



Multithane HV (High Viscosity)

High Viscosity, Liquid Applied, Polyurethane Membrane For Non-Exposed Areas

Description

Duram Multithane HV is a tough, durable, elastomeric, single pack, liquid applied, moisture curing, cross-linking, polyurethane waterproofing membrane - usually grey in colour.

Duram Multithane HV forms a tough, flexible, seamless waterproofing membrane designed for both vertical and horizontal surfaces that bonds well to most suitably primed building substrates.

Duram Multithane HV is formulated as an anti-sag membrane, that although easy to apply by roller or brush, it can be applied on to vertical surfaces without slumping to achieve the require film thicknesses.

Uses

Multithane HV is designed to waterproof most applications within the building and construction industry including:

- Tiled or covered areas
- Shower recess & wet areas (floors and upturns)
- Decks, balconies, terraces & podiums
- Retaining walls
- Planters and landscaped areas
- Structural slabs
- Tanks, pits and water retaining structures.
- Roofs (covered by pebbles or top coated with Duram Multithane ATC).

Suitable Surfaces

Multithane HV is suitable for most building substrates including:

- Concrete, Cement and cement block work,
- FC Sheeting
- Hebel
- Render
- Brick
- Plaster Board
- Masonry
- Bitumen (if primed with Duram Primeseal)

Surfaces should be sound, stable, dry, clean and free of dirt, dust and contaminants and suitably primed.

Specification

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement but the applicator or contractor must use their skill, knowledge and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the Company in writing.

Limitations

In exposed areas, Multithane HV UV (uv stabilised) should be used and then top coated with Multithane ATC or covered with pebbles, tiles or other suitable topping.

Benefits and Advantages

Multithane HV represents the highest standards in polyurethane waterproofing technology and provides the following benefits and advantages:

- Single pack - no mixing.
- Fast curing (usually within 24 hour)
- Anti-sag (maintains required thickness without slumping on vertical surfaces)
- Permanently flexible (tests show initial flexibility of > 500%)
- Voc's - Meets the Greenstar criteria for VOC.
- Suitable for immersion in water.
- Will not bleed or stain grout or tiles.
- Also available in self leveling version
- Good chemical resistance.

- High strength and puncture resistant.
- Provides seamless membrane (no joints or laps)
- Easily repaired and or maintained.
- Odourless when cured.
- Formulated to provide long term protection.
- Tar free.
- Easy to apply.
- Has good hydrostatic resistance.
- Root resistant due to its inherit tensile strength.
- Multithane HV UV meets AS4654.2 (Exposed Membrane) when exposed areas are top coated with Multithane ATC.
- Usually grey but can be made in other colours (min qty. apply).

Precautions in Use

Risk is considered low when properly used but precautions on can, label and / or data sheets should be observed. Do not use in confined areas with poor ventilation. Product is flammable.

Priming and Surface Preparation

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion.

Priming

Surfaces should be suitably primed with Duram Primeseal applied at no less than 1 Lt per 4m² or Duram Primeseal SP applied at 7m² per Lt and allowed to dry.

Duram Primeseal must be used over bitumen surfaces

Where there is a risk of evaporation of entrapped moisture in the substrate or water vapour transmission, which may cause the membrane to bubble, apply two coats of either Duram Primeseal or Primeseal SP.

Metal surfaces must be clean and free of contaminants and then metal etch primed. If rusted, treat to remove rust, apply a rust converter and then metal etch prime.

Excessively porous, friable and dusty surfaces may require an additional priming coat.

Duram Multiseal maybe used with Multithane.

Allow primers to dry or fully cure before applying the membrane and please refer to the product data sheets of the stated primers.

Detailing Preparation

Corners

Prime as required.

Apply an adequate flexible polyurethane sealant, in accordance the manufacture's instruction and tool off to form a solid covered 45° fillet extending at least 10mm on to the adjacent surfaces. Allow to cure. Apply the Duram membrane directly over the sealant and on the adjacent surfaces.

For Additional waterproofing protection the following additional steps should be taken

Lay a strip of Duram Leak-Seal Tape (self-stick, butyl mastic waterproofing membrane with a polyester backed reinforcing fabric) over the cured polyurethane sealant (as described above) pressing it firmly on the surface. Apply the Duram membrane directly over the tape and on the adjacent surfaces.

Joins, gaps and Cracks

General

Joins, gaps and cracks should be suitably filled and sealed with an appropriate elastomeric sealant, preferably a polyurethane sealant, and allowed to cure.

Recommendation: The movement of small cracks should not be underestimated and should be at least covered with a flexible polyurethane sealant or additional coats of membrane.

Large or Live Cracks

Large cracks should be routed out to form a 'V' and then filled and sealed with a polyurethane waterproof joint sealant as per the manufacturer's instructions. The sealant should be finished slightly proud of the surface and allowed to cure.

After priming, as required, lay a strip of Duram Leak-Seal Tape over the join or crack pressing it firmly on to the substrate. The Duram membrane is then applied directly to the Duram Leak-Seal Tape and extending at least 75mm on to the adjacent surfaces.

If the Duram Leak-Seal Tape is not used then a suitable bond breaker tape (such as duct tape) at least 48mm wide should be laid over the join or crack and apply a fully reinforced Duram membrane consisting of a base coat of membrane in to which the reinforcing fabric is embedded, a saturating coat of the Duram membrane ensuring that the fabric is entirely saturated and covered and then allowed to cure. At least one or two further coats are applied as per the Duram membrane's Product Data Sheet extending at least 75mm on to the adjacent surfaces.

Joins - Particularly in CFC Sheeting and Timber Sheeting

Ideally the sides of the sheets should be fully coated with a flexible polyurethane waterproof joint sealant prior to butting the sheets together.

If not, the joins should be suitably filled and sealed with an appropriate elastomeric polyurethane waterproof sealant and finished flush with or preferably slightly proud of the surface and allowed to cure.

After priming, as required, lay a strip of Duram Leak-Seal Tape over the join, pressing it firmly on to the substrate. The Duram membrane is then applied as described under 'Large or Live Cracks'.

If the Duram Leak-Seal is not used then follow the procedure as described under 'Large or Live Cracks'.

Waste Outlets, Penetrations and Angles

Waste Outlets: Floor wastes and puddle flanges should be rebated in to the floor to allow water to readily drain. Fill all gaps and

perimeters with a polyurethane joint sealant.

Plastic or metal angles: Where required by the Building Code such as internal hobs and exterior door barriers and also plastic corner angels under wall boards, they should be securely embedded in to a continuous, gap free bed of a polyurethane sealant / mastic.

Exposed Areas such as Roofs

Duram Multithane HV Uv should be used then top coated with Duram Multithane ATC (aliphatic coating) applied in a single coat at 3m² per liter.

Root Resistance

Multithane's inherent tensile strength makes it root resistant for general flowers, lawn and shrubs. However, top coating the membrane with Duram Rocktuff will further increase resistance where aggressive and large root infestation is anticipated.

Application

Apply Multithane HV by brush, roller, broom and squeegee in a minimum of two coats, usually a day a part so that the minimum dry film thickness in 1.2mm. The minimum wet coat thickness per coat is 0.5mm.

Reinforced System

In areas such as corners and over joins and cracks the membrane should be used in conjunction with a reinforcing fabric (Duram Durascrim or fibreglass matting). This application consists of applying a base coat in to which the reinforcing fabric is laid followed by the application of a saturating coat ensuring that the product is worked well in to the fabric and that no wrinkles or bubbles are present and that fabric is entirely saturated and covered with product. Allow to cure. Apply one or two further coats of products.

Single Coat Application: In ideal conditions, the membrane may be applied in a single coat after proper priming and at the prescribed coverage rate and dry film thickness as for 2 coats. The membrane should be monitored for bubbling, pin holing and damage. Should this occur, the wet membrane should be lightly over-rolled.

Coverage

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

On average the minimum final coverage of Multithane HV is 1.5 Lts per m² generally applied in two coats. The minimum final dry film thickness on vertical surfaces should be 1.0mm and 1.2mm for horizontal surfaces. Coverage is stated after proper priming.

Colours

Generally grey. Can be manufactured in some other colours but minimum quantities apply.

Drying and Curing

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide.

Curing is dependent upon temperature, humidity, type of substrate and application technique. Generally Multithane HV will be dry to touch within 10 to 12 hours with full cure within 24 hours.

Storage

Keep in cool, dry place away from heat, flame or combustible material. Product contains flammable solvents. Class 3 Dangerous Goods must be declared prior to transportation. Available in 5 & 15 Lt pails.

Self life: 6 - 12 months in unopened container but best used within 6 months. As this is a polyurethane some skinning of the product may occur. This should be cut out and removed. Balance of the product will be suitable for use.

Clean Up

Avoid spills. They are difficult to clean particularly off porous surfaces. For wet spills use a cloth and Duram Solvent. Do not clean off carpets as it is better to allow product to cure and then shave the carpet. Equipment should be immediately cleaned with Duram Solvent.

Tiling, Topping or Top Coating

Multithane HV is suitable for topping with sand: cement mix at a minimum of 25mm thickness.

Roofs should be covered with Geo-textile and pebbles or top coated with Multithane ATC or tiled.

Tiling: A 350 micron thick adhesion coat of Multithane Std should be applied to the freshly cured Multithane HV and dry builders and should liberally broadcast into the wet coat to provide a mechanical key. Allow to cure then remove any loose sand. Ensure surface is dry and clean. Acrylic bonding agents can be used in sand:cement mixes for better strength and adhesion. When tiling, it is essential that adequate expansion joints are installed in accordance with good tiling practice and AS3958.1-1991.

Safety & Precautions

Multithane HV is solvent based. The use of solvent resistant gloves and goggles (against splashes) are recommended. If spraying, which is very rare, the use of self contained breathing apparatus is recommended. If swallowed do not induce vomiting, give plenty of water to drink. Seek urgent medical advice. If in eyes, flush thoroughly with clean water, holding lid open to ensure any trapped product may be flushed away. If on skin, remove contaminated clothing and wash skin with soap and water. If inhaled, unlikely due to viscosity of the product, remove person to fresh air and apply artificial respiration if required and seek urgent medical attention. Product is flammable when wet. Keep away from all sources of ignition. Ensure adequate ventilation. Vapours may

collect in low lying areas.

For full safety data refer to the products Material Safety Data Sheet. Observe precautions as per label.

Tests and Technical Data

Duram Multithane has been tested by CSIRO [Test Report 6028.4] and passes AS4858:2004 - Wet Area Membranes

Elongation at break: > 900%

Class 111 High Extensibility.

When top coated with Multithane ATC it meets the requirements of AS4654.2 (exposed membrane).

Issued: 1 May 2012 | Valid to: 1 May 2015

Conditions of Use and Disclaimer

The information contained in this Material Data Sheet is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the Product Data Sheet in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

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