

ENVIRO MASTIC

Hot Applied, Mastic Asphalt



Hot applied, rubber modified mastic asphalt

- No Voids
- First time permanent repair
- Long-term wear resistance
- No waste - only use what is required
- More than 50% recycled material per bag
- SROH compliant
- Ideal for remote locations
- No mechanical compaction required
- 0% packaging waste - meltable bag

Description

UltraCrete Enviro Mastic is a hot applied rubber modified mastic asphalt, that gives superior performance in the patching and repairing of carriageways, footpaths, footways and cycle tracks or as a surface finish when installing street furniture and access covers.

Its unique design provides long-term wear resistance and eliminates voids, ensuring first time, high quality, permanent repairs and installations. It is ideally suited for use as a surfacing material surrounding road ironwork, gullies and other street apparatus. It is also suitable as a surface repair in foot & cycle paths and around utility reinstatements, as well as for local repairs, airfield repairs and surfacing of narrow trench reinstatements.

Stored as a granular material, UltraCrete Enviro Mastic is poured from the bag on site, into a pre-heated mastic mixer, where it can be applied as a molten mastic repair or surfacing material.

Uses

UltraCrete Enviro Mastic is a granular material made up of a blend of aggregates, recycled plainings and rubber modified bitumen pellets. The rubber modification in the mastic provides unique properties, both in application and performance. Supplied in 20kg bags the granular mix can be poured and heated in a purpose made mastic mixer onsite, allowing the exact quantity of material to be heated for use - so no waste.

Conformance

UltraCrete Enviro Mastic complies with the test requirements of the revised Specification for Highway Works (SHW), Clause 946 as defined in the Specification for the Reinstatement of Openings in Highways (SROH). Assessment of the product to meet such requirements is listed under PTS PAS Certification Ref: PA946 0006 issued by Pavement Testing Services Ltd (PTS Ltd).

UltraCrete Enviro Mastic is manufactured to conform to the requirements of BS EN 13108 Bituminous Mixtures – Material Specifications, Part 6 Mastic Asphalt. Additionally its PTS Certification covers the incorporation of 50% + reclaimed aggregate within the confines of BS EN 13108.

General Requirements

UltraCrete Enviro Mastic requires a mastic mixer to heat the material ready for use. It should be ensured that the machine operator is fully trained in the use of the mixer and is fully compliant with Health & Safety requirements and hazards associated with gas heated mixers and the handling of hot materials.

Preparation - Ironwork Reinstatement

The installation area shall be clearly defined, before any work commences and the surrounding pavement/carriageway should be stable and structurally sound.

The saw cut edges of the excavation around the ironwork or apparatus ("access surround") should be within the required parameters, in line with the Specification for the Reinstatement of Openings in Highways (SROH) and should follow the guidance of S11.5 Ancillary Activities and more specifically the relevant sections of:

- S6 Flexible & Composite Roads.
- S7 Rigid & Modular Roads.
- S8 Footpaths, Footways & Cycle Tracks.

Prior to using UltraCrete Enviro Mastic as the surface finish, the ironwork reinstatement should have been made good using UltraCrete bedding mortars (fully conforming to CD534, formerly HA104/09) and flowable backfill concrete materials, approved for use and holding Product Acceptance Scheme Accreditation (i.e a PAS or HAPAS Certificate).

The Ironwork and chamber installed should correctly match in size and the chamber should be of sufficient strength to support the frame & cover and expected loading for the category of road.

When bedding the ironwork, the frame should be aligned using a string line, to ensure it is level with the surrounding surfaces and camber of the road, on all sides.

The materials used for bedding the ironwork must be installed at a minimum depth of 10mm. The backfill flowable concrete must be installed at a minimum depth of 20mm over the flange of the ironwork and minimum of 100mm below the road surface/top of the ironwork.

Once the backfill concrete has cured, spray a uniform application of UltraCrete SCJ Seal & Tack Coat, to prime all concrete surfaces, metal frame edges and saw cut asphalt edges.

Installation of UltraCrete Enviro Mastic

The operator should be familiar with the equipment which should always be used as per the manufacturers' guidelines. The usual method of operation is to pour the required number of 20kg bags of UltraCrete Enviro Mastic into the mastic mixer before bringing up to the required temperature. Once the bags are empty, the product is above 100°C, and you are using a mastic asphalt mixer, you may add the packaging into the mixer. The operator should be aware of the maximum/minimum quantities of material that the mixer can safely handle.

Mix the material until it has melted and is reading between 180°C & 190°C on the mixer temperature gauge (always ensure the temperature gauge on the mixer is in full working order before you start). Ensure the product is thoroughly homogenous which may take approximately 1 hour depending on ambient temperatures, quantity of product in the mixer and type/capability of mixer in use.

Regularly crosscheck accuracy of machine temperature gauges by using a laser temperature gun aimed at material as it is discharged from the mixer hatch.

When it reaches the correct temperature and fluid consistency, discharge the molten material into a metal mastic bucket. Pour the material from the bucket into the prepared reinstatement and hand smooth using a mastic float to press and layer the material into position. Apply the material in layers of 20 - 50mm depth, pressing firmly and smoothing the surface to create a dense, level finish. Minimum overall installation depth of UltraCrete Enviro Mastic should be 100mm up to a maximum overall depth of 150mm. In non-regulated private installations, Enviro Mastic can be installed at a nominal 50mm depth. The balance of ironwork depth being replaced with cement backfill.

Allow each layer of the mastic to cool before applying the next, approximately 15 minutes, in order for it to solidify and create a firm base for the next layer.

After the final layer has been applied and while the product is still molten, press either 8/14mm or 14/20mm graded, of pre-coated aggregate chippings, as required into the hot surface of the mastic to provide suitable surface texture (**the aggregate should be rated 65 PSV for lower category and 68 PSV for higher category roads**). Chippings can be pressed into the mastic using hand roller or float or with the aid of a mechanical roller.

Typical coverage rate for the chippings would be 8kg/sqm to 10kg/sqm for 8/14mm grade or 10kg/sqm to 13kg/sqm for 14/20mm grade.

The product will set in 45 minutes to 1 hour dependant on depth, size of installation and ambient external weather conditions.

The installation should not be trafficked for a minimum period of 1 hour to ensure product is set sufficiently to accept vehicle loading.

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

Unit Size:	20kg bag. 50 units /pallet (1000kg)
Appearance as supplied:	Dry, pourable granular aggregate & rubber bitumen pellet mix
Appearance in use:	Black, molten, free flowing, granular, hot mastic
Application Temp °C:	170°C to 195°C
Installation:	Applied in 20mm to 50mm layers
Min / Max Overall Depth:	50mm to 150mm
Surface Texture Aggregates:	65 - 68 PSV – 8/14mm & 14/20mm, single sized, asphalt coated chippings, depending on road category.
Traffic Access:	Typically 1 hour after installing, depending on depth & ambient temperature conditions.
% Recycled Material	50%+ recycled material per 20kg