

AuralexTM

a c o u s t i c s



2001 Complete Product Guide

Check out the inside back cover for Hot New Products!



In professional environments we control sound in three ways: by absorbing it, by diffusing it or by blocking it from traveling to neighboring spaces.

Auralex certainly has a wide variety of products that can perform all three of these important functions, but what many people don't know is that we also house a full consulting division that can assist you in properly designing your studio from the ground up. With acoustical engineers & consultants, AutoCAD® & LightWave® 3D

- A. Studiofoam™ Wedges
- B. Studiofoam Pyramids
- C. LENRD™ Bass Traps
- D. T'Fusor™ Diffusers
- E. Sunburst™ (Males)
- F. SheetBlok™ Sound Barrier

2



Total Sound Control

capabilities, tons of computerized measurement gear plus years of solid experience, we can take the mumbo jumbo out of good sound AND save you tons of dough and design headaches in the process. We interface with general contractors, tradesmen, architects and interior designers on a daily basis and can help them understand the intricacies of studio construction, HVAC, wiring and more.

So, whether you just need a few questions answered or you're in the market to hire a full-blown consulting & design firm, you can count on Auralex!



- G. Mineral Fiber Insulation
- H. U-Boat™ Floor Floaters
- I. MAX-Wall™
- J. PlatFoil™
- K. RC-8 (Resilient Channel)
- L. CornerFill™ Cubes

Welcome

Auralex Acoustics was founded back in 1977 because I felt the acoustical products available at that time were way too expensive and had important disadvantages. In fact, they were so expensive that even the big-budget broadcast & recording facilities I worked in said they couldn't afford them! I knew there had to be a better way, so Auralex was born out back in my garage. Finally, great sound was available to all...not just the rich. Now, more than two decades later, we're still providing great products and great advice!

As a person in the market for acoustical consulting or products, you should choose Auralex instead of our competitors because:

★ **Our products offer the best performance regardless of price.**

Having been in the acoustics, sound reinforcement, broadcast & recording fields ourselves for so many years, we have a good feel for what's needed, what really works and what's "fluff". Over the years, we've fine-tuned our line and now have in place solid products to solve virtually every acoustical problem—regardless of room size, shape or function. Auralex doesn't make "me too" products, so if a product's in our line, you can rest assured that it's the best it can be at solving a particular problem. You can trust Auralex for solutions that absolutely work—even better than some competing products that can cost many times our prices.

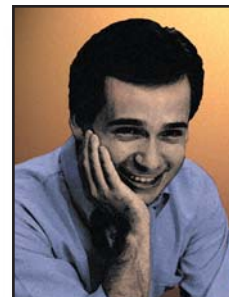
★ **Our broad product line and affordable prices bring world-class acoustics within the reach of any budget.**

Some folks question how our products can truly be the best on the market, yet be so reasonably priced. It's because we work on shorter profit margins than our competitors & subscribe to the Henry Ford business model. (Mr. Ford said he'd rather sell a million cars for a dollar apiece than sell one car for a million dollars.) Why'd he say that? Because he knew satisfied customers would spread good word of mouth about his products and also return themselves to buy more from him in the future. It must work: Auralex gets way more referrals and repeat business than any MBA school textbook says a company should. Since satisfied customers have proven to send us their friends, we operate—and price our products—in such a way as to gain more satisfied customers. Makes sense, doesn't it? This kind of long-term thinking got us where we are.

★ **The Golden Rule is alive and well at Auralex.**

These days, it takes more to succeed than just having the best products and attractive prices. You've gotta treat people fairly! This is why you see Auralex spoken of so highly in Internet chat rooms & magazines and why we get such kind comments from folks, many of whom have been repeat Auralex customers over and over for years.

When doing business with Auralex, you can take comfort in knowing that you're not only in good company, you're making the wisest product choices and are in good hands. We provide complete peace-of-mind.



It's one thing to say you've got your customers' best interests at heart; it's another thing to prove it like we do. For example, customers often end up spending even less for Auralex products than they thought they needed to. There are a couple of reasons for this. First, our products are way more effective than others on the market so you can simply get by with using less of ours than you would some competing knock-offs. Second, we're in this business for the long haul, not short-term profits, so we and our valued Auralex dealers make sure our customers get only the exact materials they need—nothing more—while providing friendly service & lots of honest advice. We absolutely refuse to sell a customer something we know he doesn't need or that won't do the job for him, so we've literally never had an Auralex customer complain that he didn't get his money's worth.

★ **Famous users trust Auralex and so should you.**

Check out www.auralex.com for our constantly updated **Famous Clients List**. These folks can afford virtually any acoustical products they want at any price. **They choose Auralex**—So should you. Many of these famous folks send us holiday gifts & kind notes, which tells us they like dealing with Auralex. This should make you feel positive about doing the same!

So, after reading this brochure, our booklet **Acoustics 101**, talking with your dealer, and perhaps visiting our website, we think you'll understand that no other acoustical products or consulting company can provide you with the same unique mix of pricing, product quality & added value that Auralex has for over two decades. Welcome aboard...we're glad to have you with us!

Sincerely,

ERIC

**Eric T. Smith
Founder & President
Auralex Acoustics, Inc.**

Contents

The Basics	6-7
Color My World	8
Absorption vs. Diffusion	9
Sound Absorbers	
Studiofoam™	10-11
Metro™ Family	12
CornerFills™/CornerFill Cubes	13
Sunburst™ Broadband Absorbers	14
Stand-Mounted Sunburst-360s™	15
MAX-Wall™ Mobile Environment	16-17
Bass Traps	
LENRD™ Bass Traps	18-19
ATOM-12™	13
Stand-Mounted LENRD™ Bass Traps	19
MegaLENRD™ Bass Traps	19
Venus™ & MegaMAX™ Bass Traps	20
Sound Diffusers	
Diffusion 101	21
T'Fusor™ Sound Diffusers	21-22
MiniFusor™ & MetroFusor™	23
Roominators Acoustic Control Kits	
Alpha0™ & Deluxe Plus	24
Project0™ & Pro Plus	25
Studio Construction & Adhesives	
SheetBlok™ Sound Barrier	26
U-Boat™ Floor Floaters	26
Mineral Fiber Insulation	27
RC8™ Resilient Channel	27
TubeTak Pro™ Liquid Adhesive	28
FoamTak™ Spray Adhesive	28
Vel-X™ Mounting Panel Kit	28
Case Studies	29
Consulting & Design Services	30
Personalized Consultation Form	31

IMPORTANT NOTE: Unless otherwise noted, flame and absorption data mentioned applies to our charcoal-colored Auralex products. The Federal Trade Commission has jurisdiction over foams & considers no existing testing method or standard regarding flammability to be an accurate indicator of the performance of cellular plastic material under actual, "real world" fire conditions. Any test results listed are intended only as a barometer of the reaction characteristics of the material under very specific and controlled laboratory conditions. Any terms used in the description of our raw foam's characteristics in the lab are not intended to be a representation of Studiofoam under actual fire conditions. Always consult your local building codes before purchasing and installing any acoustic foam product regardless of vendor.

By purchasing any product from Auralex or its dealers, you agree to hold Auralex or its dealers harmless with regard to any and all claims arising from the use and/or misuse of these products, no matter how occasioned, including personal injury, fatality and loss of income, either incidental or consequential. Seller's sole remedy to buyer if awarded shall be replacement of proven defective product.

Specifications and prices subject to change without notice. Names and logos used are property of their respective owners and all trademarks are acknowledged. Auralex reserves the right to refuse sale to anyone it deems inappropriate for whatever reason. The laws and courts of the State of Indiana shall govern all transactions and attorney fees shall be reimbursed to seller in the event of litigation.

Entire contents © Copyright 1994, 2001 Auralex Acoustics, Inc.



Why Acoustic Treatment?

In the beginning, there was perfect sound, then man invented rooms & fouled everything up. The end? Luckily, no.

It's been said that the perfect recording environment is the great outdoors. But since it's not feasible for most of us to lug our instruments and recording gear outside, let alone find a setting quiet enough, the next best thing is to acoustically treat our rooms so that they don't mangle the sound we record and/or listen to in them. (Another important component of adequate sound control is sound transmission to and from neighboring spaces, which we'll touch on soon.)

Doin' The Wave

Sound waves generated in a room radiate out to the room's boundaries, are reflected & then interact with each other, much as do ripples in a pond. Visually the effect can be mesmerizing; aurally the effect is guaranteed to be undesirable. The worst offenders are hard—and thus reflective—parallel walls. Less detrimental, but still in need of attention, are ceilings, especially flat ones.

Famous audio test guru Julian Hirsch said, "sound...is affected (often severely) by room boundary reflections." Ross Vannelli, brother of popular singer/songwriter Gino and a whiz-bang engineer/producer/songwriter in his own right, says of room tone (the reflected sound that allows your ear/brain mechanism to "sense" the space a sound was produced in), "There's no knob for it." I couldn't have said it better myself! Engineer extraordinaire Roger Nichols says "Well-controlled acoustics can make you sound like a better engineer."

The point is, unless it's properly controlled, reflected sound is detrimental to accurately recording or monitoring in sound-critical spaces. It is for this reason that the field of acoustics has become so important and why some acoustical consultants are literally paid *millions* of dollars for their work on *single* projects.

But how do we accomplish this sound control that is so vitally important? Generally, by means of absorption and diffusion of the sound waves generated in the room.

Choices In Methodology

There are some who believe that making a room's surfaces totally absorbent or totally diffusive is the only way to make a room sound "good," but this is most often not the case. While it's true that some rooms' acoustics are best controlled exclusively with specific types of treatments, the really great sounding rooms tend to be ones with a proper *blend and placement* of absorption, diffusion & low frequency control. Often, these rooms exhibit a pleasing small degree of natural ambience, but no flutter echoes or false bass buildup that could color the sound being recorded or monitored in them.

Some folks like their rooms live and some like 'em dead. If you're the sort of person who prefers a more live, yet controlled, performance environment, the best way to achieve this sort of acoustic character is to use corner bass trapping, thinner, less absorbent materials on the walls & ceiling and extra amounts of 3D diffusion. This treatment package imparts a controlled spaciousness to sound and will yield a room character that isn't too "dead". Many folks like diffusion on control room rear walls (opposing views can be found in the section about bass trapping), but if your situation dictates, we have other products, like Sunburst Broadband

Absorbers, which look great, absorb really well overall and allow you to gain significant sonic control—especially in the low frequency department—without excessive dryness.

So, even if diffusion isn't right for you for whatever reason, you still don't have to settle for either a room with runaway acoustics or a totally dead room.

On the other side of the coin, however, there are places like radio studios and voiceover booths where a very dry, controlled environment is *definitely* called for. Drying these rooms out ensures that when a talent is speaking into an open mic, all you hear is an up-close, direct, present sound—you don't hear a bunch of detrimental room ambience. Listen to network-quality voiceover work on commercials, movie trailers & the like—you virtually never hear "room."

As listeners, we've become so accustomed to this type of sound quality that when we hear a person speak on television & radio, we expect their voice not to sound like they're in a cave. On those occasions when it sounds like they *are* in a cave, the ambience really sticks out like a sore thumb & sounds cheesy to us. My point being, if you desire liveness in your performance space, it must be: (a) well-controlled in order to sound pleasing & professional, and (b) appropriate for your space's intended use.

How Dry Is Dry Enough?

Luckily, except as noted in the previous couple paragraphs, many rooms' acoustical needs can adequately be provided for by periodic (spread) absorptive treatment. For those of us who: (a) don't understand the intricacies of 'tuning' a room or (b) don't have the budget to really go the extra mile, this is good news! Interestingly, the BBC studied the effects of spreading absorbent materials around a room instead of putting all the materials on one wall or the ceiling and found that spreading the



The Basics



material around almost *quadruples* the amount of absorption gained! This is why we often recommend cutting our 2'x4' Studiofoam panels into 2'x2' sections and spreading them apart on the walls & ceiling (with the exception of the front end of your room—where your monitors are—which should generally be uniformly absorbent).

Just how you cut up your Studiofoam and spread it around is based to some degree on what appearance you desire, so come up with a treatment scheme you enjoy both the looks *and* sound of. If you need guidance, contact us!

Another added plus to spreading your acoustical foam around is that you get some bonus beneficial diffusion off the exposed edges of the absorbent panels. Rooms treated this way tend to have pleasing, well-controlled sound without being too dry for the anyone's liking. Of course, our Studiofoam Wedges, Pyramids & Metro panels generate a certain amount of beneficial diffusion (in both the physical and time domains) by virtue of their geometric surface design features. So, if the whole subject of diffusion is frightening, undesirable or just plain foreign to you, don't worry. Your space can sound great even if you concentrate on just our acoustic foam treatments and leave the intricacies of diffusion for the physicists, your next studio or the Auralex Design Group.



Choices In Materials

The two most commonly-used absorbent materials are high-quality acoustic foam and specialized acoustic fiberglass (no, not the stuff you buy at the hardware store). For brevity, at times we'll generically call acoustic foam just plain "foam", although there are very dramatic differences in cell structure & density between acoustic foam and the thousands of other types we could manufacture. (This is why you can't just run down to the local SuperMart and buy mattress pads with which to treat your studio.) Acoustic foam is well-suited to alleviate slap and flutter echo, the two most common problems in rooms not specifically designed for music recording & performance. In fact, foam can turn even the most cavernous warehouse or gymnasium into a suitable acoustic environment. Think about that statement. *Auralex Studiofoam lets you record good, clean, world-class sound in virtually any room, regardless of shape or size.* You'd be amazed if you could see—and hear—what some of the spaces used to record CDs, commercials and movie soundtracks would look and sound like without Auralex acoustic treatments! Choose your

foam carefully, though. One customer told us that his room, now treated with Studiofoam, sounds "at least 1000% better" than when he had another brand on his walls.

Features & Benefits Of Acoustic Foam

Foam is easy to work with, simple to trim to size and cost-effective for virtually any budget. Foam will improve the sound picked up by your microphones and give you a more accurate monitoring environment, thus ensuring your recordings will sound better ("translate") wherever they're played. In a listening or viewing space, foam allows you to hear recorded works the way the artist intended without your room detrimentally modifying the sound. While it is technically not a sound barrier *per se*, foam will knock down the ambient sound level in your room, making it less likely that you'll disturb those nearby. (Studies have shown that foam—the thicker, the better—can contribute up to 10dB of extra sound isolation.) Foam makes your environment more comfortable to be in, so you'll find yourself being more productive, at ease and creative, and in general, reaping more enjoyment out of the space. Most folks report improved concentration and hearing acuity in well-treated spaces. Acoustical Control = Better Focus.

Different Strokes For Different Folks

Foam is available in a variety of thicknesses. Which size is correct for your particular room is determined by a variety of factors, including sound pressure level (volume) in the room, size and placement of monitors, types of sound being generated in the room, ceiling height, the materials used to construct the room & its surfaces, the amount of glass in the room, whether there is carpet on the floor (& over what type of pad it's installed) and other factors, not the least of which may be budget! Your dealer or the Auralex Consulting Group will ask you appropriate questions so they can recommend the right solutions for your specific situation.

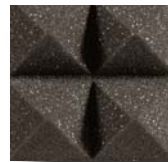
Based on physics, the thicker the foam, the greater the amount of overall absorption, but especially toward the low end of the frequency spectrum. The most common thicknesses of acoustic foam are 1", 2", 3" & 4". Auralex also has proprietary foam bass traps that are easy-to-install and phenomenally effective at incredibly affordable prices (go ahead....compare!). Not only that our low frequency control devices look really cool & complement the appearance of the Studiofoam you'll be putting on your walls.



Color My World

Color Selections

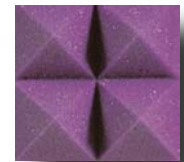
Once you've decided on a foam with the size and flammability specifications you desire and/or require, it's time to choose a color that complements the decor of your studio. Almost all manufacturers' standard color is a deep charcoal gray, but Auralex has 11 other colors, too, ranging from mild to wild! In case your foam gets damaged or needs to be trimmed to fit your room, make sure your foam is colorized at the chemical level (as ours is) and not just *surface painted*, as many other brands are. Be sure to ask the manufacturer how the color will wear, because all foams are subject to change due to exposure to ambient light of various types (halogen & fluorescent especially) as well as environmental factors like humidity, sweat, temperature and cigarette smoke. (Our exclusive formula greatly minimizes these concerns.) Unless you're made of money or just plain love installing foam you should make sure in advance that the foam you choose will stand up to poking fingers and the routine wear and tear of daily life. Surprisingly, this isn't a "done deal".... some brands can turn brittle & crumbly as soon as just a couple of months after installation! On the other hand, we've got Studiofoam pushing 20 years old that's just as soft and pliable as the day it was made. That's the Auralex difference!



Charcoal Gray



Purple



Plum



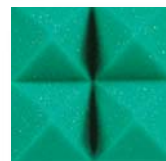
*Beige



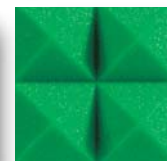
Brown



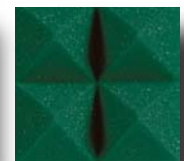
Burgundy



Teal



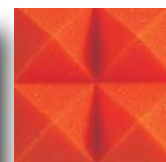
Kelly Green



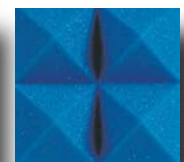
Forest Green



Red



Orange



Blue

NOTE: Color samples may not be accurate due to the limitations of the printing process.

Smoke 'Em If Ya' Got 'Em

An important consideration, but perhaps not the ultimate one, when choosing a foam is its degree of flame retardancy. Some foams are tested to pass the UL-94HF1 test, but we feel a more rigorous and current test is the California firecode specification #117. Both tests will indicate that a foam is designated Class B, yielding smoke density and flame spread ratings within certain guidelines. Class B is sufficient to appease many inspectors except when the foam is for use in certain types of public buildings and locales which may require a Class A foam, which generally lacks the wide range of benefits of Studiofoam. I'm sure you'll agree that flammability is never a good thing, so make sure the foam you're purchasing is *at least* Class B. Be careful—one popular brand isn't flame retardant at all and many are Class C! A large customer told us that he put a match to an Auralex competitor's sample and it literally flamed so quickly he barely could drop it fast enough to avoid catching his sleeve & arm on fire. Be sure to verify the vendor's claims and always consult your local building codes before purchasing *any* foam product.

Our acoustic foams are available in a wide variety of colors which other companies' products are not. Charcoal gray is our most popular because it looks sleek and hi-tech, blends well with a variety of decors and hides environmental effects the best.

Not all of our colors are available all the time, so check availability before ordering and please allow "up to" 3 weeks lead time for production in case we run short. (Most orders are filled within 72 hours from receipt of payment.)

**Before ordering, be aware that all foams, especially lighter-colored ones, are susceptible to color changes depending on factors specific to your environment that we can't control. For this reason we cannot warrant our acoustic foams' color longevity. Due to color limitations of beige, all sales are final. Customer will be required to sign a waiver.*

Superior Quality

You know how the foam surrounds on a certain loudspeaker maker's woofers are renowned for disintegrating? The same thing happens to virtually ALL of the other foams on the market, especially with exposure to environmental extremes, harsh lighting or repeated physical contact, because none of them uses our proprietary chemistry. Truly, no products on the market are better suited to giving you top-notch sound and longevity than absorbers, diffusers & bass traps from Auralex. There's a large nightclub in Texas whose patrons frequently find (another brand of) foam in their cocktails because it's disintegrating & literally falling from the ceiling! So, make sure your foam will last as long as your facility. Auralex has invested *tons* of \$ in chemistry and R&D over the last 2+ decades to ensure that our foams last a long, long time! It is for this reason we can make the guarantee that our foam will never crumble. By the way, foam that wears well over time such as ours is pretty much a stick it up and forget it item, but if you feel the need you can vacuum it every couple years. (It'd have to get awfully dirty for the cells to clog up with dust like some people think they do!)

Absorption vs. Diffusion



Understanding the Difference

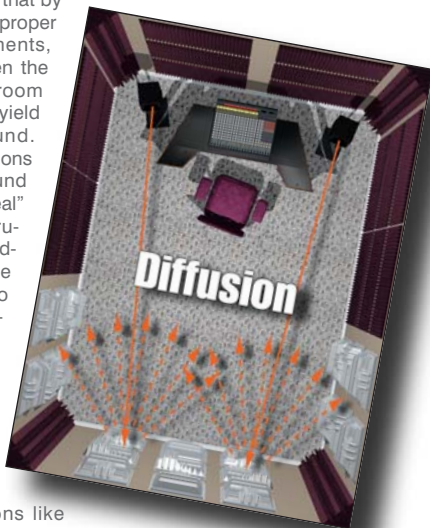
Sound waves emanate out from their sources & strike room boundaries in predictable ways. Since tons of studios have shown that reflected sound is inherently inaccurate sound, controlling reflected sound is the key to making our spaces sound "good."

While it's true that we all may have our own ideas as to what's a "bad" mixer, a "bad" loudspeaker or a "bad" microphone, I'm sure we can all agree on what a bad-sounding room sounds like. Two common examples of bad-sounding rooms that you're probably familiar with are gymnasiums & tiled bathrooms.

The good news is that by implementing the proper acoustical treatments, we can make even the worst-sounding room good enough to yield world-class sound. Controlling reflections yields truer sound and allows the "real" sound of an instrument, voice or loudspeaker to come through. The two methods of controlling sound are absorption and diffusion.

Hard room surfaces are responsible for the most detrimental reflections like standing waves, flutter echoes & low frequency room modes. Ever clapped your hands and heard a ringing, repeating, hollow sound? Say hello to your arch rival, Mr. Flutter Echo. Ever been in a conversation with someone or played music in a room where the low frequencies were overpowering the rest of the sound, making for poor intelligibility? Meet Mr. Room Mode & his nasty sidekick, Low-End Buildup.

The three types of sound wave reflections are called axial, tangential and oblique modes, which relate to which direction in a room sound is being reflected from one hard surface to another. The worst of these types is the dreaded axial mode, which means sound is being reflected from wall to opposing wall or floor to ceiling. Corners cause us a lot of problems, too, boosting the apparent amount of bass in our rooms by 9dB, making us think we have **3 times** as much bass as we actually do. So, corner bass trapping is absolutely vital to smoothing out any room's sound. (If you don't have any 90° corners available for treatment, talk with us or your dealer so we can advise you how to best achieve adequate bass absorption in your room.)



Are You Really Confused?

If all the options seem more confusing than helpful, fear not! We'll boil it down to two basic product options: "permanent" (mounted to your room's boundaries) and "temporary" (movable, stand-mounted or repositionable).

"Permanent" solutions like our Studiofoam products, our bass traps, our broadband absorbers and all three types of our diffusors help eliminate the negative sonic effects your room is interjecting, thus taking your room and its boundaries out of the mix....literally! Given that room boundaries are where sonic anomalies originate, if you're going to be in your current location for some length of time, these types of products might be your best choice.

"Temporary" products, on the other hand, allow either [1] flexibility of placement so you can (a) use your room for many different purposes or (b) "tune" your environment as needed....OR....[2] convenience because you don't have to permanently place materials on your walls. These materials can easily travel to your next house, apartment, gig, etc.! Our fabulous MAX-Wall, Stand-Mounted LENRD Bass Traps and Eclipse family of products would be examples of these sorts of devices.

So, using these rough guidelines, decide which of these treatment plans serves **all** your needs best. Regardless which direction you head, Auralex has got you covered! Still dazed and confused? Pick up your 📞 and call us!

You can judge a foam's absorptive effectiveness by studying its NRC (Noise Reduction Coefficient), a single number average of a foam's absorption in what was determined long ago to be the most important range. The federally mandated test (ASTM C423) is standardized to cover frequencies between 125Hz and 4000Hz, but when calculating an NRC, only the coefficients from 250Hz to 2000Hz are used to help alleviate the possibility of testing errors. No room in the United States is certified to test below 125 Hz because, based on physics, it's virtually impossible to build a room that won't color the test results at frequencies below 125Hz. (Now can you understand why we say bass trapping is so important?) There's no absolute number that indicates total absorption, so it's possible for a foam's NRC to be well over 1.00 if it is a very good absorber. There are various labs around the country that are certified to do acoustic testing, but note that not all labs yield accurate numbers, as proven by the blind, round-robin testing periodically performed by the governmental certifying agency. Also, some foam companies use a non-standard method of computing their products' NRCs, so it's important to know (a) which lab did their testing and (b) the formula they use to do their computations. Rest assured, our ratings are dead-on accurate and we don't perform funny math!

All of our foam products are tested at an independent, unbiased acoustical laboratory...the oldest, most reliable lab in the country.

We insist on using only the very best testing facility because we believe our customers deserve the most accurate absorption coefficient information possible.

	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	NRC
1" Studiofoam Wedges	0.10	0.13	0.30	0.68	0.94	1.00	0.50
2" Studiofoam Wedges	0.11	0.30	0.91	1.05	0.99	1.00	0.80
3" Studiofoam Wedges	0.23	0.49	1.06	1.04	0.96	1.05	0.90
4" Studiofoam Wedges	0.31	0.85	1.25	1.14	1.06	1.09	1.10
2" Studiofoam Pyramids	0.13	0.27	0.62	0.92	1.02	1.02	0.70
4" Studiofoam Pyramids	0.27	0.50	1.01	1.13	1.11	1.12	0.95
2" Studiofoam METRO	0.13	0.23	0.68	0.93	0.91	0.89	0.70
2" SonoMatt	0.13	0.27	0.62	0.92	1.02	1.02	0.95
2" Wedgies	0.15	0.21	0.70	0.99	1.05	1.05	0.75
MAX-Wall Panels	0.81	1.02	1.06	1.05	1.02	1.02	1.05
Venus Bass Traps	1.63	1.34	1.29	1.26	1.25	1.20	1.30
LENRD Bass Traps	1.24	1.28	1.45	1.39	1.27	1.31	1.35
Sunburst Males	1.08	1.23	1.14	1.07	1.05	1.08	1.10
Sunburst Females	0.65	1.02	1.00	1.08	1.05	1.08	1.05

Note: The higher the number, the more absorption.

1" Studiofoam Wedges (Shown in Plum)

Perfect for those environments that require good sound control, but where total dryness isn't required or desired. 1" Studiofoam works most effectively on mid and high frequency sound waves and may be used to treat walls or, most commonly ceilings (especially if they aren't parallel to the floor), even when the walls are treated with thicker Studiofoam. 1" Studiofoam absorbs as well as some competing 2" products, so if your budget is a bit "thin," 1" Studiofoam might be just the ticket for you!

NRC: .50 **Qty:** 20 panels **Coverage:** 160 sq. ft.
Sugg. Adhesive Per Box: 2 Foamtak or 5 Tubetak

2" Studiofoam Wedges (Shown in Charcoal)

2" Studiofoam Wedges are our most popular seller & our best overall performer! Use 'em to treat small- to medium-sized areas including vocal booths, control rooms and studios. They effectively kill standing waves and flutter echoes and, when used in conjunction with our LENRD or Venus Bass Traps or our Sunburst Broadband Absorbers, can effectively tame the full frequency bandwidth in virtually any room. 2" Studiofoam is quite simply the workhorse of the industry and is your safest bet if you're tuning your room yourself without the help of a professional acoustician.

NRC: .80 **Qty:** 12 panels **Coverage:** 96 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or 3 Tubetak

3" Studiofoam Wedges (Shown in Purple)

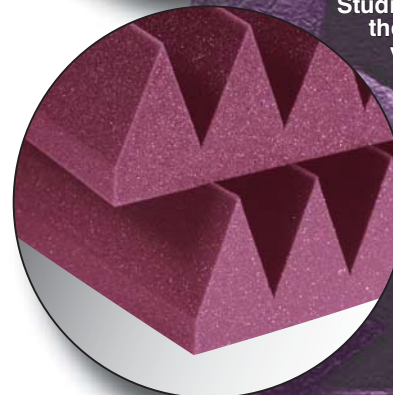
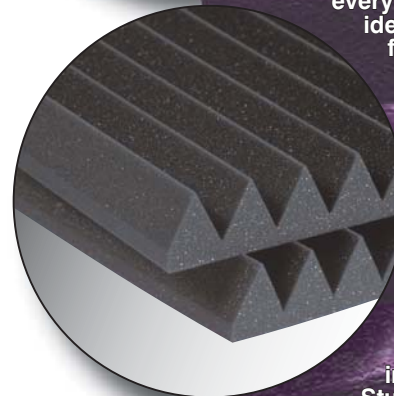
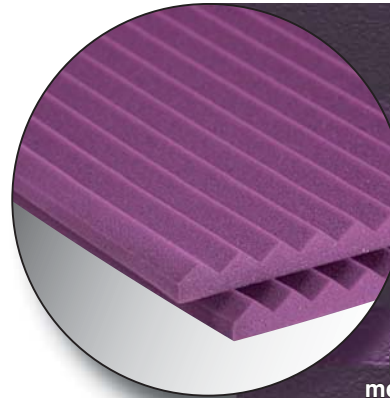
Twice as absorbent as 2" at 125Hz, 3" can even do many of the same things 4" can do (especially when used with LENRD or Venus Bass Traps) and can provide a well-controlled, more accurate sound in any size room. Recommended for rooms with higher SPLs or more low frequencies such as drum or voiceover booths. Rooms have more low-end problems than some folks acknowledge, so if you step up from 2" to 3" you *will* benefit from the extra low-end absorption 3" Studiofoam Wedges offer.

NRC: .90 **Qty:** 8 panels **Coverage:** 64 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or 2 Tubetak

4" Studiofoam Wedges (Shown in Burgundy)

Recommended for medium to large areas like concert halls, gymnasiums & churches, rooms with pronounced low frequency problems or where sonic accuracy is mandatory & maximum absorption is required (e.g. voiceover or drum booths, forensic audio labs & mastering rooms). 4" Studiofoam Wedges provide 3X the low-end control of 2" and can effectively tame even the worst sonic anomalies. In some instances, using 4" Studiofoam can lessen the need for significant dedicated bass trapping.

NRC: 1.10 **Qty:** 6 panels **Coverage:** 48 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or 2 Tubetak



Studiofoam™ Wedges. They're our most popular style, outperform by up to 60% other brands that cost much, much more and are the product on which Auralex was built.

Each sheet is cut the same by precision German machinery for clean-looking installations. What's that mean to you? It means every sheet is functionally identical, so you won't find any innies and outies here or have to hassle with the out-of-square panels some other companies sell! Our proprietary anechoic wedge cut's been optimized to offer superior absorption, a sleek, high-tech look & minimal installation seaming. Studiofoam Wedges are available in all the Auralex colors in 1", 2", 3" & 4" thicknesses and 2'x2' or 2'x4' sheets.

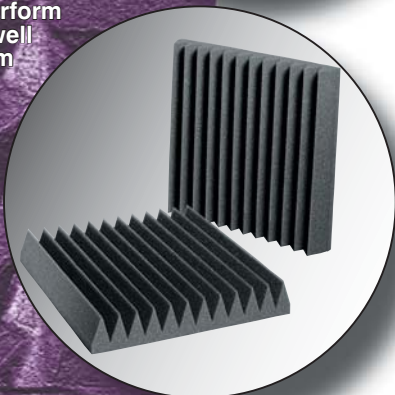
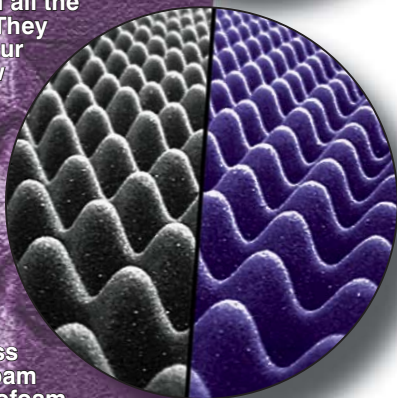
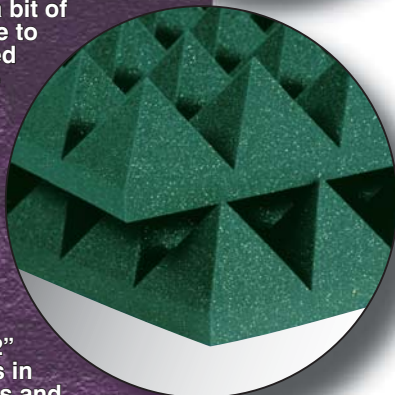
Consistency, increased flame retardancy, numerous color choices, industry-leading absorption and our super long-lasting formulation add up to make Studiofoam Wedges the hands-down value leader in the acoustics marketplace. If you buy any other brand, you just aren't getting your money's worth!

Studiofoam

Studiofoam Pyramids are a perfect combination of precision appearance and great sound control! Based on their design (i.e., there are valleys running both directions), Studiofoam Pyramids offer increased installation versatility (their pyramids are 2" or 4" wide, so you can do cuts at 1/2 foot, 1 foot, 2 feet, etc.) & minimal seaming, supply a bit of extra diffusion due to their 4-sided geometry & will give your space tasteful, upscale looks and sound. They perform really well and look absolutely fabulous!



Studiofoam Pyramids are manufactured in 2" and 4" thicknesses in 2'x2' or 2'x4' panels and are available in all the Auralex colors. They pass through our specialized saw twice, so they do cost a bit more than Wedges, but most people who see 'em think they're worth the extra dough! Based on physics ('cause they have less foam mass than Studiofoam Wedges), Studiofoam Pyramids perform about 85% as well as Studiofoam Wedges, but still outperform competing brands and offer all our other important formulation advantages.



2" Studiofoam Pyramids (Shown in Brown)

Use these to treat small- to medium-sized areas including iso booths, control rooms and studios. They effectively kill standing waves and flutter echoes and, when used in conjunction with our LENRD or Venus Bass Traps or our Sunburst Broadband Absorbers, can effectively tame the full frequency bandwidth in virtually any room. 2" Studiofoam Pyramids offer a bit of extra diffusion and slightly less absorption than 2" Studiofoam Wedges, so they yield a less dry-sounding space with a bit more "air."

NRC: .70 **Qty:** 12 panels **Coverage:** 96 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or 3 Tubetak

4" Studiofoam Pyramids (Shown in Forest Green)

As with 4" Studiofoam Wedges, recommended for larger spaces, rooms with pronounced low frequency problems or where sonic accuracy is mandatory & stronger absorption is required. Having 4 sides exposed on each pyramid also yields more sound wave diffusion, which is desirable in some spaces. Thus, 4" Studiofoam Pyramids will yield less overall dryness than 4" Studiofoam Wedges.

NRC: .95 **Qty:** 6 panels **Coverage:** 48 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or 2 Tubetak

Sonomatt™ Acoustic Panels

The perfect product for the budget-conscious, yet acoustically-discerning, customer. Sonomatt is cut in the industry standard "eggcrate" style to keep its price low & absorbs almost as well as 2" Studiofoam Wedges, but it *still* outperforms competing "premium" brands that cost *way* more! Due to the manufacturing process we use, Sonomatt's dimple pattern will not be square to the edges of the panels, so installing them side by side may not be advised from a visual consistency standpoint. Sonomatt is available in charcoal gray and vivid Auralex purple in 2'x4' and 4'x8' sheets and it may be the perfect choice for those who intend to cover their sound control materials with acoustical cloth. *Available in charcoal gray & purple only.*

NRC: .70 **Qty:** 12 2x4s (96 sq. ft.) or 2 4x8s (64 sq. ft.)
Sugg. Adhesive Per Box: 1 Foamtak or 3 Tubetak

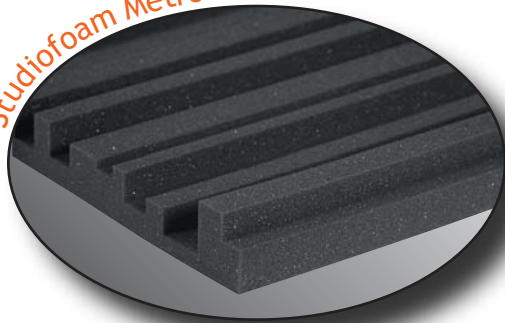
Wedgies™

Wedgies are 1' squares of 2" thick Studiofoam and are a great solution for spot treating studios, home listening rooms, iso booths and more. With slightly more wedges per square foot than 2" Studiofoam, Wedgies feature maximized surface area for greater exposure to sound waves. Wedgies are a great solution for small flutter echo problem areas and, when spread apart a little bit, yield beneficial diffusion off their exposed edges. A famous designer used Wedgies and called to tell us they were even more effective than he'd hoped they'd be, so you know you can trust them to tame *your* space! They're great! *Available in charcoal gray only.*

NRC: .75 **Qty:** 24 or 96 **Coverage:** 24 or 96 sq. ft.
Sugg. Adhesive Per Box: 1 Foamtak or Tubetak/24 sq. ft. -
1 Foamtak or 3 Tubetak/96 sq. ft.

Metro Family

Studiofoam Metro™



Studiofoam Metro

The Metro blurs the line between those products that work well *acoustically* and those that yield the desired *aesthetics* that users desire.

The Studiofoam Metro and the MetroFusor afford minimal installation seaming because the left and right edges of the panel are the same height. They lend themselves to a variety of installations that look great and sound quite natural due to Metro's linear—and moderate—acoustical action.

A Brief Physics Lesson

The differing heights of protrusions on the Metro products serve to spread sonic energy out in the time domain, as well as each absorbing a slightly different slice of the frequency spectrum. You see, it takes slightly different amounts of time for sound waves to travel through the different sections of the Metro, strike the mounting surface & travel back through the Metro into the room, so wavefronts are in effect *softened* rather than just being *absorbed*. This is why a Metro room will retain a bit more “feel” than a room that's treated with a stronger absorber like 3” or 4” Studiofoam Wedges or Pyramids and why, when coupled with a judicious amount of MetroFusors, a well-controlled, natural-sounding space will result.

Don't suffer with lackluster sound and a shoddy appearance any longer. Pick up some Metros today and take your place *uptown*!

NRC: .70 **Qty:** 12 panels **Coverage:** 96 sq. ft.

Available Colors: All **Panel Size:** 2'x4'x2"

Sugg. Adhesive Per Box: 1 Foamtak or 3 Tubetak

MetroFusor™ Diffusor

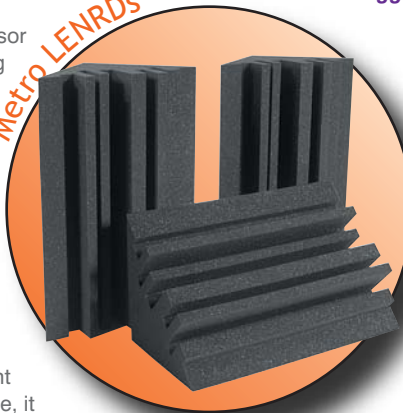
The MetroFusor features the same distinctive, proprietary surface contour as our Metro Absorber for a clean, consistent, architecturally-pleasing appearance that looks upscale and attractive in even the most highbrow of environments. Very economical and ideal for lower ceilings and tracking rooms.

Qty: 12 **Size:** 2'x2' **Coverage:** 48 sq. ft.

Sugg. Adhesive Per Box: 2 Tubetak



Metro LENRDS



Metro LENRD™ Bass Traps

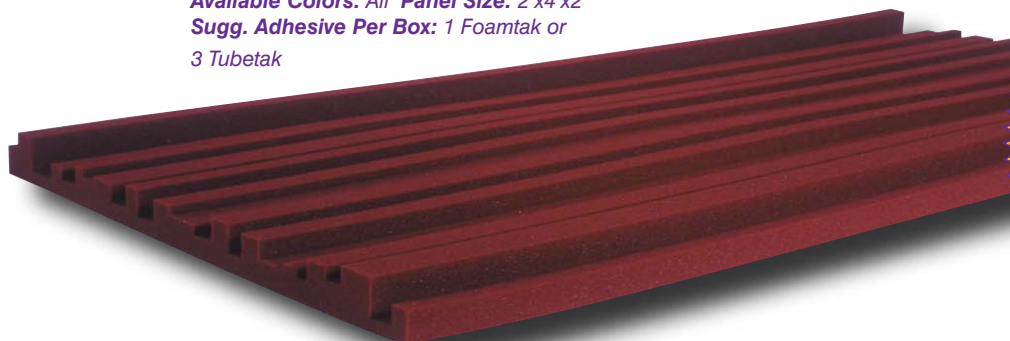
To round out the Auralex Metro family, we proudly present the Metro LENRD Bass Trap. This triangular-shaped bass trap fits into room corners and/or wall/ceiling junctures perfectly, and provides outstanding broadband absorption (especially at low frequencies). Based on the design of our wildly successful original LENRD Bass Trap, the Metro LENRD gives a fresh look to a reliable, unbeatable sound absorber! Plus, it's available in all 12 Auralex colors.

All three Metro products work together to provide sound absorption, diffusion and bass trapping, while the “cityscape” cut provides visual continuity to your room. The Auralex Metro family was designed with a professional, architectural look for use in studios, classrooms, home theaters, office buildings, churches or anywhere a more upscale appearance is called for.

Qty: 8 **Coverage:** 16 lineal feet **Size:** 2'x1'x1'

Colors Available: All

Sugg. Adhesive Per Box: 1 Foamtak or 2 Tubetak



Cornerfills

CornerFills™

CornerFills are sections of flat-cut Studiofoam that are beneficial in two ways. Aesthetically, they give you smooth, clean edges against which to butt your wall treatments and bass traps for a more professional appearance. Acoustically, they smooth out the excess low frequency energy that congregates in room corners.

CornerFill Example



ATOM-12™

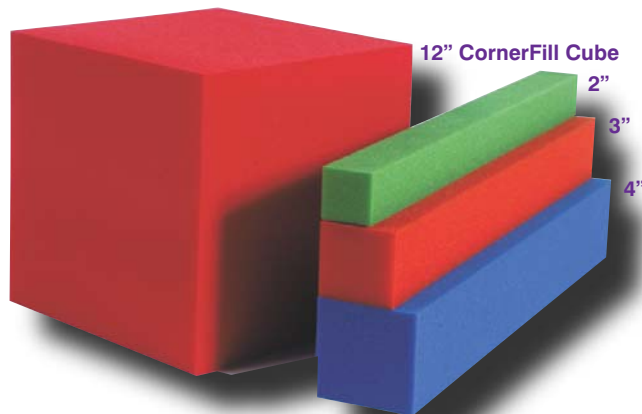
For years we've been telling customers to install their LENRDs this way using 12" CornerFill Cubes. Finally, after hundreds of times drawing this layout, explaining it to customers and explaining it to our own shipping department (!), we slapped our collective forehead and said, "Why don't we put LENRDs and 12" CornerFill Cubes into a handy kit form?" (In fact, if we had an audio clip from that day, right now you'd actually be hearing us all saying, "Doh!")

So...the **ATOM-12** was born!

In the **ATOM-12** kit, you get (4) 12" CornerFill Cubes and (12) LENRDs. Installation's a snap and what you end up with, in each trihedral corner of your room, is a configuration like the one pictured here. →

Installed in the "usual" way, LENRDs are the most effective small bass traps on the market and have no equal. But when you install 'em like this, using our 12" CornerFill Cubes, you're REALLY gonna have serious low frequency accuracy in your room.

As we've mentioned about 100 times already in this catalog, based on physics, all rooms need low frequency smoothing. We've also noted that trihedral corners (where two walls and the ceiling come together) are the places where physics amplifies bass the most. Given these facts, you can see why the ATOM-12 is a smart way to begin giving your room the bass trapping it needs!



CornerFill Cubes™

CornerFill Cubes are a terrific way to finish out trihedral corners where three LENRD Bass Traps come together. Simply install the Cornerfill Cube at the wall/ceiling juncture, then butt your LENRDs up to it for a finished, professional look and tons of additional low frequency absorption. Great for gyms & larger rooms.

CornerFill Cube

▶ 12"x12"x12" : 2 per box (2 lineal ft.)

CornerFills

▶ 2"x2"x24" : 36 per box (72 lineal ft.)

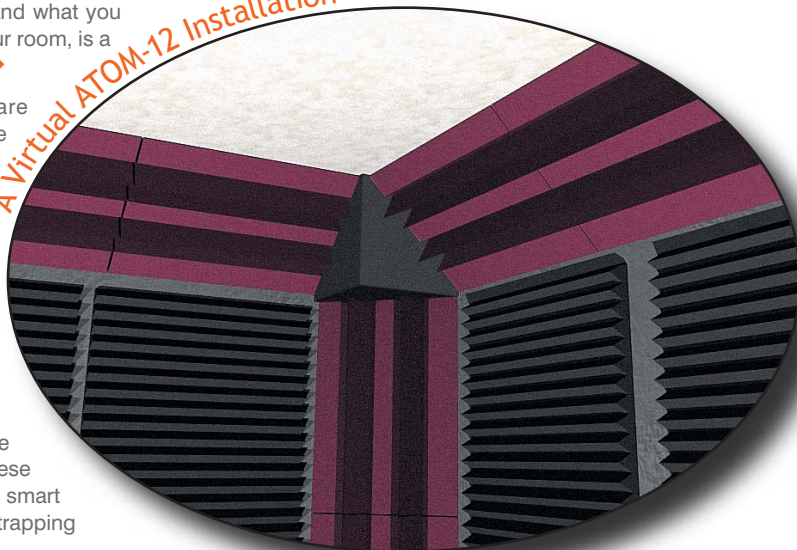
▶ 3"x3"x24" : 16 per box (32 lineal ft.)

▶ 4"x4"x24" : 9 per box (18 lineal ft.)

▶ 12"x12"x24" : 1 per box (2 lineal ft.)

Sugg. Adhesive Per Box: 1 Foamtak or 1 Tubetak

A Virtual ATOM-12 Installation



Sunburst™ Broadband Absorbers

Sunbursts are a proprietary Auralex product and are truly one of a kind! They feature a smart & unique male/female configuration that helps solve quite a wide range of acoustical problems. Because they offer a significant amount of both low frequency control in particular & broadband absorption overall, they work well in rooms that don't have corners available for treatment with LENRDs or where you don't need or desire large expanses of absorbent wall or ceiling treatment. (Translated, that means that Sunbursts work well in rooms where you desire control but don't want too dry a sound. Or, in rooms where you need extra help, but don't have a lot of wall or ceiling space available for treatment.) Sunburst Females are often cut in half & used as "mini-LENRDs" or to frame Studiofoamed areas. They look great & deliver truly linear broadband performance! (They're virtually flat!)

Shipped 4 Males & 4 Females per box;
Males are 12"x7"x4". Instructions &
"serving suggestions" also included.

NRC: 1.10 (male yields 1.08 at 125Hz)
Size: 1'x4'x7.5"

Qty. Per Box: 4 males & 4 females
(32 lineal feet)

Sugg. Adhesive Per Box: 1 Foamtak
or Tubetak

Sonic Foundry

In February 2000, Auralex was hired by Sonic Foundry (creators of award-winning computer programs like ACID®, Sound Forge® and Vegas®) to assist with the acoustical design of the Training Room at their new facility in Madison, Wisconsin. The Training Room is a large (roughly 30'x25'x9') space built with the main purpose of housing their computer based training stations. The room has the additional function of being a live tracking room for their professional recording studio.



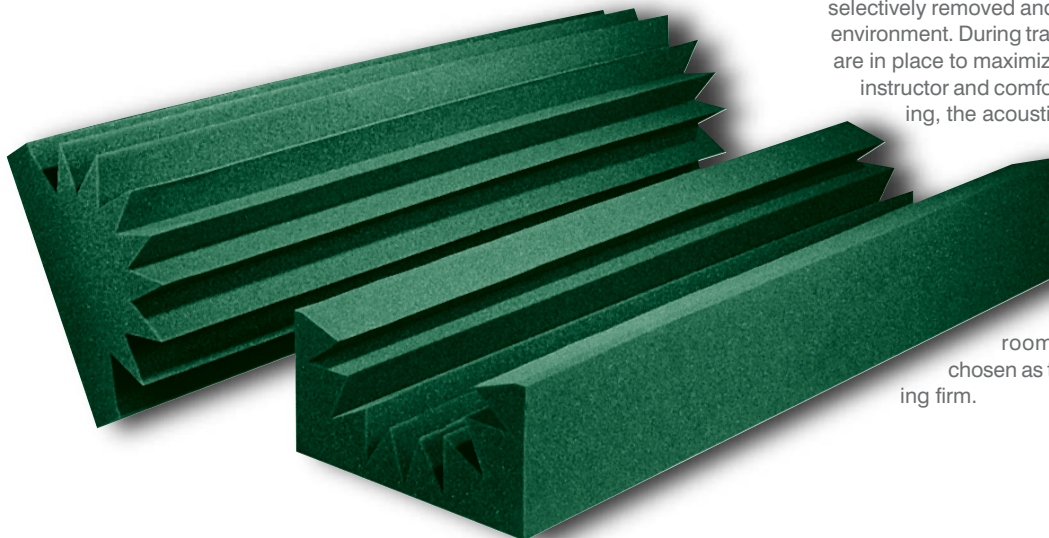
Sonic Foundry's Training Room in Madison, WI

After some acoustical models, we decided that the proposed tile floor was an excellent choice—both acoustically and functionally. Reflections off the floor would enhance a musician's performance in the room and the rolling desks and desk chairs would be unimpeded by carpet. In recording situations, area rugs can be used where/when floor reflections might be a concern.

Since the maintenance of the building required that a "dropped" acoustic tile ceiling be used, Auralex recommended high-NRC acoustical ceiling tiles mixed with T'Fusor diffusors. A pattern focusing a large portion of the diffusion in the center of the room was designed and implemented.

For the parallel flat walls, a mixture of Sunburst Broadband Absorbers and LENRD Bass Traps was recommended. The LENRDs are permanently affixed in the vertical corners to help tame some of the room's low-end build-up. Sunburst Males and Females are installed temporarily; they are mounted to custom 47"x11" Cor-X panels and Velcro™ dots hold them on the walls. The use of Cor-X and Velcro™ allows the Sunbursts to be selectively removed and replaced to vary the acoustical environment. During training sessions, all the Sunbursts are in place to maximize the speech intelligibility of the instructor and comfort of the trainees. During recording, the acoustics in the space can be customized for any recording by removing Sunbursts from the walls or moving them to other parts the room.

Thanks to Auralex, Sonic Foundry now has a world-class training and recording room. We're proud to have been chosen as their project's acoustical consulting firm.



Sunbursts



The Sunburst-360™ Eclipse™ Acoustical Environment

Sunburst-360s are wedge-cut, elongated, stand-mounted absorbers that offer adaptability, portability and affordability.

When placed around a vocalist, instrumentalist, voice talent or control room mix position they form an Eclipse Acoustical Environment, yielding superior broad bandwidth control of reflected sound waves in the *nearfield* and low frequency waves in the room *in general*. Sunburst-360s are so linear in their absorption that they exhibit a deviation of only ± 1.9 Sabins (that's hardly any!) across the *entire test frequency spectrum* from 100Hz to 5000Hz! This is the linear absorber the acoustics marketplace has been searching for all these years!

With an Eclipse Acoustical Environment, you can quickly, easily and affordably achieve world-class sound control in ANY environment.

Shipped 2 Males & 4 Females per box; Males are 12"x15.5"x4'. 2 MAX-Stands with 18" extensions per box, allowing height of 4' 6" to 9'.

Colors: Charcoal Gray, Vivid Purple & Burgundy.



A Sunburst-360 Success Story, Part II

A few months back, Auralex helped engineer/producer extraordinaire Brian Foraker (Heart, .38 Special, Yes, Kiss, Starship, Night Ranger, Whitesnake, ELP, and many more) turn an unused room in his house into a legitimate mastering studio for his company Autumnwood Mastering utilizing Auralex Acoustics' Sunburst-360s.

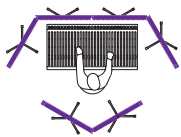
Brian recently contacted Auralex with this update, "I could simply not do what I do without Auralex. It's been amazing. For the first time in years, I find that I actually want to *listen* to music again, not just work on it."

Brian Foraker



For affordable, top-notch, Sadie®-based mastering by a guy with great ears and 25 years of hit records, visit Brian's website at autumnwoodmastering.com.

15



Mobile

The MAX-Wall's perfect if you're renting a space and don't want to—or *aren't allowed to*—mount anything to your walls, or if your place needs to serve a variety of acoustical purposes. Or, if you're on a budget and have acoustical problems that can't wait and you're the sort who likes to mix things up on the fly.

It offers you great flexibility in a big hurry. Our 831 Kit (pictured right) can serve as an excellent mix position, and in just minutes can be reconfigured to serve as a triangular vocal booth, complete with window!

Absorptive

The MAX-Wall is very absorptive, even at low frequencies. It offers great broadband absorption and is incredibly linear, with an overall NRC of 1.05!

The MAX-Wall's proprietary, patent-pending design offers excellent broadband control of sound waves throughout your room AND in the near field, so now you can play, record or mix great music or vocal tracks ANYWHERE at ANY TIME!

The MAX-Wall panels are thick enough to yield a pretty high degree of sound containment, so a couple boxes of them can be used to set up—in a flash!—a temporary pseudo-iso booth. Will it yield total sound isolation? Heck no. But it'll give you enough containment so that you can lay down a clean new track in a hurry and likely not have to monitor on headphones.

eXpandable

You can set up your MAX-Wall in minutes with no tools, no adhesive, no fuss. And you can add additional MAX-Wall panels as your needs grow. Start off with one of our 5 kits and go from there. Build your own set-up with additional MAX-Wall 200's, 420's (one box) or other accessories.

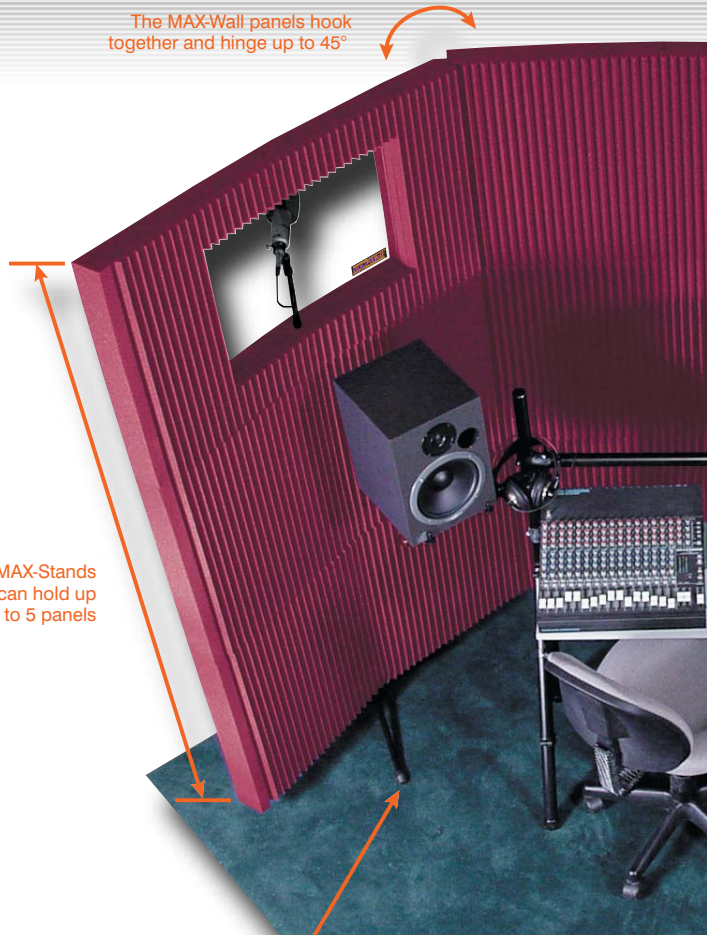
Applications

- Project Studios • Radio & Television Remotes • Home Theater • Drum Gobos • Orchestra Pit • Practicing/Training Room • Surround Mix Position • Apartment Recording • Vocal Booth • Office Dividers • Church Choir • Instrument Isolator • And Much, Much More!

The Auralex MAX-Wall solution can be used anywhere you need sound control!



MAX-Wall 200
2 - 20" x 48" MW-panels



The MAX-Wall panels hook together and hinge up to 45°

MAX-Stands can hold up to 5 panels

Patent Pending. Design features © Copyright

Kits include MAX-Stands with 18" extensions to support the MAX-Wall panels.

MAX-W
8 - 20" x 48"
3 - MAX
1 - MW (18" x 12"

Mobile Absorptive eXpandable. The MAX-W

It's everything you've always wanted from your acoustical treatment—a cool, upscale look that not only says, "I've arrived!" but, "Boy, I'm serious as your needs change....it can just go on and on and on—but only don't bankrupt your pocketbook when a simple MAX-Wall system makes it possible. Add our Sunburst-360s or some of our Stand-Mounted LENRD Bass Traps in an attractive, portable package.



MAX-Wall 521
5 - 20" x 48" MW-panels
2 - MAX-Stands
1 - MW-panel w/18" x 12" window



MAX-W
6 - 20" x 48"
3 - MAX
3 - MW-panel w/18" x 12" window

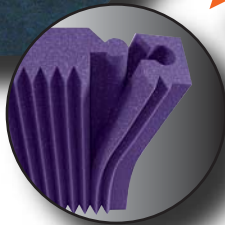
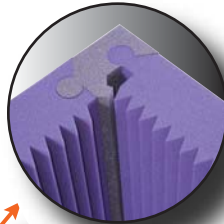
MAX-Wall



Height adjustable up to 8'

Each panel is 20" x 48"

Ends "peel" off to connect additional panels and/or Corner Couplers



Copyright 1999, 2001 by Auralex Acoustics, Inc.

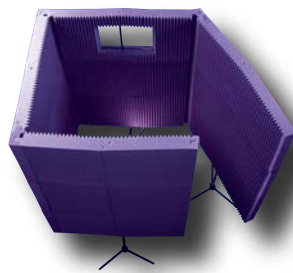
MAX-Wall 633
20" MW-panels
2 MAX-Stands
(1) window panel

Full Modular Acoustical Environment by Auralex.

...Affordability. Portability. Expandability. Adaptability. And a lot of "smart!". The interlocking MAX-Wall system is made to grow and grow with you if you need it to. Don't buy more than your place requires....and you might be all you need! You want modular? MAX-Wall's your answer! With Traps and you've got an incredible amount of acoustical control



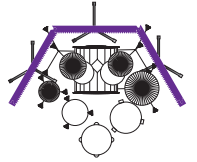
MAX-Wall 633
20" MW-panels
2 MAX-Stands
(1) 18" x 12" window



MAX-Wall 1141VB
11 - 20" x 48" MW-panels
4 - MAX-Stands
1 - MW-panel w/18" x 12" window
12 - MW Corner Couplers

What's included in a MAX-Wall?

Choose from any of the kits below in your choice of Charcoal Gray, Vivid Purple, or Burgundy. Each kit's contents are listed below. The MAX-Wall mounts on our MAX-Stands that have an extension, allowing you to raise the MAX-Wall to a height of 8 feet. You also receive MAX-Clips to place under the panels for added support. Each kit has complete instructions.



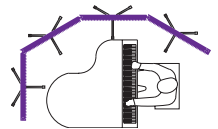
The Complete Solution

Add our **Stand-Mounted LENRDs** or **Sunburst 360s** to create your own perfect recording environment.

If you want Studiofoam to match your MAX-Wall, we offer **MAX-Pak™ Studiofoam** that features the same wedge-cut design (16 - 2'x4' panels per box).

For those needing their MAX-Walls to join at 90° angles, we have **MAX-Wall Corner Couplers** (included in the 1141 VB Kit; 12 - 20" sections per box).

The MW-Window Kit can also be purchased separately and includes a 48" x 20" panel with an 18" x 12" Plexiglas®-type window.



What They're Saying!

"The Auralex MAX-Wall System is a simple and elegant solution to 'room tuning' problems."

Guitar Player Magazine,
June 2000

"Stereo imaging at the mix position was dramatically improved...sonic details became much easier to pick out, and long-term listening became dramatically less fatiguing."

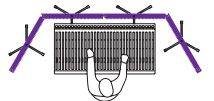
Pro Audio Review,
March 2000

"Your product has done wonders for my room. The mixes I'm bringing home are true."

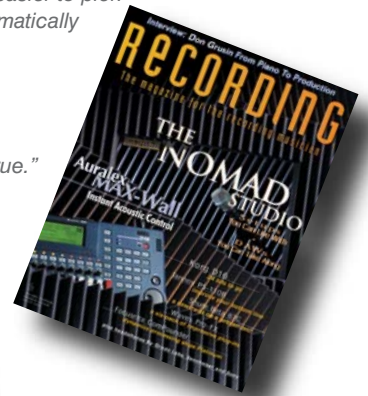
Pat Thrall
Guitarist/Producer

*"...a very flexible tool for recording...
...can make a big difference to the sound."*

Recording Magazine,
August 2000



MAX-Wall 420
4 - 20" x 48" MW-panels
2 - MAX-Stands





LENRD™ Bass Traps

In our world, rooms mess with our sound. Corners cause bass bumps in our rooms' frequency response. Critical monitoring is difficult in all but the most costly rooms. Extensive and expensive bass trapping abounds. Not in LENRD's world.

There, rooms actually sound *good* and look *cool*. Corners don't cause the headaches they once did. Checkbook balances contain numbers much larger than zero. Clients smile. Life is good in LENRD's world. A fairy tale? No way. LENRD rules!

Low frequency sound waves are so long—and thus so strong—they are the toughest to control. This is true no matter whether you're attempting to block their transmission to a neighboring space or trying to absorb them to clean up the low frequency response within a room. Controlling low frequency sound is harder than controlling mid or high frequency sound and generally requires more effort and expense. Luckily, Auralex can help.

LENRD stands for **Low-End Node Reduction Device**. (As you may know, a resonance bump in a room's frequency response is called a room node. Get it?*) Now, thanks to LENRD, you can achieve—for a pathetically small amount of dough—low frequency accuracy other companies can't give you for *any* amount of money! We're not being boastful—just knowledgeable—when we say that LENRD has virtually no competition.

Bass nodes are the most prominent and most difficult to control in any room. Bass traps substantial enough to control them have always been expensive to buy or intricate & time-consuming to build, but not anymore! LENRD is extremely effective at smoothing out low frequency room nodes at a price that anybody—and I do mean *anybody*—can afford!

LENRD's triangular shape makes quick work of trapping your bass buildup by putting a big chunk of our specialized Studiofoam™ right where you need it: in your trihedral corners (where two walls come together and meet the ceiling). Given that those corners aren't normally used for anything anyway, it's much better to make 'em work *for* you rather than *against* you.

A carton contains (8) 2' tall LENRDs, enough to trap 16 lineal feet. You've probably got 8' ceilings, so one box would be enough to trap both your room's rear corners floor to ceiling.

*Okay, officially a bump is a mode, and a dip is a node, but LEMRD didn't seem to make any sense to us. Artistic license applied for.

Or, if space permits, you could trap all four corners of your room from the ceiling down 4' (about chair rail height). Two boxes would give you enough LENRDs to trap all four corners floor to ceiling.

Some of you with more severe bass problems should consider trapping your trihedral corners as well as some or all of your wall-to-ceiling junctures, especially at the front and rear of your room. For the "really" optimal way to implement LENRDs and our 12" CornerFills or CornerFill Cubes in your room for maximum low frequency accuracy, refer to the full studio rendering on pages 2 & 3. (When we build studios, this is the way we do it.)

See, it's no wonder LENRD's so popular—he's really versatile! And, at our prices, LENRD will definitely not break your bank, no matter how small it is! LENRD is great looking, cheap & easy. (There used to be a reference to a certain blond actress here, but the Politically Correct Committee made me take it out.)

With its 1.24 absorption coefficient at 125Hz, LENRD is significantly more absorbent than 2" Studiofoam, which has a 125Hz rating of .11, and 4" Studiofoam, which has a 125Hz rating of .31. (And Studiofoam is way more absorbent than other brands!) Due to LENRD's bass absorption efficiency, many users can achieve premium results by utilizing thinner Studiofoam for the bulk of their wall treatment, i.e. they're not depending on the Studiofoam'd walls to add a lot of low frequency absorption to the overall installation.

This can save users tons of money depending on the size of the area they're treating.

It's also true that, for a device intended for bass absorption, LENRD exhibits quite admirable linear broadband absorption across the entire frequency spectrum. See all of LENRD's absorption coefficients in the chart on page 9.

Since virtually EVERY room benefits from low-end node smoothing to one degree or another in a variety of locations (trihedral corners, wall/ceiling junctures, under balconies, etc.), you should give really serious consideration to including LENRDs in your installation. In all our years of experience, we've literally never heard a room that was over-absorbed in the bass frequencies, so you run no risk of overtreatment with LENRDs. (Studios designed by the "million dollar guys" feature WAY more bass trapping than most people realize. I'm talking TONS more.)

LENRDs Utilized In A Home Theater



LENRDs

The Final Pitch!

LENRDs are working for many of our most famous clients. World-famous studio designers are spec'ing LENRDs. Major magazines have raved about LENRDs. Why? Because they know that pound for pound, LENRD gives 'em world-class absorption at unmatched prices and in an unmatched small size.

For once, we can all afford the amount of bass trapping we really need!!! So stop letting the tail (room modes & nodes) wag the dog (you & your investment). Grab some LENRDs and tell your low-end problems to take a hike! Put LENRD to work at your facility today!

Standard LENRD NRC: 1.35
Qty. Per Box: 8 (16 lin. ft.)

Sugg. Adhesive: 1 Foamtak or 2 Tubetak per box

Stand-Mounted LENRDs

The **Stand-Mounted LENRDs!** They're 4' tall instead of 2' like standard LENRDs and come complete with the same stands utilized with our Sunburst-360s. In "normal" mode, the LENRDs stand about 6' tall, but in "extended" mode, they can reach heights of nearly 8' or more. Stand-mounted LENRDs are the perfect complement to our MAX-Wall Modular Acoustical Environment! They're portable, effective, great looking and highly affordable. Not only that, but because they're stand-mounted, there's no adhesive to worry about and no wall repair to do if you move and take your Auralex treatments with you. Your investment can travel with you to your next studio, job location, etc.!

Stand-Mounted LENRD NRC: 1.35
Qty. Per Box: 4 - 4' LENRDs complete
with (4) MAX-Stands
Colors: Charcoal Gray, Vivid
Purple and Burgundy



Stand-Mounted LENRDs



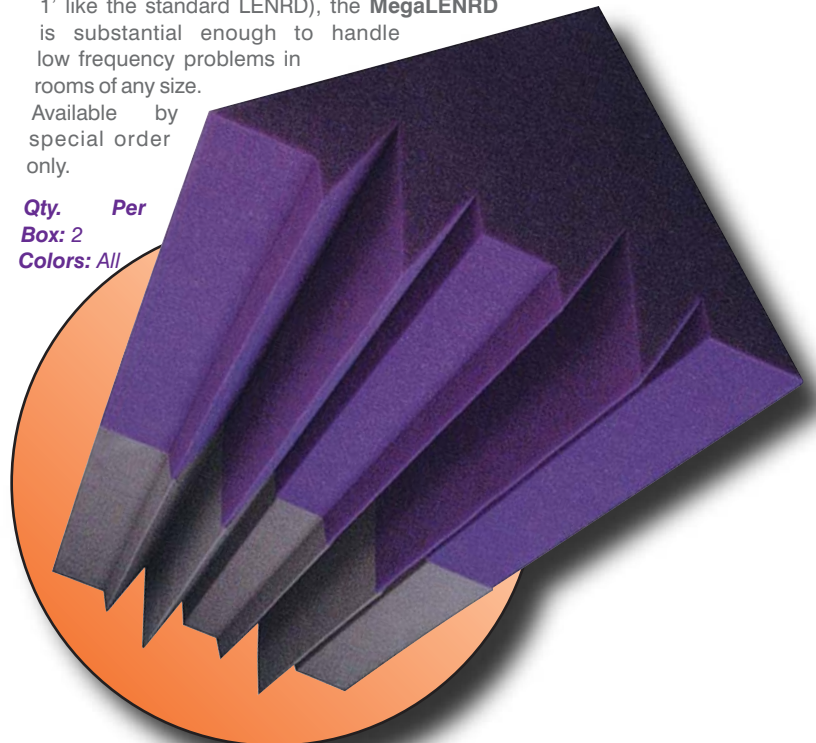
Stand-Mounted LENRD Bass Traps Make A Great Companion For The MAX-Wall Modular Acoustical Environment!

19

MegaLENRD™

At twice the width (extending 2' along each wall, not 1' like the standard LENRD), the **MegaLENRD** is substantial enough to handle low frequency problems in rooms of any size. Available by special order only.

Qty. Per Box: 2
Colors: All



VENUS



Venus™ Bass Traps

Many smaller studios and control rooms suffer from low frequency anomalies not only due to their lack of adequate trapping in general, but also due to their dimensions. Let me explain.

A standing wave occurs when a wave's length coincides with a room's dimension. This is the culprit when many times people have asked us "Why do I have tons of bass one place, but if I move my head 6", I've got no bass at all?"

In a studio, it's easy enough to move a performer, amp or drum kit to a different spot, but in a control room, where everything's fixed in location, such standing wave occurrences become tougher to deal with.....and much more important based on the nature of what a control room is for.

While we rarely "always" recommend a specific type of acoustical treatment, we do always tell customers that trapping their rear wall—even if they're going to install a diffusor array, the implementation of which isn't easy to draw for you or explain here; contact us for more info if you desire—is extremely important for accurate low frequency response at the mix position.

The Venus Bass Trap achieves a prodigious level of low frequency absorption at your room boundaries—where low frequency problems begin—at a price that allows it to fit into most budgets. The Venus ships in a 2'x4'x12" size, but is often cut in half to 2'x2', then paired with a 12" Auralex CornerFill, as shown in the diagram above.

While the Venus Bass Trap can provide serious low frequency and broad bandwidth absorption that's literally second to none in *all* rooms, it really shines in larger rooms like gymnasiums, houses of worship and multipurpose rooms. That's not to say the Venus isn't just as effective in smaller rooms, though. For example, one of the country's hot new up-and-coming ad agencies & post houses has a relatively small studio whose entire 10' tall ceiling is treated with Venus Bass Traps (if you're going to do this, note that mechanical reinforcement in lieu of adhesive may be necessary due to the weight of the Venus). Using them

in this way allowed the room's low frequencies to be smoothed out without taking too big a bite out of the room's 10'x14' size and without deadening the room's tone too much. The room now exhibits a sound that is surprisingly spacious, yet controlled; certainly the room's sound belies its small size. The engineer who works the room says "it's the best sounding room I've ever worked in."

You can check the chart on page 9 for all the absorption coefficients of the Venus Bass Trap, but it bears mentioning here that the Venus exhibits a phenomenal coefficient of 1.63 at 125Hz—so good that even the stoic testing lab guys called and said "Wow, how'd you do that?!"

If you're going for a Hidley-esque control room design, the Venus can provide some of the rear wall absorption Mr. Hidley (and Auralex, as noted previously) feels is all-important for low frequency accuracy at the mix position.

Thanks to the Auralex Venus Bass Trap, you can finally afford phenomenally effective, really serious low frequency control.

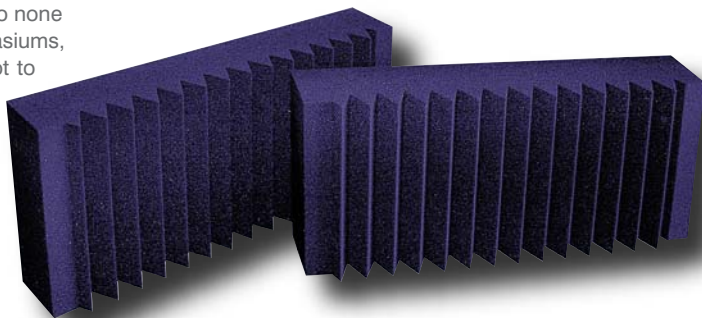
NRC: 1.30 Qty: 2 (16 sq. ft.)
Sugg. Adhesive Per Box:
1 Foamtak or 2 Tubetak



MegaMAX™

Sometimes, studios or tracking rooms have very pronounced bass anomalies that cannot be totally mitigated by conventional placement of bass traps. Auralex developed a big brother to the MAX-Wall...MegaMAX. The 2' x 4' panels are 9" thick and have a hole cut through them so that they can be mounted on MAX-Stands, therefore enabling the MegaMAX to be moved easily to "fine tune" difficult low-end problems. Their portability allows them to be used as low frequency go-bo's. The MegaMAX can be placed in problematic areas unique to particular applications.

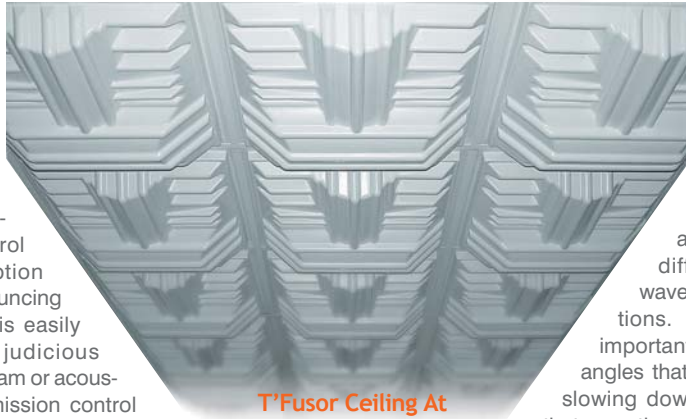
NRC: 1.10, 1.32@125Hz Qty: 2 (16 sq. ft.)
Adhesive and MAX-Stands are optional



Diffusion 101

Got Live! If You Want It!

The proper control of room acoustics typically requires three distinct types of sound management: absorption, transmission control and diffusion. Absorption of the sound waves bouncing around inside a room is easily accomplished by the judicious installation of acoustic foam or acoustical fiberglass. Transmission control (keeping inside sound in and outside sound out) is accomplished by means of specialized sound barrier materials like our SheetBlok™, specifically designed trapped air cavities, and multiple layers of specially-chosen construction materials. Diffusion is accomplished by alleviating large, flat, reflective room surfaces—about which the consensus is they have no place in serious recording, performing or listening environments—and instead, introducing surfaces of scientifically-designed varying shapes, sizes and angles. Auralex features three proprietary diffusers, the T'Fusor, the MiniFusor and the MetroFusor to serve any sonic, architectural or budgetary need.



T'Fusor Ceiling At
Sonic Foundry

How Does Diffusion Work?

In a couple of ways. Most obviously, the irregular surface contours and varying angles of the diffuser each reflect sound waves in specific different directions. Less obvious but just as important, the varying heights and angles that diffusers contain work by slowing down incoming sound waves that pass through the diffuser & strike the mounting surface at different times. Thus, sound is spread out not only in a physical (reflected) sense, but also in the time domain. Whereas the waves that get through the diffuser's material are mainly low frequency waves, introducing a piece of relatively dense sound absorbent material behind a diffuser can improve time domain spread, diffusion and, to some degree, even low end absorption. (Low end absorption is a better goal than low end diffusion, which based on physics, is difficult to achieve and would only serve to muddy your sound.) The engineer at Florida's Trans Continental Studios, where some of 1999's top albums were done, loves the sound of the dozens of T'Fusors they have and appreciates all the low frequency absorption he gained when they were installed.

What Does Diffusion Do For Me?

Diffusion keeps sound waves from grouping, so there are no hot spots or nulls in a room. In fact, diffusion greatly widens the "sweet spot" and lends a strong, 3D sense of openness to a room, making it easier to hear "into" a mix. Diffusion obliterates standing waves and flutter echoes without simply removing acoustic energy from the space or greatly changing the frequency content of the sound. Some famous recording artists like to perform in strongly diffusive environments because of the openness they hear. Diffusion can make a small space seem large and a large space seem even larger.

Diffusion in a control room imparts the all-important Initial Time Delay (ITD) that keeps early reflections off room boundaries from getting to your ears too soon & smearing the direct sound you hear from your monitors.

In conjunction with absorption, diffusion can effectively turn virtually any space into one that is appropriate and useful for the purpose of recording or monitoring sound with a high degree of accuracy.

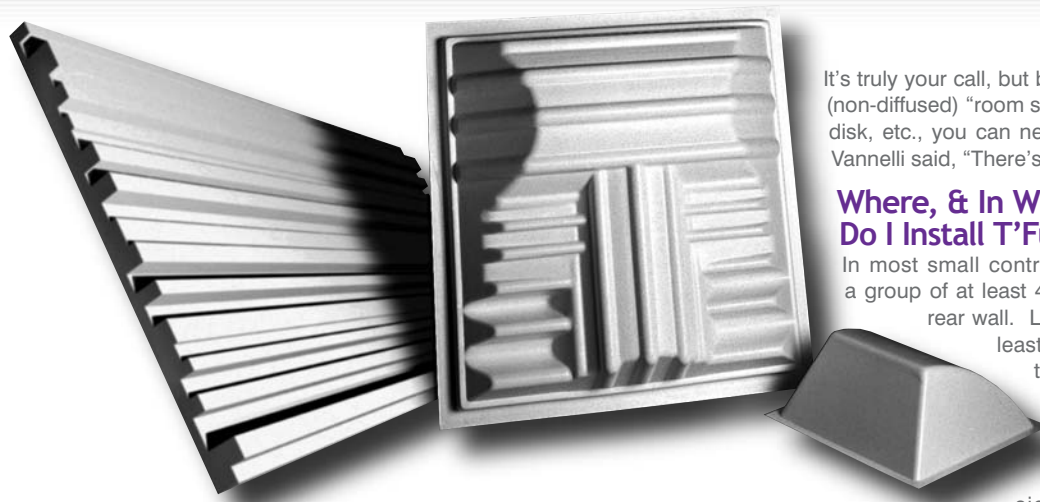
Who Needs Diffusion?

Most spaces can benefit from the introduction of properly designed and located diffusion; only the quantity & placement varies. Diffusion has been successfully implemented in studios, control rooms, concert halls, gymnasiums, meeting rooms, sanctuaries, natatoriums and more. The proper balance of diffusive & absorptive surfaces varies with room size & function, so your dealer or Auralex representative will be glad to assist you in choosing the proper type and quantity of diffusers & can advise you as to the best location for the devices in your particular space.

How Does A Good Diffusor Perform?

Diffusors spread sound evenly over the entire hemisphere in front of it in both directions (like ours does, if I might be so bold as to point out the obvious). The smoother the arc the better, because deviations from a smooth arc indicate volume changes. The object of diffusion is to redistribute mid and high frequency sound evenly throughout a space, not to absorb it, so you want a diffusor whose arcs at the various frequencies: (a) are very smooth, and (b) all show basically the same shape, which indicates the unit is providing uniform diffusion at all frequencies (like ours does from below 177 Hz to over 11,233 Hz, way above the test's cutoff frequency of 8000 Hz). Other diffusors on the market generate arcs that have too much deviation from smooth and arcs that aren't semicircles, they're more like the teardrop lobes generated by a flat panel. This means the other companies' diffusors aren't redistributing sound energy evenly in a 180 degree hemisphere. The T'Fusor DOES (as shown by the polar plots on the next page)!





It's truly your call, but bear in mind that once bad (non-diffused) "room sound" is captured on tape, disk, etc., you can never get rid of it. As Ross Vannelli said, "There's no knob for it."

Where, & In What Quantities, Do I Install T'Fusors?

In most small control rooms we recommend a group of at least 4 T'Fusors installed on the rear wall. Larger control rooms get at least 4 additional T'Fusors on the rear wall and, optionally, additional units placed on the ceiling from the mix position back. Discretionary placement: side walls behind the mix position, alternating with acoustic

foam. Regardless of room size or function, we feel groups of less than 4 T'Fusors are not audibly worthwhile. For T'Fusors to work properly, the pattern must not repeat sideways or vertically in close proximity to itself, hence the recommended orientation shown on the full studio rendering on pages 2 & 3.

Features & Benefits

We developed T'Fusors not because the other diffusers on the market don't work well; some certainly do to one degree or another. Rather, we felt that other manufacturers were disregarding certain real-world concerns.

Other brands are much more expensive, can be heavy & expensive to ship, can be too heavy to mount with adhesive or on a ceiling, are sized inappropriately (15.5" for some; 2'x4' heavy wood &/or metal for others), won't work in suspended ceiling grids, are very difficult for even professional painters to evenly coat, are very fragile &/or feature poor quality workmanship & low perceived value.

T'Fusors, on the other hand, are 23.75" square which allows them to drop perfectly into a suspended ceiling grid. They're lightweight and nest into each other, so per-unit and total shipping costs are dramatically lower than other brands. They're made of a really sturdy, high-impact thermoplastic resin that stands up much better to normal wear and tear than competing brands. They are MUCH more easily painted than other brands. They are lightweight enough to mount easily to walls & ceilings using construction adhesive or mechanical fasteners of your choice (2-sided tape, Velcro™, screws, staples, nails, push or T-pins, etc.). They are sized to facilitate alternating them with our acoustic foam panels for better overall room sound. They have a 1" ledge in their back that facilitates insertion of SheetBlok, flat-cut acoustic foam, rigid fiberglass or Auralex Mineral Fiber insulation for greater versatility in a variety of situations. They're available in easily paintable white.

In Which Rooms & Which Placement Is Diffusion Appropriate?

First, let's talk about control rooms. Most studio designers will tell you that the front of the room (walls & ceiling) should be absorptive as far back as the engineer. The ceiling from the engineer back can contain a mix of diffusion and absorption, but many top designers feel the rear wall should feature a diffuser array surrounded by broad bandwidth absorption, especially in larger rooms. The side walls & ceiling from the engineer's position on back can be alternately absorptive and diffusive. Treat your control room this way and I defy *anyone* to say your room sounds bad or inaccurate.

Second, live rooms (studios). Personal taste, room size and room function determine how dry (absorptive) or wet (diffusive) a studio should be, but many famous rooms are absorptive in some spots and diffusive in others.

Generalizations: rock studios should be more absorptive than classical or jazz studios, and rarely should be totally "dead."

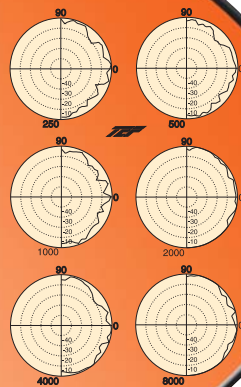
Personally, I prefer drier rooms, but if I've gotta be in a wet room, I want the liveliness controlled by diffusion to yield a more pleasing & smoother overall room sound & reverb tail (decay).

Third, isolation & voice-over booths. Personal taste & room size come into play here, too. As a voice talent, I prefer totally absorptive environments. As a drummer, however, I prefer a combination of diffusion and absorption on all room surfaces with significant bass trapping. If I was recording sax players, violinists or solo sopranos, I'd want some combination of the two; probably more diffusive than absorptive.

T'Fusor

NOTE: Auralex diffusers are tested in accordance with the proposed standard for determining the Directional Scattering Coefficients of acoustically diffusive materials which is under review by AST Committee E-33 on Environmental Acoustics. The full proposed standard can be found in Journal of the Audio Engineering Society Volume 40, Number 12, December '92.

The T'Fusor is the best performing diffuser we know of anywhere...at any price.



Polar Plots

Diffusors

Studio designer Bob Suffolk is using them in his rooms and absolutely raves about them, saying they're imparting a very noticeable spaciousness to the sound.

Last, but not least, T'Fusors are priced WAY BELOW competing products. So much so that some facilities can save literally *hundreds* or commonly *thousands* of dollars. For example, I was in a famous room recently and the engineer told me the competing diffusors on their wall cost them over \$3000 back in 1985. He about dropped his teeth when I showed him the T'Fusor polar plots and told him he could do a T'Fusor array just as large for less than \$500 (in today's dollars, no less).

So, hopefully the polar plots speak for themselves and you understand that when we say T'Fusors are priced "way below" competing products, we're not just blowing smoke. In some cases, we're talking 90% less expensive and they yield better **performance!**

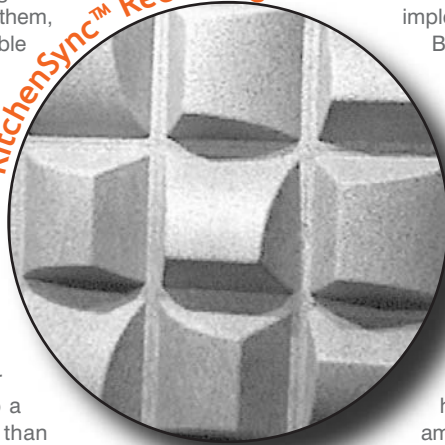
T'Fusors by Auralex. You CANNOT do better!

MiniFusor™ Sound Diffusor

Just like its big brother the T'Fusor, the MiniFusor is very versatile and affordable. The MiniFusor's shape lends itself to various wall patterns and its cavity can be filled with acoustic foam or Auralex mineral fiber insulation to provide better diffusion & low frequency trapping.

The MiniFusor is also made of rigid thermoplastic resin and, like the T'Fusor, is super-easy to mount and paint.

KitchenSync™ Recording



Auralex MiniFusors were quite successfully implemented by repeat Auralex customer, Bud Johnson, at his Red Brick Recording in Chicago. Bud used MiniFusors in quite a few ways at his facility, but in particular, liked what they did for him in a really small iso booth where there were bad sound problems.....and no room for bass trapping, other brands of diffusors, etc.

Bud installed MiniFusors per our guidelines and said they calmed the room's reflection problems AND gave him the low frequency control he needed. In fact, he said he was amazed at how much bass trapping the MiniFusors provided. Not only that, Bud's wife, an interior designer, loves their look and painted 'em really cool colors.

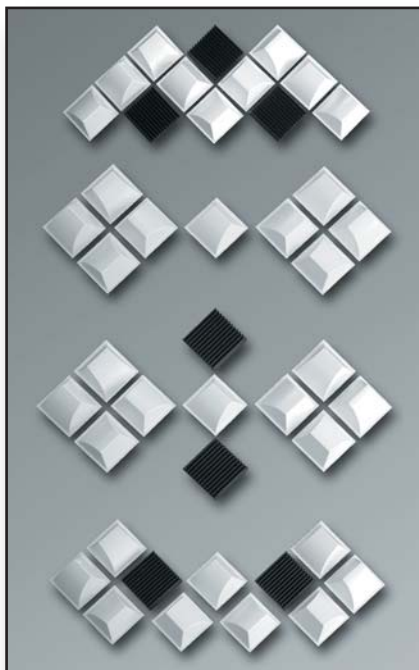
Auralex MiniFusors offer a rare combination of great performance & a great price! So, if you're in the market for diffusors and are on a tight budget, you owe it to yourself to give serious consideration to a MiniFusor array for your facility.

Dimensions: 12"x12"x5"

Qty. Per Box: 12 (12 sq. ft.)

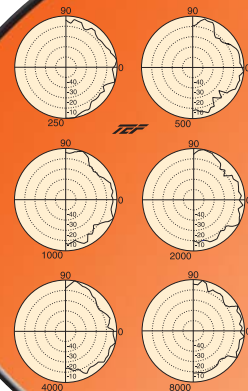
MetroFusor™ Sound Diffusor

As a companion to our well-received Metro 2" Absorber and Metro LENRD Bass Trap, we've recently introduced the MetroFusor. It's custom made for Auralex from high quality EPS (expanded polystyrene), so it's lightweight, affordable, easy to paint, easy to mount and inexpensive to ship. The MetroFusor features the same distinctive, proprietary surface contour as our Metro Absorber for a clean, consistent architecturally-pleasing appearance that looks upscale and attractive in even the most highbrow of environments. The MetroFusor's surface contour yields both sound wave refraction AND time domain spread for improved modal response without removing a significant amount of sonic energy from your space. It's perfect for churches, boardrooms, performance venues, studios and more! It's also a significant bass trap below 400Hz, which is quite a desirable attribute. ('cause low frequency diffusion would only muddy your sound.)



← Four MiniFusor™ array suggestions shown with Wedgies (sold separately)

MiniFusor



NOTE: As shown by these plots, the MiniFusor isn't quite as good a performer as our T'Fusor, however, it still outperforms many other more expensive diffusors on the market. Plus, it shares many of the T'Fusor's benefits in the areas of paintability, mounting options, etc.

Polar Plots

Complete Acoustical Control Kits

Nobody else ever did it for you, so Auralex took the guesswork out of acoustics and made it EASY AND AFFORDABLE to improve your sound! We proudly offer four Roominators™ Complete Acoustical Control Kits that can easily tame the sound problems many people run up against in commonly-sized rooms. With Roominators, everyone from the novice to the pro can sound their best....no formulas, no mumbo jumbo, no physics required! Finally, somebody has made it easy for you to sound great!

Think about this: What do you want out of your equipment? Better sound! The trouble is, without fixing your room acoustics, none of your great equipment will sound as good as it should. Your room just won't let your gear's true sound come through.

FACT: Bad sound is everywhere—in every room, regardless of size or shape.

Now you can have the big studio sound you've been looking for, but didn't know where to find & probably thought you couldn't afford. We've packed into the Roominators Kits the same exact features and performance that our famous clients have loved for years!

Roominators Kits contain:

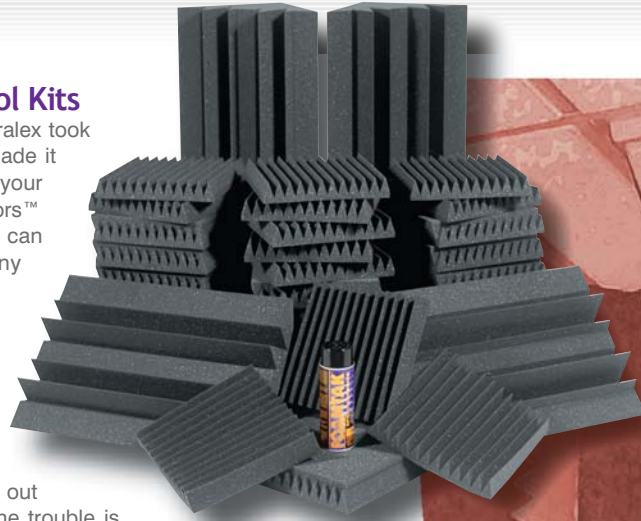
Studiofoam 2" Wedge Panels or Wedgies (Alpha⓪) to absorb early reflections & kill that hollow, "ringy" room sound.

LENRD™ Bass Traps to smooth out rooms' inaccurate & excessive low frequencies.

Foamtak™ or Tubetak Adhesive to mount Studiofoam & LENRDs with minimum hassles.

T'Fusor™ 3D Sound Diffusors (Deluxe & Pro Kits Only) for that spacious ambience & wide sweet spot big-name studios have.

- ★ Improve the sound of everything you record, listen to or mix;
- ★ Be able to reduce your monitoring volume yet actually hear *better*;
- ★ Hear more of the subtle sonic details that your room's inaccurate reflections have been burying;
- ★ Achieve better sound out of your existing equipment;
- ★ Improve your engineering skills, be more creative & get more enjoyment out of your equipment *and* your room!



Alpha⓪ Roominators Kit

- (64) 1'x1'x2" Wedgies
- (4) LENRD Bass Traps
- (1) Foamtak Spray Adhesive



Roominators™ Deluxe Plus

- (24) Studiofoam 2'x2'x2" Wedge Panels
- (8) LENRD Bass Traps
- (6) T'Fusor 3D Sound Diffusors
- (2) Foamtak Spray Adhesives

Roominators Kit	Square Footage (Area)	Shortest Room Dimension
Alpha⓪	≤ 100 ft ²	6-8 ft
Project⓪	≤ 100 ft ²	8-12 ft
Deluxe Plus	100-250 ft ²	10-14 ft
PRO Plus	250-400 ft ²	12-16 ft

Auralex Roominators Inst

Roominators™



Roominators Project 2™

- (24) Studiofoam 2'x2'x2" Wedge Panels
- (8) LENRD Bass Traps
- (2) Tubetak Pro Liquid Adhesive

In short, it's never been this easy or affordable to tame the acoustics in your small studio, iso room, voiceover booth or control room! Along with each kit, we even include instruction sheets with installation suggestions!

If you're the type who doesn't know a lot about the physics of sound control....and doesn't WANT to know a lot about the physics of sound control.... then you owe it to yourself to check out all the Roominators kits: from the super-affordable Alpha 1 all the way up to the top-of-the-line Pro Plus Kit. And, if you ever need to, simply add more Roominators kits as your budget and acoustical needs dictate! It just doesn't get any easier than Roominators from Auralex!

"The Auralex Alpha 1 Roominator kit transformed the second bedroom in my New York apartment from an acoustic war zone into a songwriter's comfort zone."

Andy Cichon
(Bass Player, Shania Twain, Billy Joel)



Roominators™ Pro Plus

- (36) Studiofoam 2'x2'x2" Wedge Panels
- (12) LENRD Bass Traps
- (8) T-Fusor 3D Sound Diffusers
- (3) Foamtak Spray Adhesives

See the chart on the bottom of the opposite page (pg. 24) for some rough guidelines to help steer you toward the Roominators kit that's just right for you. Bear in mind that these are just guidelines, so if your dimensions fall outside the recommendations, don't sweat it! You're probably safe, but to make sure, contact the Auralex consultants by phone, fax or email to double check and make sure that you're headed in the right direction. And, if your needs dictate, don't forget that you can also "mix & match" your room's solutions by combining more than one Roominators kit (the same OR different types) or by adding a la carte some of the other Auralex products featured in this

Whether how you slice it, Roominators are the best place to start your journey toward sonic enlightenment!

MiniFusor Upgrade!



Installation At Sonic Foundry



SheetBlok™ Sound Barrier

SheetBlok is a dense, limp-mass vinyl

material that is about 6dB more effective than solid lead at stopping the transmission of sound. It acts as a thin, dense sound barrier layer in walls, ceilings or floors and is most effective when used as one component of a multi-layered construction scheme.

SheetBlok helps in decoupling (i.e. floating) floors and walls and, while it's not normally considered a finish product *per se*, it is paintable with latex paint and can in some cases be your last layer if you make sure to carefully install it & use trim strips over its seams.

SheetBlok can also be used to wrap HVAC ducting, as a vent noise blocker, as a pipe noise insulator or under carpet/carpet pad. It holds up against harsh environments & cuts easily with a utility knife or scissors. Famous studio designers buy SheetBlok repeatedly & we get glowing reports on its performance ALL the time.

It simply can't be beat and is a MUST for users who demand serious soundproofing. SheetBlok is an Auralex Top Seller! By the way, if you need even more help than one layer of SheetBlok offers, you can double it up for improved isolation and can expect its effectiveness to increase from STC 27 to about 35.

Size: 4'x10' pieces (40 sq. ft.) or 4'x30' rolls (120 sq. ft.)
Color: Black (smooth on one side; has a pebble grain finish on the other) or clear (special order; subject to availability)
STC: 27 **Thickness:** 1/8" **Weight:** ±1#/sq. ft.
Service Temperature: -40° to 180° F
Tensile Strength: 400 psi **Tear Strength:** 70#/inch
Flammability: Rated UL94 S.E. "0"; Passes test MVSS-302

Notes: (1) STC stands for Sound Transmission Class, a rating of how effective a product is at being a sound barrier. (2) Clear SheetBlok is sold by the square foot and is available in widths up to 4'. Minimums may apply.

U-Boats™ Floor Beam Float Channels

Made of a specially-formulated rubber compound, U-Boats are our proprietary U-shaped channels used to support framing members and float (isolate & decouple) them from the surrounding structure. With the help of U-Boats, a floated room features greatly improved transmission loss (isolation) and low frequency definition (translated: a tight, floated room will always sound better!). It's easy to figure how many U-Boats to get: just multiply the total square footage of the area you want to float by two-thirds; the resulting number gives you the approximate amount of U-Boats you'll need. U-Boats are the industry's most

affordable floating solution and are much easier to use than those exorbitant "pucks" that have been used in the past. Personally, we would *never* design or build a studio

without 'em! To get the biggest benefit from U-Boats, install your joists 12" o.c. instead of 16"

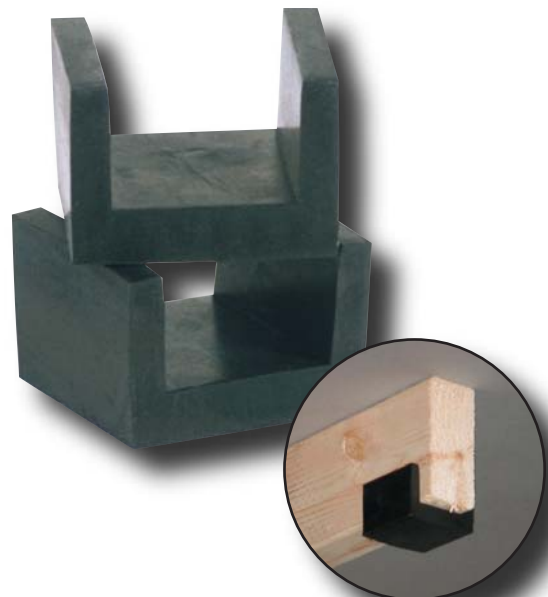
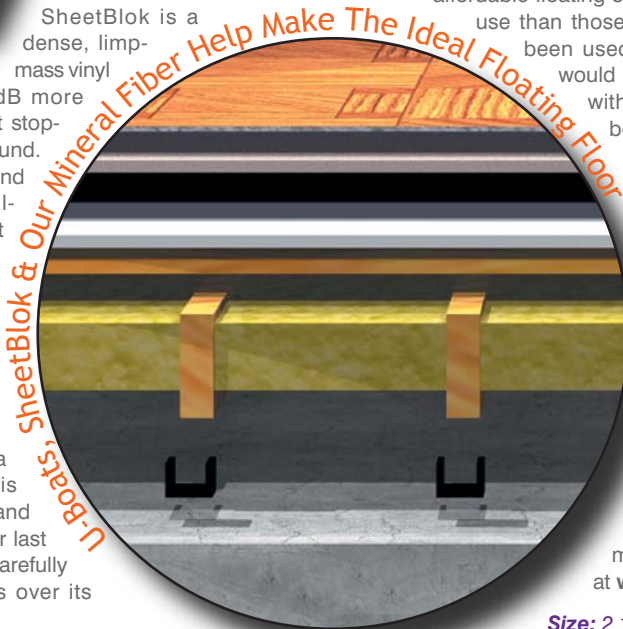
o.c. Recent testing has also shown that U-Boats are safe to use at spacings up to 32"

o.c. U-Boats on 16" centers will alleviate 50-99% of vibrations above 40Hz.

U-Boats on 32" centers will alleviate 50-99% of vibrations from 20Hz up.

More information on U-Boats, and all of our acoustic control and construction products, particularly how to install them for maximum benefit, is available at www.auralex.com.

Size: 2 1/8" wide x 1 1/2" high x 2" long
Color: Black **Thickness:** 5/16" & 1/2" **Box Quantity:** Available in lots of 50 or more



Construction Materials



Mineral Fiber Insulation

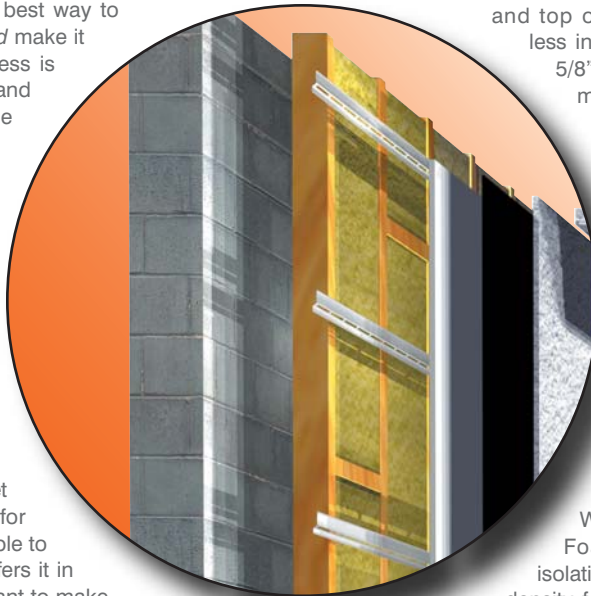
As previously discussed, the best way to tighten up a room's sound *and* make it more soundproof in the process is to design it right, build it tight and make the partitions as dense as possible. That's where our specialized, imported Mineral Fiber comes in. It's WAY more dense than "the pink stuff" and is specifically designed for acoustical usage. It yields much better bass trapping, overall absorption, thermal characteristics, moisture absorption and sound transmission loss (isolation) than any other product we've found. Our construction booklet *Acoustics 101* has spec'd it for years, but it isn't widely available to the public, so Auralex now offers it in 2" & 4" thicknesses. If you want to make your place the best it can be, you need to give serious consideration to Auralex Mineral Fiber. Note: For those of you in need of absorption, but for whom acoustic foam may not work for whatever reason (flame retardancy, looks, style, etc.), Mineral Fiber covered with specialized acoustical cloth is a viable alternative.

NRCs: 1.00 (2" & 4")

Qty. Per Box: 2" - 6 (48 sq. ft.); 4" - 3 (24 sq. ft.)

Flame Retardancy: Class A

Advantages vs. Std. Fiberglass: better sound isolation, better acoustic absorption, lower moisture absorption, better flame spread & smoke density, 1200° burn point vs. 650°



RC8™ Resilient Channel

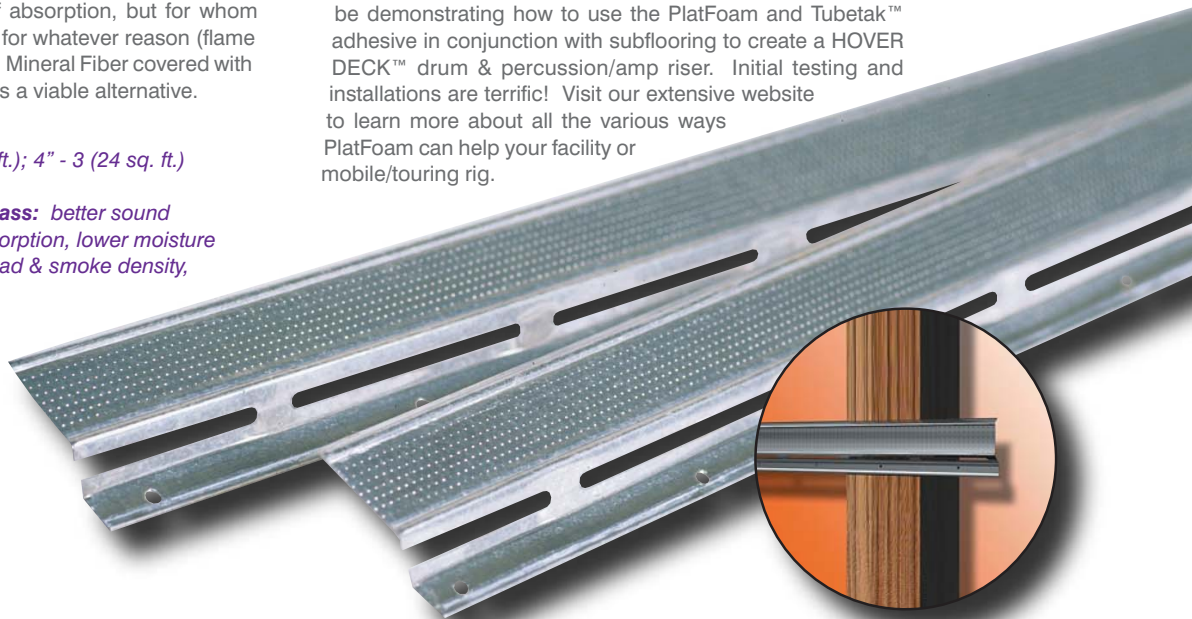
Auralex's RC8 is a specially-formed, sturdy metal device that, when used to hang drywall (instead of just attaching the drywall to the studs or joists), GREATLY improves the sound transmission characteristics of the wall or ceiling system. RC8's effectiveness has been well documented for years, but the problem has always been that RC8 isn't commercially available in many locales or is available only to licensed contractors. This led to numerous customers calling Auralex saying they couldn't obtain RC8. Not to worry...we've got you covered! RC8 should be installed horizontally at the bottom and top of your wall, then every 2' or less in between. Up to (2) layers of 5/8" drywall & a layer of SheetBlok may be hung on RC8, even on a ceiling.

RC8 is available in handy 8' lengths that are ground shippable. There are (24) 8' pieces per box. It's unbeatable!

New Products!

Auralex continues to develop new products to solve many of the problems we see every day via our Personalized Consultation Form (see p. 31).

We have just introduced PlatFoam™ designed for specialty isolation applications. Strips of high-density foam can be used for a variety of isolation projects such as an amp rig, a home theater subwoofer, or a drum riser. We will be demonstrating how to use the PlatFoam and Tubetak™ adhesive in conjunction with subflooring to create a HOVER DECK™ drum & percussion/amp riser. Initial testing and installations are terrific! Visit our extensive website to learn more about all the various ways PlatFoam can help your facility or mobile/touring rig.



Adhesives

Tubetak™ Pro Liquid Adhesive

Tubetak Pro is a super-strong bonding adhesive that comes in a tube and applies easily with a standard caulking gun or our Tubetak Pro Applicator, available separately. Tubetak Pro provides a permanent bond and one tube mounts up to 32 square feet of foam or diffusers, depending on thickness. Other brands of liquid adhesive have been known to oxidize ("eat") foam, but Auralex guarantees that Tubetak Pro will not oxidize Auralex foam products. Tubetak Pro Liquid Adhesive may be purchased in



any quantity needed.

Covers up to 32 sq. ft.

Foamtak™ Spray Adhesive

Foamtak is quite simply the fastest and easiest way to mount Auralex acoustic foam products. Unlike Tubetak Pro adhesive, which is more permanent & tougher to remove down the road, Foamtak can be applied lightly so that your foam is removable, or it can be applied heavily for a more permanent bond.

Foamtak contains more actual solids than competing spray adhesives (you're getting more for your money!) and uses a unique spray pattern, so it offers greatly improved long-term bonding power vs. other sprays, which virtually ALWAYS dry out & fail. Foamtak is guaranteed not to oxidize Auralex acoustic foams and may be purchased in any quantity needed. You'll love how easy Foamtak is to use!

Mounts up to 96 sq. ft. or more per can depending on foam thickness.



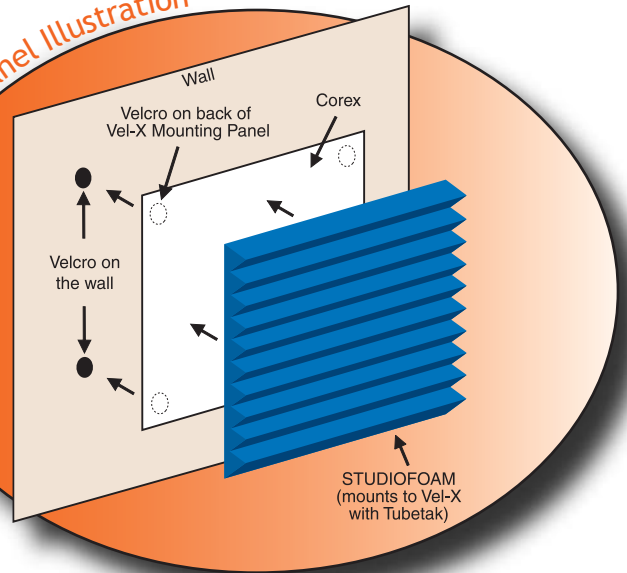
Vel-X™ Mounting

Vel-X panels are special corrugated polypropylene panels that are cut in 22" squares and can be used to mount Auralex acoustic foam or MetroFusors in a movable or temporary way on walls. The foam is adhered to the Vel-X panels with Tubetak Pro adhesive, then the special (not the same as you get at the hardware store) Velcro dots are used to stick the panels to the wall. The panels are movable at will, allowing you to tune the room for a particular project or take them with you when relocating to a new facility, so now there's no need to leave your Auralex investment behind. Vel-X panels are shipped with both Tubetak Pro and special Velcro dots included.

Minimum shipment is (4) 22"x22" Panels

- 1" needs 40 panels per box of foam
- 2" needs 24 panels per box of foam
- 3" needs 16 panels per box of foam
- 4" needs 12 panels per box of foam

Vel-X Mounting Panel Illustration



Installation Tips

If you're looking for a way to temporarily fasten your Studiofoam or other Auralex products, try using T-pins (available at fabric/dept. stores). T-pins will support your treatment while the Tubetak or Foamtak bonds. When adhesives can't be used or when you need to temporarily mount the treatment to fine "tune" your room, T-pins provide an easy solution. Traditional fasteners (screws, nails, tacks, etc.) also work in many situations.

To cut your Studiofoam, simply use an electric carving knife for custom designs, a finishing touch, super-smooth edges and a REALLY cool installation!

Please see www.auralex.com for additional technical installation tips and a growing library of pictures of actual installations.

Case Studies



CEDIA Home Theater of the Year!

Auralex is proud to have been hired as the acoustical consulting firm for the 1999 CEDIA Home Theater Of The Year in the "money is no object" category.

Both sound transmission to other areas of the home and theater ambience were of great importance. With the use of Sheetblok™, Mineral Fiber Insulation, RC8™ Resilient Channel, and U-Boats™, sound was well-confined to the theater. The room itself measured virtually flat from 38Hz to 22KHz, thanks to the use of VENUS Bass Traps, Studiofoam, and other specialized Auralex products.

In addition to the CEDIA award, we received some great compliments from many industry heavyweights. Check out the article on the Scott Jones Theater in the Summer 2000 issue of *Home Theater Interiors* magazine, and see our website for the complete case study. Let Auralex products and the Auralex Consulting Group help with your "Project Of The Year"!

GBT Studios

Auralex Acoustics, Inc. recently provided acoustical consulting services and acoustical treatment products for GBT Studios near Nashville, Tennessee.

(Owners: Award-winning and chart-topping producer & engineer, Brian Tankersley, and Mark Miller, lead singer for the multi-platinum Sawyer Brown.)



• For isolation between adjacent interior spaces, all walls utilize several layers of SheetBlok and other materials over concrete block.

• To further improve isolation, we specified custom, soundproof doors from one of the industry leaders in acoustical door manufacturing.

• For the iso booths, a custom aluminum track system was installed and Studiofoam panels were mounted in custom aluminum frames. The acoustics in each Booth can be varied to suit the type of recording.

• The isolation between Recording "Stations" (open areas meant to allow better communication between musicians and between engineer/producer and musicians) is excellent. The use of high-quality nearfield monitors with a low level of rear-projected sound, the heavy absorption (2" Studiofoam Pyramids and 3" Studiofoam Wedges) around the Stations and angled partitions between the stations all combine to provide greater than 20dB of isolation between the areas! (This means that musicians at each station can customize their monitoring mix and not be worried about hearing different mixes from adjacent spaces or from the Main Mix Area.)

• The Main Room benefits from built-in bass traps above the Recording Stations. The low frequency response of the finished room is roughly ± 3 dB from 40 to 400 Hz.

• There are 3" Studiofoam treatments on the walls and movable, acoustical "clouds" (treated with 1" and 2" Studiofoam) on the ceiling to correct other problems.

The finished studio is a truly wonderful mixing and tracking environment. Acoustically, the stereo imaging is phenomenal and the "sweet spot" is quite large.

GBT Studios is a state-of-the-art facility with all the latest in hard disk and digital recording technology. The Brian Tankersley/Mark Miller design is a new paradigm for recording studios. Auralex was happy to be a main contributor and looks forward to many great recordings from GBT Studios!

Upcoming Auralex Projects

We've selected some specific examples from the thousands of Personalized Room Consultations (p. 31) we've done in the past in order to illustrate various problems and their specific solutions. Using these consultations, we'll be creating case studies on a number of topics that are of interest to a majority of Auralex customers. Upcoming case studies will include a much smaller-scale home theater, a project studio, and a converted garage that's used as a studio by a rock 'n' roller who's charted nationally! Check www.auralex.com for new case studies that might be similar to your specific situation and feel free to send in our Personalized Room Consultation Form for your own case study.



Consulting Services

Henry Lee Summer's Studio



Over the course of more than two decades, the name Auralex has become synonymous with high quality, affordable acoustical treatments for a wide range of facilities. What many folks don't know is that Auralex also offers an expanded range of consulting and design services at the competitive prices you've come to expect from us.

Unfortunately, acoustics are often ignored or overlooked during a facility's design phase, then the consultants are brought in after-the-fact—when the pot of gold has been drained—and still expected to save the day! Acoustical treatments are often left out of a job because of budget limitations & because people can't "see" acoustical differences.

The construction of an increasing number of acoustically sensitive spaces and the rapid advances in sound reproduction technology have given Auralex the ability to offer a wider range of products and services. We have many combined years of expertise to offer the architect, consulting engineer, contractor or builder, and are prepared to assist all concerned from conceptualization....to finished design....to completed project. Plus we offer a wide range of products that allow you to achieve exactly the sound you need.

Why Choose Auralex Acoustics Consulting & Design Services?

Auralex keeps up with the latest in CAD software and complements room designs with high-tech renderings and "walk-throughs". We use the most up-to-date acoustical modeling software so we can "hear" what your design will sound like and identify possible problems before a single board is nailed. We use the most current measurement equipment for on-site analysis, but most importantly, we have personnel with the knowledge and expertise to bring everything together in a thorough, yet cost-effective, way.

Many times we have been called on to fix other studio designers' acoustical goofs, so you know you can trust what the Auralex Consulting Group has to offer.

If you have an acoustical problem or want a design done right *the first time*, put your trust in the world leader in acoustical products....and services....Auralex Acoustics.

Alien Multimedia Concept Studio



Okay...So What's Available?

The services we offer in the area of acoustical consulting & design are:

Acoustical Consulting for Existing Rooms*

- ▶ Room Acoustics (no room is too large or too small)
- ▶ Room Isolation
- ▶ HVAC Noise Control
- ▶ Industrial Noise Control
- ▶ Other noise & acoustical problems

Complete Facility Design**

- ▶ Recording Studios
- ▶ Broadcast Facilities
- ▶ Audio/Video Editing Rooms
- ▶ Mastering Facilities
- ▶ 5.1 Surround Rooms

On-Site Acoustical Consulting***

- ▶ Measurement of room response for modes and anomalies
- ▶ Measurement of noise levels
- ▶ RT and speech intelligibility measurements for large rooms
- ▶ On-site evaluations and recommendations

Estimates are always free, so email our Chief Acoustical Engineer, Jeff Szymanski, at consulting@auralex.com or give us a call at (317) 842-2600 **before** you design your next classroom, auditorium, church, arena, restaurant, conference room, call center, studio, home theater or other sound critical space.

You'll be doing yourself a favor that'll pay dividends for years to come!

Heather Hills Baptist Church, Indianapolis



* Call today for a free estimate and consultation by one of our experienced Technical Consultants.

** Charges may apply based on the complexity of the project. Call for details.

*** Minimum charge is typically \$1,000.00 per room. Please call for an estimate.

*** Minimum hourly charge of \$175.00 applies, plus expenses. Please call for an estimate.

Hot New Auralex Innovations!

Like all great innovations of the past, Auralex PlatFoam™ and GRAMMA™ are elegantly simple “soul”utions to ever present sonic battles. Whether it be in the mixing/recording environment, live production or even a home theater sub woofer, Auralex isolation products will lead you to victory!

Utilizing specially formulated high-density acoustic foam, Auralex has been able to bridge the gap between average and excellent. Let Auralex acoustic foam isolation products take you to the next level...

“Auralex products are unchallenged both live and in the studio. I love Auralex’s new GRAMMA. Onstage it really smooths all my guitar tones. In clubs, theaters and even outdoors, the GRAMMA really makes a huge difference... The production crew of Tower of Power was so impressed, they started using them underneath the horn section monitors, the keyboardist’s LESLIE speaker and several drum mics... FANTASTIC results all the way around.”

Jeff Tamelier
Guitarist, Tower of Power

“...low end much more focused. I was able to dial in exactly what I wanted, w/out room resonance’s.”

“...my two recording amps stay on the stands. If we switch amps, they go right back on the stands.”

“...all the little buzzes & rattles normally in a room go away immediately.”

Lee Roy Parnell
Vanguard Recording Artist

“Awesome... made all the difference in playing small rooms... Cleaned up my sound... I now enjoy my full volume tone at lower volumes.”

Benito DiBartoli
Blues guitarist

“Low Frequency Drum Resonance Isolation... What a concept! I recommend the PlatFoam™ for any drummer who needs to eliminate complaints from the neighbors or family members. I would also highly recommend it for studios that want to prevent low frequency resonance bleed. The PlatFoam™ is simple to use, simple in concept and is simply amazing!”

Dendy Jarrett
Nashville Drummer/
MusicPlayer.com’s Drum
Channel Editor

31

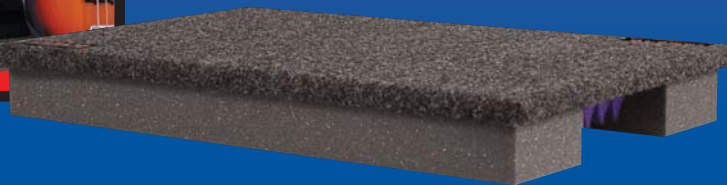


- Get your own personal amp/speaker riser.
- Isolate & decouple your amp and/or monitors from the floor/stage, resulting in much greater separation and clarity.
- Makes engineering much easier due to less bleed and resonance.
- Dramatically improve audibility on-stage and in the studio.



GRAMMA™ Specifications

- 23" L x 15" W x 2¾" H
- 1 or 2 GRAMMAs will support most amps, speaker cabinets, subwoofers & monitors



Decking material not included

“The main benefit of the PLATFOAM drum riser is that it makes my drums sound better... I immediately heard a big difference... The drums had more definition, more punch and a fatter, clearer low end.”

Kenny Aronoff

- Decouples drums/amps/speakers from the room.
- Significantly increases isolation, minimizing sound transfer to areas outside the studio.
- Improves purity of tone & “crispness” of instruments.



- Fast, portable, affordable & easy!



PlatFoam™ Specifications

- 2" x 4" x 4' pieces of high density foam
- 24 pieces per box (will float an 8' x 8' area)

See pages 26 & 27 for other Auralex isolation products.



The Mother Of All Acoustics Websites!

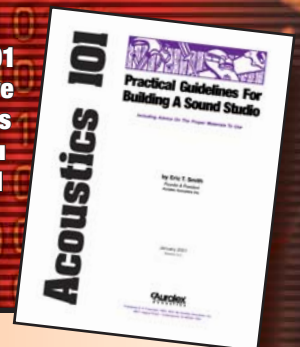
Keep up to date on all of the latest Auralex products by visiting our extensive, cool & critically-acclaimed website at www.auralex.com. There, you can learn about each product in our extensive line individually, or you can download the digital version of our catalog so you can browse offline at your leisure. The website also has all our products' testing data, which can come in especially handy when you're trying to solve a specific acoustical problem. You'll find advice on how to install your treatments, how to calculate the amount of treatments you'll need to attain the sound quality you're striving for, lots of handy installation tips, and tons more! And, if yours happens to be a special situation that just doesn't seem similar to any of our case studies, you can quickly download our Personalized Room Consultation Form, fill it out and fax or email it back to us. Auralex engineers and product consultants are standing by to help you get the sound & look you want...without breaking your piggy bank. Trust Auralex to help make your facility the best it can be!



AuralexUniversity.com takes the "black magic" out of acoustics & makes it easy to hear how proper acoustic treatments impact the tonal quality of live & recorded sound. Regardless your level of expertise, you'll be amazed at how blatant & discernible the acoustic differences are in our 'before & after' sound bites! In an effort to assist the widest segment of our customer base, Auralex engineers have painstakingly recorded a variety of instruments and voices to help illustrate our various products' effects in real world situations like bedroom studios, home theaters, vocal booths, live rooms, drum booths and more. The test results are posted in a variety of universal formats like WAV, JPG, MP3, WMA, PDF and more to make using Auralex University both easy-to-use and informative!



Lots of famous folks have called our handy booklet **Acoustics 101** "the best couple dozen pages ever written on studio construction". Now, we've taken all its tried-&-true, nuts-&-bolts acoustical construction advice and expanded it to include gobs more in-depth info on all sorts of acoustical construction issues. **Acoustics101.com** will give you good, solid, cut-to-the-chase advice on how to build your studio, home theater or other sound-critical space so that it's tight and acoustically sound (pun intended!)...plus, best of all, you don't have to be a physics major or master carpenter to understand it! So, before you cut your first 2x4, check out **Acoustics101.com**. You just might save yourself a bunch of money and a bunch of headaches!



A PARTIAL LIST OF OUR FAMOUS CLIENTS: James Taylor•Journey•Sammy Hagar•Kenny Aronoff (John Mellencamp, John Fogerty, Melissa Etheridge, Bob Seger's Silver Bullet Band)•Peter Dinklage•Tom Petty•Clint Black•Celine Dion•Doane Perry (Jethro Tull)•Dennis DeYoung/James Young/Todd Sucherman (Styx)•Andy Cichon (Shania Twain, Billy Joel)•Spyros Poulos (Madonna, Al Dimeola, Kathy Troccoli, Taylor Dayne)•George Terry (Eric Clapton Band)•Bill Kreutzmann (The Grateful Dead)•George Lynch (Lynch Mob, Dokken, Grammy®-Winning Guitarist)•D'arcy of Smashing Pumpkins•Alto Reed (Bob Seger's Silver Bullet Band)•Zoro The Drummer (Lenny Kravitz)•Andrew Gold•Christopher Cross•Ross Vannelli•Martha Davis (The Motels)•Mike Wanchic (John Mellencamp Band)•Barry Carl (Rockapella)•Mark Lindsay (formerly of Paul Revere & The Raiders)•Daniel Spitz (Anthrax)•Dominic Guss (Stevie Nicks, The Outfield, Kurzwel)•Joey "The Don" Donatello (Janet Jackson, T. Yearwood, T. Braxton, R. Kelly)•Brian Foraker (Heart, Yes, KISS, Starship, Night Ranger, 38 Special, Whitesnake, ELP)•David Schwartz (Northern Exposure, Maximum Bob, Ellen Degeneres)•Norbert Putnam (Jimmy Buffett, Dan Fogelberg, Linda Ronstadt)•Mark Farner (Grand Funk Railroad)•Greg Karukas•Teddy Pagano (Burlap To Cashmere)•Richie Gajate-Garcia•Pat Thrall (Pat Travers Band)•Too Short•David Paglia•Henry Lee Sumner•Norbert Stovall (D. Parton, Wayne Newton, K. Rogers, E. Rabbitt, The Lettermen)•Michael Cooper•Toshi Iseda•The Bellamy Brothers•Wayman Tisdale•John Baxter (Re-Flex)•John Blackwell (Drummer for Patti LaBelle)•An Anonymous "Phamous" Rock Band•John Ferencik (Todd Rundgren)•Victor Mendoza (Yamaha Percussion Artist)•Bob Kevoian (The Bob & Tom Show)•Michael Molenda, Editor, Guitar Player•Steve Oppenheimer, Editor, Electronic Musician•Brian Knave, Assistant Editor, Electronic Musician•Nona Hendryx•Walt Disney Company•MJMFORD, A Lawrence Kasdan/Touchstone Film•LucasArts Entertainment Co. •Microsoft•Mona Lisa's Pizza Palace (SkiDRow's Facility)•JBL•Steven Klein, Fmr. Sr. Engineer Criteria Studios (E. Clapton, Bee Gees, A. W. B.) & Studio Designer (Don Was, Kenny G, Yab Yum Entertainment, Larrabee)•Irving Azoff•Pelonis Acoustics (FutureDisc, K. Loggins, Skywalker Sound)•Bob Hodas•Rosati Acoustics•Sear Sound, NYC (S. Colvin, N. Merchant, E. Clapton)•Castle Oak Productions (Titanic, Tremors, Wings, 21 Jump Street, Jose Feliciano, Sergio Mendes)•Digital Sound Works (Babylon 5, Blade, Frazier/Becker, NBC, ABC)•Sound Kitchen (Dixie Chicks, Peter Frampton, Petra)•Transcontinental Studios (ABC/MTV's Making the Band)•GBT Studios, Brian Tankersly (Shania Twain, Lonestar, Brooks & Dunn)•Digital Insight•Harpo Studios•Full Sail Center For The Recording Arts•Time Warner Cable•Silicon Graphics (SGI)•Nintendo•AT&T•Bose•iMusiccast.com•NASA (Mission Control & Kennedy Space Center)•Sony•NBC Sports•Berklee College of Music•The Lincoln Center•Soundscape•Metropolitan Museum of Art•The Whitney Museum•Omni Sound Studios•Toyota•Anheuser-Busch•Rob Actis (Narrator, "Bill Gates In His Own Words" & more)•Dick Ervasti (Director of Sports on Fox & Tons More)•Jim Bratton (Voice of Dow, Exxon, Shell, Continental Airlines, Compaq, Etc.)•Qualcomm•Event Electronics•Todd•AO•Lucent Technologies•General Dynamics•Kodak•Ford Motor Company•Hitachi•Toshiba•Pioneer•20th Century Fox•MSNBC•ABC Radio Network•Chuck Surack, President, Sweetwater Sound•ABC TV•ESPN•CBS Sports•CBS Radio Network•The Family Channel•The Discovery Channel•The Golf Channel•Dick Wilkerson (Former Voice of WGN-TV, Chicago)•Paramount's Great America•Universal Studios•Making the Band (Bunim/Murray Productions)•ABC-TV(MTV)•Maury Povich Show•National Public Radio (NPR)•Beavis & Butthead•Warner Bros. •Polygram Records•Shure Bros. •3BTV•Pat Duke (Voice of McDonald's, Miller/Brewing, Etc.)•Rainbow America (Disney, Microsoft, Columbia Pictures)•Manley Audio Labs•Harman-Motive•Audix•Ensoniq•Editel•Barney & Friends•Tiki Town Studios•Electroplex•Boeing•Azden•Macromedia•Adaptex•Technics•Quarterdeck•Denver Center For The Performing Arts•Community Loudspeakers•Chevron USA•Brigham Young University•Cinema Video•Crawford Post-ShowCo•Silver Dollar City, Branson, MO•Bell Telephone Research Labs•Hunter Fan Co. •Opryland USA•Rockwell International•UCLA School of Music•MPI Home Video (ABC News, Apple Records)•Joe "Guido" Welsh (Wal-Mart, Atlanta Hawks, Turner Broadcasting)•Not Just Jingles, New York City (NFL on Fox, ABC Wide World of Sports, Coke)•Bill Fulton (I Am Weasel/ Cartoon Network)•Tom Lavin, Editor (Animaniacs, Pinky and the Brain)•Dave Meniketti (Member of Y&T, Jingle Singer For Taco Bell, Levi's, Maltite)•MTX-Soundcraftsmen•Baldwin Pianos•Carvin•Cobra Golf•Martin-Logan•Starlight International•TourDesign (major stars' concert promos & "monster truck" spots)•Wolfgang Puck (Famous Chef)•Fruit of the Loom Country Comfort Tour•World Media Group•Cigna Insurance•Martin-Marietta•US Government (Over A Dozen Agencies)•Pat Woodland (Late Show with David Letterman, I'll Fly Away, Disney)•The Music Bakery•Tim Record, Engineer (Austin City Limits on PBS)•Winnebago Industries•Matt Rohr, Engineer (Narada Michael Walden's Tarpan Studios)•Penn State University•Mormon Church Television•WhisperRoom•Kaiser-Permanente Medical Center•Walt Reed (Siemens, Texas Instruments, Cellular One)•Rusty Humphries, Creative Director (TM Century)•CharlieUniformTango, Dallas (Cadillac, JC Penney, AT&T, Black Eyed Pea)•Portland Trailblazers•Premier Percussion•Kansas City Royals Broadcasting•Investor's Business Daily•Folded Space Technologies•Sound Construction & Supply...& So Many More They'd Just About Fill This Catalog! You hear our products every single day in network television & radio productions, in feature films and on chart-topping songs by major recording artists. Take a cue from these smart, successful folks: trust Auralex to help you sound your best! You can't beat Auralex at ANY price!

Auralex Acoustics

Auralex Acoustics, Inc. ★ 8851 Hague Road, Indianapolis, In 46256 ★ 1-800-95-WEDGE ★ www.auralex.com ★ auralex@auralex.com