NewTechWood

Wood Plastic Composite LEED Compliance Statement

LEED Certification System

LEED (Leadership in Energy and Environmental Design) is a globally recognized green building certification system developed by the U.S. Green Building Council. LEED pioneers the industry, representing a global standard for green buildings' best practices. Around the world, LEED is helping companies and communities create healthier, more sustainable spaces.

There are four levels of excellency that can be achieved by exceeding defined credit point thresholds:

Certified	40 – 49 points
Silver	50 – 59 points
Gold	60 – 79 points
Platinum	≥ 80 points

Assessment Categories

LEED Building Design and Construction rating systems cover the following categories:
- Integrative Process
- Location & Transportation
- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Innovation

New Focus in LEED v4.1

LEED v4.1 learned lessons from those in the market using LEED v4, and is more inclusive with updated referenced standards. It allows projects to earn LEED points through building performance monitoring.

It provides more possibilities to demonstrate LEED compliance of the building products and materials by introducing in more practical ways to disclose the environmental life-cycle performance in the category Materials & Resources (M&R).

NewTechWood's Commitment to Sustainability

NewTechWood reacted to the growing public concern for environmental sustainability by providing consumers with innovative eco-friendly building materials from a sustainable process. NewTechWood demonstrates its green principles and values through the following positive actions:
- Products are made from 60% recycled materials, including high-grade recycled plastic and reclaimed wood fibers
- Annual third-party audits are conducted to comply with environmental and health & safety guidelines and regulations
- Reducing their carbon footprint through waste reduction, energy conservation, and utilizing an optimum manufacturing process

Contribution from NewTechWood WPC towards LEED v4/v4.1 BD+C assessment criteria

	Criteria LEED	Aspect	Points	NewTechWood WPC
	SUSTAINABLE SITES			
1	Heat island reduction	High-albedo materials	1-2	✓
	MATERIAL & RESOURCES			
2	Building product disclosure and optimization -environmental product declaration	EPD	1	✓
3	Building product disclosure and optimization - sourcing of raw materials	Responsible sourcing of raw materials	1-2	✓
4	Building product disclosure and optimization - material ingredients	Chemical inventory	1-2	✓

If you have any questions about this statement, please contact Cliff@newtechwood.com

NewTechWood WPC LEED v4 BD+C Interface

Heat island reduction

NewTechWood has Solar Reflectance (SR) test performed on 6 colors according with ASTM C1549. The Solar Reflectance Index (SRI) values were calculated according to ASTM E1980. The initial SR value of "Pure White", "Sand", and "White Dew" meet the threshold value of 0.33. Therefore, they can contribute to reducing the heat island effect. The other three colors contribute to weighted area for the purposes of credit achievement calculation.

Official test reports are available on request. See Annex 1 for detailed information about the SR values.

Building product disclosure and optimization
- environmental product declaration

NewTechWood has a product-specific third-party verified EPD that conforms to ISO 14025, EN 15804 and has a cradle-to-grave scope. The product can be valued as **one whole product** for the purpose of credit achievement calculation according to this LEED criteria's requirement.

See NewTechWood WPC EPD.

Building product disclosure and optimization
- sourcing of raw materials

Wood Products

NewTechWood is Chain of Custody certified to purchase FSC 100% wood flour, manufacture and sell FSC 100% wood-plastic composite products.
The assessments have been conducted by SGS in accordance with the following standards: FSC-STD-40-003, FSC-STD-40-004, and FSC-STD-50-001.
See certificate FSC-C124802

Recycled Content

NewTechWood WPC products are manufactured with up to 60% of recycled content (pre-consumer and post-consumer waste). See Annex 2 for the calculation.

Building product disclosure and optimization
- material ingredients

NewTechWood wood plastic composites are compliant with the EU REACH regulation (EC) No. 1907/2006. No substances of very high concern (SVHC) exceed 0.1% (w/w) in the articles of the submitted sample from NewTechWood.

Official test reports are available on request.

NewTechWood WPC LEED v4.1 BD+C Interface

Heat island reduction

NewTechWood has Solar Reflectance (SR) test performed on 6 colors according with ASTM C1549. The Solar Reflectance Index (SRI) values were calculated according to ASTM E1980. The initial SR value of "Pure White", "Sand", and "White Dew" meet the threshold value of 0.33. Therefore, they can contribute to reducing the heat island effect. The other three colors contribute to weighted area for the purposes of credit achievement calculation.

Official test reports are available on request. See Annex 1 for detailed information about the SR values.

Building product disclosure and optimization
- environmental product declaration

NewTechWood has a product-specific third-party verified Type III EPD that conforms to ISO 14025 and EN 15804 and has a cradle-to-grave scope. The product can be valued as **1.5 products** according to this LEED criteria's requirement.

See NewTechWood WPC EPD.

Building product disclosure and optimization
- sourcing of raw materials

Wood Products

NewTechWood is Chain of Custody certified to purchase FSC 100% wood flour, manufacture and sell FSC 100% wood-plastic composite products.
The assessments have been conducted by SGS in accordance with the following standards: FSC-STD-40-003, FSC-STD-40-004, and FSC-STD-50-001.
See certificate FSC-C124802

Recycled Content

NewTechWood WPC products are manufactured with up to 60% of recycled content (pre-consumer and post-consumer waste). See Annex 2 for the calculation.

Building product disclosure and optimization
- material ingredients

NewTechWood wood plastic composites are compliant with the EU REACH regulation (EC) No. 1907/2006. No substances of very high concern (SVHC) exceed 0.1% (w/w) in the articles of the submitted sample from NewTechWood.

Official test reports are available on request.

Annex 1: Sustainable Sites - Heat island reduction

NewTechWood WPC can contribute to reducing the heat island effect. An SRI and SR weighted average approach may be used to calculate compliance. Here below additional detailed information about the SR values of different colors and the weighted percentage of the materials.

Color	SR value	Weighted Percentage of the area covered by the WPC
Pure White	0.740	224%
Sand	0.441	133%
White Dew	0.579	176%
Red Cedar	0.316	97%
Antique	0.227	70%
Oak	0.257	79%

Annex 2: Materials and Resources - Sourcing of Raw Materials

Here below additional detailed information about pre-consumer recycled content and post-consumer recycled content. NewTechWood uses select, recycled, high-density plastics (post-consumer), combined with recycled wood products from furniture cut-offs, shavings, sawdust etc. (pre-consumer), to manufacture a composite wood substitute.

In LEED, total recycled content is the sum of 50% of the pre-consumer recycled content plus 100% post-consumer recycled content.

	Percentage by weight
Pre-consumer recycled content	60%
Post-consumer recycled content	30%
Total recycled content (50% pre-consumer+ 100% post-consumer)	**60%**