



Material Datasheet

FAST SET



Rugby® Fast Set is a blend of specialist cements and admixtures suitable for repair and maintenance in building work where fast setting and hardening properties are beneficial, e.g. concrete, mortar, rendering and floor screed repairs. At present there is no appropriate British Standard for this product.

Features/benefits/applications

- Sets within 1 hour, takes foot traffic in 4-6 hours and vehicular traffic in 12 hours
- Suitable for concrete, mortar, rendering and floor screed repairs
- For repair and maintenance where rapid hardening is required
- Typical uses
 - concrete drives and steps
 - paths and kerbs
 - setting manholes
 - fixing fence posts
 - railings and copings
 - repairing rendering and floor screeds
- Chromium (VI) compliant

Delivery and storage

Delivered by road in a curtain-sided vehicle, the standard load size is 28 - 30 tonnes. All CEMEX drivers are fully trained and experienced in the safe delivery and unloading of our vehicles, but please do all you can to ensure your site is accessible with no obstructions.

Rugby® Fast Set is available in paper sacks delivered as shrink-hooded, 1.4 tonne modules on non-chargeable pallets. To avoid premature deterioration of the reducing agent incorporated in the cement for control of soluble chromium (VI), storage should be in accordance with our recommendations given on bags and despatch documents.

Health and safety

Contact with wet cement, concrete or mortar may cause irritation, dermatitis or severe alkali burns. Contact between cement powder and body fluids (e.g. sweat and eye fluids) may also cause irritation, dermatitis or burns. There is serious risk of damage to the eyes. Wear suitable waterproof protective clothing, gloves and eye/face protection. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. After contact with skin, wash immediately with plenty of clean water. Keep out of reach of children. Contains Chromium (VI), may cause allergic reaction, the risk of which is increased if the cement is used beyond the declared storage period shown on bags and despatch documents.



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Product applications

Concrete

Rugby® Fast Set may be used in the normal range of traditional nominal mixes. Sharp (concreting) sand should be used, together with 20mm maximum size coarse aggregate and the minimum amount of water necessary for placement and compaction. Excess mixing water reduces both strength and durability of concrete. Use of separate sand and coarse aggregate is preferable to all-in aggregate (ballast). The following tables give nominal mix proportions by volume for common applications:

General purpose mix application:

For most uses except foundation work and outdoor paving.

| | Proportions by volume | Amount per M ³ (approx) |
|-----------------------|-----------------------|------------------------------------|
| Rugby Fast Set | 1 | 310 kg |
| Sand | 2 | 655 kg |
| 20mm aggregate | 3 | 1130 kg |
| (all - in aggregate) | (4) | (1785 kg) |

Paving mix application:

For all exposed in-situ paving – e.g. driveways.

| | Proportions by volume | Amount per M ³ (approx) |
|-----------------------|-----------------------|------------------------------------|
| Rugby Fast Set | 1 | 385 kg |
| Sand | 1½ | 575 kg |
| 20mm aggregate | 2½ | 1150 kg |
| (all - in aggregate) | (3½) | (1725 kg) |

Once in place, concrete requires moisture to develop its full strength and premature drying out must be avoided. In normal conditions and at temperatures in excess of 10°C, concrete should be cured under damp conditions for 1 to 3 days (cover with curing membrane, plastic sheeting or wet hessian); at temperatures below 10°C, this curing time should be doubled. Protection of fresh concrete against freezing is essential and placement under such conditions should be avoided if possible.

Mortar

Once placed, mortar requires measures to prevent premature loss of moisture and the advice given on curing of concrete is again applicable.

| | Rugby® Fast Set : Sand (with plasticiser) |
|---|---|
| General usage (Low-rise housing) | 1 : 5 - 6 |
| Strong (Free standing walls) | 1 : 3 - 4 |

Typical properties

| BS EN 196-3 Paste – setting time |
|----------------------------------|
| 10 – 30 minutes |

| BS EN 196-3 Mortar – compressive strength | |
|---|-----------------|
| Time | Strength |
| 1 Hour | 4 MPa |
| 4 Hours | 8.6 MPa |
| 24 Hours | 11.8 MPa |
| 2 days | 16.4 MPa |
| 7 Days | 30.1 MPa |
| 28 Days | 36.6 MPa |

Due to the rapid setting properties of Fast Set, it is recommended that the mixing and placing be performed in less than 15 minutes.

For further information please contact
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