

# Installation Instructions

## I Interior Applications

### Description

440 PINnacle™ and PINnacle N.C.F.R.® are Homasote’s velvet textured museum-grade interior panels that have the pin retention and durability of Homasote® with a new elegance that does not require additional finishing or edge treatments. These versatile panels are popular with schools, hospitals, museums, the display industry, and architectural designers.

### Sizes (Nominal):

	440 PINnacle	PINnacle N.C.F.R. Class A
<b>Thickness</b>	1/2" 13mm	1/2" 13mm
<b>Sizes</b>	4' x 8' 2440mm x 1220mm	4' x 8' 2440mm x 1220mm
<b>Weight</b>	31 lbs. 14 kg/panel	35 lbs. 16 kg/panel
<b>Edge Treatment</b>	square	square

Other sizes and thicknesses are available upon request

*3/8" thick special-size panels available to order.*

### Packaging, Storage & Protection

Panels should be kept in original packages, stored in a flat, dry place indoors or on a raised platform and protected from weather damage and soiling at all times.

### General Requirements

Temperature and humidity conditions closely approximating those which will exist when building is occupied must be maintained before, during, and after the application of all PINnacle panels.

**Installation must not be made when building is excessively cold, hot, and/or damp.**

PINnacle panels must be removed from protective packaging not less than 24 hours prior to application and exposed to environmental temperature and humidity conditions.

During installation, a 1/8" expansion gap must be allowed between adjoining panels. Allow 1/4" gaps at floor, ceiling, and around window and doorframes, etc. Panel edges must be supported at all times.

#### A) INSTALLATION TO TIMBER OR STUD FRAMING

1. Vertical wood framing not to exceed 16" o.c.
2. Apply a 3/8" bead of adhesive to framing in accordance with the adhesive manufacturer's recommendations. A double bead of adhesive is necessary on framing where adjoining panels fall. Ensure all panel edges fall on framing.
3. Apply PINnacle panels to adhesive and framing, applying hand pressure where adhesive is located to insure positive contact; screw or nail panels at maximum 24" centers along edges and 24" centers along all intermediate framing. Screws or nails should be of sufficient length to penetrate 3/4" into framing. Position screws or nails 3/8" from edge of panels. Finishing screws may be used and left exposed.

**NOTE:** If adhesive is omitted, screw or nail PINnacle panels at maximum 6" centers along all edges and 12" centers along intermediate framing.

# PINnacle™ 440 SPECIFICATIONS

## PART 1 GENERAL

### 1.1 Section Includes

- A. Sound deadening acoustical tackable systems.

### 1.2 References

- A. ASTM E 84– test method for surface burning characteristics of building materials.
- B. ASTM D 1037–test methods of evaluating properties of wood-base fiber and particle panel materials

### 1.3 Submittals

- A. Submit under provisions of section 01300.
- B. Product data: manufacturer's catalog data, detail sheets, and specifications.
- C. Quality assurance/control submittals:
  - 1. Manufacturer's installation instructions.

### 1.4 Quality Assurance

- A. Manufacturer's qualifications:
  - 1. Minimum 10 years experience in producing sound-deadening boards of the type specified herein.

### 1.5 Delivery, Storage, and Handling

- A. Deliver materials in manufacturer's original packages.
- B. Inspect the materials upon delivery to assure that specified products have been received.
- C. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- D. Store materials in a dry place, indoors, or on raised platform protected from weather damage.

## PART 2 PRODUCTS

### 2.1 Manufacturers

- A. Acceptable manufacturer: Homasote Company, 932 Lower Ferry Road, West Trenton, N.J. 08628. Telephone: 800-257-9491 or 609-883-3300, Sales Department, Ext. 1500, Technical Support, Ext. 1332, Fax 609-883-3497. Web site: www.homasote.com. For a local Homasote Company sales rep call the Sales Department, Ext. 1500.
- B. Requests for substitutions will be considered in accordance with provisions of section 01600.
- C. Substitutions: not permitted.
- D. Provide all sound-deadening boards from a single manufacturer.

### 2.2 Materials

- A. Sound-deadening boards: Homasote PINnacle™ 440; physical properties as follows:
  - 1. Thickness: 1/2 inch (13mm).
  - 2. Density: 26-28 pcf (416-448 kg/cubic m).
  - 3. Tensile strength: 450-700 psi (3,100-4,830 kPa).
  - 4. Hardness (Janka Ball): 230 lbs. (104 kg).
  - 5. Water absorption by volume; ASTM D 1037:
    - a. 2 hour immersion: 5 percent maximum.
    - b. 24 hour immersion: 15 percent maximum.
  - 6. Expansion, 50 to 90 percent relative humidity: 0.25 percent.
  - 7. R-value: 1/2 inch 1.2 (0.021), 5/8 inch 1.33, 3/4 inch 1.4.
  - 8. Flame spread: Class III (or C).
  - 9. Noise reduction coefficient: 0.20.

### 2.3 Accessories

- A. Adhesive: APA AFG-01 approved.
- B. Angular thread nails: length as required to penetrate a minimum of 3/4 inch (19mm) into wall studs.
- C. Screws:
  - 1. Coarse thread drywall type wood screw, length as required to penetrate 3/4 inch (19 mm) into wall studs.

## PART 3 EXECUTION

### 3.1 Examination

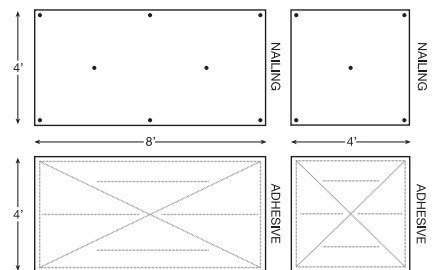
- A. Examine substrates upon which work will be installed.
- B. Verify framing member spacing complies with manufacturer's requirements depending on substrates and installation methods.
- C. Verify environmental conditions are, and will continue to be, maintained in accordance with manufacturer's recommendations.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

### 3.2 Preparation

- A. Follow manufacturer's instructions by separating and allowing PINnacle to be exposed to environmental temperature and humidity conditions for not less than 24 hours before start of installation.
- B. PINnacle panels must be installed in a clean, dry condition. DO NOT INSTALL WET PANELS. It is essential to make every effort to prevent water from ponding on installed panels. PINnacle panels must be thoroughly dry prior to closing in the structure.

### 3.3 Installation

- A. Follow manufacturer's instructions for cutting and installation of PINnacle.
- B. Over prefinished walls.
  - 1. Apply 4 by 8 foot (1.219 x 2.438m) panels on the wall.
  - 2. Using approved APA subfloor adhesive meeting APA-AFG-01 specifications, apply a 3/8 inch bead of adhesive. Holding back 3/4 inch from panel edges and in an "X" pattern within the field as shown in the "nailing and adhesive pattern."



- 3. Allow 3/16 inch (4.7mm) space at panel joints, and 3/8 inch (9.5mm) space along walls and partitions.
- 4. Use proper length ring shank nails or screws to penetrate wall stud 3/4 inch minimum (19mm). Follow nailing pattern in diagram.
- 5. If omitting adhesive, panels must be nailed or screwed 6 inch o.c. along panel edges and 10 inch o.c. throughout the field of the board.
- 6. Hold back nails or screws 3/8 inch (9.5mm) from panel edges.

### 3.4 Adjusting and Cleaning

- A. Replace panels that cannot be repaired.
- B. Light sanding by using 280-320 grit paper.

# PINnacle™ N.C.F.R.® SPECIFICATIONS

## PART 1 GENERAL

### 1.1 Section Includes

- A. Class "A" tackable systems.

### 1.2 References

- A. ASTM E 84—test method for surface burning characteristics of building materials.
- B. ASTM D 1037—test methods of evaluating properties of wood-base fiber and particle panel materials

### 1.3 Submittals

- A. Submit under provisions of section 01300.
- B. Product data: manufacturer's catalog data, detail sheets, and specifications.
- C. Quality assurance/control submittals:
  - 1. Manufacturer's installation instructions.

### 1.4 Quality Assurance

- A. Manufacturer's qualifications:
  - 1. Minimum 10 years experience in producing sound-deadening boards of the type specified herein.

### 1.5 Delivery, Storage, and Handling

- A. Deliver materials in manufacturer's original packages.
- B. Inspect the materials upon delivery to assure that specified products have been received.
- C. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- D. Store materials in a dry place, indoors, or on raised platform protected from weather damage.

## PART 2 PRODUCTS

### 2.1 Manufacturers

- A. Acceptable manufacturer: Homasote Company, 932 Lower Ferry Road, West Trenton, N.J. 08628. Telephone: 800-257-9491 or 609-883-3300. Sales Department, Ext. 1500, Technical Support, Ext. 1332, Fax 609-883-3497. Web site: www.homasote.com. For a local Homasote Company sales rep call the Sales Department, Ext. 1500.
- B. Requests for substitutions will be considered in accordance with provisions of section 01600.
- C. Substitutions: not permitted.
- D. Provide all sound-deadening boards from a single manufacturer.

## 2.2 Materials

- A. Sound-deadening boards: Homasote PINnacle™; physical properties as follows:
  - 1. Thickness: 1/2 inch (13mm).
  - 2. Density: 34-40 pcf (545-641 kg/cubic m).
  - 3. Tensile strength: 400-700 psi (2,758-4,826 kPa).
  - 4. Hardness (Janka Ball): 275 lbs. (125 kg).
  - 5. Water absorption by volume; ASTM D 1037:
    - a. 2 hour immersion: 5 percent maximum.
    - b. 24 hour immersion: 14 percent maximum.
  - 6. Expansion, 50 to 90 percent relative humidity: 0.30 percent.
  - 7. R-value: 1/2 inch .85.
  - 8. Flame spread: Class III (or A).
  - 9. Noise reduction coefficient: 0.20.

## 2.3 Accessories

- A. Adhesive: APA AFG-01 approved.
- B. Angular thread nails: length as required to penetrate a minimum of 3/4 inch (19mm) into wall studs.
- C. Screws:
  - 1. Coarse thread drywall type wood screw, length as required to penetrate 3/4 inch (19 mm) into wall studs.

## PART 3 EXECUTION

### 3.1 Examination

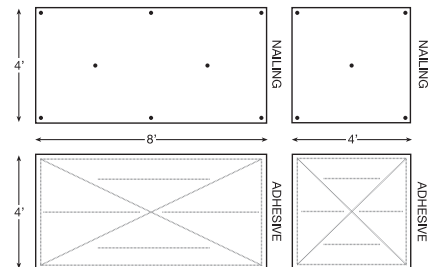
- A. Examine substrates upon which work will be installed.
- B. Verify framing member spacing complies with manufacturer's requirements depending on substrates and installation methods.
- C. Verify environmental conditions are, and will continue to be, maintained in accordance with manufacturer's recommendations.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

## 3.2 Preparation

- A. Follow manufacturer's instructions by separating and allowing PINnacle to be exposed to environmental temperature and humidity conditions for not less than 24 hours before start of installation.
- B. PINnacle panels must be installed in a clean, dry condition. DO NOT INSTALL WET PANELS. It is essential to make every effort to prevent water from ponding on installed panels. PINnacle panels must be thoroughly dry prior to closing in the structure.

## 3.3 Installation

- A. Follow manufacturer's instructions for cutting and installation of PINnacle.
- B. Over prefinished walls.
  - 1. Apply 4 by 8 foot (1.219 x 2.438m) panels on approved wall.
  - 2. Using approved APA subfloor adhesive meeting APA-AFG-01 specifications, apply a 3/8 inch bead of adhesive. Holding back 3/4 inch from panel edges and in an "X" pattern within the field as shown in the "nailing and adhesive pattern."



- 3. Allow 3/16 inch (4.7mm) space at panel joints, and 3/8 inch (9.5mm) space along walls and partitions.
- 4. Use proper length ring shank nails or screws to penetrate wall stud 3/4 inch minimum (19mm). Follow nailing pattern in diagram.
- 5. If omitting adhesive, panels must be nailed or screwed 6 inch o.c. along panel edges and 10 inch o.c. throughout the field of the board.
- 6. Hold back nails or screws 3/8 inch (9.5mm) from panel edges.

## 3.4 Adjusting and Cleaning

- A. Replace panels that cannot be repaired.
- B. Light sanding by using 280-320 grit paper.



## B) INSTALLATION TO SMOOTH BACKGROUNDS

1. Framing not to exceed 18" centers.
2. Apply adhesive to back of the panels in 9mm beads at 16" centers, applying adhesive at least 3/4" from edge. Advice from adhesive manufacturers should be sought prior to installation of PINnacle panels.
3. Panels must be aligned such that panel edges fall on framing behind smooth background. Panels must be fastened to framing behind smooth background or fixed with screws and suitable plugs.
4. Apply PINnacle panels to smooth background, applying hand pressure where adhesive is located to insure positive contact; screw at 12" centers along edges and 24" centers along all intermediate framing. Screws or nails should be of sufficient length to penetrate 3/4" into framing behind smooth background. Position screws or nails 3/8" from edge of panels. Finishing screws may be used and left exposed.

**NOTE:** If adhesive is omitted, screw or nail panels 6" o.c. along all edges and 12" o.c. along intermediate framing.

To make sure you have the most current installation instructions visit <http://www.Homasote.com/installation> to see if newer instructions are online. If online is newer, print out and use the Internet version. These instructions were printed August 10, 2005.

# homasote

COMPANY

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## Finishing PINnacle Panels

PINnacle panels may be finished with conventional paints and stains. PINnacle panels may also be finished with dye or a wood stain. Consult paint, dye, or wood stain manufacturer for applications to wood fiberboard. PINnacle N.C.F.R. must be finished with a paint, dye, or wood stain that will not affect the fire rating.

**NOTE:** It is recommended that a small quantity of paint, dye, or wood stain be applied to a sample of PINnacle to assure satisfaction of color and texture prior to finishing larger panels.

## Cutting PINnacle Panels

Cuts can be made easily by either hand or power sawing. Always use a fine tooth saw whether hand or power. When cutting the panels, always cut from finished side. Small cuts (electric boxes, outlets, etc.) can be made readily with several passes of a sharp utility knife.

## Panel Maintenance

To prevent overall soiling, regular vacuuming or light brushing to remove dust and grime is recommended. Lightly sanding the PINnacle panels with fine sandpaper can be used to remove finger marks from the surface and for general cleaning.