

# Electronic Lifestyles<sup>®</sup>

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## Architectural Masterpieces: Living The Dream

### + The Hottest Trends For The Home Environment

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Soundtrap manufactures noise control and acoustic products and specializes in residential acoustics.



# Cutting-Edge Acoustics

Soundtrap takes acoustic design and installation to the next level.

By Krissy Rushing

When I talked with Nick Foulds, CEO of the Canadian acoustics company Soundtrap, I was reminded of why I love the home-entertainment industry so much. It's an industry full of people who are passionate about extracting the best possible experience from movies, sound, music and technology. Foulds is no exception. He was practically bounding through the phone as he told the story of Soundtrap and was audibly energized when he began talking about the science of acoustics.

Soundtrap manufactures noise control and acoustic products and specializes in residential acoustics. It began in the 1960s, when Nick's father, Roger Foulds, was working with the Ford Motor

Company developing quality control for manual transmissions and using acoustic testing to evaluate acceptable noise levels and to make the cars quieter. In the '70s, they moved into the industrial and commercial markets, and in the '90s they began getting demand for residential acoustics solutions, winning the company a prestigious construction award for residential noise control and acoustics.

"We had a client who threatened not to pay the builder if she could still hear her husband talking on the phone in his office," says Foulds. "When we were done, you couldn't even hear the phone ring when the door was closed."

Today, clients who complained of similar sound leakage are using these ultra-quiet rooms to relax, do yoga or read, not to



A custom line of theater furniture, all made locally in North America for quality, rounds out the Soundtrap product line.



mention enjoy a film or two.

Clearly, as technology and home theater evolved, so did the market for residential acoustic design and treatment.

"When builders and architects told us they needed help, we naturally wanted to fill that need. They knew our expertise in the field and from that the business just grew," says Foulds. "You are talking about speakers and subwoofers that produce frequencies from 20 to 20,000 Hz. People need much more than just pipe wrap, resilient channel and fiberglass when you play in this space."

Since the mid '90s, Soundtrap's business model evolved from diagnosing residential acoustic problems to actually manufacturing the acoustic treatments that remedied them. "We used to only do the acoustical design, but then we started finding that a lot of people had issues implementing these solutions, and the acoustic products were just too expensive. Now we manufacture many of our own products and panels, which are surprisingly inexpensive."

Soundtrap has always put a very strong emphasis on research and development, with little spent on advertising because profits are



Nick Foulds at THX Video Training (2010)

pumped back into R&D. That has produced some inroads in areas such as quiet plumbing, quiet furnaces, ductwork, and even the effects of low frequencies and vibrations on the human body.

Aside from acoustics, Soundtrap has also developed proprietary actuator technology that shakes the entire floor instead of just the seats. A custom line of theater furniture, all made locally in North America for quality, rounds out their product line. Most recently, Soundtrap has joined with Ariel Muller Designs Inc. to create intainium, a company that builds pre-engineered home theaters as a cost-effective option to expensive fully custom rooms.

In all their efforts, whether it is product design or reducing waste, Soundtrap has an admirable commitment to the environment. They utilize at least 25 percent recycled products in their wares, and in some cases, up to 100 percent.

"You know how you walk into a theater and you smell something funny? That's formaldehyde. It's a volatile organic compound, which is not good for you, especially in an acoustically sealed environment with re-circulated air," says Foulds.

Soundtrap's products meet the EcoGuard standards for indoor air quality, so clients never have to worry about that funny smell





Soundtrap has joined with Ariel Muller Designs Inc. to create intainium, a company that builds pre-engineered home theaters as a cost-effective option to expensive fully custom rooms.

or its effects on their health. The company even shows installers how to make seating platforms out of their shipping materials.

Where Foulds really came to life, though, was when he began talking about the future of home entertainment and acoustics. The company really is on the bleeding edge of the industry in terms of research. "We often forget about the other senses, and that's where actuator technology came into play. We think that, in time, even scent will play a role in home entertainment. This can all become really fun for the client," he says. "Research is very important for success in this industry."

Foulds, who also guest lectures on noise



Roger Foulds - Industrial Noise Control (1970s)

control and acoustics at local colleges, recounts the story of a client who was in a car accident and developed super-sensitive hearing, in turn causing her severe migraines. The company did acoustical studies on her home to determine that the transformer buzz in the client's VCR was the culprit. "When we unplugged the VCR, the client kissed us!"

What's next for the company?

First off, right after our conversation, Foulds was off to a seminar on acoustic levitation. For now, with THX certification and a fresh CEDIA membership under its belt, Soundtrap looks forward to continuing innovation in the residential home theater market. ■

## Theater Comes Alive



This 21' x 16' x 10' home cinema was designed for a Hollywood producer and had standing waves between 90 Hz and 113 Hz, which Soundtrap eliminated. Reverberation time was 1.21 seconds, which was reduced to 0.60 with acoustical treatments. A Runco 1080P HD projector is located in a hush box outside the room in the adjoining bar, neatly tucked away and hidden in its own cabinet. The entire seating platform is designed to rumble at low frequencies to create the immersive sensation of actually being there, without transmitting into the house and structure. Perhaps best of all, there is no need for a "Night" mode, because there is no transmission of any audible frequencies into the bedrooms and living areas above.

Jeffrey Douglas (Douglas Design Studios) was the lead designer, working in conjunction with Soundtrap.

## Hear No Evil



This 24' x 13.5' x 10' home cinema was designed for a local Toronto business owner and had standing waves at 113 Hz and 160 Hz, which Soundtrap corrected via room design and shape. Reverb time



was 1.25 seconds, which was reduced to 0.62 seconds after treatment. The Ceiling Star Detail does double duty as design feature and projector box, acting as a hush box to eliminate fan-related projector noise. Walls, ceiling and mechanical systems have been treated with Soundtrap noise control products, systems and technology for no sound transmission to adjoining rooms.

Kim Govers, an interior designer on Soundtrap's staff, designed the cinema and seating, which was custom-made by Soundtrap.

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