pinta acoustic

Industrial noise control that works: sound solutions for a noisy world

Memtech Acoustical
Your Source for Noise Control Solutions

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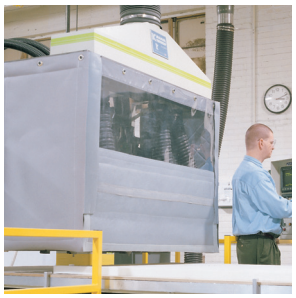


Solutions that fit your environment

Excessive noise is one of the most common workplace hazards in industrial facilities. Prolonged exposure to noise in manufacturing, power generation, printing and other industries can result in compromised verbal communication, fatigue, lower productivity and work-related hearing loss.

Manufacturing areas are not the only places where noise can be hazardous and counterproductive. Offices that share walls with factories or are subjected to outside noise from highways or airports face similar problems. In such environments, uncontrolled sound can interfere with the intended purpose of the space, resulting in hampered interpersonal communication, headaches and other problems.

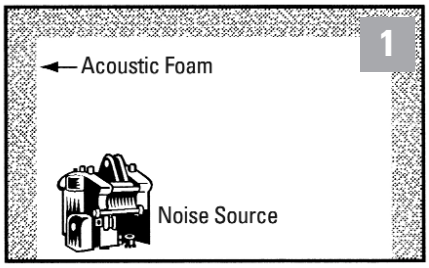
pinta acoustic offers many durable choices to easily and affordably create a healthier work environment. A knowledgeable staff and experienced distributors offer comprehensive solutions designed to help you meet OSHA requirements—and control noise in your facility effectively.

Basic principles of noise control

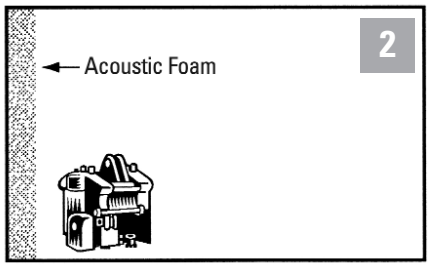
Noise control entails suppressing audible kinetic energy in two ways, and the most effective solutions may require a combination of the two:

1) Containing noise with barrier materials and enclosures
2) Absorbing noise with panels, baffles and other acoustical foam products

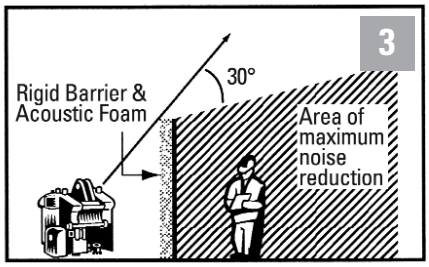
4 ways to quiet a noisy area



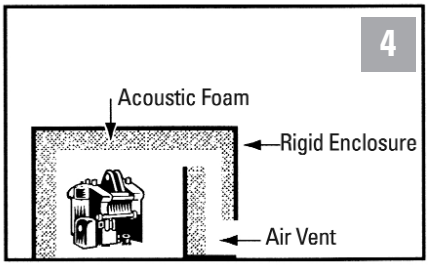
1. Treat the room
When noise is reverberating around a room, the only way to reduce it is through absorption. SONEX® Panels and Baffles absorb a high percentage of sound energy and dissipate it as kinetic heat energy. Maximum noise reduction potential is from 4 to 6 decibels, resulting in a noise level reduction of 20 to 30 percent.



2. Treat the wall nearest the noise source
Another option is to cover the wall closest to the noise source with SONEX acoustic foam panels. Maximum sound reduction will vary from 2 to 6 decibels. This solution reduces noise levels from 10 to 30 percent at low cost.



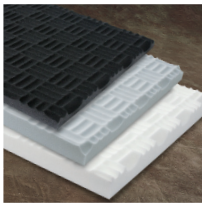
3. Build a barrier or shield
PROSPEC® Barrier can be used to create "instant walls" that isolate noisy machinery. PROSPEC Composite combines the sound absorption of foam and the containment of barrier material to isolate noise effectively. The most effective way to prevent single-source noise from reverberating around the room is to create an acoustic barrier around the machine to physically block the sound energy. The SONEX Curtain Barrier Backed (BB)/Barrier Septum (BS) features a tough quilted fabric cover over willtec® foam and a loaded vinyl barrier.



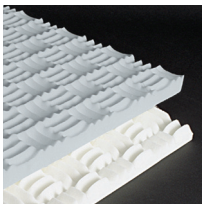
4. Build an enclosure
An acoustic enclosure around the machine also contains noise at the source. The SONEX Curtain Enclosure System provides maximum noise reduction of at least 20 to 30 decibels.

SONEX® Panels

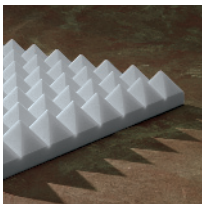
SONEX One Panel



SONEX Valueline Panel



SONEX Classic/ SONEX Junior Panels

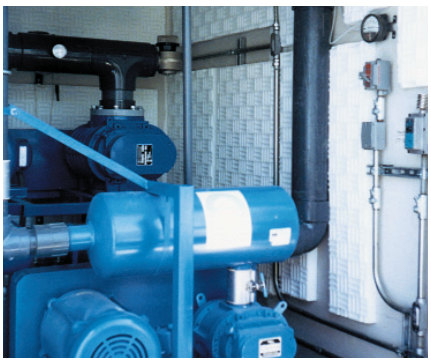


SONEX Pyramid Panel

SONEX Classic Panels are now available in natural grey or charcoal colortec®.

SONEX Panels are designed to absorb noise in areas where machine noise reverberates and echoes. They are made with Class 1 fire-rated willtec® acoustical material and are easy to install directly to walls, partitions or ceilings using acouSTIC adhesive.

SONEX Panels are available in a variety of patterns, thicknesses, sizes, colors and surface treatments.



SONEX One Panels

- Gentle pattern gives softened geometric look
- Panel size: 24" x 48"
- Thickness: 2" or 3"
- Available in natural (white or grey), painted or HPC-coated

SONEX Classic and SONEX Junior Panels

- Geometric look provides excellent sound absorption
- SONEX Classic Panel size: 24" x 48"
- SONEX Junior Panel size: 24" x 24"
- Thickness: 2"
- Available in natural (white or grey), painted or colortec

SONEX Valueline Panels

- Excellent acoustic control across all frequencies
- Subtle surface pattern
- Panel size: 24" x 48"
- Thickness: 1½", 1⅞" or 2½"
- Available in natural (white or grey), painted or HPC-coated

SONEX Pyramid Panels

- Seamless pattern
- Panel size: 24" x 24"
- Thickness: 2", 3" or 4"
- Available in natural (white or grey) or painted

SONEX Mini Panels

- Ideal for machine enclosures and other applications requiring thinner panels
- Smaller convoluted surface pattern
- Panel size: 24" x 48"
- Thickness: 1" or 1½"
- Available in natural (white or grey) or painted

SONEX® Baffles

SONEX One Baffle

SONEX Valueline Baffle

SONEX Baffles are offered in 2 patterns, and 2 thicknesses.

SONEX Baffles absorb sound from all directions and are ideal for large open factory and other production areas. Made from pinta's Class 1 fire-rated willtec® acoustical material, they are easy to suspend from high open ceilings using traditional hanging or special cable suspension systems.

SONEX Baffles are available in natural white or grey and can be HPC-coated to resist water, oil, dirt, dust and chemicals.

SONEX One Baffles

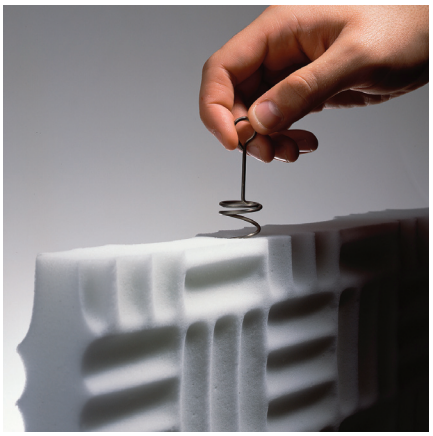
- Excellent sound absorption across all frequencies
- Gentle pattern gives softened geometric look
- Baffle size: 24" x 48"
- Thickness: 3"

SONEX Valueline Baffles

- Absorbs sound energy from multiple sources reducing noise and reverberation
- Softly sculpted surface pattern on both sides
- Easy installation with corkscrew/ cable system
- Baffle size: 24" x 48"
- Thickness: 2"

SONEX Valueline Baffles hung from ceiling mounts.

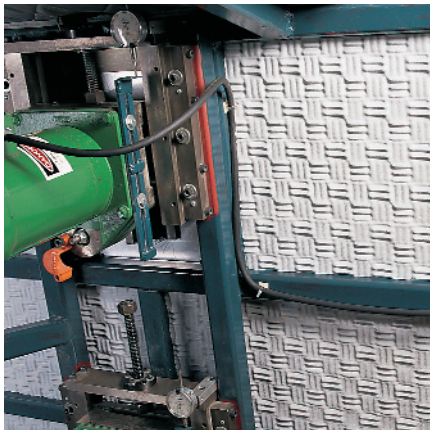
Wall-to-wall cable mount.



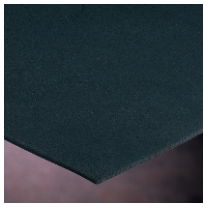
SONEX Valueline Baffles installed in the field with corkscrew hangers.

PROSPEC® Barriers, Composites and Foams

PROSPEC Barrier



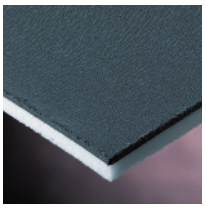
PROSPEC Foam



PROSPEC Barrier

PROSPEC Composite

PROSPEC Foam



PROSPEC Pipe Lagging

pinta's PROSPEC products feature noise-absorbing foams, barriers for noise containment and composite products that combine absorption and containment for the highest level of noise control available today. The superior quality, performance and value that have made pinta's SONEX® products so effective and popular are the foundation of the PROSPEC product line.

PROSPEC Barriers

- Contain noise
- Hang to create an instant wall around noisy equipment, weave between staggered wall studs or install within the plenum as a wall extension between rooms with dropped ceilings to isolate the noise in adjacent areas
  (Check local building codes.)

PROSPEC Foams

- Absorb noise
- Can be installed around noisy machinery

PROSPEC Composites

- Sound-absorbing foam and noise-containing barrier in one durable multilayered solution
- Can be easily installed over walls or partitions in equipment rooms, around machinery or inside engine compartments

PROSPEC Pipe Lagging

- Can be wrapped around noisy pipes

PROSPEC materials are available in several sizes, thicknesses and surface treatments.

SONEX Curtains and Custom Enclosure Systems

SONEX Curtains are either used independently or as part of an enclosure system. Custom-configured enclosures can be made from any combination of SONEX Curtain products to produce an effective and economical method of noise reduction. Options include rooftop panels, grommets, view windows, exhaust fans and more.

SONEX Curtain Barrier Backed (BB)

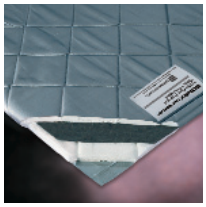
- willtec® quilted with a vinyl facing and bonded to a reinforced noise-blocking material
- Used as barriers, independent wall partitions or screens

SONEX Curtain Barrier Septum (BS)

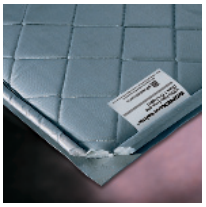
- Quilted vinyl-faced layers of willtec bonded on both sides to noise barrier material
- Ideal acoustic enclosure or noise barrier wall

SONEX Curtain Quilted Absorber (QA)

- Quilted vinyl facing with a willtec core
- Absorbs noise in large industrial environments



SONEX Curtain BS



SONEX Curtain BB

SONEX Curtain QA

SONEX Curtain Enclosure System

About this chart

Noise Reduction Coefficient (NRC) is the average of the absorption coefficients at the most common frequencies (250, 500, 1000 and 2000 Hz.) The NRC is often used to compare the acoustical performance of various materials.

Sound Transmission Class (STC) is a measurement of how much noise is stopped by a barrier or enclosure. It is an approximation of how much noise, in decibels, will be stopped by the material, assuming an airtight seal around the noise source.

Sabin is a unit of sound absorption based on one square foot of material. Baffles are frequently described as providing x number of sabins of absorption based on the size of the baffle tested, through the standard range of frequencies (125–4000 Hz.)

Absorbers

SONEX® Panels	Surface	Thickness	NRC
SONEX One	Natural	2"	0.85
	Natural	3"	1.05
	Painted	2"	0.85
	Painted	3"	1.05
	HPC-coated	2"	0.95
	HPC-coated	3"	1.10
SONEX Classic	Natural	2"	0.80
	Painted	2"	0.80
	colortec®	2"	0.75
SONEX Junior	Natural	2"	0.80
	Painted	2"	0.80
	colortec	2"	0.75
SONEX Valueline	Natural	1½"	0.75
	Natural	1⅞"	0.95
	Natural	2½"	1.05
	Painted	1½"	0.80
	Painted	1⅞"	1.00
	Painted	2½"	1.05
SONEX Mini	Natural	1"	0.50
	Natural	1½"	0.65
SONEX Mini, polyurethane	Natural	1"	0.45
	Natural	1½"	0.70
SONEX Pyramid	Natural	2"	0.70
	Natural	3"	0.80
	Natural	4"	0.95
	Natural	6"	1.05
FABRITEC	Fabric	1"	0.85
Flat willtec®	Natural	1"	0.65
	HPC-coated	1"	0.80

Baffles

SONEX Baffles	Surface	Thickness	Average Sabins/Baffle
SONEX One	Natural	3"	12.9
	Painted	3"	15.1
	HPC-coated	3"	12.9
SONEX Valueline	Natural	2"	12.7
	Painted	2"	15.0

(Note: Number of baffles, size and layout pattern can alter performance in actual installation.)

PROSPEC®

	Surface	Thickness	NRC
Foam	HPC-coated	1"	0.70
Composite	HPC-coated	1⅜"	0.85
Foam, polyurethane	Tuftane®-coated	1"	0.75
Composites, polyurethane	Tuftane-coated	1⅜"	0.85

PROSPEC	STC
Composite	28
Composite, polyurethane	28
Barrier	26
Pipe lagging	26

Curtains

SONEX Curtains	Surface	Thickness	NRC
Quilted Absorber (QA)	Vinyl-coated	1 layer	0.50
		2 layers	0.65
Barrier Backed (BB)	Vinyl-coated	1 layer	0.65
Barrier Septum (BS)	Vinyl-coated	1 layer	0.75

SONEX Curtains	STC
Barrier Backed (BB)	27
Barrier Septum (BS)	25

All NRC tests conducted according to ASTM C423-90a, Type A or B mountings

The power and versatility of willtec

One of pinta's clear advantages is its willtec foam that appears in a variety of styles. willtec is Class 1 fire-rated and can be used in virtually any application. It's amazingly lightweight with incredible acoustic control abilities. Plus, it is resistant to humidity, fungal and microbial growth for long-lasting performance. There is simply no better solution for improving sound quality in manufacturing and industrial environments.

willtec is available in natural white and grey. The natural grey color is consistent throughout the entire thickness. It can also be painted in colors and treated with surface finishes including HPC coating, which resists wear and tear from dirt, water and solvents.

Physical Data—willtec® foam	
Material	Open-cell melamine-based foam
Density	0.5 to 0.7 lbs./cu. ft. (ASTM D3574-77)
Maximum Long-Term Service Temperature	302^0 F
Fire Resistance	Class 1 per ASTM E 84 (all finishes), Meets UL 1715 (willtec natural and colortec®)
Flame Spread per ASTM E 84	Natural: 5 colortec: 10 Painted: 10 HPC-coated: 15
Smoke Density per ASTM E 84	Natural: 50 colortec: 10 Painted: 10 HPC-coated: 150
UL Code 94, Electronics	HBF: Passes HF1: Passes VO: Passes HBF: Passes
Microbial Growth	Passes UL 181, section 11
Fungus Resistance	Rating #0 per ASTM G21
Toxicity of Smoke Emission	Passes University of Pittsburgh Toxicity of Smoke test (NYC DOS#09-500-970317-4001)
Finishes	Natural (white and grey), painted, HPC-coated or colortec

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pinta acoustic, inc. manufactures a broad range of acoustical materials, including CONTOUR®, HARMONI and WHITELINE® Ceiling Tiles; SQUARELINE® Metal Ceiling Tiles; BIOLINE® Wood Ceiling Tiles; SONEX® Baffles and Panels; SONEX Clean Baffles, Panels and Ceiling Tiles; FABRITEC Wall Panels; PROSPEC® Barriers, Foams and Composites; PROSPEC Decibel Drop™ Viscoelastic Damping Compound; and pinta Ceiling Grid Systems.