## TECHNICAL DOCUMENT GAP LEED Rating System Compliance Matrix

**TD-007** September 24, 2014

## **LEED® Rating System Credit Assistance Matrix**

CATEGORY	CREDIT	DESCRIPTION	AWARD POINTS	LEED REQUIREMENTS	What Graham Can Do
ENERGY & ATMOSHERE	EA1	Optimize Energy Performance Three options: Whole Building Energy Simulation Prescriptive Compliance Prescriptive Compliance	1-19 1 1-3	Intent: Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental 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 90.1-2007 by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. (Higher the percentage the more points)  Comply with the prescriptive measures of the ASHRAE Advanced Energy Design Guide appropriate for the project.  Prescriptive Compliance Path: advanced Buildings™ Core Performance™ Guide. Comply with the prescriptive measures identified in the Advanced Buildings™ Core Performance™ Guide developed by the New Buildings Institute	Graham provides high performance insulating glass units that reduce the energy demand on the HVAC system and save costs. Triple glazing available on select models.  Graham manufactures thermally broken aluminum windows & doors and window wall systems for increased thermal performance.  Graham offers optional dual polyamide thermal strut on some models for improved energy performance and safety.
MATERIALS & RESOURCES	MR 4	Recycled Content	1-2	Intent: Increase demand for building products incorporating recycled content materials, therefore reducing impacts resulting from extraction and processing of new virgin materials.  Requirements: Use materials with recycled content such that the sum of postconsumer recycled content plus 1/2 of the preconsumer content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project.	Graham uses glass manufactured with an average of 25% recycled content.  Graham Architectural Products aluminum window & door extrusions are produced with an average of 40% recycled content.
	MR 5	Regional Materials  Regional Materials  10% 1 20% 2	1-2	Intent: Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the regional economy 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% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value.	Graham's manufacturing facility is located in York, PA within 500 miles of most North eastern U.S. markets and we use aluminum and glass from regional suppliers.
INDOOR ENVIRONMENTAL QUALITY	IEQ 2	Increased ventilation	1	Intent: To provide additional outdoor air ventilation to improve indoor air quality (IAQ) and promote occupant comfort, well-being and productivity.	Graham offers many types and styles of operable products to allow natural ventilation.
	IEQ 7.1	Thermal Comfort	1	Intent: Provide a comfortable thermal environment that supports the productivity and well-being of building occupants.	Graham's complete product line provides several options that assist with thermal comfort ratings such as shading devices, low U-value designs and glass tinting.
	IEQ 8.1	Daylight & Views  Daylight  Views	1	Intent: Provide for the building occupants a connection between indoors spaces and the outdoors through the introduction of daylight views into the regularly occupied areas of the building.  Requirements 8.1: Achieve a minimum daylight factor of 2% (excluding all direct sunlight penetration) in 75% of all spaces occupied for critical visual tasks.  Requirements 8.2: Achieve direct line of sight to vision glazing for building occupants in 90% of all regularly occupied spaces.	Graham has many glass options available with high performance and high visible light transmittance.  Graham window, door, curtainwall and storefronts allow daylight access to secure and remote areas of the building that would not have allowed for glass in past practices.  Optional light shelf designs available for increased lighting.