

## Document

### "Hey, keep it down!"

Behold, the original sound-control system: the sock. Unfortunately, applying this early technology to the usual source of the problem -- that is, the mouth of a colleague -- can be detrimental to office decorum. Tired of dingy offices and top-down communication, the working world welcomes the open, consultative workplace. Nevertheless, it needs to overcome at least one unpleasant side effect: noise.

[Steven Brown](#)  
Steelcase Biography

"But noise, like beauty, is in the ear of the beholder," says [Steven Brown](#), Steelcase's corporate acoustician. "Sounds that help create the environment that fits the activity you're doing are good." Many CAD workers like to listen to music on headphones, for instance. Stock and bond traders work in a culture of noise. Call centre workers need openness and interaction with others nearby to help them learn how to deal with similar problems. And a deadly quiet office will soon drive just about anyone batty.

#### Old problems are quieting down

Old problems with noisy office equipment are actually getting better. "Laser printers are quieter than the daisy-wheel; faxes now often go directly from computer to computer and e-mail isn't intrusive at all," says Brown. "A lot of these problems are quieting down."

So what kind of sound bugs us? "Irregular sound," says Brown. "And the worst offender is the human voice." Ah yes, the office loudmouth. But others can annoy us, too, if we're trying to do something other than listen.

But in the interests of teamwork and collaboration, we want to down walls, not build more. So what's the answer?

#### Step One: The Plan

Recognize that you can't have total privacy and total interaction in the same space at the same time. There's places for everything and your plan should point them out:

- Separate noisy, distracting areas from places where people need to concentrate. Put teams together.
- Realize that if people can see each other, they'll hear each other even if they are not facing. Therefore,

minimize direct sight lines, says Brown, "unless you actually want them to hear each other."

- Now comes the tricky part: plan a range of higher privacy areas where people can carry out tasks needed to support their teams. "The art and skill is in providing transition areas," says Brown, "introducing Personal Harbor® workstations, providing choices and understanding what degree of privacy and interaction is needed for different tasks at different times."

### **Step Two: Ceilings, Walls and Carpets**

Acoustical ceiling tiles and wall coverings are critical to open-plan workplaces because they minimize sound reflection. Carpet keeps down the pitter-patter of big feet and high-heels -- and gives offices the professional ambiance of privacy and concentration that will keep voices low.

### **Step Three: Furniture**

Open-plan furniture, especially panels, should absorb and block unwanted sound. Panels should also be the right height to contain sound or allow people to speak over them. "If you can see over them, you can hear over them," says Brown. The minimum height is 135 cm (53 inches) -- 165 cm (65 inches) for normal privacy. After 190 cm (75 inches), there are diminishing sound-blocking returns.

And now for an expert resolution to the pinboard argument: Do cartoons and memos ruin sound absorption when pinned to acoustical panels? "I have them myself," says Brown. "A few won't do much harm."

### **Step Four: Sound-Masking Systems**

Often called "white" or "pink" sound, sound-masking systems introduce sound at the same frequencies as the rest of the office's hum of activity. Generally, you don't notice it. But in total silence, it sounds something like low-level air conditioning. This masking sound helps in open-plan offices where privacy is important and the ambient sound isn't otherwise enough to cover nearby speech.

### **Last Question**

Everyone respects the need for quiet concentration. Will we ever again achieve privacy in the workplace? "It depends on the degree of privacy you're aiming for," says Brown. "If you want high collaboration and less privacy, you can choose a more open, interactive office design. If you want less interaction, you can choose a more separated cubicle design. We all have to acknowledge that people don't work just one way anymore."