to 120 mins in accordance with ASTM E119
 Durability up to over 10 years
 Eco friendly, no harm to human body
 Thinner film, to achieve the same rate, the thickness of aerogel film is less than 1/3 of the other material

Primer coat

Zinc-rich epoxy antirust primer

Substrate preparation

The substrate shall be clean, dry and free from dust, oil and any other condition preventing good adhesion.

The surface of the steel base material of the steel structure should be strictly dewatered and derusted, and the sand blasting derusting reaches the grade of Sa2.5, and the manual derusting reaches the grade of St3 and above, and the surface of the derusting is finished with anti-rust primer for anti-corrosion treatment.

It is necessary to detect the miscibility of anti-rust paint and fireproof paint on the surface of the substrate. It is not allowed to use anti-rust paint with high brightness that does not meet the requirements, so as not to affect its adhesion of fire retardant coatings.

In case of high brightness and high hardness anticorrosive paint, it should be polished or coated with an intermediate paint transition.

Attention

This product is water-based coating, not suitable for construction in rain or snow weather or dew on the surface of steel components. Intumescent coating is interior using recommended, cementitious coating is recommended for exterior projects. This coating is forbidden to be mixed with other coatings and oil crops. Construction maintenance period should prevent the sun, rain, dew invasion or mechanical damage



Datasheet

State	After stirring, it is uniform and fine, thick and thick fluid state, without agglomeration.
Dry time h	≅ 12 h
Resistance to cracking	none crack
Bonding/MPa	≅ 0.15
Insulation efficiency deviation	± 15%
pH	≅ 7
Water resistance/ h	≅ 24, without foaming,shedding
Heat /cold cycling resistance/time	≅ 15, without foaming,shedding
Fire rated	fire rate 1.5h Thickness 3.0mm, 2h 3.8 mm

Coating work

Coating should be fully stirred before construction, such as too thick add proper amount of water dilution. The theoretical coating amount of coating per square meter per spray 1mm dry film thickness is 1.0~1.2kg.

The construction should be carried out above 5°C, the relative humidity of air ≤ 85%, brush coating, roller coating, spraying, each time the thickness of the construction is not more than 0.2mm is appropriate, until the coating is basically dry (gently push the coating does not move), can be carried out next brushing, until the specified thickness.

After the fireproof coating is completely dry, spray or brush special protective finish coat on the outer surface of the coating.

Storage & Shipping

Shelf life: 12 months in origin sealed containers
 Storage temperature: 5~40°C
 Environmental: placed in a ventilated and dry place to prevent direct sunlight.
 Shipping: deemed as non - dangerous chemical, common goods.

Packaging 25kg iron bucket