

HQS-Super200 huaqiansu

——Admixture for lean production of self-leveling roadbed quick-repair material

Uses

HQS-Super200 huaqiansu is an admixture for self-leveling roadbed quick-repair material where a self-leveling,super-fluid,micro-expansion and self-compacting is required.It is applicable to the rapid repair of common diseases such as pits, holes, exposed reinforcement, exposed stone, honeycomb, pitted surface, sanding, slag dropping, cracks, edge missing, corner dropping, joint damage, etc. of concrete pavement.

Advantages

- **Early strength:**Change the early strength of ordinary silicon cement, and the compressive strength of cement mortar in 2-8 hours shall not be less than 15Mpa to meet the needs of emergency repair.
- **High fluidity:**Gives high fluidity with low water ratio.In this way, it is not only easy to level, but also conducive to the penetration of cement slurry into the damaged foundation, so that the repair layer and the foundation are combined more firmly.
- **High strength and stability:**It can maintain the stability of 28 day strength of cement, mortar, and concrete without shrinkage.
- **Expansion rate:**Make the cement mortar have micro-expansion and non-shrinkage properties, which can reduce cracking.

Dosage

The dosage is 5% of the weight of cement.

Formula technology of self-leveling quick-repair material

■Setting time and hardening rate

□**Temperature impact:**The setting time and hardening rate of HQS-Super200 huaqiansu on Portland cement are greatly affected by environmental temperature changes, especially the significant changes in strength values within 1-24 hours.

□**Large material impact:**The quality of cement and gravel varies greatly across the country and from various manufacturers, which directly affects the setting time and hardening rate of HQS-Super200 huaqiansu and its prepared mortar/concrete.

□ **Impact of water addition:**Excessive water consumption will reduce the strength of Portland cement, mortar, and concrete, and also prolong the setting time of HQS-Super200 huaqiansu on Portland cement, reducing the hardening rate.

■Self-leveling pavement quick-repair material formula (kg/t)

According to the current industry standard JT/T 1211.1-2018<Rapid repair materials for cement concrete in highway engineering - Part 1: Cement-based repair materials>,The formula of self-leveling roadbed quick-repair materials that meet the requirements of 2-8 hours' release is shown in the following table:

raw material	P. 042.5 Ordinary Portland cement /kg	Φ0.16~4.75mm river sand /kg	Φ5~16mm gravel /kg	HQS-Super200 huaqiansu /kg	Recommended water consumption/kg
-----------------	---	-----------------------------------	--------------------------	----------------------------------	--

thin layer	400	600	---	20	150~200
thin layer	50	75	---	2.5	18~25
thick layer	300	450	250	15	130~180

■Self-leveling waterproof and impermeable mortar formula (kg/t)

Two hours after pouring, people can walk on or carry out the next process,it is especially suitable for the rapid construction of leveling bottom layer or protective surface layer in the construction of paving waterproof coiled materials.

P. 042.5 Ordinary Portland cement/kg	Φ0.16~4.75mm river sand/kg	HQS-Super200 huaqiansu/kg	Recommended water consumption/kg
300	700	15	150~200

Construction technology for rapid repair of roadbed

■Base treatment

Clean the floating soil and other sundries,remove loose, loose and greasy parts,The smooth part should be roughened with "HQG-2# huaqianjiao+cement" or roughened with hammer.

■Material mixing

- (1) Pour water into the mixer.
- (2) Turn on the machine, pour HQS-Super200 Huaqiansu, cement, sand and water into the mixer in proportion, and mix them to form a uniform flowing slurry.
- (3) Let stand for about 1min, stir again and use it.

■Pouring and paving

After watering the roadbed, pour the slurry onto the roadbed,Make auxiliary

leveling and control the thickness above 3mm.

The reference dosage is about 1kg/m²/1mm.

■Curing

After pouring and paving, set enclosure or properly cover for curing.

Packaging, storage and transportation

The packaging specification of this product is 20kg/bag, or 2.0kg/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

- The data recorded in this document are based on typical experimental values, so there is no guarantee for the recorded content.
- Before use, please confirm the detailed use method and precautions according to this information and product safety data.
- When using, your company must carry out a prior test to confirm whether it meets the use purpose and safety.
- The contents of this document are subject to change without notice.



Beijing Huaqian New Technology Co., Ltd

Address: 35 Chaoqian Road, Changping District, Beijing
National University Science Park of Beijing University of Chemical Technology
website: www.line365.com.cn
Telephone: +86-10-80770130