



LEED® v4.1 CREDITS GUIDE

HELPING YOU ACHIEVE LEED® CERTIFICATION

LEED® promotes the use of durable, affordable, and sustainable materials and processes during the design, construction, and operation of the built environment. This is a guide to LEED® v4.1 for commercial and residential Building Design and Construction (BD+C) projects and how Owens Corning products can help a project achieve LEED® certification.

BUILDING DESIGN AND CONSTRUCTION (BD+C)

The LEED v4.1 BD+C rating system is used to certify New Construction, Core and Shell, Schools, Retail, Data Centers, Warehouses and Distribution Centers, Hospitality, and Healthcare projects.

Prerequisites and credits in the LEED v4.1 BD+C rating system address the following categories:

- Integrative Process (IP)
- Location and Transportation (LT)
- Sustainable Sites (SS)
- Water Efficiency (WE)
- Energy and Atmosphere (EA)
- Materials and Resources (MR)
- Indoor Environmental Quality (EQ)
- Innovation (IN)
- Regional Priority (RP)

LEED® prerequisites and credit opportunities are project-focused, rather than product-focused (i.e., a project may achieve LEED® certification, but individual products cannot). It is the cumulative effect of products integrated within building systems and assemblies evaluated within the parameters of each of the topics that contributes to the points a project accrues during the certification process.

BUILDING TYPES

- **New Construction and Major Renovations.** New construction or major renovation of buildings that do not primarily serve K–12 educational, retail, data centers, warehouses and distribution centers, hospitality, or healthcare uses.
- **Core and Shell Development.** Buildings that are new construction or major renovation for the exterior shell and core mechanical, electrical, and plumbing units, but not a complete interior fit-out. LEED® BD+C: Core and Shell is the appropriate rating system to use if more than 40% of the gross floor area is incomplete at the time of certification.
- **Schools.** Buildings made up of core and ancillary learning spaces on K–12 school grounds. LEED® BD+C: Schools may optionally be used for higher education and non-academic buildings on school campuses.
- **Retail.** Buildings used to conduct the retail sale of consumer product goods. Includes both direct customer service areas (showroom) and preparation or storage areas that support customer service.
- **Data Centers.** Buildings specifically designed and equipped to meet the needs of high-density computing equipment such as server racks, used for data storage and processing. LEED® BD+C: Data Centers only addresses whole building data centers (greater than 60%).
- **Warehouses and Distribution Centers.** Buildings used to store goods, manufactured products, merchandise, raw materials, or personal belongings, such as self-storage.

- **Hospitality.** Buildings dedicated to hotels, motels, inns, or other businesses within the service industry that provide transitional or short-term lodging with or without food.
- **Healthcare.** Buildings that serve individuals who seek medical treatment, including licensed and federal inpatient care facilities, licensed and federal outpatient care facilities, and licensed and federal long-term care facilities. May optionally be used for buildings with other kinds of medically related uses, such as unlicensed outpatient facilities, medical, dental, and veterinary offices and clinics, assisted living facilities, and medical education and research centers.

RESIDENTIAL BD+C

LEED v4.1 presents a new approach to residential projects that consolidates all residential rating systems and guidance into a single program.

BUILDING TYPES

- **Single Family Homes.** New single-family homes that are attached or detached, and multifamily buildings with up to four units.
- **Multifamily Homes.** Applicable to any predominantly multifamily building with two or more units and any number or stories.
- **Multifamily Homes Core and Shell.** Multifamily buildings that are new construction or major renovation for the exterior shell and core mechanical, electrical, and plumbing units, but not a complete interior fit-out. It is the appropriate rating system to use if more than 40% of the gross floor area is incomplete at the time of certification.

The Owens Corning products listed may contribute to meeting requirements of the LEED® rating system in the Sustainable Sites (SS), Energy and Atmosphere (EA), Materials and Resources (MR), and Environmental Quality (EQ) categories. However, the use of these products does not guarantee attainment of points or prerequisite compliance, nor are any products certified under the LEED® brand. Call 1-800-GET-PINK to learn more about how Owens Corning products can help you achieve LEED® certification.

BD+C CATEGORY KEY

- | | | |
|---|-----------------------|--|
| ALL Qualifies for ALL BD+C categories | C Schools | F Warehouses and Distribution Centers |
| A New Construction and Major Renovations | D Retail | G Hospitality |
| B Core and Shell Development | E Data Centers | H Healthcare |

| | SS | EA | | | | | MR | | | | | | | EQ | | | |
|---|-----------------------|----------------------------|-----------------------------|-------------------|---|------------------------------------|------------------------------------|---------------------------|----------------------|--|-----------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|----------------------|---------------------------------|
| | Heat Island Reduction | Minimum Energy Performance | Optimize Energy Performance | Annual Energy Use | Efficient Hot Water Distribution System | Domestic Hot Water Pipe Insulation | Environmental Product Declarations | Sourcing of Raw Materials | Material Ingredients | Construction and Demolition Waste Management | Durability Management | Environmentally Preferable Products | Construction Waste Management | Minimum Acoustic Performance | Thermal Comfort | Acoustic Performance | Low-Emitting Products/Materials |
| BD+C Prerequisite | ✓ (ALL) | ✓ (ALL) | | | | | | | | | | | | ✓ (C ONLY) | | | |
| BD+C Credit | | | ✓ (ALL) | | | | ✓ (ALL) | ✓ (ALL) | ✓ (ALL) | ✓ (ALL) | | | | | ✓ (ALL) | ✓ (ACEFGH) | ✓ (ALL) |
| Residential – Multifamily Prerequisite | | ✓ | | | | | | | | | | | | | | | |
| Residential – Multifamily Credit | ✓ | | ✓ | | | ✓ | | | | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Residential – Single Family Prerequisite | | ✓ | | | | | | | | | ✓ | | | | | | |
| Residential – Single Family Credit | ✓ | | | ✓ | ✓ | | | | | | | ✓ | ✓ | | | | ✓ |
| INSULATING PRODUCTS | | | | | | | | | | | | | | | | | |
| Fiberglas™ Blanket Insulation | | | | | | | | | | | | | | | | | |
| PINK Next Gen® Fiberglas™ Insulation | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ |
| PINK Next Gen® Fiberglas™ Sonobatts®, PINK Next Gen® Fiberglas™ Sound Attenuation Batts (SAB) Insulation, PINK Next Gen® Fiberglas™ FastBatt®, PINK Next Gen® Fiberglas™ Flame Spread 25, Basement Blanket™ Fiberglas™ Insulation | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Fiberglas™ Loosefill Insulation | | | | | | | | | | | | | | | | | |
| PROPINK® L77 PINK® Fiberglas™ Insulation, PROPINK® Fiberglas® Blown Loosefill Insulation, AttiCat® PINK® Blown-In Insulation, ProCat® Insulation | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ |
| Fiberglas™ Rigid and Semi-Rigid Insulation | | | | | | | | | | | | | | | | | |
| 700 Series® Fiberglas™ Insulation Board | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | |
| Fiberglas® Insul-Quick® Insulation | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | |
| Fiberglas® TIW Type I-HP and Type II-HP | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ | | | ✓ | | |
| Fiberglas™ Acoustic Insulation | | | | | | | | | | | | | | | | | |
| PINK Next Gen® Fiberglas™ Sound Attenuation Batts (SAB) Insulation, QuietZone® Acoustic Batts | | | | | | | ✓ | ✓ | | | | ✓ | | ✓ | | ✓ | ✓ |
| Acoustic Wall, Floor, and Ceiling Finishes | | | | | | | | | | | | | | | | | |
| QuietZone® Acoustic Floor Mat | | | | | | | | | | | | | | ✓ | | ✓ | ✓ |
| SelectSound® Black Acoustic Board Insulation, SelectSound® Black Acoustic Blanket Insulation | | | | | | | | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | |
| Thermafiber® SAFB™ | | | | | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | |
| Thermafiber® SAFB™ Formaldehyde-Free | | | | | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ |
| Thermafiber® Mineral Wool Insulation | | | | | | | | | | | | | | | | | |
| Thermafiber® Mineral Wool Insulation: Fire & Sound Guard® Plus, FireSpan®, RainBarrier®, Safing, VersaBoard® | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | |
| Thermafiber® Formaldehyde-Free Mineral Wool Insulation: Fire & Sound Guard® Plus FF, FireSpan® FF, Safing FF | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ |
| Extruded Polystyrene (XPS) Insulation | | | | | | | | | | | | | | | | | |
| FOAMULAR® NGX® 150, 250, 350, 400, 600, 1000, CW-25, LT30, LT40, Insulating Sheathing, PINKCORE® TT, Half-Inch, INSUL-DRAIN®, GRIDBOARD, Project Wall Panels, Edgelock® 400, Edgelock® 600, Edgelock® 1000, C-200, C-300, F-350, CodeBord | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ |
| Extruded Polystyrene (XPS) Roof Insulation | | | | | | | | | | | | | | | | | |
| FOAMULAR® NGX® 400, 404, 404RB, 600, 604, 604RB, 1000, THERMAPINK® 25 | ✓ ¹ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ |
| Extruded Polystyrene (XPS) Accessories | | | | | | | | | | | | | | | | | |
| FOAMULAR® Fanfold, JointSealR®, FlashSealR®, HomeSealR® | | ✓ | ✓ | ✓ | | | | | | | ✓ | | | | ✓ | | |
| FOAMGLAS® Cellular Glass Insulation | | | | | | | | | | | | | | | | | |
| FOAMGLAS® T4+ and S3 Insulations | ✓ ¹ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | | | | | ✓ | | |
| FOAMGLAS® HLB 800/1000/1200/1400/1600, FOAMGLAS® ONE™, StrataFab® | | ✓ | ✓ | ✓ | | | ✓ | | | | | | | | | | |
| HVAC Insulation | | | | | | | | | | | | | | | | | |
| QuietR® Duct Liner Board, QuietR® Rotary Duct Liner, QuietR® Spiral Duct Liner | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ |
| QuietR® Duct Board and EcoTouch® Insulation for Flexible Duct | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ |
| SoftR® Duct Wrap | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | | | ✓ |
| Pipe and Equipment Insulation | | | | | | | | | | | | | | | | | |
| Fiberglas® Pipe Insulation (ASJ Max with SSLI; ASJ Max with SSLII®), Pipe Insulation | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | | | ✓ |
| Fiberglas® "No Wrap" Pipe Insulation | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | | | |
| Fiberglas® Flexwrap Pipe and Tank Insulation | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | | | | |
| Metal Building Insulation | | | | | | | | | | | | | | | | | |
| EcoTouch® Certified R Metal Building Insulation, EcoTouch® Utility Blanket Metal Building Insulation, and EcoTouch® MBI Plus Filler Blanket | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | | ✓ | | | ✓ | | ✓ |
| ROOFING & ASPHALT PRODUCTS² | | | | | | | | | | | | | | | | | |
| Shingles: TruDefinition® Duration®, TruDefinition® Duration® Designer, Oakridge®, Supreme® | | | | | | | ✓ | | | ✓ ³ | | | ✓ ³ | | | | |
| Cool Roof Shingles: TruDefinition® Duration® Cool, TruDefinition® Duration® Cool Plus, Oakridge® (Shasta White only) | | | | | | | ✓ | | | ✓ ³ | | | ✓ ³ | | | | |

¹ Owens Corning® XPS Roof insulation products are suited to support vegetative roof assemblies or roof assemblies with cool roof coatings, which a LEED® project may use to qualify for the Heat Island Reduction credit.
² Roofing and Asphalt products included in this document may be available only in specific markets and may not be produced at all manufacturing locations.
³ Owens Corning provides resources for contractors to find shingle recycling locations in select markets.