

# Researchers Create Noise-Cancelling Windows



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Anyone living in an urban setting where they are situated close to so many other people, establishments, and perhaps even the everyday activities that generated a lot of noise will be familiar with the challenges of finding some peace and quiet. Researchers might have finally found a solution to this problem with the creation of noise-canceling windows.

The new engineering marvel comes from Nanyang Technological University researchers, who appear to have created a device that can be placed on window grilles that are capable of reducing the amount of noise coming in by as much as half. According to a [press release](#) regarding the discovery, the device supposedly used a technology called "active noise control" that is also present in products like noise-canceling headphones.

When taking out all of the technical jargon, the device basically works by using soundwave technology to cancel each other out. There are speakers and microphones on the device, which emit waves that match the sound that is coming from outside. As a result, it creates a barrier where the waves turn on each other, thus creating nothing but ambient noise.

All of this takes place in real-time, as well, which is a feat of engineering that can be difficult to fathom. Small, structured, and targeted products like headphones are one thing. Providing the same kind of noise-canceling capabilities to an entire room is something else entirely.

Of course, all of this has yet to be proven. As [Futurism](#) notes, the prototype only applies to one window, for now.

There are still challenges that need to be addressed, starting with reducing the size of the device so that it doesn't look too cumbersome when mounts on a window. Some people prefer architectural soundness rather than actual peace and quiet, after all.

There's also the matter of the price. Noise-canceling headphones are already quite expensive. Applying the same technology to an entire room or building might prove incredibly costly.