

## Specifications for LEED

### Introduction

Nordic Lam is a black spruce structural glued laminated timber (glulam) manufactured in accordance with 24F-ES/NPG and 20F-ES/CPG layup combinations listed in APA Product Report PR-L294. Nordic X-Lam cross-laminated timber (CLT) is manufactured with black spruce in accordance with the E1 grade of ANSI/APA PRG-320, as described in APA Product Report PR-L306. Nordic Lam and Nordic X-Lam are used as structural members and are manufactured in accordance with the in-plant manufacturing standards approved by APA. The adhesives used to manufacture the glulam and CLT products are exterior exposure adhesives meeting the requirements of ANSI 405, and containing no added urea-formaldehyde. The laminating lumber is certified under Forest Stewardship Council Standard FSC-STD-40-004.

### Green Products

Nordic Lam glulam as well as Nordic X-Lam CLT products listed above are qualified for green construction with points specified in Table 1, as independently verified by APA<sup>1</sup> as meeting pertinent criteria of the 2009 LEED for New Construction and Major Renovations Standard.

TABLE 1  
2009 LEED for New Construction and Major Renovations

Points that have been verified as eligible by APA<sup>1</sup>

	Section/Criteria	Eligible Points	Maximum Points
√	IEQ 4.4: Low Emitting Materials: Composite wood products used on the interior of the building (i.e., inside the weatherproofing system) must contain no added urea-formaldehyde resins	1	1

Eligible points that are conditional on construction location and application

	Section/Criteria	Eligible Points	Maximum Points
√	MR 5: Regional Materials: Use building materials or products that have been extracted, harvested, recovered and processed within 500 miles of the final manufacturing site. Demonstrate that the final manufacturing site is within 500 miles (1,500 miles if shipped by rail or water) of the project site for these products for a minimum of 20% or 30%.	1 pt for 20% and 2 pts for 30%	1 pt for 20% and 2 pts for 30%
√	MR 7: Certified Wood: Use a minimum of 50% (based on cost) of wood-based materials and products that are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components.	1	1

### Additional Information

- Nordic Lam and Nordic X-Lam are manufactured in the Chantiers Chibougamau Ltd (CCL) facility in Chibougamau, Quebec.
- CCL uses source materials, i.e. lumber, that have been extracted, harvested, recovered and processed within 500 miles of the final manufacturing site. The mean harvesting distance is 60 miles, and the farthest distance 150 miles.
- Nordic Lam and Nordic X-Lam are made of 96% (by weight) of wood fibre; the other components include resins (no added urea-formaldehyde resins) and wax.
- LEED IEQ Credit 4.1, Low-emitting Materials: Adhesives and sealants - *Not applicable*
- LEED MR Credit 3, Materials Reuse - *Not applicable*

### Supporting Data

- <sup>1</sup>APA Green Verification Reports GR-L294 and GR-L306, Nordic Lam and Nordic X-Lam
- FSC SW-CW/FM-003874 Forest Management and SW-COC-CW-003885 Chain-of-Custody (CCL)
- FSC SW-COC-004084 Chain-of-Custody (Nordic)