

CENTRIA Product Data Sheet

for the LEED Green Building Rating System New Construction & Major Renovations (LEED-NC) Version 2.2, October 2005

The following information is provided to assist the LEED project team in determining how the CENTRIA product referenced below can contribute toward earning specific LEED credits. For information not included within the scope of this data sheet, please contact CENTRIA.

www.CENTRIA.com

<http://greenworld.centria.com>

VERSAPANEL[®] ROOF PANELS

Sustainable Sites

14 Points

SS Credit 7.2

Heat Island Effect: Roof

1 Point

In order to achieve this credit, the panel color must have a Solar Reflectance Index (SRI) equal to or greater than 78 (for low-sloped roofs) or 29 (for steep-sloped roofs), as calculated in accordance with ASTM E 1980. The following table denotes CENTRIA standard colors that meet the specified SRI requirements.

Color Number	Color Name	Solar Reflectance Index (SRI)	Low Slope (2:12 or less)	Steep Slope (> 2:12)
133	Sandstone	64	No	Yes
142	Surrey Beige	45	No	Yes
179	Regal White	83	Yes	Yes
310	Bone White	90	Yes	Yes
971	Chromium Gray	50	No	Yes
992	Lee Ivory	75	No	Yes

Color Number	Color Name	Solar Reflectance Index (SRI)	Low Slope (2:12 or less)	Steep Slope (> 2:12)
993	Off White	83	Yes	Yes
1760	Limestone	73	No	Yes
5444	Aged Copper	42	No	Yes
9917	Light Gray	61	No	Yes
9946	Silversmith	61	No	Yes
9989	Platinum	46	No	Yes
-----	Unpainted Galvalume	53	No	Yes

NOTE: CENTRIA continues to test additional colors for their Solar Reflectance Index; contact CENTRIA for the most current list of colors and SRI values

Energy & Atmosphere

17 Points

EA Credit 1

Optimize Energy Performance

1-10 Points

Versapanel Roof Panels have been independently tested for thermal transmittance in accordance with ASTM C 1363, and can contribute significantly to EA Credit 1 by providing a verifiable insulation value that meets or exceeds the baseline values prescribed in ASHRAE/IESNA Standard 90.1-2004. Test reports are available upon request. The following table indicates specific thermal performance values for each panel thickness:

PANEL THICKNESS	U-VALUE (WITH AIR FILM ON EACH SIDE OF PANEL)	R-VALUE (WITH AIR FILM ON EACH SIDE OF PANEL)
1-3/4 INCH	0.069	14.44
2-1/2 INCH	0.052	19.34
4 INCH	*	*

* Value pending the completion of thermal tests; for the most current information regarding values, contact CENTRIA

- MR Credit 4.1 **Recycled Content:** 10% 1 Point
- MR Credit 4.2 **Recycled Content:** 20% 1 Point

Versapanel Roof Panels contain recycled content quantified as a percentage of the total weight of the panel. The recycled content values have been calculated in accordance with the procedure detailed in MR Credits 4.1 and 4.2. The following table indicates specific recycled content values for selected panels:

PANEL THICKNESS	PANEL MODULE	FACE PANEL GAGE	LINER PANEL GAGE	PERCENT OF RECYCLED CONTENT BY WEIGHT		
				POST-CONSUMER	PRE-CONSUMER	TOTAL
1-3/4"	36"	26	26	19.2 %	5.2 %	24.4 %
2-1/2"	36"	26	26	17.8 %	4.8 %	22.6 %
4"	36"	26	26	15.5 %	4.2 %	19.7 %

NOTE: To obtain values for those panels not included in the table above, contact CENTRIA

- MR Credit 5.1 **Regional Materials:** 10% 1 Point
- MR Credit 5.2 **Regional Materials:** 20% 1 Point

Versapanel is an engineered insulated composite panel comprised of a variety of components such as galvanized steel, coatings, foam insulation, and sealants. Although the finished panels are manufactured at CENTRIA’s facility in Sheridan, Arkansas, the panel components are made from a variety of raw materials and fabricated in a variety of locations. Given the complexity of such a multi-component system, it is not possible to accurately verify and document a primary location of material extraction or processing. Therefore, CENTRIA suggests that Versapanel not be included in the calculations for these credits.

Indoor Environmental Quality**15 Points****EQ Credit 4.1 Low-Emitting Materials: Adhesives and Sealants 1 Point**

This credit requires that the VOC content of all adhesives and sealants must be less than the limits established by the South Coast Air Quality Management District, Rule #1168. The factory-applied sealant (Tremco JS-773) used in the side joint of Versapanel Roof Panels has a VOC content of 180 grams/liter, which is less than the maximum limit of 250 grams/liter established by this regulation for architectural sealants. Therefore, the Tremco JS-773 sealant meets the requirements of EQ Credit 4.1.

EQ Credit 4.2 Low-Emitting Materials: Paints and Coatings 1 Point

All coatings used on either side of CENTRIA's Versapanel Roof Panels are applied directly to the metal sheet prior to forming of the panel, and as a result, no VOCs are generated at the jobsite from field-painting operations.

Innovation & Design Process**5 Points****ID Credit 1.x Innovation in Design: Cradle to Cradle Certification 1 Point**

In early 2007, the U.S. Green Building Council established an ID Credit point for the use of products certified under the Cradle to Cradle Certification Program. This program, administered by MBDC (McDonough Braungart Design Chemistry), evaluates products and their manufacturing process on the basis of human/environmental impact, material reutilization, energy and water use, and social responsibility. A product that meets the certification criteria is designated as either a Silver, Gold, or Platinum level product and labeled as "Cradle to Cradle Certified". CENTRIA's Versapanel Roof Panels are Cradle to Cradle Silver Certified.

For additional information regarding the use of Cradle to Cradle Certified products in the LEED certification process, consult the U.S. Green Building Council (www.usgbc.org) and MBDC (www.mbdc.com).

(REVISED: November 2007)