

Hanson 40N Concrete

Technical Data Sheet



DESCRIPTION

Hanson 40N Concrete (C32/40) is prepared by blending Hanson Cement CEM I 52.5N, with Regen GGBS and aggregates (0/4mm sand and 4/10mm coarse aggregate). The blend of CEM I and GGBS produces the cement combination CEM III/A+SR which enhances sulfate resistance.

The mix proportions are designed to achieve a mean strength in excess of 40N when the product is mixed to a target consistence of S2 (50-90 mm slump).

Hanson 40N Concrete has been designed to meet requirement of BS 8500 Concrete, but conformity cannot be attributed to this Standard since conformity is based upon the performance of the mixed concrete. To establish conformity, on-site testing of the mixed concrete is required.



APPLICATION

Hanson 40N Concrete can be used for a whole range of building projects requiring a concrete with high compressive strength.

BENEFITS OF USE

The benefits of Hanson 40N pre-packed concrete include:

- Enhanced sulfate resistance
- Reduced chloride penetration, improving protection of embedded steel reinforcement.
- Prevents damaging alkali silica reaction
- Prevents delayed ettringite formation
- Easy to use, just add water
- Saves time, quick and convenient

MIX DESIGN

Material	Proportions	Standard
CEM I 52,5N	9%*	BS EN 197
Regen GGBS	9%*	BS EN 15167
Fine Aggregate (0/4mm)	27%	BS EN 12620
Coarse Aggregate (4/10mm)	55%	BS EN 12620

*Total combined cement/binder content approx. 380kg/m³.

QUALITY

Hanson 40N Concrete meets the requirements of BS5838-1:1980 and is factory produced to ensure the highest quality concrete.

COVERAGE

Material	Required Water (approximately)	Yield	Coverage at 75mm depth	Coverage at 100mm depth
MaxiPack20	2.0 litres	0.008m ³	0.10m ²	0.08m ²
MaxiPack25	2.5 litres	0.010m ³	0.13m ²	0.10m ²

INSTRUCTION FOR USE

All surfaces to be worked should be free from oil, grease and any loose material. The area where concrete is to be placed should be prepared to prevent loss of moisture from the wet concrete.

For best results, mix thoroughly using a mechanical mixer, empty the bag of Hanson 40N Concrete into the mixer and blend until uniform. Slowly add clean water until the desired consistency or slump characteristics are achieved.

Alternatively, empty the bag of Hanson 40N Concrete onto a clean, flat moisture resistant surface, such as a mortar tray. Slowly add clean water until the desired consistency or slump characteristics are achieved, by thoroughly mixing with the aid of a shovel or similar.

Please note: The contents of the bag may segregate during transport and handling. To ensure satisfactory performance, the entire contents of the bag should be mixed thoroughly. If only part of the bag is required at a time mix together the entire contents on a clean, dry surface. Return surplus to the bag or other suitable container.

Avoid adding too much water whilst mixing as this will weaken, affect the setting time, and affect the durability of the concrete mix.

For best results, use the concrete within 30 minutes of mixing with water. Protect newly laid concrete from the weather until fully hardened. Concrete strengths are improved by keeping the concrete damp during hardening.

Application temperature: +5°C to +35°C. Application temperature: +5°C to +35°C.

ADDITION OF OTHER MATERIALS

Hanson 40N Concrete is a pre-packed concrete. The addition of admixtures is not necessary and could adversely affect the performance of the finished product.

PACKAGING AND STORAGE

- This product must be stored in unopened bags clear of the ground in cool dry conditions and protected from excessive draught.
- If stored correctly, as detailed above, the chromium (VI) in this product will be within required levels for up to 12 months from the date shown on the bag.
- Use of this product after the declared storage period, as detailed above, may increase the risk of an allergic reaction following direct contact with skin.
- 40N Concrete comes in an easy to handle, fully waterproof all weather bag.

TECHNICAL SUPPORT

For further advice please contact Hanson Cement's Technical Helpline on 0330 123 2441.

HEALTH AND SAFETY

Please refer to Material Safety Data Sheet for full information.

For further information contact:

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