

PLAINTIFF'S EXHIBIT

USG-922

NATURAL BEAUTY

ACOUSTONE

Acoustical Mineral Tiles

GP041 1189

WITHOUT DAMAGE TO SOUND ABSORBING ABILITY

EASILY MAINTAINED

Acoustone Can Be Cleaned Easily and Economically:

1. By Washing—if Surface Is Painted.
2. By Vacuuming—if Surface Is Integrally Colored.
3. By Painting—When Needed.

A test at the Bureau of Standards showed no decrease in the Noise Reduction Coefficient of open fissured Acoustone after brush painting with five coats of flat white interior oil paint.

NO FIRE HAZARD

Acoustone is rated as Incombustible by the U. S. Bureau of Standards. It will not flame nor serve as a medium for the spread of fire through a building structure. This is important for all types of buildings but especially so for Hospitals, Schools and Institutions.

HIGH LIGHT REFLECTION

Mill Painted White Acoustone has a Light Reflection Coefficient of 83%.

Integrally Colored Acoustone has Light Reflection Coefficients as follows: White 71%; Ivory 61%.

MINERAL COMPOSITION

Acoustone is made of stone filaments which are processed to form a lightweight, porous, sound-absorbent tile. It is manufactured in four thicknesses: 9/16"; 11/16"; 13/16"; 15/16" and in two standard sizes: 12"x12" and 12"x24". On special order 6"x12" and 9"x18" sizes are available.

HIGHLY SOUND ABSORBENT

Listed in the table below are the sound absorption coefficients of Acoustone as obtained from tests conducted at the Official Laboratory of the Acoustical Materials Association.

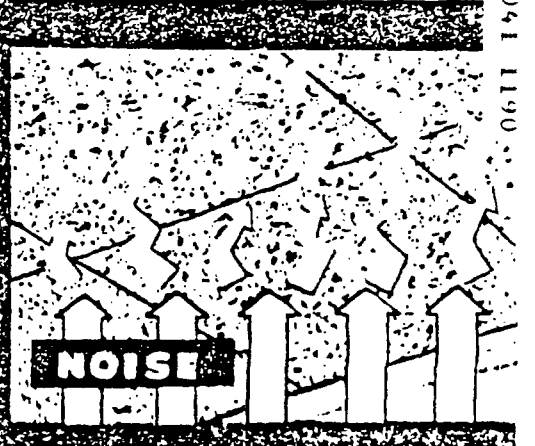
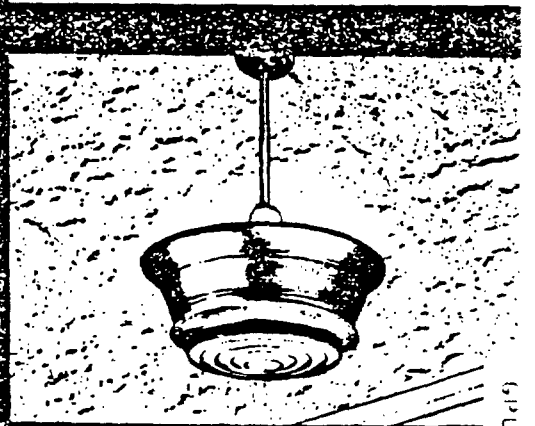
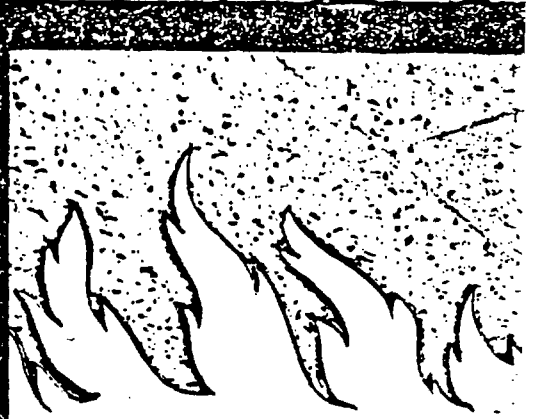
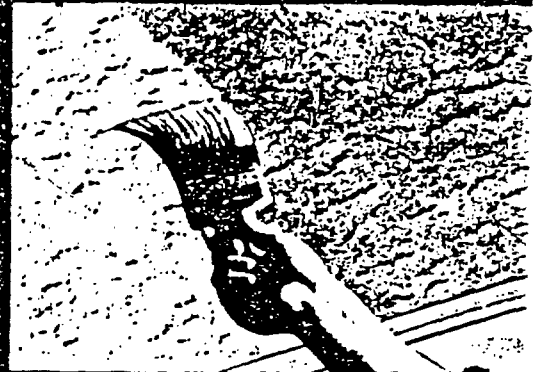
ABSORPTION COEFFICIENTS

(Coefficients from official bulletin of Acoustical Materials Association)

Thickness	128	256	512	1024	2048	4096	Noise Reduction Coefficients	Surface
9/16	.06	.16	.61	.90	.82	.82	.60	Not Painted
9/16	.08	.21	.70	.87	.71	.66	.60	Mill Painted
11/16	.08	.22	.73	.91	.81	.85	.65	Not Painted
11/16	.13	.26	.79	.88	.76	.74	.65	Mill Painted
13/16	.15	.26	.79	.92	.85	.85	.70	Not Painted
13/16	.11	.30	.81	.88	.77	.76	.70	Mill Painted
15/16	.20	.40	.84	.88	.85	.88	.75	Not Painted
15/16	.12	.37	.83	.88	.83	.80	.75	Mill Painted

All tests made on material cemented on plaster board, considered equivalent to cementing to plaster or concrete ceiling.

Coefficients on painted material are the result of tests made on Acoustone that had been well painted with an oil-base paint.



TO ANY TYPE OF ROOM OR ARCHITECTURAL TREATMENT

ACOUSTONE Permits of Functional Design in Keeping with Architectural Tradition

SIMPLE, NATURAL BEAUTY

No longer need the architect sacrifice traditional ceiling simplicity in order to secure acoustical results. The irregularly fissured surface of Acoustone is as natural appearing as the grain in fine wood veneers. This, plus the fact that Acoustone can be obtained in units with square, unbeveled edges, kerfed for installation by means of splines, enables the architect to obtain a highly sound absorbent ceiling of unobtrusive simplicity.

Spline Alignment

Spline alignment permits the installation of a square edge, unbeveled unit without that unworkmanlike "shadow casting" irregularity of appearance which occurs when one tile is a little above or below the level of the adjacent tile unit. Splines prevent dropped corners and insure the "one-plane appearance" of a machine sanded surface.

Since Acoustone is composed of long thin fibres of specially processed stone and contains no gritty aggregate or coarse fibres it can be and is manufactured with really square edges and accurate kerfs. Splines—approximately 1"x4"—fit into these kerfs and engage the four corners of adjacent units, thus assuring the installation of these units in a true plane.

DECORATIVE CEILINGS

Beautiful Tile Designs

Where the architect desires, Acoustone may readily become a "featured" part of the decoration. Using beveled edge units, it may be laid out in attractive tile effects. Acoustone's slight variation in texture from tile to tile adds materially to the beauty of the design.

While splines are not essential for beveled edge installations, we recommend their use since a better looking, truer surface is obtained. The improved appearance more than justifies the small cost of the splines.

Motif'd Acoustone

Acoustone is also available in Motif'd patterns where conventional designs are lightly etched into the surface. The architect may give free rein to his imagination in the design of these etched patterns. Individual designs are limited only by two-direction etching per tile and the development of pattern designs within the area of four 12"x12" tiles. Motif'd Acoustone can be used for entire surfaces, for decorative borders or as single tile inserts to embellish regular Acoustone installations.

USE THESE CONVENIENT SPECIFICATIONS

1. WORK INCLUDED— List and locate all areas of walls and ceilings to be covered with Acoustone. If more than one thickness of Acoustone is to be used, specify the thickness for the various areas.

2. BASE—

A. (Use when Acoustone is to be Cemented to Plaster.)

As specified in another section of these specifications, a good level brown coat of gypsum plaster will be furnished as a base to which the acoustical contractor shall cement the Acoustone.

B. (Use when Acoustone is to be Mechanically Suspended by Means of Clips.)

The acoustical contractor shall furnish and install $1\frac{1}{2}$ " carrier channels accurately leveled and spaced not over 4' 0" on centers. $\frac{3}{4}$ " furring channels shall be securely wired to the carrier channels spaced not over 12" on centers.

C. (Use when Acoustone is to be Mechanically Suspended by Means of the H & T System.)

The acoustical contractor shall furnish and install $1\frac{1}{2}$ " carrier channels, accurately leveled and spaced not over 4' 0" on centers. 1" pressed steel "H" sections especially manufactured for this purpose shall be securely fastened to the runner channels spaced not over 2' 0" on centers.

3. MATERIAL— Acoustical material shall be Acoustone "D." It shall be composed of specially processed mineral fibres manufactured into tile units so as to present a natural appearing, fissured surface capable of being brush painted with oil-base paints without appreciable loss of sound absorbing properties. The acoustical material shall be rated as "incombustible" by the U. S. Bureau of Standards.

(Choose paragraph A or B below depending on type of erection decided upon above in Section 2.)

A. (Use when Acoustone is to be Cemented to Plaster.)

Acoustical material shall be furnished in 12"x12" units with beveled (or unbeveled) edges. Units shall have edges kerfed to permit of leveling with concealed splines. The Light Reflection Coefficient of the material shall not be less than 70% if a white surface is selected and not less than 60% if an ivory surface is selected. Acoustical material shall be approximately (choose from table and insert in blank space following) " thick and shall have a (choose from table and insert in blank space following) of at least (choose from table and insert in blank space following) %.

B. (Use when Acoustone is to be Mechanically Suspended by Means of Clips or the H & T System.)

Acoustical material shall be furnished in 12"x12" units with beveled edges or 12"x24" units with beveled edges and center scored to simulate 12"x12" tile. Units shall have edges kerfed and rabbeted for clip installation. Surface shall be mill painted white and shall have a light reflection coefficient of not less than 83%. Acoustical material shall be approximately (choose from table and insert in blank space following) inches thick and shall have (choose from table and insert in blank space following) of at least (choose from table and insert in blank space following) %.

Choose and insert where indicated in the Specification:

1. Thickness to be specified.
2. The words "Noise Reduction Coefficient" or "Sound Absorption Coefficient at 512 Cycles/Second."
3. The Coefficient corresponding with selection made under (1) and (2) immediately above.

Thickness of Acoustone:	9/16"	1 1/16"	1 3/16"	1 5/16"
Noise Reduction Coefficient: (Use in those instances where Acoustone is being specified for quieting such rooms as Offices, Corridors, etc.)	60%	65%	70%	75%
Sound Absorption Coefficient at 512 Cycles/Second: (Use in those instances where Acoustone is being specified for Audience Rooms such as Churches, Auditoriums, Assembly Rooms, etc.)	61%	73%	79%	83%

4. INSTALLATION—

A. (Use when Acoustone is to be Cemented to Plaster.)

The Acoustone tile shall be securely cemented in place using an approved acoustical cement. Tile shall be laid close with edges in alignment. Concealed splines shall be used accurately fitted into the kerfs in the edges of the Acoustone so that one spline will engage the corners of 4 Acoustone units and bring same to a true and level plane.

B. (Use when Acoustone is to be Mechanically Suspended by Means of Clips.)

The Acoustone tile shall be installed by means of special clips. These clips shall fit into the kerfs provided in the edges of the tile units and shall lay across and engage the top of the $\frac{3}{4}$ " furring channels. These clips shall be spaced not over 12" on centers and shall be installed in strict conformity with the manufacturer's detailed directions. Acoustical tile units shall be erected with close joints. Edges shall be kept in alignment and care shall be taken to secure a level surface.

C. (Use when Acoustone is to be Mechanically Suspended by Means of the H & T System.)

Special "T" splines with ends coped to fit over the bottom flange of the special "H" sections shall be furnished. These T's shall be installed on 12" centers at the same time that the Acoustone is being installed. The flange of the T shall be down and shall fit into the kerfs provided in the long edges of the Acoustone units. All tile shall be laid with close joints. Edges shall be kept in alignment and care shall be taken to secure a level surface.

5. EDGE CONDITION—

A. (Use when Acoustone is to be Cemented to Plaster.)

At the intersection of the acoustical tile with walls, beams or other vertical surfaces, the tile shall be neatly scribed to that surface.

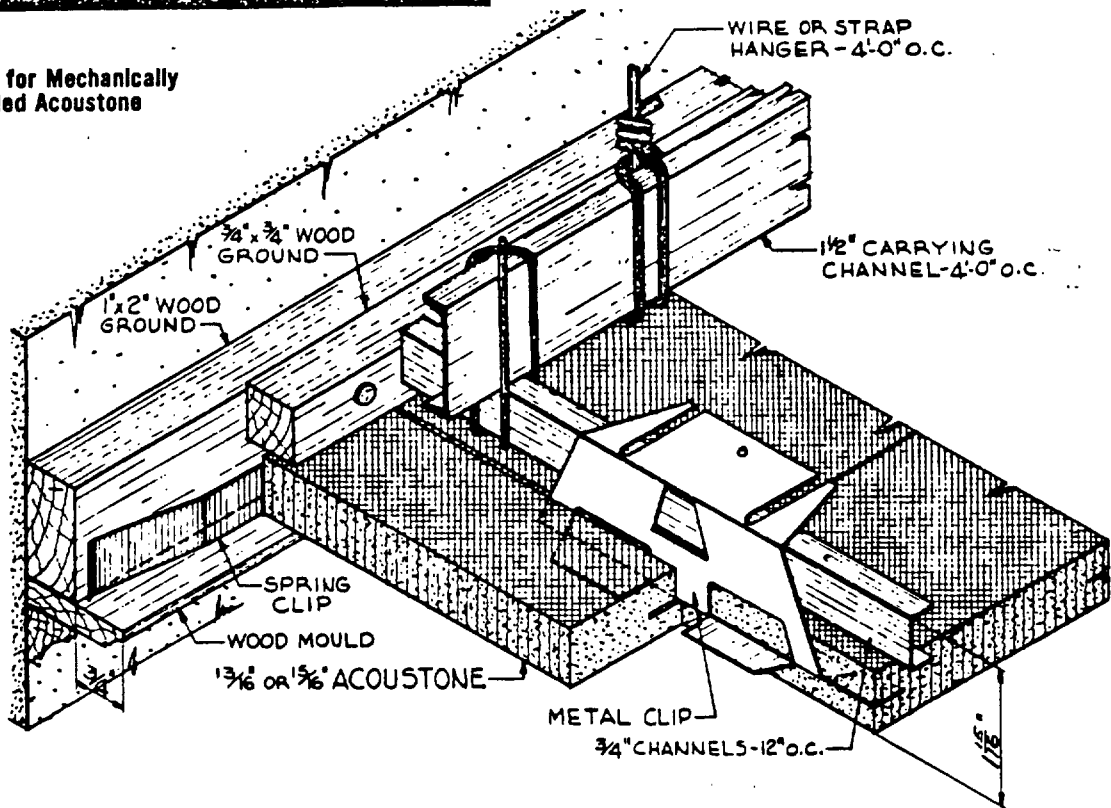
B. (Use when Acoustone is to be Mechanically Suspended by Means of Clips or the H & T System.)

At the intersection of the acoustical tile with walls, beams or other vertical surfaces, necessary wood grounds and spring clips shall be installed to prevent lateral movement of the tile. A stock section wood cover mould shall then be securely nailed to the wood grounds.

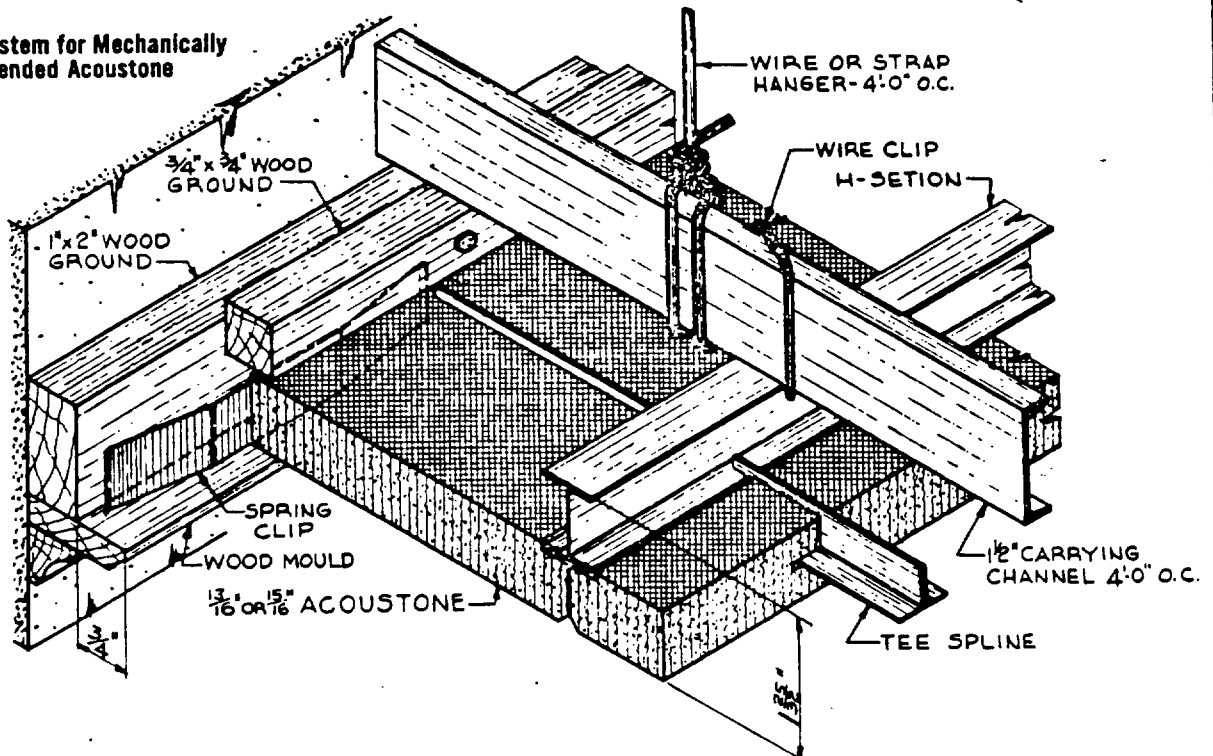
UNITED STATES GYPSUM COMPANY

U.S.G. SYSTEMS FOR MECHANICALLY SUSPENDED ACOUSTONE

**Clip System for Mechanically
Suspended Acoustone**

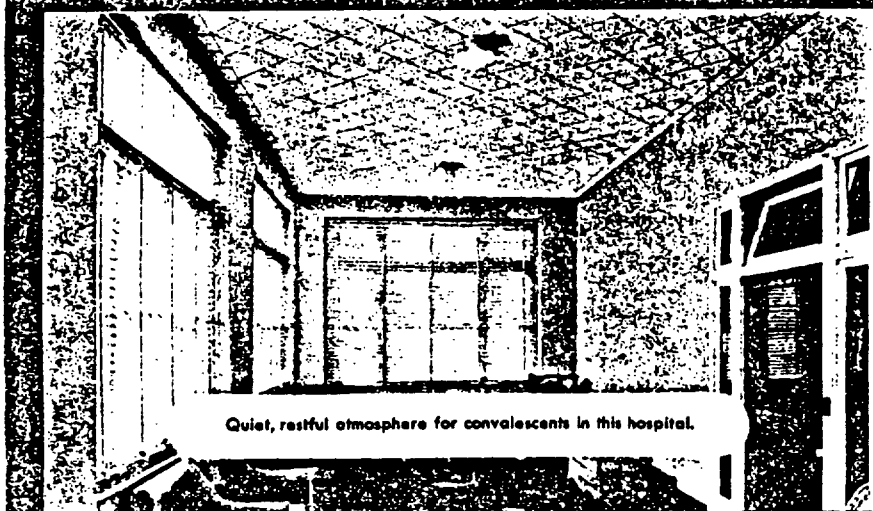


**H and T System for Mechanically
Suspended Acoustone**

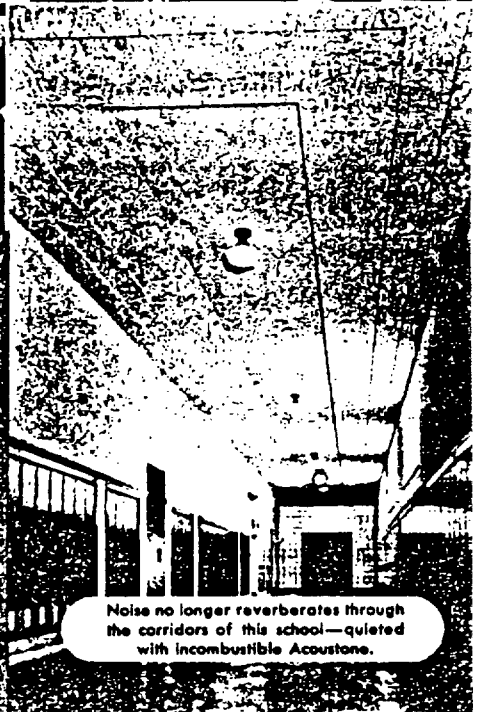




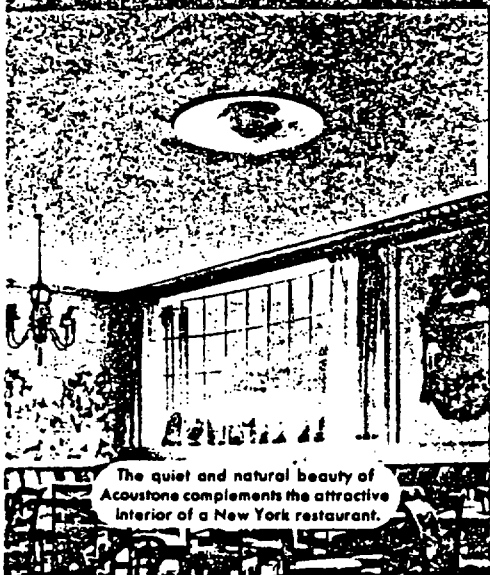
Increased efficiency with a natural appearing sound absorbent ceiling in this large general office.



Quiet, restful atmosphere for convalescents in this hospital.



Noise no longer reverberates through the corridors of this school—quieted with Incombustible Acoustone.



The quiet and natural beauty of Acoustone complements the attractive interior of a New York restaurant.



Visitors are graciously received in this quiet, dignified reception room.



Acoustone lends character and quiet to this Cincinnati bank.

62041 1174

*Motif'd
Acoustone*

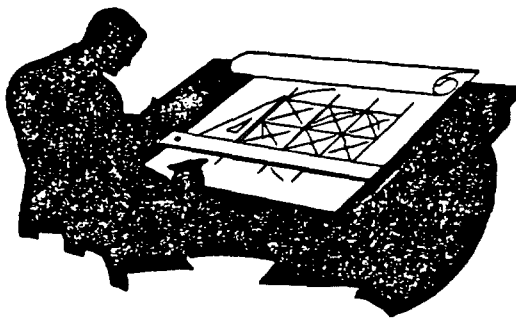
ACOUSTICAL SURFACES OF DISCRIMINATING DESIGN

Motif'd Acoustone decoration is an integral part of the tile itself. It is not a paint — not a covering. Soft designs, accentuated by lights and shadows, are actually etched into the surface of Acoustone by a new United States Gypsum process, producing an acoustical product of classical beauty.

A Product of the United States Gypsum Company

New

CREATIVE DESIGNS TO DECORATE ACOUSTICAL SURFACES



Rooms may be scientifically "sound controlled" with this new acoustical method giving offices and interiors new dignity and beauty as well as acoustical benefit. These Motif'd surfaces demonstrate the rich beauty obtained by using the basic patterns developed by the United States Gypsum Company. The designs offer complete variations of strikingly different acoustical surfaces. In addition to those patterns available, architects and designers are given a free hand to create and design their own patterns for Motif'd surfaces.

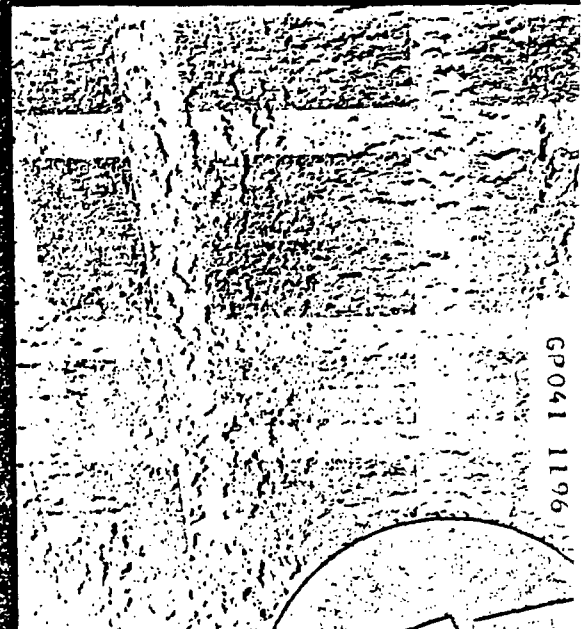
Individual designs are limited only by two direction etching per tile and pattern designs should be developed within the area of four 12"x12" tiles as illustrated on this page.

Acoustone borders, if used, should be plain, without design. It is recommended that borders be of a greater thickness than the field tile and have a $\frac{1}{8}$ " bevel on the edge adjacent to the field. If field and borders are the same thickness all edges should be flush.



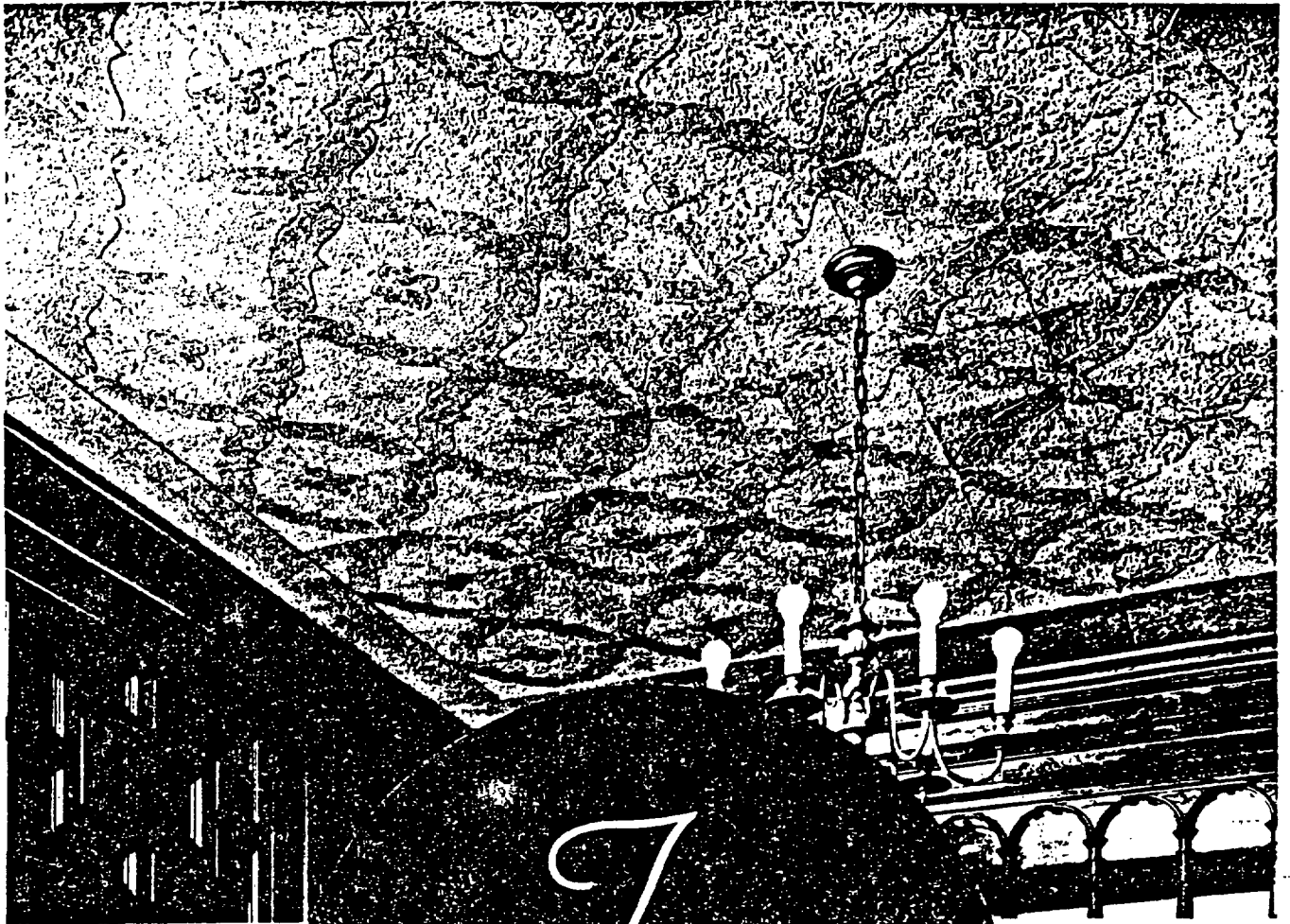
Controlled sound, distinctive interiors at moderate cost offered with this new method. Soft high-lighting is obtained with the interesting pattern on the right. Two units—same pattern etched from the left angle and from the right angle—fit into and form the decorative field—developed over four 12" units in an area 24" x 24".

HERE ARE SOME TYPES OF MOTIF'D ACOUSTONE DESIGNS



This simple pattern demonstrates the rich, classical beauty of Motif'd acoustical surfaces. No matter what design is selected or created, individuality of decoration and perfected sound control are assured. Right—here is how a basic 12" x 12" Motif'd Acoustone unit fits into the 24" x 24" design field.

GP041 1196



*T*hese basic patterns
used individually establish a new
standard for discriminating interiors.
Used singularly or together, they
provide unlimited possibilities for
the architect or designer.

