

BUSINESS

PLAINTIFF'S EXHIBIT

USG-987



BB024 1657

Lift The Ceiling on Learning With a New C



"ALLEGATIONS TO THE AMERICAN FLAG

in which it stands"

Little Mary came home from school and repeated her newly learned pledge to the flag. It was the funniest thing her family had heard in a long time. They added it to their "bright-sayings-of-Mary" collection, and everyone laughed.

Yet in reality it was tragic. Little Mary, in her formative years, learned by sound. She repeated what she had heard in a classroom that was so poor acoustically that uttered sound was distorted before it reached the pupils. Poor acoustics put a ceiling on Mary's ability to learn.

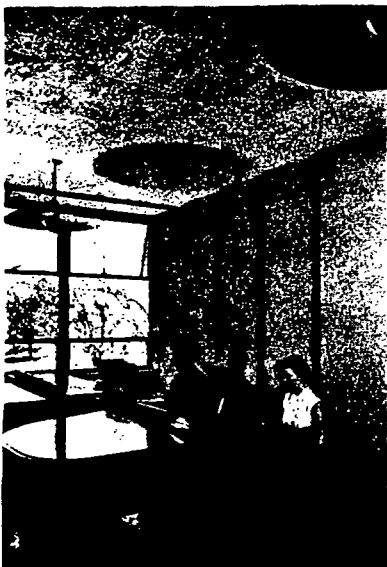
In-school learning at all age levels is largely learning by hearing. Only correspondence schools teach by sight alone.

You can lift the ceiling on learning imposed by poor acoustics, with a new ceiling of incombustible, sound controlling ACOUSTONE mineral tile. Such treatment is equally available to existing structures, and to buildings being planned or built.



School libraries, for the lower grades, develop concentration and study habits that are of benefit throughout a person's life. In Roosevelt Elementary, Moline, Ill. ACOUSTONE mineral sound quieting tile on the ceiling encourages this condition of study quiet.

ACOUSTONE mineral tile applications at University of Arkansas by Harry G. Barr Co., Fort Smith, Ark.



Left: All instrumental teaching and practice studios of University of Arkansas music department, located in their new Fine Arts building, are treated with sound quieting tile. Partitions are designed to reduce sound transmission.



Above: The double-decker fine arts library in the handsome new Fine Arts building, designed by architect Edward Stone of NYC for the University of Arkansas (in his native Fayetteville), is easy on eyes and ears because of the light reflective, sound absorbent mineral acoustical tile ceiling.



Greig & Briggs, architects, Peoria, Ill.
Watson Engineering Co., Peoria,
acoustical applicators

Hedrich Blessing photographs.

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iling at School



Above: Corridors, lacking soft furnishings, are echo chambers, (see page 7) and the noise of moving, talking children is multiplied by reverberation. ACOUSTONE mineral tile makes the ceiling surface highly sound absorbent and reduces the noise that can penetrate and be disturbing in classrooms.



Far left and left: This library of Bradley University, Peoria, Ill. is beautifully contemporary in appearance and in function. Notice how well ACOUSTONE mineral tile serves both, and how it adapts to this type of structure as well as to more traditional settings also shown on these pages.



Above: Boys will be boys, and boys will make noise, in school and out. Roosevelt Elementary at Moline, Ill. recognized the fact even to the extent of installing sound quieting tile in the washrooms.

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SCHOOL ACOUSTICS

check list

Acoustical contractors are careful salesmen. They are sincere in their desire to avoid over-selling. They often tell a customer that his needs will be equally well served by less acoustical tile than he is willing to buy. They recommend ACOUSTONE mineral tile or AUDITONE fiber tile only when an area benefits from its acoustical properties as well as its appearance.

The following check list is presented in the same spirit. In existing buildings, improvement with acoustical tile is often a progressive thing. It starts in one area, and because the improvement is so noticeable and desirable, future orders are received to spread its use over an entire structure. The check list which follows is a guide to areas in schools where sound control materials are most profitably installed. For a progressive job they are in a general order of preference and importance. Follow this list in the order indicated and the acoustical benefits will be cumulative.

- **AUDITORIUM** A logical starting point, because an auditorium is worthless if its acoustics are poor.
- **CAFETERIA AND KITCHEN** Meals digest better, and a lunch hour is more refreshing if surroundings are quiet.



Girl's Preparatory School, No. Chattanooga, Tenn., brings quiet to its corridors and cafeteria with AUDITONE fiber tile. AUDITONE has a distinctive slotted pattern, and is acoustically the equal of other tiles which sell at greater cost.

The Currin Co., Chattanooga, acoustical applicators.

- **CORRIDORS** School corridors carry heavy traffic at certain periods, and because they are often tunnels of hard surfaces, the noise factor is high and disturbing. When properly treated acoustically the feeling of quiet present is a deterrent to thoughtless boisterousness.
- **CLASSROOMS** Students don't learn what they cannot hear or understand, and poor acoustics can defeat the entire purpose of classroom study. Classrooms and practice rooms, and industrial arts shops are "musts" in school economics.
- **LIBRARY** Student libraries often have a noise problem created by irrepressible occupants—a noise problem which can be minimized by use of acoustical tile on ceiling surfaces.
- **GYMNASIUM** An echo chamber supreme, in which loud voices and noise is the rule rather than the exception. Acoustical treatment can reduce noise to low levels which present no interference with instruction or study in other rooms.
- **SWIMMING POOL** Tile, water, glass: all are highly reflective of sound, and all are present in a swimming pool room, where there is much verbal exchange. Acoustical tile lowers the noise level so the instructor may be fully understood by his class. PERFATONE metal pan tile or perforated asbestos board is especially suited to the high moisture conditions which swimming pool areas provide.



Home is a HAVEN



Home of Dr. & Mrs. Ray Balyeat, John B. Hobbs & Co., interior decorators. ACOUSTONE mineral tile applied by Denman Floors Co., Oklahoma City.

Jones & Duncan, architects
Anning-Johnson Co., acoustical applicators, Chicago.

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Kitchens are usually devoid of "soft" adornment, and contemporary planning often leaves the kitchen open to dining or other areas of the house. This makes a sound quieting ceiling highly desirable. In the Walter Ramsey kitchen, Portland, Ore., AUDITONE fiber tile does an attractive job of providing kitchen quiet.

Darrel Harbart, architect
Emert & Zednik Co., Portland, acoustical applicators

MOTIF'D ACOUSTONE adds extra appearance value to this living room in the Oklahoma City residence of Mr. and Mrs. John F. Eberle.



Sorey, Hill & Sorey, architects. Denman Floors Co., acoustical applicators

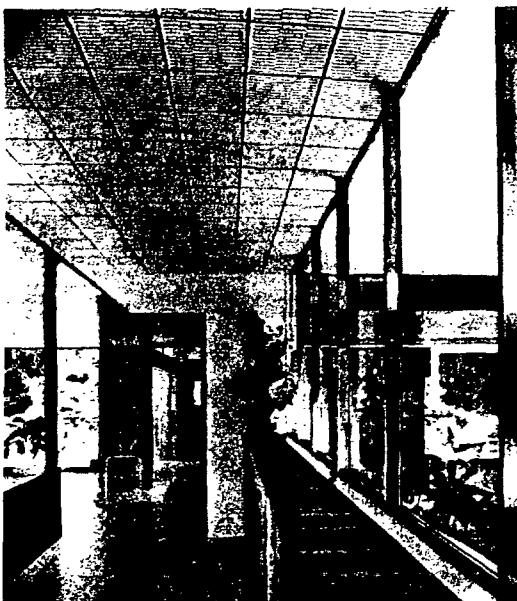


In this recreation room of Mr. and Mrs. Theodore Thornton, Hinsdale, Ill., fine music can be enjoyed at its finest, because of the acoustical ceiling treatment and the equipment provided. High fidelity radio and record playing equipment has been gaining increasing popularity, and can be acquired at relatively moderate cost by buying and hooking together a tuner, amplifier, record changer and speaker. These components can be acquired from local radio parts stores in larger cities or by mail through any one of several radio equipment companies. When properly housed, tone production is superior to most commercial sets. The two cabinets shown here (one is the speaker) are adapted from sliding door cabinets introduced by our sister publication POPULAR HOME magazine. These cabinets are shipped completely cut, drilled and sanded from beautiful hardwood plywood. Information about radio component combinations and the cabinets is available from SOUND BUSINESS, 300 W. Adams, Chicago.

or Quiet

HOUSES ARE usually full of soft things—carpeting, draperies, upholstered furniture. In many cases these items take care of the sound control problem. However there are rooms at home which can be improved immeasurably by a sound absorbent ceiling. Some are pictured here.

Richard Neutra, architect—R. E. Howard Co., Los Angeles, acoustical contractors.



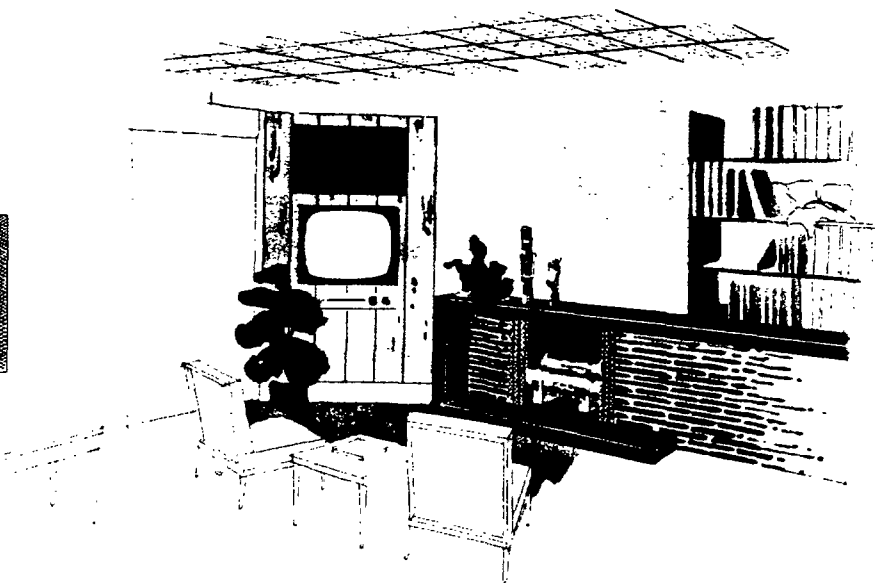
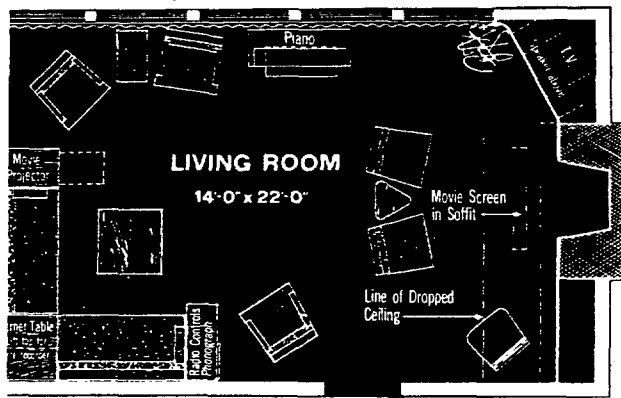
AUDITONE fiber tile is used both for beauty and the quiet tranquility it supplies in this residence near Los Angeles.



The SOUND BUSINESS high-fidelity radio

Far left: Recreation rooms often boast large glass areas and floors covered with hard tile-like material or handsome wood which is left uncarpeted. This makes a noise problem, especially considering the nature of use made of these rooms. Acoustical tile provides fine appearance and effectively reduces noise. Three examples are shown here, using ACOUSTONE mineral tile on the ceiling.

Left: Home of Mr. and Mrs. S. J. Hammerman, Glencoe, Ill. The acoustical ceiling is an especially good complement for obtaining best results from the built-in high-fidelity radio and television equipment. (Turn page for more on this subject.)



A Concert Hall AT HOME

Radio television and recorded sound, have brought the concert hall into the home. To some people this means nothing. Other millions of people find their greatest pleasure in music either as a "spectator" or as a participant.

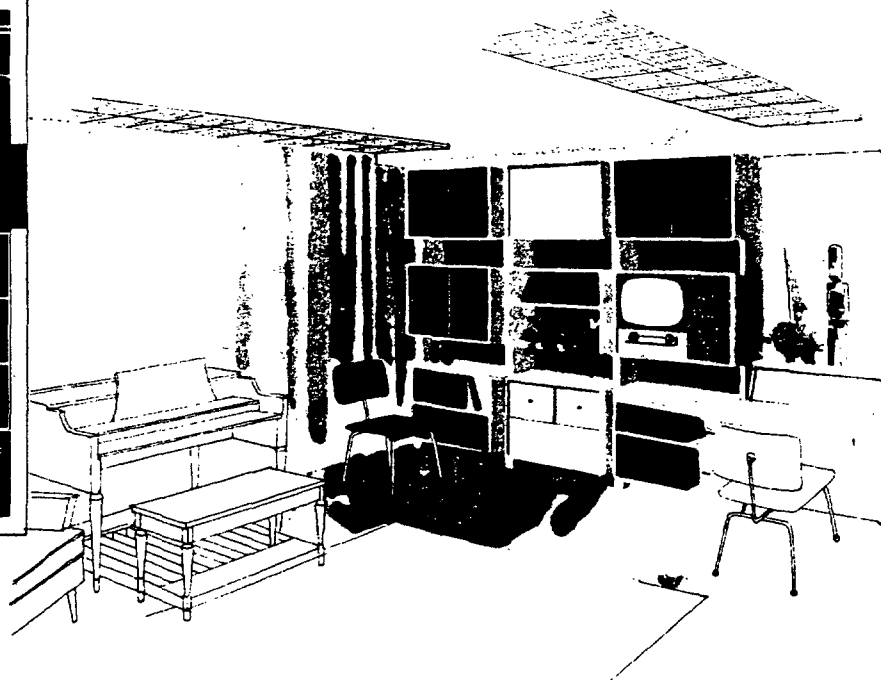
This page is for these latter millions. It suggests how a room in almost any home, large or small, can be made to serve the interest of a music loving family.

Two solutions are shown here. One converts an extra bedroom, either upstairs or down, into a so-called music room, and yet allows it to retain its usefulness as a guest sleeping room. The other shows how a living room can serve its owners' musical taste as well as serve the many uses to which living rooms are traditionally devoted.

Study them carefully in all of their detail. See how acoustics can be controlled in these rooms with sound quieting tile to make them serve all functions better. And note especially how economically the finest in music can be achieved in the home. This is no sport restricted to kings. Fine music is no more costly a hobby than photography or woodworking or many other pursuits of leisure hours.

If the living room is to be the center of music interest, this may be the answer to its arrangement. Speaker for the high fidelity radio and television screen (if desired) are part of an angled wall which directs their entertainment to the principal seating area. Controls for radio-phonograph are located at the seating area, as is a motion picture projector found in an end table, mounted on a swing-up board like a typewriter. The screen drops from behind a baffle board. For good listening the ceiling is ACOUSTONE mineral tile.

The spare bedroom can become a haven for the music minded, and still serve as a guest sleeping room. Here is one that has been so converted. Equipment is optional, but we show an electronic organ, and a wall of cabinets which includes the control and speaker units of the SOUND BUSINESS high fidelity radio unit described elsewhere. Sound is controlled by area covered by sound absorptive material. In a small room such as this, covering the first two or three rows around the perimeter of the ceiling of the room gives almost as much sound absorption as covering the entire ceiling area. Here these strips are done in AUDITONE fiber acoustical tile. The center area, a sound reflective surface, helps distribute speaker tone.





Control Corridor Confusion with Acoustical Tile

HENRY RUSSELL'S *SENTIMENTAL Halls of Ivy* immortalizes in song the "echo through the years" associated with the corridors of alma mater. Alma mater's halls are fast losing their echo, however, with the steady advance of acoustical tile in schools and the corridors of all types of public buildings. It is well that this is so.

Corridors lack soft, sound absorbent decorative materials. Floors are hard surfaced material designed for heavy duty wear. Walls have smooth hard surfaces to facilitate cleaning. This is the perfect condition for sound reflection—reverberation—unless there is present an acoustically absorbent material on the ceiling, and if possible, on the upper walls.

The noise of milling crowds and many voices, which is present at high traffic periods in any corridor area, can be extremely disturbing when increased by reverberation. Even footfalls of a single person are multiplied to disturbing noise levels in an untreated corridor.

Corridors and lobbies are good starting points for acoustical treatment in an existing building whether it is school, office structure, theater, apartment or hospital.

Left: Milwaukee Sports Arena, Eschweiler & Eschweiler, architects, Insulation Service Inc., Milwaukee, acoustical applicators.

Left below: Florsheim Shoe Co. plant, Chicago, Shaw Metz & Dolio, architects, ACOUSTONE mineral tile installation by Anning Johnson, Chicago.

Below: Bradley University Library, Gregg & Briggs, architects, Watson Engineering Co., Peoria, Ill., acoustical applicators.



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ELMER H. JOHNSON, Editor

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Noise Abatement Week

APRIL 13-19, 1952

A Nationwide Observance of the Effort to Suppress Noise
Sponsored by the National Noise Abatement Council

Noise Causes Fatigue

We never completely adjust ourselves to noise. Repeated noise causes fatigue, mental discomfort, decreased efficiency.

Noise Costs Money

Noise costs American business thousands of dollars a day in errors, accidents and decreased efficiency.

Noise Robs You of Sleep

Noise at night causes unnecessary mental activity even when asleep, robs you of rest.

You can help abate Excessive Noise

At home by keeping radios at low volume, by speaking quietly, by keeping parties quiet.

On the street by using auto horns only on necessity, by encouraging use of quiet surface cars and other vehicles through support of local noise abatement societies.

At work by use of sound quieting materials, acoustical tiles, sound dampeners on machinery, personal restraint.

We can help you with your personal noise problem—at home, at work, at school, at church. Call us for aid with acoustics in every type of structure.

TRAFFIC—Trucks, Horns, Cut-Outs, Brakes, Buses, Motorcycles

TRANSPORTATION—Elevated, Street Car, Subway Trains

RADIO—Homes, Streets, Stores

WHISTLES and BELLS—Factory, Locomotives, Tugs

CONSTRUCTION—Riveting, Pneumatic Drills

VOCAL, ETC.—Newsboys, Peddlers, Noisy Parties

ALL OTHERS

BARKING DOGS

NOISES THAT ANNOY

HISTORICAL FILE

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