

SCS Global Services does hereby certify that an independent assessment has been conducted on behalf of:

RedBuilt LLC

200 E. Mallard Dr., Boise, ID, United States

For the following product(s):

Building and Construction Products:

Red-I I-Joists

HPD Screening Dates: 9/3/2019

Verification #: qGE-8669



The product(s) meet(s) all of the necessary qualifications to be certified for the following claim(s):

Verified Health Product Declaration

This validation conforms to the Health Product Declaration Open Standard, Version 2.1.1 (July 2, 2018). Products have a complete, basic method, product threshold HPD and have been validated for health hazard warnings at an inventory threshold of 1000 ppm (0.1%). All substances above the the threshold were characterized, screened, and identified, but some substances remained undisclosed on the HPD.

HPDC Special Conditions for Biological Material applied for the HPD.

Registration # SCS-HPD-05694

Valid from: October 11, 2019 to September 3, 2022



A handwritten signature in black ink that reads 'Stanley Mathuram'.

Stanley Mathuram, PE, Vice President

SCS Global Services
2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

CLASSIFICATION: 06 17 33 Wood I-Joists

PRODUCT DESCRIPTION: Red-I™ I-joists are engineered wood products manufactured in Stayton, Oregon. Red-I™ I-joists are available in several different series and depth ranges from 9-1/2" (241mm) to 32" (813mm). Red-I™ I-Joists are engineered to provide structural joist solutions for floor, ceiling, and roof system applications.

Section 1: Summary

Basic 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

- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened Yes Ex/SC Yes No
All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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

RED-I I-JOISTS | SC:CELLULOSE Not Screened **UNDISCLOSED CHEMICAL #1** **BM-4 PARAFFIN** **LT-UNK PHENOL FORMALDEHYDE** **LT-P1** | RES **POLYMERIC MDI (PMDI)** **LT-UNK** | RES | MUL | CAN **UNDISCLOSED CHEMICAL #2** **LT-P1 PHENOL, POLYMER WITH FORMALDEHYDE,** **SODIUM SALT** **LT-UNK** **UNDISCLOSED CHEMICAL #3** **LT-1** | CAN | 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:

Special conditions applied: BiologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted from this substance entry.

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: No VOC Certification

Sustainable forestry: ASTM D7612

Other: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-8669

SCREENING DATE: 2019-09-03
PUBLISHED DATE: 2020-03-16
EXPIRY DATE: 2022-09-03



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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

RED-I I-JOISTS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: RedBuilt worked with the HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES: This information is a representative HPD covering standard Red-I I-joist products produced at RedBuilt's Stayton facility and is not applicable to Red-I I-joists produced with, or that have undergone a secondary treatment process. The average weights and the anticipated components are based upon practical professional judgment and information provided by suppliers

SC:CELLULOSE

ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-09-03

#: 84.83 - 95.62

GS: Not Screened

RC: None

NANO: No

ROLE: Veneer and OSB Components

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: OSB & Unaltered Veneer

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

The suppliers of the veneer material have verified that they supply RedBuilt unaltered veneer without any additives such as mold/mildew inhibitors.

UNDISCLOSED CHEMICAL #1ID: **Undisclosed**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-09-03**

#: 1.39 - 1.45	GS: BM-4	RC: None	NANO: No	ROLE: Adhesive #1; Adhesive #2 and Sealant Components
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The GreenScreen® Benchmark assessment score of BM-4 was provided through the HPD 2.1 Builder Tool. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

PARAFFINID: **8002-74-2**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-09-03**

#: 0.42 - 0.91	GS: LT-UNK	RC: None	NANO: No	ROLE: Sealant and OSB Components
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

PHENOL FORMALDEHYDEID: **9003-35-4**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-09-03**

#: 0.42 - 5.81	GS: LT-P1	RC: None	NANO: No	ROLE: OSB Component
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: :

POLYMERIC MDI (PMDI)

ID: 9016-87-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-03**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagens (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

%: **0.42 - 5.81**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **OSB Component**

SUBSTANCE NOTES:

UNDISCLOSED CHEMICAL #2ID: **Undisclosed**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-03**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

%: **0.30 - 0.30**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Adhesive #2 Component**

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALTID: **40798-65-0**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-03**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

%: **0.29 - 0.29**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Adhesive #1 Component**

SUBSTANCE NOTES: :

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-09-03**

%: **0.11 - 0.11** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Sealant Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
CANCER	GHS - Australia	H350 - May cause cancer

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance 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

No VOC Certification

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-09-04**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **N/A**

CERTIFICATE URL:

<https://www.usgbc.org/leedaddenda/10466>

CERTIFICATION AND COMPLIANCE NOTES: **CDPH Standard V1.2 (Section 01350/CHPS)- Not tested**

SUSTAINABLE FORESTRY

ASTM D7612

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2020-03-06**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **Stayton Facility**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **All wood materials used in this product meet the requirements of ASTM D7612 as coming from coming from either Responsible or Non-Controversial sources.**

OTHER

Environmental Product Declaration (EPD) by SCS

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2016-08-16**

EXPIRY DATE: **2021-08-15**

CERTIFIER OR LAB: **SCS Global Services**

APPLICABLE FACILITIES: **Stayton Facility**

CERTIFICATE URL:

https://www.scs-certified.com/products/cert_pdfs/SCS-EPD-04127_RedBuilt_Red-I_081916_web.pdf

CERTIFICATION AND COMPLIANCE NOTES: **SCS-EPD-04127; North American Structural and Architectural Wood Products, Version 2.0, June 18, 2015. (Product-Specific Type III, Cradle to Gate)**

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

RedBuilt worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold. Due to the proprietary nature of the information, the name and CAS number for certain chemicals have been redacted from this substance entry. "Undisclosed Chemical #n" indicates chemicals RedBuilt suppliers protect with NDAs.



MANUFACTURER INFORMATION

MANUFACTURER: **RedBuilt LLC**
 ADDRESS: **200 E. Mallard Drive**
Boise Idaho 83706, USA
 WEBSITE: **www.redbuilt.com**

CONTACT NAME: **Christine Richey**
 TITLE: **Professional Engineer**
 PHONE: **503-640-7151**
 EMAIL: **crichey@redbuilt.com**

KEY

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

Hazard Types

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

GreenScreen (GS)

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

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None 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

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

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.