

## SECTION 06 1666

### EXTERIOR SHEATHING

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word 2007: Click the OFFICE button, select WORD OPTIONS, select DISPLAY, then select or deselect the HIDDEN TEXT option.

Microsoft Word (earlier versions): From the pull-down menus select TOOLS, then OPTIONS. Under the tab labeled VIEW, select or deselect the HIDDEN TEXT option.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Radiant barrier sheathing for roof sheathing.
  - 2. Reflective insulating sheathing for wall sheathing.
- B. Related Sections:
  - 1. Division 01: Administrative, procedural, and temporary work requirements.
  - 2. Section [06 1000 - Rough Carpentry:] [06 1100 - Framing and Sheathing:] [\_\_ \_\_\_\_ - \_\_\_\_:][Wall] [and] [roof] framing and bracing.
  - 3. Section [06 1733 - Wood I-Joists:] [06 1753 - Shop Fabricated Wood Trusses:] [\_\_ \_\_\_\_ - \_\_\_\_:] Roof framing.
  - 4. Section [07 2600 - Vapor Retarders:] [\_\_ \_\_\_\_ - \_\_\_\_:] Exterior wall vapor retarders.

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  - 2. C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
  - 3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 4. E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
  - 5. E2178 - Standard Test Method for Air Permeance of Building Materials.
  - 6. F593 - Standard Specification for Stainless Steel Bolts, Hex Cap Screws and Studs.
- B. State of California, Department of Consumer Affairs, Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (BEARHFTI) - Licensing Requirements.
- C. Engineered Wood Association (APA) PRP-108 - Performance Standards and Qualification Policy for Structural-Use Panels.
- D. National Institute of Standards and Technology (NIST) PS2 - Performance Standards for Wood-Based Structural Use Panels.
- E. Forest Stewardship Council (FSC) STD-40-004 - Chain of Custody Standard.
- F. Reflective Insulation Manufacturer's Association International (RIMA-I):
  - 1. Radiant Barrier Requirements.
  - 2. Reflective Insulation Requirements.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Product Data: Manufacturer's descriptive data and performance characteristics for panels.
  - 2. Samples: 12 x 12 inch panel samples.
  
- B. Sustainable Design Submittals:
  - 1. Regional Materials: Statement that Products have been extracted, processed, or harvested and manufactured within 500 mile radius of Project site.
  - 2. Certified Wood: Copy of FSC certification.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum [2] [ ] years [documented] experience in work of this Section.
- B. Manufacturer: Licensed as Thermal Insulation Manufacturer by BEARHFTI.

#### 1.5 DELIVERY, STORAGE AND HANDLING

- A. Prevent exposure to moisture and construction dust.
- B. Store panels minimum 5 inches above ground on framework or blocking.
- C. Cover with protective waterproof covering providing for adequate air circulation.
- D. Protect edges and corners from damage.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Do not apply panels during precipitation.

#### 1.7 WARRANTIES

- A. Furnish manufacturer's 25 year limited warranty providing against delamination and loss of reflectance properties.

### **PART 2 PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Contract Documents are based on products by RoyOMartin. ([www.royomartin.com](http://www.royomartin.com))
- B. Substitutions: [Under provisions of Division 01.] [Not permitted.]

#### 2.2 MATERIALS

- A. Radiant Barrier Sheathing:
  - 1. Product: Eclipse.
  - 2. Description: Oriented strand board conforming to APA PRP-108 and NIST PS2, with foil facing laminated to one side.
  - 3. Size: [[3/8] [7/16] [15/32] [19/32] [23/32] inches thick x 96 inches long.] [[3/8] [7/16] [15/32] [19/32] inches thick x 108 inches long.] [[19/32] [23/32] inches x 96 inches long.]
  - 4. Surface emittance: Maximum 0.10, tested to ASTM 1371.
  - 5. Verified by RIMA-I as Radiant Barrier.
  - 6. Certified to FSC STD-04-004.

\*\*\*\* OR \*\*\*\*

- B. Reflective Insulating Sheathing:
  - 1. Product: Eclipse Energy Guard.

2. Description: Oriented strand board conforming to APA PRP-108 and NIST PS2, with breathable facing laminated to one side.
3. Size: [[3/8] [7/16] [15/32] [19/32] [23/32] inches thick x 96 inches long.] [[3/8] [7/16] [15/32] [19/32] inches thick x 108 inches long.] [[19/32] [23/32] inches x [96] [97-1/8 to 97-7/16] [109-1/8 to 109-7/16] inches long.]
4. Performance characteristics:
  - a. Water vapor transmission: Maximum 1 perm, tested to ASTM E96/E96M.
  - b. Air permeance: Maximum 0.0136 L per second per square meter at 75 Pa, tested to ASTM E2178.
  - c. Fire hazard classification: Class B flame spread/smoke developed, tested to ASTM E84.
  - d. Surface emittance: Maximum 0.10, tested to ASTM 1371.
5. Verified by RIMA-I as Reflective Insulation.
6. Certified to FSC STD-04-004.

## 2.3 ACCESSORIES

- A. Fasteners:
  1. [Nails,] [Screws,] type and size as required by conditions of use.
  2. [Hot-dip galvanized steel, ASTM A153/A153M, [G90] [ ] coating class.] [Stainless steel, ASTM F593, Type 304 or 316.]
- B. Seam Tape: Eclipse Energy Guard Adhesive Tape by RoyOMartin.

## PART 3 EXECUTION

### 3.1 INSTALLATION OF WALL SHEATHING

- A. Place panels parallel to framing members, with ends over firm bearing.
- B. Stagger end joints in adjacent rows by one-half panel width.
- C. Leave 1/8 inch expansion space at panel ends and edges.
- D. Secure to supports at maximum [6] [ ] inches on center along edges and maximum [12] [ ] inches on center in field of panels.
- E. Where closer fastener spacing is indicated, fasten to spacings stated above, allow panels to acclimatize for minimum 24 hours, then place additional fasteners.
- F. Inspect facings for damage just prior to covering panels.
  1. Clean damaged areas and cover with seam tape.
  2. Press to firm contact with facing.

### 3.2 INSTALLATION OF ROOF SHEATHING

- A. Place panels perpendicular to framing members with ends staggered and sheet ends over firm bearing.
- B. Leave 1/8 inch expansion space at panel ends and edges.
- C. Secure to supports at maximum [6] [ ] inches on center along edges and maximum [12] [ ] inches on center in field of panels.
- D. Where closer fastener spacing is indicated, fasten to spacings stated above, allow panels to acclimatize for minimum 24 hours, then place additional fasteners.
- E. Apply seam tape centered over panel-to-panel joints. Press to firm contact with facing.
- F. Inspect facings for damage just prior to covering panels.

1. Clean damaged areas and cover with seam tape.
2. Press to firm contact with facing.

### 3.3 TOLERANCES

- A. Maximum Offset in Adjacent Panels at Joint: Plus or minus 1/4 inch.

END OF SECTION