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:**
RedLam LVL

HPD Screening Dates: 9/3/2019
Verification #: qGE-8668

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 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-05695
Valid from: October 11, 2019 to September 3, 2022
RedLam LVL
by RedBuilt LLC

CLASSIFICATION: 06 17 13 Laminated Veneer Lumber

PRODUCT DESCRIPTION: RedLam™ Laminated Veneer Lumber (RedLam™ LVL) is an engineered wood product manufactured in Stayton, Oregon. RedLam™ LVL is available up to 7” (178mm) in thickness, and 24” (610mm) in depth, and 80’ (24.4m) in length. RedLam™ LVL is typically used as main carrying beams, headers, and wall framing and can be manufactured to precision lengths.

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

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
--- | --- | --- | --- | ---
REDLAM LVL | SC:CELLULOSE | Not Screened | UNDISCLOSED CHEMICAL #1 BM-4 PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALT LT-UNK | UNDISCLOSED CHEMICAL #2 LT-1 | CAN | MUL UNDISCLOSED CHEMICAL #3 LT-UNK

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
Formaldehyde emissions: JAS F**** Certificate
Other: Environmental Product Declaration (EPD) by SCS
Sustainable forestry: FSC Certification - Mix Credit

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-8668
SCREENING DATE: 2019-09-03
PUBLISHED DATE: 2019-10-11
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](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

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**REDLAM LVL**

**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 LVL produced at RedBuilt's Stayton facility and is not applicable to LVL produced with, or that has undergone a secondary treatment process. The average weights and the anticipated components are based upon practical professional judgment and information provided by suppliers.

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**SC:CELLULOSE**

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

<table>
<thead>
<tr>
<th>%: 97.00 - 97.00</th>
<th>GS: Not Screened</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Veneer Component</th>
</tr>
</thead>
</table>

**HAZARD TYPE**

**AGENCY AND LIST TITLES**

**WARNINGS**

Hazard Screening not performed

**SUBSTANCE NOTES:**

Version: SCBioMats/2018-02-23  
Category: Tree-based materials  
Identifier: 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 #1

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE</th>
<th>%: 1.72 - 1.83</th>
<th>GS: BM-4</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Adhesive and Sealant Components</th>
</tr>
</thead>
</table>

**HAZARD TYPE**
- None found

**AGENCY AND LIST TITLES**
- WARNINGS

**WARNINGS**
- 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.

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### PHENOL, POLYMER WITH FORMALDEHYDE, SODIUM SALT

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE</th>
<th>%: 0.50 - 0.50</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Adhesive Component</th>
</tr>
</thead>
</table>

**HAZARD TYPE**
- None found

**AGENCY AND LIST TITLES**
- WARNINGS

**WARNINGS**
- No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:**

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### UNDISCLOSED CHEMICAL #2

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE</th>
<th>%: 0.19 - 0.19</th>
<th>GS: LT-1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Sealant Component</th>
</tr>
</thead>
</table>

**HAZARD TYPE**
- 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

**WARNINGS**
- No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** This substance was properly screened by the HPD Approved Preparer. 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.
<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD SCREENING DATE</td>
<td>2019-09-03</td>
</tr>
<tr>
<td>%:</td>
<td>0.14 - 0.14</td>
</tr>
<tr>
<td>GS:</td>
<td>LT-UNK</td>
</tr>
<tr>
<td>RC:</td>
<td>None</td>
</tr>
<tr>
<td>NANO:</td>
<td>No</td>
</tr>
<tr>
<td>ROLE:</td>
<td>Sealant Component</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td></td>
</tr>
<tr>
<td>AGENCY AND LIST TITLES</td>
<td></td>
</tr>
<tr>
<td>WARNINGS</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** This substance was properly screened by the HPD Approved Preparer. 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**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>N/A</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td><a href="https://www.usgbc.org/leedaddenda/10466">https://www.usgbc.org/leedaddenda/10466</a></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-09-04</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

### FORMALDEHYDE EMISSIONS

**JAS F**** Certificate**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>Stayton Facility</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td><a href="http://www.pfsteco.com/docs/cert/JAS_324.pdf">http://www.pfsteco.com/docs/cert/JAS_324.pdf</a></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2010-03-17</td>
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<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>PFS TECO (ROCB)</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: Japanese Agricultural Standard (JAS) for Laminated Veneer Lumber, MAFF Notification No. 2773. Japanese Law Concerning Standardization and Proper Labeling of Agricultural Forest Products (Law No. 175 of 1950); Date of Enforcement: March 1, 2006.

### OTHER

**Environmental Product Declaration (EPD) by SCS**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>Stayton Facility</td>
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<tr>
<td>ISSUE DATE:</td>
<td>2016-08-16</td>
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<td>EXPIRY DATE:</td>
<td>2021-08-15</td>
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<tr>
<td>CERTIFIER OR LAB:</td>
<td>SCS Global Services</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: SCS-EPD-04128; North American Structural and Architectural Wood Products, Version 2.0, June 18, 2015. (Product-Specific Type III, Cradle to Gate)

### SUSTAINABLE FORESTRY

**FSC Certification - Mix Credit**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All Facilities</td>
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<tr>
<td>ISSUE DATE:</td>
<td>2018-09-25</td>
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<tr>
<td>EXPIRY DATE:</td>
<td>2023-09-24</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>SCS Global Services</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: The assessment has been conducted by SCS Global Services in accordance with the protocols of the Forest Stewardship Council® A.C. (FSC®).

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

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.