

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



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 2.3 (May 12, 2022)**. Products have a complete, basic method, product threshold HPD and have been validated for health hazard warnings using full disclosure at an inventory threshold of 1000 ppm (0.1%). All substances above the threshold were characterized and screened. **Special Conditions for Biological Material applied the HPD.**

HPD Screening Dates: 1/25/23

Verification #: qGE-8669

Registration # SCS-HPD-05694

Valid from: January 31, 2023 to January 25, 2026



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

Stanley Mathuram, PE, Executive Vice President
SCS Global Services
2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

HPD UNIQUE IDENTIFIER: 31260
CLASSIFICATION: 06 17 33 Wood I-Joists
PRODUCT DESCRIPTION: Red-ITM I-joists are engineered wood products manufactured in Stayton, Oregon. Red-ITM I-joists are available in several different series and depth ranges from 9-1/2" (241mm) to 32" (813mm). Red-ITM 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	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
<div><div></div> Nested Materials Method</div> <div><div></div> Basic Method</div>	<div><div></div> 100 ppm</div> <div><div></div> 1,000 ppm</div> <div><div></div> Per GHS SDS</div> <div><div></div> Other</div>	<div><div></div> Completed</div> <div><div></div> Partially Completed</div> <div><div></div> Not Completed</div> <div>Explanation(s) provided :<div><div></div> Yes<div></div> No</div></div>	<div>Characterized<div><div></div> Yes<div></div> No</div></div> <div>Provided weight and role.</div> <div>Screened<div><div></div> Yes<div></div> No</div></div> <div>Provided screening results using HPDC-approved methods.</div> <div>Identified<div><div></div> Yes<div></div> No</div></div> <div>Provided name and CAS RN or other identifier.</div>

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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE
RED-I JOISTS [PHENOL FORMALDEHYDE LT-P1 | RES POLYMERIC MDI (PMDI) LT-UNK | CAN | RES | EYE | SKI | MAM UNDISCLOSED CHEMICAL #1 BM-4 PARAFFIN LT-UNK PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALT LT-UNK UNDISCLOSED CHEMICAL #2 LT-P1 UNDISCLOSED CHEMICAL #3 LT-1 | CAN | MUL | DEV CELLULOSE]

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, LT-1
Nanomaterial ... No
INVENTORY AND SCREENING NOTES:
Special Conditions applied: [BiologicalMaterial]

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
Other: Environmental Product Declaration (EPD) by SCS
Sustainable forestry: ASTM D7612
Sustainable forestry: SFI Sustainable Forestry Initiative - Certified Chain of Custody (COC)

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Option 1.

Third Party Verified? <div><div></div> Yes</div> <div><div></div> No</div>	PREPARER: ToxServices LLC VERIFIER: SCS Global Services VERIFICATION #: qGE-8669	SCREENING DATE: 2023-01-25 PUBLISHED DATE: 2023-01-31 EXPIRY DATE: 2026-01-25
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RESIDUALS AND IMPURITIES EVALUATION

D: Biological Material

ScreenScreen: Not Required

C: None

ANO: No

MATERIAL ROLE: Structure component

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening is not applicable to this Special Condition

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-01-25 12:43:58		
?: 0.4200 - 5.8100	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2022		
		Red List substances to avoid in Living Building Challenge V4.0 projects		

SUBSTANCE NOTES: :

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-01-25 12:43:58

%: 0.4139 - 5.7946

GreenScreen: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Adhesive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES:

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-01-25 12:43:59

%: 1.2625 - 1.2625

GreenScreen: BM-4

RC: None

NANO: No

SUBSTANCE ROLE: Adhesive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

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 2.3 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.

PARAFFIN				ID: 8002-74-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-01-25 12:44:00		
?: 0.4139 - 0.8278	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Sealant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALT				ID: 40798-65-0
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-01-25 12:44:00		
%: 0.5750 - 0.5750	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

UNDISCLOSED CHEMICAL #2				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-01-25 12:43:58		
%: 0.3000 - 0.3000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
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.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-01-25 12:43:59		
%: 0.1100 - 0.1100	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Sealant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	EU - REACH Annex XVII CMRs		Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man	
CAN	EU - Annex VI CMRs		Carcinogen Category 1B - Presumed Carcinogen based on animal evidence	
MUL	ChemSec - SIN List		CMR - Carcinogen, Mutagen &/or Reproductive Toxicant	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
CAN	GHS - Australia		H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]	
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1		H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]	
DEV	GHS - Australia		H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	

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 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	ISSUE DATE: 2022-09-06 EXPIRY DATE:	CERTIFIER OR LAB: N/A
OTHER	Environmental Product Declaration (EPD) by SCS	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Stayton Facility CERTIFICATE URL: https://cdn.scs-certified.com/products/cert_pdfs/SCS-EPD-07524_RedBuilt_Red-I_Joists_122021.pdf CERTIFICATION AND COMPLIANCE NOTES: SCS-EPD-07525: PCR Guidance for Building-Related Products and Services Part A: Life Cycle Assessment Calculation Rules and Report Requirements (V 3.2, UL Environment, Dec 2018) PCR Guidance for Building-Related Products and Services, Part B: Structural and Architectural Wood Products, EPD Requirements UL 10010-9 v.1.1.2020.	ISSUE DATE: 2021-12-20 EXPIRY DATE: 2026-12-19	CERTIFIER OR LAB: SCS Global Services
SUSTAINABLE FORESTRY	ASTM D7612	
CERTIFYING PARTY: Self-declared 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.	ISSUE DATE: 2022-09-06 EXPIRY DATE:	CERTIFIER OR LAB: N/A
SUSTAINABLE FORESTRY	SFI Sustainable Forestry Initiative - Certified Chain of Custody (COC)	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Stayton Facility CERTIFICATE URL: https://sfidatabase.org/mod-cert/item/102323-scs-sfi-coc-001848 CERTIFICATION AND COMPLIANCE NOTES: SFI Standard: SFI2015-2021, Section 4 (Chain of Custody). Certificate covers production of Red-I joists and RedLam LVL using the volume credit method.	ISSUE DATE: 2020-12-20 EXPIRY DATE: 2025-12-19	CERTIFIER OR LAB: SCS Global Services

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	CONTACT NAME: Christine Richey
ADDRESS: 200 E. Mallard Drive	TITLE: Professional Engineer
Boise Idaho 83706, USA	PHONE: 503-640-7151
WEBSITE: www.redbuilt.com	EMAIL: crichey@redbuilt.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types		
AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

- PreC** Pre-consumer recycled content
- PostC** Post-consumer recycled content
- UNK** Inclusion of recycled content is unknown
- None** Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.