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TECHNICAL DATA SHEET

# **ECO FINE BEDDING CONCRETE** PERMEABLE (FBC)

**TYPE 35 BEDDING MORTAR TO TABLE 9, BS 7533 PART 101** 

**ECO - REDUCED CARBON** 

1.2 TONNE BULK BAGS

**PERMEABLE** 

Larsen Streetscape Eco FBC Permeable is a fine bedding concrete specifically designed to meet or exceed the requirements of BS 7533 part 101. Manufactured from a controlled blend of aggregate, cement & GGBS it only requires the addition of water to produce a fully BS 7533 part 101 (code of practice for the structural design of pavements using modular paving units) compliant bedding mortar for the laying course.











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# PRODUCT INFORMATION

FORM	Granular
STANDARD COLOUR	Grey
HAZARD INFORMATION	Contains cement. Consult Safety Datasheet before use
MAX AGGREGATE	6 mm
CLEANING	Clean tools, equipment, etc. using warm water. Mechanical means are necessary when the product has set
PACKAGING	1.2MT Big Bag
STORAGE INSTRUCTIONS	Store unopened containers in a dark, cool, dry location away from extremes of temperature
SHELF LIFE	Must be used within 6 months of date of manufacture

# **APPLICATION INFORMATION**

WATER DEMAND	10%
APPLICATION TEMPERATURE	+3°C to +30°C
WORKING TIME	Approx. 60 minutes
BED THICKNESS	30 - 75 mm per pass
TIME TO TRAFFIC	Light Foot Traffic - after 12 hours Vehicle Traffic - after 1-2 days (depending on site conditions)
YIELD	624L (approximately) per 1.2MT

### TYPICAL PERFORMANCE INFORMATION

(Independent third party test results are pending. Results listed below are from internal reports)

BOND STRENGTH	> 2.0 MPa (with priming slurry)
DRY HARDENED DENSITY	2100 - 2200 kg/m3
SHRINKAGE	0.02 - 0.04%
COMPRESSIVE STRENGTH	≥ 35 MPa
FLEXURAL STRENGTH	≥ 7.8 MPa
MODULUS OF ELASTICITY	19,400 MPa
PERMEABILITY	≥5 x 10- <sup>5</sup>

# **DIRECTIONS FOR USE**

### **PREPARATION**

The base should meet the requirements of BS 7533 part 101 dependent on the type and level of traffic. All substrates must be suitable to receive the bedding mortar as per current good working practices. All substrates for bound construction should be clean, thoroughly sound and free from oils, grease, dust, loose particles or any other contaminants which may interfere with adhesion. They should be pre-soaked but free from standing water.

#### **BONDING MORTAR**

Larsen Streetscape PS ECO (bonding mortar). Bonding mortar is necessary in bound system B as per BS 7533 part 101. When measured in combination with the bedding mortar, Larsen Streetscape PS ECO bonding mortar should be applied to the base and underside of the paving element in order to provide an adhesion bond strength of ≥2.0 MPa; this is from the base to the bedding mortar and paving element to bedding mortar.

#### MIXING

Add water at a ratio of 10% of the weight of powder to achieve the desired workability i.e. being able to form a ball of FBC with your hands. To achieve a dry mortar mix, use a ratio of 7.2% - 8%. For a stiff screed, it is recommended to use a ratio of up to 10%. Mix with a suitable mechanical mixer for a minimum of 3 minutes. Streetscape FBC Eco Permeable is designed to be used semi dry / moist consistency at the above water ratios. Should extra water be added to gain a more pliable workability, the hardened properties of the mix will be reduced. If too little water is used, the bedding will be too dry to bind together, achieve correct compaction or hydrate the binder element. Workability should be checked regularly using the "snowball" test (the FBC 'snowball' should retain its shape when thrown in the air and caught). Do not remix or wet up FBC which has gone off.

### **APPLICATION**

Bedding depths of between 30 mm and 75 mm can be placed in a single layer. Greater depths can be achieved by placing successive layers with each layer being sufficiently compacted prior to laying another pass. When applying another layer to a layer which has set, it should first be primed with Larsen Streetscape PS ECO bonding mortar. Freshly laid areas should be protected from foot traffic for a minimum of 12 hours, vehicular traffic for a minimum of 24 hours, both dependent on temperature and site conditions.

## **RESTRICTIONS**

In adverse weather conditions, paving should not be laid or jointed if the temperature is below 3°C on a falling thermometer or 1°C on a rising thermometer. The surface of the substrate should not be frozen before bedding and fresh bedding protected from inclement weather or freezing until sufficient strength is achieved for damage not to occur. All work should be carried out following guidance in BS 7533.

#### QUALITY

Larsen Streetscape FBC ECO is manufactured in a plant controlled under an integrated management system third party certified to BS EN ISO 9001 & BS EN ISO 14001. All orders are sold subject to our current terms of sale and delivery. The information and recommendations provided are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied in accordance with current best practice, national standards and our recommendations.

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