Putting It All Together LEED Certification Guide



Three Decades of Experience

Light is flowing brilliant and clear throughout the entire building.



United Glass Company

One of the leading, independent fabricators and processors of valueadded glass products targeting commercial construction endmarkets in the Eastern United States.

The UGC "family of companies" consists of five operating facilities providing beneficial fabrication services to transform raw, flat glass into a variety of sophisticated, energy-saving and technical products. The vast majority of the company's service offerings result in highly customized, "made-to-order" products to meet customer specifications.

All UGC companies are dedicated to preserving our environment by conserving natural resources, minimizing material sent to landfills, and working with architects and building owners to help their projects qualify for LEED certification.



David L. Lawrence Convention Center Pittsburgh, PA

...And <u>we</u> put it there.

Energy & Atmosphere

EA 1 Optimize Energy Performance

Intent: Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Requirements: Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA standard 90.1-2004. Projects earn up to 10-points toward LEED certification based on the percentage of energy cost savings.

Partnering: UGC products that lower building energy consumption

- High Performance Insulating Units with optional warm edge technology:
- Enhanced U-Value for building envelope lowers heating costs
- Reduced Solar Heat Gain lowers cooling costs
- Interior glass walls and entrances:
- Natural daylight reduces energy cost by replacing artificial lighting
- Natural daylight consumes 6% of the energy required for artificial lighting

Materials & Resources

MR 2.1 & 2.2 Construction Waste Management

Intent: Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

Requirements: Recycle and or salvage at least 50% for MR 2.1 and 75% for MR 2.2 of non-hazardous construction debris. Projects may earn 1-point for MR 2.1 and an additional point by meeting the requirements of MR 2.2.

Partnering: UGC offers our customers the option of receiving insulating units in reusable steel racks. Steel racks replace the traditional wood crates that consume natural resources and are then tragically thrown into project dumpsters. Steel crates are also available with wheels that may actually help glazing contractors to reduce their labor. Specify reusable steel racks on your next project.



Merrill Lynch Corporate Campus, Hopewell, NJ

MR 5.1 & MR 5.2 Regional Materials

Intent: Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Requirements: Use building materials or products that have been extracted, harvested or recovered, as well as manufactured within 500 miles of the project site for a minimum of 10% for MR 5.1 and 20% for MR 5.2 (based on cost) of the total materials value. Projects may earn 1-point for MR 5.1 and an additional point by meeting the requirements of MR 5.2.

Partnering: UGC may help your project to qualify for Materials and Resource points by providing glass that is manufactured and contains silica that is extracted within 500 miles of the project. Please consult with your UGC representative on a per project basis.

Indoor & Environmental Quality

EQ 8.1 & EQ 8.2 Daylight and Views

Intent: Provide building occupants a connection between indoor spaces and outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

EQ 8.1 Requirements

Design the building such that a minimum daylight illumination of 25 foot candles has been achieved in a minimum of 75% of the regularly occupied areas.

EQ 8.2 Requirements

Design the building to achieve direct line of sight to the outdoor environment via glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of regularly occupied areas of the building.

— UGC and You.

Partnering: UGC helps your project to earn LEED points by providing

- energy costs and a comfortable work environment
- to the exterior and the wonders of Mother Nature

UGC is Proud to Offer the Following Products:

- High performance insulating units with:
- -PPG Solarban[®] 60, 70, and 80 coatings –Guardian SunGuard® Glass
- –Pilkington Solar-E™ Glass
- -Zeledyne Versalux™ Architectural Glass
- Exterior and interior all glass walls
- Azon Warm-Light[®] warm edge spacer
- Tubelite[®] architectural aluminum





Northbank Condominiums, Columbus, OH

• High performance insulating glass units permit transmission of natural daylight while providing lower

• Interior glass walls and entrances replace traditional opaque material to provide natural light and views





PNC Firstside Center, Pittsburgh, PA



www.ugcglass.com

TGI Atlanta, GA 800.229.2882

Mid-OhioTempering Columbus, OH 800.486.6648 PDC Cheswick, PA 800.232.9050

PDC Plymouth, MI 800.752.3522