

The New York Times

The Dream of Absolute Quiet By PENELOPE GREEN

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JONATHAN PRAGER is a 40-something Manhattan comedian and singer whose life experience and worldview, like those of many other comedians, are semitragic. Certainly, his quest to find a quiet home has been laced with pathos.

His last apartment, he said, was a living hell. He could hear the squeak of his neighbors' faucets, the ring of their phone and the clatter of the plastic marbles their child would drop on the floor.

But Mr. Prager is made raw by all manner of city noises, from the squeal of a bus's brakes to the bell the subway door makes when it closes (let's not even talk about its brakes), from a jackhammer's drill to the gum-chewing of the couple behind him at "The Drowsy Chaperone" the other night.

(He has a house in Connecticut, but he said he found no peace there, either. There are lawn mowers and leaf blowers and a neighbor's pool with a noisy filter.)

"I'm sensitive to noise, emotions, electromagnetic vibrations," he said. "You name it, I'm sensitive to it."

In searching for a new apartment, he confounded brokers, he said, by rejecting sweeping city views or abundant light because he could discern the sound of the place's elevator or the whir of rooftop equipment. He vetted his new home in a new building on the Lower East Side by wheedling his way past the super on successive visits to "just lie on the floor and feel and hear what it's really like there."

Broker-attended visits are easier, but brokers are always on their cellphones, he explained. This apartment is free of upstairs neighbors, by virtue of being on the top floor. Yet despite his due diligence, some issues have arisen since he moved in a few weeks ago.



Photo Illustration by Josef Astor

"There are vents in the hallways through which air is sucked," he said, "and that sucking noise is pretty loud." And the construction work down the block is louder than he had imagined.



Don Hogan Charles/The New York Times

Mr. Prager eschewed Mason Wyatt's remedy, acoustical wall panels called Silent Pictures, right, and has decided to try to live with the noise in his new apartment.

He has worked his way in and out of solutions: CitiQuiet, a New York sound-insulating window company, gave him an estimate for his floor-to-ceiling windows that came in at \$10,000, rather steep for a rental. Then he consulted Mason Wyatt, a deep-voiced Southerner with a noise treatment practice called City Soundproofing, who cautioned against a full-on sound isolation package, again, because the place is a rental. Instead, he suggested his Silent Pictures, acoustical panels that can be hung on a wall like art, which start at \$20 a square foot.

"But my girlfriend was like, 'We don't want pieces of fabric-covered wallboard on the wall,' " said Mr. Prager, who paid Mr. Wyatt \$300 for a consultation.

Like many before him, Mr. Prager was learning that domestic sonic bliss might be attainable, but at a price. Quiet has always been a luxury in cities. In New York, "neighbor noise" competes with outside noise to make noise complaints the No. 1 reason people call the city's environmental complaint line.

Today quiet is even more elusive. With dozens of new buildings still on the drawing board in Manhattan and around the country, owners of new glass condos are recoiling in horror from the sonic fallout of the next glass tower being built down the block, or the roar of traffic heard through those beautiful glass walls. (Watch for New York City's revised noise code, in place by July 1, which will put the onus on developers "to develop a noise mitigation plan prior to commencing work," said Natalie Millner, a spokeswoman for the city's Department of Environmental Protection.)

This is why sales of sound-insulating windows at CitiQuiet are up 50 percent from two years ago, to over 10,000 windows in the last year, said David Skudin, the company's

president, who added that he has been outfitting glass towers like the Urban Glass House and the Bloomberg Building for wiggled-out new residents.

And quiet is now the consummate domestic prize in the ever-expanding exurbs, where family members rattling around in cavernous great rooms and pursuing separate amusements -- their TiVo'd movies, their ping-pong Xboxes, their YouTube-blaring computers -- are driving one another crazy.

Ethnographers at Owens Corning have noted that families in new homes are "having more stress and changing their lifestyles as a result of all the interior noise," said Harry Alter, a senior engineer at the Owens Corning science and technology center, explaining why his company cannily created and began marketing insulation products last year under the name Quietzone Noise Control Solutions. (Their trademarked slogan: "Volume control for the home.")

"You had moms that would go into a bedroom closet to read a book," said Portia Ash, the business manager for residential noise control at Owens Corning. "People with home theaters who couldn't use them after certain hours because the kids were asleep. People who were working at home who were relegating their kids to the basement so their noise wouldn't interfere with their ability to conduct business."

These days new houses are noisier than ever, she concluded, because of their open floor plans, the abundance of hardwood floors and minimal carpeting.

The larger and more elaborate they are, the louder they get. Not only are there more activity rooms packed into them, from home theaters to bowling alleys to kickboxing studios (and who among us wants to hear the thwack of a foot against a punching bag at 6 a.m.?), they also run on the sort of powerful -- and noisy -- commercial systems that municipal buildings do.

Naturally, owners of houses like these can afford to avail themselves of the very latest in sonic technology.

Let's examine one very, very large shingle-and-granite-faced house nearing completion on the North Shore of Long Island. It has all the usual flourishes: a sweetheart staircase with a 1,550-gallon fish tank behind it, a Ping-Pong room with a coffered ceiling, a model train room, a shooting gallery, a fencing room, a gym, a theater and a grotto. And, except for that

grotto, each of its 30-odd rooms has been engineered for acoustical privacy, a fancy phrase that means quiet.



Hiroko Masuike for The New York Times
Steve Haas, an acoustician, is using technology to create a sonic retreat in this Fifth Avenue apartment.

Last week Jim Gerold, the house's contractor, and Steve Haas, its acoustician, described Mr. Haas's "treatments": the sound-absorbing plaster systems; the lead-lined Sheetrock and plywood (and the rubber clips and braces that "float" them); the fiberglass-lined ducts; and the range of resilient ceiling materials. Not that you could see any of these things.

"When I do my job well, nobody notices," said Mr. Haas, who speaks quite softly and whose initials spell "SH." He was wearing a dark gray shirt, dark gray pants and a dark gray silk tie with an airbrushed image of a saxophone on it. Mr. Haas's background is as a designer of museum and performance space

acoustics. For the past four years, however, his company, SH Acoustics, based in Milford, Conn., has focused on high-end houses like the one in Long Island, tweaking their many rooms to tame -- this is a favorite word of his -- the sound within them so that their owners no longer have to hear water rushing through pipes, toilets flushing, children running, televisions droning or anything else they would rather not.

Mr. Haas said his company is growing by about 30 percent a year and is now working on about 100 residences, including a 55,000-square-foot house in Australia. His costs, he said, could be anywhere from a few hundred dollars (to soundproof a wall) to six figures, as is the case for the Long Island house.

"For those who want all aspects of their new home conditioned for sound, plan on a 3 to 5 percent upgrade in the total cost of your home," he said. "It helps if people can prioritize, like, 'I want my bedroom to be a haven' or 'I want this home from start to finish to be quiet.'"

While a decorator creates an aesthetic ambiance, Mr. Haas and others like him work on a house's sonic ambiance, making sure that conversation in a living room, for instance, is not too bouncy or "live" -- too much like a noisy restaurant, for example. "Restaurant quality," he said, making air quotes. "We don't want that."

Nature can be noisy, too. Years ago Jeffrey Collé, another contractor who works on Long Island, was asked if he could eliminate the sound of the ocean in the house he was renovating in East Hampton. He had been working with Billy Joel on his sound studio on Shelter Island and had learned a few things about acoustics.

"I applied the knowledge I'd had from Billy's studio," said Mr. Collé, who staggered studs, deployed a lot of lead-filled drywall and made windows using double-plated glass framed with Honduras mahogany. "But I wasn't sure what the result was going to be until the end. And the bottom line was, you couldn't hear the ocean.

"My favorite thing to do was to bring people to the house -- it was all glass and the ocean was right there -- and they would get this look on their face because you couldn't hear anything. They knew something was different but couldn't figure it out until I opened the doors to the roar of the surf. Then they got it."

Anthony Grimani is the president of Performance Media Industries, in Fairfax, Calif., an acoustical engineering company. "I do think people have the right to live in places that have good sound privacy," he said. "Especially high-end residences."

He added, "When we're working on the home theater I always ask: What about the rest of your residence? Does it have a comfortable feel sonically? I think people are more aware than they were 10 years ago," but they don't realize that without acoustic enhancements, "things aren't going to be quiet, no matter how classy the place is."

The cost of sound treatment adds \$3,000 to \$4,000 a room, Mr. Grimani said. "But that's in a new house, while you're building. It costs an arm or a leg if you fix it later."

Acoustical privacy is an investment in mental health, he suggested, offering an evolutionary rationale. "You hear something, and flight or fight kicks in," he said, "and you wonder what or who is creeping up behind you. You think, 'Is it going to eat me, should I run?' Sound is putting you in an evaluating condition all the time, and I would say that's no way to live."

It may also be that quiet is a moving target, and that what's annoying and what's pleasurable comes down to what's in or out of your control.

Mr. Prager, the comedian, tells jokes about how the sound of hard candy being unwrapped makes him crazy and why a white-noise machine could never be a tolerable remedy for what ails him.

"I have jokes about that," he said, "because you know how they use those in therapists' offices? I have to ask the therapist to turn them off, along with their computers -- there's a little fan inside most computers that goes on and that's annoying -- and their air-conditioners. And then I can't concentrate because there is always construction noise."

Construction, he said, follows him around.

Mr. Prager has suffered deeply because of his sonic aversions. Relationships are complicated, he said (though it must be noted that his current relationship is a year old), and he ticked off some reasons: "Music playing in the house or a car makes me agitated," he said. "I have to leave the house if my girlfriend blow-dries her hair. And it's hard for me to go to restaurants because if I'm next to people who are screaming or laughing I can't tune it out, and have to move tables, and that can be very annoying to the person I'm with."

Nonetheless, Mr. Prager has just decided, in defiance of his own inclinations as well as a national trend toward obsessive quiet mongering, to learn to live with the noise.

"My girlfriend said, 'If you can learn to adapt it will make your life better,' " he said. "She said, 'This is not a silent world and you've got to learn to function with noise around.' "

And he really likes his new apartment.

Fingers in the Ears Are the Last Refuge

DO-IT-YOURSELFERS can tweak their sonic ambience in a few ways, said Steve Haas, the president of SH Acoustics, an acoustical engineering concern in Connecticut. But first the problem needs a proper diagnosis.

If sound in the room is echo-y -- or "bouncy," as Mr. Haas said, using a layman's term for "reverberating" -- that signifies an in-room treatment issue.

"Basically you need a way to stop the sound from reflecting around," Mr. Haas said. Hard surfaces like bare walls, wood floors and sleek modern furniture reflect sound. "You need sound-absorbing material," he said, "and that can take many forms." Consider reworking

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Silencing the Home: Not a Simple Business

Soundproofing in residential buildings can be improved by eliminating structures that carry sounds, and by sealing small gaps that let sound waves through. One crucial area is the point where the wall meets the floor.

SEALING

Airborne sound can be reduced by using elastic, acoustical **sealant** where floor and wallboards meet.

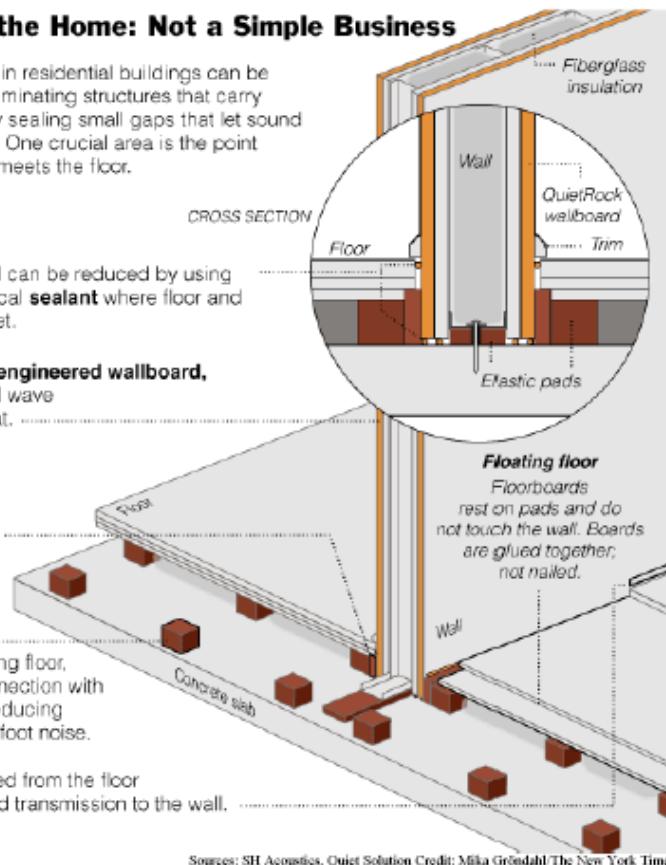
QuietRock, an **engineered wallboard**, converts sound wave energy into heat.

SEPARATING

Soft **perimeter boards** isolate floor structure from the wall.

Elastic pads support a floating floor, eliminating connection with the concrete, reducing transmission of foot noise.

Trim is separated from the floor to reduce sound transmission to the wall.



Sources: SH Acoustics, Quiet Solution Credit: Mika Gröndahl The New York Times

the décor from midcentury modern to English country. Rugs are a good idea (wall-to-wall carpet being the most effective). For truly cavernous spaces, you can break up the sound with "funky chandeliers or hanging light fixtures," he said.

To prevent room-to-room sound transmission, Mr. Haas said, it's important to seal holes and gaps in and around walls with

acoustic caulking that stays pliable. The best thing to do, he added, "is think about adding another layer of standard drywall to a wall or ceiling, or for further improvement, buying a special acoustic drywall called QuietRock that is engineered to damp sound vibrations.

What doesn't work is putting fiberglass panels on a wall," he said. "That only treats the sound in the room." PENELOPE GREEN