COLAS PRODUCTS DATA SHEET
COLAS HSC10

Colas HSC10 is a pre-packaged cement based concrete containing graded aggregates and non-shrink additives. **Colas HSC10** is supplied to site ready to use only requiring the addition of mixing water to produce a medium workability high strength durable concrete.

The mixed concrete, when placed, will harden in approximately 10 minutes and reach initial set in approximately 15 minutes. **Colas HSC10** can be placed in a single pass from 30mm to 400mm. Thicker sections can be achieved by placing additional layers once the preceding layer has reached initial set. The compressive strength gain will reach 18N/mm2 within 1 hour allowing early opening of roads to vehicular traffic.

The rapid setting assists the re-bedding of manhole frames and the setting of new frame systems. The product is chloride free and can be safely used with cast iron and steel units. After placement, no special curing is required in moderate ambient conditions.

WHERE TO USE?

- Infilling around re-bedded raised manhole
- Infilling around manhole frames in new road
- Support of road furniture

PREPARATION

Laitance and all loose material including dust, oil and grease should be removed in order to produce a sound substrate. The work area should be pre-wetted taking care to remove any standing water before placing the **Colas HSC10** concrete.

APPLICATION

To achieve the most consistent concrete mix, mechanical mixing is recommended. Thorough hand mixing is suitable but care should be taken to ensure that the mix is fully wetted out without the use of excess water. Mechanical mixing may be carried out in a suitable vessel using a slow speed high torque drill and paddle. Hand mixing may be carried out using a clean spot board or wheelbarrow.

Each 25kg tub or bag of **Colas HSC10** requires 1.0 to 1.75 litres of water to give a stiff concrete. Excess water should not be added. Combine the aggregate and cement portions and gradually add water until a stiff concrete consistency is achieved. Once setting of the concrete has commenced, further mixing should not be used to re-work the mix. The concrete should be placed within approximately 5 minutes of mixing. The working time may be extended in cold ambient conditions and may be slightly shortened in hot ambient conditions.

Required mixing water is 1.0 to 1.75 litres. Aggregates as supplied contain moisture. Do not add excessive water. Variations in water content for particular applications may alter concrete consistency and compressive strength achieved. Place mixed concrete onto dampened prepared substrate as soon as possible after mixing. Compact concrete into place using a suitable tamp or float. Tools and mixers should be cleaned with water before the **Colas HSC10** has hardened.

Curing: No special curing is required at temperatures between 5°C and 35°C. For placing at temperatures outside this range, contact our National Sales Office.

COVERAGE

The volume yield of each 25kg bag of **Colas HSC10** is approximately 12 litres.

PACKAGING

Colas HSC10 is supplied in 25kg bags (50 x 25kg bags per pallet) and 25kg buckets (40 x 25kg per pallet).

STORAGE

Colas HSC10 will have a shelf life of 6 months when kept in unopened packaging at a temperature of 5°C to 35°C. Storage at higher temperatures may reduce the shelf life.

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STANDARDS

Colas HSC10 is manufactured in accordance to BS EN ISO 9001:2015.

PERFORMANCE

Typical Mortar Properties @ 20°c		
Compressive strength	60 mins	18MPa
	1 day	40MPa
	28 days	60MPa
Particle size	0 - 10.0 mm	
Density	2,300 - 2,400 kg/m^3	
Approx. working life @ 20°c	10 mins	

Concrete for installing ironwork such as manhole cover frames during repairs may be trafficked when the strength is expected to be 20N/mm^2. For rapid construction, this strength should be achieved within 2 hours. **Colas HSC10** will achieve the required strength of 20N/mm^2 within 1 $^1/_2$ hours at a temperature of 20°C.

SAFETY

For full safety information please request the **Colas HSC10** Safety Data Sheets 154 & 155 using the contact information below.

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COLAS

WE OPEN THE WAY