

new
systems

PLAINTIFF'S EXHIBIT

USG-1557

for mechanical suspension of

ACOUSTONE*

mineral acoustical tile



Suspending ACOUSTONE to provide access
to area above ceiling.

Attaching ACOUSTONE to wood furring strips ...
over existing ceiling ... exposed wood joists
... or exposed concrete.

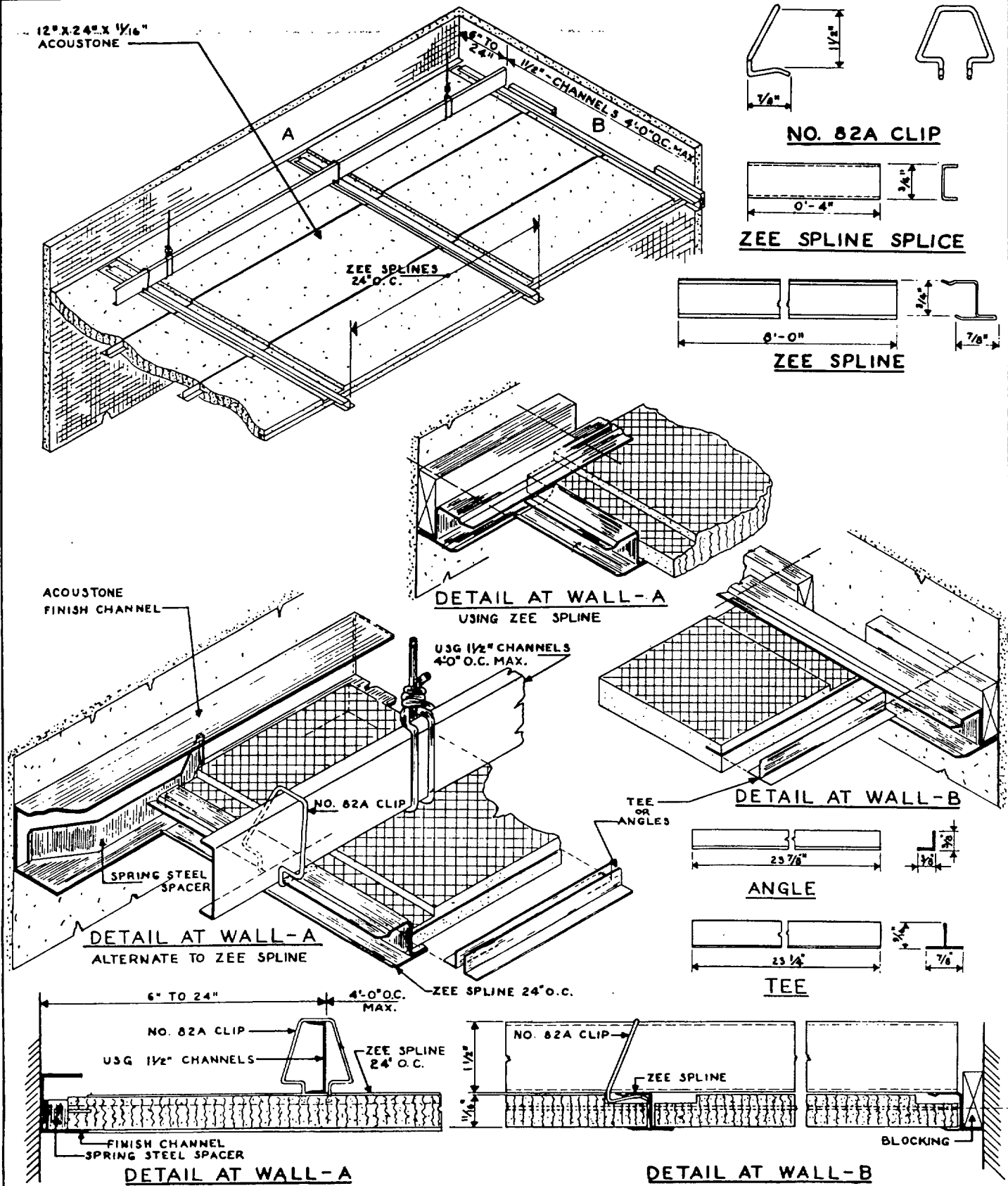
A system for suspension of USG Sheathing as a base
for ACOUSTONE or AUDITONE fiber acoustical tile.

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SOUND CONTROL DEPARTMENT
UNITED STATES GYPSUM COMPANY
300 W. Adams Street • Chicago 6, Illinois

BB021 2411

11/16" ACOUSTONE—EXPOSED AND PAINTED ZEE SPLINE SYSTEM



11/16" ACOUSTONE ON PAINTED ZEE SPLINE

FUNCTION AND UTILITY

This system is used where access is required to the area above the ceiling for adjusting valves, electrical equipment, controls of air conditioning equipment, or for other reasons.

1 1/16" ACOUSTONE suspended by this method gives a Noise Reduction Coefficient of 70%.

This system is applicable where a mechanical suspension system is required or specified.

This system also permits wide latitude of lighting arrangements. Can be adapted to any light troffer arrangement or lights can be installed in the space above the Acoustone and glass or plastic can replace Acoustone in the finished ceiling to give any desired lighting effect.

Because of ease of installation this system is economical, providing the lowest cost acoustical ceiling with accessibility.

SPECIFICATIONS

1. SCOPE

Architect will specify areas to be treated.

2. MATERIALS

- a) 1 1/16" x 12" x 24" ACOUSTONE mineral acoustical tile specially kerfed and rabbeted—U.S. Gypsum Co.
- b) Zee Splines painted on the lower flange with flat white enamel—U.S. Gypsum Co.
- c) 82 A Clips—U.S. Gypsum Co.
- d) No. 8 Ga. hanger wires
- e) 1 1/2" cold rolled runner channels—U.S. Gypsum Co.
- f) Tees, 26 Ga. or angles, 26 Ga., as required—U.S. Gypsum Co.

3. INSTALLATION

Space hangers not to exceed 4 feet in both directions—method of attaching hangers by special inserts or otherwise to be approved by the architect.

Attach 1 1/2" channels to hangers with saddle ties.

Attach Zee Spline 2' on centers to 1 1/2" channels with the No. 82 A Clips. Top flanged surface of the Zee Spline shall be advancing. Support 12" edges of ACOUSTONE on bottom flanges of the Zee Splines. In the kerfs of the 24" edges insert angles or tees.

ACOUSTICAL MATERIALS ASSOCIATION

OFFICE OF THE EXECUTIVE SECRETARY AND TREASURER

59 EAST 55TH STREET

NEW YORK 22, N. Y.



October 18, 1952

To all Members: The following are official data on a product of
UNITED STATES GYPSUM COMPANY

The manufacturer has certified that this is a standard production material and has been sampled in accordance with the official procedure.

Test No. 52-225

Description of Material

Material	Thickness	Mounting	Unit Size	Wt./so.ft.	Surface
Acoustone	11/16"	7*	12"x24"	1.156 lbs.	Fissured Painted

Results of Test

Sound Absorption Coefficients

125	250	500	1000	2000	4000	NRC
.44	.53	.53	.83	.86	.81	.70

* Z Spline mounting system

jd

Wallace Waterfall
Wallace Waterfall
Executive Secretary

BB021 2413

ACOUSTONE—zee spline attached to wood furring strips

FUNCTION AND UTILITY

For use over existing ceilings. This is particularly adaptable to those existing ceilings where the surface is in such condition that it is impossible to attach ACOUSTONE by cementing.

This system can also be used for direct attachment to wood joists or to wood furring strips nailed to wood joists or exposed concrete surfaces.

Since all materials in this system are incombustible, it can be used wherever building codes require incombustible ceiling finishes. Does not require hangers and grilleage normally required for installation of an incombustible ceiling finish over existing ceilings.

Economical, is quickly erected. Simplicity of system permits work to be accomplished during occupancy without interrupting functions of the area.

SPECIFICATIONS

1. SCOPE

Architect will specify area to be treated.

2. MATERIALS

- a) ACOUSTONE $\frac{7}{8}$ " x 12" x 24" square edge or bevel—U.S. Gypsum Company
- b) Zee Splines—U.S. Gypsum Company
- c) No. 90 Clip—U.S. Gypsum Company
- d) Wood furring strips 2" x 3"
- e) Nails $1\frac{3}{4}$ " No. 11 galvanized nails $\frac{1}{16}$ " head
- f) Flat splines for end joints

3. INSTALLATION

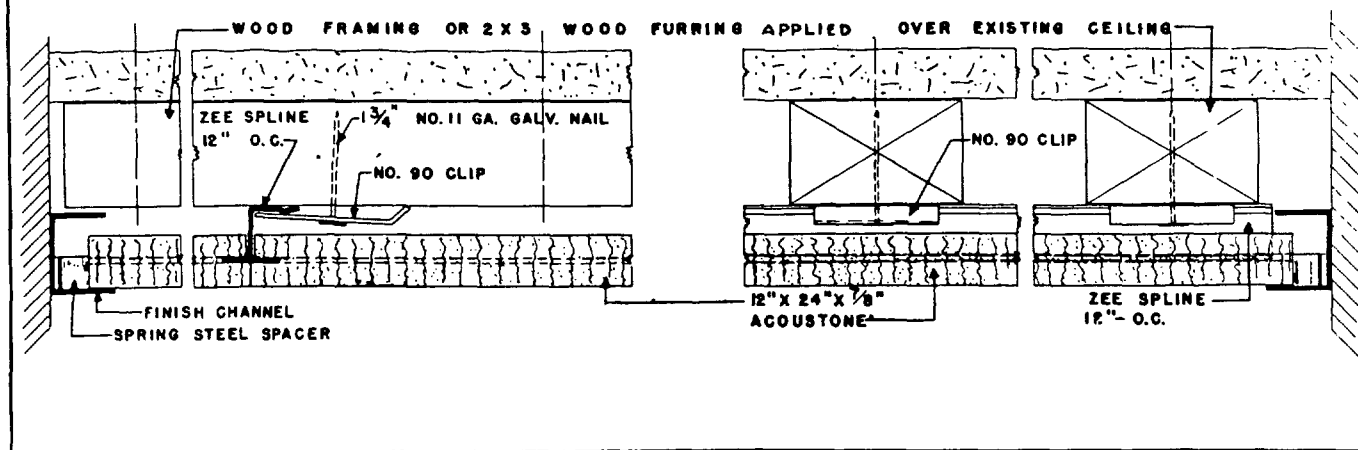
Apply wood furring strips to existing ceilings or to wood joists. Maximum spacing 4 feet on centers. Use appropriate fasteners. Level strips by wedging or scribing.

Apply wood molding or metal finished channel to intersections of ceiling with walls.

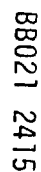
Attach Zee Splines to wood furring strips with No. 90 Clip, using $1\frac{3}{4}$ " long 11 gauge galvanized nails.

Apply ACOUSTONE to Zee Spline.

ACOUSTONE—ZEE SPLINES ATTACHED TO WOOD FURRING STRIPS



SC-38, USG, 12/52



SUSPENSION USG SHEATHING BY ZEE SPLINES

FUNCTION AND UTILITY

Where building codes require an incombustible backing for acoustical tile, USG Sheathing, 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* Sheathing is treated with asphalt and the board itself wrapped in a tough, water-repellent paper, this system offers a very desirable moisture-resistant, non-warping base on which to attach acoustical tile. USG Sheathing is particularly adaptable to use where application of acoustical tile by screw attachment is required.

Tests conducted in the U. S. Gypsum Research Laboratories show that a #4 round head screw used to attach AUDITONE to USG Sheathing has a holding power of 10.8 pounds per screw.

USG Sheathing also provides an ideal base for adhesive application of acoustical tiles.

SPECIFICATIONS

1. SCOPE

Architect will specify area to be treated.

2. MATERIALS

- a) 1½" cold rolled runner channels—U. S. Gypsum Company
- b) 8 Ga. galvanized hanger wire.
- c) USG Sheathing—½" x 2' x 8' gypsum sheathing with tongue and grooved edges. Core treated to resist penetration of moisture—U. S. Gypsum Company.
- d) Zee Splines—U. S. Gypsum Company
- e) 82 A Clip—U. S. Gypsum Company
- f) Nails 1⅝" x 13 Ga. blued nails ⅝" head
- g) ½" B-1 Clip—U. S. Gypsum Company

3. INSTALLATION

Space hangers not to exceed 4 feet in both directions—method of attaching hangers by special inserts or otherwise to be approved by the architect.

Saddle tie 1½" channels not over 4 foot on centers to hanger wires.

Attach Zee Splines on 2 foot centers to 1½" channels with 82 A Clips.

Upper flanged surface of Zee Spline should be advancing.

Insert tongue edge of USG Sheathing, face of sheathing down, into Zee Spline channel. Support advancing edge of sheathing (grooved edge) with second length of Zee Spline.

Drive nails on 2 foot centers into grooved edge of the USG Sheathing through holes provided in Zee Spline.

Attach and align butting ends of sheathing with USG B-1 Clips.

Join lengths of Zee Splines with Zee Spline splice plates.

*T.M. Reg. U. S. Pat. Off.

The USG Acoustical Contractor serving your area will be pleased to discuss these and other USG Acoustical Systems in more detail, his name is listed below. Call on him as your local Sound Conditioning expert for consultation concerning your Acoustical problems.

ALABAMA Birmingham • Shook & Fletcher Insulation Co. Mobile • Stokes Interiors of the Gulf Coast, Inc.	ILLINOIS Chicago • Anning-Johnson Co. E. St. Louis • Blazier-Huntley Co. Moline • Builders Sales & Service Peoria • Watson Engineering Co. Rockford • Acoustical Engineering Co. Springfield • American Roofing & Tile Co.	MASSACHUSETTS Auburndale • Post Products, Inc.	MISSISSIPPI Jackson • Stokes Interiors, Inc.	MINNESOTA Minneapolis • Hauenstein & Burmeister, Inc.	MICHIGAN Detroit • The Nichols Co. Grand Rapids • Harold R. Sobie Co.	NEW JERSEY East Orange • Woollulate Corp.	NORTH CAROLINA Greensboro • The Bonitz Insulation Co., Inc.	UTAH Salt Lake City • Elias Morris & Sons Co.
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