

SECTION 09831

FIRE-RATED ACOUSTICAL BARRIERS

PART GENERAL

SECTION INCLUDES

Tackable wall panels.

Ceiling paneling.

Display wall.

Tack board.

Tackable substrate for fire-rated wall covering.

Wall sheathing.

Noise-deadening resilient carpet underlayment.

Soffits.

Fire-rated garage interiors.

Interior siding.

Exterior siding.

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RELATED SECTIONS

Section 06100 - Rough Carpentry.

Section 07260 - Vapor Retarders.

Section 07460 - Siding.

Section 09110 - Non-Load-Bearing Wall Framing.

Section 09250 - Gypsum Board.

Section 09680 - Carpet.

Section 09900 - Painting.

Section 10300 - Fireplaces and Stoves.

Section _____ - _____.

REFERENCES

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

ASTM D 1037 - Test Methods of Evaluating Properties of Wood-Base Fiber and Particle Panel Materials.

UL - Report No. R-5268.

UL Canada - File No. CR909.

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SUBMITTALS

Submit under provisions of Section 01300.

Product Data: Manufacturer's catalog data, detail sheets, and specifications.

Quality Assurance/Control Submittals:
Manufacturer's installation instructions.

QUALITY ASSURANCE

Manufacturer's Qualifications:
Minimum 10 years experience in producing fire-rated panels of the type specified herein.

DELIVERY, STORAGE, AND HANDLING

Deliver materials in manufacturer's original packages.

Inspect the materials upon delivery to assure that specified products have been received.

Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.

Store materials in a dry place, indoors, or on raised platform protected from weather damage.

PART PRODUCTS

MANUFACTURERS

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).

Requests for substitutions will be considered in accordance with provisions of Section 01600.

Substitutions: Not permitted.

Provide all fire-rated panels from a single manufacturer.

MATERIALS

N.C.F.R.(R) Homasote: Class A fire rated, physical properties as follows:

Thickness: 1/2 inch (13 mm).
Density: 34-40 pcf (544-640 kg/cubic m).
Tensile Strength parallel to surface: 400-700 psi (2,755-4,830 kPa) minimum.
Transverse M.O.R.: 600-950 psi (4,140-6,555 kPa) minimum.
Hardness (Janka Ball): 275 lbs. (124 kg) minimum.
Water Absorption by Volume; ASTM D 1037:
 2 hour immersion: 5 percent maximum.
 24 hour immersion): 14 percent maximum.
Expansion, 50 to 90 percent relative humidity: 0.30 percent.
R-value: 0.85 (0.015).
Noise Reduction Coefficient: 0.20.
Finish: Natural.
Fire Hazard Classification: Flame Spread 25, Fuel Contributed 0, Smoke Developed 20, per UL Building Materials Index.

N.C.F.R.(R) Wall Shield: Class A fire rated, physical properties as follows:

Thickness: 1/2 inch (13 mm).
Density: 34-40 pcf (544-640 kg/cubic m).
Tensile Strength parallel to surface: 400-700 psi (2,755-4,830 kPa) minimum.
Transverse M.O.R.: 600-950 psi (4,140-6,555 kPa)

minimum.
Hardness (Janka Ball): 275 lbs. (124 kg) minimum.
Water Absorption by Volume; ASTM D 1037:
 2 hour immersion: 5 percent maximum.
 24 hour immersion): 14 percent maximum.
Expansion, 50 to 90 percent relative humidity: 0.30
percent.
R-value: 0.85 (0.015).
Noise Reduction Coefficient: 0.20.
Finish: Natural.

ACCESSORIES

Metal Frame Clips: Manufacturer's standard clip for
securing panels to framing.

Adhesive: APA approved panel adhesive.

Nails: Length as required to penetrate wood framing 3/4
inch (19 mm) minimum.

Nails: Finishing nails, length as required to penetrate
wood framing 3/4 inch (19 mm) minimum.

Screws:

Wood Framing: Coarse thread drywall type wood screw,
length as required to penetrate framing 3/4 inch (19
mm) minimum.

Metal Framing: 22-25 gage, drywall type steel screw.

Metal Framing: 20 gage or heavier, self-tapping
drywall type steel screw.

PART EXECUTION

EXAMINATION

Examine substrates upon which work will be installed.

Verify framing member spacing complies with
manufacturer's requirements depending on substrates and
installation methods.

Verify environmental conditions are, and will continue to
be, maintained in accordance with manufacturer's
recommendations.

Coordinate with responsible entity to perform corrective

work on unsatisfactory substrates or conditions.

Starting work by installer is acceptance of substrate and environmental conditions.

PREPARATION

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

Precondition panels larger than 4 by 8 feet (1.219 by 2.438 m) panels by sprinkling with water and stacking wet side up overnight.

INSTALLATION

Follow manufacturer's instructions for cutting and installation of fire rated panels.

Install panels in dry condition only.

N.C.F.R. (R) Homasote Exterior Applications:

Apply panels over wood sheathing or direct to framing by glue-nailing or with nails only.

Allow 3/16 inch (4.7 mm) gap at exposed joints, seal with calking, and cover with battens.

N.C.F.R. (R) Homasote Interior Applications:

Apply panels direct to framing or solid furring by glue-nailing or with nails only.

Apply panels to old masonry walls by glue-nailing, provided walls are flat and solid.

Allow 3/16 inch (4.7 mm) gap at butt joints, 3/8 inch (9.5 mm) gap at floor, ceiling, and abutting framing.

N.C.F.R. (R) Homasote Underlayment Applications on Wood Sub-Flooring:

Shim or sand sub-floor as necessary to provide a flat surface continuity for panels.

Apply underlayment panels with APA approved decking adhesive and nails, or with nails only.

Allow 3/16 inch (4.7 mm) gap at abutting edges; 3/8 inch (9.5 mm) space at walls and partitions.

N.C.F.R.(R) Wall Shield Applications:

Space panels 1 inch (25 mm) from wall with non-combustible spacers attached to wall and spaced as recommended by panel manufacturer.

Space panels 1 inch (25 mm) minimum and 3 inches (75 mm) maximum above floor and below ceiling.

Extend panels 8 inches (203 mm) minimum each side of projected area of back of stove or flue.

ADJUSTING AND CLEANING

Follow manufacturer's instructions for repairing damaged panels.

Replace panels that cannot be repaired to "as new" condition.

END OF SECTION