November 2018

APPLICATION GUIDE

EASYGUM LIQUID APPLICATION GUIDE

Contents

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1. INTRODUCTION

LIQUID MEMBRANE SYSTEM APPLICATION GUIDE

These application notes are intended as a guide to a successful installation of Easygum liquid reinforced membrane system.

The first process / system is of a single layer fibreglass reinforced membrane normally used on roofs or deck areas.

The second process / system is of a single layer fibreglass reinforced membrane normally used on below ground tanking.

The upper surface of the Easygum membrane is suitable for light traffic.

Normal in-service cleaning can be carried out by mopping or low pressure washing to maintain a clean and beautiful surface.

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TECHNICAL INFORMATION

The information contained in this information is based on our experience and testing, and represents the latest information available at the date of production. No responsibility is taken for uses to which this information may be put, but we advise that where application of products and processes is in complete conformity with this specification, an appropriate warranty may be available. We reserve the right to update information parameters and formulations at any time without prior notice.

3.NOVAPOXY 'W.B.' TWO PACK WATER BASED EPOXY COATING J07

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PRODUCT DESCRIPTION

Novapoxy W.B. is a two-pack water based epoxy sealer designed for use on uncoated concrete block asbestos cement and cement plaster walls and floors. All plywood and other wooden surfaces (uncoated). It is alse used as a damp proof barrier undercoat for other coating finishes.

PRODUCT FEATURES

* M.A.F approved
* Can be applied over damp, clean substrates
* Zero VOC emissions
* Penetrates and locks onto concrete
* Stops damp and hydrostatic pressure
* Overcoated with two pack urethane
* Water based
* Ease of clean and use

Colour	White and Grey
Appearance When Dry	60 % gloss at 60 deg, tri gloss meter
Storage Temperature (deg.C)	Minimum 10^{o} Maximum 50^{o}
Shelf Life (months)	18
Pack Size	2 litre, 4 litre,8 litre and 20 litre

PHYSICAL PROPERTIES

Percentage by Weight of Solids	48%
Volume Solids	40 %
Film Thickness	Under most circumstances three coats at 8sqm/ litre

NOTE: When being over coated with two-pack urethane or similar, minimum two coats required.

APPLICATION

Surface Preparation

New Concrete Acid etch to remove cement latents, remove etch with copious quantities of water. Water or wet sand blast if necessary. Ensure all dirt and loose material is removed so that the **Novapoxy W.B.** can be applied to a clean rocky base.

Fat, Oil & Grease Contaminated Walls & Floors Scrub the surface with **JAYDEX** Chemical Degreaser twice, using high-pressure water blasting between applications. Thoroughly rinse off before applying **Novapoxy W.B.**

Existing Coatings **Note:** The effective adhesion of Novapoxy W.B is limited by the presence of previous coatings. To obtain maximum adhesion direct to the substrate remove all existing coatings. If applying over Existing coatings ensure the film is sound, degreased and sanded back to a matt finish with coarse paper. When over coating existing coatings, ensure no hydrostatic pressure is present in the substrate. Failure to identify this can lead to complete failure of the coating system.

New Fibrolite, Concrete Blocks. Remove all dirt, dust, loose mortar etc, ensure the surface is clean and free of contaminants.

Damp Protection When damp or seepage exists in concrete floors or walls, **Novapoxy W.B**. can be used as a seAler, provided it is applied directly to the substrate i.e. remove any existing coating prior to the application of two to three coats.

Mixing	Mixing ratio: Base A 1:1 Pack B by volume. Always measure the volume of each material accurately. **Note:** Accurate mixing of base and hardener ensures consistency of colour.
Pot Life	Mix Pack A (Base) 1:1 Pack B (Hardener) by volume. Allow to stand for five minutes before using. Only mix enough material for 1.5 hours use. (1.5 hours is the mixed pot life of the material).
Spreading Rate	Primer 8-12 sqm / litre Bodycoat 5-7 sqm / litre Topcoat 7-10 sqm / litre

APPLICATION DETAILS

Minimum Temperatures	10 deg.C
Maximum Relative Humidity	70%
Application Temperature Range	10 deg.C - 35 deg.C
Methods	Brush and/or Roller

NOTE: Under most circumstances this product is applied best by brush or roller. Always allow the mixed product to stand for five minutes before using.

Thinners	Water
Cleaning Solvent	Hot Soapy Water
Max. Volume Thinners	Do not Thin
Nozzle Orifice	N/A
Fan Angle	N/A
Nozzle Pressure	N/A

DRYING CHARACTERISTICS

Temperature (deg.C)	20 ^{o}C
Touch Dry	4 – 6 hours
Handle Cure	8 hours
Full Cure	24 hours

Over-coating	Allow overnight drying between coats or a minimum of 4 – 6 hours at 20 deg.C. The Novapoxy can be overcoated with two pack urethane or epoxy finishes providing the coating has been allowed to cure for a minimum of 8 – 12 hours. When overcoating aged material lightly sand surface and thoroughly degrease.
Health & Safety	Waterbased. Non flammable. Non hazardous. Wash off with clean water when in contact with skin as the product may cause dermatitis. Take normal precautions for handling epoxy resins i.e. avoid contact with skin.

This information is intended to give a fair description of the product and its capabilities under specific test conditions. It does not constitute an offer by the manufactures nor do they warrant or guarantee its accuracy of completeness in describing the performance of suitability of the product.

For further technical information please Phone 09 444 1751 Facsimile 09 444 0132
E-mail: sales@jaydex.co.nz

ISSUE NUMBER: Novapoxy W.B. J07
ISSUE DATE: February 2008

November 2018

EASYGUM LIQUID APPLIED RUBBERISED BITUMEN DAMP PROOFING MEMBRANE **J58**

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PRODUCT DESCRIPTION	A liquid rubberised emulsion high build membrane applied wet in conjunction with chopped strand mat fibreglass to form a flexible, tough and waterproof membrane system for concrete, plywood or fibre-cement walls, decks and roofs.
PRODUCT FEATURES	Waterbased bituminous emulsion Excellent exterior durability Flexible – will tolerate building movement.
Colour	Black Only
Storage Temperature (deg.C)	Minimum 10 ^{0}C Maximum 50 ^{0}C
Shelf Life (months)	12-18
Pack Sizes Litre	1 litre, 4 litre, 20 litre
PHYSICAL PROPERTIES	
Volume Solids	65 %
Normal Cured Film Thickness	0.9 – 1.1mm
Flashpoint	None. Waterborne system
Flexibility	Pass 3 mm mandrel
Theoretical Coverage	Easygum coats should be applied at 1 sqm / litre and allowed at least overnight to dry. Recoating times will largely depend on prevailing temperatures and humidity.
APPLICATION	
Surface Preparation	<u>Plywood Decks</u> Plywood should be a minimum 17.5mm CpD treated construction ply. Sheets must be loosed butted, glued, screwed or screwed and nailed in a staggered pattern. <u>Concrete and Compressed Fibre Cement Sheet</u> Clean down by medium pressure water blasting after suitable anti mould treatment.
General	All cracks and joints shall be given a coat of Easygum and overlaid with a strip of 300 gsm chopped strand mat into the wet liquid.
Priming	<u>Concrete and concrete blocks</u>

Use Easygum diluted with 10% clean fresh water.

Mixing	Stir thoroughly with a broad paddle to ensure product is fully incorporated.

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APPLICATION DETAILS

Methods	Except for narrow gaps and inaccessible areas all Easygum build coats shall be roller applied using a long nap roller. The order of application is: Easygum body coat with fibreglass mat laid into it while wet for detailing. Easygum second build coat at 4-5 sqm / litre Easygum top coat 4-5 sqm/litre

HEALTH & SAFETY	Water based. Non-hazardous. Non- flammable.

This information is intended to give a fair description of the product and its capabilities under specific test conditions. It does not constitute an offer by the manufacturers nor do they warranty or guarantee its accuracy of completeness in describing the performance or suitability of the product.

For further technical information	Phone: 09 444 1751 Fax: 09 444 0132 Email: sales@jaydex.co.nz
ISSUE NUMBER	EASYGUM J58
ISSUE DATE	MARCH 2001

Technical Data Sheet

JAYDEX INTERNATIONAL · LIMITED

ENVIROFLECT

Description

Jaydex Enviroflect is a water based aluminium coating especially formulated for application to surfaces coated with Jaydex Easygum™ Liquid Applied Bitumen Waterproofing Membrane. By providing a metallic silver finish it keeps the surface cool and provides additional UV protection to Jaydex Easygum™ Liquid Applied Bitumen Waterproofing Membrane.

Product Features

- Excellent adhesion to Jaydex Easygum™
- Suitable for drinking water collection
- Reflects incident sunlight keeping the surface cool
- Outstanding protection from destructive UV
- Water based application
- Quick drying
- Cures down to 5°C
- Made in New Zealand for New Zealand conditions.

Substrate Preparation Instructions

Leave Jaydex Easygum™ Liquid Applied Bitumen Waterproofing Membrane a minimum of seven days to cure before applying Jaydex Enviroflect.

Apply two coats of Jaydex Enviroflect direct to Jaydex Easygum™ Liquid Applied Bitumen Waterproofing Membrane, allowing a minimum of four hours between coats.

Recommended Application Methods and Techniques

Mix the contents in the can thoroughly before and during use. Apply in full, even coats. Thin, if required, for ease of application in hot or windy conditions, with up to 5% water.

Minimum Surface Temperature:	5°C
Maximum Relative Humidity:	75%
Temperature Range:	5°C – 35°C
Suitable Application Methods:	Brush, Roller, Airless Spray
Thinners:	Water
Cleaning Solvent:	Water
Max. Volume Thinners:	5%
Nozzle Orifice:	11–15 Thou
Fan Angle:	30°–50°
Nozzle Pressure:	1800 – 2500psi
Coverage rate	8–10 m^2/L

DRINKING WATER COLLECTION

The first 25mm of rainfall (equivalent to two heavy showers) from a roof freshly painted with Jaydex Enviroflect must be discarded before drinking water collection starts.

This is to ensure that water soluble extractives present in small quantities in the paint have leached out.

Note that all water collected off roof surfaces made from any material is considered to be non-potable due to possible contamination from other sources, e.g. bird droppings. Water collected of a roof can only be considered potable if it has been passed through a suitable sterilization system.

Drying Characteristics

All figures quoted are at 20°C and 65% relative humidity.

Drying will take longer at lower temperatures and/or at higher relative humidity.

Do not paint when temperature of surface is below 5°C, above 35°C or when humidity is very high. Do not apply when rain or dew is expected within four hours.

Touch Dry:	1 hour
Recoat:	4 hours
Full Cure:	7 days

Health & Safety

Water based, non-flammable, non-hazardous.

Wash off with clean water when in contact with skin as the product may cause dermatitis. Take normal precautions for handling paint i.e. do not ingest, avoid contact with skin and protect eyes from splashes.

Refer MSDS, available on request, for detailed safety instructions.

ENVIROFLECT

TECHNICAL DATA

Gloss Level	65% minimum at 60^{O}
Primer	None required
Wash Up	Water
Colours	Aluminium
Pack Size	4L, 10L
Storage Temperature	5^{O}C – 50^{O}C
Shelf Life	Minimum 2 years
Toxicity	Non hazardous waterborne paint formulated without added lead or mercury
VOC content	30g/L
Volume Solids	33.7%
Wet Film Thickness	65-100µ per coat
Dry Film Thickness	22-33µ per coat
Coverage	8-10sqm depending on surface texture, porosity and method of application

Note

The information concerning the use and application of this product is intended for use by professional specifiers and applicators, is given in good faith and is believed to be correct at the date of issue. Jaydex International Ltd reserves the right to alter the product or specification without notice. The user should check the date of issue, and if more than 24 months have elapsed, should verify with our nearest sales office that the information is still current. Because we cannot control the way these products may be used, or the conditions they may be exposed to, we can give no express guarantees in respect of the performance of this product. However certain guarantees may be implied by law.

4. TOOLS FOR INSTALLATION

Roller Sleeves
Brushes
Roller Handle
Extension Pole
Roller Tray
Gloves
Tape
Masking Paper
Masking Machine
Chalk line / chalk
Pencils
Snap blade knife
Hammer
Brooms
Rags

5. SAFETY EQUIPMENT

Safety helmet
Safety shoes
Safety jacket
Safety goggles
Ladders

6. CHOOSING THE RIGHT MATERIALS AND DETERMINING THE WATERPROOFING PACKAGE

Every example of a water proofing application is based around a 'system' or sequence of layers, the simplest of which consists of the substrate (supporting element) and the impermeable sheet (waterproofing element). The 'system' always depends on the type of structure to be waterproofed and its specific requirements.

In every case a system design must always take into account all the parameters which more of less directly affect the final result.

In particular the following must be considered:

- The type, material and function of the supporting element.
- The possible use of a thermal insulation element, taking note of its characteristics and behaviour.
- The climate and/or environmental conditions.
- The degree of slope
- The wind
- The geographic location, altitude, limits of rainfall and temperature range.
- The accessibility and trafficability of the site.

During the design stage, other parameters affecting the performance of the system should not be neglected. These are:

- The aesthetic
- The durability of the materials used.
- The ease of maintenance
- The comfort under the acoustic and hygrothermic profiles
- The reaction to fire
- The performance during possible ground movements (vibrations, etc)

When these parameters have been established, the ideal materials can be chosen and the complete waterproofing package put together.

The people involved in drawing up the project as a whole are:

- The owner
- The designer or architect
- The builder
- The material manufacturer and supplier
- The applicator

All these people must contribute each within their own field, to the necessary materials, thus ensuring compliance with all specification requirements.

7. SUBSTRATE PREPARATION ROOFING:

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DESIGNATION
Responsibility shall be designated for all substrate preparation between the main contractor and sub contractor at the time of contract formulation or contract tender, not after contract acceptance.

Unless specified in the contract documents it is the full responsibility of the main contractor to prepare the various substrates according to the following criteria. Failure to strictly meet these criteria will invalidate the required warranty arrangement issued by waterproofing sub contractor and supplier.

CONCRETE
Concrete shall be correctly formed to falls where required, and cured at least 28 days prior to membrane application (curing time is 7 days per 25mm of concrete thickness).

For **Jaydex sheet applied** (APP modified bitumen) membrane applications, the concrete surface shall be finished to NZS3114:1980U2. Wood or bull float (power driven floats are not to be used).
For Jaydex liquid applied (water based) acrylic or bitumen rubber membrane applications, concrete surface can be finished to either a NZ3114:1980 U2 or U3. Power driven floats are not to be used for this process. If cured concrete surface has a high pH it must be acid etched to bring it down to around pH7 before liquid applied acrylic membrane application commences.

All ridges and protrusions in the concrete surface shall be stoned flush. All dust and surface contaminants to be cleaned away.

Note: In –situ site concrete moisture content is the responsibility of the Building Contractor and their Plywood Supplier not the Membrane Supplier and/ or Installer

Depressions in the concrete surfaces shall be flushed with sand, cement, Jaydex Aquamix gauged patch mix and allowed to cure for at least 48 hours before preparation priming.

PLYWOOD
Plywood Grade and Thickness – Standard
Plywood shall be
1 A minimum 17mm complying with AS/NZ 2269
2 At least CD grade structural plywood, with sanded C face upwards
3 H3.1 with treatment type compatible with membrane and adhesives used and kiln dried after treatment. The compatibility of LOSP – treated plywood must be checked with membrane suppliers.

Plywood Moisture Content
Insitu Plywood sheets to be 20% maximum prior to application of membrane overlay.

Sheet Layout
All sheets shall be laid out so as to maximise the use of whole sheets. All sheet joints shall be laid over framing members, in a staggered pattern with sheet lengths running at right angles to supports. See Table 2 over page.

Sheet Spacing
Sheets shall be laid loose **butt jointed** before fixing in place. No deliberate end gaps or enforcement between plywood sheets are permitted.

Sheet Fixing
Plywood must be fixed in accordance with the Manufacturers instructions taking into account wind loading, frame spacing and ply thickness. See Table 1 over page.

All plywood must be screw fixed using countersunk corrosion resistant 10g x 50mm screws. Sheets must be laid in a bead of construction adhesive along all framing members. Fixings must be spaced a maximum of 150mm around outside edge of plywood sheeting and a maximum of 200mm for the plywood interior sheeting. All screw heads shall be recessed below the level of the sheet face, and flushed over with an appropriate wood filler. There must be a maximum of 3mm screw spacing between adjacent plywood sheets.

GENERAL PREPARATION FOR PLYWOOD OR CONCRETE

Edges
Sharp cornered horizontal/vertical roof/deck line edges to be pencil rounded.

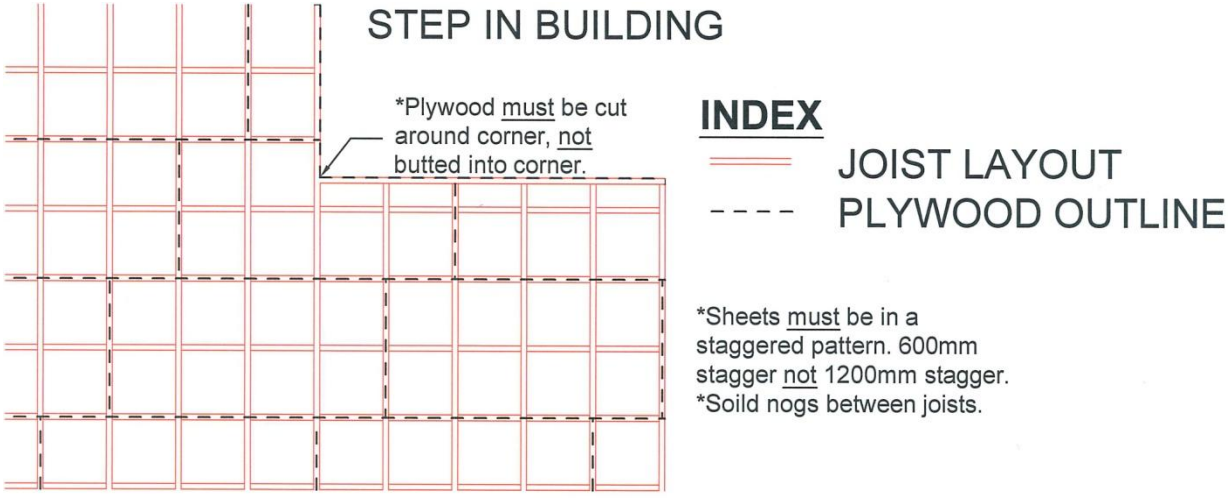
Fillets
Timber or concrete fillets 50mm x 50mm to a minimum of 20mm x 20mnm shall be tightly installed at all vertical/horizontal junctions.

Falls
Falls in roof substrate and internal gutters should have a minimum fall of 1.5º **(1:40)**. Decks must have: 1.A minimum fall of 1º (1:60)

2. A maximum area of 40sqm
3. No steps in level within deck area except into gutters
4. No internal roof gardens
5. No down pipe direct discharge to deck.

Outlet Types
Contact **Jaydex** or refer to **Jaydex** catalogue for further assistance on outlet type and suitability.
Jaydex outlets of various shapes and composition are available to drain water through parapet walls, from deck floors, roof tops & internal gutters.
The **Jaydex** outlets all reliably interface with all the **Jaydex** membrane systems.

TABLE 2: PLYWOOD SHEET LAYOUT CONFIGURATION



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7.1 SUBSTRATE PREPARATION TANKING: INTRODUCTION

The substrate onto which the membrane is laid must be designed and subsequently constructed to be dimensionly stable over its service life to support the membrane.
In some exceptional situations usually involving large areas and lift pits, movement/expansion joints must be designed in and constructed to reduce anticipated excessive structural and substrate movement.

Designation of Responsibilities
Designer

1. Substrate Material Composition
2. Substrate/Structural Support Criteria
3. Substrate Falls, Drainage Venting
4. 4. To consult with Jaydex

GENERAL PREPARATION FOR CONCRETE SUBSTRATES
Edges
All sharp cornered horizontal/vertical roof/ deck edges to be chamfered or pencil rounded.
Fillets
Timber or concrete angle fillets at a minimum (20mm x 20mm) shall be tightly installed at all vertical/horizontal junction lines**.**

CONCRETE SUBSTRATES
New Concrete Substrates
New concrete substrates are generally structural building elements in their own right. They must be designed and built to the engineer's recommendations and specifications, the NZ building code and other relevant standards.
Where a concrete surface forms the membrane substrate interface; chemical, curing agents must not be used. If used, any such curing agents must be removed by an abrasion method to ensure complete removal. Failure to do so can result in the failure of the adhesion membranes to the substrate surface.
Concrete substrates must be laid to incorporate coves to upstands and rounded corners, drainage outlets at low points and integral expansion joints.
Under normal circumstances, there should be a minimum 28 – day curing period of the concrete surface before membranes are applied over.

8. INSTALLATION OF EASYGUM REINFORCED SINGLE LAYER ROOF MEMBRANE SYSTEM

PRIMING

To a dried prepared surface apply one coat of Easygum primer by brush/roller at a spreading rate of (6) sqm/litre. Leave to dry.

GUSSETS

All external or internal corners are to have a fibreglass gusset installed using the Easygum base coat as the laminating medium.

DOUBLES

At all plywood or concrete joints, changes of direction from the vertical to the horizontal apply a 100mm to 150mm Easygum bandage to add strength at these points.

NB: Both sides of the fibreglass bandage are to be feathered to improve the total aesthetic appearance.

FIBREGLASS ENCAPSULATION

To encapsulate the fibreglass, it is important to only work an area of no more that an square metre.

Applying liberally the Easygum body coat over the pre-primed substrate. Cover the body coat with a layer of fibreglass 300 chopped strand mat.

Using No2 lambs-wool roller sleeve or similar, roll over the surface of the fibreglass, bringing the Easygum body coat through to the top surface ensuring the total area being treated is fully encapsulated. Continue the process overlapping at the edges a minimum of 80mm.

TOP COAT

Apply one coat of Easygum at a spreading rate of 4-5 sqm per litre and allow to dry.

EASYGUM TO GUTTERS

The same application procedures are used in gutters as they are on roofs and decks.

GLAZE COAT

Apply by brush and roller one (1) coat of Enviroflect or Alumicote at a spreading rate 8 sqm per litre and allow to dry.

ROOF VENTS

For ventilating enclosed cavities below rooflines.
We recommend low-profile tough light Jaydex vents be installed at a maximum of 20 sqm per vent.

OUTLET TYPES

For removal of surface water runoff.
These come in varying shapes and sizes, in brass or cast iron/aluminium composition and are available under the **Jaydex** brand name. On smaller roofs and decks many outlets are made in situ from sheet, steel, or copper, Refer to **Jaydex** for further assistance on outlet type and suitability.

9. INSTALLATION OF EASYGUM

INSTALLATION OF EASYGUM DAMP PROOFING MEMBRANE SYSTEM

PRIMING
To a dried prepared surface apply one coat of Easygum primer by brush/roller at a spreading rate of 6 sqm/litre. Leave to dry.

GUSSETS
All external or internal corners are to have fibreglass gussets installed using the Easygum base coat as the laminating medium.

DOUBLES
At all concrete joints, changes of direction from the vertical to the horizontal apply a 100mm to 150mm Easygum fibreglass bandage to add strength at these points.

NB: Both sides of the fibreglass bandage are to be feathered to improve the total aesthetic appearance.

FIBREGLASS ENCAPSULATION
To encapsulate the fibreglass, it is important to only work an area of no more than a metre.

Applying liberally the Easygum body coat over the pre-primed substrate. Cover the body coat with a layer of fibreglass 300 chopped strand mat.

Using a No2 lambs-wool roller sleeve or similar, roll over the surface of the fibreglass, bringing the Easygum body coat through to the top surface ensuring the total area being treated fully encapsulated.

Damp proof coats
Apply the first coat of Easygum at a spreading of 4-5sqm per litre to the total area including those details that have been fibre reinforced and allow a minimum of 2hrs to dry.

Apply the second coat of Easygum at a spreading rate of 4-5sqm/litre over the previous coat and allow to dry for a minimum of 24 hours.

Protection
Install the specified protection board prior to back filling.

10. INSTALLATION OF EASYGUM

REINFORCED SINGLE LAYER MEMBRANE TANKING SYSTEM

PRIMING
To a dried prepared surface apply one coat of Easygum primer by brush/roller at a spreading rate of 6 sqm/litre. Leave to dry.

GUSSETS
All external or internal corners are to have fibreglass gussets installed using the Easygum base coat as the laminating medium.

DOUBLES
At all concrete joints, changes of direction from the vertical to the horizontal apply a 100mm to 150mm Easygum fibreglass bandage to add strength at these points.

NB: Both sides of the fibreglass bandage are to be feathered to improve the total aesthetic appearance.

FIBREGLASS ENCAPSULATION
To encapsulate the fibreglass, it is important to only work an area of no more than a metre.

Applying liberally the Easygum body coat over the pre-primed substrate. Cover the body coat with a layer of fibreglass 300 chopped strand mat.

Using a No2 lambs-wool roller sleeve or similar, roll over the surface of the fibreglass, bringing the Easygum body coat through to the top surface ensuring the total area being treated fully encapsulated. Continue the process overlapping at the edges a minimum of 80mm.

Reinforced Layer
To encapsulate the fibreglass, it is important to only work an area of no more than a square metre at a time.

To reinforced and primed areas apply a full body coat of easygum using a No2 lambs wool roller sleeve or similar, roll over the surface of the fibreglass, bringing the body coat through to the top surface ensuring the total area being treated is fully encapsulated. Continue the process overlapping at the edges a minimum of 80mm.

TOP COAT
Apply by brush or roller a final coat of Easygum to the total area at a spreading rate of 4-5 sqm per litre and allow to dry for a minimum of 24 hours.

Protection
Install the specified protection board prior to back filling.