

HQS-F huaqiansu

—Admixture for lean production of cement self-leveling mortar

Uses

HQS-F huaqiansu is an admixture for cement self-leveling mortar.

Advantages

■ **High fluidity:** Gives high grout fluidity with low water/cement ratio, thus making placement or injection of the grout easy. The cement mixed with HQS-F huaqiansu flows, coheres and lubricates like water, and can self-compact and harden without shrinkage deformation in an unconstrained state.

■ **Expansion rate:** Gaseous expansion system compensates for plastic shrinkage and settlement in properly designed cement grouting material.

■ **Stability:** No metallic iron content to corrode and cause staining or deterioration due to rust expansion in the grout.

■ **Impermeability:** reduced water/cement ratio mixes in the grout mix ensures low permeability and long term durability in service.

■ **Winter construction:** Suitable for winter construction under -10°C ambient temperature.

Description

HQS-F huaqiansu is supplied as a powder admixture. The material is a combination of a plasticising agent and a gas producing expansion medium. The plasticising agent allows the use of a reduced water ratio with consequent

increased strengths and durability. The expansive medium counteracts the natural settlement and plastic shrinkage of the grout and aids stability and cohesion.

Dosage

The dosage is 8-9% of the weight of cement, drastic over-dosing of HQS-F huaqiansu increases expansion and may cause frothing.

Cement self-leveling mortar formula technology

■ Thin cement self-leveling mortar formula (kg/t)

According to the current industry standard JC/T985-2005 <Cement-based Self-leveling Mortar for Ground>. The formula is shown in the following table:

P. 042.5 Ordinary Portland cement/kg	fine sand /kg	HQS-F huaqiansu /kg	recommended water consumption/kg
350	650	25	220~250

■ Thick cement self-leveling mortar formula (kg/t)

The formula is shown in the following table:

P. 042.5 Ordinary Portland cement/kg	$\Phi \leq 4.75\text{mm}$ graded sand/kg	$\Phi 5 \sim 16\text{mm}$ gravel/kg	HQS-F huaqiansu/kg	recommended water consumption/kg
300	450	250	25	180~220

Construction technology of cement self-leveling mortar

■ Foundation treatment

The strength grade of the base concrete is $\geq C20$, the sundries are removed and the interface agent is painted.



■ Mix

(1) Use a small electric mixer or high-speed mixer to mix. Reference dosage: $1.6\text{kg}/\text{m}^2/\text{mm}$.

(2) Add the weighed tap water into the bucket and turn on the mixer, Add the powder slowly while stirring until it is finished, and continue stirring for 4~5min. After standing for about 1 min, stir it again until the uniform and dough free slurry is ready for use.

(3) Construction in winter or at low temperature and negative temperature, warm water $\leq 65\text{ }^{\circ}\text{C}$ shall be used.



■ Pouring and paving

(1) Pour the mixed slurry on the ground and spread it evenly with a special

toothed scraper, and eliminate the unevenness at the joint, with the thickness controlled between 3 and 30mm.



(2) Put on spiked shoes and enter the pouring area, use the air release roller to roll gently to eliminate the bubbles generated during mixing, pouring and pouring.



■ Curing

(1) Under normal temperature, curing can be carried out according to ordinary mortar.

(2) Under high or low temperature conditions, after initial hardening, water or cover wet sacks, straw mats and other measures shall be taken to maintain for 1 to 3 days.

(3) The ground with heavy traffic needs to be maintained for 3 days before it can be opened for traffic.

Packaging, storage and transportation

The packaging specification of this product is 25kg/bag, or 2.5kg/bag.

This product should be stored in a dry and ventilated environment to avoid rain, water, moisture, and sun exposure. The unopened shelf life is 12 months.

This product is nonflammable, non-explosive, non-toxic and tasteless, and does not contain heavy metals, halogenated hydrocarbons, benzene series, formaldehyde, VOC and other harmful substances. It can be stored and transported as general goods.

Statement on data and other recorded contents

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