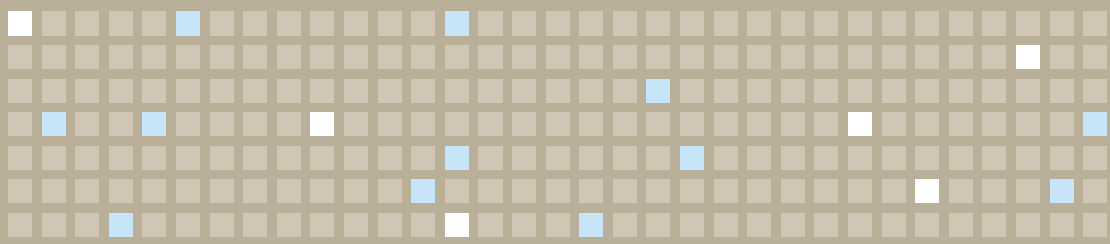
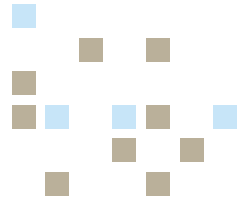


CARLISLE'S
NVELOPTM
BUILDING ENVELOPE SOLUTIONS



The Need for a Quality Building Envelope

An improperly sealed building can lead to dramatic energy losses and premature system failures due to moisture and air infiltration, resulting in unnecessary expenses for the building owner.

A building envelope design must take into consideration a number of factors including building location, building use, material compatibility and constructability. Adherence to building code does not guarantee a high-performing building envelope. Many buildings constructed only to code exhibit a lack of energy efficiency and durability, and experience significant performance problems associated with air and moisture leakage.

Let Carlisle Construction Materials take the guesswork out of your building envelope details with the NVELOP system. NVELOP is a complete integration of roofing,

waterproofing, air and vapor barrier and insulation systems for use on all six sides of a building.

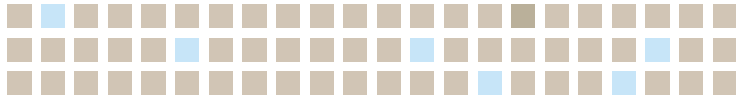
When you build with NVELOP, you not only exceed construction standards but you also create a valuable, high-performance structure characterized by increased service life and reduced maintenance and energy costs.



Flooded roof due to improperly designed taper.



Condensation in wall insulation from air leakage.



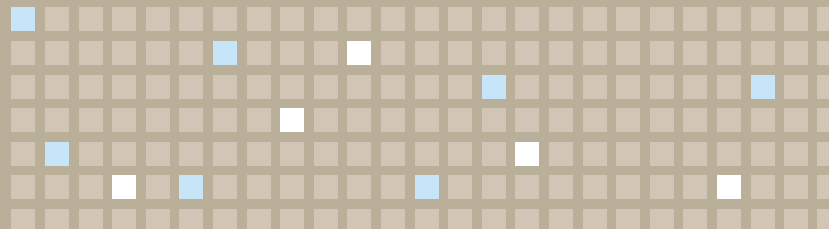
Energy Savings

CCM provides details for the NVELOP roof, wall and below-grade systems based on your building's location, use and type of construction. NVELOP prescribes a complete air and moisture barrier, and includes high-performing, continuous insulation.

A study completed by the National Institute of Standards and Technology (NIST)* in 2005 indicated that minimizing air leakage in a building envelope resulted in annual savings of up to 37 percent. As energy prices continue to rise, this percentage cannot be ignored.

*(NIST) National Institute of Standards and Technology

The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) recently raised its Energy Standard, ASHRAE 90.1, to require a minimum



Moisture Management

In order for a building envelope system to perform effectively, it must be able to manage both interior and exterior moisture sources. NVELOP protects the building's moisture sensitive materials by reducing air and water infiltration and by limiting condensation of interior moisture.



Moisture infiltration caused the insulation to deteriorate and the fastener to rust, putting the roof at risk of blowing off.

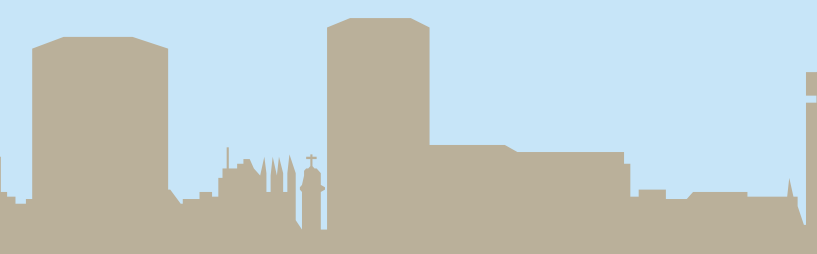


This deterioration was caused by lack of waterproofing in window openings.

Return on Investment

Through increased energy efficiency and durability, NVELOP provides significant cost savings and dramatic returns on investment, enabling building owners to realize significant savings in long-term maintenance costs. Independent studies suggest ROI in as little as 18 months time, and with rising energy costs, the continued savings from an energy-efficient building are immeasurable.

■ ■ ■
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insulation R-value of 20 for new roof and wall construction. This is a 33% increase from the previous standard, and an obvious affirmation of the value that insulation plays in building performance. Canada and some U.S. states require air barriers in their energy codes. ASHRAE is also developing a standard for high-performance buildings, called 189P, which will likely include air barriers. Because of their widely-recognized benefits, air barriers are specified on many projects throughout the USA, even where they are not mandated.

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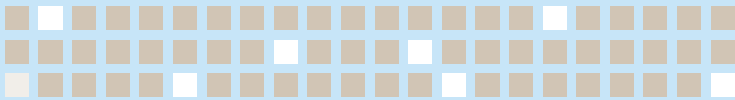
The Industry's Most Complete Building Envelope

Carlisle SynTec pioneered the single-ply roofing industry. Carlisle Coatings & Waterproofing (CCW) is a long-time leader in the waterproofing and air and vapor markets. Insulfoam is the nation's largest manufacturer of block-molded expanded polystyrene (EPS) insulation. Now, these three Carlisle Construction Materials (CCM) companies have joined forces to create the most comprehensive building envelope system available. Carlisle is a name synonymous with quality and dependability, a name you can count on for superior building envelope protection.

Experience and Expertise

With more than 45 years of experience in the construction industry and an extensive offering of roofing, waterproofing, insulation and air & vapor barrier products, Carlisle Construction Materials (CCM) offers the expertise and services you need to create the most durable, energy-efficient and high-performance building envelope.

In the past half decade, CCM has emerged as a leader in energy management solutions for the entire building envelope. Its NVELOP building envelope system is the industry's only comprehensive package backed by a single-source warranty, so you can take confidence in the performance and protection it will provide.



Synergy

Carlisle SynTec, Carlisle Coatings & Waterproofing and Insulfoam, CCM's roofing, insulation and waterproofing companies, offer a unique combination of experience and innovation, providing the highest quality in both products and services. Together, these three companies and their products enable you to create a building envelope system that will provide superior performance and protection against severe weathering conditions.



With more than 170 years of combined roofing and waterproofing experience, Carlisle's Design Services can help you create a comprehensive, code-compliant building envelope that meets even the most specific requirements. These seasoned professionals have researched, developed and tested every product and component to ensure that they are fully compatible and able to provide the performance you want and need.

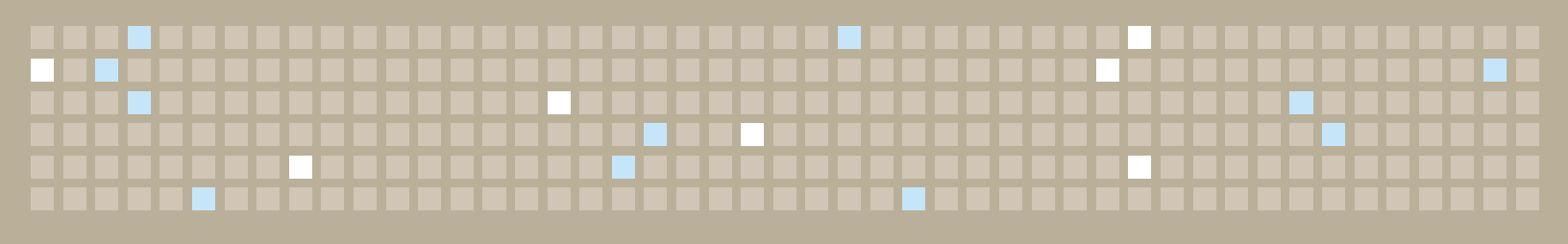
Carlisle also offers on-site technical assistance in the U.S. or Canada, so you can be sure that your system is being installed right the very first time.



Warranty

With NVELOP, CCM offers the industry's most comprehensive single-source warranty that covers all components and tie-ins, providing you with one easy-to-reach point of contact. The NVELOP system also comes with CCM's field inspection service to ensure that all components and tie-ins are installed correctly. Specify the CCM NVELOP system and experience complete protection for your building!

 **Carlisle offers the industry's only single-source warranty that covers all building envelope components and tie-ins.** 



Numerous Products – One System

Roofing Systems

Carlisle SynTec pioneered the single-ply roofing industry more than 45 years ago, and it continues to lead in the research, development and manufacturing of the industry's most durable, longest lasting materials. From its trademark black and white EPDM to its reflective TPO and PVC single-ply systems, Carlisle offers a premium roofing solution for any project in any location.

- Time-tested, proven single-ply membrane roof systems
- Reflective roofing options for southern climates
- High-speed wind and puncture-resistant assemblies and warranties
- Title 24-compliant roof systems
- Energy Star®-rated and Cool Roof Rating Council (CRRC)-certified membranes
- Laborsaving features such as Factory-Applied Tape (FAT™) and prefabricated, pressure-sensitive accessories
- Wide sheets for fewer seams and less leaks
- Carlisle SynTec's Polyiso or EPS insulation is provided with the membranes for a complete system.



Carlisle SynTec EPDM Roof System



Membrane Air Barriers

Carlisle Coatings & Waterproofing (CCW) offers a complete line of membrane air barriers. CCW offers self-adhering sheet and fluid-applied membranes, which perform as combined air & vapor barrier systems. CCW also offers a fluid-applied, vapor-permeable membrane for wall assemblies that require an air barrier without a vapor barrier. All of CCW's membrane air barriers have been independently tested and evaluated by the Air Barrier Association of America (ABAA).

- Meets Massachusetts, Canadian National and proposed ASHRAE 90.1 air barrier code requirements.
- Reduced maintenance and energy costs
- Eliminates mold and mildew formation
- More comfortable interior environment
- Easy-to-apply



CCW Barriseal-S Spray-On Air & Vapor Barrier



Waterproofing

CCW's line of waterproofing membranes and drainage composites are proven to lengthen a building's service life and increase owner value by relieving underground hydrostatic pressure and resisting the penetration of ground water into a structure.

- Improved building performance
- Increased durability and protection
- Extended service life of below-grade building systems
- Unlimited waterproofing options for every application
- Eliminates mold and mildew formation



CCW Barricoat-S Spray-On Waterproofing Membrane



Insulation

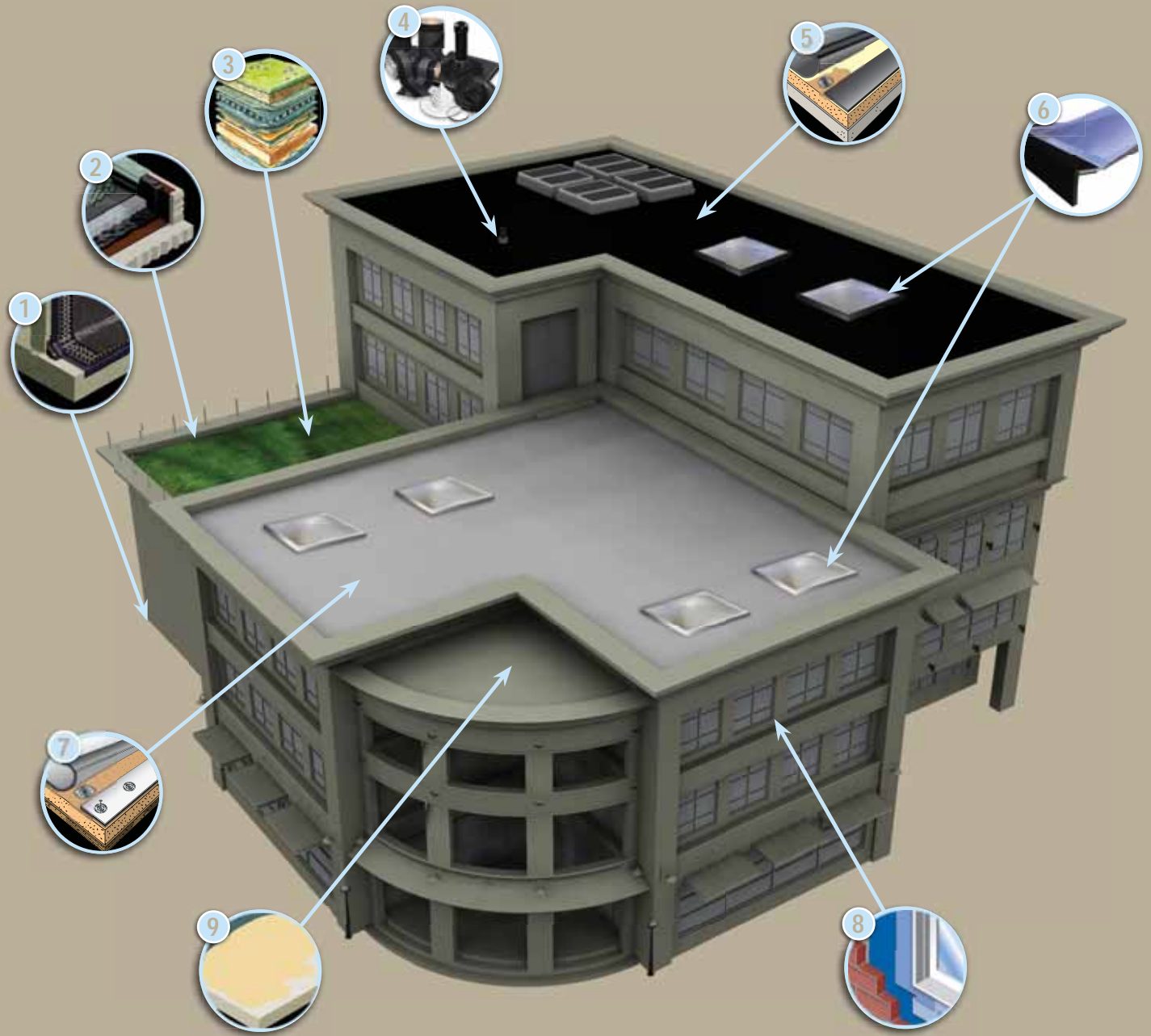
Insulate with Carlisle SynTec's polyisocyanurate or expanded polystyrene (EPS) insulation on the roof and Insulfoam's EPS insulation on the walls and below grade. These types of insulation provide continuity and steady R-Value, enabling construction of more energy-efficient assemblies when compared to those constructed with batt or blown-in fiber insulation.

- Insulation continuity in roof and wall assemblies
- Reduced heating and cooling costs
- Improved interior temperature and comfort levels
- Potential to reduce the size of your HVAC equipment
- Helps reduce carbon emissions



Carlisle's Polyisocyanurate Roof Insulation

CARLISLE'S
NVELOPTM
 BUILDING ENVELOPE SOLUTIONS



-
- 1 Below-Grade Waterproofing Systems
 - 2 Plaza Deck or Planted Rooftop Waterproofing Systems
 - 3 RoofGarden Assemblies
 - 4 Prefabricated Heat-Weldable and Pressure-Sensitive Flashing Accessories
 - 5 EPDM Elastomeric Roofing Systems
 - 6 DryLight™ Reaction Injection Molded (RIM) Skylights
 - 7 TPO Thermoplastic Roofing Systems
 - 8 Membrane Air Barriers & Flexible Flashings
 - 9 Pedestrian and Vehicular Deck Coating Systems

Investing in Building Solutions for Over 45 Years

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