



8245 Remmet Ave Canoga Park, CA. 91304 (818) 888-0050

Installation Instructions
AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane
Table of Contents

General

- Description 2
- Approvals..... 2
- Applicator..... 2
- Product Delivery, Storage and Handling 2
- Limitations 2
- Acceptable Substrates 2
- Safety 2
- Tools Needed for Application..... 2

Products..... 3

- Aussie Membrane 502 Materials 3

Substrate Inspection and Preparation 3

- Inspection of Concrete or Block Wall Substrates 3
- Preparation of Concrete and Block Wall Substrates 3

Membrane Installation Instructions 3

- Primer (Optional)..... 3
- Reinforcement (Optional)..... 3
- Aussie Membrane 502 Installation 4
- Mixing: 4
- Application: (Roller/Brush) 4
- Application: (Spray) 4
- Membrane Inspection 5

Flood Testing Specifications 6

Protection Board / Drainage Board / Drainage System Specifications 6

Repairing Damage to the Aussie Membrane 502 (When the substrate is not damaged)..... 7

- Damage Description (1)..... 7
- Damage Description (2)..... 7
- Damage Description (3)..... 7

Repairing Damage to the Aussie Membrane 502 (When the substrate is damaged)..... 7

- Damage Description (4)..... 7

Coverage Charts & Technical Information 8

Technical Data 8

General Information 9

Packaging: 9

Shipping Weights: 9

Important Notes: Spraying the Aussie Membrane 502 requires training and experience. Do not rely on these installation instructions alone. The Aussie Membrane 502 can be applied in many different applications and substrates. These installation instructions are “General” in nature and will not cover every scenario. Please consult with AVM Industries prior to applying the Aussie Membrane 502 on a job.



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Installation Instructions

AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

General

Description

The AUSSIE MEMBRANE 502 is a vapor-proof, brown rubber/bitumen liquid emulsion with excellent adhesion, which dries to a tough, black seamless flexible waterproof membrane. The AUSSIE MEMBRANE 502 is a thixotropic cold-applied bitumen emulsion with added rubber latex. It exhibits excellent elongation and recovery properties.

Where To Use

Walls: Waterproof below-grade concrete and block walls, basements, wet rooms, Blind Side Waterproofing (as part of the Aussie Skin Dual System), etc.

Floors: In-between slab waterproofing. To provide a sandwich membrane in-between two concrete slabs.

Roofs: To be used in Green Roof applications or in Roof Paver systems.

Planters: Waterproof planters and other landscaping features.

Balconies: For waterproofing under concrete toppings on balconies, walkways and other common areas (Including over living space). concrete topping (sometimes referred to as hard rock) must be a minimum 3.0" thick, properly reinforced and minimum 2500 PSI.

Under Tile: Waterproof under terrazzo and ceramic tile applications when using a thick-set or mud-bed over the membrane.

Approvals

ICC-ESR 2503 and Los Angeles Research Report (L.A.R.R.) #25550. AUSSIE MEMBRANE 502 meets AC-29 Testing Standards. (These standards are used by ICC for below-grade fluid applied waterproofing membranes testing).

Applicator

The applicator shall be an AVM Industries Authorized Installer or be completely experienced in the application of the materials of this system and has read and understood these installation instructions prior to commencing the work.

Product Delivery, Storage and Handling

- A. Delivery of all the Aussie Membrane materials to the job site must be in their original sealed containers, with the manufacturer's name and label intact.
- B. Store at temperatures between 50°F and 90°F. Do not store materials in direct sunlight or where they may be damaged by water or rain.
- C. Keep all materials out of the reach of children.
- D. If irritation occurs during use, liberally flush affected areas with water. If irritation continues, see a physician immediately.

Limitations

Temperatures: Do not apply when temperatures cannot be maintained above 50°F for a minimum of 48 hours or until cured or if precipitation is imminent. Do not apply materials in direct sunlight at temperatures above 100°F.

UV Resistance: Install acceptable protection as soon as the membrane has cured. Do not leave membrane exposed to UV for more than 14 days. Strictly adhere to the Installation Instructions. Failure to do so, may result in the membrane's failure.

Green/Wet Concrete: Substrates do not need to be fully cured. The AUSSIE MEMBRANE 502 may be applied to damp surfaces. Do not apply the AUSSIE MEMBRANE 502 to waterlogged surfaces. If substrates are oozing water, allow 24 hours cure time after water has stopped oozing prior to installing the Aussie Membrane.

PSI: On traffic bearing surfaces, concrete substrates shall achieve a min compression strength of 2500 psi prior to installation.

Acceptable Substrates

Concrete substrates exceeding 2500 psi, concrete blocks (CMU), ICF (Insulated Concrete Forms)

Steam Rooms: Maximum temperatures for the Aussie Membrane 502 are 167°F or 75°C.

Safety

Wear protective gear and safety glasses for eye protection.

Tools Needed for Application: A. Cutting Knife B. Brush C. Roller D. Dual sprayer System



Installation Instructions

AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Products

AUSSIE MEMBRANE 502 Materials

- Primer (Use the Aussie 502 Resin without hardener).
- Adhesive 501 (Solvent-based adhesive for applications when water will not absorb into the concrete substrate)
- AUSSIE MEMBRANE 502 supplied in 264 gallon Totes..
- Optional reinforcement: AVM Mat 800, Polyester fabric, 6"x300' and 40"x324', as supplied by AVM Industries.

Substrate Inspection and Preparation

Inspection of Concrete or Block Wall Substrates

- A. Substrates shall be sound, stable, clean, free of dirt, dust, oil, grease and curing agents.
- B. Concrete finish shall be straight without waviness or noted defects, finished with a smooth, light broom or sponge surface texture. Block walls to have all grout lines filled. (no gaps)
- C. Damaged surfaces with noted defects shall be repaired prior to commencement of the AUSSIE MEMBRANE 502 application.
- E. On horizontal surfaces, Verify that substrate provides adequate slope for proper drainage. (Minimum slope: 1/4" per foot)
- F. When applicable, verify that all sheet metal flashing and related accessories are properly secured and joints solidly imbedded in sealant. Install edging and other related metals where shown or required for a complete installation.
- G. Expansion Joints: **DO NOT COVER EXPANSION JOINTS.** If expansion joints exist, contact the architect or AVM Industries for further instructions on how they should be waterproofed.

Preparation of Concrete and Block Wall Substrates

- A. Remove laitance, oil, grease, curing agents, debris and other deleterious materials from surfaces scheduled to receive application. On horizontal, older, or very dirty substrates, high pressure washing or bead blasting are highly recommended. If needed, apply a thin parge coat using AVM Crete 6200.
- B. Clean hairline or small cracks and rout out all cracks wider than 3/16 inch. Seal the large cracks flush with AVM Aussie Seal M Sealant.
- C. Grind off any sharp edges and protrusions. Fill in all gaps or cracks larger than 1/8" wide with either Aussie Patch, a parge coat or Aussie Seal M.
- D. Cold Joints, other wall-to-deck joints and Inside Corners: Install a 45 degree 2" mortar or 3/4" Aussie Seal M cant strip at these joints. Then install a min 6" wide, 45 mils thick detail coat of Aussie Membrane 500 fully reinforced with AVM Mat 800.
- E. Just prior to beginning the installation of the Aussie Membrane, thoroughly clean the areas to receive this work with a broom or blower to remove all debris and dust from the work area.

System Application

Important Note: The following material coverages may vary based on job conditions, Substrate conditions and other factors. Please read the coverage charts carefully prior to the application of the Aussie Membrane.



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Installation Instructions

AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Membrane Installation Instructions

Absorption Test: Aussie Membrane 502 is a water-based bitumen. For proper membrane adhesion, the bitumen coating must absorb into the concrete surface being waterproofed. An absorption test shall be performed prior to membrane application to ensure no additives, coatings, form release agents, or other foreign matter might inhibit the membrane from properly bonding to the concrete.

To perform an absorption test, apply water with a brush, spray bottle, or by hand to various areas of the concrete surfaces scheduled to receive waterproofing. Note if the water is absorbing into the concrete or beading up on the surface. If the water beads up or is not being absorbed into the concrete for any reason, the concrete must be primed with AVM Adhesive 501. An adhesion test with the Aussie Membrane 502 may also be performed. A minimum of two samples shall be taken per 1000 sq.ft. and must achieve a minimum bond strength of 5 lbs. after a 72-hour cure time.

Primer: If proper adhesion can be achieved without Adhesive 501 or the concrete surface easily absorbs water, the surfaces can be primed with Aussie Membrane 502 resin only (without the salt water catalyst). Its recommended Prime coat be allowed to cure before applying the Aussie Membrane 502 with salt water catalyst. Typical cure times are less than 30 minutes at 75°F at 50% relative humidity.

AUSSIE MEMBRANE 502 Installation - Apply the AUSSIE MEMBRANE 502 using a 2-part spray machine. On vertical applications, minimum thickness of the completed, cured membrane shall be 60 mils in non-hydrostatic conditions and 90 mils in hydrostatic conditions. On horizontal applications, min thickness of the cured membrane shall be 90 mils. Some assemblies may require thicker applications. Refer to the Aussie Membrane 502 Details for more information

Mixing:

Resin: Mix the Aussie Membrane 502 resin in the tote by either circulating it thru the spray pump by-pass for about 10–15 minutes or by drill and paddle for about 10-15 minutes. Do not add water, solvent or anything else to the product.

Accelerator (Salt Water): Mix one 50-pound bag of salt with 30 gallons of water. Mix well using a drill and paddle until all the salt has dissolved. The table below lists other common salt-to-water ratios.

Water	1.0 Gal	2.0 Gal	3 Gal	5 Gal	6 Gal	10 Gal	15 Gal	30 Gal
Salt	1.67 Lbs	3.33 Lbs	5.0 Lbs	8.33 Lbs	10.0 Lbs	16.66 Lbs	25.0 Lbs	50.0 Lbs

Application: (Spray)

Spray Ratio: 10 Gallon Resin / 1 Gallon Salt Water

For every 1 unit in thickness (Dry thickness) Spray 1.6 units (Wet thickness)
 Example: To achieve 60 Mils dry – spray 96 Mils wet. (60 x 1.6 = 96)

Test the spray equipment on a piece of scrap cardboard to make sure it’s spraying properly. Once spray equipment is spraying properly, apply product by continuously spraying up and down until desired thickness is achieved. Check for pinholes and proper thickness using a mil gauge. Continue spraying additional material as described above until the required thickness has been achieved. Full cure is typically achieved after 24 hours. Drying times may vary based on temperature, humidity and other factors.

Important Notes:

1. **Spraying the Aussie 502 product requires training and experience. Do not rely on these installation instructions alone.**
2. **Drying time between coats should not be more than one (1) or two (2) minutes max. If more time has passed, you must wait 4 hours or so to allow all the water to exit the membrane before applying another coat. Failure to allow proper water evacuation before installing the next coat could result in separation between the layers due to water accumulation.**
3. **Always wash surfaces with water to remove any and all salt residues before applying another coat.**
4. **The Aussie 502 membrane can be applied in many different applications and substrates. These installation instructions are “General” in nature and will not cover every scenario. Please consult with AVM Industries prior to applying the Aussie 502 membrane on a job.**



Installation Instructions

AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Membrane Inspection

1. Visually inspect all coated surfaces to ensure a full adhesion and proper coating application, especially at corners, drainage areas, footings and other hard-to-reach areas.
2. Carefully inspect the membrane for pinholes. (The membrane should be completely and evenly sealed) If pinholes are found, apply additional coats of the Aussie Membrane 502 until the imperfections are sealed.
3. If bubbles, or other imperfections are found, remove them and the surrounding area by cutting them out and reinstalling the membrane per the membrane installation instructions. Or, you may also gently use a small blow torch to pop the bubbles. Then, reapply additional membrane material as needed.
4. **Flood testing is highly recommended whenever possible. Do not flood test until membrane has fully cured.**

The Following Pages Contain the Specifications Listed Below:

1. Flood Testing Procedures
2. Protection Board / Drainage Board / Drainage System Specifications
3. Repair Specifications
4. Coverage Charts and Technical Information



Installation Instructions

AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Flood Testing Specifications

It is not always practical or feasible to do a flood test, but when it can be done it can be very helpful in finding leaks and fixing them quickly and inexpensively. (Leak detection methods are also recommended) Examples: 1. Planter boxes where the drains can be sealed and the planter boxes filled with water. 2. In some applications, the Aussie Membrane 502 is buried underneath the finished surfaces (such as tile or concrete topping slabs) and is not readily accessible for repairs. If leaks are found, the only way to repair them would be to remove some of the tile or topping slab, repair the damaged membrane, and then reinstall the tile or topping slab. This would be time consuming, inconvenient and costly. If all possible, dam these areas and fill with water to test for waterproofness before proceeding to the next step.

Flood testing provides an efficient and economical method to test the waterproofness of the membrane prior to proceeding with the installation of the protective component or the finished surfaces. Following are some guidelines for flood testing.

1. Make sure the membrane is fully cured.
2. Visually inspect corners and other hard to reach areas for openings where water might penetrate.
3. Fix all openings prior to proceeding with the flood test.
4. Close the drains using drain plugs or other methods
5. Be careful not to damage the membrane while walking on it or plugging the drains.
6. Slowly fill the deck area with water. Do not overfill. Be extra careful when flood testing on decks built over wood substrates. The extra weight of the water could cause damage or cause the deck to collapse. If you are not sure the deck can support the extra weight of the water, consult with an architect or structural engineer before flood testing.

Protection Board / Drainage Board / Protective Panels / Root Barriers / Drainage System Specifications

- PB:** Protection Boards: Several types of Protection Boards are commonly used and acceptable for use with the Aussie Membrane 502.
1. 1/2" fanfold foam boards such as Insulfoam.
 2. Foam panels, typically 1/2" thick or more.
- PP** Asphaltic Protective panels 1/4" or thicker. Consult with AVM or Engineer for proper thickness.
- DB:** Drainage Boards: Several types of Drainage Boards are commonly used and acceptable for use with the Aussie Membrane.
1. For vertical applications use AVM Drain Board 6000.
 2. For horizontal applications use either AVM Drain Board 6000 for pedestrian topping slabs not exceeding 4" thick or use AVM Drain Board 9000 when the topping slabs will exceed 4" in thickness or the deck is for vehicular use.
- FD:** French Drains: At footings, cold joints and other areas where water could accumulate, use a french drain system (or other approved method) to remove water and release hydrostatic pressure. If weep-holes are used, make sure to cover the weep-hole's entrances with gravel, fabric or other acceptable means to prevent the weep-holes from clogging. Make sure a sufficient number of weep-holes are installed and that they are large enough to handle the amounts of water expected to pass thru them.

Refer to Aussie Membrane 502 details for further information.



Installation Instructions AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Repairing Damage to the AUSSIE MEMBRANE 502 (When the substrate is not damaged)

Damage Description (1)

A leak or a bad section of the AUSSIE MEMBRANE 502 is detected. No protection or finished surfaces are installed.

Method of Repair

1. Cut out an area of the membrane 6" larger in diameter than the defective area.
2. Clean the substrate of any loose materials using a scraper or a stiff brush.
3. Remove anything else that might prohibit bonding of the new materials.
4. Reapply the AUSSIE MEMBRANE 502 to the damaged area following the appropriate installation instructions. (min 4" overlap)
5. Allow to properly cure. Once cured, visually inspect the repaired area for imperfections.
6. (Optional) Do another flood test.

Damage Description (2)

A leak or a bad section of the AUSSIE MEMBRANE 502 is detected. Protection/Drainage Board is installed. No finished surfaces are installed.

Method of Repair

1. Remove Protection/Drainage boards from an area 9"-12" larger in diameter than the defective area.
2. Cut out an area of the membrane 6" larger in diameter than the defective area.
3. Clean the substrate of any loose materials using a scraper or a stiff brush.
4. Remove anything else that might prohibit bonding of the new materials.
5. Reapply the AUSSIE MEMBRANE 502 to the damaged area following the appropriate installation instructions. (min 4" overlap)
6. Allow to properly cure. Once cured, visually inspect the repaired area for imperfections.
7. (Optional) Do another flood test.
8. Re-install Protection/Drainage Board.

Damage Description (3)

A leak or a bad section of the AUSSIE MEMBRANE 502 is detected. Protection/Drainage Board is installed. Topping surface is installed as well.

Method of Repair

1. Gently as possible, remove the finished surface from an area 16"-24" larger in diameter than the defective area. Be careful not to damage the membrane underneath.
2. Remove Protection/Drainage boards from an area 9"-12" larger in diameter than the defective area.
3. Cut out an area of the membrane 6" larger in diameter than the defective area.
4. Clean the substrate of any loose materials using a scraper or a stiff brush.
5. Remove anything else that might prohibit bonding of the new materials.
6. Reapply the AUSSIE MEMBRANE 502 to the damaged area following the appropriate installation instructions. (min 4" overlap)
7. Allow to properly cure. Once cured, visually inspect the repaired area for imperfections.
8. (Optional) Do another flood test.
9. Re-install Protection/Drainage Board.
10. Re-Install Finished Surface Materials.

Repairing Damage to the AUSSIE MEMBRANE 502 (When the substrate is damaged)

Damage Description (4)

A leak or a bad section of the AVM Membrane is detected and the substrate is damaged as well.

Method of Repair

You MUST contact AVM Industries, an authorized AVM Industries installer or a professional contractor or engineer to review the damage. Since the substrate is damaged, the repairs must be done very carefully to ensure the Fire Resistance (if applicable) and or the Structural Integrity of the structure has not been compromised and that structural repairs will be properly done.



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Installation Instructions
AUSSIE MEMBRANE 502 - Fluid Applied Waterproofing Membrane

Coverage Charts & Technical Information

The following coverages are based on controlled tests. Actual coverages may vary.

Materials	One Kit Makes	One Kit Covers at 1/16" Thick
Optional Parge Coat - AVM Crete 6200	4 Gallons of Mixed Product	80 - 100 Square Feet
Weight of 1 Sqft of AVM Crete 6200 installed and Cured		1 Sqft at 1/16" thick = ~0.625 Lbs

Materials	Over Block Walls (CMU)	Over Concrete
Adhesive 501	150-200 Sqft/gal	200-300 Sqft/gal
Aussie Membrane 502	22-25 Sqft/gal at 60 Dry Mils	25 Sqft/gal at 60 Dry Mils
Mat 800 6"x300 feet long for cant strips & corners	270-300 Feet. Allow 5%-10% waste	270-300 Feet. Allow 5%-10% waste



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Technical Data - AUSSIE MEMBRANE 502		
Color:	Dark brown. After drying: black	
Specific Gravity:	1.189 gr/cm ²	
Flash Point:	Non-flammable	
Service Temperature:	15°F-177°F (-10°C to +80°C)	
Application Temperature:	42°F-132°F (+5°C to 55°C)	
Tensile Strength:	>15.4 Lbs (>7 kg)	ASTM D412
Elongation at break:	>1000%	ASTM D412
Resistance to water pressure 1 tm 24 hr	Passed	ASTM D751
Water vapor transmission	4.0 gr/m ² 24 hr	ASTM D96
Recovery	85%	IS 1536
Creep At 177°F (80°C)	No Creep	DIN 52123
Resistance to Standing Water	Passed	ASTM D2939
Bacterial Attack in soil 30 days @ 105°F (40°C)	Passed	ASTM D2939
Crack bridging	>3/16" (>5mm)	IS 1731
Certifications:	ISO 9002, Green Label, I.Q. Net (International Certification Network)	

General Information - AUSSIE MEMBRANE 502	
Shelf Life: (Liquids / Salt)	One year from manufacturing date in original unopened packaging. / Salt: No limit
Storage Conditions:	Store dry/shade at 50-90F. If frozen, discard
Cement Mixing Ratio:	One 50 Lbs bag Aggregate 200 to 1.0-1.25 gal additive 7400
Adhesive 501 Color	Red
AUSSIE MEMBRANE 502 Color:	Black
Additive Color:	AVM Additive 7400 is Milky/Clear
Slurry Coat	AVM Crete 6200 is Gray.
Slurry Coat Strength:	AVM Crete 6200 achieves over 6200 PSI when cured, providing excellent protection and bonding

Packaging:	AVM Aggregate 200 50 LB Bag AVM Additive 7400..... 2.0/5.0 Gal pails AVM Adhesive 501.....5.0 Gal pail Aussie Membrane 502 264 Gal Tote Mat 800 6" wide x 300 Ft. Long..... 150 Sq. Ft	Approximate Shipping Weights:	AVM Aggregate 200..... 50 Lbs/Bag AVM Additive 7400 2.0/5.0 Gal 18/46 Lbs AVM Adhesive 501 41.0 Lbs Aussie Membrane 502 2,625 Lbs Mat 800 6" wide x 300 Ft. Long 3.0 Lbs
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