

Denka Quickset S30

Ultra-quick hardening additive

Description

Denka Quickset S30 is Ultra-quick hardening additive comprising a mixture of powdered ordinary Portland cement and calcium sulfo aluminate; and it is most suitable for emergency works where construction time is limited. **Denka Quickset S30** is able to be designed with local sand, aggregate and water.

Uses

Emergency construction works as road, bridge, airport, railway, bridge, harbors.



Repairing for expansion joint of Bridge



Repairing for apron of Airport



Repairing for tollgate of high way

Advantages

- High early strength (20~30N/mm² in 2 ~ 3 hours)
- Excellent hydration activity
- Achieved of good initial strength
- Good cost performance than resin concrete
- It can be applied to wet conditions

Mix Proportion and Technical Data

- Standard Concrete Mix Proportions (Arbitrary Values)

Mix no.	Target slump (cm)	W/C (%)	s/a (%)	Unit weight(kg/m ³)					
				Water	Quick Set S30	Sand	Gravel	WRA ※1	D500 ※2
1	10.0	34.0	43.0	170	500	720	960	0.5-10	0.5-5

※1.WRA: Water reducing agent ※2. D500: DENKA SETTER: Retardant

- Concrete Physical Properties (at 30 °C)

Mix no.	Handling time (minutes)	Compressive strength (N/mm ²)				
		3h	6h	Day 1	Day 7	Day 28
1	30	>30	>35	>40	>45	>50

※Handling time; It can be controlled by DENKA SETTER D500 up to 60 min.

- Mortar Mix Proportions (Arbitrary Values) and Mortar Physical Properties(at 30 °C)

Mix no.	Cement to sand ratio	Flow value (mm)	Unit amount (kg/m ³)			Handling time (minutes)	Compressive strength (N/mm ²)				
			Water	Quickset S30	Sand		3h	6h	Day 1	Day 7	Day 28
1	1:1.5	200±20	267	786	1179	15	>30	>35	>40	>50	>55

Packing Size and Yield

Denka Quickset B120	25 Kg / Bag
	500 Kg / Bulk bag
	1000 Kg / Bulk bag

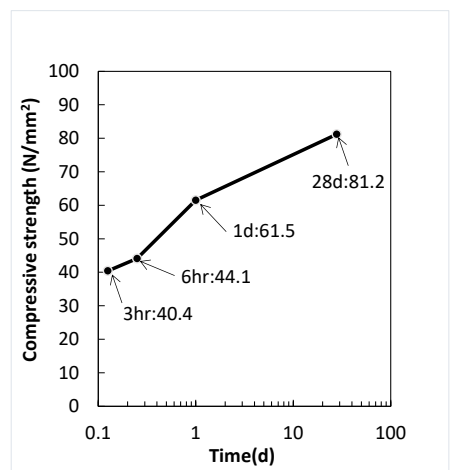


Fig.1 Concrete strength example

Application Instruction

Surface Preparation

Concrete surfaces should be clean, sound and free from oil, grease, laitance and loosely adhering particles.

Metal surfaces (iron and steel) should be free from scale, rust, oil and grease.

All absorbent surfaces must be well saturated with clean water, but be free of any surface water or puddles prior to the application of **Denka Quickset S30**.

Mixing

- (1) Pour aggregate and water into the concrete mixer. WRA and D500 setter was mixed in water. Mixing is 1 minute after pouring the water.
- (2) Add the **Denka Quickset S30** into the concrete mixer while turning off the power of the concrete mixer.



- (3) Mix the concrete mixture until homogenous. Approximately about 4 minutes.



- (4) Scrap the material around the concrete mixer while power off the mixer if necessary



- (5) Place the concrete onto the desired area and use the concrete vibrator for compaction.



- (6) Level the concrete using the trowel for finishing. Carry out curing until a predetermined time. It is recommended to used curing compound (Eg: Estocure R90) during the curing process.



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Cleaning

Wash all equipment with water after used.

Technical Support

Denka Construction Solutions Malaysia offers a technical support package to specifiers, end-user and contractors, as well as on site technical assistance.

Storage

Denka Quickset S30 has a shelf life of 10 months in unopened containers, kept in a dry store. In high humidity locations, the shelf life may be reduced.

Precautions

- Refer to the Safety Data Sheet (SDS) before use.
- Take note that hardening time may be extended when using **DENKA Quickset S30** in the milk form.
- Use ASAP once mixed as the mixed cement will rapidly harden.
- Wear protective gear (goggles, mask, gloves, and rubber boots) while handling the product. Do not dispose of the product in drains.
- If any part of the body comes into contact with **DENKA Quickset S30**, wash copiously with water as it is alkaline.
- Once opened, the product should be used up completely. Otherwise, reseal for storage.
- The product should be stored in a dry area, indoors, and out of direct sunlight.
- For further information, please contact Denka

Additional Information

Denka Construction Solutions manufactures and offer a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.

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