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DIVISION: 06— WOOD AND PLASTICS
Section: 06070—Wood Treatment

REPORT HOLDER:

PHIBROWOOD LLC
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RIDGEFIELD PARK, NEW JERSEY 07660
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EVALUATION SUBJECT:

SUSTAINWOOD™ PRESERVATIVE-TREATED WOOD

ADDITIONAL LISTEES:

BABB LUMBER COMPANY
6652 HIGHWAY 41 NORTH
RINGGOLD, GEORGIA 30736

BRACKETT BROTHERS
4875 BRACKETT-LYLES ROAD
MORGANTON, NORTH CAROLINA 28655

COVE CITY WOOD PRESERVING
11065 OLD US 70
COVE CITY, NORTH CAROLINA 28523

COX WOOD PRESERVERS
860 CANON BRIDGE ROAD
ORANGEBURG, SOUTH CAROLINA 29115

CULPEPER WOOD PRESERVERS
15487 BRAGGS CORNER ROAD
CULPEPER, VIRGINIA 22701

EVERWOOD TREATMENT COMPANY
HIGHWAY 31 SOUTH
SPANISH FORT, ALABAMA 36577

FREE STATE LUMBER COMPANY, INC.
41542 HIGHWAY 195
HALEYVILLE, ALABAMA 35565

HOOVER TREATED WOOD
154 WIRE ROAD
THOMSON, GEORGIA 30673

LITRELL BROTHERS LUMBER COMPANY
20345 HIGHWAY 31 NORTH
VINEMONT, ALABAMA 35179

PEACH STATE MANUFACTURING, INC
4250 STACKS ROAD
COLLEGE PARK, GEORGIA 30349

ROBBINS WOOD
175 OLD MAIL ROAD
ROCKWELL, NORTH CAROLINA 28138

STRAITS WOOD TREATING
4804 EAST WILDER ROAD
BAY CITY, MICHIGAN 48706

STRUCTURAL WOOD PRESERVING
4034 HIGHWAY 22 SOUTH
COLERIDGE, NORTH CAROLINA 27316

SUMTER WOOD PRESERVERS
1455 EAST FRONTAGE ROAD
SUMTER, SOUTH CAROLINA 29150

SUNBELT FOREST PRODUCTS CORPORATION
6106 SPRIT LAKE ROAD
BARTOW, FLORIDA 33830

TSO OF MARYLAND
1201 MARYLAND AVENUE
HAGERSTOWN, MARYLAND 21740

TSO OF OHIO
115 WEST ROAD
FOMBELL, PENNSYLVANIA 16123

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)
- Other Codes (see Section 8.0)

Properties evaluated:

- Preservative-treated wood
- Decay resistance
- Termite resistance
- Corrosion
- Structural

2.0 USES

SustainWood™ is a preservative treatment for wood members that are required by the code to be protected against decay and termites.

***Revised August 2008**

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3.0 DESCRIPTION

3.1 General:

SustainWood™ preservative-treated wood products are recognized for use in aboveground, ground-contact, and freshwater-contact applications and to resist attack by fungal decay, and subterranean termites, including Formosan termites.

SustainWood™ 20T brand wood preservatives are produced by PhibroWood LLC, and the wood treatment process is conducted at the wood-preserving treatment facilities listed in Table 3 of this report in accordance with the PhibroWood LLC Quality Manual and AWWA Standards.

3.2 Preservative System:

SustainWood™ 20T concentrate brand wood preservatives are micronized copper-azole preservative systems used for treating wood members. The preservative contains copper (Cu) and azole (tebuconazole) corresponding to a ratio of 25:1 (+/- 10% tolerance). The active ingredients are dispersed in water.

3.3 Materials:

The following wood products may be treated with the SustainWood™ preservative system:

- Dimensional lumber and timbers of the following species consisting of primarily sapwood: southern pine, mixed southern pine, radiata pine, patula pine, Caribbean pine, red pine, ponderosa pine, eastern white pine, and German Scots pine.
- Lumber, of nominal size 2-by-8 or less, for decking and specialty use, of the species listed in (a) above.
- Southern pine and Douglas fir plywood.

Minimum preservative retention levels are provided in Table 1 of this evaluation report.

4.0 INSTALLATION

4.1 General:

SustainWood™ preservative-treated wood products are installed as preservative-treated lumber and timbers in accordance with the requirements of the applicable code.

PhibroWood LLC and industry published installation instructions for wood and pressure-treated wood products, and this report, must be strictly adhered to, and a copy of the instructions must be available at all times on the jobsite during installation.

The instructions within this report govern if there are any conflicts between PhibroWood LLC's instructions and this report.

4.2 Applications:

SustainWood™ preservative-treated wood products may be used in locations where wood is permitted and/or in locations required by the code to be fungal decay or termite resistant, in all building types and occupancies where permitted by the applicable code. Typical applications are described in Table 2.

Locations requiring preservative-treated wood for fungal decay or termite resistance are described in Section 2304.11 of the IBC and Sections R319 and R320 of the IRC.

4.3 Fasteners:

Fasteners used with SustainWood™ preservative-treated wood products must be in accordance with Section 2304.9.5 of the IBC and Section R319.3 of the IRC, except that aluminum fasteners are also permitted.

4.4 Structural:

4.4.1 Duration of Load: The maximum load duration factor allowed for SustainWood™ treated wood products used for structural members is 1.6, in accordance with Section 2.3 of the American Forest & Paper Association (AF&PA) National Design Specification for Wood Construction (NDS).

4.4.2 Incising Factor: When the treated wood products have been incised, the reference design values must be multiplied by the incising factor, Ci, in accordance with Section 4.3.8 of the NDS.

5.0 CONDITIONS OF USE

The PhibroWood LLC SustainWood™ preservative-treated wood products described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- Use of the preservative-treated wood is limited to the types of applications noted in Section 4.2.
- Surface treatment of field cuts must be in accordance with the recommendations of PhibroWood LLC.
- The SustainWood™ preservative-treated wood products are limited to the wood species noted in Section 3.3 and the minimum retention levels noted in Table 1.
- Treatment of wood products is at the facilities of the treaters noted in Table 3 under a quality control program with inspections by Timber Products Inspection Inc. (AA-664 and AA-696) and Southern Pine Inspection Bureau, Inc. (AA-680).

6.0 EVIDENCE SUBMITTED

Data in accordance with Appendix A, Copper-azole Wood Preservative Treatment Systems (formerly AC143), of the ICC-ES Acceptance Criteria for Proprietary Wood Preservative Systems-Common Requirements for Treatment Process, Test Methods and Performance (AC326), dated February 2008.

7.0 IDENTIFICATION

SustainWood™ preservative-treated wood products must be labeled with the name of the inspection agency (Timber Products Inspection Inc.); the product name (PhibroWood SustainWood™) or logo (see Figure 1); the treatment company name and plant location (refer to Table 3); the name of the preservative components; the intended end use application (see Table 2); and the evaluation report number (ESR-2325). Sample labels are shown in Figure 1.

8.0 OTHER CODES

In addition to the codes referenced in Section 1.0, the products described in this report were evaluated for compliance with the requirements of the following legacy codes and earlier editions of the International Codes:

- 2003 *International Building Code*® (2003 IBC)
- 2003 *International Residential Code*® (2003 IRC)
- 2000 *International Building Code*® (2000 IBC)
- 2000 *International Residential Code*® (2000 IRC)
- 1997 *Uniform Building Code*™ (UBC)
- BOCA® *National Building Code*/1999 (BNBC)
- 1999 *Standard Building Code*® (SBC)

The PhibroWood LLC SustainWood™ preservative-treated wood products described in this report comply with, or are suitable alternatives to what is specified in, the codes listed above, subject to the provisions of Sections 8.1 through 8.6.

8.1 Uses:

See Section 2.0.

8.2 Description:

See Section 3.0.

8.3 Installation:

See Section 4.0, except for the following modifications:

Locations requiring preservative-treated wood for decay or termite resistance are described in Section 2304.11 of the 2000 and 2003 IBC, Sections R323 and R324 of the 2000 IRC, Sections R319 and R320 of the 2003 IRC, Section 2304 of the SBC, Section 2311 of the BNBC, and Section 2306 of the UBC.

Fasteners used with PhibroWood LLC SustainWood™ preservative-treated wood products must be in accordance with Section 2304.9.5 of the 2000 and 2003 IBC, Section R323.3 of the 2000 IRC, Section R319.3 of the 2003 IRC, Section 2306.3 of the SBC, Section 2311.3.3 of the BNBC, and Section 2304.3 of the UBC, except that aluminum fasteners are also permitted.

8.4 Conditions of Use:

See Section 5.0.

8.5 Evidence Submitted:

See Section 6.0.

8.6 Identification:

See Section 7.0.

**TABLE 1—MINIMUM PRESERVATIVE RETENTION REQUIREMENTS
FOR SUSTAINWOOD™ WOOD PRODUCTS BY END USE**

END USE	MINIMUM TOTAL RETENTION [pcf (kg/m ³)]	MINIMUM COMPONENTS RETENTION ^{1,2} [pcf (kg/m ³)]	
		Cu	Tebuconazole
Above Ground—Decking Use Only UC1, UC2, UC3A, UC3B	0.06 (0.96)	0.046 (0.74)	0.0018 (0.029)
Above ground UC1, UC2, UC3A, UC3B	0.07 (1.1)	0.054 (0.86)	0.002 (0.036)
Ground contact UC4A	0.16 (2.6)	0.12 (1.9)	0.005 (0.08)
Ground Contact UC4B	0.24 (3.8)	0.18 (2.9)	0.007 (0.12)

¹Retention is expressed in pounds of preservative per cubic foot (kilograms per cubic meter) of preservative actives.


²These values may be +/- 10%, or copper:azole ratio may vary from 22:1 to 28:1, respectively.


TABLE 2—TYPICAL APPLICATIONS FOR SUSTAINWOOD™ WOOD PRODUCTS


SERVICE CONDITIONS	AWPA USE CATEGORY	TYPICAL APPLICATIONS
Interior construction, above ground, dry	UC1	Interior construction - millwork and furnishings
Interior construction, above ground, damp	UC2	Interior construction - interior beams, timbers, flooring, millwork and sill plates
Exterior construction, above ground, coated & rapid water runoff	UC3A	Exterior - coated millwork, siding and trim
Exterior construction, above ground, uncoated and poor water runoff	UC3B	Decking, guardrails, spindles, flooring, deck joists, beams and framing, deck posts above grade support on concrete piers with a steel bracket, trim and fascia, sill plates, fence rails, trellises, gazebos
Ground contact - general use	UC4A	Deck support posts, fence posts, retaining walls
Ground contact - critical structural	UC4B	Permanent wood foundations, sawn and round building poles

TABLE 3—WOOD PRESERVATIVE TREATMENT LOCATIONS

LISTEES	WOOD PRESERVATIVE TREATMENT LOCATIONS
Babb Lumber Company	Ringgold, Georgia
Brackett Brothers	Morganton, NC
Cove City Wood Preserving	Cove City, NC
Cox Wood Preservers	Orangeburg, SC
Culpeper Wood Preservers	Culpeper, VA Columbia, SC Fredericksburg, VA Streator, IL
Everwood Treatment Company	Spanish Fort, AL
Free State Lumber Company, Inc.	Haleyville, Alabama
Hoover Treated Wood	Thomson, GA Pine Bluff, AR Milford, VA Detroit, MI
Littrell Brothers Lumber Company	Vinemont, Alabama
Peach State Manufacturing, Inc.	College Park, Georgia
Robbins Wood	Rockwell, NC Orlando, FL
Straits Wood Treating	Bay City, Michigan
Structural Wood Preserving	Coleridge, NC
Sumter Wood Preservers	Sumter, SC
Sunbelt Forest Products Corporation	Bartow, FL
TSO of Maryland	Hagerstown, MD
TSO of Ohio	Fombell, PA

END USE - ABOVE GROUND ONLY		08	ABOVE GROUND	09
		Monitored by: Timber Products Inspection AA-696		AWPA UC3B ESR - 2325
SustainWood TM Plant Location		0.06 PCF Decking Use only Preservative System		
SEE OTHER SIDE FOR IMPORTANT INFORMATION				

END USE - ABOVE GROUND ONLY		07	ABOVE GROUND	08
		Monitored by: Timber Products Inspection AA-696		AWPA UC3B ESR - 2325
SustainWood TM Plant Location		0.07 PCF Preservative System		
SEE OTHER SIDE FOR IMPORTANT INFORMATION				

END USE - GROUND CONTACT		08	GROUND CONTACT	09
		Monitored by: Timber Products Inspection AA-696		AWPA UC4A ESR - 2325
SustainWood TM Plant Location		0.16 PCF Preservative System		
SEE OTHER SIDE FOR IMPORTANT INFORMATION				


END USE - GROUND CONTACT		08	GROUND CONTACT	09
		Monitored by: Timber Products Inspection AA-696		AWPA UC4B ESR - 2325
SustainWood TM Plant Location		0.24 PCF Preservative System		
SEE OTHER SIDE FOR IMPORTANT INFORMATION				

FIGURE 1—SAMPLE PRODUCT LABELS