LCF AEROGELSPRAY

Cement based wet spray

Product description

The cement based wet spray produced by LCF, is a kind of cementitous coating for steel structure is mainly composed of inorganic thermal insulation material with aerogel technical.

Application

Mainly be used in petro & oil plant, chemical engineering, garage, oil drilling platform and other buildings prone to high temperature fire caused by hydrocarbons.

Features

Environmental protection coating, does not react with any anti-corrosion primer, does not corrode steel, can be coated in a large area, and does not produce smoke in case of fire.
The addition of aerogel material has excellent fire and heat insulation performance, and can withstand flame high temperature for a long time.
Strong adhesion, good weather resistance, not afraid of wind, rain, sun, no skin, no peeling, no aging, long life.Does not contain asbestos and organic solvents and other substances, does not produce irritating gases, harmless to the human body
Easy to construct, can be sprayed directly, short drying time light coating, strong adhesion, long life.Excellent fire resistance

Substrate prepartion

The substrate shall be clean, dry and free from dust, loose mill scale, looserust, oil and any other condition preventing good adhesion.
Grease and ash should be removed and the surface should be clean.
This coating has a certain anti-rust effect on steel components, but for exterior or humid environment, steel surface still need to be coated with anti-rust primer.
Surface priming: in the daub coating must be priming, priming material with portable spray gun spraying, thickness of 2-3mm, the bottom is basically uniform.
Primer material preparation: according to the special glue: paint: water =1:3:2.1 advised (water consumption slightly adjusted for spraying).

Coating work

Coating tools: manual application, the bottom of the hand-held spray gun spraying, muzzle diameter of 8-10mm, air compressor air pressure of about 0.4 mPa.

Mixing: The paint is a powdery mixture, mixed with an appropriate amount of tap water in a low-speed mixer to form a thick slurry. (Note: water should be added first and then add powder, the two can not be reversed)
Its consistency should be suitable for application (the consistency is generally about 8cm), mixing time 6 minutes, not too long, mix well. The proportion of water used is about 1: 0.86.

Datasheet

State	After stirring, it is uniform and fine, thick and thick fluid state, without agglomeration.
Dry time /h	≦24 h
Resistance to cracking	none crack
Bonding/MPa	≧0.04
Compressive strength /MPa	≧0.5
Density /kg/m³	≦650
Heat exposure endurance /h	≧720 no fall off, hollow drum, and cracking
Wet and heat endurance/h	≧504 no layer, fall off
Freeze-thaw cycle resistance /time	≧15 no cracking, shedding and blistering
Acid resistance /h	≧360 no peeling, cracking
Alkali resistance/h	
Insulation efficiency deviation	±15%
Salt spray resistance /time	≧30 no foaming, obvious metamorphism and softening
pH	≧7
Fire rated	fire rate 2.5h Thickness 28mm, 3h 34mm

Thickness: According to the fire protection requirements, the coating thickness is selected in the range of 0.8-2.8cm, and the thickness of each application is controlled within 1cm, and the interval between secondary applications is generally 24 hours (temperature 20°C). The interval time between different ambient temperature and humidity should be adjusted accordingly.

Environmental: During the construction of the paint and within 24 hours after construction, the ambient temperature shall not be lower than 4°C. Like ordinary cement mortar, it suffers frost damage before solidification, but after the coating has solidified and partially dried, the coating can resist frost damage.

Reinforcement treatment: This coating is reinforced with steel wire, taking a galvanized steel wire (wire diameter 0.6 ~ 0.7mm), winding a circle at 10cm intervals on the steel beam, and winding the web of the steel beam for another week. In the case of large steel components or incomplete coating of structural shapes, as well as under conditions of vibration and mechanical collision, in order to ensure the durability of use, it is recommended to use reinforcement measures such as bandaging steel wire mesh.

Slurry use time: the slurry should be mixed with the use, at room temperature should be used up within 1 hour, the base material should be used up in 1.5 hours (the weather is hot, shorter), do not store too long, resulting in the slurry lining on the substrate adhesion and other adverse effects.

Exterior decoration: the coating is grayish white after hardening, and after the coating is dried, the surface can be painted with architectural paint decoration.

Other matters that have not yet been built can be carried out with reference to the general lightweight aggregate plastering construction process.

Once the packing is opened, it must be used, and the paint that is damp and agglomerated must not be used.

This spray should be constructed by designated professional construction workers, and LCF can provide construction technical guidance for the construction application unit.

Clean and maintenance

Wash the construction tools with water.
After cleaning the wastewater disposal, please follow the local environmental protection requirements.
In extremely dry and hot conditions, the necessary maintenance conditions (such as shading, wind shielding measures), to prevent the coating from losing water too quickly and affecting the strength.

Storage & Shipping

Shelf life: 6 months in origin sealed containers
Storage temperature: Off the ground and kept dry until ready for use
Shipping: deemed as non - dangerous chemical, common goods.

Packaging

25kg bag

Attention

Do not discharge into drains, watercourses or soil.
Not readily biodegradable.
Not expected to bioaccumulate.
Not expected to be toxic to aquatic life except at high concentrations