

CLASSIFICATION: 06 17 19 00 Cross-Laminated Timber

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Nordic X-Lam cross-laminated timber (CLT) is composed of cross-wise Spruce-Pine-Fir (S-P-F) and/or Black Spruce species boards, forming a slab/panel product up to 15 inches thick, 8 feet wide, and 64 feet long. The result is a building material high in resistance and stiffness, that can easily substitute steel or concrete.

## Section 1: Summary

## Nested Method / Product Threshold

### CONTENT INVENTORY

#### Inventory Reporting Format

- Nested Materials Method  
 Basic Method

#### Threshold Disclosed Per

- Material  
 Product

#### Threshold level

- 100 ppm  
 1,000 ppm  
 Per GHS SDS  
 Per OSHA MSDS  
 Other

#### Residuals/Impurities

Residuals/Impurities Considered in 1 of 4 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes  No

Are All Substances Above the Threshold Indicated:

**Characterized**  Yes  No  
Percent Weight and Role Provided?

**Screened**  Yes  No  
Using Priority Hazard Lists with Results Disclosed?

**Identified**  Yes  No  
Name and Identifier Provided?

### CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

**MATERIAL** | **SUBSTANCE** | *RESIDUAL OR IMPURITY*  
**GREENSCREEN SCORE** | HAZARD TYPE

**WOOD** [ **BLACK SPRUCE (BLACK SPRUCE)** **NoGS** ] **ADHESIVE #1** [ **POLYURETHANE (POLYURETHANE)** **LT-UNK** **POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))** **LT-UNK** | RES | MUL | CAN **METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))** **LT-UNK** | MAM | EYE | SKI | CAN | RES | MUL **POLYISOCYANATE COMPOUNDS (POLYISOCYANATE COMPOUNDS)** **NoGS** **DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI ) (DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI ))** **LT-UNK** | MAM | EYE | SKI | CAN | RES | MUL **BENTONITE, ACID-LEACHED (BENTONITE, ACID-LEACHED)** **LT-UNK** ] **ADHESIVE #2** [ **STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR))** **LT-UNK** **LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)** **LT-UNK** **WATER (WATER)** **BM-4 POLYURETHANE (POLYURETHANE)** **LT-UNK** **POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL))** **LT-UNK** **TOLUENE (TOLUENE)** **LT-1** | MAM | SKI | DEL | REP | END | MUL | PHY  
**(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM SALT**  
**(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM SALT** **LT-P1** | MUL **SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)** **LT-1** | CAN **TRIBUTYL PHOSPHATE (TRIBUTYL PHOSPHATE)** **LT-P1** | MAM | SKI | CAN | END | MUL ] **ADHESIVE #3** [ **POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))** **LT-UNK** | RES | MUL | CAN **METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))** **LT-UNK** | MAM | EYE | SKI | CAN | RES | MUL **DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC (DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC)** **LT-UNK** | MAM | EYE | SKI | CAN | RES | MUL ]

Number of Greenscreen BM-4/BM3 contents..... 1  
Contents highest concern GreenScreen  
Benchmark or List translator Score..... LT-1  
Nanomaterial..... No

### INVENTORY AND SCREENING NOTES:

This HPD has been prepared considering a Nested Materials Inventory with a "Per Product" threshold of 1,000 ppm. Wood and all adhesives are Special Conditions Materials (biological material and reaction products) and are present in the product. Guidelines for reporting Special Conditions materials are still under development by HPDC, Nordic Structures will update the HPD accordingly once these guidelines get published.

### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

### CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CDPH Standard Method v1.1 - Not tested  
Sustainable forestry: FSC Certification - Chain of Custody (COC)  
LCA: Environmental Product Declaration (EPD) by UL - Industry Generic  
Other: APA Green Verification Report

No pre-checks completed or disclosed

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER: Vertima

VERIFICATION #: Ute-3553

SCREENING DATE: 2018-01-25

PUBLISHED DATE: 2018-01-25

EXPIRY DATE: 2021-01-25

## Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-standard](http://www.hpd-collaborative.org/hpd-2-1-standard)

**WOOD** %: **99.2000** HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals and impurities for that material.

OTHER MATERIAL NOTES: Main component

### BLACK SPRUCE (BLACK SPRUCE)

ID: Not registered

%: **100.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Main component**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Structural main component.

**ADHESIVE #1** %: **0.6000** HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

OTHER MATERIAL NOTES: Adhesive used for face bonding.

### POLYURETHANE (POLYURETHANE)

ID: 64440-88-6

%: **30.0000 - 60.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive polyurethane component**

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Amine, propylene glycol (PG), propylene oxide (PO)

### POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))

ID: 9016-87-9

%: **20.0000 - 60.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS: AGENCY(IES) WITH WARNINGS:

RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Polymeric diphenylmethane diisocyanate and isocyanic acid, polymethylenepolyphenylene ester.

**METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))**

ID: 101-68-8

%: **10.0000 - 30.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component.

**POLYISOCYANATE COMPOUNDS (POLYISOCYANATE COMPOUNDS)**

ID: **Not registered**

#: **10.0000 - 30.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approximation for isocyanate terminated polymer.

**DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI ) (DIPHENYLMETHANE-2,4'- DIISOCYANATE (2,4'-MDI ))**

ID: **5873-54-1**

#: **1.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component.

**BENTONITE, ACID-LEACHED (BENTONITE, ACID-LEACHED)**

ID: **70131-50-9**

#: **1.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approximation for organo-modified bentonite.

**ADHESIVE #2**

**%: 0.2000**

**HPD URL: N/A**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

OTHER MATERIAL NOTES: Adhesive, cross-linking agent (hardener) used in combination with adhesive #3.

**STYRENE BUTADIENE RUBBER (SBR) (STYRENE BUTADIENE RUBBER (SBR))**

ID: 9003-55-8

**%: 40.0000**      **GS: LT-UNK**      **RC: None**      **NANO: No**      **ROLE: Latex component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component.

**LIMESTONE; CALCIUM CARBONATE (LIMESTONE; CALCIUM CARBONATE)**

ID: 1317-65-3

**%: 20.0000 - 30.0000**      **GS: LT-UNK**      **RC: None**      **NANO: No**      **ROLE: Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component

**WATER (WATER)**

ID: 7732-18-5

**%: 16.0000**      **GS: BM-4**      **RC: None**      **NANO: No**      **ROLE: Aqueous phase**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Water is used in adhesive composition.

**POLYURETHANE (POLYURETHANE)**

ID: 64440-88-6

**%: 10.0000 - 30.0000**      **GS: LT-UNK**      **RC: None**      **NANO: No**      **ROLE: Adhesive component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Adhesive component

**POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL))**

ID: 9002-89-5

#: **10.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS: None Found AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists

SUBSTANCE NOTES: PVOH used as an adhesive component

**TOLUENE (TOLUENE)**

ID: 108-88-3

#: **0.1000 - 1.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
DEVELOPMENTAL	EU - R-phrases	R63 - Possible risk of harm to the unborn child
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
DEVELOPMENTAL	EU - GHS (H-Statements)	H361d - Suspected of damaging the unborn child
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour

SUBSTANCE NOTES: Adhesive component

**(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM SALT  
(((CARBOXYMETHYL)IMINO)BIS(ETHYLENENITRILO))TETRAACETIC ACID, PENTASODIUM SALT)**

ID: 140-01-2

#: **0.1000 - 1.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS: MULTIPLE AGENCY(IES) WITH WARNINGS: German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

SUBSTANCE NOTES: Adhesive component

**SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)**

ID: 14464-46-1

#: **0.1000 - 1.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Adhesive component

**TRIBUTYL PHOSPHATE (TRIBUTYL PHOSPHATE)**

ID: 126-73-8

#: **0.1000 - 1.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R22 - Harmful if Swallowed
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: Adhesive component



PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No information regarding residuals and impurities was found and/or available for that material.

OTHER MATERIAL NOTES: Adhesive used in combination with adhesive #2.

**POLYMERIC MDI (PMDI) (POLYMERIC MDI (PMDI))**

ID: 9016-87-9

%: 20.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Adhesive component
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
RESPIRATORY	AOEC - Asthmagens		Asthmagen (G) - generally accepted	
RESTRICTED LIST	US EPA - PPT Chemical Action Plans		EPA Chemical of Concern - Action Plan published	
RESPIRATORY	US EPA - PPT Chemical Action Plans		Inhalation sensitizer causing asthma and lung damage	
CANCER	MAK		Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels	
RESPIRATORY	MAK		Sensitizing Substance Sah - Danger of airway & skin sensitization	

SUBSTANCE NOTES: Adhesive component.

**METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (METHYLENE BISPHENYL DIISOCYANATE (PURE MDI))**

ID: 101-68-8

%: 20.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Adhesive component
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
MAMMALIAN	EU - R-phrases		R20 - Harmful by Inhalation (gas or vapor or dust/mist)	
EYE IRRITATION	EU - R-phrases		R36 - Irritating to eyes	
SKIN IRRITATION	EU - R-phrases		R38 - Irritating to skin	
CANCER	EU - R-phrases		R40 - Limited Evidence of Carcinogenic Effects	
RESPIRATORY	EU - R-phrases		R42 - May cause sensitization by inhalation	
SKIN SENSITIZE	EU - R-phrases		R43 - May cause sensitization by skin contact	
RESPIRATORY	AOEC - Asthmagens		Asthmagen (G) - generally accepted	
RESTRICTED LIST	US EPA - PPT Chemical Action Plans		EPA Chemical of Concern - Action Plan published	
SKIN IRRITATION	EU - GHS (H-Statements)		H315 - Causes skin irritation	
SKIN SENSITIZE	EU - GHS (H-Statements)		H317 - May cause an allergic skin reaction	
EYE IRRITATION	EU - GHS (H-Statements)		H319 - Causes serious eye irritation	
RESPIRATORY	EU - GHS (H-Statements)		H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled	
CANCER	EU - GHS (H-Statements)		H351 - Suspected of causing cancer	

RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component

**DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC  
(DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC)**

ID: 26447-40-5

%: **10.0000 - 15.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Adhesive component**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
EYE IRRITATION	EU - R-phrases	R36 - Irritating to eyes
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
CANCER	EU - R-phrases	R40 - Limited Evidence of Carcinogenic Effects
RESPIRATORY	EU - R-phrases	R42 - May cause sensitization by inhalation
SKIN SENSITIZE	EU - R-phrases	R43 - May cause sensitization by skin contact
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
RESPIRATORY	US EPA - PPT Chemical Action Plans	Inhalation sensitizer causing asthma and lung damage
ORGAN TOXICANT	EU - R-phrases	R48 - Danger of serious damage to health by prolonged exposure.

SUBSTANCE NOTES: Adhesive component

 **Section 3: Certifications and Compliance**

This section lists applicable certification information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

## VOC EMISSIONS

### CDPH Standard Method v1.1 - Not tested

CERTIFYING PARTY: Self-declared  
APPLICABLE FACILITIES: All.  
CERTIFICATE URL:  
ISSUE DATE: 2017-12-15  
EXPIRY DATE:  
CERTIFIER OR LAB: -  
CERTIFICATION AND COMPLIANCE NOTES:

## SUSTAINABLE FORESTRY

### FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: Third Party  
APPLICABLE FACILITIES: All.  
CERTIFICATE URL:  
[http://nordic.ca/data/files/datasheet/file/CCL\\_NordicStructuresFSCCoCcertIN-2016-1ENG.pdf](http://nordic.ca/data/files/datasheet/file/CCL_NordicStructuresFSCCoCcertIN-2016-1ENG.pdf)  
ISSUE DATE: 2014-03-09  
EXPIRY DATE: 2019-03-08  
CERTIFIER OR LAB: Rainforest Alliance  
CERTIFICATION AND COMPLIANCE NOTES: Chantiers Chibougamau Ltée and Nordic Structures are certified for the Single Chain of Custody and Controlled Wood for sustainable forestry practices. Products included in certificate scope are : planks; woodchips and sawdust; Footing, Glued-laminated, Isolated stud, cross-laminated timber, Joist; Oriented Strand Board (OSB); Softwood lumber.

## LCA

### Environmental Product Declaration (EPD) by UL - Industry Generic

CERTIFYING PARTY: Third Party  
APPLICABLE FACILITIES: All.  
CERTIFICATE URL:  
<http://nordic.ca/data/files/datasheet/file/EPDNordicXLam.pdf>  
ISSUE DATE: 2013-07-23  
EXPIRY DATE: 2018-07-23  
CERTIFIER OR LAB: UL Environment

CERTIFICATION AND COMPLIANCE NOTES: Type III environmental product declaration for cross-laminated timber and glulam manufactured at Nordic Structures developed according to PCR for North American Structural and Architectural Wood Products (FPInnovations, November 2011).

## OTHER

### APA Green Verification Report

CERTIFYING PARTY: Second Party  
APPLICABLE FACILITIES: All.  
CERTIFICATE URL:  
<http://nordic.ca/data/files/datasheet/file/APAGR-L306NordicX-LamCLT.pdf>  
ISSUE DATE: 2017-01-23  
EXPIRY DATE:  
CERTIFIER OR LAB: APA - The Engineered Wood Association

CERTIFICATION AND COMPLIANCE NOTES: Certificate for points toward National Green Building Standard ICC 700 and Leadership in Energy and Environmental Design (LEED) Certification.

## OTHER

### ILFI Declare - Red List Free

CERTIFYING PARTY: Third Party  
APPLICABLE FACILITIES: All.  
CERTIFICATE URL:  
[http://nordic.ca/data/files/datasheet/file/NWP-3002\\_170118.jpeg](http://nordic.ca/data/files/datasheet/file/NWP-3002_170118.jpeg)  
ISSUE DATE: 2017-02-02  
EXPIRY DATE: 2018-03-01  
CERTIFIER OR LAB: International Living Future Institute

CERTIFICATION AND COMPLIANCE NOTES: LBC Red List Free Declare certification.

CERTIFYING PARTY: Second Party

ISSUE DATE: 2017-09-

EXPIRY DATE:

CERTIFIER OR LAB: APA - The

APPLICABLE FACILITIES: All.

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Engineered Wood Association

CERTIFICATE URL:

<http://nordic.ca/data/files/datasheet/file/APAPR-E740.pdf>

CERTIFICATION AND COMPLIANCE NOTES: Certificate for low formaldehyde emission level disclosure.

**OTHER****NAHB ICC 700 NGBS Green Certified Product**

CERTIFYING PARTY: Third Party

ISSUE DATE: 2014-01-

EXPIRY DATE: 2018-

CERTIFIER OR LAB: Home

APPLICABLE FACILITIES: All.

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07-31

Innovation Research Lab

CERTIFICATE URL:

<http://nordic.ca/data/files/datasheet/file/NGBSNORDICX-Lam2017-2018.pdf>

CERTIFICATION AND COMPLIANCE NOTES: Certificate for points toward NGBS Green Certification to the ICC 700 National Green Building Standard.

**+ Section 4: Accessories**

*This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.*

No accessories are required for this product.

**📄 Section 5: General Notes**

No residuals and impurities for wood material. No residuals and impurities for post manufacture state for adhesives.

**👁 Section 6: References****MANUFACTURER INFORMATION**MANUFACTURER: **Nordic Structures**CONTACT NAME: **Julie Frappier**ADDRESS: **504-1100, Avenue des Canadiens-de-Montréal,**TITLE: **Director, Technical Services****Montréal Québec H3B 2S2, Canada**PHONE: **5148718526**WEBSITE: **www.nordic.ca**EMAIL: **info@nordicewp.com**

## KEY

<b>OSHA MSDS</b>	Occupational Safety and Health Administration Material Safety Data Sheet
<b>GHS SDS</b>	Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

## Hazard Types

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>OZO</b> Ozone depletion	<b>LAN</b> Land Toxicity
<b>GEN</b> Gene mutation	<b>PBT</b> Persistent Bioaccumulative Toxic	<b>NF</b> Not found on Priority Hazard Lists

## GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible Benchmark 1
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator Likely Benchmark 1
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> Unknown (no data on List Translator Lists)
<b>BM-U</b> Benchmark Unspecified (insufficient data to benchmark)	

## Recycled Types

<b>PreC</b> Preconsumer (Post-Industrial)
<b>PostC</b> Postconsumer
<b>Both</b> Both Preconsumer and Postconsumer
<b>Unk</b> Inclusion of recycled content is unknown
<b>None</b> Does not include recycled content

## Other Terms

### Inventory Methods:

- Nested Method / Material Threshold** Substances listed within each material per threshold indicated per material
- Nested Method / Product Threshold** Substances listed within each material per threshold indicated per product
- Basic Method / Product Threshold** Substances listed individually per threshold indicated per product

<b>Nano</b> Composed of nano scale particles or nanotechnology
<b>Third Party Verified</b> Verification by independent certifier approved by HPDC
<b>Preparer</b> Third party preparer, if not self-prepared by manufacturer
<b>Applicable facilities</b> Manufacturing sites to which testing applies

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The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.