



Insulation / Specifications

Thermal Resistance

Decking will normally require additional insulation to meet today's energy codes. Rigid insulation or structural insulated panels can be installed over the decking to provide the desired insulating capacity.

Thermal Resistance Calculation (R) For Laminated Roof Deck Systems

Air film resistance, outside	0.17
Asphalt shingles	0.44
3/8" plywood or OSB sheathing	0.47
Vapor barrier	0.12
Air space	1.05
Air film resistance (inside)	0.61
3" laminated decking	4.00
6" rigid insulation R=5.4 per inch	32.40
Total R Value	39.26

Guide Specifications

Species: Select face from Western Red Cedar, Idaho White Fir, White Pine, Ponderosa Pine, Douglas Fir/Larch, or Southern Pine.

Grades: Supreme, Decorative, Service.

Textures: Select face from smooth surface, smooth sanded, course sanded (16 grit), resawn (cross band-saw texture), or wire brushed.

Nominal Sizes: 2x6, 2x8, 3x6, 3x8, 4x6, 4x8, 5x6, and 5x8.

Lengths: Random 6' to 16' or specified lengths up to 24'. End matched tongue-and-groove is standard. Square ends or end-matched available up to 20'. Lengths 18' to 24' may have structural finger-jointed lumber.

Pattern: Standard vee, square edge, channel, bull nose.

Moisture Content: 10% to 12% average, maximum 15%.

Adhesives: 100% exterior waterproof type, meeting ASTM D2559. Laminated decking is cured under pressure using high frequency electronics in a radio frequency (RF) press.

Factory Finish: Use factory applied, oven dried, acrylic semi-transparent colors.

Quality Control: Lumber to be graded under American Softwood Lumber Standard grading provisions. Glueline certification complies with ASTM D205 and AITC 200. Laminating is certified by an independent inspection agency.

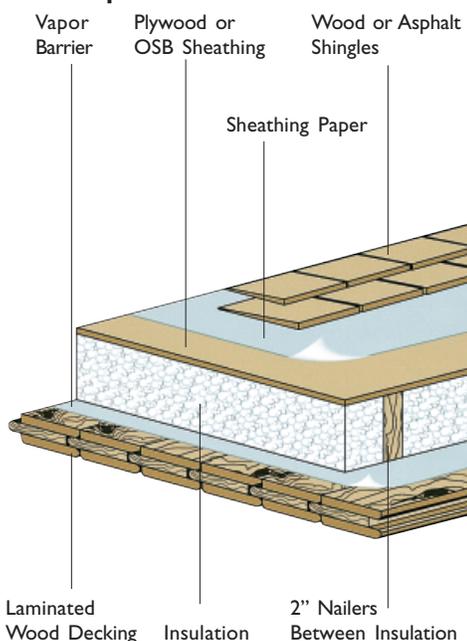
Decking Thermal Resistance -- R¹

Decking Thickness Nominal Inch	Western Red Cedar	Cedar Face Whitewood core & back	White Fir Idaho White & Ponderosa Pine	Douglas fir	Southern Pine
	2	2.67	2.53	2.40	2.07
3	4.00	3.70	3.58	3.08	3.05
4	5.02	4.58	4.47	3.81	3.69
5	6.16	5.59	5.48	4.63	4.63

¹R = Total thermal resistance of the assembly without roofing or air film resistance.

Examples of Typical Roof Assemblies

Roof Slopes Over 4:12



Roof Slopes Under 4:12

