



# TUF-TRED® Industrial Panel



- Superior skid resistance off AS HB198: 2014 (AS/NZS4586)
  - Exceptional weatherability with UV stable and durable surface
  - ADA approved PTV Wet 56
  - No further surface finishing required
- Interior or exterior stair applications where skid resistant surfaces are desired
- Interchangeable with boards in systems which include closed risers
  - Waterproof bond for water/high humidity resistance
  - High face/edge screwholding
  - NAUF - meets CARB requirements

**Swanson Group® provides the highest proven performance in panel solutions.** Customers recognize our exceptional history of performance, exhibited in our panel solutions.

We have enhanced our capability to provide superior panel performance. “Swan Peel”™ Technology provides a smoother surface: less grain show through, and improved glue and overlay bond. “Swan Peel”™ Technology reduces thickness variability: resulting in an enhanced balanced construction, tighter core lines, and dimensional stability.

**Swanson is manufacturing overlay panels in a new state-of-the-art facility - the most technologically advanced operation in North America.**

### Product Description:

Tuf-Tred® is a skid-resistant, textured, overlaid plywood with superior skid resistance, surface durability and weatherability. Superior skid resistance - pendulum sustainable slip resistance test.

### Panel Construction/Moisture Resistance:

Tuf-Tred® is manufactured with a proprietary renewable bio ploymer embossed coating equivalent to 40 grit sandpaper. It is produced in a 2 Step layup, has waterproof glue bond and is manufactured to APA PS 1-09 custom series guidelines. All Swanson Group® products are made in the USA.

### Working Faces/Treatment:

Tuf-Tred® is available with 1 working face & waterproof backer. The surface is sand colored, light-stable and will not peel or bubble. The skid resistant surface is equivalent to 40 grit sandpaper.

### Working Edges/Treatment:

- Edges are factory sawn, without edge treatment.
- For interior applications requiring edge banding, do not edge seal, otherwise, seal all edges using clear or pigmented Pre-Form by Nox- Crete or equivalent. Pre-Form can not be over coated.

### Applications:

- Dock, wharf & boat decks
- Wheelchair & truck ramps, walkways for portable classrooms
- Pool & Spa Decking, floating swim platforms
- Bleacher, stage decking, catwalks & factory floors

### Limitations:

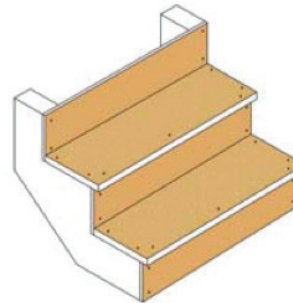
Do not exceed design limitations imposed by the floor span or stair riser tables. Tuf-Tred® is not designed for repetitive heavy wheel loads. Tuf-Tred® is designed as a finished surface and should not be over coated or laminated.

### Thicknesses & Sizes:

Tuf-Tred® is available in 3/4" thicknesses. Standard panel sizes are 4' X 8' only. Non standard thicknesses and lengths meeting volume requirements are available.

Panel Tolerances <sup>2</sup>	5/8" to 3/4"	1" & greater
Thickness Tolerance	+/- 1/32" (.032")	+/- 5%
Length & Width Tolerance	+0, -1/16" (.062")	+0, -1/16" (.062")
Squareness	1/16" (.062")	1/16" (.062")
Straightness	1/16" (.062")	1/16" (.062")

### Stair Tread & Risers:



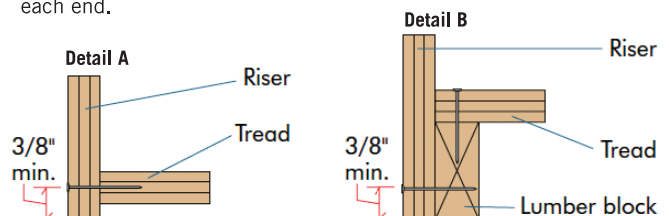
- Swanson Tuf-Tred® is ideal for interior or exterior stair applications where skid resistant surfaces are desirable.
- Tuf-Tred® may be used interchangeably with boards in systems which include closed risers.
- Minimum thickness is 5/8".
- Maximum span between risers is 42".

Tuf-Tred® Stair Part Minimum Thickness <sup>1</sup>		
	Minimum Thickness (in.)	
	Nail Glued	Nailed Only
Tuf-Tred® / Treads	5/8"	3/4"

<sup>1</sup>From APA The Engineering Wood Association's Engineering Wood Construction Guide, Form E30W, 2019, Figure 7: APA Panel Stair Treads.

### Field Fabrication

- Nail all edges of treads as indicated in details A and B. Detail B is preferred as it eliminates end grain nailing.
- Glue is recommended to improve stiffness of the connection and eliminate squeaks
- Apply construction adhesive meeting APA's performance specification AFG-01 or ASTM D3498 to all joints, with particular attention to the back riser/tread connection
- Minimum 8d common nails 12" O.C. along leading edge, add two nails to each end.



Renewable Coating Technology provided by:



## Tuf-Tred® Floor Loads and Span Ratings:

Tuf-Tred® Recommended Uniform Floor Live Load and Span Rating With Strength Axis Perpendicular to Supports							
Panel Thickness	Allowable Live Loads (lbs. per Square Foot)						
	12"	16"	19.2"	24"	32"	40"	48"
1/2"	270	155	100				
3/4"	580	325	225	145			

\*Table based on Standard APA and PS-1 criteria. See Table 5 of APA A225 for adjustment factors if above conditions are not met.

Load table based on 10 year duration of load; live load deflection criteria of L/360; based on panels spanning two or more supports.

HB198-2014 (AS/NZS 4586) Pendulum Sustainable Slip Resistance (SSR) Test	
Pendulum Test Value	PTV
Test Method	Pendulum Slip Test Wet Hard Rubber
Safety Criterion Ramp less than 4 degrees	45
Safety Criterion Ramp greater than 4 degrees	55
Tuf-Tred Anti Slip	56

Certified by Sotter Engineering Corporation - Official slip resistance testing Laboratory in California September 2018

Thermotron SM4800 - 336hrs @ 122°F		
	Initial Values	Results
Hardness (shore)	48.4	47.35
Water Absorption	0%	0.29%

\*University of British Columbia completed ASTM D2240-05 and ISO 4287-1197 testing to simulate accelerated aging conditions. Samples were then subjected to multiple weeks of elevated humidity and temperature with results showing insignificant change.

Freeze/Thaw Resistance		
Cycle	Temp	Exposure Time
Oven Drying	+120 °F	80 hours
Water Immersion	+73 °F	80 hours
Freezing	-20 °F	160 hours

Freeze/thaw resistance testing was conducted by Intertek Group PLC in accordance with ICC ES AC 11. Ten cycles of freeze/thaw were completed and then a visual inspection was conducted afterwards. Intertek found "No visual sign of any deleterious effects" after completion of the testing.

\*Intertek Group PLC completed ICC ES AC11 for freeze/thaw resistant. After cycles, there was no change.

### Application Instructions

**1. Installation:** Install Tuf-Tred® directly over framing. Install flat, do not crown the panel. Consult Load Span Tables for maximum spans and allowable uniform load per square foot. Panel faces and edges must not have continuous direct contact with water.

**2. Fastening:** Use only stainless steel or hot-dipped galvanized screws. Screw at least 3/8" from edge of panel to prevent surface cracking. For marine applications or other wet areas, use corrosion resistant bolts or screws. Pre-drill screw holes and countersink with caution, then fill the hole with two-part epoxy and cover it with shell that is provided.



**3. Edge Joints:** 1/8" spacing is recommended at all edges and end joints to provide room for expansion and contraction. If caulking is desired, joints must provide enough room, such as a 3/16" groove or 50 back bevel, to apply a bead of caulk. Additional notes can be provided by APA E30 Floor Construction Guide.

**4. Caulking:** Use a good quality caulk on all joints. Avoid oil-based caulks and glazing materials. Obtain caulking squeeze-out the full length of the joint. Caulked joints are not approved for roof applications or other applications where water-proofing is required.

**5. Machining:** Tuf-Tred® can be sawn, shaped, routed or jointed with ordinary methods, using high speed, professional quality power tools. Use carbide-tipped blades for cutting, adjusting arbor so that blade extends 1/2" through the panel. Feed material to saw slowly.

**6. Drilling:** If appearance on back is important, panel should be signed up to avoid chipping as drill bit breaks through. Do not drill closer than 1/4" to the edge of the panel.

**7. Durability:** Tuf-Tred® will provide years of service when installed properly. Wood, however, may decay when subjected to prolonged periods of moisture. Free air circulation around the panel is crucial for long life. Do not install over existing lumber or plywood decking in exterior applications. Joists and blocking members should be constructed with preservative treated or naturally decay-resistant wood species for maximum life in exterior applications.

**8. Staining:** Tuf-Tred® can be stained to get your color for any project. Recommend only using a water base solid stain. Good results have been achieved using Sansin SDF and Benjamin Arbor Coat as the examples of stains which have been used.

**9. Cleaning:** Power wash with soap & water as often as needed.

### Standard Packaging:

Thickness	Tuf-Tred® 1 Face, HDO Back Average Weight* lbs./Panel	Tuf-Tred® 1 Face, HDO Back Average Weight* lbs./Panel	Pieces per Unit
5/8"	2.000	64.0	50
3/4"	2.350	75.2	44
1"	3.065	98.1	33
1-1/8"	3.450	110.4	30

\*Average product weights may vary +/- 10%

**Suitability for Use and Warranty:** Nothing herein constitutes a warranty express or implied, including any warranty of merchantability or fitness for use, nor is protection from any law or patent to be inferred. The exclusive remedy for all claims is replacement of materials.

### Warehouse Storage and Handling

- Store in a dry, clean, well-ventilated area indoors.
- Avoid temperatures and moisture extremes. Allow panels to equalize for 72 hours or more before use.
- Pieces must not be stored in contact with the ground.
- Limit the stacking height up to five units. Separate units with clean, dry spacers of uniform thicknesses, aligned carefully. Use three spacers for panels 8' long.

### Environmental Impact

- Swanson Group® uses process by-products to produce energy
- Swanson products are renewable, biodegradable and recyclable

**Warnings:** This product will generate wood dust from sawing, sanding, or shaping. Safety data sheets are available on Swanson's website at [www.swansongroup.biz](http://www.swansongroup.biz) and upon request.

Structural panels (PS-1) are exempt from California Air Resources Board regulations, however, this product is below CARB limits for all uses.

Find out more at [www.swansongroup.biz](http://www.swansongroup.biz)



Installed September 2018

*Testimonial from a client:*

**"Of course function, safety and durability are all important in a dock. Honestly, for me, I was most interested in finding a solution that met my aesthetic needs. It had to look good and stay looking good for a long time.**

**Sure, it has to be cost effective, durable and safe, but it also has to look good and blend in with my home.**

**I found this product checked all the boxes. As a bonus, it requires very little maintenance to keep it in tip-top shape!"**

# Swanson Group

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