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## SITUFORM LINER SYSTEM

### WALL CLADDING & LINER SYSTEM

**DESCRIPTION:**

Situform liner is an epoxy Wall cladding and Lining system. It is fiberglass reinforced and fully bonded to the substrate. Its base (AquaKem, prev. Aquaguard 101) ensures easy application in most situations. Aquakem also has very high specific adhesion to concrete.

**Components:**

AquaKem Basecoat plus fiberglass cloth; overcoated with Terratuff epoxy coating

**Suggested Uses:**

For creating a smooth, hygienic finish over masonry, concrete, precast, Plywood and tilt slab to provide an easy-clean, hygienic finish.  
Food storage, pharmaceutical, processing plants, dairy companies, chemical processing, hygiene areas.  
Reinforced, exposed floor finishes.  
Tanks and bund Liners.  
Waterproofing in selected areas.

**Not Recommended:**

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

**PROPERTIES / FEATURES:**

- SITUFORM is a glass reinforced epoxy system applied in situ to provide a jointless, impact resistant, hygienic surface.  
\*\* Laminates are inherently more durable than plain, unreinforced coatings. The laminate ensures a consistent film thickness and the laminate resists cracking.
- **Seamless, smooth, attractive finish. Non porous.**
- Good chemical resistance.
- Good impact and abrasion resistance.
- Tolerant of damp surfaces.
- Low odour.
- Will not peel or flake.
- Easily repaired and maintained.
- Complies with Food Industry and cleanroom requirements.
- Finish –medium gloss

**PROPERTIES/ FEATURES:**

(cont'd)

- Laminate thickness – 1.00mm approx.
- Hardness               DIN-SHORE       65  
                                  PENCIL               6H
- Minimum application temperature - +10°C.
- Colour – Grey N35, or White. Or may be pigmented pastel colours.

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**CHEMICAL RESISTANCE:**

Good resistance is shown to all these chemicals.

NB: It should be noted that this system is for temporary exposure to these chemicals; not for long term storage.

Water resistance 25°C

Water resistance 100°C (short term with immediate cooling)

10% Hydrochloric Acid

10% Acetic Acid

10% Sulphuric Acid

10% Caustic Soda

Diesel

Petrol

Xylene

MEK (very short term; before removal or evaporation.)

**FILM BUILD:**

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

**THINNING:**

- Do not thin laminating resin (Aquakem).
- Do not thin Terratuff

**SURFACE PREPARATION:**

**Concrete**

Allow full 28 days cure time after the concrete pour. Acid etch or grind to prepare the concrete prior to priming. Fill blow holes with Superset or Epoxy Fairing Cream.

**Priming**

Prime all substrates as prepared with Aquakem. This should be applied as one coat at approximately 5m<sup>2</sup>/mixed litre. Mix and apply Aquakem as per data sheets and specification. Allow the Aquakem to cure 24hours prior to proceeding. Sand and reprime if topcoating is delayed more than 3 days. Take care to apply Aquakem into joint areas with a brush. Take care to treat the surface and prime all vertical wall areas i.e. coves.

**Application Conditions**

Products such as this require **good drying conditions throughout the process** to allow water to evaporate from the coating. Do not apply in temperatures less than 10°C or when wet weather is likely. **Good air movement** is the best method of drying waterbased products.

**Joints**

Plywood and concrete joint gaps should be filled with a polyurethane mastic applied with a broad knife.

All joints should then be taped prior to the full membrane application. It is recommended to use Nuplex joint safe Tape on all cracks and internal corners, particularly in critical situations. This is a highly flexible tape.

Most joints will then require a 150mm wide strip of glass CSM. Use slip joint lap prior to glass strips (the JointSafe tape fulfils this function)..

Wider strips will be needed to form coves. Coves should be laid over cove formers eg: timber, PVC.

Allow to fully dry (test), prior to the full membrane installation.

## SITUCLAD E SYSTEM (cont'd)

### PRIMARY PHASE INSTALLATION:

Following priming and joint preparation roll a full coat of Aquakem body coat over the whole surface at 3m<sup>2</sup>/Lt. Include roll-downs into drains and cover ups behind flashings. Lay the 300gsm mesh into the body coat. Allow 75mm overlaps. This is a critical step and take care this 75mm overlap is achieved. Apply a further body coat of Aquakem, at 5m<sup>2</sup>/Lt, wet on wet. Roll the entire surface with a fiberglass laminating roller. (Apply a water mist to help "wet out" the laminate during this process.) This will bring up the body coat through the mesh. It is important that the pressure of the roller brings material up, rather than trying to force it down. This process ensures the underside of the CSM is "wetted" by the Aquakem. The sufficient quantity is indicated by surplus spots being forced up by the action of the roller. Keep water misting to ensure 100% wetting.

### Note:

The above process description is critical. Long term success is critical on the successful and detailed completion of the laminating step.

### SECONDARY PHASE INSTALLATION:

Apply a subsequent coat of Aquakem at 7m<sup>2</sup>/Lt  
OPTIONAL: incorporate a surfacing tissue for a smoother, finer.  
**The Aquakem must be fully cured, 48hrs, prior to the topcoat.**

### TOPCOAT

Once cured, apply two finishing coats of Terratuff N35 light Grey at 8m<sup>2</sup>/Lt / coat; (or white or colour as required).

Allow to fully cure for a minimum of 48 hrs.

### SUMMARY:

Description:

Components:

#### **Epoxy wall cladding / Lining system**

- Aquakem as a primer, 5m<sup>2</sup>/Lt
- Joint safe tape and/or fibreglass reinforcing
- Aquakem @ 3m<sup>2</sup>/Lt
- Chopped strand matt 300gsm
- Aquakem @ 5m<sup>2</sup>/Lt
- OPTIONAL: Aquakem @7m<sup>2</sup>/Lt with reinforcing tissue
- Topcoat: Terratuff 2 coats @ 8m<sup>2</sup>/Lt / coat