

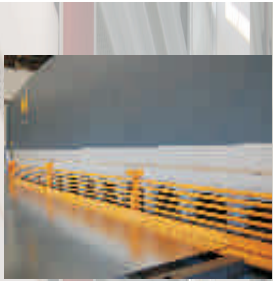


METLANE™
ACOUSTICAL PRODUCTS



ACOUSTIC
COMMERCIAL
INDUSTRIAL

WWW.METLANE.COM



OVERVIEW

METLANE offers strength in design and fabrication of specialized acoustical products for commercial and industrial applications, in various industry sectors.

Our team consistently produces high quality acoustical products, using many programs. This is made possible by working and collaborating with acoustical professionals and specialists.

We offer a large variety of products for commercial and industrial applications, such as silencers, enclosures, plenums, walls and screen barriers, acoustical louvers, absorption panels and custom made acoustical products.

We manufacture quality products for commercial and industrial applications that will meet your expectations in noise reduction. Noise will be decreased to acceptable limits for workers and environmental standards.

METLANE's team consists of highly skilled professionals (designers, engineers and experienced workers) producing the best acoustical products for your needs.

For over 30 years, our team has built strengths in the fabrication of HVAC components and acoustical products.

METLANE QUALITY

SERVICES - We build high quality soundproofing products, provide custom made designs and access to our in-house expertise for specialized acoustical product design, access to Research and Development for industrial applications, as well as acoustical and vibration measurements, and data analysis.

INSTALLATIONS - Our 15,000 sq.ft. manufacturing area includes a large variety of technically advanced equipment, operated by highly skilled personnel. Located in the north-east of New Brunswick (Canada), we benefit from our great contact network. To meet our clients' highest expectations, our sophisticated machinery includes CNC controllers, which are used for process optimization.

PERFORMANCE - Our acoustical products are a result of research and testing programs. Our product quality meets ASHRAE and SMACNA standards. Testing, performed by the independent NVLAP ISO/IEC 17025:2005 accredited Intertek laboratory, confirms the accuracy of performances according to standards ASTM C423, E477, E90 and AMCA 500.



EXCEEDING YOUR SATISFACTION IS OUR MISSION!



Through METLANE Selection™ software, you can select METLANE commercial silencers and eventually METLANE louvers and panels. Our database, updated regularly, offers a large variety of acoustical products.

This software has been engineered and developed in collaboration with experts, to facilitate and accelerate the selection of silencers for various commercial applications. Its web application interface provides easy access at all times with the latest updates for optimal selection.

Available on our website at www.metlane.com through controlled and secure access.

METLANTECH INC.

METLANE is a METLANTECH Inc. trade mark for acoustical products which combines over 15 years of experience in fabrication of HVAC components and acoustical products.

Contact us!
We are always available to develop your projects.





COMMERCIAL SILENCERS

METLANE offers a large variety of commercial and custom design silencers that provide noise control in many applications. These dissipative silencers (straight rectangular, elbow shape and circular) are designed to meet the expected noise reduction while respecting the aerodynamic system constraints.

Silencer geometries allow for a laminar flow, limiting aerodynamic turbulence, in order to get a balance between noise level, insertion loss, system elements and space constraint. They are designed and built to specific flows, pressures and noise reductions to accommodate existing or new systems.

COMMERCIAL APPLICATIONS

- Generating Units
- HVAC Systems
- Fans
- Turbofans
- Dryers
- Air Treatment Systems
- Turbine-Alternator Units
- Centrifugal Compressors
- Dust Collectors
- Room Air Inlet and Outlet



ONLINE SELECTION



Our METLANE Selection™ software as well as our catalogue on commercial silencers are great tools for better project design (dimensions, composition, absorption level, etc.). This web application interface is available on our website at www.metlane.com through controlled and secure access.

DETAILS

RANGE - METLANE silencers are normally made of a standard casing and can also be customized using thermal casing or different types of HTL (High Transmission Loss) casings to minimize break in and break out noise. Silencers are built with various types of splitters, lined casing, center bodies and other elements to obtain various soundproofing characteristics. These silencers are available in standard range and extruded range shall be available soon.

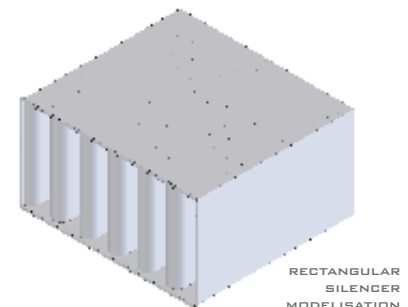
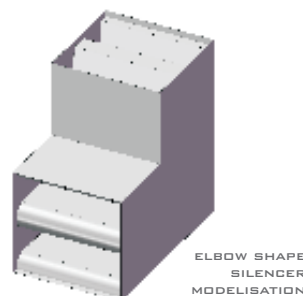
CONSTRUCTION - METLANE Silencers are generally built of galvanized or satin coated sheet steel (also available in stainless steel or aluminum upon request). Splitters are filled with Rockwool as a soundproofing media and covered by a protective film (strongly recommended to prevent damages and maintain cleanliness). Their inlet and outlet aerodynamic shape helps to maximize the system aerodynamic properties and to minimize insertion loss. During crating, we recommend adding a polythene to both ends prior to shipping for additional protection (must be removed prior to installation).

ASSEMBLY - Silencers can be built and delivered to site in sections for easy and efficient handling and assembly. The design can include lifting lugs attached to the casing for lifting and installation purposes (temporary or permanent use).

PERFORMANCE - Testing has been performed on many METLANE silencers according to standard ASTM E477 to verify design performances and internal tests. These tests were verified by the independent NVLAP accredited laboratory Intertek.

OPTIONS

- Protective Films
- Bird Screens
- Weatherhoods
- Lifting Lugs
- Polythene
- Paint
- Etc.

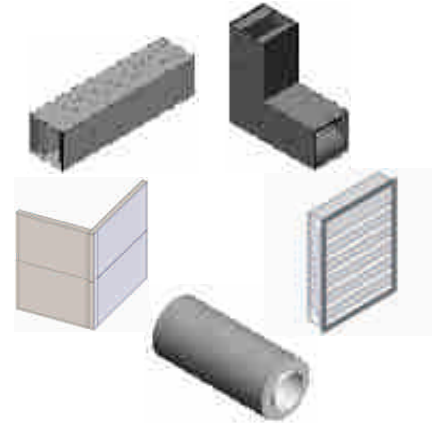




METLANE Selection™ software was developed to provide easy access to online selection of METLANE commercial silencers among over 12 000 models of rectangular, elbow shape and circular silencers updated periodically. This software will eventually include most of our acoustical products, such as acoustical louvers, acoustical panels and absorption panels.

Our software has been engineered and developed in collaboration with computer experts, to facilitate and accelerate the choice of silencers for various commercial applications. Based on access level, it generates submittal sheets (including sound level and aerodynamic performances), quotations and budget prices, as well as acoustical calculations, throughout different modules.

METLANE Selection™ software is available at www.metlane.com through controlled and secure access. This provides easy access at all times, with the latest updates for optimal selection.



COMMERCIAL SILENCER SELECTION

The software performs in three modules, all silencer selection steps from calculations and acoustical designs to fabrication.

MODULE 1 - METLANE Selection™ is the right tool for choosing the optimal silencer. Engineers and acousticians can choose and select from a variety of connection types, construction methods and many other options, to obtain the required acoustic and aerodynamic performances, specific to their needs.

MODULE 2 - This module of METLANE Selection™ will execute acoustical and aerodynamic calculations specific to an HVAC system with silencer insertions. It will generate technical information to aid engineers with their designs.

MODULE 3 - Once silencers are approved and released by the client for fabrication, module 3 of METLANE Selection™ will generate fabrication drawings, labels and quality control documents for each silencer to optimize and facilitate fabrication.

Module 1
Silencer selection
and optimization

Module 2
Acoustical calculations for
HVAC systems with silencers
(under development)

Module 3
Fabrication drawings
(under development)

SOFTWARE FUNCTIONS

This software includes all required functions for simple and easy project control. It simplifies acoustical product selection and provides submittal sheets, quotations, different reports, print outs, etc.

Selections and quotations are accessible for online orders.

For additional information about our software, please visit our website at www.metlane.com or contact us.



SELECTION SOFTWARE



INDUSTRIAL SILENCERS

METLANE industrial silencers result from many years of experience and research and development programs. The design of industrial silencers combines various disciplines such as acoustics, thermodynamics, fluid mechanics, finite element analysis and many others.

These silencers are custom designed according to project requirements and final products can take impressive proportions. With expertise, experience and the necessary tools, our engineers perform calculations and simulations to optimize the best product for your needs. The silencers are designed and built to meet the system physical and geometrical requirements, provide noise reduction performances specific to each application and silencer insertion loss according to project specifications.

INDUSTRIAL APPLICATIONS

- Industrial Chimneys
- High Pressure Fans
- Generators
- Tunnel and Subway Ventilation Shafts
- Thermal Power Generating Stations
- Other Applications



DETAILS

CONSTRUCTION - METLANE Silencers are generally made of galvanized or satin coated sheet steel and stainless steel or aluminum upon request. When for outside applications, these silencers can be built of a stronger casing to minimize break out noise and offer greater stability. They can be made of special materials with specific treatment, coating or paint according to operating conditions (corrosion, abrasion, extreme temperatures, etc.).

Casings, splitters and center bodies are normally filled with Rockwool as a soundproofing media. Other soundproofing materials are still under study and will be available soon. The media can be covered or wrapped inside a protective film (highly recommended to prevent damages and maintain cleanliness depending on operating conditions). Splitters or center bodies are designed with an inlet and outlet aerodynamic shape to maximize system properties and minimize insertion loss. All commercial silencer options can be applied to industrial silencers.

ASSEMBLY - METLANE industrial silencers are built in a single or multi-section unit to optimize fabrication, handling and site assembly. Lifting lugs can be part of the design when required. They can be made for temporary use or permanent supports.

PERFORMANCE - Since industrial silencers are custom designed, they can be in-house tested or outsourced to an independent accredited laboratory upon request. They will be tested and verified according to standard ASTM E477, the same as our commercial silencers.

OTHER CUSTOM SILENCERS

Silencers (commercial or industrial) can also be customized using different configurations to accommodate specific system constraints.

These silencers take various shapes such as T shape, Z shape, stacked and reinforced multi-sections, tapered sections, transitions, etc. Other shapes can also be studied according to project needs.



T-SHAPE CUSTOM SILENCER MODELLISATION





ACOUSTICAL ENCLOSURES

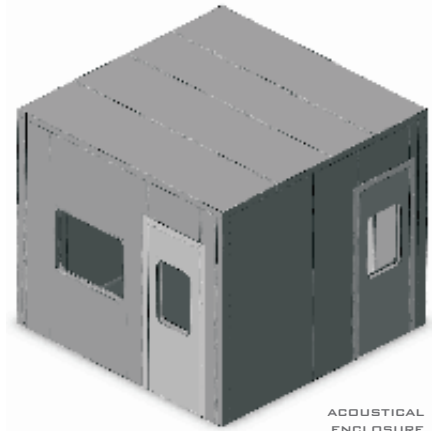
Over the last 30 years, our team has built acoustical panels for various applications. Offered in different compositions, METLANE panels can be assembled with different connection types to form acoustical plenums and enclosures.

METLANE acoustical enclosures are designed in modules for easy assembly, with or without supporting structure. These units offer excellent soundproofing characteristics. Panels can be shipped loose, preassembled or in separate modules with lifting lugs (if required) to facilitate handling and installation.

The design of these enclosures ensures an excellent noise level control to meet environmental, health and safety regulations, as well as insurance companies' requirements. While minimizing hearing issues, they give you a quiet space within a noisy environment.

CONSTRUCTION - Generally made of galvanized or satin coated sheet steel (also available in stainless steel or aluminum upon request), our enclosures are built as strong and durable structures. Enclosures are available with doors, windows, openings, louvers and several other options. They can also be painted to meet your project requirements or shipped ready-to-paint.

PERFORMANCE - Testing has been performed on different types of METLANE panels at the independent NVLAP accredited Intertek laboratory according to standards ASTM E90 and ASTM C423. These tests ensure validation of our designs and help optimize our panel performances.



ACOUSTICAL
ENCLOSURE
MODELLISATION

APPLICATIONS

- Process Equipment
- Compressors and Pumps
- Fan Systems
- Generating Units
- Outdoor Equipment
- Factory Offices
- Other Applications

BUILT-UP AIR HANDLERS

METLANE built-up air handlers consist of acoustical enclosures dedicated to noise reduction of HVAC systems. Our designs are optimized to incorporate any HVAC system component (heating, filtration, ventilation, cooling, humidification, mixing chambers, heat wheels, etc.). They are built from METLANE acoustical panels, just like our acoustical enclosures. Our team has built and installed these units for over 30 years.

Built-up air handlers provide superior noise control inside buildings, as well as excellent servicing accessibility for maintenance personnel.

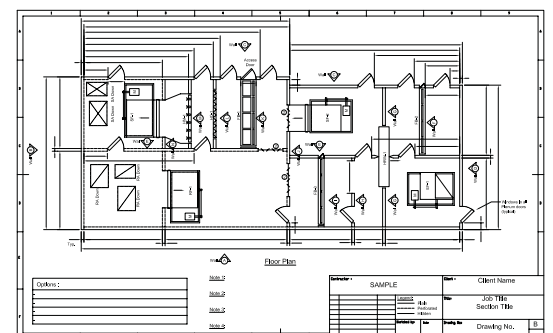
These air handler chambers are usually shipped in separate modular panels with or without supporting structure. Multi-level units are available for heat wheel installations.



BUILT-UP AIR HANDLERS

CHARACTERISTICS

- Positive or negative pressurization
- Removable access panels
- Leak proof sealed openings and joints for noise reduction
- Tongue-and-groove connections
- Access doors and windows



BUILT-UP AIR HANDLER DRAWING



METLANE acoustical louvers are adaptable to different types and dimensions of conventional, commercial and industrial buildings, as well as to modular structures. Their primary application is to provide noise reduction to air intake and air exhaust applications into walls or acoustical enclosures. They can also form complete acoustical walls or enclosures. Louvers can be stacked in modules, framed or self-supported as necessary. Their optimized aerodynamic shape minimizes insertion loss while maximizing noise reduction.

Acoustical louvers allow the creation of an aperture in a building for air exchange without compromising its aesthetic appearance. They are generally painted or anodized for aesthetic purposes and durability. They provide an exceptional architectural finish.

DETAILS

CONSTRUCTION - Louvers are generally made of galvanized or satin coated sheet steel but are also available in stainless steel or aluminum. Their blades are soundproofed with Rockwool, covered or wrapped with a protective film when required. Louvers can be shipped in sections, with or without a mounting frame according to specifications. Dimensions, composition and design vary from project to project.

FINISH - Our Louvers come in different finishes. They can be made of anodized aluminum for a long-lasting finish or made of satin coated steel or aluminum with a polyurethane paint or polyester powder paint in a variety of colors and gloss or matt finish. Our paints provide an impeccable and long-lasting finish, large temperature range and UV ray resistant.

SELECTION - Our acoustical louver catalogue contains all relevant technical information (noise reduction, insertion loss and others), along with a selection method and installation guidelines. Louvers will soon be available for selection from METLANE Selection™ software.

PERFORMANCE - Testing has been performed on different types of louvers by the independent NVLAP accredited Intertek laboratory according to ASTM E90 and AMCA 500. These tests helped to validate the design of the louvers and optimize their performance.

APPLICATIONS

- Fresh air inlet and exhaust air through wall openings while respecting the following:
 - Air exhaust noise level reduction with respect to the surrounding environment and applicable regulations
 - Outside element infiltration blockage (bird screens, insect screens)
 - Building architectural aesthetical enhancement
- Standard silencer replacement (rectangular, elbow shape, etc.) in constrained spaces
- Door replacement
- Used in mobile generating units (Gensets)
- Used in acoustical enclosures
- Other applications



SATIN COATED ACOUSTICAL LOUVERS



ARCHITECTURAL ACOUSTICAL LOUVER



INSTALLED ARCHITECTURAL ACOUSTICAL LOUVERS



ACOUSTICAL WALLS & SCREEN BARRIERS

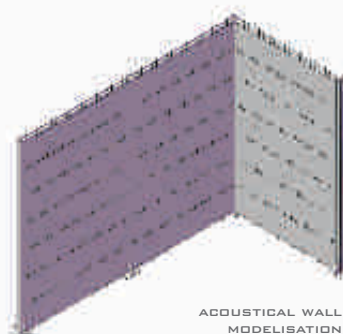
METLANE acoustical walls and screens are a result of our experience in design, fabrication and installation of acoustical panels. Walls and screens are generally installed between the noise source and the people to protect, in the source direction. The noise reduction provided by the wall or screen depends mostly on the dimensions (height especially) and the origin of the noise and the location of people. Available in various colors or ready-to-paint, these walls and screens form a long lasting product with an aesthetic appearance according to the needs.

CHARACTERISTICS - METLANE acoustical walls and screens are in general structurally supported to increase the internal mechanical strength. The panels can resist weather and temperature fluctuations under different conditions. Soundproofing materials are odourless and inorganic. Structural requirement may vary based on the installation. Structural beams are normally secured to the main structural steel frame. Panels are sandwich type tongue-and-groove assembly. Also, a heavier gauge and different composition offer greater acoustical and mechanical performance.

PERFORMANCE - Testing has been performed on different METLANE panel types, used for walls and screens, by the independent NVLAP accredited Intertek laboratory according to standards ASTM E90 and ASTM C423.

APPLICATIONS

- Highways
- Airports
- Railways
- Noisy Industries
- Commercial Centers
- Roof Equipment
- Loading Decks
- Noisy Installations



ABSORPTION PANELS

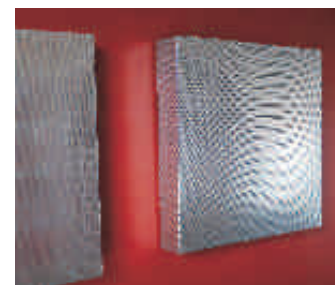
METLANE acoustical absorption panels are used for noise reduction in public areas while offering an architectural finish. They are mainly used to reduce excessive reverberations and insure an excellent sound quality. Their absorption level is excellent in all octave bands. Our absorption panels provide superior noise reduction in an open area, while offering the appropriate architectural finish.

CHARACTERISTICS - These panels can be painted in various colors to match surrounding designs. They have good impact resistance and durability, as well as easy wall and ceiling mounting system. They are maintenance free when utilized under normal conditions.

OPTIMIZATION - In order to obtain an excellent sound quality in an area, selection, quantity, location and spacing of the panels can be chosen in collaboration with a professional acoustician. This will optimize effectiveness and performance compliance. METLANE absorption panels comply with ASTM E90 and ASTM C423.

APPLICATIONS

- Gymnasiums and swimming pools
- Libraries, theaters, halls
- Recording studios
- Mechanical machine shops and manufactures
- Restaurants, offices
- Underground stations and tunnels
- Religious buildings
- Commercial centers, etc.



Our highly skilled and experienced personnel use technically advanced equipment and tools to fabricate all METLANE quality products. We use internal quality control practices, security at work (OH&SA, WorkSafeNB, NBCSA), a preventive maintenance program and ongoing daily inspections. We have access to several research and development programs, along with our software METLANE Selection™ to optimize product selection for our clients. Each project is treated separately in a cost-effective manner to get the best solution.

FABRICATION

- Detailed shop and assembly drawings
- Plasma cutting optimization and hydraulic shear cutting
- Fast bending on hydraulic press break
- Spot welding
 - Standard equipment
 - Scissor spot welder
 - Copper table and push gun and other welding equipment
- Complete duct fabrication shop
- Painting
- Quality control, cleaning and optimized packaging



QUALITY AND PRECISION

**WE STRIVE TO EXCEED
OUR CLIENTS' EXPECTATIONS!**

QUALITY CONTROL

Our internal quality control program keeps a close control on material, product fabrication, cleaning, crating, shipping, etc. With a close follow up, we can implement all necessary corrective actions to our clients' satisfaction. Our experienced personnel focuses on the final product and cares about METLANE quality.



PLASMA CUTTING

ONGOING QUALITY!

R & D

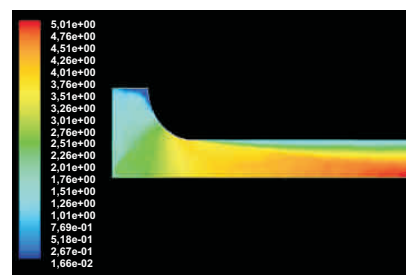
We benefit from different research and development programs to create new products and have access to a bench test built according to standard ASTM E477.

Combined with our third party verifications at independent NVLAP accredited laboratory, product performances can be bench tested and verified through software simulations, for complete testing under normal and severe situations (temperature fluctuations, turbulence, noise generation, etc.) to confirm accuracy of results.

Our acoustical consultants have over 15 years of experience in acoustic and vibration applications.



SHIPPING



TESTING





METLANE™
ACOUSTICAL PRODUCTS

Manufacturer:

Metlantech Inc.
698, boul. des Acadiens,
Bertrand, NB E1W 1G8 Canada
T 506.727.0354
F 506.727.1806
info@metlane.com
www.metlane.com



Intertek Verified
NVLAP ISO/IEC 17025:2005
ASTM C423 / E477 / E90
AMCA 500



METLANTECH^{INC}
METAL PRODUCTS - PRODUITS MÉTALLIQUES