

EDGE™ AND EDGE GOLD™ FLOOR PANELS

WEYERHAEUSER EDGE GOLD™ ENHANCED FLOOR PANELS

Quality builders rely on Weyerhaeuser Edge Gold panels for good reason. They're tough enough to stand up to weather during construction delays. Each panel is fully sanded and engineered to start flat and stay flat with a fastening template for easy installation. And with built-in drains for rainwater and a 200-day no-sand guarantee, you have even less to worry about.

- Limited 50-year warranty against delamination
- Limited 200-day no sand guarantee
- Sanded face for uniform thickness
- Easy-fit tongue-and-groove
- Self-gapping tongue-and-groove profile
- Every panel ships working-side up
- Nailing marks for quick and easy installation



GIVE YOURSELF AN EDGE ON EVERY JOB



25 YEAR LIMITED WARRANTY
 25 ANOS GARANTIA LIMITADA
 25 ANS GARANTIE LIMITEE

Weyerhaeuser Edge™ oriented strand board (OSB) floor panels help builders get an edge on their competition by delivering both the value and product reliability needed for solid, stable floors. Easily recognized by their green edge seal, each Edge™ panel is uniform in size to allow easy installation, minimal waste, and reduced callbacks. Edge™ floor panels are also backed by a limited 25-year warranty against delamination.

50 YEAR LIMITED WARRANTY
 50 ANOS GARANTIA LIMITADA
 50 ANS GARANTIE LIMITEE

Weyerhaeuser Edge Gold™ OSB has long been the quality builder's floor panel of choice for its outstanding performance and enhanced weather resistance. Engineered to start flat and stay flat, each panel is fully sanded and marked with an easy-to-use fastening template for quick installation.

200 DAY NO-SAND GUARANTEE
 200 DIAS SIN NECESIDAD DE LIJAR
 200 JOURS SANS SABLAGE

Edge Gold™ floor panel benefits include:

**No delamination.
 No sanding.
 We guarantee it.**

- Fully sanded face for uniform thickness
- Limited 200-day no sand guarantee
- Limited 50-year structural warranty
- Stamped with fastener markings for fast nailing
- Tongue-and-groove profiles automatically gap panel edges to the recommended 1/8"
- Bundles delivered face-up for easy handling on the job site
- Proprietary edge seal provides superior edge swell resistance

TABLE OF CONTENTS

Weyerhaeuser Edge Gold™ Enhanced Floor Panel	2
Design Properties	3
Load Tables	4
Floor Design for Canada	5
Product Storage and Handling	6

A GOOD THING IS EVEN BETTER WITH DOWN PORE® Self-Draining Technology

U.S. Patent: 8,333,044

In some regions, Weyerhaeuser Edge Gold™ floor panels include Down Pore® technology, a patented, self-draining feature that allows rainwater to drain from the floor. If your site sees a hard rain after Edge Gold™ flooring is installed, the water is channelled through the panel and off the joists below. No more sweeping off water, no more drilling holes in the floor to let it through, and less time spent waiting for flooring to dry before installing finish material.



Note: When concrete topping is applied, Down Pore® grooves do not need to be covered. However, if minor concrete seepage must be avoided, covering grooves with tape is recommended.

DOWN PORE SELF-DRAINING TECHNOLOGY

Available Sizes

Edge™ and Edge Gold™ floor panels are available at Weyerhaeuser Distribution Centers in standard sizes, and in the following performance classes:

Edge™ floor panels:
 1 3/32", 2 3/32", 7/8", and 1 1/8"

Edge Gold™ floor panels:
 5/8", 2 3/32", 7/8", and 1 1/8"

Product Specifications

Edge™ and Edge Gold™ floor panels are manufactured in accordance with Product Standard CSA O325, which is recognized by the National Building Code of Canada (NBCC).

Down Pore® drainage grooves do not affect the use of Edge Gold™ panels in fire-rated assemblies.

Minimum quantities may be required for some orders. Some thicknesses and Down Pore® technology may not be available in your region.



Certified Sourcing
www.sfiprogram.org
 SFI-0008

DESIGN PROPERTIES

Weyerhaeuser Edge Gold™ Enhanced Floor Panels

Engineered specifically for floor applications, Weyerhaeuser Edge Gold™ is an enhanced grade oriented strand board (OSB) panel. Compared to commodity OSB commonly used in sheathing applications, Edge Gold™ is manufactured with an enhanced formulation involving higher adhesive and wax content. As a result, Edge Gold™ enhanced panels deliver outstanding dimensional stability through “wet weather” construction periods, making them an ideal specification for flooring.

In most applications, Edge™ and Edge Gold™ floor panels will be specified based on the span rating of the panel. However, in some uses, engineers will require actual design values to support application-specific engineering calculations. The **Design Properties** table below provides industry-standard design values for OSB based on CSA 086.

Geometric cross-sectional properties: To calculate the geometric cross-sectional properties for a specific Edge™ or Edge Gold™ panel, use the nominal thickness from the **Design Properties** table below and assume a uniform rectangular cross section.

Creep: Under constant load, the deflection of wood-based products generally increases over time—a phenomenon known as creep. In typical applications, with relatively low dead loads, it is not necessary to consider creep in the design process. However, when the potential for creep exists—specifically, when a permanent or constant load will stress the panels to one-half or more of their design strength capacity—an adjustment to the deflection calculations should be made.

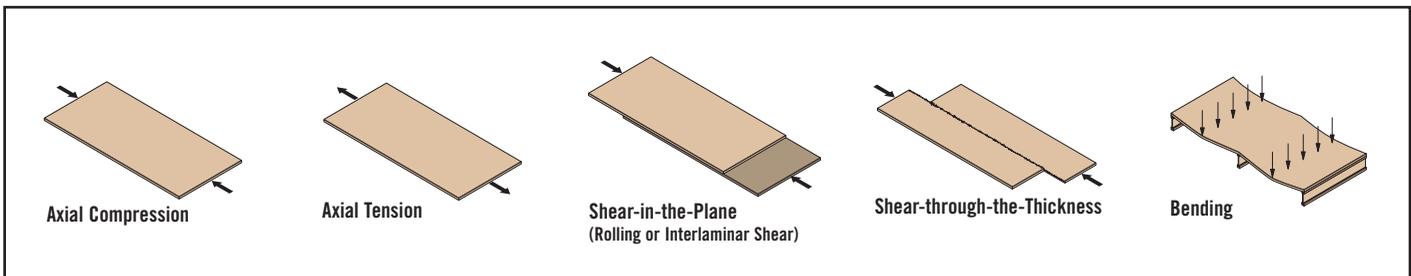
Weyerhaeuser Edge™ and Edge Gold™ Specified Strength and Stiffness

Span rating		=	1F20		1F24		1F32		1F48	
Nominal thickness		=	19/32", 5/8"		23/32"		7/8"		1 1/8"	
Strength axis ⁽¹⁾		=	0°	90°	0°	90°	0°	90°	0°	90°
Bending	Bending (in-lb/ft of width)	m_p	970	405	1,295	620	1,725	1,080	3,235	1,940
	Stiffness (lb-in. ² /ft of width)	EI	212,400	38,200	297,400	76,500	647,900	223,000	1,168,300	467,300
Shear	Planar Bending - Shear (lb/ft)	v_{pb}	420	265	535	310	630	440	960	685
	Shear-Through-Thickness Rigidity (lb/in)	B_v	62,810	62,810	68,520	68,520	85,650	85,650	114,200	114,200
	Shear Through Thickness (lb/in. of shear-resisting panel length)	v_p	310	310	335	335	365	365	485	485
Axial	Axial Tension (lb/ft of width)	t_p	4,590	3,290	5,275	4,045	6,305	5,140	8,910	7,535
	Axial Compression (lb/ft of width)	p_p	6,305	5,960	7,535	6,440	9,595	8,910	12,335	10,280
	Axial Stiffness (lb/ft of width x10 ⁶)	EA	3.85	2.60	5.15	3.00	6.80	3.75	7.40	4.20

(1) Orientation of applied force relative to the panel's major axis.

General Notes

- Table is based on CSA 086-14.
- The specified strength in bearing (normal to plane of panel), q_p is 610 psi. Refer to CSA 086-14 9.5.8 for adjustments to determine factored resistance.
- Lateral and withdrawal capacity of nails can be computed in accordance with CSA 086-14. For diaphragm design, use species adjustments based on the framing member.
- Additional information on K_D for permanent loads and permanent deflection can be found in section 5.3.2 and 5.4 respectively of CSA 086-14.
- While Weyerhaeuser Edge™ and Edge Gold™ are able to tolerate wet job site conditions, they are intended for dry use applications in a weather-protected building.



LOAD TABLES

Weyerhaeuser Edge™ and Edge Gold™ Factored Uniform Load Table (PSF)

Span Rating	Thickness	Load Calculation Based on ⁽¹⁾⁽²⁾	Span									
			Major Axis Perpendicular to Supports (0°)									
			12	16	19.2	24	30	32	36	40	48	60
1F20	1 ⁹ / ₃₂ " , 5/ ₈ "	ULS	760	432	300	192	123	108	-	-	-	-
		SLS – L/180	1,848	695	380	184	90	74	-	-	-	-
		SLS – L/360	924	348	190	92	45	37	-	-	-	-
1F24	2 ³ / ₃₂ "	ULS	968	577	400	256	164	144	91	74	51	-
		SLS – L/180	2,588	973	533	258	126	103	91	65	42	-
		SLS – L/360	1,294	487	266	129	63	52	45	33	21	-
1F32	7/ ₈ "	ULS	1,140	768	533	341	219	192	121	98	68	44
		SLS – L/180	5,637	2,121	1,160	562	275	225	197	142	93	45
		SLS – L/360	2,819	1,060	580	281	138	112	99	71	46	23
1F48	1 ¹ / ₈ "	ULS	1,737	1,258	1,000	640	410	360	228	184	128	82
		SLS – L/180	10,165	3,824	2,092	1,014	497	405	356	256	167	81
		SLS – L/360	5,083	1,912	1,046	507	248	202	178	128	83	41

(1) ULS = Ultimate Limit States, SLS = Serviceability Limit States.

(2) Strength calculation based on minimum of bending or shear.

General Notes

- Table is based on based on:
 - Uniform Loads.
 - 2x supports for span configurations less than 48" on-centre. Support width effects have been considered.
 - 4x supports for span configurations equal to or greater than 48" on-centre. Support width effects have been considered.
- For Major Axis Perpendicular Supports:
 - 3-span conditions assumed for spans of 32" or less.
 - 2-span conditions assumed for spans greater than 32".
 - 1-span condition requires the use of the span adjustment factor see "Span Adjustments".

Span Adjustments

Item	2-span to 1-span	3-span to 1 span
Deflection	0.42	0.53
Moment	1.00	0.80
Shear	1.25	1.20

- When adjusting uniform loads based on strength from the Weyerhaeuser Edge™ and Edge Gold™ Factored Uniform Load Table, use the span adjustment factors for moment.
- When adjusting uniform loads calculated from the equations in Calculations of Uniform Loads, use the corresponding factor.

A Note About Floor Performance

Floor panels are an important component in creating a floor that feels good to customers. The span rating shown on a panel represents a structurally acceptable floor performance level. Floor performance can be enhanced to meet higher customer expectations in several ways:

- Consider using thicker panels.
- Glue and nail flooring for improved connections to help resist vibrations, minimize nail pops, and transfer loads more evenly. Weyerhaeuser recommends using a subfloor adhesive that has been qualified as a Class 1/8 in., Type P/O subfloor adhesive in accordance with ASTM D3498-19.
- Use stiffer joists or a narrower joist spacing.

Choosing the optimal combination of these parameters can be difficult. To predict floor performance and evaluate the relationship between the cost and the "feel" of a floor, use Trus Joist® TJ-Pro™ Rating. For customized TJ-Pro™ Rating solutions, use ForteWEB™.



FLOOR DESIGN IN CANADA

Designing as a System with Vibration Control

Maximum joist span is often governed by code mandated floor vibration criteria. The Joist Span Comparison chart illustrates the effect that floor panel thickness has on allowable TJI® joist spans.

Joist Span Comparison

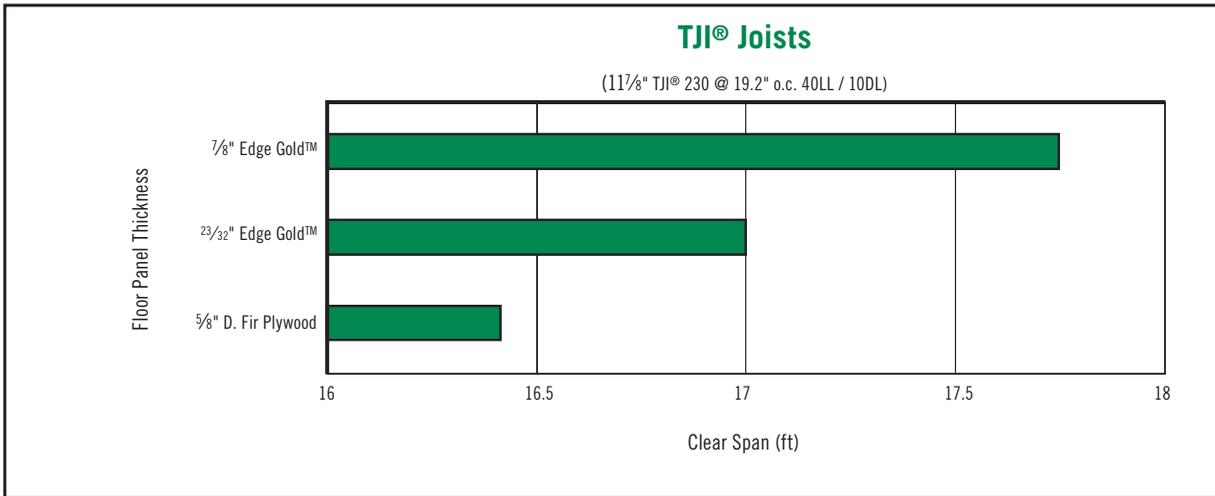


Table Notes: Settings used to develop above vibration-controlled span results: Simple Span, no ceiling, no blocking, no concrete topping.

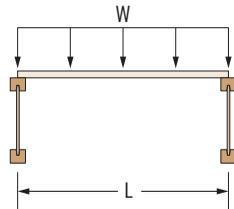
One-Span Equations

Uniform load equations based on:

$$\text{Moment Capacity} = W_M = \frac{96M_f}{L_M^2}$$

$$\text{Shear Capacity} = W_V = \frac{24V_{rp}}{L_V}$$

$$\text{Deflection} = W_\Delta = \frac{L_M 921.6 EI}{L_\Delta^4 R}$$



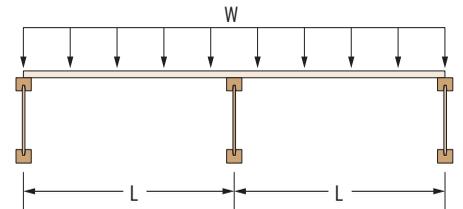
Two-Span Equations

Uniform load equations based on:

$$\text{Moment Capacity} = W_M = \frac{96M_f}{L_M^2}$$

$$\text{Shear Capacity} = W_V = \frac{19.2V_{rp}}{L_V}$$

$$\text{Deflection} = W_\Delta = \frac{L_M 2220 EI}{L_\Delta^4 R}$$



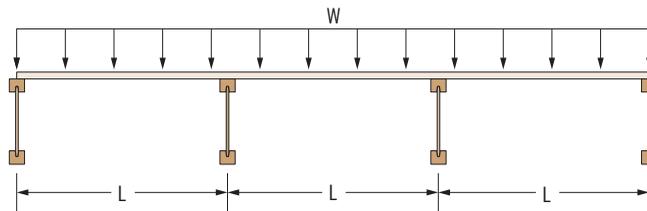
Three-Span Equations

Uniform load equations based on:

$$\text{Moment Capacity} = W_M = \frac{120M_f}{L_M^2}$$

$$\text{Shear Capacity} = W_V = \frac{20V_{rp}}{L_V}$$

$$\text{Deflection} = W_\Delta = \frac{L_M 1743 EI}{L_\Delta^4 R}$$



The equations above are based on one-way "beam" action. They are provided to help develop allowable uniform loads based on moment, shear, and deflection as applied to one-, two-, and three-span conditions. Loads derived from the equations provided are assumed to be applied over full-size panels in normal sheathing applications. The following definitions apply:

- Δ Deflection (in.)
- EI Bending Stiffness (lb-in.²/ft)
- M_f Factored moment capacity (lb-in./ft)
- V_{rp} Factored planar bending-shear capacity (lb/ft)
- L Span (in.)
- L_m Center-to-center span between supports, used for moment calculation (in.)
- L_v Clear span used for shear calculation (in.)
- L_Δ Clear span plus SW, used for deflection calculation (in)
- R Denominator of chosen deflection limit. (e.g. for $L/360 R = 360$)

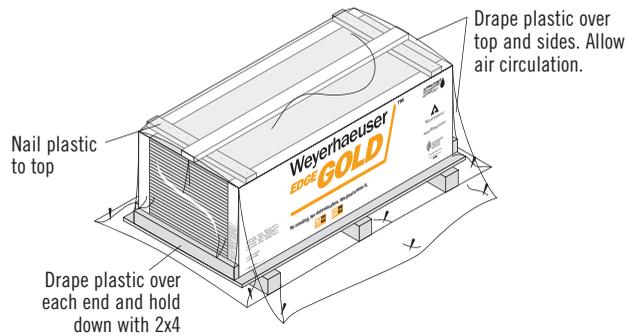
- SW Support width factor:
 - 0.25 for 2x nominal lumber
 - 0.625 for 4x nominal lumber
 - For additional information refer to the current *Panel Design Specification* (APA D510)
- W Uniform load (psf)
- W_m Factored uniform load based on moment capacity (psf)
- W_v Factored uniform load based on shear capacity (psf)
- W_Δ Factored uniform load based on deflection (psf)

PRODUCT STORAGE AND HANDLING

Like any wood product, wood-based panels are at risk of fungal decay or rot if exposed to repeated wetting or high-moisture environments. Panels that are exposed to such conditions may deteriorate, lose strength, or support mold growth, so protection from these conditions must be provided.

Use a platform made from cull panels and scrap lumber supported by stickers that extend across the width of the stack, and keep panels at least 4" from the ground. Put one sticker in the center of the load and the others approximately 12" from each end. When covering the panels, drape plastic over the ends of the stack and secure it. Then drape plastic over the top and sides of the stack; stake it to the ground, pulling the ends away from the product to allow air circulation along the sides of the stack.

Handle Edge™ and Edge Gold™ panels in a flat orientation. Protect the edges and ends from damage, keep the load level, and lift the stack from the center.



Edge™ and Edge Gold™ panels are intended for dry-use applications

Exposure 1 Bond Classification

Edge™ and Edge Gold™ panels are manufactured to an Exposure 1 bond classification. Exposure 1 panels are suitable for uses where they are not permanently exposed to the weather; they are intended to resist the effects of moisture on structural performance due to construction delays or other conditions of similar severity.

PRODUCT WARRANTIES



Visit weyerhaeuser.com/woodproducts/warranty for copies of these and other Weyerhaeuser product warranties.

Contact your local representative or dealer at:

CONTACT US

1.888.453.8358 • weyerhaeuser.com/woodproducts/contact

December 2020 • Reorder OSB-4501

This document supersedes all previous versions. If this is more than one year old, contact your dealer or Weyerhaeuser rep.

▲ Weyerhaeuser, Trus Joist and Down Pore are registered trademarks and Edge, Edge Gold, and TJ-Pro are trademarks of Weyerhaeuser NR Company. © 2020 Weyerhaeuser NR Company. All rights reserved. Printed in the USA.