

MatCrete

MATCRETE & FLEXBOND USED WITH CEMLAM AND CEMFORCE FOR REPAIRING OR CONSTRUCTING WATER-CONTAINING STRUCTURES

Description

MatCrete : An enhanced fibre-cement blend to be mixed with a solution of Flexbond (a liquid additive), for the saturation and impregnation of CemForce and CemLam forming a reinforced, vapour-proof product of about 4 to 8 mm in thickness.

CemForce : An open-textured reinforcing 4mm x 4mm mesh fabric, made of polypropylene strands and fibres. Designed for use with cement matrices. Is totally inert to the alkalinity of cement and has an extended fibrous interface area with which the cement matrix can interact and mechanically bond.

CemLam : A tightly woven polypropylene tape with a 4mm x 4mm mesh fabric made of polypropylene strands and fibres, laminated by hot extrusion to form a tough, waterproof substrate. It is totally resistant to the alkalinity of cement and offers extended fibrous interface on the strands with which the cement matrix can mechanically bond. The cement matrix is specially formulated to form part of the CemLam to act like fibreglass and resin.

Purpose

For creating a thin, reinforced, waterproof cement lining to be applied directly onto hard compacted soil, the inner surface of old, cracked reservoirs etc.. For the cost-effective creation of any water-containing structure.

Type

MatCrete - Ready to use by the addition of Flexbond solution only.

CemForce - woven polypropylene fibre

CemLam - woven polypropylene fibre extrusion laminate.

Application

The creation of fish ponds, water channels, dams, relining of pipes, repair of old cracked reservoirs etc.

Advantages

Thin cement linings can now be formed in-situ with the help of the reinforcing of as many layers of CemForce as is necessary for any given strength required.

Not only waterproof, but vapour-proof as well.

Limitations

Will not stick to plastic, rubber or gypsum plaster. Do not use if freezing conditions are expected within 24 hours.

Site Work

Storage

MatCrete : Keep bags off the floor on slats in a dry

place. Expected shelf life under dry conditions is 6 months. Flexbond : Store in a dry shed protected from freezing for 12 months. Stir well from the bottom if storage is prolonged. CemForce and CemLam : prolonged storage in sunlight to be avoided.

Weather

Protect work from rain for 12 hours and frost for 24 hours.

Surface Preparation

Ground over which material is to be used should be well compacted and in most cases a 100mm layer to be a soil/cement mixture of about 1 volume cement, 9 volumes soil, well compacted and damped with water.

Mixing

Dilute one volume Flexbond with five volumes clean water and use this solution to mix MatCrete to sloppy plaster consistency.

Application

Lay out first layer of CemLam, plastic down, over compacted soil. Apply a liberal coat of MatCrete/Flexbond mixture over woven side, work CemForce into wet MatCrete and plaster/paint over this second layer making sure that the CemForce is fully covered. A second layer of CemForce should be applied at the joints of the CemLam to ensure that you have at least two layers at any one point. If extra strength is required, more layers of CemForce can be applied in the same manner.

Curing

Allow finished work to air cure for two days before filling with water. Dry applications, damp down three times the day following the day of application with clean water and cover with plastic for a further 2 days.

Coverage

Flexbond : approx. 2 litres per 40kg bag of MatCrete.
MatCrete : approx. 6m² per 40kg bag depending on thickness of final work.

CemForce : allow 10% for overlaps and joints.

CemLam : need not allow for joints, but allow narrow 200mm strips of CemForce for the joints.

Packaging

Flexbond : 1 litre, 5 litre and 20 litre plastic drums.

MatCrete : 40kg bags.

CemForce : 1m width; any length

CemLam : 1,6m widths any length

Technical Information

Cemcrete provides a free comprehensive technical service based on over 3 decades of experience in the field of surface applications and cement technology.

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