BituChem Asphalt Ltd

Technical Guidance Notes - NatraTex

The information contained in this document is intended as a guide when laying **NatraTex** products.

Overview

NatraTex products are proprietary decorative hard landscaping materials, working with Shell's Mexphalte CLT clear synthetic binder, which is manufactured and used extensively throughout Europe. This unique binder is combined with complimentary aggregates at the dedicated Gloucestershire production facility to manufacture surfacing products that can be used in a number of applications and is available in a range of different colours.

NatraTex products are manufactured on an asphalt plant similar to that used in the production of conventional black asphalt, is supplied in hot format and is laid in the same way as conventional black asphalt (however, it's important to make sure that all equipment: boots, rakes, barrows, pavers etc., are clean!).

NatraTex uses the clear binder and natural aggregate to produce an attractive and durable surface. We use a range of aggregates to provide both colour and performance. Also, the addition of pigment is adjusted to produce bright & vibrant natural finishes.
Samples & brochures are provided to solely give an illustrative guidance to the NatraTex product range and there may be differentials in colour & tone found in the supplied materials.
The aggregates used range from flint gravels to high skid resistant stone if a PSV (Polished Stone Value) has been specified. NatraTex boast long-term colour retention, are largely maintenance free and cost-effective when compared to other aesthetic systems.

Technical Details

Pavement structure below the NatraTex layer may be identical to that of a conventional asphalt / macadam surface course.

NatraTex is supplied in nominal sizes of 6mm and 10mm depending on usage.

Nominal Size (Aggregate)	Mix Design	Loadings & application
6mm	Dense Grade (DG)	Light domestic, Cycleways, Pedestrian.
6mm	Fibre Enhanced (FE)	Driveways, Occasional utility vehicles.
6mm	Heavy Duty (HD)	Driveways, Residential Roads, Turning area, Parking area.
6mm	Porous – SUDs Compliant	Light domestic, Cycleways, Pedestrian **
10mm	Dense Grade (DG)	Light domestic, Cycleways, Pedestrian.
10mm	Fibre Enhanced (FE)	Driveways, Residential Roads, Turning area, Parking area. Occasional HGV.
10mm	Heavy Duty (HD)	Residential Roads, Turning Area, Parking area, HGV, High volume motor vehicle, Busy driveways.
10mm	Porous – SUDs Compliant	Light domestic, cycleways, pedestrian **

** Subject to technical review.

Installation

Preparation

NatraTex should be installed in accordance with **BS 594987** - the standard for Asphalt for roads and other paved areas.
All equipment needs to be clean to avoid contamination, resulting in discolouration of the finished surface.

We strongly recommend that **NatraTex** should be machine laid, particularly the Heavy Duty & Porous ranges. It is appreciated that this may not always be possible. Please contact us for additional guidance if required.

The surface onto which the material is to be installed should be of adequate strength to bear the construction of the new surface without deformation. Designers should take into consideration the possibility of any consolidation, movement or settlement of the foundation design.

Before laying the material the surface should be free of ice, standing water, snow and loose detritus.

It's recommended to apply a bond coat to the prepared surface to prevent the ingress of water, which can result in "plating off" i.e. where the surface separates from the binder course. Ensuring that the bond coat has cured is vital otherwise bleeding can occur, which will discolour and contaminate the surface.

BituChem produce and strongly recommend the use of a clear vertical joint and edge sealant, which is supplied in 15/20 litre containers and this should be applied to all raised iron works and kerbs etc.

Although it is not always practical joints in the new surfacing should be avoided. If unavoidable care and attention to the laying plan should be given in regards the number and location of any joints.

Compaction

When the material has been laid, either by hand or machine, it is recommended to compact the surface as soon as possible.

Steel wheel, tandem, vibratory rollers are recommended.

Compaction of the finished surface should be completed above the minimum rolling temp stated in the product datasheet. Continue compacting (polishing) the material until the temperature reaches approx. 60˚C. (Infrared reading on the surface will show approx. 55˚C)
(Refer to specific Material Specification Data Sheet for further information.)

Additional Notes on Installation

Ideally, it is recommended to complete the scheme in as few visits as possible, to minimize the risk of variation in appearance.

If "day joints" are unavoidable, they must be treated on the vertical face with the clear joint edge sealant before additional installation.

Adverse Conditions

Laying should be avoided if standing water is present or wet weather is forecasted on the day of scheduled laying.

NatraTex should not be laid if the ground is frozen. Laying should be suspended if air temperatures fall beneath 0˚C, or -3˚C in calm conditions.

Consideration should be given to compaction times if temperatures are falling.
Thinner layers of material cool quicker and the wind chill can significantly accelerate the cooling process.
The material is loaded onto insulated lorries and depending on the size of load (the fuller the lorry, the less heat loss) **NatraTex** will lose approximately 3-5˚C per hour whilst travelling.

Installation Contractors

Reputable contractors with a knowledge and skill set that are able to lay "conventional asphalt" should be able to lay NatraTex. We strongly recommend the use of competent Contractors who are familiar with placement of **NatraTex**.
For a list of contractors in your area who have installed our products, please call **Neil Robinson** on 07779 268631, **Fran Smart** on 07584 278 836 or our **Sales Office** on 01594 826768.

Opening to Traffic

Depending on weather conditions, product density and use, the opening of the installed surface course to traffic will vary. We recommend leaving the surface at least 12 hours before trafficking. In summer months, when temperatures are high, we'd suggest leaving the surface overnight, or until the whole course has fully cooled (ideally, to below 30˚C).

Maintenance & Aftercare

NatraTex products are very low maintenance, making them ideal for a range of applications and sectors.

BituChem also produce cold-lay grades of our products, available in 25kg containers, ***NatraTex*** *Cold Lay,* for use in areas where there has been changes to raised ironworks or small repairs due to bollard replacements or similar. This material has a 3 month shelf life.

If hot material is required consideration should be given to quantities & travel time etc. to ensure there's enough workable material to complete the works.

If the finished surface becomes soiled from spillages or debris, it's recommended to remove these marks using a citrus cleaner. **Avoid using a solvent based cleaner**.

Please Note: Tyre marks and general black marking will be more visible on material produced using clear binder. However the marking is usually on the binder film that covers the aggregate in early life, and will after trafficking and weathering become far less evident.

It is not advisable to place chairs and tables, producing high point loads on any asphalt surface as the surface will deform particularly in warm weather.

Quality Control

NatraTex is manufactured and supplied in accordance with the requirements of BS EN ISO 9001 and the factory process control requirements of BS EN 13108 – 21.

Further Information

BituChem Asphalt Ltd are the manufacturers and suppliers, therefore, any questions which relate to pavement design should be raised with a suitably qualified person.
Any further information can be found on our website www.natratex.co.uk

NatraTex® Cotswold NatraTex® Colour