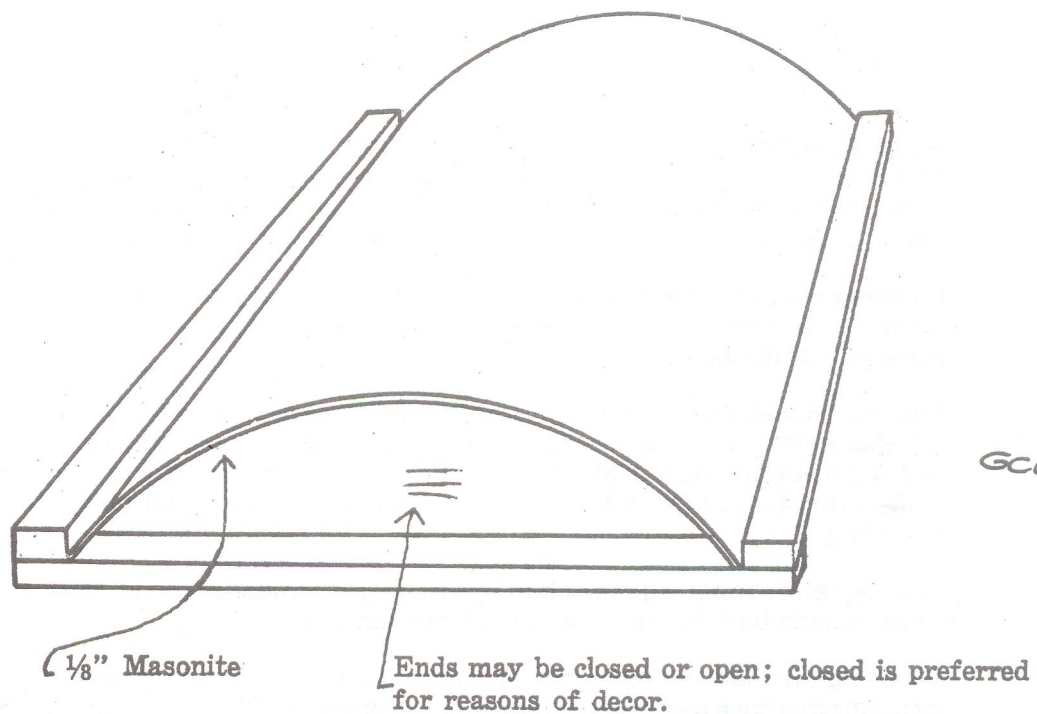


PWK 750427

Sketch of one of Dr. Boner's "polycylindrical surfaces" for improving room acoustics.



It is suggested that random sizes, depth of bow, location and orientation be used such as:

4' x 8' with 7 to 11' bow,  
3' x 6' with 5 to 9" bow  
3' x 4' etc.

and that about 5 to 10% of wall surface be covered.

To accompany DOPE FROM HOPE  
Vol. 1, #4 Dec. 1960 and  
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Room acoustics can affect the overall quality of a sound reproducing system. This should go without saying. Yet, it happens some times that a fine system is installed in a poor environment and the system is blamed. One such room, nearly 50 feet long and 15 feet wide, resembled an overscaled tibia pipe.

I recently tried to demonstrate a speaker system in a room with excess treble damping. The bass was excessive at all points in the room and piled up especially at the back of the room.

I have a 16 x 25 foot studio which exhibited excessive bass. I tried damping material which made it worse. I reduced the damping and put up 300 square feet of convex cylinders of Masonite ranging in size from 3 x 4 feet to 4 x 8 feet bulged from 4 to 15 inches. The room is excellent for play-back and tolerable for recording.

One can tell if a room is good or bad by listening to someone talk in it. If natural voice sounds bad, its reproduction will be bad, too.

Choosing the room for a good sound system appears to require a preference for rooms that have a length to breadth ratio of less than 8.5. I still prefer to put a stereo array on the long wall in most cases. A ratio of 6.5 is preferable to one of 8.5.

Room treatment is the subject matter of "Acoustical Design of Broadcasting and Recording Studios", The Celotex Corporation, Chicago 3, Illinois. The means and methods appear to me to be as applicable to homes as to studios. You should order a copy of this paper and use it as an aid to your clients.

I would appreciate experiences of each of you; it is my plan to "build a file" of these experiences and try to make them available to all. For the time being, this will be on a basis of "on request" but eventually if there is sufficient interest, I will try to produce it as a bulletin.

**Paul W. Klipsch, Editor**