



PANELITE BONDED SERIES LEED INFORMATION

BONDED SERIES PANELS CONTRIBUTE TO LEED CREDITS

Panelite's approach to sustainability, which is to save resources both in the production of our materials and in their application, is not as readily rewarded by the LEED rating system as is a recycling approach, despite the fact that recycling utilizes substantial energy. Though we offer a recycled honeycomb core panel and utilize recycled adhesives, our focus is on conserving raw materials and optimizing daylighting, user comfort, and durability for extended life cycle.

We are pursuing alternate ways of documenting the sustainability of our products, and encourage our clients to check back on this issue. Current LEED points are listed below.

CONSTRUCTION MATERIALS WASTE MANAGEMENT (MR 2)

- Panelite installation systems, such as [ClearConnect™](#) and other recommended systems, use the inherent strength of honeycomb to dramatically minimize the amount of framing material needed, thereby also reducing material waste.
- Panelite offers a reclaim program, inviting contractors, architects or building owners to contact us regarding the reclaiming of any Panelite materials in a project which will be demolished. We have frequently seen the re-use of Panelite materials by designers or contractors themselves.
- When reclaiming is not an option, Panelite Bonded Series panels can be dismantled into their facing and core components. Honeycomb core (aluminum – AH Hexaben type - and cardboard – R100 [Ecoben](#) type, not the polycarbonate - TC and RC types) is recyclable and consists of 5-10% percent of the panel composition by weight. PETG facings, consisting of 90-95% of the panel composition by weight, can also be recycled. To date there is no program for recycling the acrylic facings or the polycarbonate honeycomb cores.
- Panelite Bonded Series panels require little or no adhesives or sealants for installation, and only non-aggressive cleaners are recommend. A simple solution of mild soap and water is ideal.

RECYCLED CONTENT (MR 4)

- Panelite's [ECOBEN](#) product B-CT100 uses a honeycomb core which consists of 100% recycled cardboard content.

LEED bases recycled content on weight by volume, which is a misleading calculation in this case, since the nature of honeycomb core is that it provides exceptional stiffness with very low weight, allowing for a dramatic reduction in the amount of material needed to make a stiff panel. While the recycled core makes up about 80% of the panel by section, by weight it makes up only about 5-10%.

- Other Panelite Bonded Series panels use recycled adhesives but the percentage by weight is low enough to be negligible in a LEED system.



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LOW EMITTING MATERIALS/ ADHESIVES AND SEALANTS (IEQ 4)

- All adhesives and sealants used in the production of Panelite Bonded Series panels or recommended for use in installation meet the LEED requirements for Volatile Organic Compound (VOC) content.

| ADHESIVE | CLASS | VOC LEVEL | LEED VOC LIMIT | MEETS LEED STANDARD? |
|---|------------------------------------|-----------|----------------|----------------------|
| Proprietary adhesive used in production of Bonded Series panels | Panel Adhesives | 0 g/L | 50 g/L | YES |
| VHB Tape (3M) | Multipurpose Construction Adhesive | 0 g/L | 70 g/L | YES |
| Devcon Plastic Welder II | Multipurpose Construction Adhesive | <50 g/L | 70 g/L | YES |
| Plexus P9157 | Multipurpose Construction Adhesive | 20 g/L | 70 g/L | YES |

DAYLIGHT AND VIEWS (EQ 8)

- Through the use of translucent and directionally transparent Panelite materials, daylighting of interior spaces can be substantially improved, reducing energy consumption for artificial lighting as well as increasing user comfort and productivity.

INNOVATION & DESIGN PROCESS (ID 1)

- The LEED rating system allocates up to four additional points for innovative performance not specifically addressed by the rating system. Designers specifying Panelite panels should consider submitting to this category due to the inherent material and structural efficiency of translucent honeycomb panels.

- Panelite applies honeycomb technology to produce structurally efficient composite panels that use 70-80% less raw material than a solid resin sheet, and that require less material for framing and installation.

- The use of self-structural Panelite panels as wall and partition panels can minimize or eliminate the necessity for additional structural framing members, contributing to more efficient material and labor practices for construction, and reducing waste upon demolition.

- Panelite [ClearConnect™](#) installation details for Bonded Series panels utilize the inherent structural strength of honeycomb to dramatically reduce the amount of material and the time needed to install the product.