INNOVATIONS FOR LIVING™

OWENS CORNING INSULATION PRODUCTS

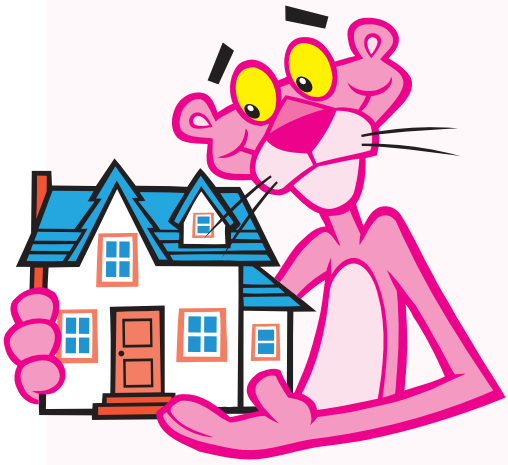
INSULATION

What exactly is an insulating system? The answer starts with the role insulation plays in your home. All insulating products are based on a single basic principle: heat moves from warmer to colder areas. On cold days, warm air from inside tries to get out. On warm days, the hot air outside is trying to get in. Insulation slows this process.

Which means the only way to maximize your home's energy efficiency is to insulate all the areas of your home susceptible to air infiltration and heat transfer. The Owens Corning Insulating System consists of many products working together throughout your home to deliver energy savings and year-round comfort.

IN THIS SECTION:

- R-15 for Exterior Walls
- R-38 for Attics
- PINKWRAP® Housewrap
- WeatherResist™ Flashing Tape



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R-15 FOR EXTERIOR WALLS (STANDARD FEATURE)

INSULATION

For existing walls, it may be best to have an insulation contractor add loose-fill blown insulation rather than take the wall apart and rebuild.

If your project is a new home, or a remodeling addition, you have a big opportunity to save energy by filling the new exterior walls with insulation, and adding Extra Insulating Power for Exterior Walls by sheathing the outside with FOAMULAR® rigid foam insulation.

Your exterior walls will be comprised of either 2x6 or 2x4 studs. 2x6 stud walls allow for more insulation because of their extra depth. Depending on local codes or your desired R-value for the wall, you may use 5 1/2" thick R-21. R-19 fiber glass batt insulation (6 1/4" thick) can also be used. Compressing it into a 2x6 cavity will lower the R-value to R-18. For 2x4 stud walls, the choice is R-15 which is 3-1/2 inches thick.

R-15	Application(s)	Product Information
	Finished attic Exterior walls	Length: 93" Width: 15" or 23" Thickness: 3 1/2" Sq. ft.: 125.9 or 178.3

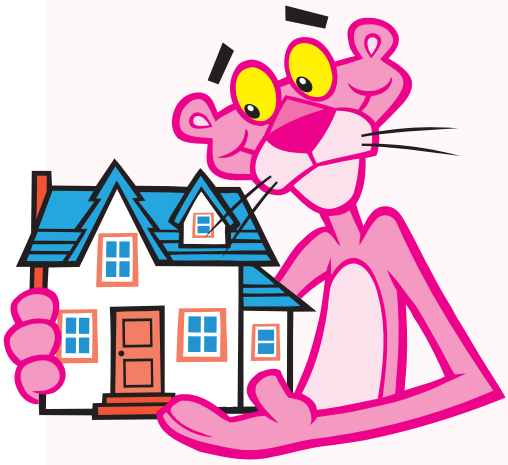
INSTALLATION & FEATURES

1. For standard wall heights, use precut batts rather than continuous rolls. Each piece of insulation is manufactured to the size of the most typical framing, which usually is built either 16 or 24 inches on center and about 92 inches high. These cut-to-size batts will make the job go faster and easier.

2. The insulation should fit snug against the studs and completely fill the cavity to the top and bottom plates. Cut batt insulation to fit snugly around obstructions such as electrical boxes, plumbing and plumbing vent lines.

3. When using kraft-faced batts with flanges, staple the flanges every 8 - 12 inches. The flanges can be stapled to the front or inside of the stud. Drywall installers prefer the facing to be stapled on the inside of the studs. Owens Corning PROPINK FastBatt™ Insulation does not have stapling flanges.

Note: Never leave faced insulation exposed. The facings on Kraft-and-foil-faced insulation will burn and must be installed in substantial contact with an approved ceiling, wall or construction material to help prevent the spread of fire in the wall, ceiling or floor cavities. Unfaced fiber glass is non-combustible.



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INSULATION

R-38 FOR ATTICS (STANDARD FEATURE)

The attic is one of the most important areas of a home to insulate. According to the U.S. Department of Energy (D.O.E.), up to 45% of a home's energy loss is through the attic. The D.O.E. recommends that most homes need an insulation value of R-38 in their attics, which is equivalent to 12" of Owens Corning PINK batt insulation.

R-38

Application(s)

Additional attic insulation

Uninsulated attic

Product Information

Length: 48"
Width: 16" or 24"
Thickness: 12"
Sq. ft.: 42.7 or 64

Note: Do not leave faced insulation exposed. The facings on kraft paper- and foil-faced insulation will burn and must be installed in substantial contact with an approved interior finish as soon as the insulation has been installed to help prevent the spread of fire in the wall, ceiling or floor cavities.

INSTALLATION & FEATURES

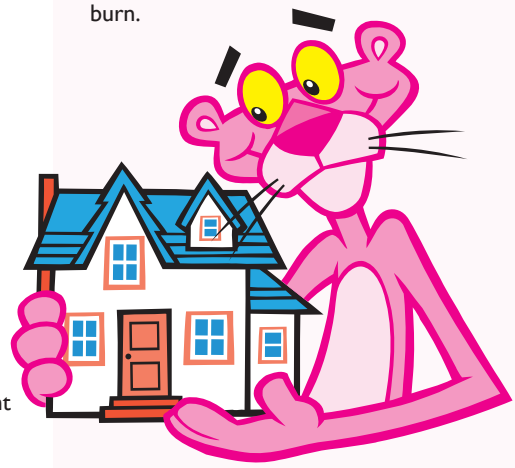
1. Lay temporary flooring (using plank or plywood pieces) across joists and hang a temporary work light. To make sure the eave vents aren't blocked, Owens Corning Raft-R-Mate® attic vents or baffles should be installed to provide unobstructed air flow from the soffit to the attic.

2. Begin laying faced fiber glass insulation at outer edge of attic and work toward center. The vapor retarder should be facing down toward the warm-in-winter (living area) side of the ceiling. In Gulf Coast states and Florida, local building practice may not call for an interior vapor retarder.

3. Lay in long runs first and use leftovers for shorter spaces. Ends of insulation should be cut to fit snugly around cross bracing. Insulation should extend far enough to cover exterior walls but should not block flow of air from eave vents. If needed, install a baffle wherever there is an eave vent to assure air flow. For additional ventilation, install roof vents.

4. Insulation must be kept three inches away from recessed lighting fixtures unless fixture is marked "I.C." (Insulated Ceiling) - designed for direct insulation contact. The facing should be cut back so it is not touching the light fixture. Insulation placed over an unrated fixture may cause it to overheat and start a fire. The insulation should always be installed at least three inches away from any metal chimneys, gas water heater flues or other heat-producing devices.

5. Fill the spaces between a masonry chimney and wood framing with a non-combustible material such as unfaced fiber glass insulation, which will not burn.



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INSULATION

PINKWRAP® HOUSEWRAP (STANDARD FEATURE)

Serious protection for weather-wise homes.

Typically installed over wood or insulating sheathing, and under siding or other exterior covering, PINKWRAP® surrounds your home with a protective barrier to help seal out energy-robbing leaks and drafts (air infiltration). Working hand-in-hand with insulation, which traps air in tiny pockets to slow the transfer of heat (thermal control), PINKWRAP functions like a windbreaker layered over a thick sweater to keep your home comfortable and energy efficient throughout the year.

Controlling moisture in a humid environment.

The average daily activities inside a home–showering, cooking, washing clothes and dishes, even breathing–produce moisture vapor which needs to escape. PINKWRAP housewrap is specially engineered to stop air infiltration while, at the same time, allowing excess moisture to be "exhaled" so it won't build up in walls.

Built to Handle Tough Construction Conditions.

PINKWRAP is specially designed to resist tearing around nail and staple holes, even in windy conditions.

PINKWRAP® Housewrap	Application(s)	Width x Length
	Exterior Walls	3' x 100' 9' x 100' 9' x 195'

INSTALLATION & FEATURES

1. Attach underneath or over sheathing board or insulation. PINKWRAP is translucent to help you see your alignments.

2. To begin wrapping, start at the base of the wall, 2 to 3 feet from a corner. Fold 3 to 5 inches of PINKWRAP under itself and fasten to a stud or framing member, printed side out. Installation Wrap the entire building, including door and window openings.

3. Staples (galvanized 16 gauge) or nails (3/8 inch diameter) may be used for attachment to structural materials such as framing members or plywood. When covering non-structural sheathing (such as foam plastic insulation boards) nail through sheathing and into studs using large head fasteners or nails with plastic heads. Fasteners should penetrate a minimum of 1/2 inch into studs.

4. To hold PINKWRAP housewrap in place: * 9-foot roll: Place a minimum of three fasteners (one at top, middle and bottom). * 3-foot roll: Place a minimum of two fasteners (one at top and bottom).

5. Fastening Once PINKWRAP housewrap is in place, fasteners should be placed every six inches at the perimeter of the wall and around door and window openings, and should be spaced every 12 - 16 inches along vertical framing members.

6. At the end of a roll, fold the edge under and fasten to the nearest stud or framing member. To minimize air infiltration, overlap PINKWRAP at least 8 inches on all horizontal and vertical seams, with the upper layer overlapping the lower layer. For upper stories, a 12-inch overlap over the story below is necessary.

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WEATHERESIST™ FLASHING TAPE (STANDARD FEATURE)

INSULATION

The smart way to seal windows and doors from moisture and drafts. With more than 65 years experience in bringing you an energy efficient home, Owens Corning now has smart solutions for keeping it moisture and air resistant. WeatheResist Flashing Tape is an effective way to seal out leaks around windows and doors.

- WeatheResist Flashing Tape seals out air and moisture that can leak in around window and door openings.
- Easy application. WeatheResist Flashing Tape comes in four easy peel and stick rolls, eliminating messy canned foam products or wasted material.
- One product. WeatheResist Flashing Tape is self-adhesive and easily bonds to most building materials at colder temperatures. No special adhesives, heat or equipment are needed to install the product.
- Enjoy extra protection. You should know that WeatheResist Flashing Tape meets all applicable building codes.

Choose Owens Corning for draft and moisture protection of your home.

Ask your builder about Owens Corning WeatheResist Flashing Tape.

Property	Test Method	Nominal Value
Tensile Strength (fi lm)	ASTM D 882	20.0 lb/in (3.5 kN/m)
Elongation to Break (rubberized asphalt)	ASTM 412	> 300%
Pliability, 180°, 1/8" mandrel 32°F (0°C)	AC-148	Pass
Water Resistance	AC-148	Pass
Peel Adhesion to Tape	AC-148	5 lb/in (0.9 kN/m)
Peel Adhesion – Concrete, polystyrene foam, plywood, vinyl, OSB	AC-148	> 2.6 lbs/in (0.45 kN/m)
Nail Sealability	AC-148	Pass
Water Vapor Permeance	ASTM E 96B	0.05 perms (max)
Water Absorption	ASTM D 570	570 0.2% by weight (max)

INSTALLATION & FEATURES

1. Substrate Preparation - All surfaces must be clean, dry and smooth. Remove any contaminants or debris from the substrate surface prior to application.

2. Application - Cut the WEATHEResist flashing tape into the required lengths. Generally, the required length is the length of the side of the window or door to be sealed plus two times the width of the tape being used. Peel back a small portion of the release paper sheet. Starting a distance equal to the width of the tape from the corner, center the tape over the joint. Press the exposed adhesive portion of the tape firmly into place. Continue the installation by slowly removing the release paper while continuing to press the tape in place, until the opposite end of the opening edge is reached. WEATHEResist flashing tape is installed first along the bottom edge of the opening, then along the sides, and then finishing along the top edge. Always overlap, a minimum of 3" (75mm). All horizontal overlaps should be in shingle fashion so that any liquid water is directed to the outside. Rub or roll the WEATHEResist flashing tape firmly against the substrate to insure uniform contact with the substrate.

3. Low Temperature Applications- WEATHEResist Flashing Tape is formulated for installation at ambient temperatures of 20°F (-7°C) and above. For optimal performance, it is recommended that WEATHEResist Flashing Tape be stored at room temperature until ready for application. Note: WEATHEResist Flashing Tape should not be left exposed for more than 90 days. WEATHEResist Flashing Tape is 25 mils (0.6mm) thick and is supplied in rolls 75 feet (23 m) long. Available roll widths include: 4", 6", 9", or 12"s (100, 150, 230 or 300 mm) widths.