



Trus JoistTM
A Weyerhaeuser Business

APPLICATION GUIDE


Microllam[®] LVL Scaffold Plank

Scaffolding takes a beating. Planks sit on frames and hang from supports, subjected to the affronts of rain, snow, heat, cold—not to mention heavy loads and wear and tear from numerous assembly/knock-down cycles.

Scaffold companies need planks they can rely on—planks that have minimal twist and bow from that exposure. Trus Joist Industrial has the solution: planks made of Microllam[®] laminated veneer lumber (LVL).

- **SAFETY** is a scaffold user's main concern. Each piece is proof-loaded by machine, ensuring that the product meets Trus Joist Industrial quality standards and OSHA deflection limits when it leaves the mill.
- **RELIABLE CONSISTENCY.** Microllam[®] LVL scaffold plank is made from many layers of thin veneer, so there are no concentrated areas of knots or cross-grain to contend with.
- **MADE TO ORDER.** Microllam[®] LVL scaffold plank isn't sold as stock lumber—it's manufactured to scaffold plank specifications.



 **Industrial**
*Trus Joist*TM

1-877-856-9663
www.trusjoist.com

PRODUCT WARRANTY

Trus Joist warrants Microllam® LVL scaffold planks to be free from defects in materials, workmanship and design. Microllam® LVL scaffold planks will carry the loads specified when used in accordance with the design information included herein, provided that the product is not misused or otherwise subjected to conditions which reduce the product's strength (see Storage Recommendations, Cautions, Visual Evaluation and Testing). The above warranties are in lieu of all other warranties, express or implied. The implied warranties of merchantability and fitness for a particular purpose are excluded from this warranty. Consequential and indirect damages are hereby excluded.



Trus Joist

200 East Mallard Drive
Boise, Idaho 83706

1-877-856-9663

Tom Denig, President

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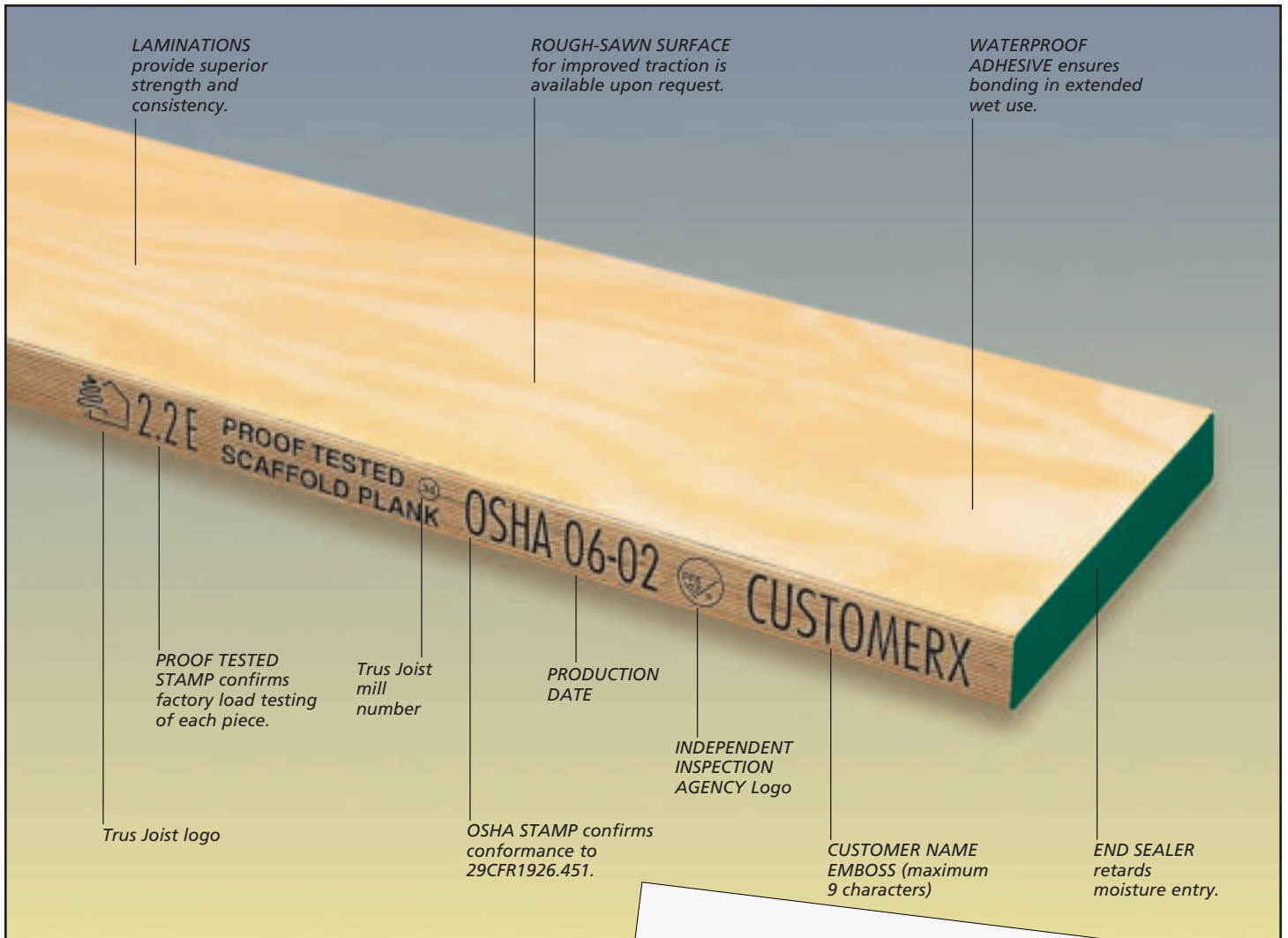
MEMBER

SCAFFOLD
INDUSTRY
ASSOCIATION **SIA**

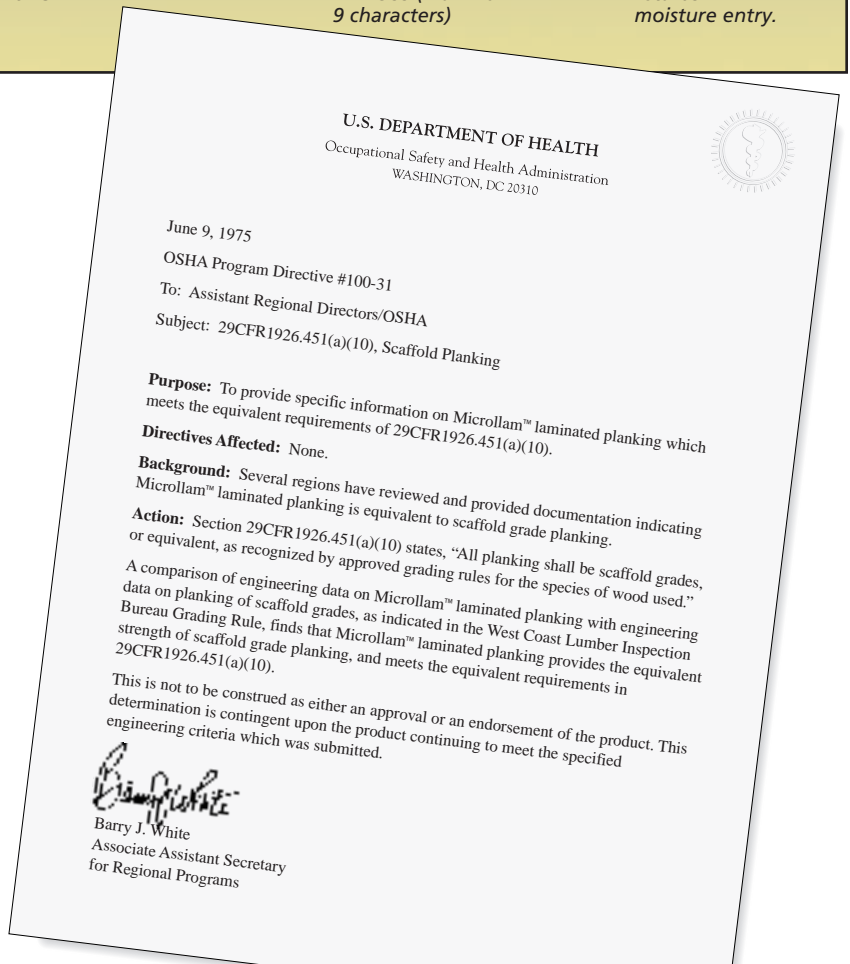
**PRODUCT APPLICATION
ASSURANCE**

**DO IT RIGHT
FIRST!!**





THERE ARE MANY GRADES OF MICROLLAM® LAMINATED VENEER LUMBER (LVL). USE ONLY SCAFFOLD GRADE FOR PLANKING.



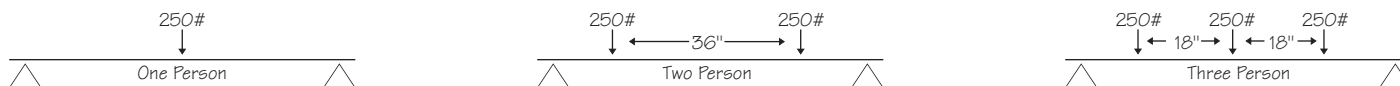
UNTREATED – U.S.

		LIVE LOADING	1½" x 9¼"	1½" x 9½"	1½" x 11¾"	1¾" x 9"	1¾" x 9½"	1¾" x 11¾"
DRY USE Moisture Content ≤ 19%	SIMPLE SPAN	50 psf	10'-6"	10'-6"	10'-6"	12'-0"	12'-0"	12'-0"
		75 psf	9'-0"	9'-0"	9'-0"	10'-6"	10'-6"	10'-6"
		One Person	10'-6"	10'-6"	11'-6"	13'-0"	13'-0"	14'-6"
		Two Person	8'-6"	8'-6"	9'-0"	10'-0"	10'-0"	11'-0"
		Three Person	6'-0"	6'-0"	7'-0"	7'-6"	8'-0"	9'-0"
	TWO SPAN ⁽¹⁾	50 psf	11'-6"	11'-6"	11'-6"	13'-6"	13'-6"	13'-6"
		75 psf	9'-6"	9'-6"	9'-6"	11'-6"	11'-6"	11'-6"
		One Person	12'-0"	12'-6"	14'-6"	16'-0"	17'-0"	21'-0"
		Two Person	9'-0"	9'-0"	10'-0"	11'-0"	11'-0"	12'-6"
		Three Person	6'-6"	6'-6"	7'-6"	8'-0"	8'-0"	10'-0"
WET USE Moisture Content < 30%	SIMPLE SPAN	50 psf	9'-6"	9'-6"	9'-6"	11'-0"	11'-0"	11'-0"
		75 psf	8'-6"	8'-6"	8'-6"	10'-0"	10'-0"	10'-0"
		One Person	9'-6"	9'-6"	10'-6"	11'-6"	12'-0"	13'-0"
		Two Person	7'-6"	7'-6"	8'-6"	9'-0"	9'-0"	10'-0"
		Three Person	5'-0"	5'-6"	6'-0"	6'-6"	6'-6"	7'-6"
	TWO SPAN ⁽¹⁾	50 psf	10'-6"	10'-6"	10'-6"	12'-6"	12'-6"	12'-6"
		75 psf	9'-0"	9'-0"	9'-0"	10'-6"	10'-6"	10'-6"
		One Person	10'-6"	11'-0"	12'-6"	14'-0"	14'-6"	18'-0"
		Two Person	7'-6"	8'-0"	9'-0"	9'-6"	10'-0"	11'-0"
		Three Person	5'-6"	5'-6"	6'-6"	6'-6"	7'-0"	8'-0"

FIRE RETARDANT TREATED – U.S.

		LIVE LOADING	1¾" x 9"	1¾" x 9½"	1¾" x 11¾"	2" x 12"	2¼" x 11¾"	2½" x 11¾"
DRY USE Moisture Content ≤ 19%	SIMPLE SPAN	50 psf	11'-6"	12'-0"	12'-0"	12'-6"	14'-0"	15'-6"
		75 psf	10'-0"	10'-0"	10'-0"	10'-6"	12'-0"	13'-0"
		One Person	11'-6"	12'-6"	14'-6"	15'-6"	18'-6"	21'-0"
		Two Person	9'-0"	9'-6"	10'-6"	11'-6"	13'-0"	15'-6"
		Three Person	6'-0"	6'-6"	7'-6"	8'-0"	9'-0"	11'-0"
	TWO SPAN ⁽¹⁾	50 psf	12'-6"	12'-6"	12'-6"	12'-6"	14'-0"	15'-6"
		75 psf	10'-0"	10'-0"	10'-0"	10'-6"	12'-0"	13'-0"
		One Person	14'-6"	15'-6"	18'-6"	19'-6"	23'-0"	27'-0"
		Two Person	9'-0"	9'-6"	11'-0"	12'-0"	14'-0"	16'-6"
		Three Person	6'-6"	6'-6"	8'-0"	8'-6"	10'-0"	12'-0"
WET USE Moisture Content < 30%	SIMPLE SPAN	50 psf	9'-6"	10'-0"	11'-0"	11'-6"	12'-6"	14'-0"
		75 psf	9'-0"	9'-0"	9'-0"	9'-6"	10'-6"	11'-6"
		One Person	9'-6"	10'-0"	12'-0"	12'-6"	15'-0"	17'-6"
		Two Person	8'-0"	8'-0"	9'-0"	9'-6"	11'-0"	13'-0"
		Three Person	5'-0"	5'-6"	6'-0"	6'-6"	8'-0"	9'-0"
	TWO SPAN ⁽¹⁾	50 psf	11'-0"	11'-0"	11'-0"	11'-6"	12'-6"	14'-0"
		75 psf	9'-0"	9'-0"	9'-0"	9'-6"	10'-6"	11'-6"
		One Person	11'-6"	12'-6"	15'-0"	16'-0"	19'-0"	22'-6"
		Two Person	7'-6"	8'-0"	9'-6"	10'-0"	11'-6"	14'-0"
		Three Person	5'-6"	5'-6"	6'-6"	7'-0"	8'-6"	10'-0"

(1) Two-span table indicates the most restrictive span lengths considering live loads on one or both spans.



- Design load deflection is limited to L/60.
- Spans shown are considered the distance between the center lines of bearers. Actual Microllam® LVL scaffold plank lengths will be greater due to overhangs or overlaps specified in ANSI A10.8. Contact Trus Joist for additional span information.
- Two-span tables assume both spans have equal lengths. Contact Trus Joist for other than equal two-span configurations.
- Uniform and person loads shown are defined in ANSI A10.8. Proper Microllam® LVL scaffold plank selection must be based on the most restrictive load case anticipated in service.
- Microllam® LVL scaffold planks treated with Hoover Treated Wood Products' Exterior Fire-X® fire retardant treatment are on the "Qualified Products List of Products Qualified Under Military Specification MIL-L-19140 (QPL 19140)."
- Microllam® LVL scaffold planks treated with Hoover Treated Wood Products' Exterior Fire-X® fire retardant treatment are a UL®-listed building material with the designation "FR-S." This designation denotes that the flame spread rating and smoke developed values are 25 or less, and that the product has been subjected to tests of thirty minutes duration during which the flame spread did not progress more than 10'-6" beyond the centerline of the burners, with no evidence of significant progressive combustion. There is no increase in the listed Classification when the product is subjected to the Standard Rain Test (UL790).

UNTREATED – CANADA

		LIVE LOADING	1½" x 9½"	1¾" x 9½"	1¾" x 11¾"
DRY USE Moisture Content ≤ 19%	SIMPLE SPAN	50 psf (2.40 kN/m ²)	10'-0" 3.0	11'-6" 3.5	11'-6" 3.5
		75 psf (3.60 kN/m ²)	8'-6" 2.6	10'-0" 3.1	10'-0" 3.1
		500 lbs (7.26 kN)	6'-6" 2.0	8'-6" 2.6	9'-6" 2.9
		Workers & Tools (25 psf + 250 plf) (1.20 kN/m ² + 3.63 kN/m)	8'-6" 2.7	10'-6" 3.2	10'-6" 3.2
		Workers & Materials (75 psf + 265 plf) (3.60 kN/m ² + 3.88 kN/m)	7'-0" 2.1	8'-6" 2.6	8'-6" 2.6
WET USE Moisture Content < 30%	SIMPLE SPAN	50 psf (2.40 kN/m ²)	9'-0" 2.8	10'-6" 3.2	10'-6" 3.2
		75 psf (3.60 kN/m ²)	8'-0" 2.4	9'-0" 2.8	9'-0" 2.8
		500 lbs (7.26 kN)	5'-0" 1.6	7'-0" 2.1	8'-6" 2.6
		Workers & Tools (25 psf + 250 plf) (1.20 kN/m ² + 3.63 kN/m)	8'-0" 2.4	9'-6" 3.0	9'-6" 3.0
		Workers & Materials (75 psf + 265 plf) (3.60 kN/m ² + 3.88 kN/m)	6'-6" 2.0	7'-6" 2.4	7'-6" 2.4

1. Live load deflection is limited to L/80.
2. No increases in allowable unit stresses are included for load-sharing systems.
3. PLF loads are applied across the plank direction at centerline.

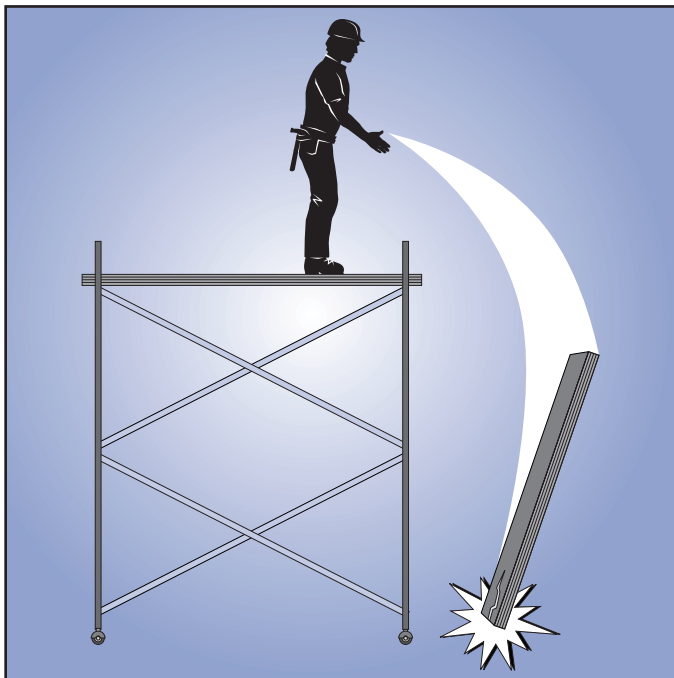
Design Properties

MICROLLAM® LVL SCAFFOLD PLANK DESIGN PROPERTIES

	UNTREATED		FIRE RETARDANT TREATED	
	1¾" and less	Greater than 1¾"	1¾" and less	Greater than 1¾"
Plank Thickness	1¾" and less	Greater than 1¾"	1¾" and less	Greater than 1¾"
Flexural Stress, F _b	2900 psi	2400 psi	2175 psi	1800 psi
Modulus of Elasticity, E	2.2 x 10 ⁶	2.2 x 10 ⁶	2.2 x 10 ⁶	2.2 x 10 ⁶
Horizontal Shear Stress, F _v	145 psi	145 psi	109 psi	109 psi
Coefficient of Variation (MOR)	12%	12%	12%	12%

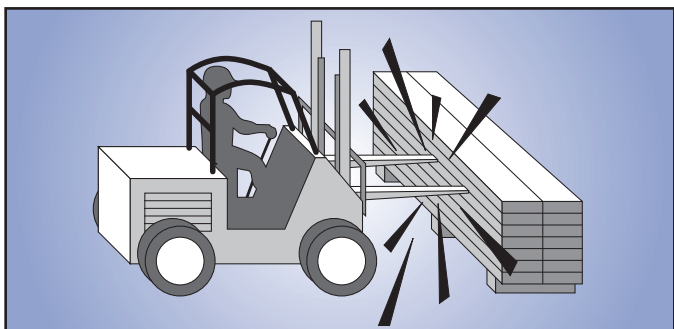
1. Design properties are determined in accordance with ANSI A10.8-1988, Appendix C.
2. These properties apply only to Microllam® LVL scaffold planks used in conditions where the moisture content of the plank is not expected to exceed 19%. These values apply only to planks used in the flat orientation.
3. F_b, F_v and E shall be adjusted by a factor of 0.80 when conditions of use are such that the moisture content of the plank is expected to exceed 19%.
4. Fastener values (nails, bolts, screws) shall be as provided for sawn Douglas fir per the *National Design Specification® for Wood Construction*, (NDS®), 1997 edition, or per CSA O86-01, *Engineering Design in Wood*.
5. Values are for new or like-new product.

- **Proper handling.** Scaffold planks can be damaged when thrown from a scaffold. Lower scaffold planks in an orderly manner. Scaffold planks that have been thrown from scaffolding or had heavy objects dropped on them should be removed from service and evaluated before reuse.

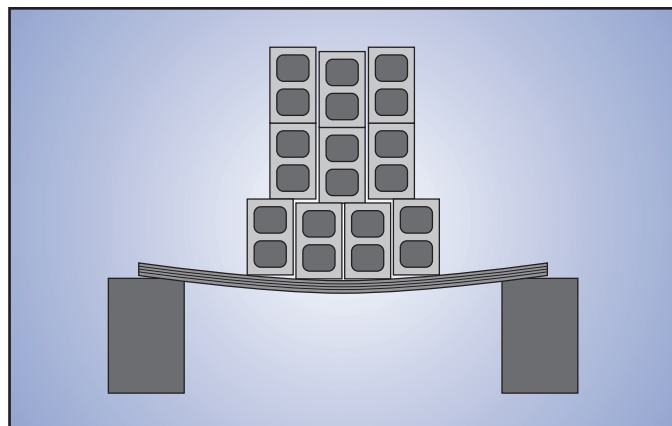


Do not throw scaffold planks

Forklifts or other mechanical lifting devices should always be used to lift and lower bundles of scaffold planks. Bundle stickers should be thick enough to allow easy access for forks. Corner protection should be used when moving bundles with chain or cable swings. Do not dump scaffold planks from trucks. Do not push bundles of scaffold planks with the ends of forks.



Do not push bundles of scaffold planks with the ends of forks



Do not overload scaffold planks (See Maximum Allowable Deflection chart below)

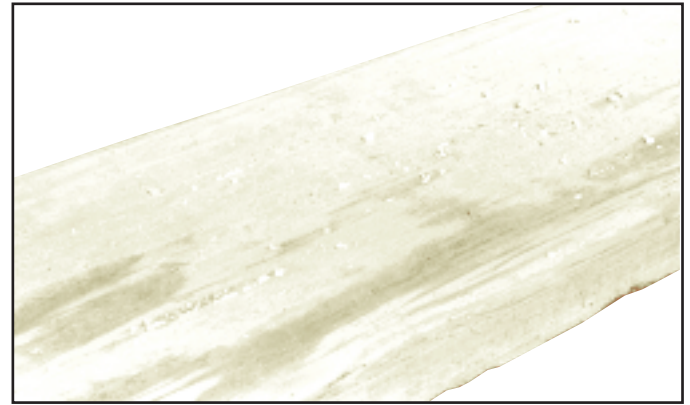
- **Overloading.** Heavy materials should never be stored on scaffold planks unless permitted by the scaffold designer. The maximum allowable deflection for scaffold planks is about $1\frac{5}{8}$ " for an 8' span and 2" for a 10' span ($1\frac{1}{4}$ " and $1\frac{1}{2}$ " in Canada); see *Maximum Allowable Deflection* chart below. If a scaffold plank deflects more than this, or makes cracking noises, it is being overloaded. Scaffold planks that have been overloaded should be immediately removed from service, then visually inspected and field tested before reuse.
- **Misuse.** Scaffold planks should never be used for loading ramps, walkways through mud or anything other than scaffold planking. Improper use might cause damage that makes the scaffold planks unsafe.
- **Notches.** Consult the scaffold designer when a plank must be notched to clear an obstruction. It will be necessary to provide additional support in the area of the notch if the modified plank cannot properly support design loads.
- **Chemicals.** The phenolic resin used to make Microllam® laminated veneer lumber (LVL) is highly resistant to the action of chemicals. The wood component is, however, susceptible to attack. The risk of damage is related to concentration, pH and the temperature of the chemical solution. The most hazardous chemical solutions have $\text{pH} \leq 3$ or $\text{pH} \geq 9$, or temperatures higher than 120° F. All oxidizing chemicals are hazardous.

MAXIMUM ALLOWABLE DEFLECTION

PLANK SPAN	6'	8'	10'	12'	14'	16'
United States (L/60)	1¼"	1⅝"	2"	2½"	2⅞"	3¼"
Canada (L/80)	1"	1¼"	1½"	1⅞"	2"	2½"

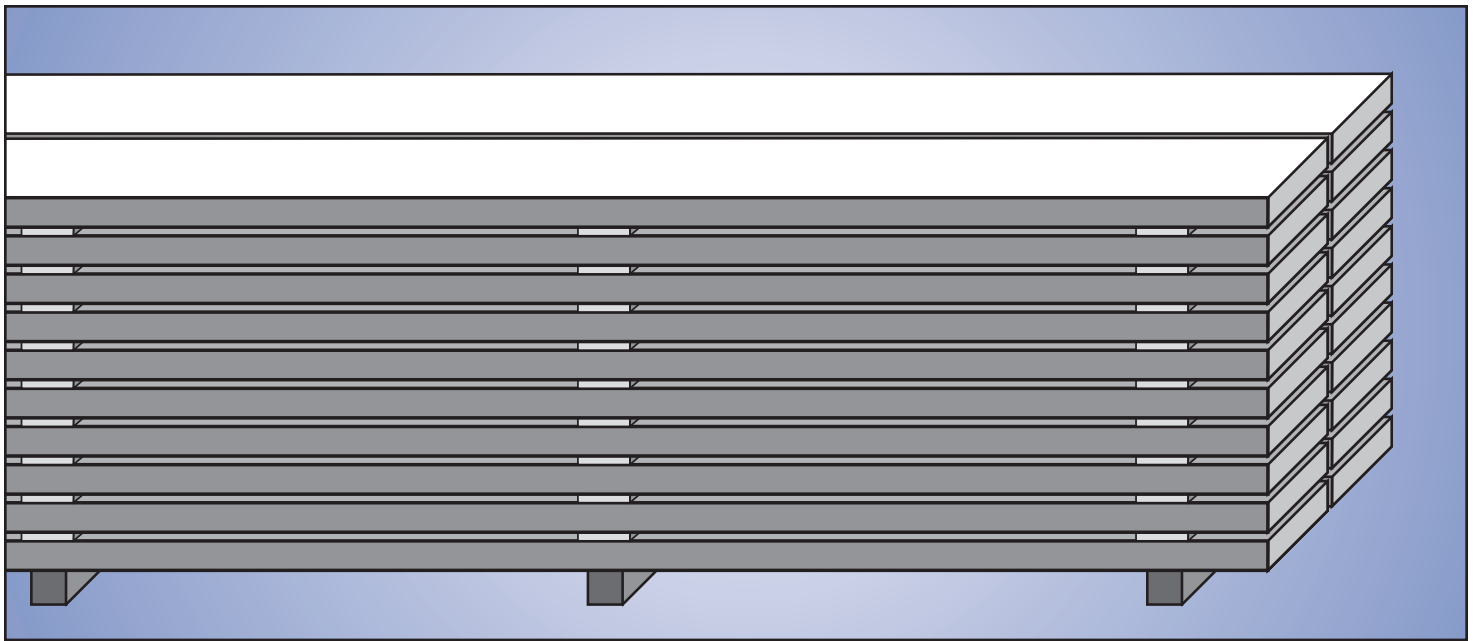
Obtain Material Safety Data Sheets (MSDS) for any chemicals likely to come in contact with scaffold planks on a job. Follow *Steps to Be Taken in Case Material Is Released or Spilled* in Section VII of the MSDS. Planks contaminated with hazardous chemicals should be immediately removed from service, then properly evaluated before reuse.

- **Polar liquids** (such as water and alcohol) temporarily weaken wood. Their effect is reversible. Non-polar liquids (for example, petroleum products and creosote) have a negligible effect on strength.
- **Acids** attack wood. The rate of decomposition increases as solution temperature increases. Strong acids (such as hydrochloric, nitric, sulfuric—pH 1 to 3) react with wood more quickly than weak acids (for example, formic, acetic, propionic, lactic).
- **Strong alkalis** (for example, sodium hydroxide, potassium hydroxide and ammonium hydroxide—pH 12 to 13) attack wood. The rate of decomposition increases as solution temperature increases.
- **Salts'** effects are related to their pH. Acid salts are generally weak acids and pose a minor threat at low temperatures. Neutral salts are not a problem. Alkaline salts (pH > 9) are very damaging. Sodium chloride (common salt) does not react chemically with wood, but can cause the wood structure on the surface to rupture over time.
- **Oxidizing chemicals** (such as peroxides, chlorates and nitrates) are very damaging.
- **Heat.** The phenolic resin used to make Microllam® LVL belongs to a class of adhesives known as thermosets. These adhesives require heat to cure, but once cured, additional applications of heat cannot reverse the process. Phenolic resins will not begin to decompose until reaching a temperature of about 625° F in an inert atmosphere. Wood, on the other hand, can suffer permanent loss of strength under prolonged exposures to temperatures above 150° F, and char at about 425° F. Wood scaffold planks should not be exposed to temperatures that exceed 150° F.



Fungus

- **Decay.** Fungi require food (wood), oxygen, a favorable temperature and water to thrive. Of these four factors, water offers the best potential for control. See *Storage Recommendations* on page 8. Two basic rules should form the basis for storage practices:
 - Keep dry planks dry
 - Allow wet planks to dry quickly by providing air circulation
- **Wet conditions.** Scaffold planks are generally used in elevated locations with good air circulation. This environment is conducive to the drying of wood fibers. For this reason, allowable stresses for scaffold use may be based on a dry service condition (moisture content \leq 19%). Allowable stresses representing the wet condition should be used when planks are used in applications where moisture contents between 19% and 30% are likely. See *Wet Use Span Tables* on pages 4 (U.S.) and 5 (Canada).
- **Improper storage.** Scaffold planks that are improperly stored are subject to biological attack and mechanical damage. See *Storage Recommendations* on page 8 for proper storage techniques.
- **Jumping.** Never jump or bounce on scaffold planks.



Properly stickered, neat bundles

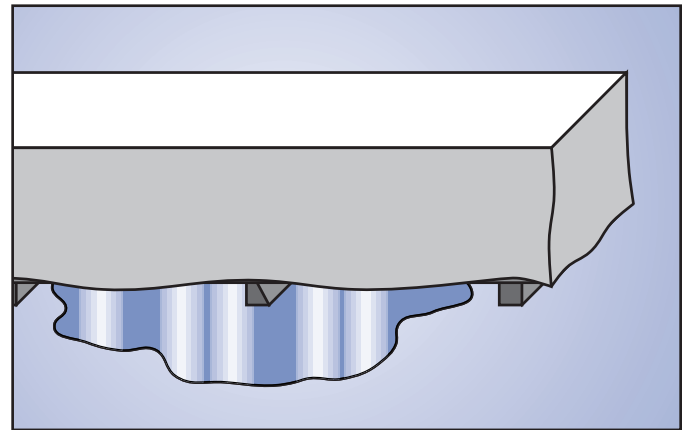
MICROLLAM® LVL SCAFFOLD PLANKS ARE VALUABLE! STORE THEM PROPERLY!

Stack scaffold planks neatly and sticker bundles properly!

- **The proper storage and handling** of wood scaffold planks can prevent unnecessary damage. Plank strength and stiffness properties are affected by moisture content. It is important that scaffold planks be stacked off the ground. Bundles of scaffold plank should be supported on stickers spaced no more than 8' on-center to provide air circulation and easy access for forklifts. Stickers between bundles should line up with stickers on the ground. Misaligned stickers or bands can cause bowed or damaged scaffold planks.

Wet scaffold planks that are not stored in a manner that allows for proper air circulation can decay. Users can improve air circulation within a bundle of wet scaffold planks by separating each layer with stickers. Layer stickers should be spaced no more than 8' on-center and should line up vertically. Bands should line up with stickers. Misaligned stickers or bands can cause bowed or damaged scaffold planks.

- **Bundles of scaffold planks** should be assembled neatly and contain planks of similar lengths. Scaffold planks sticking out from the ends of bundles can be snagged and damaged.



Properly covered storage

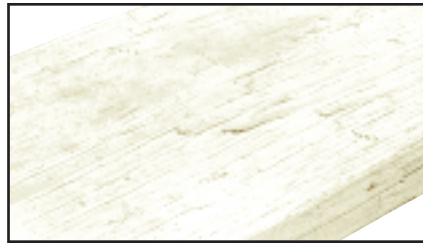
Keep scaffold planks dry when they are in storage!

- **Certain geographical areas** experience extreme weather conditions. In those areas, decay may be more likely to occur, and the following precautions should be followed:

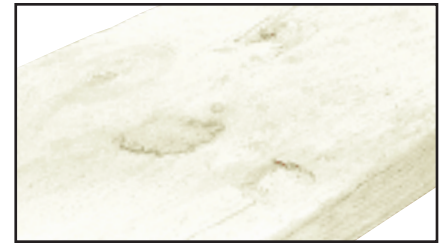
- Scaffold planks should be stored in a level, well-drained location.
- Scaffold planks should be protected from weather by being placed under a roof or under a material that will shed water but is porous enough to allow moisture to escape.



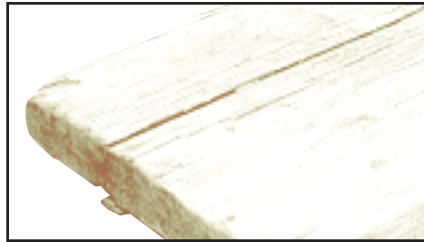
Saw Cuts



Face Break



Dent



End Split



Narrow Face Split

It is the responsibility of Trus Joist to deliver to each of its customers defect-free scaffold plank.

Systematic visual inspection prior to each scaffold erection, along with proper storage, handling and use are the best means of ensuring safe performance of all wood scaffold plank. Some damage to Microllam® LVL scaffold plank may be difficult to detect visually.

Damaged scaffold planks should be removed from service as soon as the damage is discovered. Failure to remove damaged scaffold planks from service might result in injury or death. Some of the more common types of damage are:

- **Saw kerfs, saw cuts, drilled holes and notches.** A saw kerf across the wide face of a scaffold plank lowers its capacity by effectively making the plank thinner. A saw cut, or notch in the narrow face, or a drilled hole, has a similar effect. Scaffold planks with saw kerfs, saw cuts, drilled holes or notches in them should be removed from service.
- **Face breaks.** A break on the wide face of a scaffold plank is the result of overloading. This type of damage might be difficult to detect; therefore, a policy of prevention will be more effective than sole reliance on detection. See *Cautions* on pages 6 and 7. A face break looks like an irregular crack across the tension face (bottom) of the scaffold plank, or a small, straight wrinkle across the compression face (top). Face breaks result in a dangerous loss of strength. Scaffold planks showing face breaks should be removed from service.
- **Dents.** A dent could be caused by a dropped scaffold plank striking an object, or by a dropped object striking a plank. The dent itself might have little effect on plank strength, but it could be a sign of internal damage that will seriously affect plank performance. Scaffold planks with dents should be removed from service, then visually evaluated and field tested before reuse.

- **Gouges and depressions.** Gouges or depressions (where pieces of wood have been torn or eaten away from the plank) might be the result of careless forklift operation, decay or chemical attack. Scaffold planks with gouges or depressions in them should be removed from service.
- **End splits.** An end split is a separation that extends through the plank from one face to another. End splits are normally the result of abuse or repeated wet/dry cycles. End splits of lengths shorter than one-half of the plank width do not necessarily weaken the plank. Longer end splits, up to 18" long, should be arrested and reinforced with straps or rodding. Planks with end splits longer than 18" should be removed from service.
- **Narrow face splits.** An open split on the narrow face of the plank might have been caused by a forklift. An open split that migrates diagonally across adjacent veneers might have been caused by overloading. Diagonal splits are likely to be accompanied by face breaks. It may be necessary to use a thin, stiff probe to distinguish a split from a shallow weathering check. Scaffold planks containing open splits on the narrow face should be removed from service.
- **Discoloration.** Discoloration might indicate exposure to high temperatures, chemical attack or decay. Scaffold planks that are entirely or partially discolored should be removed from service until the cause of the discoloration has been determined to be harmless to the planks.
- **Other.** Soft or crumbly wood might indicate chemical attack or decay. Odd odor might be an indication of chemical attack. Scaffold planks that have soft or crumbly areas on them should be removed from service until the cause has been determined to be harmless to the planks.

If you choose to mechanically test your wooden scaffold planks, avoid traditional industry test procedures that involve jumping or bouncing on them. These methods could actually cause damage. Instead, use nondestructive test procedures such as the following:

1. Make sure the plank is free from built-up dirt and debris.
2. Center the plank on a scaffold frame, or similar structure, that has been set up on a level surface. The plank may overhang one or both sides of the frame without affecting the test results, provided the plank touches both supports.
3. Identify a stationary point of reference, separate from the frame, from which to measure the location of the plank before and after loading. This could be the ground directly below the plank where measurements could be made with a tape measure, or a vertical pole with a measuring tape attached to it that stands up next to the plank.
4. Preload the plank with approximately 20 lbs to settle the plank on the frame. Measure and record the deflection of the plank under the preload.

5. Determine the test load to be applied to the plank from Table 2. **Place the load slowly on the plank.** Measure and record the deflection of the plank under the test load plus the preload.
6. The difference between the first and second measurements (steps 4 and 5) is the deflection of the plank under the test load. Compare this number to the limits shown in Table 2.
7. Examine the bottom of the plank for face breaks while the plank is loaded. If face breaks can be seen, remove the plank from service.
8. If cracking noises can be heard during the test, remove the plank from service.
9. Turn the plank over and repeat this procedure.
10. Any plank that deflects more than the maximum amount shown in Table 2 should be removed from service.
11. Planks that fail the load test, yet show no signs of damage, may be too wet. To determine whether the moisture content of a plank is high, compare its weight to the limits stated below. If the plank's weight exceeds these limits, set it aside to dry, then retest it.

TABLE 1 – APPROXIMATE WEIGHT OF MICROLLAM® LVL SCAFFOLD PLANKS (LBS/FT)

MICROLLAM® LVL SCAFFOLD PLANK SIZE	PLANK SPECIES			
	DOUGLAS FIR		SOUTHERN PINE	
	Dry (m.c. ≤ 19%)	Wet (m.c. < 30%)	Dry (m.c. ≤ 19%)	Wet (m.c. < 30%)
1½" x 9¼"	3.8	4.6	4.2	4.8
1½" x 9½"	3.9	4.8	4.4	4.9
1½" x 11¼"	4.8	5.9	5.4	6.1
1¾" x 9"	4.3	5.3	4.8	5.5
1¾" x 9½"	4.5	5.5	5.1	5.8
1¾" x 11¼"	5.6	6.9	6.3	7.1
2" x 12"	6.5	8.0	7.3	8.3
2¼" x 11¼"	7.2	8.8	8.1	9.2
2½" x 11¼"	8.0	9.8	9.0	10.2

A handheld, needle-probe, electrical-resistance meter provides an alternative method of determining whether the moisture content of a plank is high. Generally, the recommended procedure is to drive the probes in about one-quarter of the plank's thickness to get the average of the section. If the meter has two probes, they should be inserted so they read along the grain. Measurements should be taken in a few different locations. The glue lines in Microllam® LVL affect electrical resistance, making it

necessary to adjust the meter reading by a factor of approximately 5%. This factor is likely to vary depending on the make and model of the meter. The moisture meter manufacturer will provide other adjustment factors for species and temperature. If the surface of the plank is wet, dirty or contaminated, or if the plank has been fire retardant treated, the meter will give false readings. If the meter reading suggests a high moisture content, set the plank aside to dry and retest it.

TABLE 2 – MICROLLAM® LVL SCAFFOLD PLANK TEST LOADS

MICROLLAM® LVL SCAFFOLD PLANK SIZE	TEST SPAN (ft)	TEST LOAD (lbs)	MAXIMUM DEFLECTION (in.)
1½" x 9¼"	7	480	1.29
	8	420	1.69
	10	340	2.67
	14	240	5.18
1½" x 9½"	7	490	1.29
	8	430	1.69
	10	340	2.60
	14	250	5.25
1½" x 11¾"	7	610	1.30
	8	530	1.68
	10	430	2.66
	14	300	5.10
1¾" x 9"	7	630	1.10
	8	560	1.46
	10	440	2.24
	14	320	4.47
1¾" x 9½"	7	670	1.11
	8	590	1.46
	10	470	2.27
	14	330	4.37
1¾" x 11¾"	7	830	1.11
	8	720	1.44
	10	580	2.26
	14	410	4.39
2" x 12"	14	460	3.23
	16	400	4.19
	18	360	5.37
	20	320	6.55
2¼" x 11¾"	14	570	2.87
	16	500	3.76
	18	440	4.71
	20	400	5.87
2½" x 11¾"	14	700	2.57
	16	610	3.34
	18	540	4.21
	20	490	5.24

1. Bending stresses induced by the test loads approximate allowable design stresses for dry, untreated planks.
2. The maximum deflection shown is 25% higher than the amount calculated using the design modulus of elasticity. This is intended to account for the variability of the material and moisture contents of 19% or less.
3. Deflection is directly proportional to load. If the test load used is 20% lower than the test load shown above, the maximum deflection shown above should be decreased by 20%.



WOOD THIS GOOD DOESN'T GROW ON TREES

Trus Joist's family of engineered wood products offers a wide range of creative scaffolding and concrete formwork solutions. Contact your Trus Joist representative for assistance with needle beam, long-span work deck and custom scaffolding applications.

BUILD SAFELY

We at Trus Joist are committed to working safely and want to remind you to do the same. We encourage you to follow the recommendations of OSHA (www.osha.gov) in the U.S. or provincial regulations (www.canoshweb.org/en/) in Canada regarding:

- Personal protective equipment (PPE) for hands, feet, head and eyes
- Fall protection
- Use of pneumatic nailers and other hand tools
- Forklift safety

Please adhere to the Trus Joist product installation details, including the installation of safety strut lines on unsheathed floors and roofs.



200 East Mallard Drive
Boise, Idaho 83706

1-877-856-9663
www.trusjoist.com

