

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