

"more than one in four office workers complains about lack of privacy on the job."

Beyond Four Walls and a Door, 2001

The control of open-plan acoustics is a matter of control over three acoustical problems: sound level, speech intelligibility, and sound paths.

#### Sound Level

It's not necessarily loudness that is a problem; it's distraction from other people.

#### Speech Intelligibility

A conversation can be heard from 32 ft (9.7m) away. There needs to be control over all the spreading sound waves.

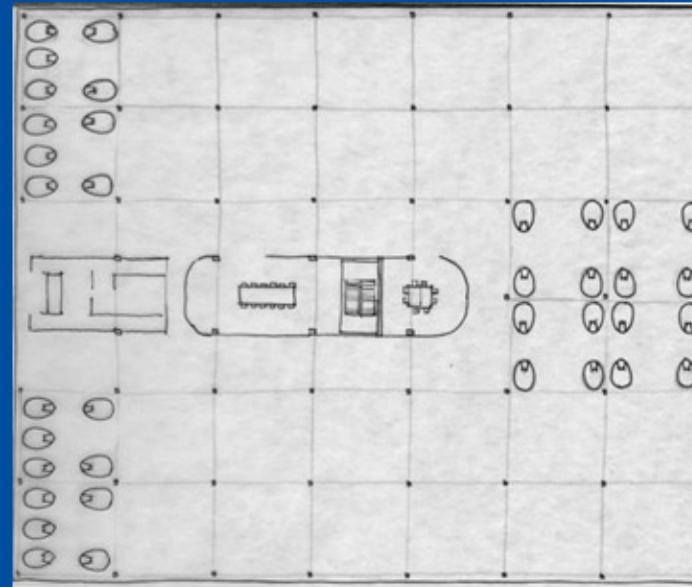
#### Sound Paths

Sound waves spread out everywhere.

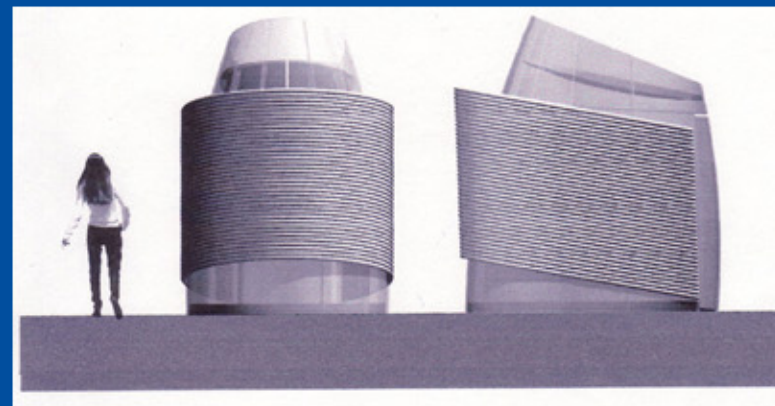
"Controlling the speech privacy of an open-office plan space require a systems approach that takes into account all acoustical components of the space. Those components include room dimensions; placement of windows and doors; workstation size and configuration; ceiling height and absorbency; wall and floor absorbency; sound-masking system; and panel height, absorbency, and sound blocking."

Speech Privacy Goal	What's Heard	What's Needed
Interzonal (confidential) Privacy	10 percent of what's said in next workstation	Perfect coordination of all architectural, furniture, and planning elements for best balance of panel height, sound absorption, sound blocking, and sound masking
Zonal privacy	50 percent of what's said in next workstation, but less than 10 percent from two workstations away	Very sound-absorbent ceiling, good sound-masking system, and appropriate sound-blocking panels
Regional Privacy	Nothing too disturbing (20 to 30 percent of what's said two workstations away, and less than 10 percent from 40 to 60 feet away)	Adequate sound absorption in ceiling and sound blocking in panels, and some masking (either electronic or from heating and ventilation system)

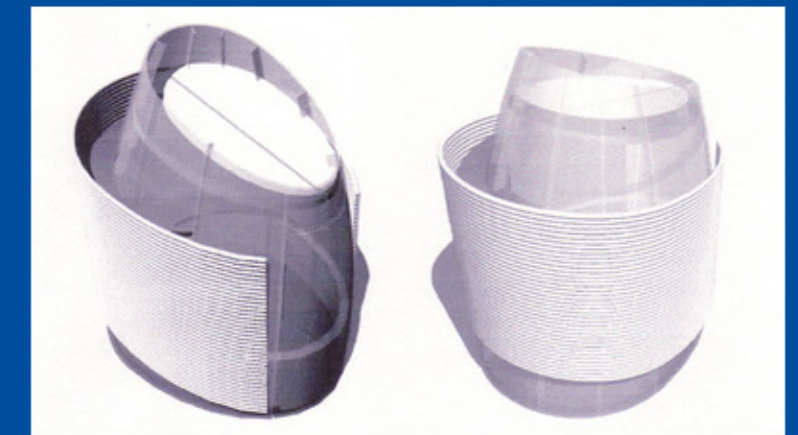
It's A Matter of Balance, 2002, www.hermanmiller.com



hypothetical open-office plan



Design Issues: v 18, n 3, summer 2002



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