

## How to Install an Armstrong Fire Guard Ceiling System

### **WARNING**

This product contains man-made mineral fibers and crystalline silica. possible cancer and respiratory tract hazards can cause temporary respiratory, skin and eye irritation.

**Precautionary Measures** Install in well-ventilated areas and avoid breathing dust. If high dust level are anticipated during installation such as with the use of power tools, use appropriate NIOSH designated dust respirator. All power cutting tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear long-sleeve, loose fitting clothing, gloves and eye protection.

**First Aid Measures** If contact occurs flush eyes and skin irritation with plenty of water for at least 15 minutes and remove contaminated clothing. After installing material, wash with warm water and mild soap. Wash work clothes separately from other clothing. Rinse washer thoroughly.

Refer to Armstrong MSDS (which includes information on established occupational exposure limits) which are available from Armstrong or your employer.

## Important Information You Should Know:

Your Armstrong Fire Guard Suspended ceiling panels and the Armstrong Prelude® Fire Guard Grid System must be used together to comply with applicable UL fire-resistant ceiling assembly requirements.

**NOTE:** See UL Fire Resistance Directory for details or specific installation requirements.

## General Information:

- Use #12 or heavier gauge galvanized steel hanger wire to suspend the grid system.
- Armstrong Fire Guard Ceiling Panels and Prelude Fire Guard ceiling components carry the Underwriters' Laboratories, Inc., label and qualify for use in 3/4-, 1-, 1 -1/2-, 2-, or 3-hour fire-resistant-rated assemblies.
- Penetrations for lights and air ducts must be within the limitations as stipulated within the applicable Underwriters' Laboratories, Inc. design listing.

## Precautions:

- Wear loose, comfortable clothing and long-sleeved shirts to minimize skin contact with the ceiling materials.
- After using ceiling materials, wash with warm water and mild soap. Do not scratch or rub skin if it becomes irritated.
- Wash work clothes separately and then rinse the washer.
- Handle ceiling materials carefully to minimize airborne dust.
- Power cutting tools should not be used; high dust may result.
- A disposable mask such as a 3M Model 9900 or equivalent is advisable if high dust levels are encountered during installation or removal.

## 3 Easy Steps to Install Our Fire Guard Ceiling System

## Step 1: Install Hanger Wires and Wall Molding

### Install Hanger Wires

1. Lay out ceiling to permit largest possible border-unit size.
2. Attach guide strings to wall 1/2" below desired ceiling height to mark location of border units. Keep lines exactly perpendicular.
3. Using the guide string parallel to direction of the main beams as a reference, attach #12 or heavier gauge galvanized steel hanger wires to structure above. Space hanger wires 4' on center in each direction.

### Install Wall Molding

1. At desired ceiling height, install steel angle molding along perimeter walls and columns; use nail best suited to wall construction, spacing nails maximum 16" on center.
2. Bend hanger wire 6" and attach to fasteners, wrapping securely around itself 3 times.

## Step 2: Install Main Beams and Cross Tees

### Place Guide Strings.

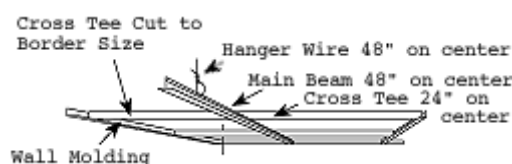
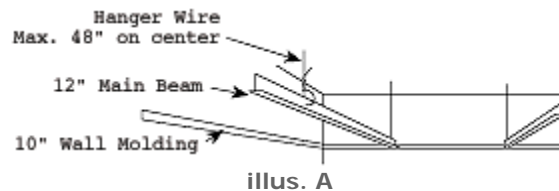
1. Stretch guide strings and attach to bottom of wall molding. (Main beam guide string 40" from side) (Cross tee guide string 18" from end)

### Trim the Main Beam.

1. Trim end of first main beam, aligning a cross tee slot on main beam with cross tee guide string.

### Install and Level Main Beams.

1. Install first main beam at guide string, trimmed end on wall molding and other end hung on prebent wire. **(illus. A)**
2. To span room, connect main beam ends (male- female connection). Support main beams with prebent wires every 4'.
3. Hang all main beams at 4' intervals. **(illus. B)**
4. Insert all hanging wires into main beam support holes. Adjust height using a level.
5. Twist wires securely around themselves 3 times.



illus. B

### Install Cross Tees.

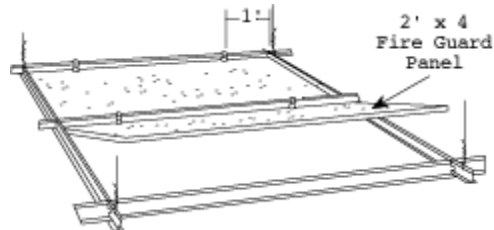
1. Trim end of a 4' tee so it reaches from the main beam to the side wall.
2. Insert the uncut end of the tee into the cross tee slot on the main beam; the cut end will rest on the molding. (**illus. C**)
3. Complete the row of cross tees to the other side wall, cutting the last tee again to rest on the molding.
4. Repeat to install all 4' cross tees between main beams at 2' intervals.
5. If the system is 2' x 2', install additional tees at midpoint of 4' cross tees to create a 2' x 2' grid.
6. Remove guide strings.



illus. C

## Step 3: Install Ceiling Panels

1. Install Fire Guard Suspended Ceiling Panels, resting flanges on the grid. Cut border panels to a snug fit. (**illus. D**)



illus. D

### How to Protect Recessed Lights and Diffusers

Protect recessed lights and diffusers by boxing in the lighting system as shown. See UL Fire Resistance Directory for complete details