ROSBORO X-RIM™

Rosboro X-Rim is the first glulam beam designed specifically for rim applications. Manufactured to tight tolerances with low moisture content to reduce shrinkage and ensure fit.

FIRE STOP

Heavy timber X-Rim glulam is used as a fire stop in floor systems, around stair wells and elevator shafts. It is installed in walls perpendicular to the floor joist eliminating high cost standoff hangers. X-Rim is specified in stacked framing applications where dimensional stability is critical.

ZERO CAMBER

X-Rim is zero camber so it installs flat in floor systems. The width fits flush with 2x4 and 2x6 framing and depths match EWP and conventional framing systems. X-Rim is finished to an Industrial appearance so both wide faces are surfaced smooth allowing hardware to fit flush and tight against the rim.

KILN-DRIED

X-Rim is kiln-dried to an average moisture content of 13% and is manufactured to tight depth tolerances of -0"/+3/32". Rosboro X-Rim is cut to shorter, more manageable lengths such as 20' with both ends square cut and sealed. Only trimmed ends have to be sealed and less field cutting is required, resulting in reduced installation time.

Because X-Rim is a glulam product, it is less prone to swelling and moisture related issues than other EWP products like PSL, LVL, and LSL because it has less open wood fiber from the manufacturing process.

ALSO AVAILABLE WITH WATER RESISTANT SEALER

Rosboro Sealed X-Rim glulam was specifically developed for rim applications in regions that experience extended periods of rain during construction. Rosboro Sealed X-Rim is coated on all four sides and both ends with Liquid Wrap™ sealer that significantly reduces water penetration and minimizes swelling and shrinkage.

***All solid and engineered wood products will absorb water through the end grain if the ends are not properly sealed after cutting. Designers should specify that all ends will be sealed prior to installation.*

Rosboro X-Rim™ Sizes

Product	Depth						
3½" X-Rim	9¼"	9½"	11¼"	11⅞"	14"	16"	18"
5½" X-Rim	9¼"	9½"	11¼"	11⅞"	14"	16"	18"
6¾" X-Rim	9¼"	9½"	11¼"	11⅞"	14"	16"	18"

X-Rim Design Values: All X-Rim products meet or exceed the design standards for EWS #1 Douglas fir.

Design Properties: F_b=1,250 psi* F_v=265 psi E=1.5 x 10^6 psi F_{cp}=560 psi

*For 16" and deeper F_b=1,100 psi

ANOTHER GREAT RIM OPTION

Rosboro X-Beam is also a great option for use as a Rim and is readily available because it is stocked at most major distributors. Rosboro X-Beam width fits flush with 2x4 and 2x6 framing and depths match EWP. X-Beam is finished to an Architectural appearance so both wide faces are surfaced smooth allowing hardware to fit flush and tight against the rim. Rosboro X-Beam is kiln-dried to an average moisture content of 13% reducing the potential for shrinkage. X-Beam IJC depths are manufactured to tight depth tolerances of -1/16" / +1/16".

Rosboro X-Beam™ Design Values

Product	Layup Combination	Flexural Stress F_b (PSI)*		Compression Perpendicular to Grain F_{cl} (PSI)	Shear F_v (PSI)	Moe (10^6 PSI)	
		Tension Zone	Compression Zone			Apparent	True
X-Beam	24F-V4	2,400	1,850	650	265	1.8	1.9

*F_b shall be adjusted by the volume effect factor based on NDS-18

GLULAM RIM IN FIRE RATED WALLS AND FLOORS

When wood is exposed to fire, the char layer protects the remaining unburned wood against the heat. Under fire exposure of up to 2 hours, the char depth of glulam can be calculated in accordance with Chapter 16 of the *National Design Specification for Wood Construction* (NDS) and Section 722, *Calculated Fire Resistance*, of the 2015 International Building Code (IBC). The residual cross-section of glulam Rim-Boards after 1-hour and 2-hour fire exposures can carry a significant uniform vertical load (UVL) because glulam Rim Boards are manufactured to a relatively larger width compared to other Rim Boards. The American Plywood Associations (APA) publication *TT-124 Uniform Vertical Load Capacity of Glulam Rim Boards Subject to Fire Exposure* discusses this issue in greater detail.

Fire-resistance-rated wood frame assemblies can be found in a number of sources including the International Building Code (IBC), Underwriters Laboratories (UL), Fire Resistance Directory, Intertek Testing Services Directory of Listed Products, and the Gypsum Association's Fire Resistance Design Manual (GA 600). The American Wood Council (AWC) and its members have tested a number of wood frame fire-resistance-rated assemblies. These assemblies can be found in the AWC document DCA3 Fire-Resistance-Rated Wood-Frame Wall and Floor/Ceiling Assemblies.