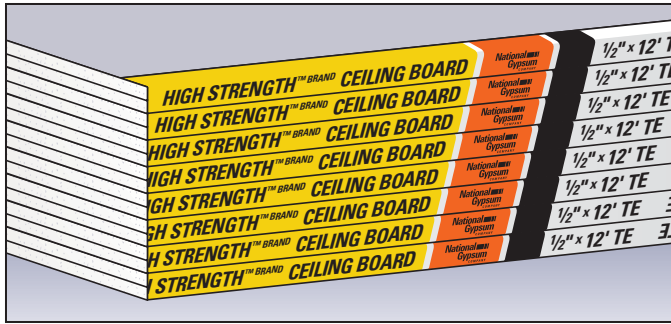


# 1/2" HIGH STRENGTH™ BRAND CEILING BOARD



## GENERAL INFORMATION

1/2" High Strength Ceiling Board gives manufactured home builders an alternative to 5/8" wallboard for ceiling construction. A specially formulated core provides superior sag resistance required for parallel installation to trusses spaced 24" o.c., especially when water-based ceiling textures are applied. Since 1/2" High Strength weighs less than 5/8" wallboard, the lower weight means additional bottom-line savings.

## FEATURES/BENEFITS

- Meets HUD Manufactured Home Construction and Safety Standards — promotes security for the homeowner.
- Lower weight of 1/2" wallboard, compared with 5/8", reduces the total weight of the unit and provides easier handling.
- 1/2" High Strength Ceiling Board can be used in place of 5/8" wallboard when applied with foam adhesive to the ceiling trusses. The special core exhibits sag-resistant properties that allow for parallel installation to trusses spaced 24" o.c. It is approved for non-fire rated ceiling assemblies where trusses are spaced no wider than 24" o.c. and ceiling is finished with water based spray textures.

## SPECIFICATIONS

- Thickness:** 1/2"  
ASTM permissible variations: In the nominal thickness of +/- 1/64" (0.4 mm) with local variations of +/- 1/32" (0.8 mm) from the nominal thickness.
- Width:** 48" and 54"  
ASTM permissible variation: +0", -3/32" (2.4 mm)
- Lengths:** 6'-16' (1/2" increments)  
ASTM permissible variation: +/- 1/4" (6.4 mm)
- Corners:** Square  
ASTM permissible variation: +/- 1/8" (3.2 mm) in the full width of the board

**Edges:** Tapered

**Weight:** Approx. 1.7 lbs./sf

### SAG RESISTANCE TECHNICAL DATA

The sag resistance for High Strength Ceiling Board is equivalent to that of 5/8" type X wallboard. Under the strict ASTM C 473 Physical Testing for Humidified Deflection, National Gypsum 1/2" High Strength Ceiling Board exhibited average sag-resistant qualities equivalent to 5/8" type X wallboard. In a test witnessed by an independent testing agency, 1/2" High Strength Ceiling Board exhibited an average sag of only 0.033" (approximately 1/32") on joists spaced 24" o.c. with spray texture applied. The test was conducted over one month at temperatures between 66° and 79°F with a relative humidity between 30% and 60%.

**ASTM E 84 Surface Burning Characteristics**  
(Fire Hazard Classification)  
Flame Spread: 15  
Smoke Developed: 0

## GENERAL APPLICATION

**Note: If blown-in cellulose insulation is used, take care to follow insulation manufacturer's specifications on addition of water. Excess moisture in this insulation can cause 1/2" High Strength Ceiling Board to sag.**

**Note:** To minimize foam leakage, the back of each joint may be taped with 3/4" masking tape prior to applying foam.

For specific applications and shear values, please refer to section titled "Shear Tests."

### TOUCH-UP

Fill gouges, nicks, hammer marks, etc., with joint treatment compound. Sand smooth before applying final surface texture or finish. Panel replacement may be necessary if damage cannot be corrected satisfactorily.

**Foam Method:** After ceiling trusses are placed on the gypsum board, foam adhesive should be applied as recommended per the manufacturer's instructions.

**Staple Method:** Staples (16 gauge with 1" crown and 1-1/2" legs) must be spaced 4" o.c. around the perimeter of the board, either parallel or stitched, and 1/4" in from both ends. Screws in the field of the board should be 1-1/4" to 1-1/2" drywall screws with maximum spacing of 12" o.c. Tools must be properly adjusted so screws, nails and staples are driven straight and flush with the board surface, without breaking the face paper of the gypsum board.

**Insulation should not exceed 2.2 lbs./sq. ft. (10.7 kg/m<sup>2</sup>).**