PLAINTIFF'S EXHIBIT
USG-1402

a NEW way to control sound

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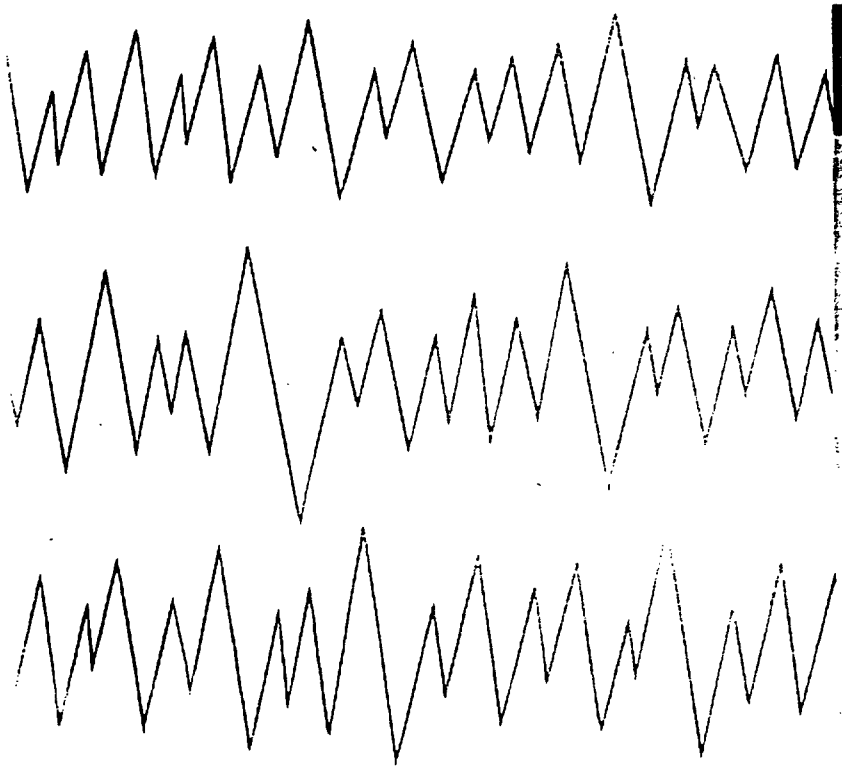
RESEARCH CENTER

# audicote*

## ACOUSTICAL PLASTER






*Reg. U.S. Pat. Off.

CS035 0280

# audicote

...with the ceils that absorb sound!



LOW COST

ABSORBS SOUND

INCOMBUSTIBLE

BEAUTIFUL

ENDURING

VERSATILE

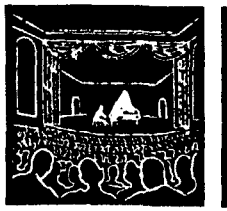
REDECORATIVE

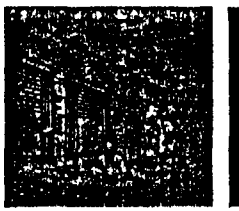
## Spray or hand applied
# ACOUSTICAL PLASTER

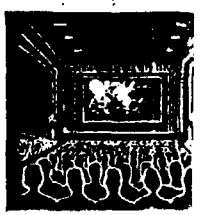


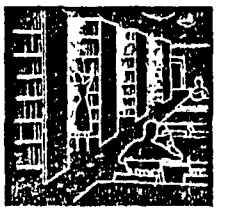












AUDICOTE Acoustical Plaster requires only the addition of water to produce a plastic material which may be hand or machine applied. Since AUDICOTE does not set into a dense, hard mass, but simply dries to form a porous, sound-deadening surface, it develops excellent sound-absorption properties. Basically mineral in composition, it will not support combustion. If spray painted according to U.S.G. specifications, its sound absorbent qualities will not appreciably be affected.

AUDICOTE is readily adaptable to various finishing methods, tinting and incorporation of special aggregates to further increase the design and decorative possibilities. Variety can also be obtained through variation of texturing technique. Many unusual and unique effects can be created by impressing designs into the surface. Inexpensive "glitter" aggregates in the final coat lend a subtle touch of "starlight" to any room.

## WHERE TO USE IT

AUDICOTE is recommended for use on ceilings or wall areas not subject to contact, excessive vibration or high moisture. It is ideal for use in classrooms, churches, offices, auditoriums, theaters, libraries, hospitals; in short, wherever beautiful, sound absorbent fire-proof surfaces are desired. AUDICOTE lends itself perfectly to curving contours and smoothly sweeping surfaces. The uniformity of textures resulting from spray applications make this product particularly suitable for use on large, unbroken expanses of ceiling.

AUDICOTE Plaster's exceptional bonding characteristics allow it to be applied over properly prepared gypsum or portland cement basecoats, monolithic concrete and fabricated concrete units.

## WHY YOU SHOULD USE IT

AUDICOTE Acoustical Plaster avails a *NEW* horizon in the field of sound control—*NEW* because it offers the economy, beauty and uniformity of machine-applied plaster—*NEW* because it can be easily applied by hand or machine in a variety of appealing finishes—*NEW* because it will bond to many types of bases, and any good plaster craftsman can apply it.

Produced and bagged under strict laboratory control, AUDICOTE, a product of research, is your assurance of lasting beauty.

## Here's Proof

**audicote**
ACOUSTICAL PLASTER

**Takes the Nuisance out of Noise!**

AUDICOTE spray applied to ½" total thickness over a gypsum plaster basecoat on metal lath:

| FREQUENCY | SOUND ABSORPTION 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---|---|---|---|---|---|---|---|
| Machine Textured Finish | .26 | .28 | .53 | .67 | .73 | .66 | .55 |

*Reg. U.S. Pat. Off.

**audicote** ACOUSTICAL PLASTER **Paints Beautifully again and again**

*Tests reveal no loss in* AUDICOTE Plaster's Noise Reduction Coefficient after two spray coats of TEXOLITE* Standard Paint, applied according to U.S.G. specifications for painting acoustical plasters. AUDICOTE can also be redecorated easily by direct spray application of a thin coat of AUDICOTE.

**audicote** ACOUSTICAL PLASTER **Lightens and Brightens!**

AUDICOTE Plaster's pleasing Satin White gives light reflection of .65, Special White .70 . . . make any room restful to the eye as well as to the ear.

# audicote* Acoustical Plaster

## SPECIFICATIONS

The following short form specification may be used in the general plastering specifications.

### GENERAL PROVISIONS

General provisions for plastering apply to acoustical plaster application.

### SCOPE

As indicated on drawings, all walls and ceilings shall be finished as herein described.

### MATERIALS

AUDICOTE Acoustical Plaster (Machine Textured Finish) (Stipple Finish) (Trowel Finish) (Darbied Finish) as manufactured by the United States Gypsum Company. Color shall be as selected by the architect.

### MIXING

MACHINE MIXING is recommended. Mix for 5-7 minutes. Clean water and equipment should always be used. Do not overmix.

FOR HAND APPLICATION add AUDICOTE to approximately 48 qts. of water per bag for first and second coats.

FOR MACHINE APPLICATION add AUDICOTE to up to 53 qts. of water for the first coat; for the second coat, approximately 68 qts. shall be used. More or less water may be used in the finish coat to give the desired texture.

## APPLICATION

HAND APPLICATION—The first coat shall be applied by firmly scratching in to approximately 3/8" thickness, and immediately doubling back to a full 3/4" thickness. This coat shall be left smooth and level for application of the finish coat. The finish coat shall be applied over the partially dry first coat, by scratching in and immediately doubling back to a 3/4" thickness. After finish coat has taken up sufficiently, it may be stippled, stipple-perforated, floated, darbied or trowelled to produce the desired finish.

MACHINE APPLICATION—First coat shall be applied to a full 3/4" thickness, and leveled to a true and smooth surface for the finish coat.

The second coat shall be applied over the partially dry first coat to 1/8" thickness, using pump pressure, air pressure, nozzle adjustment and the amount of water necessary to give the required spray texture.

On low suction bases such as monolithic concrete three coat application may be necessary; allow first coat to dry completely to provide suction for succeeding coats.

*CAUTION—Allow AUDICOTE Acoustical Plaster to dry naturally, furnishing proper heat and ventilation in slow drying weather. Avoid fast or uneven drying which may result in excessive fissuring. Large fissures should be filled and leveled prior to application of the finish coat.*

## AUDICOTE ACOUSTICAL PLASTER TECHNICAL DATA

| FINISH | LIGHT REFLECTION (1) | HEAT INSUL. K. FACTOR (2) | SOUND ABSORPTION FREQ. (3) 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---|---|---|---|---|---|---|---|---|---|
| MACHINE TEXTURED | SATIN WHITE .65 | .50 | .26 | .28 | .53 | .67 | .73 | .66 | .55 |
| | SPECIAL WHITE .70 | | | | | | | | |

(1) Light reflectance from tests at an independent recognized laboratory. (2) Heat insulation data from tests at USG Research laboratory. (3) Sound absorption from standard tests at a recognized laboratory.

### RELATED INCLUSION (FOR CONCRETE SPECIFICATIONS).

Where AUDICOTE is specified for application directly to monolithic concrete, ends of bar chairs shall be either galvanized or painted with rust inhibitive paint. Other raw steel in the exposed surface of the concrete shall be held to a minimum.

### OPTIONAL INCLUSION (FOR APPLICATION OF AUDICOTE OVER POURED MONOLITHIC CONCRETE).

(*Note: to be included in the specifications when there is* unprotected raw steel in the surface of the poured concrete.)

Prepare a mixture of four parts of mixed AUDICOTE and one part of lime putty by thoroughly blending on a mortar board, (not in a mixer). Hand apply this mixture as a tight scratch coat, not more than 1/8" thick, making certain that the entire surface is uniformly covered. Follow immediately with the first coat of AUDICOTE in accordance with the appropriate specification above.

### OPTIONAL INCLUSION (FOR APPLICATION OF AUDICOTE OVER PRECAST STRUCTURAL CONCRETE UNITS).

Pre-cast structural concrete units must be firmly anchored and supported so that individual units will not move or vibrate in relation to adjacent units.

All joints or other surface irregularities shall be filled with a non-shrinking, quick-setting gypsum patching material, such as RED TOP* Patching Plaster or RED TOP #1 Moulding Plaster, and trowelled smooth and flush with the surface of the concrete units. AUDICOTE shall be applied in accordance with application specifications above.

### PAINTING AUDICOTE ACOUSTICAL PLASTER

Remove all loose dirt or dust by use of a vacuum cleaner with hose and brush attachment.

Paint shall be TEXOLITE Standard.

The first coat shall be mixed one part of TEXOLITE Standard Paint to one part water by volume.

Second coat, if required, shall be mixed one part of TEXOLITE Standard Paint to two parts water by volume.

Paint shall be spray applied, using sufficient nozzle pressure and application technique to insure uniform coverage of the AUDICOTE surface, without building up unnecessary thickness along the area of joinings.

Allow at least over-nite drying between coats. Under slow drying conditions, allow additional drying if necessary.

*Reg U.S Pat. Off.

UNITED STATES GYPSUM

the greatest name in building

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PRINTED IN U.S.A.

## U.S.G. ACOUSTICAL PLASTERS

| | | AUDICOTE* | HI-LITE* |
|---|---|---|---|
| TYPE, CHARACTERISTICS, AND COLOR | | NON-SETTING MATERIAL, HARDENS BY DRYING. COMPOSED OF BENTONITE CLAY, PERLITE, *AND OTHER POROUS MATERIALS.* ACOUSTICAL PROPERTIES DEVELOP BY NATURAL FISSURING. AVAILABE IN SATIN WHITE AND SPECIAL WHITE. | SETTING MATERIAL. COMPOSED PRINCIPALLY OF LIME AND KEENES CEMENT. ACOUSTICAL *PROPERTIES DEVELOPED ONLY* BY MECHANICAL OPENING OF THE SURFACE. AVAILABLE IN WHITE. |
| METHOD OF APPLICATION - TYPES OF FINISH - | | MACHINE SPRAY, HAWK AND TROWEL. MACHINE TEXTURED FINISH, TROWEL FINISH, FLOAT FINISH, STIPPLED FINISH, OR STIPPLED-PERFORATED FINISH. | HAWK AND TROWEL (NOT RECOMMENDED FOR MACHINE USE.) STIPPLED FINISH, OR STIPPLE-PERFORATED FINISH. |
| WHERE TO USE - | | OVER A FULL GYPSUM PLASTER BASECOAT, PORTLAND *CEMENT - LIME BASECOAT,* OR MONOLITHIC CONCRETE. | OVER PROPERLY PREPARED GYPSUM OR PORTLAND CEMENT - *LIME BASECOATS.* CAN BE USED IN AREAS OF RELATIVELY HIGH HUMIDITY, SUCH AS CEILINGS OVER SWIMMING POOLS. |
| TECHNICAL DATA | N.R.C. | MACHINE TEXTURED - .55<br>*HAND FINISHED - .60*<br>(ALL MACHINE APPLIED ACOUSTICAL PLASTERS DENSIFY WHEN SPRAYED, REDUCING THEIR N.R.C.) | STIPPLED - .60<br>*STIPPLE-PERFORATED - .60* |
| | # OF LIGHT REFLECTANCE | SATIN WHITE .65<br>SPECIAL WHITE .70 | STIPPLED - .80<br>STIPPLE-PERFORATED - .77 |
| PAINTABILITY AND DURABILITY | | TESTS SHOW NO LOSS OF SOUND ABSORPTION AFTER TWO SPRAY COATS OF TEXOLITE+ PAINT. MAY BE SPRAYED WITH A THIN COAT OF AUDICOTE. FOR USE IN AREAS NOT SUBJECT TO ABRASION. | ON STIPPLED-PERFORATED FINISH, NO LOSS OF SOUND ABSORPTION *AFTER FOUR SPRAY* COATS OF TEXOLITE. HAS MAXIMUM PAINTABILITY, HIGHLY DURABLE, NOT EASILY DAMAGED BY ABRASION. |
| ADVANTAGES | TO ARCHITECT | ECONOMICAL AND VERSATILE. VARIETY OF FINISHES. INCOMBUSTIBLE. EASILY REDECORATED. GOOD SOUND ABSORPTION. | HIGH LIGHT REFLECTION. HIGH DEGREE OF PAINTABILITY. CAN BE USED OVER PORTLAND CEMENT. EXCELLENT SOUND ABSORPTION. INCOMBUSTIBLE. HIGHLY DURABLE. SOLD BY SQUARE YARD INSURING CORRECT AMOUNT OF MATERIAL. |
| | TO CONTRACTOR | EASE OF APPLICATION. UNIFORM RESULTS. LOW COST AND HIGH COVERAGE. LESS *SHRINKAGE THAN OTHER COM-* PETITIVE TYPES. SOLD BY THE BAG. | EASE OF APPLICATION. UNIFORM RESULTS. LOWER COST THAN COMPETITIVE MATERIALS. *HIGH QUALITY JOB.* |

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

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