

SPECIFICATION SHEET (C.S.I. FORMAT)

FILLER KING LAMINATED ROOF DECKING

PART 1 – GENERAL

Filler King laminated roof decking provides the elegance of exposed wood while also providing a load supporting deck for snow or other roof loads. Lengths may be specified or random and up to 24 ft. Filler King decking may also be used for resisting light diaphragm forces with nailing alone or may be used to resist heavy diaphragm forces in combination with structural sheathing.

1.1 SUMMARY

- A. Work Includes: furnish and install roof decking with required fasteners in accordance with building code, manufacturer, and engineering (where applicable) requirements.

1.2 SYSTEM DESCRIPTION

- A. Glued-laminated decking:

1. Species (face): Douglas fir – Larch, Ponderosa Pine, Inland Red Cedar, Alaska Yellow Cedar
2. Sizes: nominal (actual): 2x6 (1-7/16 in. x 5 in.); 3x6 (2-3/16 in. x 5-1/4 in.); 4x6 (2-7/8 in. x 5-1/4 in.); and 5x6 (3-21/32 in. x 5-1/4 in.)

2x8 (1-7/16 in. x 6-3/4 in.); 3x8 (2-3/16 in. x 7 in.); 4x8 (2-7/8 in. x 7 in.); and 5x8 (3-21/32 in. x 7 in.)
3. Appearance Grades: Decorative, Rustic, Supreme, or Industrial
4. Lengths: Random or Specified
5. Pattern: Center Matched-End Matched-Edge Vee One Side (CM-EM-EV1S) or other (specify)

6. Face (finish): Sanded or other (specialty)
7. End Joints: End-matched or Square
8. Decking Layup: Simple Span, Two-span Continuous, Controlled Random Layup, Combination Simple and Two-span, or other.
9. Tongue-and-Groove: Single for 2 in., 3 in., and 4 in.; Double for 5 in.

B. Design:

1. Decking species and size shall satisfy applicable building codes in accordance with decking layup selected.
2. Allowable load determined in accordance with timber decking design formulas in the *Timber Construction Manual*, or other accepted engineering practice.
3. Design values (allowable stresses and modulus of elasticity) provided by Filler King Company.
4. Load-Span tables from Manufacturer may be used where applicable and approved by building official.
5. Light diaphragm wind/seismic force resistance may be achieved with prescribed nailing per *National Design Specification for Wood Construction, Special Design Provisions for Wind and Seismic (NDS SDPWS)*.
6. Heavy diaphragm wind/seismic force resistance may be achieved with combined use of wood structural panel sheathing per *NDS SDPWS*.
7. Laminated timber decking may be used in fire resistance as Heavy Timber Decking where approved.

C. Fasteners:

1. Face nailing to support members and course-to-course slant nailing per Manufacturer.
2. Engineered fastening schedule where applicable for structural diaphragm.

D. Structural Sheathing (where applicable)

1. Furnish and install wood panel structural sheathing by other where required as blocked structural diaphragm
 2. Engineered fastening schedule sheathing to decking and framing
- E. Other Roof Components: not included in this specification
1. Structural framing members
 2. Waterproofing and moisture barrier
 3. Insulation
 4. Roof surface
 5. Ceiling and acoustical surface (if applicable)
- F. Board Foot Measure
1. Quantities and pricing of glued laminated decking are in Board-Foot Measure of laminating stock as defined by the Western Wood Products Association.
- G. References
1. *Timber Construction Manual*, American Institute of Timber Construction, 7012 S. Revere Parkway, Suite 140, Englewood, CO, 80112 (under Structural Systems).
 2. *National Design Specification for Wood Construction, Special Design Provisions for Wind and Seismic*, American Forest and Paper Association / American Wood Council, 111 Nineteenth Street, NW, Suite 800, Washington, D.C., 20036 .
 3. *American Wood Council Wood Construction Data 2, Tongue and Groove Roof Decking*, American Forest and Paper Association / American Wood Council, 111 Nineteenth Street, NW, Suite 800, Washington, D.C., 20036.

1.3 SUBMITTALS

- A. Quantity: submit board foot of decking required based on square foot of surface covered, layup, decking lengths, and trim waste.

1.4 QUALITY ASSURANCE

A. Glued Laminated Decking

1. Lamination lumber stock: graded to American Softwood Lumber Standard Grading Provisions.
2. Lumber moisture content: 10 – 12 % average; maximum 15 %.
3. Lamination adhesive: fully exterior phenolic – resorcinol, in compliance with ASTM D2559.
4. Glue line bonding, lumber grading, and manufacturing certified by the Western Wood Products Association, complying with AITC Standard 200 – 2004.
5. Lamination joints: structural finger joints for face and back.

B. Fasteners (by Others)

1.5 DELIVERY STORAGE AND HANDLING

A. Delivery

1. Verify manufacturer, species, size, appearance grade, lengths, pattern, face finish, and end joints

B. Storage

1. Decking units are to be stored on a level area with adequate blocking to avoid warping.
2. Filler King wrapping or other water-resistant wrapping should be used on top and sides where stored in uncovered locations. Water resistant wrap should be `open` at bottom to prevent moisture trapping against decking.
3. Decking must also be separated from ground moisture during storage.

C. Handling

1. Decking units and pieces shall not be dropped or dragged and shall be handled in a way to prevent surface, tongue and groove, and other damage.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Filler King Company, P.O. Box 185, 4318 Pioneer Road, Homedale, ID 83618, (208) 337-3134, www.FillerKing.com.

2.2 MATERIALS

- A. Glued Laminated Decking Species (choose face species):
 - 1. Douglas Fir – Larch
 - 2. Ponderosa Pine
 - 3. Inland Red Cedar
 - 4. Alaska Yellow Cedar
- B. Size (choose nominal size, in. x in.): 2 x 6, 2 x 8, 3 x 6, 3 x 8, 4 x 6, 4 x 8, 5 x 6 or 5 x 8
- C. Appearance Grade (of face, choose):
 - 1. Decorative – most popular with face of sound, tight knots.
 - 2. Rustic – nice knotty face, allowing some small knot holes and small season checks.
 - 3. Supreme – highest grade, where a “clear” face is desired.
 - 4. Industrial – for roof applications where strength is more important the appearance.
- D. Lengths (choose):
 - 1. Specific lengths and quantities, or
 - 2. Random
- E. Standard Pattern: Center Matched-End Matched-Edge Vee One Side (written as CM-EM-EV1S); or other (specify).
- F. Face: Sanded (Standard); or other (specify).

- G. End Joints: End-Matched (Standard) or Square.
- H. Moisture Content: not to exceed 15 % at time of manufacture.
- I. Pre-Factory Finish (if any, specify).

PART 3 – EXECUTION

3.1 SUPPORTING FRAMING

- A. Supporting framing members shall be straight and true and clear of debris and excess moisture.
- B. Framing member spacing shall not exceed value used in load-span tables or as otherwise used to determine decking species, size, and layup.
- C. Layup rules are per American Wood Council Wood Construction Data 2 (AWC WCD 2).

3.2 DECKING

- A. Decking pieces shall be supported by framing members as prescribed by manufacturer per layup choice.
- B. Pieces damaged on site shall not be used.
- C. Adjoining and adjacent decking pieces shall be tight.
- D. Decking shall not be installed when or where moisture content of pieces exceeds 15 %.
- E. Fastener size, type, and locations shall be per Manufacturer for non-engineered construction.
- F. Fasteners for engineered construction shall be specified by Engineer-of-Record.

3.3 OTHER

- A. Installation of roof decking shall be coordinated with other framing and trades.
- B. Fasteners used for other roof materials shall not fully penetrate decking taking into consideration of shrink-swell of decking and other materials.