MIAMI-DADE COUNTY

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908
www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

TRUS JOIST a Weyerhaeuser Business
P. O. Box 8449
Boise, ID 83707-2449

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by the BCCO and accepted by the Building Code and Product Review Committee (BCPRC) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).
This NOA shall not be valid after the expiration date stated below. The BCCO (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BCPRC reserves the right to revoke this acceptance, if it is determined by BCCO that this product or material fails to meet the requirements of the applicable building code.
This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.
DESCRIPTION: TimberStrand Laminated Strand Lumber
APPROVAL DOCUMENT: Drawing No. **File Name** Sheets 1 and 2, titled "TimberStrand LSL," dated 02/14/01, with no revisions, prepared by Trus Joist a Weyerhaeuser Business, signed and sealed by A. G. Burk, PE. bearing the Miami-Dade County Product Control Renewal stamp with the NOA number and expiration date by the Miami-Dade County Product Control Division.
MISSILE IMPACT RATING. None
LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or the manufacturer's logo and MDPCA", unless otherwise noted herein.
RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.
TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.
INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.
This NOA renews NOA # 00-1228.01 consisting of this page, evidence page as well as approval document mentioned above.
The submitted documentation was reviewed by **Candido F. Font PE.**

04/27/06

Candido F. Font PE.
Sr. Product Control Examiner
NOA No 06-0119.09
Expiration Date: April 09, 2007
Approval Date: April 27, 2006

TRUS JOIST a Weyerhaeuser Business.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A DRAWINGS

1. Drawing prepared by Trus Joist a Weyerhaeuser business titled "TimberStrand LSL", Drawing No. File Name, dated 02/14/01 with no revisions Sheets 1 and 2 signed and sealed by A. G. Burk, PE.

B TEST

1. Test Report on flexural strength, compression perpendicular to grain, compression parallel to grain, shear strength parallel to grain, nail withdrawal and lateral nail resistance on "LSL, PSL & LVL structural composite lumber". The test were conducted before and after MDC durability standard for SCL, prepared by PFS Corporation report # 97-45, dated 01/05/98 signed and sealed by E. Starostovic, PE.

C CALCULATIONS

1. N/A

D QUALITY ASSURANCE

1. Building Code Compliance Office.

E MATERIAL CERTIFICATION

1. National Evaluation Report # 481 by National Evaluation Service Inc, reissued on March 1, 1997.
2. TimberStrand Summary-Application prepared by Trus Joist MacMillan on 02/09/98, signed and sealed by A. B. Burk, PE.
3. TimberStrand LSL Manufacturing Standard prepared by Trust Joist Macmillan reviewed and approved by S. A. Nelson PE on 08/31/95

F STATEMENTS

1. Letter of no-change issued by Trus Joist on 02/09/01 signed and sealed by A. G. Burk, PE.
2. Agreement of dissolution of Trus Joist MacMillan dated 12/31/00 signed and sealed by VP of TJ International and Weyerhaeuser Co R. A. Dowdy.
3. Third Party Quality Control Certification, issued by PFS/TECO on 01/16/97 signed and sealed y J. R. Nelson PE.

04/27/06

Candido F. Font PE.
Sr. Product Control Examiner
NOA No 06-0119.09
Expiration Date: April 09, 2007
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Material Description

1. TimberStrand® LSL is manufactured by laminating strands of aspen, yellow poplar, or a mixture of white birch, red maple and aspen. The strands are oriented in a parallel direction and formed into large mats.

2. TimberStrand is available in thicknesses up to 5 1/2", depths up to 48" inches, and lengths up to 48 feet.

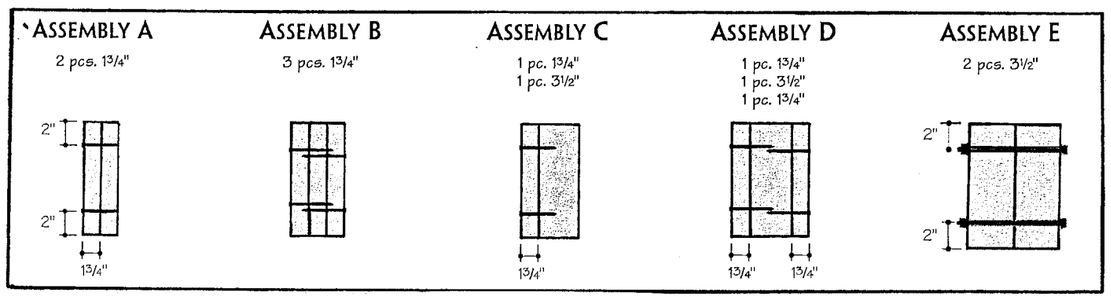
3. The strands are glued with an isocyanate-based adhesive which complies with TimberStrand manufacturing standards. Quality control testing and inspection are provided by PFS/TECO.

4. Lateral resistance values for nails are as provided in the National Design Specifications for Wood Construction (NDS) for Douglas fir-Larch (minimum specific gravity SG=0.50). Nail withdrawal capacity is determined on the basis of the specific gravity for SPF (minimum specific gravity SG=0.42).

5. Design values for bolts loaded parallel to grain are as provided in the NDS for Douglas fir-Larch (minimum specific gravity SG=0.50). Design values for bolts loaded perpendicular to grain are as provided in the NDS for Red Maple (minimum specific gravity SG=0.58).

6. Specific approval shall be required for nail and bolt connections not herein prescribed.

7. Testing was conducted at PFS/TECO to evaluate the moisture durability of TimberStrand® LSL. This testing was done in accordance with the Metro Dade County Durability Evaluation Standard for Structural Composite Lumber Products.



General Notes

1. Where members qualify as repetitive members as defined in the applicable code, an additional increase in allowable bending stress of 4 percent is permitted. This increase does not apply to field assembled, multi-membered beams.

2. Bearing length should never be less than 1 ½ " at ends, 3 ½" at intermediate supports.

3. The maximum round hole size which can be cut in 7 ¼" to 18" deep members is 2" diameter. Holes may only be cut in the middle 1/3 of the span and the middle 1/3 of depth of the beam. Minimum hole spacing for uniformly loaded beams is 2x the largest hole diameter. Rectangular holes are not allowed. Holes in cantilevers require additional analysis.

4. Spacing for nails installed on narrow face of member:

Nail Size	Closest On-Center Spacing per Row (1 ¼" Thickness)	Closest On-Center Spacing per Row (3 ½" Thickness)
8d (2 ½") Common	4"	3"
10d (3") Common	4"	3"
16d (3 ½") Common	6"	3 1/2"

5. Maximum uniform load applied to either outside member of a side-loaded multiple-ply beam:

Multiple Assembly (See picture and footnotes below)	Max. Uniform Load Applied to Either Outside Member (plf)			
	Nailed Connection[1][5]		Through Bolted Connection[2]	
	2 Rows 16d Common Wire at 12" o.c.	3 Rows 16d Common Wire at 12" o.c.	2 Rows ½" Bolts at 24" o.c.	2 Rows ½" Bolts at 12" o.c.
A	470	705	505	1015
B[3]	355	530	380	760
C	355	530	520	1045
D[3][4]	315	470	465	930
E[4]	-	-	860	1720

1. Nailed Connection values may be doubled for 6" o.c. or tripled for 4" o.c. nail spacing.

2. Bolts are to be material conforming to ASTM standard A307 (machine bolts). Bolt holes are to be the same diameter as the bolt, and located a minimum of 2" from the top and bottom of the member. Washers should be used under head and nut.

3. For a three-piece member, the nailing specified is from each side.

4. Beams 7" in width may only be side loaded when loaded from both sides to minimize rotation.

5. Nailed connection values require an additional row of nails when nail size is smaller than specified above (minimum 0.131" x 3.25")

PRODUCT REVIEWED 06-0119.09 2/10/01

APPROVED AS COMPLIANT WITH THE SOUTH FLORIDA BUILDING CODE DATE MAR 2 9 2001 BY BUILDING CODE ACCEPTANCE NO. 00-1228.01

A. G. BURR CERTIFICATE 51657 2/27/01 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET NUMBER 1 OF 2

FILE NAME

DRAWN BY: B.J.R.

DATE: 2/14/01

SCALE: N.T.S.

DESCRIPTION

TimberStrand® LSL

GENERAL INFORMATION & PROPERTIES

TrusJoist™ A Weyerhaeuser Business

SOUTHEAST REGIONAL ENGINEERING DEPARTMENT
6001 Jackson Square, Suite 600, LaVergne, TN. 37086
800-854-5647 FAX: 615-793-7721

REVISIONS

NO.	BY	DATE
△		
△		
△		

Allowable Design Stresses[1]
for TimberStrand® Liminated Strand Lumber

Grade	Available Depths (in.)	Flexural Stress[2] F_b (psi)	Compression Parallel to Grain $F_{c\parallel}$ (psi)	Compression Perpendicular to Grain Parallel to Glue Line[4] $F_{c\perp}$ (psi)	Horizontal Shear Perpendicular to Glue Line F_v (psi)	Modulus of Elasticity[3] MOE (psi x 10^6)
1.3E	Up to 48"	1700	1400	680	400	1.3
1.5E	Up to 48"	2250	1950	775	400	1.5

1. Timberstrand® LSL is produced at 9% to 13% moisture content. Allowable values have been established at conditions that would produce 12% moisture content in lumber. These values are valid for dry service in which a 16% maximum moisture content will not be exceeded.

2. For 12 inch depth; for other depths, multiply by $(12/d)^{0.092}$, as shown below. For depths less than 3.5 inches, use the factor for 3.5inch depth.

Depth (inches)	3.5	5.5	7.25	9.25	12.0	16	20	24
Multiplier	1.12	1.07	1.05	1.02	1.00	0.97	0.95	0.94

3. For uniformly loaded simple span beams, the deflection shall be calculated using the following equation:

$$\Delta = \frac{270WL^4}{Ebd^3} + \frac{28.8WL^2}{Ebd}$$

where,
- Δ = Deflection, inches
- W = Uniform load, plf
- L = Span, feet
- b = Beam width, inches
- d = Beam depth, inches
- E = Modulus of Elasticity, psi

4. Values shown are for thicknesses up to 3.5.

PRODUCT APPROVED
as complying with the Florida
Building Code
Application No. 06-0119.09
Approval Date 04/09/07
By
Miami-Dade Product Control
Division

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE MAR 2 9 2001
BY
PRODUCT CONTROL SECTION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO 00-1228.01

A. G. BURR
CERTIFICATE
51657
2/27/01
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

	SHEET NUMBER 2 OF 2	DRAWN BY: B.J.R.	DESCRIPTION TimberStrand® LSL	
	FILE NAME	DATE: 2/14/01	GENERAL INFORMATION & PROPERTIES	
		SCALE: N.T.S.		

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