# LP<sup>®</sup> LVL H42 SCAFFOLD PLANK



# IP LVL H42 Scaffold Plank User Guide

# VALUE-ADDED SCAFFOLD PLANK

Introducing the LP LVL H42 Scaffold Plank, our latest value-added industrial solution for today's contractors. LP Laminated Veneer Lumber (LVL) is a vast improvement over solid wood scaffold planks. With over a decade of use on job sites all across the country, LP LVL Scaffold Planks have passed the test of time. Our product design provides consistent, reliable scaffold planks.

# **A SAFE INVESTMENT**

Naturally occurring defects such as knots, irregular grain and splits, which weaken solid lumber scaffold planks, are dispersed during the veneer peeling process. The veneers are ultrasonically and visually graded, then laid in a specific pattern so naturally occurring defects have no concentrated effect on the plank's performance. Finally, the veneers are bonded together under pressure with waterproof adhesives. A moisture inhibiting end sealer is applied to each plank to enhance weather protection. To ensure strength and consistency, LP maintains strict quality control standards and performance testing. LP LVL H42 Scaffold Planks have been designed to meet OSHA and ANSI requirements in the US and CSA requirements in Canada.

# SAFETY IS OUR TOP PRIORITY

LP LVL H42 Scaffold Planks are manufactured to a uniform thickness to provide a flat working surface which minimizes the chance of tripping. Excellent strength and stiffness characteristics produce a consistent walking surface, without excessive bounce or variation from plank to plank. Rounded edges make the planks easier and safer to handle by reducing splintering.

# THE COST EFFECTIVE ALTERNATIVE

Some grades of solid wood scaffold planks may be less expensive, but could cost more in the long run. The added expense to rod or pin solid planks may offset any initial cost savings. LP LVL H42 Scaffold Planks are manufactured to last, providing an excellent return on your investment.

# **CUSTOMER SERVICE**

LP LVL H42 Scaffold Planks are available in standard thickness of 1-5/8". Custom lengths and embossing are available. To ensure safety and extend the useful life of your planks, follow this User Guide which includes span information, job site instructions and storage recommendations.



# Dry Use Conditions<sup>3 and 7</sup>

Load Simple		e Span	2 Equal Span	
Conditions	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"
50 psf	11'	11'	11'	11'
75 psf	9'	9'	9'	9'
1-Person	11'	12'	11'	12'
2-Person	8'	9'	8'	9'
3-Person	6'	6'	6'	7'

#### Wet Use Conditions<sup>4 and 7</sup>

Load	Simple Span		2 Equal Span	
Conditions	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"
50 psf	10'	10'	10'	10'
75 psf	9'	9'	9'	9'
1-Person	9'	11'	10'	12'
2-Person	8'	9'	7'	9'
3-Person	5'	6'	5'	6'

#### **GENERAL NOTES FOR US TABLES:**

1. Spans are from center to center of scaffold supports.

- The weight of the plank is excluded from deflection calculations and included in other calculations.
  Dry use conditions are suitable for use in an environment where the moisture content of the
- planks will not exceed 16%. 4. Wet use conditions should be used in an environment where the moisture content of the planks is expected to exceed 16%.
- The spans shown are for standard frame sizes. For conditions other than listed, contact LP for assistance.
- 6. Proper selection of scaffold planks shall be based on the most severe in-service conditions.
- 7. For use in California all spans are limited to a max of 10' 0".

#### **ADDITIONAL NOTES FOR US TABLES:**

- 1. Deflections are limited to L/60 per OSHA requirements.
- 2. The "Person" load is defined in ANSI A10.8 as a person weighing 200 pounds,
- carrying 50 pounds of equipment.
  - The "1-Person" load is applied at mid-span.
  - The "2-Person" load is applied with each "person" load placed 18" to either side of mid-span.
  - The "3-Person" load is applied with a "person" load at mid-span, and a "person" load at 18" to either side of mid-span.

### **Dry Use Conditions<sup>3</sup>**

Load Conditions	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"
50 psf	10'	10'
75 psf	8'	8'
500 lbs	6'	7'
Workers & Tools (25 psf + 250 plf)	9'	9'
Workers & Materials (75 psf + 265 plf)	7'	7'

#### Wet Use Conditions<sup>4</sup>

Load Conditions	1-5/8" x 9-1/2"	1-5/8" x 11-3/4"
50 psf	9'	9'
75 psf	8'	8'
500 lbs	5'	6'
Workers & Tools (25 psf + 250 plf)	8'	8'
Workers & Materials (75 psf + 265 plf)	6'	6'

#### **GENERAL NOTES FOR CANADIAN TABLES:**

1. Spans are from center to center of scaffold supports.

- The weight of the plank is excluded from deflection calculations and included in other calculations.
  Dry use conditions are suitable for use in an environment where the moisture content of the
- planks will not exceed 16%.
- Wet use conditions should be used in an environment where the moisture content of the planks is expected to exceed 16%.
- The spans shown are for standard frame sizes. For conditions other than listed, contact LP for assistance.
- 6. Proper selection of scaffold planks shall be based on the most severe in-service conditions.

#### ADDITIONAL NOTES FOR CANADIAN TABLES:

- 1. These span tables are based on criteria specified in CAN/CSA-S269.2 Access Scaffolding for Construction Purposes.
- Loading conditions identified as "Workers & Tools" and "Workers & Materials" are defined in CAN/CSA-S269.2, which stipulates that the vertical load for workers, materials, and equipment on platforms of access scaffolds shall not be less than prevailing conditions or these assumed loads.
- Tabulated spans are based on design values above and a CAN/CSA-S269.2 specified deflection limitation of L/80.

# 1-5/8" LP LVL H42 Scaffold Plank Design Properties and Specifications

	Design Properties Per Inch of Width of Plank		
Service Condition	Stiffness El x 10 <sup>5</sup> (Ib-in <sup>2</sup> )	Allowable Moment (lb-in)	Allowable Shear (Ibs)
Dry Use	6.26	968	157
Wet Use	5.57	842	117

### ADDITIONAL SPECIFICATIONS:

Species: Douglas Fir Adhesive: Waterproof Phenolic Edges: Eased for easy handling

## NOTES:

- 1. The design properties were determined in accordance with ANSI/ASSE A10.8-2001 Safety Requirements for Scaffolding – American National Standard for Construction and Demolition Operations.
- 2. The design properties listed are for untreated LP LVL Scaffold Plank in new or like-new condition.
- Dry Use design propeties are suitable for use in an environment where the moisture content of the plank will not exceed 16%.
- Wet Use design properteis should be used when the moisture content of the planks is expected to exceed 16%.
- 5. Nail, screw and bolt values shall be based on equivalency to Douglas Fir lumber (SG=0.50) in accordance with the National Design Specification for Wood Construction (NDS) or the Canadian Standards Association (CSA) 086, Engineering Design in Wood with the following exceptions: nail withdrawal into the edge grain and bolts or lag screws loaded parallel to the grain shall be based on Douglas Fir(S) lumber (SG=0.46). Bolts and lag screws shall only be installed into the wide face of the planks.

# STORAGE AND HANDLING RECOMMENDATIONS

Proper storage and handling will help protect your planks from damage that may reduce their useful life. To help ensure optimal performance and the longevity of your planks, please **carefully read** the following handling and visual inspection instructions. Scaffold planks that have been improperly stored or damaged should be removed from service immediately. **Failure to remove improperly stored or damaged planks from service may result in injury or death**.

# **RECOMMENDED STORAGE METHODS**

- KEEP SCAFFOLD PLANKS DRY. The strength and performance of a scaffold plank is reduced by increased moisture content.
- Store planks in a dry, well-ventilated area. Storing in wet or unventilated areas will accelerate wood decay and plank deterioration. Always allow wet planks to dry quickly by providing proper air circulation.
- Protect planks from extreme weather conditions, including excessive exposure to water and temperatures exceeding 150 degrees Fahrenheit. Store planks under roof or under a porous cover that will shed water while allowing moisture to escape. (Fig. 1)
- Keep planks stacked in bundles off the ground and supported by stickers spaced no more than 8' apart between each layer. Be sure to line up the stickers between bundles with the ground stickers. This will allow for easy forklift access and provide air circulation. Misalignment of the stickers can damage the planks by creating a bow. (Fig. 2)
- Do not store heavy objects on the planks.

# **RECOMMENDED HANDLING METHODS**

- Do not overload the planks; refer to the span charts for loading capacity. Immediately remove planks that have been overloaded from service and visually inspect prior to reusing. (Fig. 3)
- Throwing planks from scaffolding may cause damage. A thrown plank should be inspected and evaluated before reuse. (Fig. 4)
- Do not push or hit bundles of scaffold planks with the fork ends. Stickers should be of thick enough material to allow forklift handling without causing damage to the planks. (Fig. 5)



# **OTHER CONSIDERATIONS**

- Do not expose scaffold planks to oxidizing chemicals.
- Do not jump or bounce on the planks; avoid dropping heavy objects on the planks.
- LP<sup>®</sup> LVL Scaffold Planks are intended to be used exclusively as scaffold planks. Other use may cause damage that will make the planks unsafe for their intended use.
  - LP LVL Scaffold Planks are covered by a limited warranty. Please visit www.lpcorp.com for full warranty details.





DO NOT MISALIGN STICKERS.



Fig. 2

DO NOT OVERLOAD PLANKS.



PLANKS SHOULD NOT BE THROWN.



DO NOT HIT THE PLANKS WITH THE FORK ENDS.



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# **VISUAL INSPECTION AND EVALUATION**

LP LVL H42 Scaffold Planks should be thoroughly visually inspected by a qualified person\* prior to each use. Visual inspection along with proper handling and storage are the best means of assuring safe performance of laminated scaffold planks.

Immediately remove damaged scaffold planks from service. Failure to remove planks from service may result in injury or death. The following pictures detail the most common examples of damage that affect the structural strength of scaffold planks.

# **RECOGNIZING VISUAL DEFECTS**

**End Splits** - A separation that extends through the plank from face to face. End splits are caused by repeated exposure to wet/dry conditions. If an end split exceeds 18," remove the plank from service. (Fig. 6)

**Saw Cuts, Drilled Holes and Notches -** Saw cuts across the face or through the edge of the plank, drilled holes or notches will reduce the plank's load carrying capacity. Planks with saw cuts, drilled holes or notches should be removed from service and inspected by a qualified person\* (Fig. 7)

**Edge Splits** - A separation of the narrow edge of the plank usually caused by forklift damage. A diagonal split may be caused by overloading. Probe the split to determine the depth; shallow weather checks are acceptable. If an open split is detected, remove the plank from service. (Fig. 8)

**Dents, Gouges and Depressions -** Dents can indicate internal structural damage. Dropping the plank or impact from heavy objects on the plank will dent the plank. Remove the plank from service and visually inspect the plank before reuse. (Fig. 9)

**Face Breaks -** Irregular cracks across the face of the scaffold plank. Usually a result of overloading, face cracks dramatically reduce the strength of the plank. Remove planks with face breaks from service. (Fig. 10)

There are other visible signs of damaged planks. These include DISCOLORATION possibly caused by exposure to chemicals, high temperature or decay. ODOR may also indicate chemical deterioration. SOFT SPONGY WOOD can be caused by chemical exposure or decay. Planks with discoloration, odor or soft spongy wood should be removed from service to determine the cause of the problem and the effect it will have on the load capacity of the plank.

\*QUALIFIED PERSON, as defined in OSHA Safety and Health Standards and by the SIA, means one who, by possession of a recognized degree, certificate or professional standing or by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work or the project.

# **DISTRIBUTED BY:**

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Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.



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