

SECTION 06152

WOOD ROOF DECKING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Furnishing and installing factory fabricated and finished roof decking.

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry.
- B. Section 07311 - Asphalt Shingles.
- C. Section 07313 - Wood Shingles and Shakes.
- D. Section 07322 - Clay Roofing Tile.
- E. Section 07325 - Ceramic Slate Roofing.
- F. Section _____ - _____.

1.3 REFERENCES

- A. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.
- B. Factory Mutual Research Corporation (FMRC) Standard for Class A (25 Flame Spread) for rated decking.
- C. UL R5268.
- D. _____.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's product and complete installation data for all materials in this specification.
- C. Shop Drawings: Prepared specifically for this project; show profiles, joining method, assembly details, adjacent construction interface, and dimensions.
- D. Installation Guide: Product manufacturer's written installation guide.
- E. Samples: Sized to adequately represent material.

- F. Closeout Submittals: Warranty and Manufacturer's performance certifications.

1.5 QUALITY ASSURANCE

- A. Roof decking manufacturer shall certify that fire retardant roof decking meets performance design criteria according to the following test standards:
 1. ASTM E 84.
 2. FMRC Standard for Class A (25 Flame Spread) for rated decking.
 3. UL R5268.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in the manufacturer's original sealed, labeled packaging.
- B. Store materials in a dry, well-vented area above ground on wooden pallets and covered.
- C. Inspect the materials upon delivery to assure that specified products have been received.
- D. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- E. Remove protective packaging immediately prior to installation.

1.7 PROJECT CONDITIONS

- A. Verify that other trades are complete before installing the roof decking.
- B. Ensure that mounting surfaces are straight and secure and that substrates are of proper material per roofing deck manufacturer.
- C. Refer to the construction documents, shop drawings, and manufacturer's installation instructions.
- D. Coordinate installation with roof membrane manufacturer's installation instructions. Decking installation must be followed immediately with finish roofing.
- E. Observe all appropriate OSHA safety guidelines for this work.

1.8 WARRANTY

- A. Manufacturer's Standard Warranty: Materials shall be free of defects in material and workmanship for one year after shipment.
- B. If, after inspection, the manufacturer agrees that materials are defective, the manufacturer shall, at their option, repair or replace them.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Homasote Company, P.O. Box 7240, West Trenton, NJ 08628-0240; ASD. Tel: (609) 883-3300, Fax: (609) 530-1584, Internet address: <http://www.homasote.com>; For local rep contact: Sweet's Buyline 1-800-892-1165 (#0878).
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600. Proposed substitutions shall meet the performance and quality standards of this specification.
- C. Substitutions: Not permitted.
- D. Provide all wood roof decking from a single manufacturer.

2.2 ROOF DECKING

- A. Structural Roof Decking: Firestall(R) Roof Decking, a composition of Homasote structural board and a face ply of UL Class A NCFR Homasote.
 - 1. Panel Thickness: 1 inch (25.4 mm).
 - 2. Panel Thickness: 1-3/8 inches (34.9 mm).
 - 3. Panel Thickness: 1-7/8 inches (47.6 mm).
 - 4. Panel Thickness: 2-3/8 inches (60.3 mm).
 - 5. Panel Size: Nominal 24 by 96 inches (610 by 2438 mm), actual 23-1/8 by 95-7/8 inches (587 by 2435 mm).
 - 6. Flame Spread: Class I or A.
 - 7. Noise Reduction Coefficient: 20.
 - 8. Thermal R-Value: 2.05 for 1 inch (25.4 mm).
 - 9. Thermal R-Value: 2.5 for 1-3/8 inches (34.9 mm).
 - 10. Thermal R-Value: 3.1 for 1-7/8 inches (47.6 mm).
 - 11. Thermal R-Value: 4.9 for 2-3/8 inches (60.3 mm).
 - 12. Weight: 2.62 psf (12.79 kg/sq. m) for 1 inch (25.4 mm).
 - 13. Weight: 3.48 psf (16.99 kg/sq. m) for 1-3/8 inches (34.9 mm).
 - 14. Weight: 4.63 psf (22.60 kg/sq. m) for 1-7/8 inches (47.6 mm).

15. Weight: 5.78 psf (28.68 kg/sq. m) for 2-3/8 inches (60.3 mm).
16. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 24 inches (610 mm) for 1 inch (25.4 mm).
17. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 32 inches (812 mm) for 1-3/8 inches (34.9 mm).
18. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 48 inches (1,219 mm) for 1-7/8 inches (47.6 mm).
19. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 48 inches (1,219 mm) for 2-3/8 inches (60.3 mm).
20. Maximum Rafter Spacing: _____.

- B. Structural Roof Decking: Easy-ply(R) Roof Decking, a composition of Homasote structural board with a 6 mil pre-finished surface of a decorative white "flitter" vinyl film, Class "C" fire resistance rating per ASTM E 84.
1. Panel Thickness: 1 inch (25.4 mm).
 2. Panel Thickness: 1-3/8 inches (34.9 mm).
 3. Panel Thickness: 1-7/8 inches (47.6 mm).
 4. Panel Thickness: 2-1/16 inches (52.4 mm).
 5. Panel Size: Nominal 24 by 96 inches (610 by 2438 mm), actual 23-1/8 by 95-7/8 inches (587 by 2435 mm).
 6. Fire Resistance Rating: Class C per ASTM E 84; 100 Flame Spread, 230 Smoke Developed.
 7. Thermal R-Value: 2.4 for 1 inch (25.4 mm).
 8. Thermal R-Value: 3.27 for 1-3/8 inches (34.9 mm).
 9. Thermal R-Value: 4.46 for 1-7/8 inches (47.6 mm).
 10. Thermal R-Value: 5.0 for 2-1/16 inches (52.4 mm).
 11. Weight: 2.4 psf (11.72 kg/sq. m) for 1 inch (25.4 mm).
 12. Weight: 3 psf (14.65 kg/sq. m) for 1-3/8 inches (34.9 mm).
 13. Weight: 4 psf (19.53 kg/sq. m) for 1-7/8 inches (47.6 mm).
 14. Weight: 5 psf (24.41 kg/sq. m) for 2-1/16 inches (52.4 mm).
 15. Maximum Rafter Spacing, 40 psf (195 kg/sq. m) Live Loads: 24 inches (610 mm) for 1 inch (25.4 mm).
 16. Maximum Rafter Spacing, 40 psf (195 kg/sq. m) Live Loads: 32 inches (812 mm) for 1-3/8 inches (34.9 mm).
 17. Maximum Rafter Spacing, 40 psf (195 kg/sq. m) Live Loads: 48 inches (1,219 mm) for 1-7/8 inches (47.6 mm).
 18. Maximum Rafter Spacing, 40 psf (195 kg/sq. m) Live Loads: 48 inches (1,219 mm) for 2-1/16 inches (52.4 mm).
 19. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 16 inches (406 mm) for 1 inch (25.4 mm).

20. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 24 inches (610 mm) for 1-3/8 inches (34.9 mm).
21. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 32 inches (812 mm) for 1-7/8 inches (47.6 mm).
22. Maximum Rafter Spacing, 50 psf (244 kg/sq. m) Live Loads: 48 inches (1,219 mm) for 2-1/16 inches (52.4 mm).
23. Maximum Rafter Spacing, A-Frame: 32 inches (812 mm) for 1 inch (25.4 mm).
24. Maximum Rafter Spacing, A-Frame: 48 inches (1,219 mm) for 1-3/8 inches (34.9 mm).
25. Maximum Rafter Spacing, A-Frame: 48 inches (1,219 mm) for 1-7/8 inches (47.6 mm).
26. Maximum Rafter Spacing, A-Frame: 48 inches (1,219 mm) for 2-1/16 inches (52.4 mm).
27. Maximum Rafter Spacing: _____.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that the roof decking installation will not disrupt other trades.
- B. Verify that substrate is dry, clean, and free of foreign matter.
- C. Report and correct defects prior to any installation.

3.2 PREPARATION

- A. Submit design drawings for review and approval before installation.
- B. Check as-built conditions and verify the manufacturer's roof decking details for accuracy to fit the roof configuration.

3.3 INSTALLATION

- A. Comply with roof decking manufacturer's current installation guide.
- B. Install roof decking in dry condition only.

END OF SECTION