# STRONGER. STRAIGHTER. PROVEN

Get to know TimberStrand®LSL

INDUSTRIAL

# What is TimberStrand® LSL?

TimberStrand® laminated strand lumber (LSL) is made from aspen trees and is one of the strongest, straightest, most stable wood products available for industrial applications.

Any way you cut it, every piece of TimberStrand® LSL provides the same consistent performance, without knots, wane or grain defects, making it an excellent alternative to solid lumber and other composite wood products.

Available in thicknesses ranging from  $1 \text{ to } 3\frac{1}{2}$  inches, TimberStrand® LSL can be machined just like solid wood, only making your product stronger, straighter and more efficient — every time.



# How it's made



# Step 1

The TimberStrand® LSL manufacturing process begins with small-diameter aspen trees.



# Step 2

The logs are cleaned, debarked and cut into strands up to 14 inches long. These are dried, then aligned and glued with strands parallel to each other to take advantage of the wood's natural strength.



# Step 3

A revolutionary steam injection process presses the strands into solid sheets of wood up to  $3\frac{1}{2}$  inches thick.



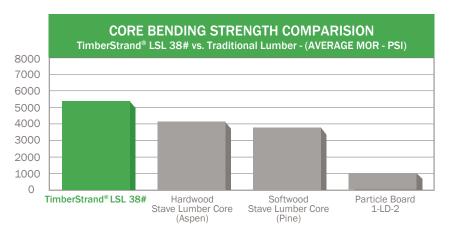
# Step 4

The sheets are cut to your exact specification.

# **Stronger**

# **Engineered toughness**

Manufactured from long strands that are strategically aligned, TimberStrand® LSL is engineered to be stronger and straighter than most other composite wood products used for industrial millwork. Oriented Strand Board (OSB) is made from 2-inch or 6-inch long strands that are scattered throughout, and even smaller wood fibers are used in particleboard and Medium-Density Fiberboard (MDF), which makes them weaker and less stable than TimberStrand®LSL.



### Multi-directional uses

density and quality throughout.

No knots, inconsistencies or manufacturing defects — guaranteed. Cut TimberStrand  $^{\! \circ}$  LSL from any direction and to any size, and you'll find the same

# **Fastener holding**

TimberStrand® LSL's proven dowel, screw and nail holding ability outperforms many types of solid lumber typically used for millwork. TimberStrand® LSL is engineered to securely hold fasteners without splitting or becoming damaged.

# Split resistant. Impact tested.

The split-resistant properties of TimberStrand® LSL help create a finished product that is not only strong, but resists bowing, twisting and shrinking. Door cores made with TimberStrand® LSL are impact tested and surpass the standards set by the Window and Door Manufacturers Association.

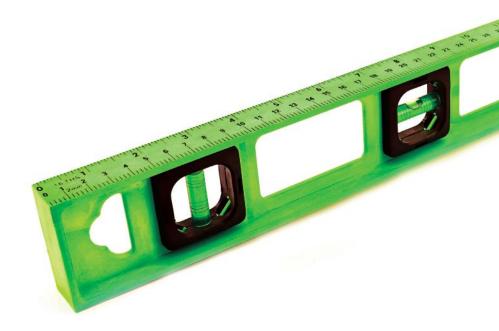
# **Straighter**

# **Solid machinability**

TimberStrand® LSL is solid, and free of defects that often cause traditional wood products to warp. Its straightness allows it to be machined easily and consistently.

# **Quality guarantee**

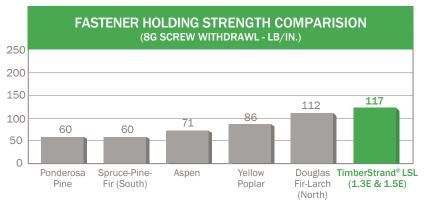
Each sheet of TimberStrand® LSL is inspected using a trusted quality management system. This ensures that every shipment meets our quality standards and matches the customer order exactly.



# **Proven**

# Setting the bar

For more than 20 years TimberStrand® LSL has been successfully used in millwork applications where strength and fastener holding is a critical requirement. It's trusted, reliable and strong.



Screw withdrawal is for face orientation, assuming .50 specific gravity. Ponderosa Pine is a species of Western Woods, the NDS® designation.

Select structural grade lumber values taken from the American Forest and Paper Association's 2005 National Design Specification® (NDS) for Wood Construction.

### Widely utilized

Hospitals. Schools. Office complexes and apartment buildings. There are literally millions of doors with TimberStrand® LSL cores and components in use around the globe. TimberStrand® LSL is also commonly used in window components, furniture, flooring, stairways, cabinets, packaging, or wherever strength matters most.

# Certified and recognized

TimberStrand® LSL is certified by the Sustainable Forestry Initiative and approved by the Architectural Woodwork Institute for use in wood flush and panel doors. It's also recognized by the Window and Door Manufacturer's Association.





# Versatile

# **Customized lengths**

TimberStrand® LSL is available in custom lengths up to 21 feet, allowing you to increase your overall part yield, reduce waste-and save money.

### Manufactured thickness

Most composite panels are only available in thicknesses of up to  $1\frac{1}{8}$ " inches. But by using an innovative steam-injection pressing technology, TimberStrand® LSL can be manufactured in sizes up to  $3\frac{1}{8}$ " thick.

# Reliable, no matter what

TimberStrand® LSL can be cut, ripped, re-sawn or molded parallel to strand direction, all without changing its performance characteristics. Any way you cut it, the physical profile of TimberStrand® remains the same.



# Consistent

### Zero defects

TimberStrand® LSL is an engineered wood product that offers predictable strength, consistent density and dimensional stability in every sheet. Because defects like knots and wane are eliminated during manufacturing, TimberStrand® LSL can resist problems that naturally occur in solid lumber, such as warping, splitting and twisting.

### **Exceptional performance**

Not all structural composite lumber is created equal. TimberStrand® LSL combines the natural strength of the large strand wood fibers with a special steam injection technology to create a consistently stronger, more stable material — perfect for being reworked into smaller components.

# Consistent price/supply

While the price and supply of most wood products can fluctuate frequently, TimberStrand® LSL has a history of more consistent availability and pricing for industrial markets.



# **Smart**

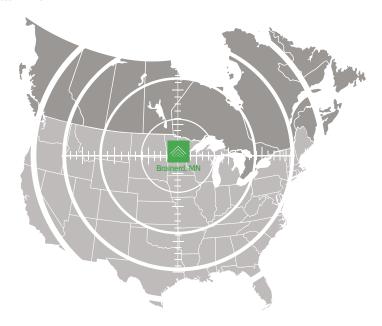
# Less waste, more profit

With custom sizes and no defects, every inch of a TimberStrand® LSL sheet is usable. So you get maximum production and minimum waste with every cut-every time.



# Save time and money

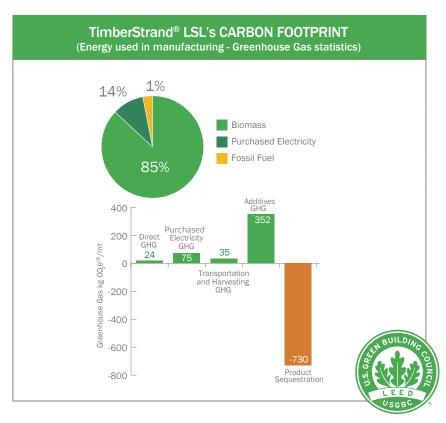
TimberStrand® LSL is shipped from a centralized North American location, which results in reduced freight costs and faster shipping times that benefit your production schedule and bottom line.



# Responsible

### **Utilizing resources**

Certified by the Sustainable Forestry Initiative, TimberStrand® LSL is made from small-diameter aspen trees, which are readily available and often considered an underutilized hardwood. The TimberStrand® LSL manufacturing process uses up to 75% of each log, with the remaining 25% converted into wood chips to be used for fuel to power the mills.



# **Indoor Air Quality**

TimberStrand® LSL is made with a resin classified as a no-added formaldehyde resin and it meets California Air Resources Board standards.

# **Accountable**

### Just-in-time delivery

Shipments of TimberStrand® LSL are built to order and take days, not weeks, to arrive at your plant.

# **Unmatched performance**

TimberStrand® LSL deliveries will not only arrive on time, they will be sized to your exact specifications and in pristine condition.





