

FIBRECLENE

Seamless Wall System

PRODUCT DESCRIPTION

Fibreclene Seamless Wall System is composed of a gun-deposited or hand-applied layer of glass fibre and resin. This laminate provides a joint free hygienic surface.

Fibreclene has been used in a wide variety of applications, some of which are freezing works, small goods manufacturers, alumina plants, dairies and cheese makers, pet food manufacturers, industrial kitchens, pharmaceutical manufacturers and bakeries.

Fibreclene is often coupled with its sister product Sureshield monolithic floor topping to provide a total system within areas requiring a high degree of hygienic or chemical resistance.

BENEFITS

Hygienic

Because Fibreclene is impermeable, non-porous and has a good working surface finish, it is totally hygienic. It is readily washed and cleaned. There are no interstices which will support bacteria or fungal growth. It does not crack or craze and therefore prevents possible locations for bacteria or fungus build-up.

Hard-wearing

Fibreclene is hard-wearing and will provide long working life.

Ease of Repair

Damaged areas are cut out and quickly repaired with minimal disruption to factory production.

Waterproof

Fibreclene Seamless Wall Systems are water and weatherproof.

Quickly in Service

Few industries can afford to be disrupted for more than a few hours. Fibreclene can be in service within 24 hours unlike epoxy resin systems.

Ease of Cleaning

Fibreclene Seamless Wall Systems are easily kept clean by hosing down or mopping with water and detergent.

Service Temperature

Fibreclene Seamless Wall Systems are suitable for a wide range of service temperatures.

Chemical Resistance

The chemical resistance of glass reinforced polyester is well documented. Fibreclene has excellent resistance to many common chemicals including acidic cleaning agents and food acids.

SPECIFICATION

General

To ensure competitive pricing, it is recommended that Fibreclene Seamless Wall Systems be specified by nominating the required glass weight as follows:

- i) One layer 450g chopped strand mat; and
- ii) One layer of 0.3mm fibreglass tissue.

Substrates

Fibreclene Seamless Wall Systems may be applied to a variety of substrates including sound wood, plaster, concrete blocks and concrete.

The substrate to which Fibreclene is to be applied must be free of moisture and dampness of any kind. No work is to be undertaken until the area is properly enclosed and weatherproof.

The substrate must be clean, sound and dust-free. Paint must be removed to obtain a good key.

Limitations

Fibreclene cannot be applied to a surface having a bitumen based coating.

TYPICAL PHYSICAL PROPERTIES

Physical properties vary according to the weight of the system selected. The following relates to a system based on 600 grams of chopped strand mat per square metre plus final tissue:

Permeability:	Fibreclene is impermeable to water vapour
Water Absorption:	0.4% by weight
Tensile Strength:	60.7 MPa
Flexural Strength:	135.1 MPa
Impact Resistance:	Failure 325mm
Abrasion Resistance:	3.47gm over 1000 cycles
Thermal Shock:	119.3 MPa

Note: Tests carried out by Government Registered "Telarc" Lab.

APPLICATION

The substrate should be reasonably flat, remembering that Fibreclene will reflect the surface over which it is applied. Concrete blockwork should be pointed flush. If using cement plaster any holes or indentations must be filled 21 days prior to the commencement of applying Fibreclene,

Any brackets, clips or projections, should be removed prior to application.

New concrete, or concrete block pointing, must be allowed 21 days to cure. If rapid-hardening cement is used, allow 14 days for curing. Surface curing agents should not be used. Asbestos cement, cement plaster, wood or blockwork should be lightly sanded prior to application.

On old concrete, cement plaster etc, chip off any loose or flaking material, dig out coarse, but not structural cracks. Any exposed steel must be clean and free from rust.

The glass weight recommended on concrete block or concrete is 450 grams chopped strand mat per square metre, plus final tissue. Where extra rigidity is required, on timber framed walls or areas under intensive usage, the weight of the material is normally much heavier. This selection should be made in conjunction with Nuplex Sureshield or their approved applicators.

Site Requirements

Dry air is made available by the prime contractor, on-site and must be free of any oil contamination. The prime contractor must make available an adequate supply of fresh water.

Power is to be made available by the prime contractor on-site, for extractor fans etc.

Any welding to be done should be carried before Fibreclene is applied, otherwise welding sparks can mark the Fibreclene. The applicator shall provide fire extinguishers.

Test Criteria:

In normal application, Fibreclene is applied to a variety of wall surfaces ranging from Gibraltar Board to reinforced concrete walls.

The samples tested were obtained by applying a release agent to a substrate and the Fibreclene layer only was submitted.

In all applications therefore, the results obtained in situ will be much better, although the degree of improvement would depend upon wall composition:

e.g. Gib Board versus concrete.

SITUCLAD E SYSTEM

Full gloss, fibreglass reinforced, epoxy wall cladding system

PROPERTIES/FEATURES

- Situclad E is a glass reinforced epoxy wall cladding system applied in situ to provide a jointless, impact resistant, hygienic surface.
- Excellent chemical resistant.
- Good impact and abrasion resistance.
- May be applied to damp surfaces.
- Low odour. Will not contaminate foodstuffs during application.
- Non-toxic.
- Non-flammable.
- Will not peel or flake.
- Easily repaired and maintained.
- Complies with Department of Health and MAF requirements.
- Finish: full gloss.
- Laminate thickness: 1.00mm (0.040") approx.
- Hardness DIN-SHORE: 65
 PENCIL: 6H
- Minimum application temperature: +10°C.
- Colour: White. May be pigmented pastel colours to order.
- Fibreglass reinforcing weight: 225 gms/m² E Matt.
- Surfacing tissue: 25 micron (.010").

SUGGESTED USES:

- Food storage and processing plants.
- Pharmaceutical filling and processing areas.
- Freezing works, abattoirs and slaughter houses.
- Dairy factories.
- Chemical processing plants.
- All hygiene areas.

NOT RECOMMENDED:

- Over existing coatings.
- Continuous immersion in strong acids, alkalies or aggressive solvents.

Chemical Resistance

Water resistance 25°C:	Excellent
Water resistance 100°C:	Good
10% Hydrochloric Acid:	Good
10% Acetic Acid:	Good
10% Sulphuric Acid:	Good
10% Caustic Soda:	Excellent
Xylene:	Excellent
MEK:	Fair

Application Methods

- Laminate: Hand lay-up using “parsley cutter” rollers.
- Coatings: Roller, brush, conventional or airless spray.

Coverage Rate m² – Situclad E laminating

Aquaguard 101 total:	Approx. 1.33 l/m ²
Aquaguard 801 total:	Approx. 0.64 l/m ²
Chopped Strand Matt:	Approx. 225gms/m ² E Matt
3500E Surfacing Tissue:	1 m ²

Film Build

Total dry laminate build – 1mm (0.040”) approximately.

Thinning

- Aquaguard 801 may be thinned up to 10% with clean potable water.
- Do not thin Situclad E laminating resin (Aquaguard 101).

Dry Times

- Situclad E laminate (Aquaguard 101).
Touch Dry: 6 hours
Recoat After: 48 hours
- Situclad E topcoat (Aquaguard 801).
Touch Dry: 4 hours
Recoat After: 12 hours
FULL CURE: 7 days

Cleaning Up

Warm water and detergent.

Caution

- Relative humidity must not exceed 85% during application or subsequent cure. Do not allow condensation to form on the film during curing.
- Wear protective clothing during use.
- Prolonged contact may cause mild skin sensitisation in some individuals. Use suitable respirator when spraying.
- Provide adequate ventilation in confined areas.
- Refer to Nuplex MSDS sheets.

Shelf Life

- 12 months in unopened cans. Store above 1 °C.

Packaging

Situclad E laminating resin (Aquaguard 101).

Part A and B: 10 litre polypails (20L kit).

Situclad E topcoat (Aquaguard 801).

Part A: 8 litre polypails

Part B: 2 litre polypails

Flash Point None.

Dangerous Goods Class Not applicable.