SUSPENSION OF USG* Z-BOARD ON Z-SPLINES

UNITED STATES GYPSUM HISTORICAL ARCHIVES
THIS IS NOT A LOAN
TO BE RETURNED TO
RETURN TO CHICAGO
TO ARCHIVES

This system facilitates the economical suspension of USG Z-Board as a base for the installation of acoustical tiles. The ½"x2'x6' Z-Board is placed on top of the lower flanges of Z-Splines which are attached to carrying channels, bar joists, or wood framing.

FUNCTION AND UTILITY

Where an incombustible backing for acoustical tile is desirable, USG Z-Board, a board made of gypsum that will not burn or support combustion, may be used for the acoustical tile base. Because the gypsum core of USG Z-Board is treated with asphalt and the board itself wrapped in a tough water-repellent paper, this system offers a very desirable base on which to attach acoustical tile.

SPECIFICATIONS

1. **Scope**—Architect will list all areas to be treated.

2. **General Provisions**—The area or room in which USG Z-Board is to be suspended shall not be damp; satisfactory closures for windows and other openings shall be in place and roofs tight; plaster, terrazzo floors, etc., shall be previously installed and dry.

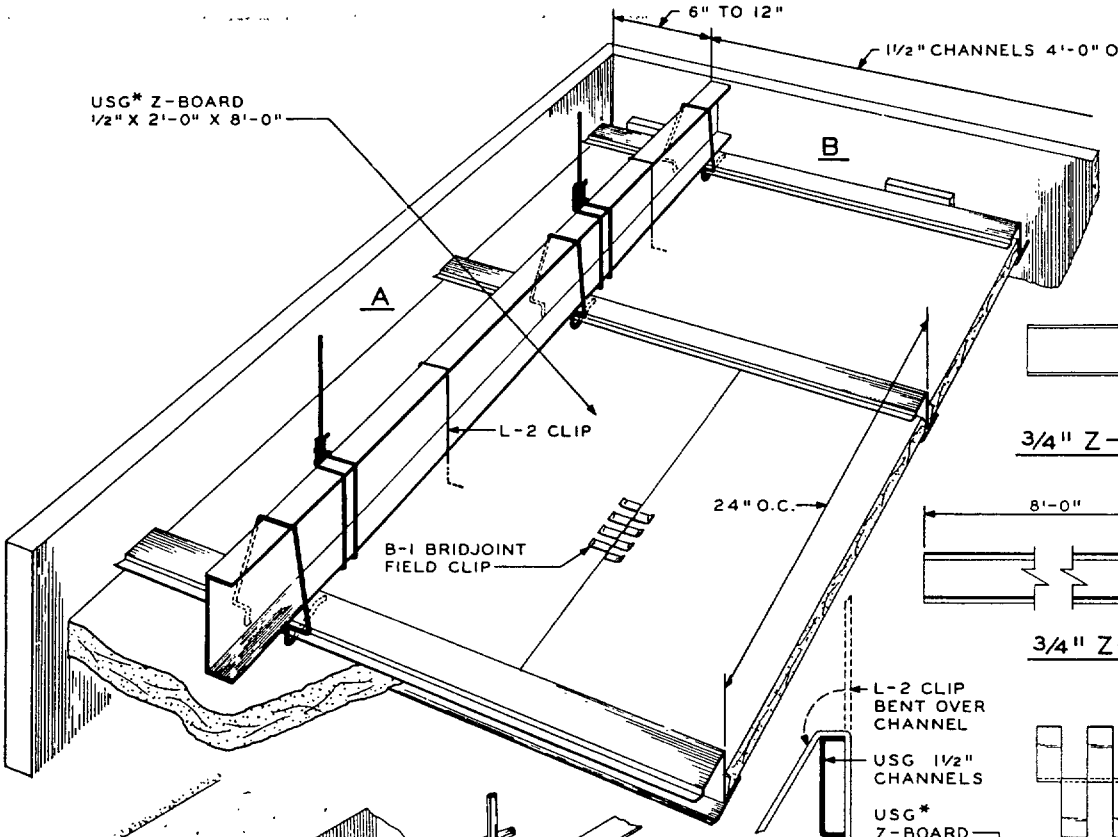
PLAINTIFF'S EXHIBIT
USG-1555

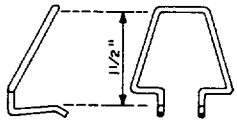
3. **Materials**
   a. 1½" cold rolled runner channels supplied by U.S. Gypsum Company.
   b. No. 8 Ga. Galvanized hanger wires.
   c. ¾" Z-Splines supplied by U.S. Gypsum Company.
   d. USG Z-Board—½"x2'x6' Z-Board with tongue and groove edges, core treated to resist penetration of moisture, supplied by U S. Gypsum Company.
   e-1. No. 82-A or 85 Clips, supplied by U.S. Gypsum Company, used to attach Z-Splines to 1½" carrying channels.
   e-2. No. 85 Clips, supplied by U.S. Gypsum company, used to attach Z-Splines directly to bar joists or 2" carrying channels. (Refer to Planograph SC-202, ACOUSTONE* Tile Mechanically Suspended on Bar Joists.)
   e-3. No. 90 Clips, supplied by U.S. Gypsum Company, for attaching Z-Splines to wood furring strips or wood framing. (Refer to Planograph SC-20, ACOUSTONE Mechanically Suspended on Z-Splines attached to Wood Furring Strips.)
   f. Nails to be partially driven through Z-Splines to prevent uplift of USG Z-Board shall be 6-d or 8-d coated nails.
   g. ½" B-1 Clips, supplied by U. S. Gypsum Company, to be used at abutting ends of USG Z-Board.
   h. L-2 Clips, supplied by U.S. Gypsum Company for center support of USG Z-Board.

4. **Installation**
   a. 1½" Carrying Channels
   No. 8 Ga. hanger wires shall be securely attached at not more than 4'-0" on centers. 1½" carrying channels shall be tied to the hanger wires and spaced not over 4'-0" on centers; carrying channels shall be hung level.
   OR
   b. Wood Furring Strips. (Refer to Planograph SC-50, ACOUSTONE Mechanically Suspended on Z-Splines Attached to Wood Furring Strips.)
   Wood furring strips shall be attached and leveled at a maximum spacing of not more than 4'-0" on centers.
   OR
   c. Bar Joist Construction. (Refer to Planograph SC-202, ACOUSTONE Mechanically Suspended on Bar Joists.)
   If the lower chords of the bar joists are not erected level, shims shall be used between the lower chord of the bar joists and Z-Splines when the Z-Splines are attached to the bar joists.

¾" Z-Splines attached 24" on centers to (Metal grillage by No. 82-A or No. 85 clips) (bar joists by No. 85 clips) (wood framing by No. 90 clips). USG Z-Board shall be placed on top of the lower flanges of the Z-Splines and a 6-d or 8-d nail partially driven through the vertical leg of the Z-Spline prior to placing the next piece of USG Z-Board between the nail and the lower flange of the Z-Spline. ½" B-1 clips shall be placed in the abutting ends of the USG Z-Board, and L-2 Clips shall be attached between Z-Splines along the center line of the Z-Board at each intersection of metal framing.

SUSPENSION OF USG* Z-BOARD ON Z-SPLINES

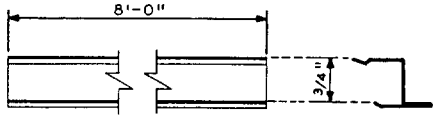




NO. 82A CLIP

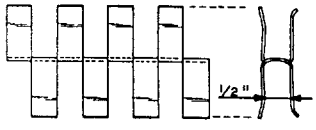


¾" Z-SPLINE SPLICE

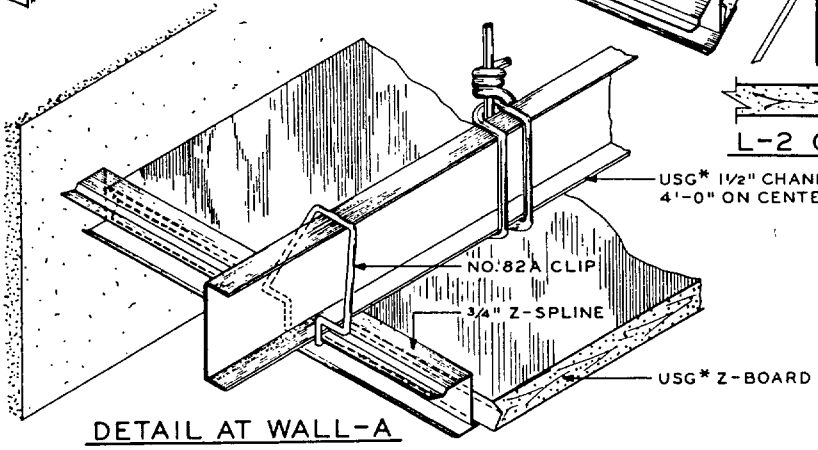


¾" Z-SPLINE

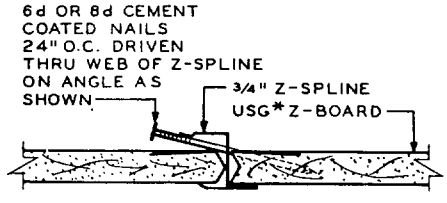
L-2 CLIP DETAIL



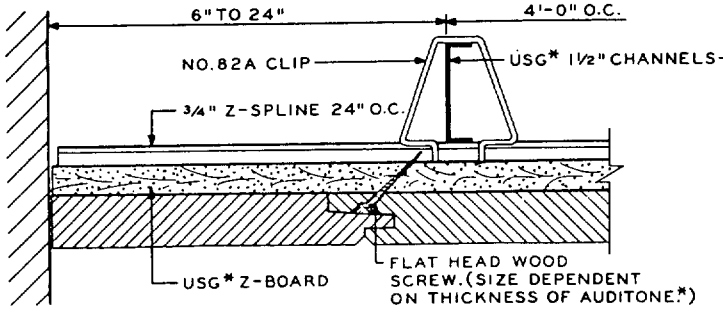
B-1 BRIDJOINT* FIELD CLIP



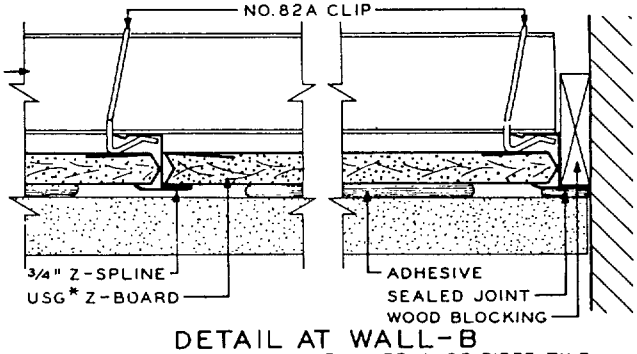
DETAIL AT WALL-A



DETAIL AT NAIL APPLICATION OF SHEATHING



DETAIL AT WALL-A
SCREW APPLICATION OF FIBER TILES



DETAIL AT WALL-B
ADHESIVE APPLICATION OF MINERAL OR FIBER TILE

* T.M. REG. U.S. PAT. OFF.

BB021 2343