

Product Description

Privica Pavements combines the high strength of cementitious materials with the flexibility of asphalt to deliver a maintenance free structural surfacing that is tough, durable and jointless.

Privica Pavements is ideal for both refurbishment and new build projects.

Privica Pavements is a two layer system - an upper surface course and a base:

- Surface Course An open graded asphalt (22 - 28% voids), in which the voids are penetrated and automatically filled with high strength thin flowing mortar.
- Base A new or existing layer - from cement bound macadam, asphalt, block paving, concrete to steel.

Definitions

- Component : Constituent part of Privica Pavements
- Product : A recipe of components to form Privica Pavements **R**, **RX**, **B**, **C** or **F**
- Batch Size : Component - As defined in this data sheet (DS-ES-050)
Product - The area impregnated by Privica Pavements mortar in one day

Product Recipe's

	Component	Refurbishment		New Build		
		R	RX	B	C	F
Surface Course :	Privica Pavements Powders	√	√	√	√	√
	Water	√	√	√	√	√
	Open Graded Asphalt	√	√	√	√	√
Base :	6mm Dense Macadam		√			
	Dense Macadam			√		
	Cement Bound Material				√	
	Recycled Bitumen Bound Material					√
Other :	Bituminous Emulsion	√	√	√	√	√
	Reinforcement		√			

Privica Ltd

York, YO42, UK / Dubai, UAE
Tel: (+44) 870 1128835 / Fax: (+44) 870 1128836
Email: pavements@privica.com
Web: www.privica.com

Confalt is the
registered
Trademark of
Contec - ApS.



Components

4.1 Privica Pavements Powder

Privica Pavements mortar is a high strength shrinkage compensated free flowing mortar used for filling voids in open graded asphalt. It is a blend of water and dry premixed Privica Pavements powders.

Privica Pavements powders are either manufactured by Contec ApS (Denmark) or produced locally by distributors based upon concentrate supplied by Contec. The quality control measures of Contec ApS have been approved in accordance with BS EN ISO 9002.

During manufacture a 10kg sample is taken for every 12 Ton of dry ready mixed Privica Pavements Powder produced. Every second sample (24 Ton) is laboratory tested for compliance with the recipe and design properties. The other samples are stored in a dry place for 6 months to allow for any future testing.

Every bag of dry Privica Pavements powder manufactured is labelled with the date produced and batch number.

Site mixing and installation operations are in accordance with Contec's recommendations and Privica's quality system.



4.2 Water

Clean tanker or mains supplied drinking water is mixed with the Privica Pavements powder to form Privica Pavements mortar.

The flow of the mortar is between 10 and 15 seconds, measured using the Contec standard ICO-cone. The typical amount of water to achieve this flow is 21 to 24% of the total dry powder i.e. 210 to 240litres of water to 1000kg of dry Privica Pavements powder.

4.3 Open Graded Asphalt

The open graded asphalt consists of crushed aggregates coated with a mixture of bitumen, filler and stabilising cellulose fibres. It is produced in a hot mix asphalt plant registered to BS EN ISO 9001 'Sector Scheme for the Production of Asphalt Mixes', at a mixing temperature of 155 to 165°C.

The Job Mix Formula (recipe) is designed in accordance with the Marshall Method of Mix Design (Asphalt Institute Manual Series MS-2), complying with:

Air voids (AASHTO T269)	24 to 28%
Cantabro Abrasion	Max. 15%
Binder Drain Off	Max. 0.3%



The aggregate consists of clean, hard, durable and sound crushed granite, basalt or similar of uniform quality with cubical shape in the grading 5/8mm, 8/11mm or 11/16mm, complying with BS EN 13043. Maximum 10% oversized particles and a minimum of 10% undersized particles.

Privica Ltd

York, YO42, UK / Dubai, UAE

Tel: (+44) 870 1128835 / Fax: (+44) 870 1128836

Email: pavements@privica.com

Web: www.privica.com

Confalt is the
registered
Trademark of
Contec - ApS.



Bitumen B60 to B180 complying with BS EN 12591 is used as the binder. The minimum laying temperature for bitumen B60 is 120 to 140°C and for B180 110 to 130°C. The softer grade (higher Pen) bitumen is selected for colder climates and / or manual installation. Generally, the grade is chosen in the interval ASTM D946 Pen. Grade 85 - 100.

Transportation of the open graded asphalt is in accordance with Cl.901 part 3 of the Specification for Highway Works Vol.1 (MCHW1). Normal deliveries are 20Tonne batches. Each batch is accompanied by a delivery ticket stating as a minimum product type, time batched and actual weight. These tickets are retained as part of Privica's quality assurance records. The placement location of every 5th delivery (on average) is recorded.

Standard Recipe:

- 4.0% Bitumen B 90
- 4.5% Filler (Calcium filler, fly-ash or cement)
- 0.2% Cellulose fibres (Bitucell or Technocell)
- 91.3% Cubic broken aggregates 5/8, 8/11 or 11/16

Installation is in accordance with Cl. 901 MCHW1, except that compaction is undertaken using a smooth steel roller of 3.5 to 4 ton deadweight, without vibration. Water with soap is used as the lubricant (not oil).

6mm Dense Macadam (909)

Dense macadam consists of crushed aggregates coated with a mixture of bitumen and filler. It is produced in a hot mix asphalt plant registered to BS EN ISO 9001 'Sector Scheme for the Production of Asphalt Mixes'.

Laid by hand or machine as a regulating / levelling layer, normally between 15 and 30mm thick, prior to application of Privica Pavements R or as the levelling course in Privica Pavements RX. It complies with BS 4987-1 and is referenced in the MCHW1 as Cl.909.

Installation is in accordance with Cl. 901 MCHW1

Normal deliveries are in 20Tonne batches. Each batch is accompanied by a delivery ticket stating as a minimum component type, time batched and actual weight. These tickets are retained as part of Privica's quality assurance records. The placement location of every 5th delivery (on average) is recorded.

Privica Ltd

York, YO42, UK / Dubai, UAE

Tel: (+44) 870 1128835 / Fax: (+44) 870 1128836

Email: pavements@privica.com

Web: www.privica.com

Confalt is the
registered
Trademark of
Contec - ApS.



Dense Bitumen Macadam (929)/ HDM50

Dense Bitumen macadam consists of crushed aggregates coated with a mixture of bitumen and filler. It is produced in a hot mix asphalt plant registered to BS EN ISO 9001 'Sector Scheme for the Production of Asphalt Mixes'.

Laid by machine as the base layer to Privica Pavements B. It may be specified as Heavy Duty Macadam (HDM50) The material complies with BS 4987-1 and is referenced in the MCHW1 as Cl. 929.

Installation is in accordance with Cl. 901 MCHW1.

Normal deliveries are in 20Tonne batches. Each batch is accompanied by a delivery ticket stating as a minimum product type, time batched and actual weight. These tickets are retained as part of Privica's quality assurance records. The placement location and time of every 10th batch (on average) is recorded.

Cement Bound material

A cement bound material (CBM) is the base layer of Privica Pavements C. Its main constituents are a binder (such as cement, fly ash or a blend of 2 or more binder materials), graded aggregates (such as crushed natural stone or recycled road planning's) and water.

CBM is produced at either a concrete batching plant or at site, in a portable mixing plant; following a BS EN ISO 9001:2002 registered quality system.

The CBM is designed to achieve a 7 day cylinder compressive strength at 20°C of 6 to 8N/mm² (in accordance with BS EN 14227).

Standard Recipe (adjusted according to the locally available materials):

- 110kg Cement CEM I 42.5
- 2,200kg 0 to 32mm natural aggregates
- 55 litres Water

(The 110kg of cement can be replaced with 80kg of cement plus 60kg of fly ash / fine ground slag material).

CBM is batched in 20T loads (average). Material quality is monitored continuously by an onsite technician. The placement location and time of every 10th batch (on average) is recorded.

The CBM is placed in accordance with Cl. 814 MCHW1, in one layer (minimum 130mm design thickness) and sealed with 400g/m² bitumen emulsion directly after compaction and before the surface is dry.

Privica Ltd

York, YO42, UK / Dubai, UAE

Tel: (+44) 870 1128835 / Fax: (+44) 870 1128836

Email: pavements@privica.com

Web: www.privica.com

Confalt is the
registered
Trademark of
Contec - ApS.



Recycled Bitumen Bound Material

The base layer to Privica Pavements F, sometimes known as Foamix or Foambase.

It comprises recycled coarse aggregate, new fine aggregates, a foamed bituminous binder and cement.

Designed, manufactured (at a fixed or mobile batching plant) and installed in compliance with TRL Report TRL611 (2004) and the manufacturers Quality Plan to deliver a placed material with the strength characteristics equal to or greater than a Heavy Duty Macadam (HDM50 - Cl. 929 MCHW1).

Batched in 20T loads (average). Material quality is monitored continuously by an onsite technician. The placement location and time of every 10th batch (on average) is recorded.

Bituminous Emulsion

Bituminous Emulsions are applied to the surface of the Privica Pavements base layer to either aide curing (CBM) or to seal (to prevent leakage of Privica Pavements mortar into the lower layers).

They are compliant with BS 594-2 and installed in accordance with CI 920 MCHW1.

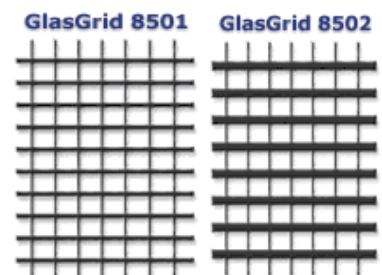
Reinforcement

A component of Privica Pavements RX.

The material is Saint-Gobain GlasGrid 8501 (complete repair) or 8502 (detailed repair) high modulus fibreglass (or its equivalent). It provides the stiffness required to redirect crack energy horizontally, minimizing the risk of reflective cracking at the surface.

The material is manufactured at an ISO 9002-1994 registered facility and specified / installed in accordance with Saint-Gobain' GlasGrid Technical Manual (or at and in accordance with an equivalent manufacturers facility and technical guide).

Each delivery of Reinforcement is accompanied by a delivery ticket stating as a minimum the component type. Each roll of reinforcement is marked with the component type and batch reference. The placement location, batch reference and time of every 10th roll of reinforcement (on average) is recorded.



Privica Ltd

York, YO42, UK / Dubai, UAE

Tel: (+44) 870 1128835 / Fax: (+44) 870 1128836

Email: pavements@privica.com

Web: www.privica.com

Confalt is the
registered
Trademark of
Contec - ApS.

