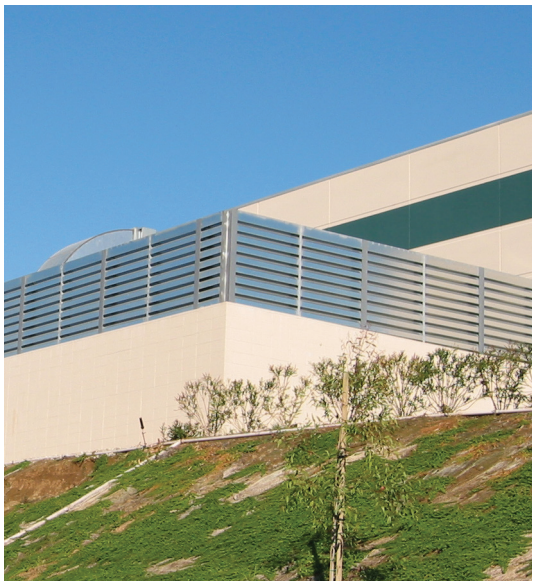
Noise Control

Commercial, Industrial, and Environmental Products and Solutions



KINETICS Noise Control

www.kineticsnoise.com

Represented by:

CAPITAL ENERGY EQUIPMENT, INC.

tel. (703) 437-8161
info@capitalenergyequipment.com
www.capitalenergyequipment.com

Commercial Duct Silencers

Kinetics Noise Control offers the design and engineering assistance to integrate our duct silencers into a system solution. As a result you may choose from a selection of standard or custom engineered duct silencers that will satisfy the requirements of the application.

Integration of noise control measures using silencers requires careful consideration of space constraints, fan selection and aerodynamic pressure losses.

Applications

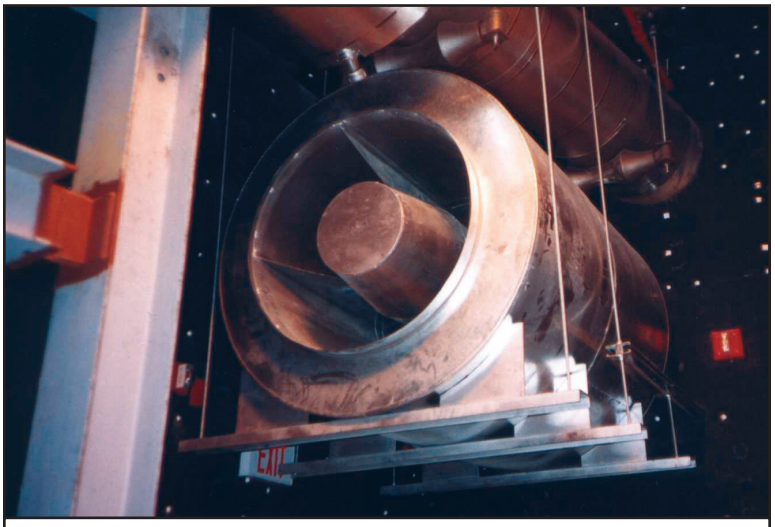
- Fan Inlet and Discharge
- RTU/AHR/Rooftop Curbs/Air Cooled Chillers
- Cooling Towers
- Generator Room Ventilation
- HVAC Duct Systems for Commercial, Institutional, Government and Industrial Buildings

Types: (Rectangular and Circular)

- Dissipative (Fill), Elbow and Straight
- Reactive (No-Fill), Elbow and Straight
- Cross-Talk
- Custom Designed
- Axial Cone
- Transitional
- Extended Body

All Kinetics silencers are backed by independent testing in a NVLAP accredited laboratory in accordance with ASTM E477.

Rectangular Duct Silencers - KCRS-F/3



Return Air Circular Duct Silencer - KCCS-F-B2

Z-Shaped “Offset” Duct Silencer

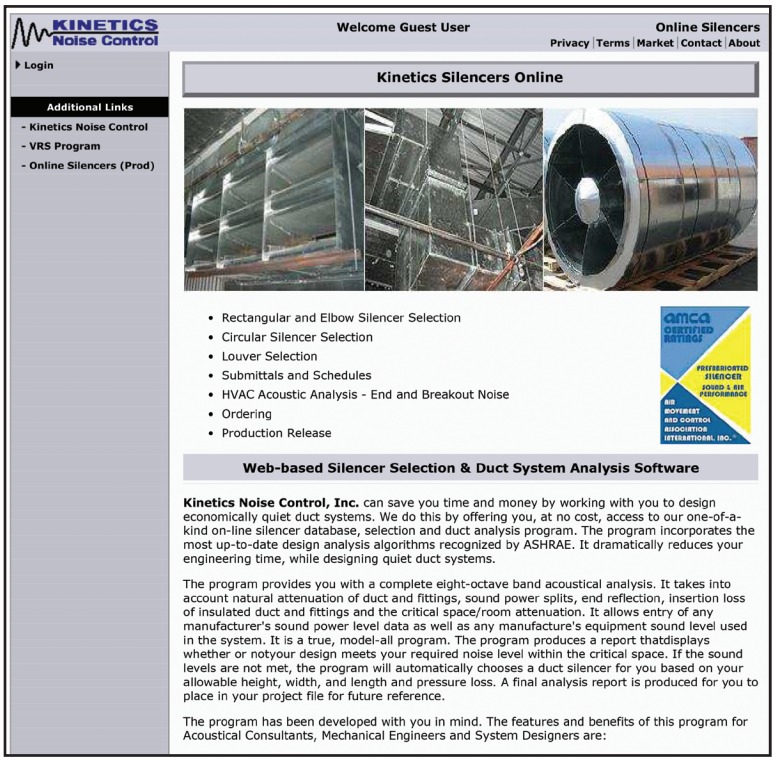
Generator Room Intake Silencer Bank

Web-Based Silencer Selection and Acoustical Duct System Analysis Program

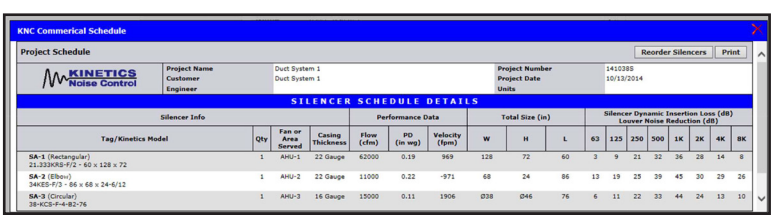
Kinetics Noise Control, Inc. offers you, at no cost, our one-of-a kind, Web-based, silencer selection program. The program incorporates the most up-to-date, design analysis algorithms presented by ASHRAE. It dramatically reduces your engineering time, while designing quiet duct systems.

The program provides you with a complete, eight-octave band, acoustical analysis. It takes into account natural attenuation of duct and fittings, sound power splits, end reflection, insertion loss of insulated duct and fittings, system component generated noise and critical space/room attenuation. It allows entry of fan sound power level data for any manufacturer's equipment. It is a true, "model-all" program. The program produces a complete acoustical report displaying whether your design meets the required critical space sound levels. If not, the program will automatically choose a Kinetics silencer based on the height, width, length and pressure loss restrictions. The program contains our complete line of rectangular, round, dissipative, reactive, straight and elbow silencers.

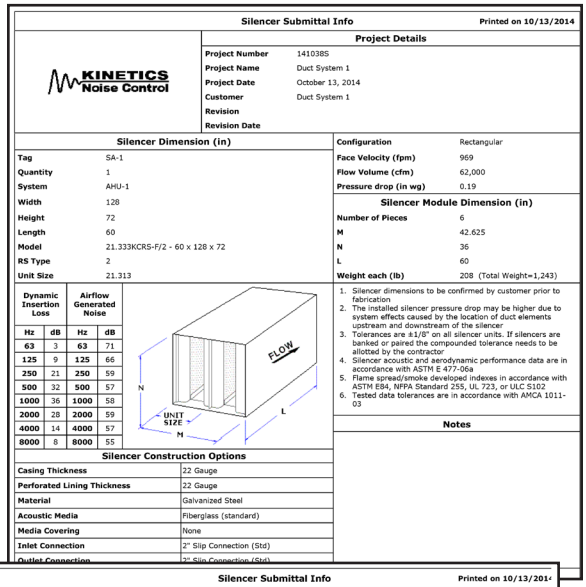
KINETICS® Silencers Online

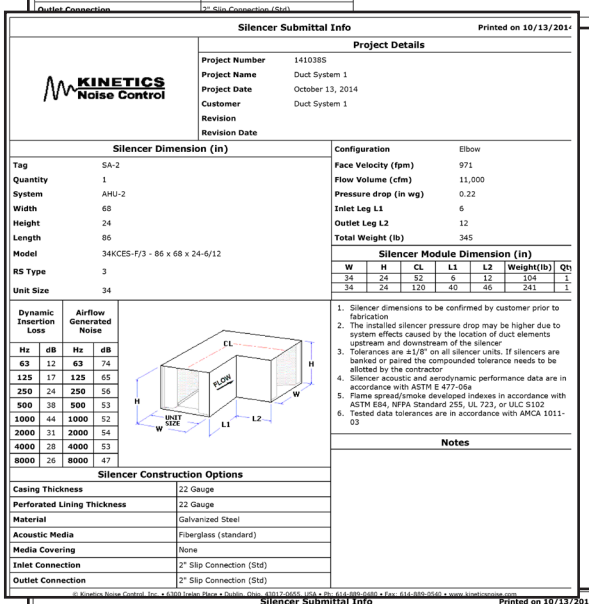


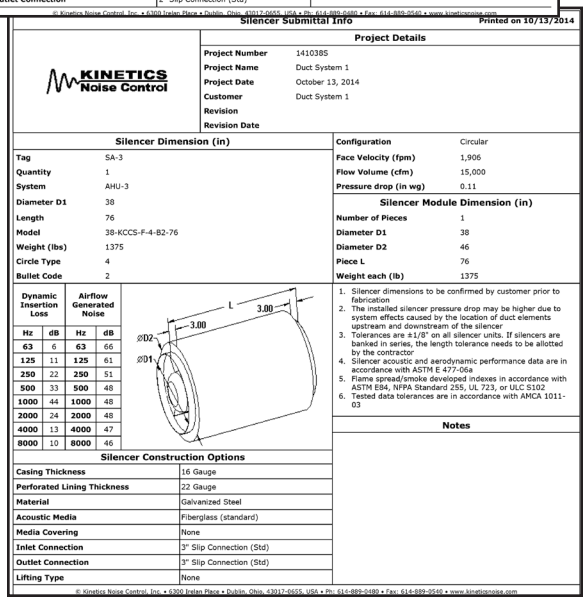
Silencer Schedule



Project Specific Silencer Submittals







Pressurized Plenums & Equipment Casings

Pressurized Plenums

The control of noise in modern buildings due to air-conditioning is a normal procedure in most projects. Kinetics designs and manufactures a complete line of double-wall, pressurized plenum enclosures for heating, ventilating and air-conditioning systems. Designed to be assembled in the field, our panel enclosures provide thermal and optimum noise control through sound absorption and sound transmission loss.

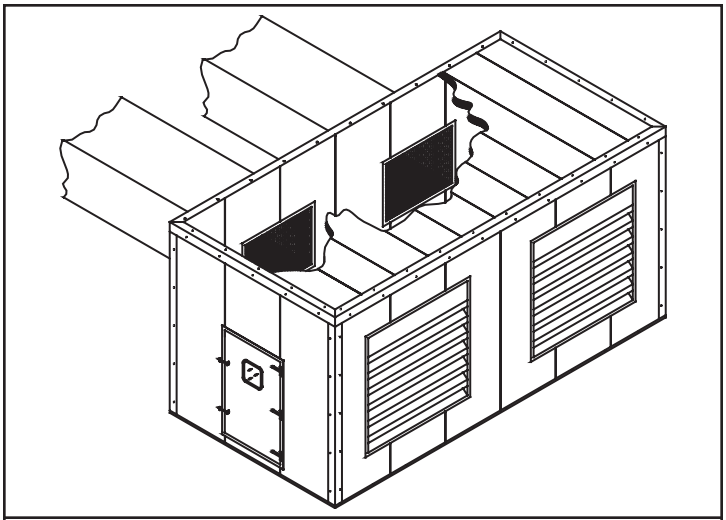
Applications

- Built-up Air Handling Units
- Panel Duct Systems
- Outside and Exhaust Air Plenums
- Supply and Return Air Handling Systems

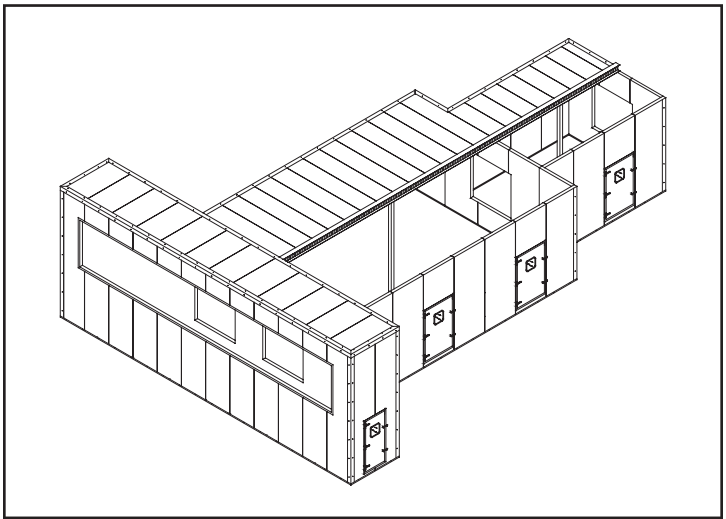
Products Overview

- 2-, 4-, 6-inch thick
- 18/16 Gage Solid / 22 Gage Perforated Skins
- Galvanized/Galvanneal/Stainless/Aluminum
- Tongue & Groove Panel Connections
- Access Doors with Airtight Seals
- Double-Glazed Wire Reinforced Door Windows
- Removable Panel Sections
- Factory Located Duct Penetrations
- Plenums are Structurally Designed Based on the Internal Positive or Negative Operating Static Pressure with a Maximum L/240 Deflection
- AutoCAD Submittal and Piece-Marked Installation Drawings

KINETICS Noise Control offers complete design and engineering assistance including layout, as well as, providing acoustical and structural requirements.

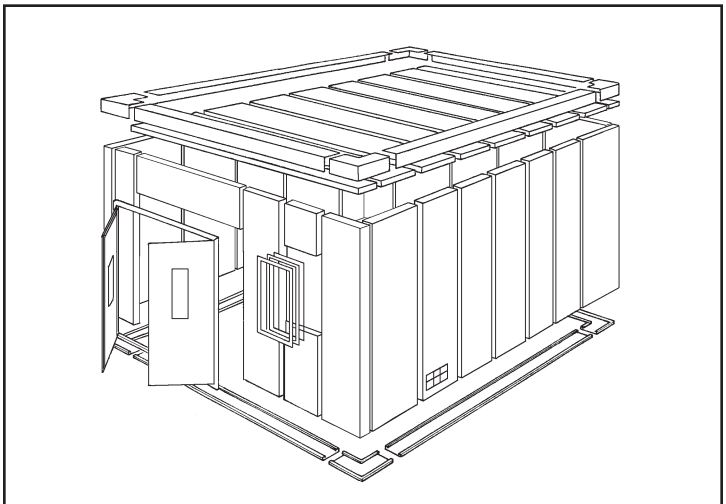


Air Intake Plenum with Acoustic Louvers



Built-up Air Handling Unit Casing

AHU Plenum Interior



Control Room Equipment Casing

Industrial Ventilation Silencers

Generator Enclosure Ventilation Silencers

Cleanable Baffle Silencer

Cooling Tower Inlet and Discharge Silencers

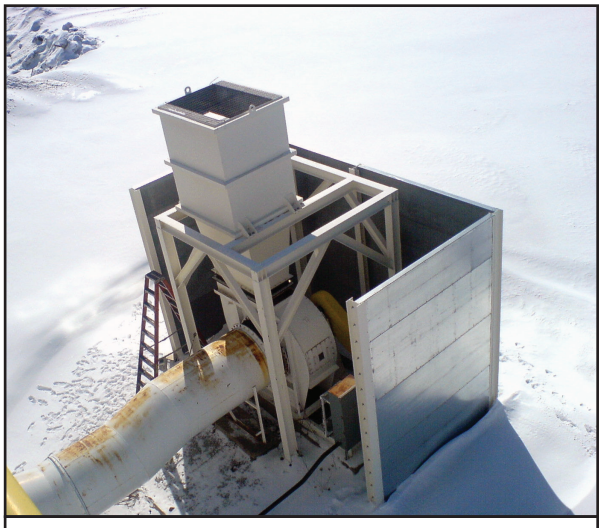
Applications

- Fan Inlet and Discharge
- Cooling Towers
- Stacks, Blow-offs, Vents
- Equipment/Process Enclosure Ventilation
- Chillers
- Dust Collectors
- Generators

Types: (Rectangular and Circular)

- Dissipative (Fill), Elbow and Straight
- Reactive (No-Fill), Elbow and Straight
- Custom Designs as Required
- Industrial Grade Construction (Materials, Gages)
- Transitional
- Static Regain Designs

Roof Top Factory Exhaust Silencer



Exhaust Air Silencer

NOISEBLOCK™ Enclosures and Buildings

KINETICS® Acoustical Enclosures are designed and manufactured using our standard **NOISEBLOCK™** type “STL & HTL”, tongue and groove panels. The panels are fabricated of solid steel outer skin, and solid or perforated steel inner skin. Panels are stiffened with pre-formed internal steel channels. Acoustic grade fill is packed under compression. The enclosures are available with doors, access panels, removable panels, windows, and ventilation packages. Materials of construction include: galvanized steel, galvanneal steal, stainless steel, or aluminum.

Claims for hearing damage and safety requirements make a noise reduction program essential for many industries. In the past, many manufacturing facilities were regulated by a government agency such as OSHA, but today insurance companies who seek to keep claims for hearing damage to a minimum for the facilities they insure drive the vast majority of noise regulation.

Kinetics offers complete design and engineering assistance including layout as well as providing acoustical, structural and ventilation requirements.

Applications

- Compressors and Pumps
- Constant Power Generator Sets
- Grinding, Pulverizer, Chipper Processes
- Punch Presses
- Vacuum Pump and Positive Displacement Blower Systems
- Outdoor Mechanical Equipment
- Paint Booths
- In-Plant Offices / Control Rooms
- Process Equipment
- Oil and Gas Midstream Compressors
- Extrusion Processes
- Flame Spray Booths

Control Room and Testing Enclosures

Multiple Generator Enclosure

Generator and Cogen Enclosure

Skid Mounted Equ

Systems for Equipment and Process

Dual Midstream Compressor Building

In-Plant Equipment Building

Accessories

- Acoustical Doors are equipped with heavy-duty hinges, panic/passage hardware and seals to prevent noise leakage.
- Windows are double or single glazed, 1/4 in thick, laminated safety glass or wire reinforced including framing and sealing.
- Removable Panels for constant or intermittent access to equipment.
- Ventilation Systems include intake and exhaust silencers as well as supply or exhaust fans to meet the individual project's airflow requirements.
- Design & Engineering assistance including layout as well as determining acoustical, structural and ventilation requirements are included.
- AutoCAD submittal and piece-marked installation drawings are included.

Air Compressor Enclosure

Industrial Fan Enclosure

ipment Enclosure

Midstream Compressor Buildings

NOISEBLOCK™ Barrier Wall Systems

for Utilities, Rooftop Equipment, Oil and Gas Operations, and Environmental Noise Compliance

The control of noise in everyday life is very important. Unwanted noise can cause stress related illnesses and severe noise can cause hearing damage. To meet these requirements and to help solve many noise problems, Kinetics manufactures a complete line of acoustical barrier panels called **NOISEBLOCK™ Barrier Panels**. These panels can be quickly and easily installed to provide complete or partial wall systems. The panels are designed to provide optimum noise control through sound absorption and sound transmission loss.

Applications

- Utilities
- Rooftop / On-Grade Mechanical Equipment
- Equipment Yards
- Industrial Processes and Machinery
- Oil and Gas Midstream Compression/Operations

Chiller Barrier Wall System, Before (right), After (above)

Utilities Barrier Wall

Roof Top Equipment Barrier

Four Sided Barrier Wall System

Chiller Barrier Wall

NOISEBLOCK™ Barrier Wall Midstream Compressor Station

Roof Top Barrier Wall

Roof Top Chiller Barrier Wall

Cooling Tower Barrier Wall System

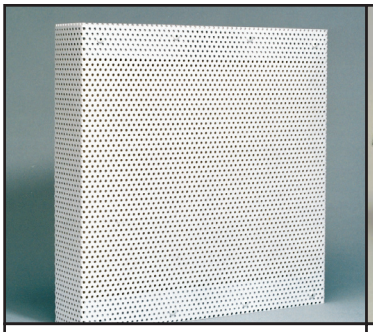
Wall and Ceiling Panel Sound Absorbers

KINETICS® KNP Panel Absorbers are functional durable and aesthetically pleasing perforated panels which are used to control background and reverberant noise. Although primarily intended as an absorber, the panels will act as a barrier when a solid sheet metal back is added. KNP Panels are also useful as additions to existing barriers to reduce reverberation time and to lower reflected sound levels.

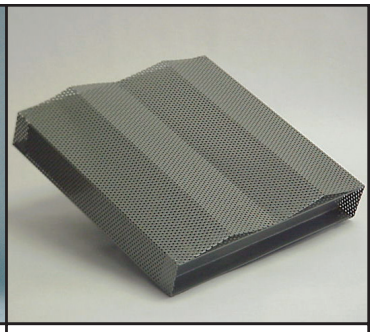
KNP Panels are excellent sound absorbers over a wide frequency range. Their acoustic properties combined with their appearance and rugged durability make them a perfect choice for test chambers, class rooms, factories, auditoriums, mechanical equipment rooms, gymnasiums, theatres, garages, hallways and other spaces where reverberant noise is a problem. KNP panels are suitable for outdoor use and are ideal for installation over existing barrier walls.

KNP panels can be attached to walls, ceilings or other surfaces and can be located in a manner to achieve a pleasing appearance.

They are available with optional rear backing to increase their transmission loss and be used as a barrier. In addition, KNP Panels can be faced with perforated material on both sides and used as hanging absorptive baffles.



KNP Panel



KNP-V Panel

Test Room KNP Wall Panels

Equipment Yard Absorption

Chiller Yard Wall Absorption Panels

Fixed Blade Acoustic Louvers

Kinetics Fixed Blade Acoustic Louvers are economical, effective and attractive. They are designed for maximum attenuation when space is limited. They are aesthetically pleasing and available in various material types.

Applications

- Building Vents
- Generator Room Vents
- Equipment Barrier Wall Systems
- Acoustical Enclosure Ventilation
- Commercial and Industrial Duct Systems

Accessories

- Flanges
- Bird Screen
- Powder-Coat Finish
- Structural Design of Large Louver Banks

Acoustic Louvers are used as part of the intake/exhaust air system of buildings, structures, or equipment to help reduce noise produced by the system equipment. They have a relatively large surface area which compensates for their lack of depth.

Rooftop Louvered Equipment Barrier

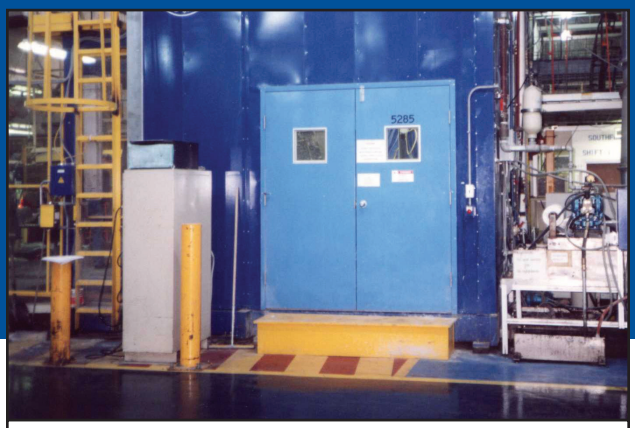
Central Energy Plant Louvers

Data Center Backup Generators Room Louvers

Cooling Tower Yard Louvers

Custom Cooling Tower Ventilation Silencers

Outdoor Barrier Wall



In-Plant Equipment Enclosure

Equipment Yard Barrier Wall

Kinetics Noise Control has been engineering and manufacturing vibration isolation and noise control products and systems for over 56 years. We pioneered the use of pre-compressed molded fiberglass for vibration isolation. Throughout the years, we have developed and refined a complete line of noise and vibration control products. In addition to the airborne noise control products illustrated in this brochure, we also offer complete designed pipe riser isolation systems, seismic restraint, engineered floating floor systems for control of airborne and impact noise, and a complete selection of barriers, absorbers and damping materials. Kinetics offers the engineering expertise, laboratory, and field-testing capabilities to work with you and your acoustical consultant to develop a solution to your specific noise control problem by applying independently tested Kinetics manufactured products.

KINETICS Noise Control

kineticsnoise.com
sales@kineticsnoise.com
1-800-959-1229