

Background:

Carboline Fireproofing products can contribute towards 11 points under the LEED Green Building Rating System[®]. The LEED Green Building Rating System[®] does not certify construction products or materials. Instead, entire projects are certified on the basis of overall design and in consideration of the environmental impact of the building materials employed. This data sheet provides environmental properties, so that Carboline products can be evaluated under the LEED Green Building Rating System[®].

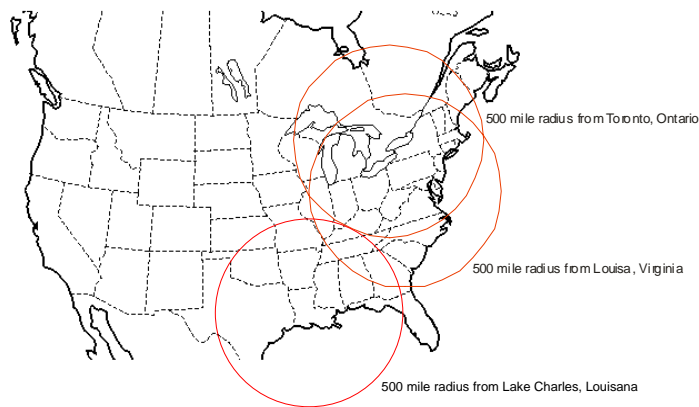
Table of Applicable LEED Points

LEED Points	LEED Requirements	Applicable Product	LEED Guide Reference
1	Building materials manufactured within 500 miles of the project site.	All	MR Credit 5.1
3	Renovation projects maintain existing building elements.	All	MR Credit 1.1, 1.2 and 1.3
2	Building materials contain recycled content.	Pyrolite, Pyrocrete and Southwest Products	MR Credit 4.1 and 4.2
2	Low Volatile Organic Compound (VOC) content.	All	EQ Credit 4.1 and 4.2
1	Raw materials supplied within 500 miles of the manufacturing site.	All	MR Credit 5.2
2	Divert Construction Waste from Disposal	All	MR Credit 2.1 and 2.2

1 Points – LEED MR Credit 5.1.

Building materials manufactured within 500 miles of the project site.

Carboline products are manufactured at either our facilities in Toronto, Ontario, Louisa, Virginia and/or Lake Charles, LA. Your Carboline Technical Sales Representative can determine at which facility a product batch was manufactured.



2 Points – LEED MR Credit 2.1 and 2.2

Wooden shipping pallets and some product packaging such as plastic buckets can be returned to Carboline for reuse, contributing to the percentage of construction waste diverted from disposal.

**3 Points – LEED MR Credit 1.1, 1.2 and 1.3
Renovation Projects Maintain Existing Building Elements**

Carboline products are ideal in fire performance retrofit/upgrade situations, where existing, unrated building elements are required to be fire-rated under modern building codes. Wooden floor assemblies, cast iron structural columns, and other existing building elements can be upgraded to meet modern fire rating, firestopping and thermal insulation requirements, rather than being replaced during building renovation projects.

5 Points and 1 Prerequisite

The following table outlines product data required for the application of LEED Credits MR 4.1, MR 4.2, MR 5.2, EQ 4.1, EQ 4.2, and EQ Prerequisite 1.

Table of Environmental Data – Carboline Products

Product	% Regionally Supplied Raw Materials (MR Credit 5.2)^a	% Recycled Content (MR Credits 4.1 and 4.2)^b	VOC Content (EQ Credits EQ 4.1, EQ 4.2 and Prerequisite 1). lbs / gal US (g/L)^c
Southwest Type 5GP, 5MD and 5EF	99 %	2 %	None.
Southwest Type 7, 7HD and 7TB	92 %	1 %	None.
Southwest Type 1XR	99 %	0	None.
A/D FIREFILM [®] III	53 %	0	0.17 (20)
A/D COLORCOAT [®]	100 %	0	2.69 (323)
Pyrolite 15	99 %	2 %	None.
Pyrolite 22	99 %	2 %	None.
Pyrocrete 239	92 %	1 %	None.
Pyrocrete 40	92 %	1 %	None.
Pyrocrete 240HY	92 %	1 %	None.
Pyrocrete 241	92 %	1 %	None.
Hardcoat 4500	92 %	1 %	None.
Nullifire S605	41 %	0	2.44 (293)
Nullifire S606	43 %	0	2.49 (300)
Nullifire S607	43 %	0	0.44 (53)
Thermo-Sorb	43 %	0	2.87 (344)
Thermo-Lag 3000P	41 %	0	0.11 (13)
Thermo-Lag 3000SP	41 %	0	0.53 (64)
Thermo-Lag 3000A	41 %	0	0.11 (13)
Thermo-Lag 3000SA	41 %	0	0.53 (64)

^a Regionally supplied raw material status is based on a 500 mile radius criteria, measured from Carboline's manufacturing facility. Suppliers may purchase or extract raw materials from outside this radius. Percentages are by mass.

^b Recycled content is based on the definition of "recycled", included in US Federal Trade Commission document, *Guides for the Use of Environmental Marketing Claims*, 16 CFR 260.7 (e). This does not include water. Recycled content is 100% post-industrial. Percentages are by mass.

^c VOC testing has been conducted in accordance with ASTM D 3960.



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