

THE ENGINEERED WOOD PRODUCT THAT PERFORMS BETTER THAN LSL

Rosboro ESL 1.6 E™ is the perfect choice for engineered beam, header, and joist applications. The full 3½" and 5½" widths make it ideal for wall framing. Produced in I-joist depths for compatibility with EWP floors, ESL is a great substitute for multiple I-joist assemblies. The balanced layout means hassle-free use in cantilever and multi-span applications.

100% REAL WOOD

- ESL is 25% lighter than LSL and is easier to cut, drill, and nail
- Straight, dimensionally stable, consistent sizes
- Does not require special hangers or screws and no nailing or bolting multiple plies
- Enhanced Industrial appearance - planed smooth with no off-set laminations

INDUSTRIAL APPLICATION

- Factory-built walls and trusses
- Concrete forming
- Shoring

SIZES

- Full width 3½" and 5½"
- EWP depths: 9½" • 11⅞" • 14" • 16"
- Also available in 9¼" and 11¼" depths
- Available in long lengths



ROSBORO ESL 1.6 E™ BALANCED LAYUP COMPARED TO LAMINATED STRAND LUMBER (LSL)

14 ft Simple Span

Width x Depth	Product	Floor Load @ 100%, Total Load (PLF)	Roof Load @ 125%, Total Load (PLF)
3½" x 9½"	Rosboro ESL 1.6 E	316	424
	TJ TimberStrand	288	386
	LP SolidStart	288	388

Rosboro ESL 1.6 E™: 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
ESL 1.6 E	20F-V7	2,000	2,000	650	265	1.6	1.7

Rosboro ESL 1.6 E™ Balanced Layup Section Properties

EWS 20F-V7 Dry-Use F_b = 2,000 psi F_v = 265 psi E = 1.6 x 10⁶ psi F_{cp} = 650 psi

Width (in)	Depth (in)	Weight (lbf / ft)	Maximum Resistive Shear (lbf)			Depth (in)			EI (10 ⁶ in ² -lb)
			100%	115%	125%	100%	115%	125%	
3½"	9¼	7.9	5,720	6,578	7,149	8,319	9,566	10,398	369
	9½	8.1	5,874	6,755	7,343	8,774	10,090	10,968	400
	11¼	9.6	6,956	8,000	8,695	12,305	14,150	15,381	664
	11⅞	10.1	7,343	8,444	9,178	13,710	15,766	17,137	781
	14	11.9	8,657	9,955	10,821	19,056	21,914	23,819	1,281
	16	13.6	9,893	11,377	12,367	24,889	28,622	31,111	1,911
5½"	9¼	12.4	8,988	10,336	11,235	13,072	15,033	16,340	580
	9½	12.7	9,231	10,615	11,539	13,788	15,856	17,235	629
	11¼	15.0	10,931	12,571	13,664	19,336	22,236	24,170	1,044
	11⅞	15.9	11,539	13,269	14,423	21,544	24,776	26,930	1,228
	14	18.7	13,603	15,644	17,004	29,944	34,436	37,431	2,012
	16	21.4	15,547	17,879	19,433	39,111	44,978	48,889	3,004

Notes for ESL Design Properties:

1. Beam weight is assumed to be 35 pcf.
2. Maximum resistive moment shall be adjusted by the volume factor based on NDS-18.