

M60

Rapid Strength Bedding Mortar



Our market leading, rapid strength mortar, for use with all access covers, as well as for the bonding of granite setts, flags and bedding kerbs.

- HAPAS approved since 2005
- Conforms to HD27/15
- Rapid strength gain
- Open to traffic: 60 minutes even at 5°C
- Shrinkage compensated

Applications

UltraCrete M60 is a rapid strength bedding mortar for use with all access covers, as well as for the rapid bonding of granite setts and flags, emergency repairs and bedding of kerbs.

Technical

M60 is supplied pre-blended in 25kg bags or plastic containers and requires only the addition of water. The product can be used from 10mm-75mm in one pass, with greater depths possible using the layer-upon-layer method. M60 achieves exceptional bond strength without the use of a primer. The product can be bulked out with the addition of up to 30% hard stone clean aggregate. Please note that this will reduce the product's strength gain and alter its performance characteristics.

Preparation

All surfaces should be free from oil, grease, dust or any other visible contaminants. Remove all loose particles and work on a sound substrate. Pre-soak the area with clean water prior to application to aid bond. Remove ponded water before applying the product.

Mixing

M60 can be mixed with a forced action mixer or by hand with an appropriate tool. If hand mixing is used, ensure that it is vigorous. 25kg of product will require approximately 3 litres of water. A stiff consistent mix with no slump should be achieved, ensuring all particles are well wetted. Note: Mix only enough material to apply within 4 minutes. Never remix or add extra water.

Placing

Apply the bedding material over a pre-soaked area. Once mixed, M60 should be applied to the supporting structure within 4 minutes. Firm well into position using a float and allowing a 5mm excess thickness. Place the frame onto the bedding mortar ensuring it is fully supported. Check that the frame does not overhang the mortar at any point (use suitable lifting equipment when positioning the frame). Care must be taken to prevent voids in the bedding material under the frame, especially in the cover seating area. The frame should then be tamped into place ensuring the correct level is obtained. Any holes within the frame should be infilled and the flanges of the frame enveloped by a minimum thickness of 10mm of the bedding material. Exposed surfaces of the bedding material should be float finished, ensuring voids are filled. Remove loose materials and point the inside surface to a smooth finish. Once the bedding material has reached its initial set, the backfill material Ultracrete QC10 concrete can be placed.

Cleaning

M60 should be removed from tools and equipment with clean water immediately after use. Cured material can also be removed mechanically.

Storage

Store in closed original packaging at temperatures between 5°C and 30°C. Avoid frost.

Shelf life

Shelf life in correct conditions for sealed packaging is 8 months. High temperatures and high humidity will lead to a reduced shelf life.

Health, Safety and Environmental

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash your hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material datasheet relating to this product is available from instarmac.co.uk

Quality assurance

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001. Our products are guaranteed against defective materials and manufacture, and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept any liability arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All products are sold subject to our conditions of sale, copies of which may be obtained on request.

Technical data*

| Compressive strength (N/mm ²) | |
|---|--|
| At 5°C: | |
| 45 minutes | 17.5 |
| 1 hour | 20.30 |
| At 20°C: | |
| 45 minutes | 24.00 |
| 1 hour | 27.00 |
| 2 hours | 29.00 |
| 7 days | 44.00 |
| 28 days | 60.00 |
| Tensile strength (N/mm ²) | |
| At 20°C: | |
| 1 hour | 1.13 |
| 7 days | 3.18 |
| Workability | 5-10 minutes |
| Density | 2220kg/m ³ |
| Coverage | Approx 1 x 400mm x 400mm standard ironwork cover and frame @ 25mm, dependant on bed depth, brickwork and substrate |
| Yield | 12.5 litres approx |
| Colour | brownish grey <i>As with all raw materials, colour variation may occur. This does</i> |

*Depending on temperatures. Cool temperatures retard, warm temperatures accelerate product performance.

[Design Manual for Roads & Bridges – Volume 7, Section 2](#)

The department of Transport Part 4, HD 27/15

3.11 Mortars for bedding ironwork such as manhole cover frames during repairs may be trafficked when the strength is expected to be 20 N/mm². For rapid construction, this strength should be achieved within 2 hours.