Water Armor AWB

VOC: <1% by Weight
VOC: 10 g/l
Manufacture Locations:
30058 • 77474• 84651

Packaging: 5 gallon (19L) pail

Pail Weight: 60 lbs. (27 kg)

Shelf Life: 2 years

Storage: Protect from extreme heat: 90°F (32°C), freezing and direct sunlight.

Coverage (estimated per pail)
Roller: 450-500 sf (42-46 sm)
Spray: 300-350 sf (28-32.5 sm)
Trowel: 200-250 sf (18-23 sm)

Dry to Touch: 1 hour @ room temperature

Recoat Time: 2 hours @ room temperature

Drying Time: 12 hours @ room temperature

Application Range: 40°-110°F (5°-43°C)

Exposure: Up to 6 months

Product Test Standards

Solids Content: 69.52% solids by wt (55.05% by volume)

Tensile Bond, ASTM C297/E2134/AC212: 30-200 psi

Freeze-thaw ASTM E2485/AC212: Pass

Water Resistance, ASTM D2247/AC212: Pass

*Water Vapor Transmission, ASTM E96 Proc. B/AC212: 30 perms** @ 10 mils, 15 perms @ 20 mils*

Air Permeance, ASTM E2178: 0.001 cfm/ft^2 @ 1.57 psf, 0.001 L/s/m^2 @ 75 Pa

Air Leakage, ASTM E2357: 0.0006 cfm/ft^2 @ 1.57 psf (0.003 L/s/m^2 @ 75 Pa), 0.04 cfm/ft^2 @ 6.24 psf (0.02 L/s/m^2 @ 300 Pa)

Structural Performance, ASTM E1233/AC212: Pass

Racking, ASTM E72/AC212: Pass

Restrained Environmental, AC212: Pass

Water Penetration, ASTM E331/AC212: Pass

UV Exposure: Rated to 6 months

Accelerated Aging, AC212: Pass

Hydrostatic Pressure Test, AATCC 127/AC212: Pass

Surface Burning Characteristics, ASTM E84: Flame Spread < 25, Smoke Developed < 450

Intermediate Multi-Story Fire Test, NFPA 285 (UBC 26-9): Pass

Nail Sealability, ASTM D1970: Pass @ 22 mils

Heat and Smoke Release Rates, ASTM E1354, IBC Section 1403.5: Peak Heat Release Rate = 32 kWm^2, Total Heat Release Rate = 3.6 MJ/m^2, Effective Heat of Combustion = 2.5 MJ/kg

*** Defined as a Class III vapor retarder per IBC and IRC*

Water Armor AWB is a high quality 100% acrylic flexible air and water barrier. Water Armor AWB is intended for roller or spray application but also can be troweled or brushed into place. Water Armor AWB forms a continuous air and water barrier that protects approved substrates from incidental water damage.

- **100% Coverage, Fully adhered to substrate**
- **Vapor open/permeable with low air infiltration rate**
- **Used as water barrier and flashing, 60-minute Grade D equivalent**
- **Adheres to most common building materials**
- **Easy to apply, water based for easy cleanup**
- **Exposure up to 6 months**
- **Low VOC, <1% by weight, 10 g/L**

Application Procedure

Job Conditions - Air and substrate temperature for application of Water Armor AWB must be 40°F (5°C) or higher and must remain 40°F (5°C) or higher for a minimum of 24 hours. Provide temporary protection to protect the wall system from damage until permanent flashings, caps and sealants are installed. Store materials within prescribed temperature limits and out of direct sunlight. Working and drying times are based upon normal room temperature conditions and will vary with temperature and humidity.

Preparation - The substrate must be approved by T. Clear Corp., clean, dry, structurally sound and free of efflorescence, oil, grease, form release agents and curing compounds or anything that would affect bond. Painted surfaces are not acceptable and must be removed. Substrates must be flat and free of fins or planar irregularities greater than 1/4" in 10'-0" (6.35 mm in 3.05m).

Concrete – Must have cured a minimum of 28 days prior to the application of Water Armor AWB. If form release agents or curing compounds exist on the surface, they must be removed with a solution of muriatic acid or similar product (with appropriate precautions). Remove any residual acid by flushing with water.

Brick/Masonry – If joints are not struck flush, multiple coats may be required. Contact T. Clear Corp. for more information.

Sheathing Applications - Sheathing gaps must be 1/4" (6.4 mm) or less. For gaps larger than 1/4" (6.4 mm) Water Armor TG and Water Armor Flashing Tape may be used. Gap wood-based sheathing per manufacturers recommendations, typically 1/8" (3.2 mm) minimum.

Mixing - Thoroughly stir Water Armor AWB into a homogenous consistency. Do not add water, over mix, or add accelerators or retarders to Water Armor AWB.

Application – Water Armor AWB is applied by first treating the joints and fastener locations where sheathing is used, then coating the entire surface using brush, roller, trowel or airless spray equipment techniques. When using a foam roller, a maximum ¾" (19 mm) nap is recommended. Apply Water Armor AWB in an even, continuous coat, maintaining a wet edge of approximately 15 mils thickness. Oriented Strand Board and other porous substrates require two (2) coats of Water Armor AWB. For moisture protection, Water Armor AWB must be applied as a continuous barrier of 10 mils dry thickness with no breaks or skips, although some areas will appear lighter than others due to the application process. The Water Armor AWB application need not look like a painted surface.

Joint Treatment—Apply a thin layer of Water Armor AWB to the joints and embed Water Armor Flashing Tape into the wet mixture and trowel smooth. Alternatively place and center Water Armor AWB Mesh over all joints, corners and gaps in the substrate. Immediately embed Water Armor AWB into the reinforcing mesh and spot fasteners using a paint brush or trowel and allow to dry.

Water Armor AWB may be flashed into window, door and other openings using the same techniques for sheathing applications. Any remaining gaps should be filled with Water Armor-TG (Trowel Grade).

Wall Treatment—Apply Water Armor AWB to the wall surface using the foam roller, trowel or by spray applying and backrolling to a uniform thickness of 15 mils wet, 10 mils dry with no pinholes or voids.

Clean Up-Tools and equipment can be cleaned with soapy water when Water Armor AWB is wet.

T CLEAR CORPORATION

tclear.com

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Water Armor AWB

Approved Substrates

ProTEC ®
Util-A-Crete®
ProGUARD®
Exterior gypsum sheathing (ASTM C1396)
ASTM C1177: Sheathing: Dens Glass Gold®, GlasRoc®, FiberBond®, Gold Bond e2xp®
Durock®, PermaBase®
Concrete
Brick
Masonry
Exterior Plywood
Oriented Strand Board (OSB)
Huber Zip (Consult with Huber)
Most metals and PVC
Others approved in writing

Sealant Bond Compatibility**

Adfast Corp.: Adseal DWSP1940 Series, Adseal 4600, Adseal 4580, Adseal 1940

*Dow Corning: 795 Silicone***

Pecora Corp.: 864NST, 890NST, 890FTS, 895NST[A], Dynatrol I-XL Hybrid

*Sika: Silaflex 15 LM***, Silaflex-2C NS*

Master Builders Solutions: MasterSeal NP1

Tremco: Dymonic 100

*Most polyurethane sealants***
***field verify bond (varies)*
[A]With P120 Primer with Water Armor AWB

COLD WEATHER LIMITATIONS

Application range is at ambient temperatures between 25° and 100°F (-3.8° and 38°C) during application and drying period. Strictly adhere to Special Instructions for Cold Temperature Application if installing below 40°F (4°C). Do not apply if substrate or ambient temperature is less than 25°F (-3.8°C), or if temperatures will go below 25°F (-3.8°C) at any time during the application or drying period. Do not apply if the surface temperature is less than 5°F (2.8°C) above the ambient dew point temperature.

SPECIALTY APPLICATION - MEDIUM AND HIGH BUILD

Application for Medium-Build Specification: apply one or two coats to achieve minimum 20 mils wet film thickness (WFT). If applied by roller apply two coats to achieve minimum 20 mils WFT. For CMU substrates apply two or three coats to achieve 20-60 mils WFT.

Application for High-Build Specification: apply two or three coats to achieve 40 mils WFT. If applied by roller apply three or more coats as needed. For CMU substrates apply multiple coats to achieve 40-60 mils WFT.

IMPORTANT: the condition of the substrate may dictate thicker application or more coats to achieve a VOID and PINHOLE FREE SURFACE, particularly on substrates like concrete masonry where CMU composition, unit weight (lightweight or normal weight), porosity, joint profile, and other variables may exist. For “rough” CMU wall surfaces level with T. Clear approved Base Coat before applying the coating. Use the mock-up and site tests as the basis for the work. Some highly absorbent glass mat gypsum sheathing substrates may require back rolling to achieve a VOID and PINHOLE FREE surface. Avoid excess film build-up of wet material to prevent sag, especially on non-porous surfaces and during cold or damp weather. Work away from sun during application.

SPECIALTY APPLICATION - COLD WEATHER

Special Instruction for Cold Temperature Application: T. Clear Water Armor AWB may be applied at temperatures less than 40° down to 25°F (4° down to -3.8°C), provided certain conditions are met:

1. Pre-condition Water Armor AWB to 65°-75°F (18°-24°C) for a minimum of 24 hours.
2. Confirm and maintain substrate and ambient temperatures are minimum 25°F (- 3.8°C) and rising at the time of application and do not fall below 25°F (-3.8°C) until Water Armor AWB is fully dry.
3. Apply Water Armor AWB over standard sheathing substrates – glass mat gypsum, plywood, or OSB.
4. Confirm substrate surfaces are frost-free, dry and remain dry throughout the application and curing process.
5. Apply Water Armor AWB at a wet film thickness of no greater than 15 mils WFT.
6. Apply Water Armor AWB with T. Clear Water Armor Flashing Tape for joint and rough opening treatments.
7. Apply in dry weather and protected from rain or other precipitation for at least 24 hours and relative humidity (RH) remains at or below 50%.

IMPORTANT: Final water-resistive barrier and air barrier material properties, and film toughness, depend on temperatures rising above freezing.

LIMITATIONS

- Not for use as an exterior finish, note exposure limitations on front page. When adhering an approved EIFS or CIFS® to the surface assure it is clean, dry, and free of surface contamination. Remove any dirt or surface contamination before adhesive attachment.
- Allowable in-service temperature range: -40° to 180°F (-40° to 82°C).
- Fire-retardant or pressure treated plywood must be dry with surface free of salts or other chemicals migrating from within the wood. Test adhesion to be sure of desired results.
- Use a slip sheet, typically one layer of building paper between Water Armor AWB and stucco or adhered masonry veneer over metal lath.

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