

BITUFAST

Asphalt Primer

DESCRIPTION

BITUMAT BITUFAST is a premium quality, cold applied, fast curing primer, formulated with a highly pliable, flexible bitumen and select fast drying solvents and compounded with wetting and saturation additives.

USES

BITUMAT BITUFAST is a universal primer for concrete, smooth asphalt roofs, brick and metal surfaces. It is used as the priming coat before applying any of BITUMAT's elastomeric membranes and coatings.

OUTSTANDING FEATURES

BITUMAT BITUFAST is fast curing and hence:

- Dust is not trapped whilst wet.
- Time interval between coats is less, resulting in greater efficiency and better output.
- 100% evaporation of solids is achieved which is specially essential when using self-adhesive membranes.
- Greater & stronger adhesion / bonding.
- Does not require heating, thinning or mixing, thereby saving labour costs.
- When applied over select asphalt, allows for proper penetration into the surface pores, pin holes, cracks and cures rapidly, preventing work delays and surface contamination.
- When applied over weathered asphalt, it rejuvenates and revitalizes the existing cracked and brittle surface, thus preparing suitably from initiating any maintenance or repair operation.
- When applied over stable homogenous asphalt, does not exude or bleed and hence forms a more durable bond.

APPLICATION

The surface must be thoroughly cleaned, all dust, dirt, loose coating, oil and grease must be cleared and the surface should be dry before priming. It can be applied with a roofing brush, roller, squeegee or airless spray equipment at the recommended coverage rates.

CLEANING

Tools : Clean with kerosene
Hands : Use a hand cleaner or kerosene followed by soap and water.

COVERAGE RATES

Concrete and metal	: 0.2 - 0.3 L/M ²
Smooth asphalt	: 0.3 - 0.5 L/M ²
Mineral granule surfaces and wood	: 0.6 - 0.8 L/M ²
Coarse aggregate	: 0.8 - 1.0 L/M ²

STANDARDS

Exceeds the performance requirements of ASTM-D-41.

PACKING

20-litre pails and 200-litre drums.

HEALTH & SAFETY

Contains petroleum distillate; flammable; keep away from open fire, sparks or other ignition sources. Wear protective clothing, gloves and goggles.

1. Fire -Flammable when wet, flash point 40 °C.
2. Skin - Avoid repeated or prolonged contact; if contact occurs remove with hand cleaner that removes oil or grease; then clean with soap and water.
3. Eyes-Contact could cause irritation. If contact occurs flush with clean water.
4. Inhalation - Can cause dizziness. Remove to fresh air and if breathing difficulty persist, administer oxygen.

BITUFAST

Asphalt Primer

TECHNICAL DATA

PMR01	MAY04	R-00	00
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	<i>Property</i>	<i>Typical Value</i>	<i>Test Method</i>
1.	Density at 25 °C, Kg/Liter	0.80 - 0.86	ASTM-D-70
2.	Viscosity, Saybolt furol at 25 °C., seconds Viscosity at 25 °C, cps	30 - 70 60 - 140	ASTM-D-88 Brookfield
3.	Drying time, to touch at 25 °C, Hr.	2	—
4.	Drying time, through, at 25 °C, Hr.	12	—
5.	Non-volatile, % Wt.	45 (Min.)	ASTM-D-402
6.	Volatile, % Wt.	55 (Max.)	ASTM-D-402
7.	Penetration at 25 °C of asphalt from distillation upto 360 °C, dmm	20 - 50	ASTM-D-5
8.	Water content	Nil	ASTM-D-95
9.	Shelf life	2	—

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THIS PUBLICATION AUTOMATICALLY SUPERSEDES ALL PREVIOUS PUBLICATIONS RELATING TO THIS PRODUCT.

ELASTIGARD

Rubberized Asphalt Roof Coating

DESCRIPTION

BITUMAT ELASTIGARD is a superior, quality, liquid, cold applied rubber modified bitumen coating, reinforced with mineral stabilizers, gelling agent and special additives to prevent degradation due to oxidation, ozone and UV. It also has special additives for better adhesion.

USES

BITUMAT ELASTIGARD elastomeric coating is ideal for roofing work where there may be thermal and structural expansion and contraction of the roof membrane, deck or structure due to sudden temperature changes, foundation shifting, deck deflection, absence of working deck expansion points, etc.

Recommended for maintenance, and repair of existing roofs, construction of new polyester reinforced built-up roofs, cap sheeting over existing roof and waterproofing of concrete walls, floors, bridges or any other surface requiring waterproofing or protection with an elastic, flexible coating.

OUTSTANDING FEATURES

- BITUMAT ELASTIGARD is a highly elastic product, and cures to a rubber like membrane capable of withstanding severe cases of expansion, contraction and deck movements.
- Highly resistant to oxidation, UV light and ozone because of unique additives used in compounding it. It does not crack.
- More durable than normal asphalt coating and lasts longer than most other coatings.
- Superior wetting and adhesion properties ensure durable bond and resistant to peeling, chipping, separation and a longer life.
- Has the unique property of adapting itself over the irregular contours of the deck and forming a waterproof and impervious blanket.
- Single component, cold applied, requiring no mixing or heating; saves labour costs.

APPLICATION

The surface must be thoroughly cleaned and should be free of dirt, gravel, dust and oil. The concrete should be dry and smooth. When applying directly over concrete or old, dry, asphalt, prime first a BITUMAT primer.

When using as a top coat to protect and rejuvenate existing smooth asphalt roofs, first repair all blisters, cracks, split seams and flashings with BITUMAT ELASTIFLASH.

The coating is applied straight from the container using a standard roofing broom, brush, squeegee or airless spray equipment at the recommended coverage rates.

CLEANING

Tools : Clean with kerosene
Hands : Use a hand cleaner or kerosene followed by soap and water.

COVERAGE RATES

Over smooth asphalt or modified bitumen	:	0.80-1.20 L/M ²
Over gravel covered asphalt	:	1.20-1.40 L/M ²
Over concrete	:	1.20-1.40 L/M ²
Built-roof or re-roofing per coat	:	1.30-1.40 L/M ²

STANDARDS

Exceeds the performance requirements of ASTM-D-4479.

PACKING

20-litre pails and 200-litre drums.

HEALTH & SAFETY

Flammable; contains petroleum distillate. Keep away from open fire, sparks or other ignition sources. Wear protective clothing, gloves and goggles.

1. Fire - Flammable when wet, flash point 40°C.
2. Skin - Avoid repeated or prolonged contact; if contact occurs remove with hand cleaner that removes oil or grease, then clean with soap and water.
3. Eyes - Contact could cause irritation; if contact occurs flush with clean water.
4. Inhalation - Can cause dizziness. Remove to fresh air and if breathing difficulty persists, administer oxygen.

ELASTIGARD

Rubberized Asphalt Roof Coating

TECHNICAL DATA

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	<i>Property</i>	<i>Typical Value</i>	<i>Test Method</i>
1	Density, at 25°C., Kg/liter	1.01 - 1.03	ASTM-D-70
2	*Viscosity @ 25°C., cps	12,000 - 100,000 depending on grade	Brookfield
3	Dry film thickness, 1 Liter/M ² , mm	0.6	-
4	Drying time to touch, at 25°C, Hr	6	-
5	Drying time, through, at 25°C, Hr	48, at the recommended coverage rate	-
6	Colour	Black	-
7	Cold temperature pliability at -20°C	No cracking or chipping	ASTM-D-4479
8	Resistance to heat at 60°C	No sagging or blistering greater than 6mm	ASTM-D-4479
9	Adhesion to wet surfaces	Excellent	ASTM-D-3409
10	Adhesion to dry surfaces	Excellent	ASTM-D-3409
11	Resistance to Sunlight (UV) (Weather-O-Meter, 2000 Hrs)	No erosion, cracking or peeling	ASTM-G-53
12	Elongation of cured film, %	250 (min.)	ASTM-D-412
13	Resistance to mild acids and alkalies	Good	Immersion
14	Service temperature, °C	0 to 90	-
15	Resistance to solvents	Poor	-
16	Non volatile, % Wt.	69-74	ASTM-D-4479
17	Volatile, % Wt.	26-31	ASTM-D-4479
18	Bitumen content, % Wt.	52-61	ASTM-D-4
19	Mineral stabilizers and fibers, % Wt.	13-17	ASTM-D-4479
20	Special additives, anti-oxidants Ozone inhibitors etc., % Wt.	1.2	-

* Available in winter and summer grades. Specify winter grade for application at 25°C or below and for spray application; summer grade at temperature greater than 25°C.

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SYNROOF HI-BUILD

Premium Quality Acrylic Waterproof Coating

GENERAL

1. **BITUMAT SYNROOF HI-BUILD**, an elastomeric, premium quality acrylic coating, may be applied by brush, roller, squeegee or spray equipment depending on site conditions. To spray, select a nozzle size of at least 0.028 in.; first checking the spray equipment to ensure suitability.
2. All surfaces to be coated must be clean, dry, free from dust, dirt, oil and other contaminants.
3. Coverage varies depending on factors such as type and quality of substrates i.e. surface regularity and application method.
4. Apply in separate coats, each at a right angle to the one before. Using a different colour for each coat helps ensure consistency of cover.
5. The final coating thickness to be achieved depends on the requirements of the individual roof. A final dry film thickness between 0.5 and 1.5 mm may be built-up.

PREPARATION

Surface preparation is a very vital issue and this influences the integrity of the waterproofing system. Hence, care must be exercised when the preparation is done. This is very important when re-roofing over an existing old roof.

Instructions should be followed strictly.

1. All surfaces to be smooth, clean, dry and free from dust, rust and latience.
2. Concrete and cementitious substrates must be well compacted with a wood float type finish, be at least 28 days old and well dried. Uncured concrete surface will have moisture trapped inside and will turn gaseous when temperature rises. This will lead to blistering and even delamination from the surface.
3. Wooden or metal panels to be firmly fixed in position.
4. Terrazo roof tiles: Clean and repair damaged joints. Ensure that the tiles are firmly grouted. Remove all loose material.
5. Metal Roofs: Wire brush to remove moss, mildew, loose paint, and rust areas, then clean surfaces with a broom before priming. High pressure water brooming may be used, if necessary.

PRIMING

1. **Old asphalt surfaces and bituminous roofing felt.** Cut felt blisters crosswise, dry and rebond with suitable adhesive. Allow to cure. Then prime cleaned surface with SYNROOF HI-BUILD diluted with 20% water.
2. **Concrete & Terrazo tile roofs.** Following removal of all loose and other alien material, prime with Synroof Hi-Build diluted with 20% water. Greater dilution may lead to weaker bonding with the substrate.
3. **Metal roofs.** Clean and remove all rust and apply a rust inhibitive primer. Follow this by applying metal primer to all corroded surfaces.
4. **Other roofs.** Should the roof be affected by algae or fungal growth, use a stiff bristled broom to remove this before treating the cleaned surface with a suitable fungicide, and apply primer coat by diluting BITUMAT SYNROOF HI-BUILD with 20% water.

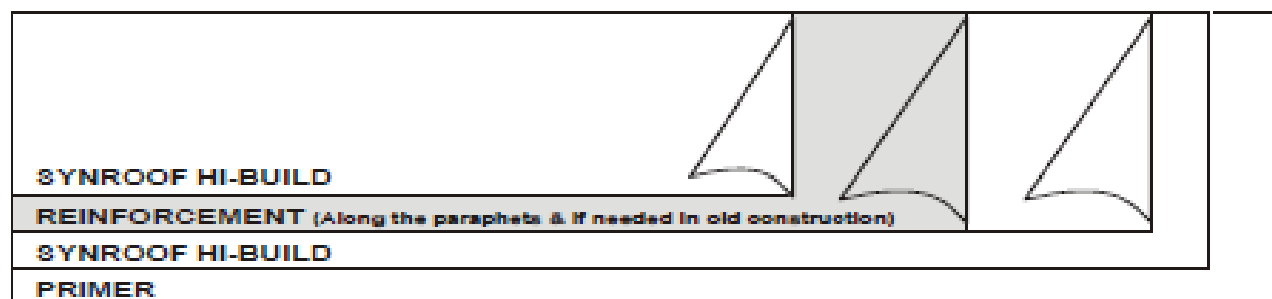
APPLICATION

1. Primer must be completely dry before the first coat is applied.
2. BITUMAT SYNROOF HI-BUILD may be applied by soft brush, roller or spray gun.
3. For spraying, BITUMAT SYNROOF HI-BUILD may be slightly diluted with water. To great a dilution may lead to sedimentation and blocking of spray gun.
4. Apply two coats, each at the approximate rate of 0.8 kg/sqm. (excluding the BITUMAT SYNROOF HI-BUILD prime coat).
5. Where substantial movement is anticipated in the substructure, a mesh reinforcement (60/80 gsm thermobonded polyester as part of a "sandwich" membrane system is used. Lay this mesh in the wet first coat before application of subsequent coats. All detailing to pipes, upstands, drains, projected line etc. should be mesh re-inforced in this way.

CURING

Allow 24 hours between coats. A final curing time of 48 hours is adequate at normal working temperatures. Ensure curing is complete before laying thermal insulation boards, mechanical protect and other coverings.

Low temperatures and high atmospheric humidity will slow down the curing rate, and vice versa.



SYNROOF HI-BUILD

Premium Quality Acrylic Waterproof Coating

MECHANICAL PROTECTION

Accessible roofs. The installed Bitumat Synroof Hi-Build can either be covered by insitu concrete screed or by thermal insulation. Place a non-woven polyester separation layer over the acrylic waterproofing membrane followed by appropriate thermal insulation boards. Then lay kraft paper or polyethelene sheets as separation layer over the insulation boards and place the topping screed of 4 to 5 cms thickness or suitable cement tiles.

Non-accessible roofs. Place a non-woven polyester separation layer over the acrylic waterproofing membrane followed by the insulation boards. Cover the insulation with another layer of non-woven polyester separation layer and place 15/30 gauge washed gravel to a minimum depth of 5cm. For thicker insulation boards, the gravel depth should be at least equal to that of board thickness.

PRECAUTIONS

1. Bitumen or asphalt roof surfaces to receive a coating of BITUMAT SYNROOF HI-BUILD should be totally dry. Trapped moisture can lead to severe problems later.
2. Never apply if rain is imminent.
3. Application of thick coat at temperature below +5°C may result in incomplete film formation, with reduced elasticity and the possibility of crack forming.
4. BITUMAT SYNROOF HI-BUILD is resistant to light foot traffic. However, heavy traffic, high heel shoes, furniture, etc. will cause damage. In these cases the membrane should be protected by tiles, slabs, etc.

5. Do not clean the cured BITUMAT SYNROOF HI-BUILD coating with brooms that have hard bristles. These may cause damage.
6. Do not use BITUMAT SYNROOF HI-BUILD on areas that will be constantly submerged in water.

CLEAN-UP

As a good roofing practice, flush all hoses, equipment and tools with water immediately after use.

PACKING

- 20 kg. metal pails, others on request.

STORAGE

- Keep away from direct sunlight and preferably store below 30°C and above +5°C.
- Protect from frost.
- When stored in unopened containers, expect a minimum shelf life of one year.

HEALTH AND SAFETY

1. Toxicity - non toxic and odourless.
2. Flammability - Non flammable when wet. The cured film will burn but is not a fire hazard.
3. Skin contact - Prolonged contact is to be avoided. Use of a barrier cream or gloves will protect sensitive skins.
4. Cleaning - Remove with water when wet and proprietary hand cleaner when dry.
5. Medical assistance - This should be sought if BITUMAT SYNROOF HI-BUILD is ingested or comes into contact with eyes. Eyes should be rinsed with copious amount of clean water.
6. Ventillation to the working area is desirable.

TECHNICAL DATA

Property	Typical Value	Test Method
1. Solids Content, %	64 (+/-1)	ASTM-D-1076
2. Viscosity, CPS	50,000-70,000	Brookfield
3. Density, Kg/l	1.30 (+/0.05)	ASTM-D-1475-16
4. Application Temp, °C	+5 (minimum)	In-House Test
5. Curing Time, at 25°C	Approx. 8 hr. for touch dry	In-House Test
6. Service Temperature °C	Approx. -5 to 100	In-House Test
7. Tensile Strength, N/CM ²	480	ASTM-D-412
8. Elongation, at Break %	440	ASTM-D-412
9. Hardness, Shore A	68	ASTM-D-2240
10. Permeability	Pass	ASTM-E-398
11. Dry Peel Adhesion, lbs/sq. in.	65	ASTM-C-297
12. Flexibility	No cracking of film after 1000 hrs. accelerated weathering conditions and flexed 180 degrees	In-House Test
13. UV Resistance	2000 hrs. No deterioration, no color fade	ASTM-D-822
14. Colours	Satin White & Grey, other colors by request	
15. Coverage	For 1 mm thick dry film allow approx. 2kg/m ²	

* Incorporation of a reinforcement considerably increases certain dry film properties.

The information given in this Technical Data Sheet reflects typical median properties based on laboratory test, and practical experience, subject to the tolerance levels of UEAlc's directives. However, as the product is often used under conditions beyond our control, we can't warrant but the product itself.

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