



Air Barrier C3

DS-36621-0223

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

Air Barrier C3

2. MANUFACTURER

LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235

Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684

Website: laticrete.com

3. PRODUCT DESCRIPTION

AIR BARRIER C3 is a ready-mixed Class 3, liquid waterproof air barrier membrane. It is applied directly to approved substrates and will function as a vertical above grade waterproof air barrier when combined with various other LATICRETE Flashing components.

Uses

- Designed for use as a Class III air barrier membrane when placed over exterior rated sheathing.
- Bridges up to 1/4" (6mm) gaps on sheathing board joints with LATICRETE Flashing Sealant.
- Performs as a component of an air barrier assembly when properly tied in with other wall elements within the building envelope.

Advantages

- **Waterproof** Minimizes risk of water damage and associated repair or replacement costs

- **Vapor Permeable** Minimizes risk of condensation in wall from water vapor diffusion
- **Structural** No air leakage between the sheathing; rigid and stable under air pressure loads; does not tear or blow off the wall with wind
- **Seamless** No tears, holes, or mis-lapped joints that can compromise performance in service
- **Durable** Does not tear or lose its effectiveness with exposure to weather during construction or while in service
- **Spray Applied via Airless Spray Equipment** Easy, fast installation; does not require specialized spray equipment
- **Liquid Formulation - Water Based** Safe, non-toxic, VOC compliant, saves time and money when installing the product, does not require highly skilled labor
- **Safe for Exterior Use** Low VOC, low flame spread and smoke development

Suitable Substrates

- Oriented Strand Board (OSB)
- Glass Mat Gypsum Exterior Sheathing Panels
- Concrete Masonry Units (CMU)
- Concrete
- Exterior Glue Plywood

Packaging

Commercial Unit

5 gal (18.9 L) pail liquid (36 commercial units/pallet)

Approximate Coverage

Commercial Unit: 500 ft² (46.4 m²)

Apply a single coat for a total dry thickness of 10-15 mils, 0.01-0.02" (0.3-0.4mm); for a total of 500 ft² per 5 gallons/46.4m² per (18.9 L) pail.

- Exterior Rated Gypsum Sheathing: 550-650 ft² (51-60 m²)
- Plywood: 425-525 ft² (39-49 m²)
- OSB: 400-500 ft² (37-46 m²)
- CMU: (2 coats): 100-300 ft² (9.3-28 m²)

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

Limitations

- Apply only when the surface and ambient temperatures are above 40°F (4°C) and below 100°F (38°C) during application and drying period.
- Not recommended for use when cool, damp conditions exist for prolonged periods. Cool, damp conditions retard drying and may require extended periods of protection against rain or freezing.
- Do not use on damp surfaces, below grade, or on surfaces subject to water immersion.
- Fire-retardant treated or pressure treated plywood substrates must be dry and free of all bond-inhibiting materials.
- Not recommended for spanning holes or sheathing joints more than 1/8" (3mm) wide. Use LATICRETE Flashing Sealant for joints 1/8" or greater.
- Maintain temperatures above 40°F (4°C) during drying period for at least 24 hrs.
- Provide adequate ventilation during application and drying period.
- Ventilate temporary heaters to the exterior to prevent water vapor from accumulating on or within the wall assembly materials.
- For sheathing use a slip sheet (typically one layer of building paper) between AIR BARRIER C3 and metal lath in portland cement stucco and similarly constructed wall assemblies. Paper may be omitted when paper-backer stucco lath or cement backer units are used.
- Allow wet mortars/renders to cure for a minimum of 72 hours at 70°F (21°C) / 50% R.H. prior to installing AIR BARRIER C3

Cautions

- Consult SDS for safety information.
- Test assemblies when necessary to verify performance.
- Do not use power, power actuated or other fastening tools/methods that can damage the air barrier, water resistive barrier or substrate.
- Review local building codes and obtain any required approvals before using AIR BARRIER C3. Placement of AIR BARRIER C3 in a wall assembly to be determined by project design professional.
- It is the responsibility of the project design professionals to ensure that the air barrier, vapor barrier, insulation, and waterproofing membrane are all properly placed to prevent the movement of air and moisture into and out of the building to ensure maximum performance.
- Mechanical anchors, brick ties, furring strips, finish cladding supports or other penetrations through AIR BARRIER C3 should be sealed and made air and watertight.
- For all finishes: The successful performance and installation of exterior finishes is dependent upon the proper design and construction of the finish, adjacent building materials and systems of the assembly.

Follow all applicable industry guidelines and building codes for the respective utilized finish.

4. TECHNICAL DATA



VOC/LEED Product Information

Total VOC content pounds/gallon (grams/liter) of product in unused form is 35 g/L (0.29lb/gal).

This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Applicable Standard

- ASTM E2357: Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
- ICC – ES AC212: Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over Exterior Sheathing.
- ASTM D1970: Nail Sealability

Physical Properties

Physical Properties	Test Method	Specifications	Results
Crack Isolation	ANSI A118.12	≥ 1/16"	Pass
Crack Bridging	ASTM C1305	No crack/pinhole	Pass
Nail Sealability	ASTM D1970	No leakage	Pass
Air Leakage	ASTM E2357	0.2 L/(s·m ²)	0.004 L/(s·m ²)
Flame Index	ASTM E84	≤ 25	0
Smoke Index		≤ 450	0
Tensile-Gypsum	ASTM C297	>15 psi	17 psi
Tensile - Alum.		>15 psi	36 psi
Tensile - PVC		>15 psi	25 psi
Tensile - CMU		>15 psi	59 psi
Pull - Concrete	ASTM	>16 psi	361
Pull - Gypsum	D4541	>16 psi	100
Freeze-thaw	AC 212 4.2	No crack/erosion	Pass
Water Resistance	AC 212 4.3	No crack/defect	Pass
Vapor Permeance	ASTM E96 -A	1 - 10 perm	3 perm
Water Penetration	AC 212 4.5	No peneration	Pass

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION

AIR BARRIER C3 is a ready-mixed Class 3, flexible waterproof air barrier membrane. It is applied directly to wall sheathing and functions as a vertical above grade waterproof air barrier when combined with various other LATICRETE Flashing components. AIR BARRIER C3 is installed in conjunction with other building materials; it must be properly integrated so that water is diverted to the exterior of the wall system.

Apply only to sound and clean, dry, properly prepared, frost-free surfaces. Sheathing joints, inside and outside corners and rough openings must be treated with LATICRETE FLASHING SEALANT. Spot surface defects such as overdriven fasteners, knots, or other voids in sheathing surface can be treated with LATICRETE FLASHING SEALANT.

For adhered veneer applications, substrates must be structurally sound, stable and rigid enough to support the intended finish. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/600 where L=span length.

Over Exterior Gypsum Sheathing, Glass-Mat Sheathing, Exterior Plywood and Oriented Strand Board (OSB):

Apply AIR BARRIER C3 to the prepared substrate using spray equipment that can support a minimum 1 Gallon per minute (GPM) and a .031 mil tip at 3000+ psi, or with the appropriate size nap roller in a single, uniform coating at a wet thickness of 18 mils. For roller application over OSB, glass-mat gypsum sheathing, and plywood: use a 1/2" (13 mm) nap roller. OSB sheathing may require touch-up with a second coat of AIR BARRIER C3 where wood strands are raised from the surface. Inspect surface after initial application of AIR BARRIER C3 and touch-up as needed.

Over Concrete Masonry Wall Construction: Concrete masonry wall construction must be structurally sound, clean, dry, and free from damage, frost, and all bond-inhibiting material, including dust, dirt, mold, algae, and efflorescence. Treat non-structural cracks up to 1/8 inch (3 mm) wide by filling with LATICRETE FLASHING SEALANT. Rake the crack with a sharp tool to remove loose or friable material and blow clean with oil-free compressed air. Apply LATICRETE FLASHING SEALANT by trowel or putty knife over the crack and smooth with the knife or trowel. For moving cracks consult a structural engineer. Do not use LATICRETE FLASHING SEALANT to repair moving cracks or to fill expansion joints in construction. Protect materials from rain and freezing until dry. For roll application over CMU use a 1/2" (13 mm) nap roller. The CMU may require touch-up with a second coat of AIR BARRIER C3. Inspect surface after initial application of AIR BARRIER C3 and touch-up as needed.

Spray-applied over CMU: Apply AIR BARRIER C3 uniformly with an airless spray, or other suitable spray

equipment. Back-roll to fill the surface and allow to dry. If needed apply a second uniform coat of AIR BARRIER C3 and back-roll to achieve a void and pinhole free surface. Depending on the condition of the surface a minimum of 15 to 18 wet mils up to a maximum of 30 wet mils per coat is required. Apply additional coats if needed to achieve a VOID AND PINHOLE FREE surface.

Seal all penetrations through the wall.

Placement of AIR BARRIER C3 in a wall assembly to be determined by project design professional.

6. AVAILABILITY AND COST

Availability

LATICRETE materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- 1 Year Product Warranty
- 5 Year Product Limited Warranty – Air Barrier

8. MAINTENANCE

Non-finish LATICRETE and LATAPOXY® installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235

Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at laticrete.com. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS230.05AB: 5 Year Limited Product Warranty, Air Barrier
- DS 070.0: LATAPOXY Waterproof Flashing Mortar

- DS 237.0: Waterproofing/Anti-Fracture Fabric
- DS.36617: LATICRETE Flashing Sealant