

# The science to build smarter.

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## 3M™ Air and Vapor Barrier 3015

### Product Description

3M™ Air and Vapor Barrier 3015 is an air, moisture and water impermeable membrane with an aggressive, high-tack adhesive that does not require the use of a primer on most construction surfaces. It even adheres to damp surfaces. Unique acrylic pressure sensitive adhesive aggressively sticks and stays stuck both at lower and higher application temperatures than traditional air barrier products.

The proprietary backing seals around hand driven nails and staples to prevent moisture intrusion. This backing is also tough, resists punctures and tears, yet it is thin to fit conveniently into corners.

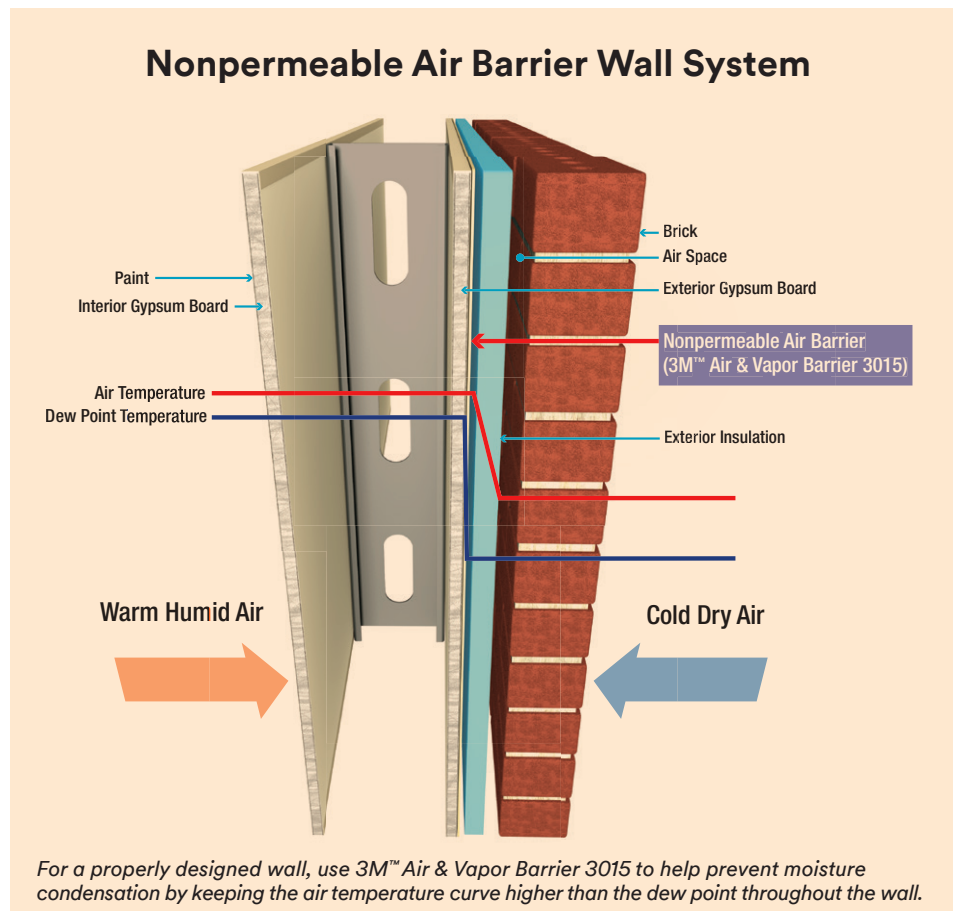


### Advantages

Using the most advanced air barrier technologies, 3M™ Air and Vapor Barrier 3015 is a self-adhered film engineered to help control the indoor climate. It reduces air leakage and uncontrolled airflow from the building envelope, prevents moisture ingress and helps improve indoor air quality.

- **No primer required.** Pressure-sensitive adhesive technology eliminates the time and materials usually required for applying air barriers.
- **Compatible with common construction materials and sealants.** The special adhesive sticks well to concrete, concrete block, anodized aluminum, galvanized metal, plywood, extruded polystyrene and most exterior gypsum sheathing. It is compatible with a wide range of common sealants, including: synthetic rubber, butyl, polyurethane, silicone and silane-terminated hybrid sealants.
- **Hot and cold temperature application.** Apply 3M™ Air and Vapor Barrier 3015 in temperatures as high as 150°F (66°C) or as low as 0°F (-18°C).
- **Self-seals if penetrated.** Seals around nails and staples to further reduce moisture intrusion. It passes ASTM D1970 both before and after thermal cycling.
- **Tough and flexible.** Flexible enough to fit into corners, under siding and around curved surfaces — tough enough to resist punctures and tears.
- **Lightweight and easy to use.** A standard 36" roll of 3M™ Air and Vapor Barrier 3015 weighs 21 pounds, yet it outperforms thicker, competitive membranes weighing up to 3 times more!
- **UV resistant up to 12 months.**
- **NFPA® 285 compliant** (as part of an approved wall assembly).
- **Water Vapor Transmission.** Perm rating = 0.14 per ASTM E96 (desiccant method), 0.26 US perm per ASTM E96 (water method) ensuring a better moisture barrier.

One of the basic principles of air barrier design is to ensure that the air temperature curve within the wall assembly is always higher than the dew point temperature curve, as shown in the diagram. If the dew point temperature curve crosses the air temperature curve, moisture will condense within the wall, which can compromise building health and performance.



## Principal Applications

- Designed for use as a self-adhered air, vapor and water barrier for new and remedial commercial applications.
- Can be installed onto exterior wall sheathing and behind exterior cladding.
- Can be used to transition the building envelope from one substrate to another, or other openings and penetrations.

## Installation

### Surface Preparation

*Refer to 3M™ Air and Vapor Barrier 3015 Installation Guide for detailed surface preparation information.*

- To obtain the best adhesion, 3M™ Air and Vapor Barrier 3015 should be installed when outdoor temperatures range from 0°F to 150°F (-18°C to 66°C).
- Surfaces should be clean, free from dirt and debris and have not absorbed water.
- Surfaces should be free of any damaged, unsupported areas, sharp protrusions or voids.
- Concrete must be cured a minimum of 7 days before application.
- Block or brick walls should have mortar joints stuck flush.
- While 3M Air and Vapor Barrier 3015 can be applied as low as 0°F (-18°C), surfaces must be clear of snow, ice or frost.
- 3M™ Air and Vapor Barrier 3015 adheres to most common building materials. For difficult to stick to surfaces, test adhesion before application.

## Installation

### Application Instructions

Refer to 3M™ Air and Vapor Barrier 3015 Installation Guide for detailed application information.

- Membrane has measurement markings at 6 inch grid intersections for ease in alignment and cutting.
- 3M Air and Vapor Barrier 3015 must be lapped a minimum of 2" on sides and ends. Cut membrane to desired length and wind up into a roll for easy handling. Fold the starting edge back over itself to create the paper release liner. Peel back the liner to expose a starting 2-3 inch adhesive strip.
- 3M Air and Vapor Barrier 3015 does not need a primer on most construction surfaces. It is ready to apply as soon as the release liner is removed. The adhesive is very aggressive and quickly bonds to substrates. Do not contaminate the starting strip with dust or debris before applying it to the intended surface. Be careful when aligning product on the wall as repositioning may be challenging.
- Once aligned, set the membrane in place by rolling the product back against the exposed adhesive. Unwind the roll while simultaneously pulling the release liner, maintaining pressure against the wall to tack the membrane in place. Wipe the membrane down with a feathering motion from the middle outward to obtain a smooth surface. For best air barrier membrane performance, roll the membrane with a rubber roller to ensure a tight seal against the wall and between overlapped edges.
- Detail work must be carefully executed to ensure a continuously sealed building envelope.
- Rough openings may be flashed with detail widths of 3M Air and Vapor Barrier 3015, 3M™ Ultra Conformable Flashing Tape 3015UC, or 3M™ 3015 Air and Vapor Through Wall Flashing Tape 3015TWF.

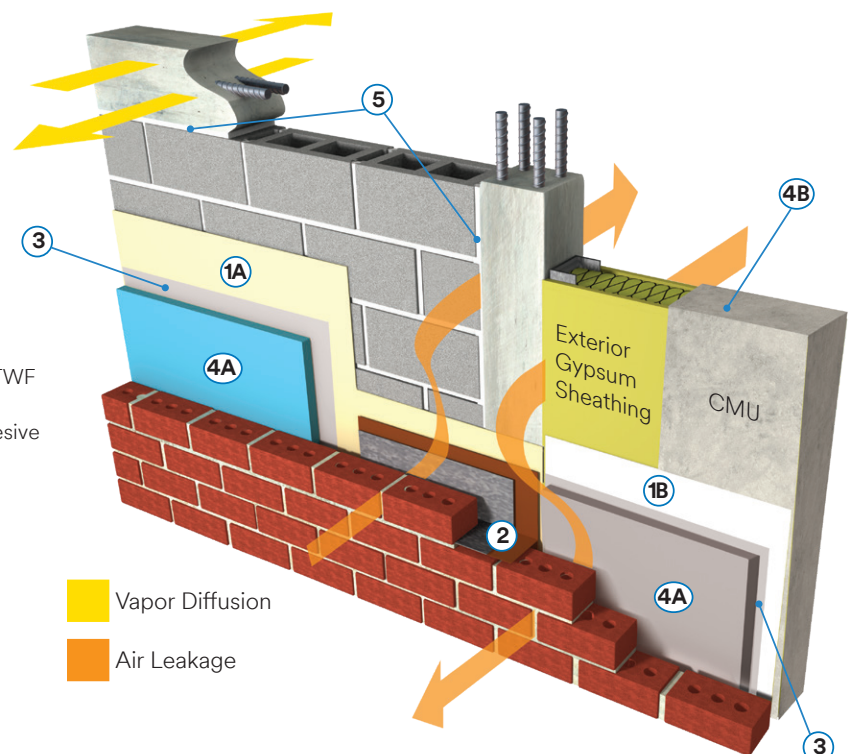
## Performance Standards

The unique adhesive in this product provides a combination of both cold and hot temperature adhesion to most substrates, helping to extend the construction season. This adhesive even adheres to damp surfaces that have not absorbed water, like metals, glass and plastics.

- Service temperature from -40°F to 240°F (-40°C to 116°C)
- Resists UV exposure for up to 12 months
- Meets the requirements of ASTM E2178 and CAN/ULC S741-08
- Assemblies of 3M™ Air and Vapor Barrier 3015 and 3M™ Polyurethane Construction Sealant 525 or 3M™ Polyurethane Sealant 540 meet the requirements of ASTM E2357 and CAN/ULC S742-11

An air barrier system is designed to control the unintended movement of air flow into and out of the building enclosure.

- ①A 3M™ Air and Vapor Barrier 3015
- ①B 3M™ Vapor Permeable Air Barrier 3015VP
- ② 3M™ Air and Vapor Through Wall Flashing Tape 3015TWF
- ③ 3M™ Scotch-Weld™ HoldFast 70 Cylinder Spray Adhesive
- ④A Continuous Insulation
- ④B Fiberglass batt insulation
- ⑤ Closed-cell foam insulation or approved sealant



# 3M™ Air and Vapor Barrier 3015

Refer to 3M™ Air and Vapor Barrier Technical Data Sheet for complete technical information.

Product Construction	Backing	Adhesive	Color	Liner
	Multilayer Elastomeric Film	Acrylic	Tan, semi-translucent	Polycoated Kraft

Typical Physical Properties	Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.		Test Method
	<b>Air Permeance of membrane</b> @ 75 Pa (0.3 in/wg.)	< 0.0002 L/s·m <sup>2</sup> (<0.00005 cfm/ft <sup>2</sup> )	
<b>Air Leakage of assembled wall</b>			
Opaque wall @ 75 Pa (0.3 in/wg.)	< 0.01 L/s·m <sup>2</sup> (<0.002 cfm/ft <sup>2</sup> )		ASTM E2357
Penetrated wall @ 75 Pa (0.3 in/wg.)	< 0.03 L/s·m <sup>2</sup> (<0.006 cfm/ft <sup>2</sup> )		ASTM E2357
Air Leakage Rate Classification	A1		CAN/ULC-S742
<b>Water Vapor Transmission</b>			
Desiccant Method	8 ng/Pa·s·m <sup>2</sup> (0.14 US perm)		ASTM E96
Water Method	15 ng/Pa·s·m <sup>2</sup> (0.26 US perm)		ASTM E96
<b>Water Resistance</b>			
55 cm (21.6 inches) of water for 5 hours	No Leakage		AATCC 127 (deviated)
<b>Low Temperature Flexibility</b>			
@ -30°C (-22°F)	Bend Test – pass Water Head Test – No Leakage		ASTM D1970, Section 7.6
<b>Nail Sealability</b>			
127 mm (5 inches) water head after 3 days	Dry / Pass		ASTM D1970, Section 7.9
Initial	Pass		ASTM E331/547 as modified per AAMA-711-07
After Thermal Cycling	Pass		Annex 1
<b>Wall Assembly Fire Test</b>			
Pass as part of various assemblies with foam plastic insulation	Pass		NFPA 285
<b>Surface Burning Characteristics</b>			
Flame Spread Index	15		ASTM E84
Smoke Developed Value	45		ASTM E84
Rating	Class A		ICC AC 38
<b>Backing Thickness</b>	5 mils (0.13 mm)		ASTM D3652
<b>Total Thickness (coated membrane)</b>	10 mils (0.25 mm)		ASTM D3652
<b>Tensile Strength (coated membrane)</b>	1740 psi (12 MPa)		ASTM D882
<b>Elongation at Break</b>	700%		ASTM D882
<b>Lap Adhesion</b>	40 oz/in (0.44 N/mm)		ASTM D3330
<b>Pull Adhesion</b>	16 psi (0.11 MPa)		ASTM D4541

# 3M™ Air and Vapor Barrier 3015

## Roll Information

Packaging		Rolls per BU		Case/ Pallet	Sq. ft. per roll	UPC
Size	Form	Case	Pallet			
2 3/8" x 75'	Solid	20	540	27	14.8	00076308143541
4" x 75'	2-2 Split	12	324	27	25.0	00076308143534
6" x 75'	3-3 Split	8	216	27	37.5	00051115812811
6" x 75'	2-4 Split	8	216	27	37.5	00051115632006
9" x 75'	2-7 Split	4	144	36	56.3	00051115634697
12" x 75'	2-10 Split	4	108	27	75.0	00051115632013
18" x 75'	7-11 Split	1	50	50	112.5	00051115632020
18" x 75'	Solid	1	50	50	112.5	00051115690198
36" x 75'	Solid	1	25	25	225.0	00051115632044
48" x 75'	Solid	1	20	20	300.0	00051115634703

**Storage** Optimum storage conditions are 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original packaging material.

**Shelf Life** To obtain best performance, use this product within 24 months from date of manufacture.

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ISO 9001

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Learn about 3M's advanced technologies for controlling airflow and optimizing the indoor climate at [3M.com/construction](http://3M.com/construction) or contact your 3M representative at 1-866-513-4026.



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