

SECTION 06165

FIBERBOARD UNDERLAYMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Underlayment for finish flooring over concrete slabs.
 - 1. Floating method.
 - 2. Adhesive method.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 09310 - Ceramic Tile.
- C. Section 09647 - Wood Parquet Flooring.
- D. Section 09648 - Wood Strip Flooring.
- E. Section 09650 - Resilient Flooring.
- F. Section 09680 - Carpet.
- G. _____.

1.3 REFERENCES

- A. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.
- B. _____.

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. Installation Guide: Product manufacturer's written installation guide.
- D. Closeout Submittals: Warranty and Manufacturer's performance certifications.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in the manufacturer's original sealed, labeled packaging.

- B. Store materials inside when possible, stored flat at all times before installation. For exterior storage, place in a dry, well-vented area above ground on wooden pallets and covered with waterproof tarpaulins.
- 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 not less than 24 hours before installation to allow material to acclimate.

1.6 PROJECT CONDITIONS

- A. Maintain temperature and humidity conditions before, during, and after application closely approximating those which will exist when building is occupied.
- B. Concrete slab must be dry before application. Do not apply where moisture is present.

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 fiberboard underlayment from a single manufacturer.

2.2 MATERIALS

- A. Fiberboard Underlayment: ComfortBase(tm) high-density fiberboard made from 100 percent recycled newsprint with 1/4 inch (6 mm) deep by 4 inch by 4 inch (100 by 100 mm) grid on one side only.
 - 1. Thickness: 1/2 inch (13 mm).
 - 2. Density: 26-28 pcf (416-448 kg/cubic m).

3. Tensile Strength parallel to surface: 450-700 psi (3,100-4,830 kPa) minimum.
4. Transverse M.O.R.: 750-1,000 psi (5,175-6,900 kPa) minimum.
5. Hardness (Janka Ball): 230 lbs. (104 kg).
6. Water Absorption by Volume:
 - a. 2 hour immersion: 5 percent maximum.
 - b. 24 hour immersion: 15 percent maximum.
7. Expansion, 50 to 90 percent relative humidity: 0.25 percent.
8. Noise Reduction Coefficient: 0.20.
9. R-value: 1.2 (0.021).
10. Flame Spread: Class III (or C).

2.3 ACCESSORIES

- A. Adhesive: APA approved subfloor adhesive meeting APA AFG-01 specification.
- B. Wood Nailers: 1/2 inch (13 mm) thick by 1-1/2 inches (38 mm) wide.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates upon which work will be installed.
- B. Verify environmental conditions are, and will continue to be, maintained in accordance with manufacturer's recommendations.
- C. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates or conditions.
- D. Starting work by installer is acceptance of substrate and environmental conditions.

3.2 PREPARATION

- A. Follow manufacturer's instructions by separating and allowing underlayment boards to be exposed to environmental temperature and humidity conditions for not less than 24 hours before start of installation.

3.3 INSTALLATION

- A. Follow manufacturer's recommendations for temperature and humidity conditions before, during, and after installation. (Bowing of panels away from grid side is normal before application.)

- B. Allow 3/16 inch (4.7 mm) space at panel joints, 3/8 inch (9.5 mm) space at walls and partitions, to allow for expansion and contraction.
- C. Provide 1/2 inch (13 mm) expansion joints at 50 feet (15.240 m) in each direction.
- D. Stagger all panel joints regardless of panel size.
- E. Underlayment Application for Carpet and Pad (Floating Method):
 - 1. Nail or glue wood nailers to concrete where tackless strips are to be used.
 - 2. Lay panels in position, grid side down.
 - 3. Allow 48 hours before installation of pad and carpet.
- F. Underlayment Application for Carpet and Pad (Adhesive Method):
 - 1. Nail or glue wood nailers to concrete where tackless strips are to be used.
 - 2. Apply continuous 3/8 inch (9.5 mm) beads of adhesive on grid surface of underlayment panels:
 - a. Each direction at 1/3 points .
 - b. 3/4 inch (19 mm) from each edge.
 - 3. Place adhesive side down to concrete and apply pressure over entire surface.
 - 4. Maintain installed panels traffic-free for 24-48 hours before installation of pad and carpet.
- G. Underlayment Application for Adhered Carpet, Vinyl, Wood Parquet, Wood Strip, and Ceramic Tile Flooring (Adhesive Method):
 - 1. Apply continuous 3/8 inch (9.5 mm) beads of adhesive on grid surface of underlayment panels:
 - a. Each direction at 1/3 points .
 - b. 3/4 inch (19 mm) from each edge.
 - 2. Place adhesive side down to concrete and apply pressure over entire surface.
 - 3. Maintain installed panels traffic-free for 24-48 hours before installation of plywood.
 - 4. Install 4 foot by 4 foot (1.219 by 1.219 m) maximum sheets of 3/8 inch (9.5 mm) minimum thickness plywood of suitable underlayment grade over installed panels.
 - a. Trowel adhesive over underlayment panels in 100 percent coverage fashion.
 - b. Apply plywood so that plywood joints do not coincide with underlayment joints.
 - c. Nail each corner and center of plywood using concrete nails to penetrate concrete 1 inch (25 mm) minimum.
 - d. Use additional nails as necessary to hold plywood flat.

5. Maintain installed plywood traffic-free for 24-48 hours before installation of finish flooring.

3.4 ADJUSTING AND CLEANING

- A. Follow manufacturer's instructions for repairing damaged panels.
- B. Replace panels that cannot be repaired to "as new" condition.

END OF SECTION