



Sensible. Sound.  
Solutions.



**440 SOUND BARRIER**  
and N.C.F.R. Homasote®



**Table of Contents**

APPLICATION	PAGE
Packaging / Storage / Application As A Flooring Underlayment	1
A) Installation of Carpet & Pad over Homasote – Method 1 (Wood Sub-floor)	2
Recommended Glue-Nail/Screw Pattern Over Wood Sub-floor	2
B) Installation of Carpet & Pad over Homasote – Method 2 (Wood Sub-floor)	2
C) Installation of Vinyl / Linoleum / Wood Parquet / Glue-Down Carpet over Homasote (Wood Sub-floor)	2
D) Installation of Tile Flooring over Homasote – Tile Not Directly Adhered (Wood Sub-floor)	3
E) Installation of Tile Flooring over Homasote – Tile Not Directly Adhered (Wood Sub-floor)	3
F) Installation of Tile Flooring over Homasote – Tile Directly Adhered to Homasote (Wood Sub-floor)	3
G) Installation of Floating Finished Floors over Homasote (Wood Sub-floor)	3
H) Installation of Hardwood Flooring Applications over Homasote (Wood Sub-floor)	3
I) Installation Hardwood Flooring Applications over Homasote (Concrete Sub-floor)	4
J) Installation of Carpet & Pad over Homasote (Concrete Sub-floor)	4
K) Installation of Laminate or Floating Floor over Homasote (Concrete Sub-Floor)	4

**Packaging, Storage and Protection**

*All Homasote products having a maximum 4' width are packaged in plastic covered units. However, when stored outside, all materials should be stored above grade on wooden pallets and covered by waterproof tarpaulins. Packaging material is not intended for exterior job site protection.*

**Interior Applications**

**General Requirements:** Temperature and humidity conditions closely approximating those which will exist when building is occupied shall be maintained before, during, and after the application of panels. **Installation shall not be made when building is excessively dry, cold, hot or damp.** All panels shall be removed from plastic covered units and separated not less than 24 hours prior to installation to allow material to acclimate.

**Applications as a Floor Underlayment**

During installation, leave a 3/16" space between each panel. All panels must be spaced 3/8" from all walls and partitions at all times. This will allow for the natural expansion and contraction of the Homasote® panels. On runs over 50', provide 1/2" expansion joint. All panel joints must be staggered regardless of panel size. When installing, hold annular threaded nails or screws back a minimum of 3/4" from all panel edges.

## Over Wood Sub-Floor

Wood sub-floor must be flat (not cupped), dry lumber, level and securely fastened to joists. Shim or sand sub-floor as necessary to provide flat surface continuity for Homasote panels.

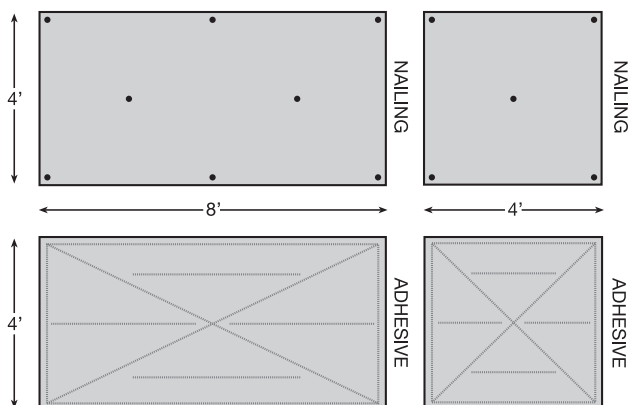
**Note: Performance Specifications AFG-01 (developed by APA – The Engineered Wood Association) requires that glues applied at the job site be sunlight resistant, strong under many moisture and temperature conditions, and able to fill gaps.**

### A. Homasote installations for use with Carpet and Pad – Method 1

**Homasote AND Tack strip installed directly to wood sub-floor.**

- 1) 1/2" thick by 1-1/2" wide wood nailers shall first be nailed and/or glued to wood sub-floor at all locations where tackless strips are to be used.  
**Note:** 1/2" tack-strip shims are available and may replace wood nailers around perimeter of room for attachment of carpet and pad. Contact your local flooring dealer for more details.
- 2) Apply a 3/8" bead of APA-approved sub-floor adhesive meeting APA AFG-01 specification to Homasote panel, holding back 3/4" from panel edge, as shown in the "Glue-Nail/Screw Pattern Over Wood Sub-floor" below.
- 3) Turn Homasote panel over and place adhesive side down to wood sub-floor.
- 4) Follow immediately with nailing or screwing of Homasote panel to wood sub-floor; from the center out, using annular threaded nails or screws of sufficient length to penetrate a minimum of 1/2" into wood sub-floor. Nail or screw as shown in the "Glue-Nail/Screw Pattern Over Wood Sub-floor" below. Nail or screw Homasote panel additionally in any areas that are not lying down flat into adhesive.  
**Note:** If adhesive is omitted, panels must be nailed or screwed 6" o.c. along panel edges and 10" o.c. throughout the field of the board.
- 5) Follow with next panel, leaving 3/16" expansion space between panels and 3/8" off walls and partitions at all times. Allow time for the adhesive to set, consult adhesive manufacturer's instructions for setting times as the setting times may vary.
- 6) Nail tackless strips to the top of wood nailers, followed by the installation of carpet and pad.

#### "Glue-Nail/Screw Pattern Over Wood Sub-floor"

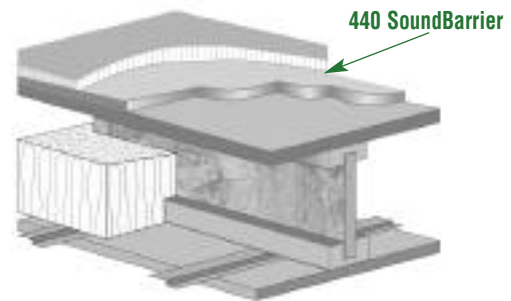


### B. Homasote installations for use with Carpet and Pad – Method 2

**Homasote installed to wood sub-floor.  
Tack strip applied directly to Homasote.**

- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad –Method 1."
- 2) Install tack strips directly to Homasote panel using annular threaded nails or screws sufficient in length to penetrate through the Homasote and 1/2" into wood sub-floor.
- 3) Install carpet as per carpet manufacturer's installation instructions.

Note: Contact your local flooring retailer for more information on "tack-strip nail extensions" for application of tack strips.



### C. Homasote installations for use with glue-down applications such as: Vinyl, Linoleum, Glue-down Wood Strip Flooring, Wood Parquet, and Glue-down Carpet

**Homasote installed to wood sub-floor**

- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad – Method 1."
- 2) Apply 1/4" or greater thickness APA-approved plywood of suitable underlayment grade over Homasote panel, staggering the joints.
- 3) Attach the 1/4" plywood over Homasote panel, assuring that plywood joints do not coincide with the Homasote joints. Follow the plywood manufacturer's recommended method and pattern of attachment, making sure that mechanical fasteners are of sufficient length to penetrate through Homasote panel and into wood sub-floor a minimum of 1/2".
- 4) Install finish floor covering in strict accordance with manufacturer's instructions.

#### Alternative application without 1/4" underlayment

Apply joint filler such as Sikaflex® 1C SL, Sonneborn® NP1 or Dash Patch® to fill gaps in the Homasote Panels. For further information see: "Suggested Joint Fillers" on the "Installation Instructions" page.

#### IF USING DASH PATCH®:

Apply dash patch a little over the height of the joint; allow material to set following manufacturer's installation instructions and then sand joints down flush with 440 Sound Board. The Homasote is now ready to accept finished flooring.

#### IF USING A ONE PART POLYURETHANE CAULK:

Pour or inject one part polyurethane caulk into the gaps between Homasote 440 Sound Board; then tool the caulk or run your finger along it to create a concave shape that is recessed from the top of the joint by 1/16" from the top of the joint. This will allow the caulk room to move flush with the surface of the 440 Sound Barrier as the board expands without creating a ridge under the finish floor. Allow time for the caulk to cure, consult caulk manufacturer's instructions for curing times as the setting times may vary. After curing, the Homasote is now ready to accept finished flooring.

### D. Homasote installations for use with Tile Flooring

#### *Tile application with acoustical anti-fracture membranes*

- 1) Follow 2, 3, 4 and 5 of section A, "Homasote installations for use with carpet and pad-Method 1", but screw and glue with one screw per square foot. Do not nail. Use 4'x4' panels only. Allow 24 hours for sub-floor adhesive to set before installing acoustical anti-fracture membrane.
- 2) Install acoustical anti-fracture membrane according to manufacturer's installation instructions.
- 3) Install thin-set, tile and grout according to manufacturer's installation instructions.

### E. Homasote installations for use with Tile Flooring

#### *Homasote installed to wood sub-floor.*

#### *Tile NOT directly adhered to the Homasote panels.*

- 1) Follow 2,3,4,5 of "A. Homasote installations for use with Carpet and Pad – Method 1," but **screw and glue** with one screw per square foot. **Do not nail.** Use 4' x 4' panels only. Allow 24 hours for sub-floor adhesive to set.
- 2) After a minimum of 24 hours, install cementitious backer board (or plywood or approved substrate) over Homasote panels. Install cement board in strict accordance with manufacturer's installation instructions. If plywood is used as underlayment, refer to "C. Homasote installations for use with glue-down applications" for applying plywood over Homasote panels.
- 3) Cementitious board must be installed following manufacturer's recommended method and pattern of attachment. Fasteners must be of sufficient length to penetrate through Homasote panels and into wood sub-floor a minimum of 1/2".
- 4) Install tile flooring in strict accordance of tile manufacturer's installation instructions.

SPECIAL NOTE: Use 4'x4' panels only, screwed and glued to the wood sub-floor, with minimum 3/16" expansion joint on all sides.

### F. Homasote installations for use with Tile Flooring

***Homasote installed to wood sub-floor, with tile adhered directly to 440 SoundBarrier – TCA Report # TCA-053-02 (A). Obtain the above-mentioned report from TCA or contact Homasote for a copy.***

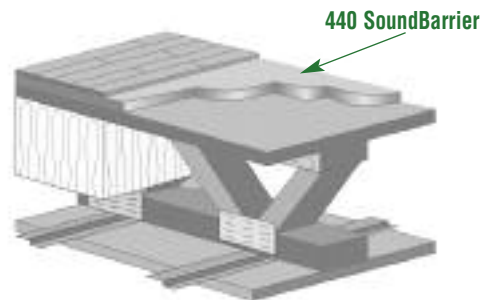
- 1) Follow 2, 3, 4, and 5 of section A, "Homasote installations for use with carpet and Pad-Method 1," but **screw and glue** with one screw per square foot. Do not nail. Use 4'x4' panels only. Allow 24 hours for sub-floor adhesive to set.

- 2) Use the Mapei® Granirapid System –Rapid Setting Flexible Latex Mortar System. Mix the system components according to the Mapei specifications.
- 3) Apply mixed Mapei mortar (as directed in #2 above) to the Homasote in accordance with Mapei instructions for installation onto plywood sub-floors and underlayments.
- 4) Use Bostik Hydroment® joint filler (sanded) with Multipurpose Acrylic (Mortar Admixture and Grout Additive) for grout. Tile and grout must be installed as per manufacturer's installation instructions.

### G. Homasote installations for use with Finished Floating Floors such as: Wood Floating Floor and Laminate Flooring

#### *Homasote installed to wood sub-floor.*

- 1) Follow 2,3,4,5 of "A. Homasote Installations for use with Carpet and Pad – Method 1."
- 2) Install finished floating floor as per manufacturer's instructions.



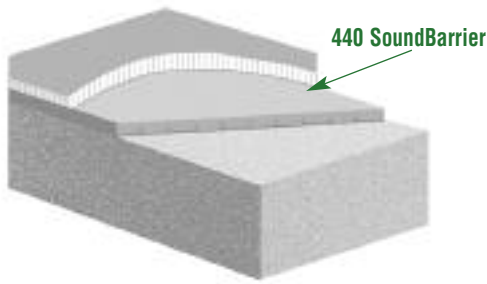
### H. Homasote installations for use with Hardwood Flooring

#### *Homasote installed to wood sub-floor.*

- 1) Cut panels into 4' x 4's. Use an appropriate construction mastic to glue panels, leaving 3/16" gaps between adjoining panels and 3/8" from walls and partitions. Apply the mastic using a 1/8" x 1/8" notched trowel (35 square feet per gallon). Screw the panel to the floor by placing one screw at the center of the panel and one at each corner.
- 2) Install hardwood flooring as per manufacturer's installation instructions. Attach hardwood flooring using 2" staples or cleats, sufficient in length to toenail through Homasote panels and penetrate sub-floor a minimum of 1/2". Follow the wood floor manufacturer's recommendations for nailing pattern.
- 3) Rosin paper or a minimum 15-pound felt paper should be placed over the Homasote panels when recommended by a hardwood flooring manufacturer.

### Over Concrete Sub-Floor

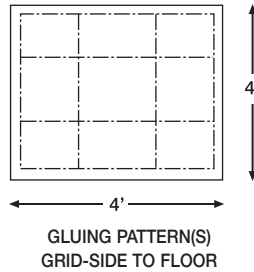
Prior to installation of any flooring component, a concrete sub-floor must be dry, clean, free of mildew and, unless suspended, integrally waterproofed, i.e. sealed. **ComfortBase™ is required for use on below grade application and new concrete. Using maximum 4' x 4' panels,** install Homasote panels following appropriate category in "Over Wood Sub-Floor," (top of page 2) based on finished flooring to be used, substituting concrete nails or fasteners in place of annular threaded (ring shank) nails.



## I. Homasote installations over Concrete Slab for use with Finished Hardwood Flooring — on or above grade

### Plywood/Homasote to concrete:

- 1) Concrete floor to be completely free of dust and debris.
- 2) Use an appropriate construction mastic to glue panels grid-side down, leaving 3/16" gaps between adjoining panels and 3/8" from walls and partitions. Apply the mastic using a 1/8" x 1/8" notched trowel (35 sq. ft. pr gallon). To insure proper ComfortBase-to-concrete adhesion, especially in cold weather, panels may need to be weighted uniformly in order to enforce a strong bond between ComfortBase and the concrete slab.
- 3) Cut the 3/4" plywood or OSB into 4' x 4' squares and stagger panel joints by 2'. Be sure to leave a 3/8" space at all wall lines and a 1/8" - 3/16" gap between ComfortBase panels. Cut sub-floor to fit within 1/8" near and around door jambs and other vertical obstructions where finish trim will not be used. Glue down 3/4" T&G subfloor to the ComfortBase, staggering all joints. Apply a 3/8" bead of APA – approved sub floor adhesive meeting APA AFG-O1 specification as shown in the "Gluing Pattern(s)".
- 4) Install the 3/4" finished hardwood floor according to the manufacturer's installation instruction over the plywood subfloor.



- 4) Fasten 4' x 4' Homasote panels to slab with power-actuated fasteners, securing the center of the panel first, then the edges, using five (5) fasteners per 4' x 4' panel. Place a fastener in each corner, holding back 3/4" from panel edge; place one fastener in middle of panel. Allow for 3/16" expansion gap between all Homasote panels.
- 5) Attach pad and carpet as per manufacturers instructions.

## K. Homasote installations over Concrete Slab for use with Laminate or Floating Floor

Refer to Homasote Comfort Base® as an alternative to 440 Sound Barrier® for placing on concrete. **In below grade applications, Comfort Base® must be used.**

- 1) Cover concrete slab with a layer of 4-6 mil. polyethylene or visqueen, overlapping seams a minimum of 6".
- 2) Fasten 4' x 4' Homasote panels to slab with power-actuated fasteners, securing the center of the panel first, then the edges, using five (5) fasteners per 4' x 4' panel. Place a fastener in each corner, holding back 3/4" from panel edge; place one fastener in middle of panel. Allow for 3/16" expansion gap between all Homasote panels.
- 3) Install laminate or floating floor in strict accordance with flooring manufacturer's instructions.

## Specifications

### 440 SoundBarrier

Thickness	Sizes (nominal)*	Wt. (lbs. / sq. ft.)	R-Value
1/2"	4' x 4', 4' x 8', 4' x 10'	1.2	1.2
5/8"	4' x 4', 4' x 8'	1.5	1.33
3/4"	4' x 8'	1.8	1.4

### N.C.F.R

Thickness	Sizes (nominal)*	Wt. (lbs. / sq. ft.)	R-Value
1/2"	4' x 8'	1.5	0.85

\* Actual length and width 1/8" shorter.

## J. Homasote installations over Concrete Slab for use with Carpet and Pad

Refer to Homasote Comfort Base® as an alternative to 440 Sound Barrier® for placing on concrete. **In below grade applications, Comfort Base® must be used.**

- 1) Cover concrete slab with a layer of 4-6 mil. polyethylene or visqueen, overlapping seams a minimum of 6".
- 2) Install tack strips with shims (or wood nailer strips 1-1/2" x 1/2") along perimeter of area where carpet is to be installed. Tack strip must be installed into concrete using concrete fasteners.
- 3) Install Homasote panels leaving a 3/8" gap between panel and tack strip.

	440 SoundBarrier	N.C.F.R
Density (lb./cu. ft):	26-28	34-40
Flame Spread:	Class III (or C)	Class I (or A)
Tensile (Parallel):	450-700, psi	400-700, psi
Transverse M.O.R.	750-1000, psi	600-950, psi
Hardness (Janka ball)	230, lbs	275, lbs

Water absorption by vol.

2 hrs. immerse	5%	5%
24 hrs immerse	15%	14%

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 October 15, 2009.



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