



*Green Building*  
**TECHNICAL BULLETIN**

## OWENS CORNING ENERGYCOMPLETE™

### Background

EnergyComplete™ is the first whole house system that addresses the problems of air infiltration through thermal, air, and moisture management. EnergyComplete™ combines breakthrough air sealing technology with trusted, proven Owens Corning insulation. The air sealant – Energy Complete Air Infiltration Barrier with Flexible Seal Technology – is a safe, low-expanding foam material that penetrates to fill seams, gaps and holes in the building envelope. EnergyComplete™ produces energy savings, preserves consistent, comfortable temperatures throughout the home. And it may improve indoor air quality, when used as recommended with the inclusion of mechanical air exchange equipment. Field trials with this system have shown whole-house infiltration levels of 3 ACH50 or 0.2 NACH.

The EnergyComplete™ system can help contribute to requirements and credits for the green building programs of National Green Building Standard™ and LEED® for Homes.

### National Green Building Standard™

The National Green Building Standard (NGBS) was developed by the National Association of Home Builders to help its members move the practice of green building into the mainstream. Its emphasis is on building practices that increase energy efficiency, water and resource conservation, sustainable or recycled products, and indoor air quality.

Owens Corning's EnergyComplete™ system will likely contribute to points in the following NGBS categories:

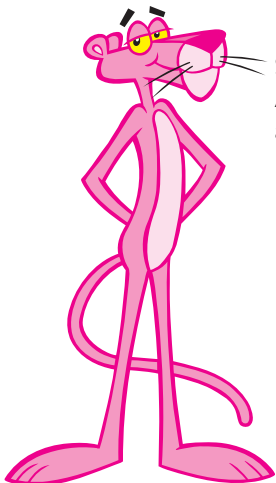
Section 604.1: Recycled Content Building Materials (2 points). Owens Corning PINK FIBERGLAS™ Insulation has 40% certified recycle content, as verified by SCS.

Section 702.2: Energy Performance (15 to 120 points). EnergyComplete™ significantly reduces air infiltration and recommends an upgraded insulation package for wall cavities and attic insulation. Building envelope upgrades are essential to Energy Performance.

Section 901.3: Pollutant Source Control: Garages (2 points). EnergyComplete™ Air Infiltration Barrier seals the walls and ceilings that form the garage/house connection.

Section 901.11. Pollutant Source Control. Insulation (4 points). Owens Corning PINK FIBERGLAS™ Insulation has been tested and satisfy GREENGUARD Children and Schools Certification.

Section 903.4.1. Moisture Control Measures (2 points). The foam sealant used in EnergyComplete™ Air Infiltration Barrier sets in under 20 minutes (depending on temperature and relative humidity) and the fiberglass insulation is applied dry.





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**LEED® for Homes**

LEED for Homes is a rating system that promotes the design and construction of high-performance green homes. A green home uses less energy, water and natural resources; creates less waste; and is healthier and more comfortable for the occupants. Benefits of a LEED home include lower energy and water bills; reduced greenhouse gas emissions; and less exposure to mold, mildew and other indoor toxins.

**EnergyComplete™ will likely contribute to the following LEED for Homes Credits:**

ID Credit 2.1:	Detailed Durability Plan. (Pre-Construction)
IE Credit 10.2	Tightly Seal Shared Surfaces between Garage and Home
EA Credit 1.2-7	Exceeds ENERGY STAR for Homes (1 Pt / 2 HERS Index Pts)

**Insulation**

EA Credit 2.1	Third-Party Inspection of Insulation, At Least HERS Grade II
EA Credit 2.2	Third-Party Inspection of Insulation, Grade I AND 5% above code

**Air Infiltration**

EA Credit 3.1	Third-Party Envelope Air Leakage Tested $\leq$ 7.0 CFM50 (CZ 1-5)
EA Credit 3.2	Third-Party Envelope Air Leakage Tested $\leq$ 5.0 CFM50 (CZ 1-5)
EA Credit 3.3	Third-Party Envelope Air Leakage Tested $\leq$ 3.0 CFM50

**EnergyComplete™ could possibly contribute to the following LEED for Homes Credits:**

ID Credit 3.1-4	Provide Description and Justification for Specific Measure
MR Credit 3.2	Reduce waste sent to landfill by 25% to 100% (compared to other types of insulation)
IE Credit 1.2-10	Meets ENERGY STAR w/ Indoor Air Package (IAP)
IE Credit 4.2	Dedicated Outdoor Air System (w/ Heat Recovery)
AE Credit 1.1-2	Basic & comprehensive homeowner manuals
AE Credit 2.1	Building Education TBD

