

RIW LIQUID GM

Liquid GM is a single component water based compound, formulated on styrene-butadiene co-polymer.

BENEFITS

- l Liquid applied, methane and carbon dioxide barrier
- l Excellent adhesion; fully bonds to porous and non-porous substrates
- l Easily applied by brush, roller or airless spray
- l Can be applied to damp substrates
- l Rapid drying and easily repaired
- l Non-toxic and flexible when cured

APPLICATIONS

- l Suppression of methane, carbon dioxide and high density hydrocarbon vapour
- l Ground floors
- l Basements and substructures
- l Retaining walls

APPLIED TO

- l Concrete
- l Masonry
- l Steel

RIW LIQUID GM

TYPICAL USES

Liquid GM is a high performance elastomeric liquid rubber membrane, specifically designed for a range of vertical and horizontal surfaces, generally as follows:

- Applied to walls, floors or soffits.
- As a retro applied gas proof membrane to concrete and masonry substrates.
- As an alternative to sheet membranes in new construction.

The product only requires stirring to form the ideal material for providing a waterproof and gas proof, methane and carbon dioxide barrier.

When designing Type A structures (as classified in BS 8102: 2009), the product applied correctly is capable of providing the levels of protection required for Grades 1, 2 & 3 basements.

DURABILITY

Subject to normal conditions of use, Liquid GM will provide an effective barrier to methane and carbon dioxide gases, water and water vapour for the life of the structure.

INDEPENDENT AUTHORITY

Tests carried out by the Technology Centre show that Liquid GM will provide a barrier to methane, carbon dioxide and high density hydrocarbon vapour.

A copy of the reports are available upon request.

SPECIFICATION

J30 – Liquid Applied Tanking / Damp Proofing in accordance with NBS Clauses.

Please consult RIW for further information.

ANCILLARY PRODUCTS

Cementfill FC – Cement based waterproof fairing coat and repair mortar for filling minor holes, voids and defects.

Cementfill HB – Cement based waterproof high build repair mortar for profiling and providing fillets.

GM Reinforcing Scrim – a material for embedding in the coating, used to reinforce joints, etc.

Sheetseal GR – Compatible self-adhesive sheet, for flat open areas, if preferred.

CONSTRUCTION

GENERAL

All construction should conform with the Building Regulations, Codes of Practice and British Standards in current use at the time the building is constructed.

PERFORMANCE & COMPOSITION

Form	Thixotropic blue/grey liquid
Colour; when dry	Black
Specific gravity	1.4
Number of coats	Two (2)
Coverage*	1 st coat = 0.5 litres/m ² 2 nd coat = 0.7 litres/m ²
Coverage for two coats	0.85m ² / litre
DFT of coating	0.7mm for two coats
Curing time	Touch dry: 30 – 60 minutes 24 - 48 hours: full cure
Overcoating time	90 - 120 minutes after 1st coat
Application temperature limits	5 - 35°C
CURED PROPERTIES	
Adhesion to concrete	> 1.1 N/mm ²
Elongation ASTM D2370	> 100%
Water penetration	3.0 bars – no penetration
Methane permeability	< 1.40 x 10 ⁻¹²
UV resistance	Good

The above performance figures are typical values and should not be considered a product specification.

*Dependent upon application rate and product surface porosity.

PREPARATION

All surfaces: Should be clean, free from dust and loose material, oil, paint, fungal growth, etc.

Non-structural cracks, less than 0.5mm wide, must be filled. Structural cracks must first be repaired and filled.

The substrate must be sound and ideally present a smooth face. Fill holes and re-point flush to the finish, using Cementfill FC or HB to suit.

Old repairs must be inspected and re-repaired if necessary. Remove fins and snots as necessary.

Newly laid concrete should have a clean textured surface with 45° fillets at internal angles. Use Cementfill HB to provide fillets where required.

MIXING

Liquid GM is supplied ready for use. The product requires agitation using a slow speed paddle mixer. Mix carefully for 5 minutes before use. If containers are stored for more than 2 hours after opening, re-agitate. Do not add water.

SURFACE PREPARATION

Pre-dampen (not wet) the substrate before applying the first coat.

Interface with other media

For expansion joints, ensure that Liquid GM is applied well into the rebate before the expansion media is applied.

Other gas membranes must be exposed and lapped with where present.

Dealing with cracks

Cracks must be stabilised as necessary, and filled. Apply Liquid GM along the line of the crack, at a rate of 0.3 litres/m², with the GM Reinforcing Scrim fully embedded within it. Then apply the main coating system, as stated below.

APPLICATION OF THE MAIN COATING SYSTEM

The product can be applied by stiff brush, roller or airless spray with a minimum 17/1000 of an inch (17 thou.) nozzle. The spray method is especially suitable for less accessible locations and uneven substrates.

The first coat is to be applied at the minimum rate of 0.5m²/litre. Ensure that the coating is even and use a circular action when spraying.

Allow the primer coat to dry before applying the second coat.

Apply the second coat, which is to be applied at the rate of 0.7m²/litre, at right angles to the first coat using a similar application method.

Do not apply over bitumen.

The total application thickness must not exceed 4mm if splitting or cracking is to be avoided.

CLEANING

All tools should be cleaned with water immediately after use.

SAFETY

Full health and safety instructions are contained on the product material safety data sheets and these must be referred to before use.

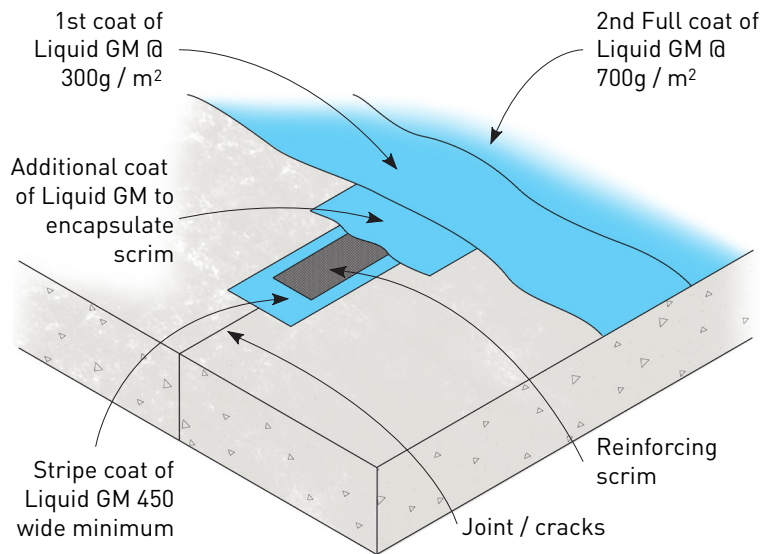
SUPPLY

AVAILABILITY

All RIW products can be obtained through Builders Merchants or approved stockists. A list of approved stockists is available from RIW's offices.

PACKAGING

Liquid GM	20 litre container
GM Reinforcing Scrim	300mm x 100m long rolls



Typical Joint Detail

STORAGE

Liquid GM must be stored at room temperature (minimum 10°C and max 30°C), and kept dry.

Protect from freezing and direct sunlight.

If these conditions are maintained, and the product packaging is unopened, then a shelf life of 12 months can be expected.

TECHNICAL SERVICES

The RIW Technical Department is available to advise on individual projects and to prepare or assist in the preparation of specifications and drawings. A list of experienced applicators of RIW materials is available from RIW's offices.

The information in this literature was correct at the time of going to press. However, we are committed to continually improving our products and reserve the right to change product specifications.

For the latest information, please consult RIW. Conditions of use are beyond our control, therefore we cannot warrant the results to be obtained.

RIW

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