Soundscreen™ Panel Systems

Prefabricated Acoustical Panel Systems for
Acoustical Enclosure and Barrier Wall Systems

a McGill AirSilence™ product   United McGill® products
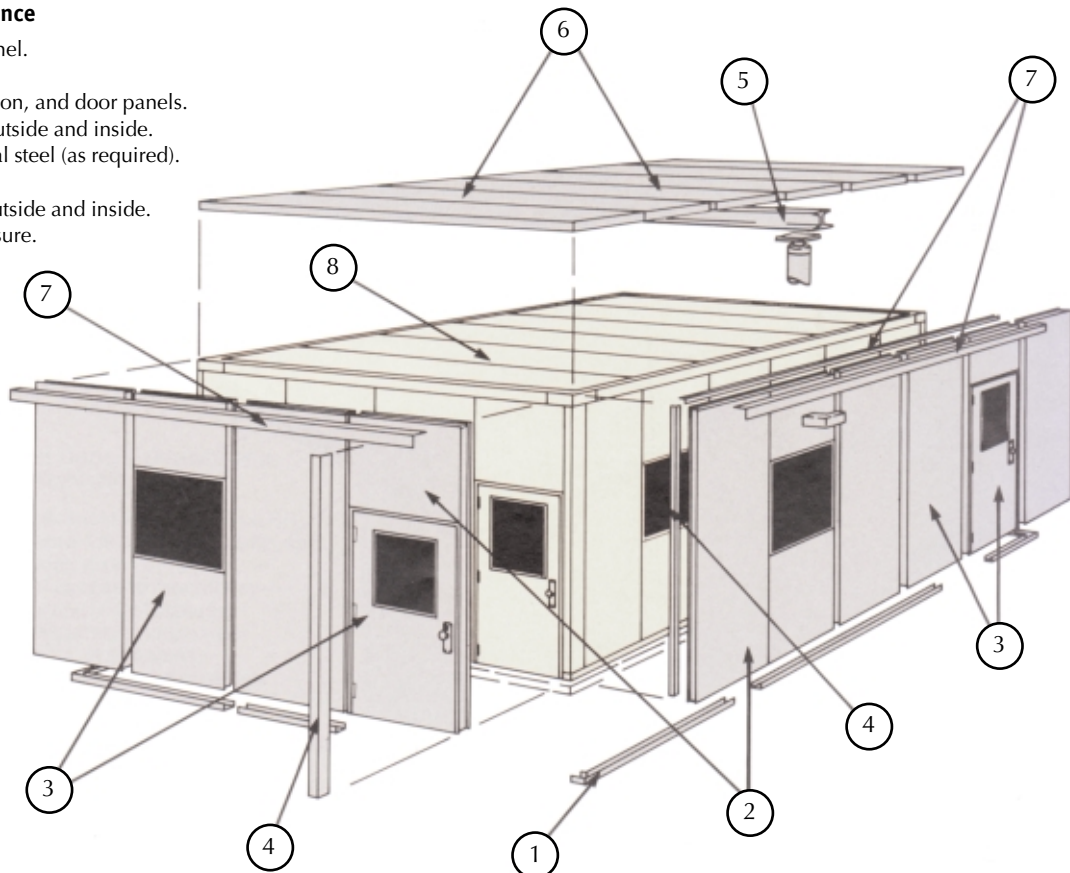
Testing and equipment enclosures

Every industrial noise problem has a variety of possible solutions with different cost/benefit options. Each project for which prefabricated acoustical panels are used has its own assembly, performance, equipment access, and maintenance requirements. That is why McGill AirSilence offers three different acoustical panel products that can be integrated into a variety of packages. They combine state-of-the-art acoustical technology and materials to withstand the harsh environments and rough use associated with industrial manufacturing. McGill AirSilence's Type SL, TG, and RR acoustical panel systems give you consistently high quality and excellent performance at an economical price.

McGill AirSilence offers a comprehensive line of products. Our sales representatives, and sales and engineering staff welcome the chance to match your noise control problem with our products and allow you to make the decision about which solution best meets your needs, performance requirements, and budget.

This brochure has been prepared as an overview of all Soundscreen acoustical panel systems and accessories. For more complete information including specifications, pricing, and delivery, or information about other noise control products, please contact McGill AirSilence.

Installation Sequence

1. Locate base channel.
2. Set corner panels.
3. Install wall, partition, and door panels.
4. Add wall trim—outside and inside.
5. Optional structural steel (as required).
6. Add roof panels.
7. Add roof trim—outside and inside.
8. Completed enclosure.

Type SL and TG panel systems

McGill AirSilence LLC

Type SL—Snap-Lock
Joint Construction

The Type SL panel system incorporates a mechanically self-locking feature, which allows adjacent panels to be snap-locked together, forming structurally sound, full-length panel-to-panel joints. **The self-locking feature eliminates the need to install sheet metal screws at the panel joints,** a time consuming task in the erection of standard tongue-and-groove and H-connector panel systems. Compared with other systems, this self-locking feature reduces installation time by about 20 percent.

Type TG—Tongue-and-Groove
Joint Construction

The Type TG panel system features a slip-fit tongue-and-groove joint.

Type RR—Rapid Removable
Joint Construction

The Type RR system features removable panels. All of the panels fit into drop-in channel frames.

Typical Uses and Benefits of McGill Acoustical Panel Systems

Type SL
- **Permanent installations**
  Type SL panel systems are not intended for use in projects in which future disassembly and re-erection may be required.
- **Rapid panel assembly time**
  The snap-lock feature eliminates the need for joint-to-joint sheet metal screws and speeds assembly.
- **Visually appealing panel-to-panel joints**
  The elimination of sheet metal screws at joints provides an attractive assembled enclosure.

Type TG
- **Semi-permanent installations**
  Type TG panel systems allow future disassembly and re-erection.

Type RR
- **Movable installations**
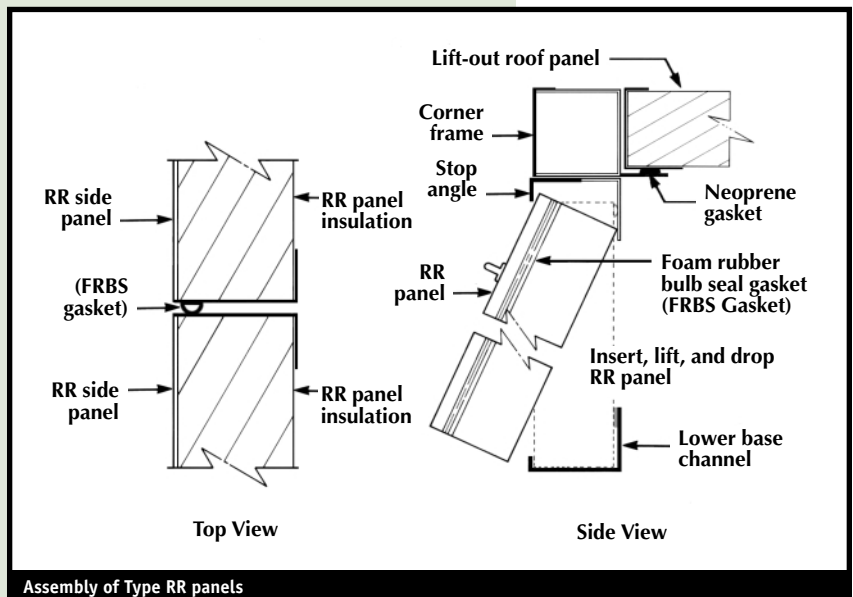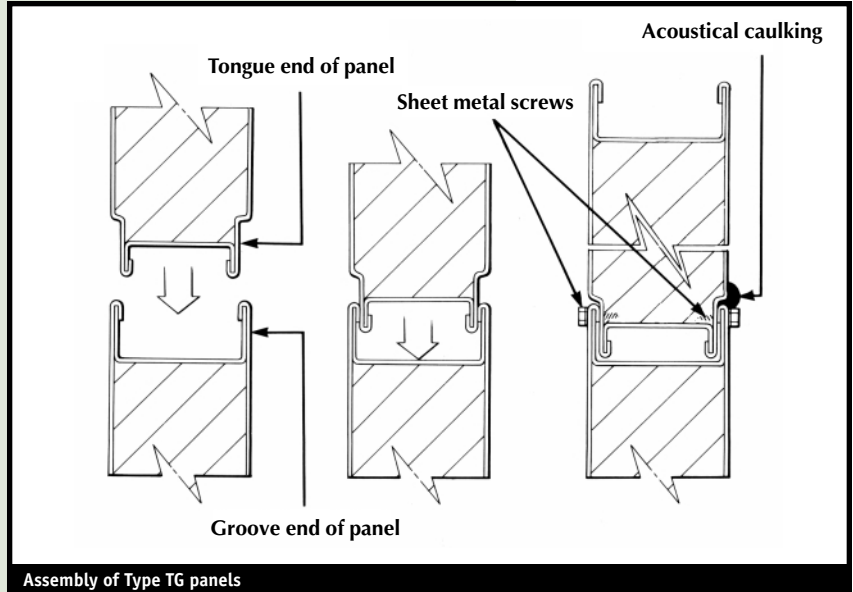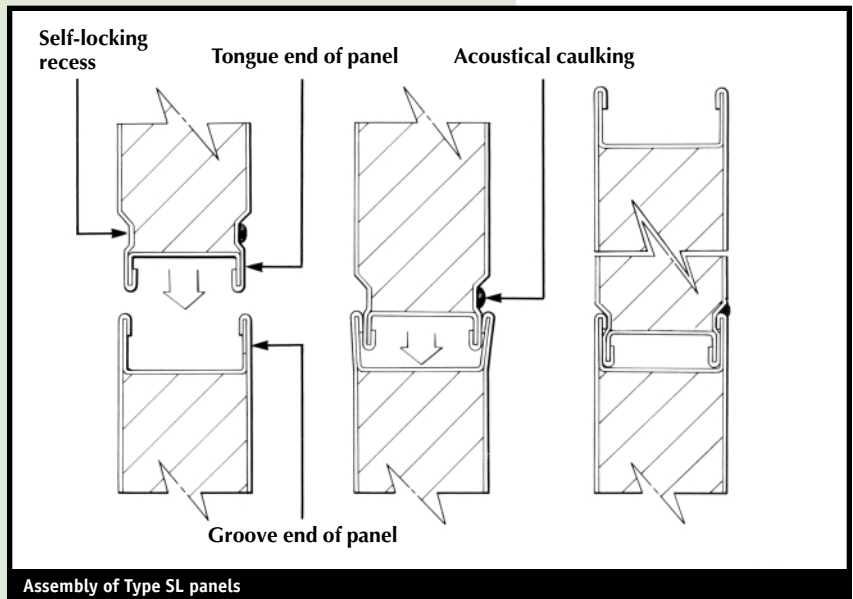 Type RR systems provide superior flexibility and ease of relocation.
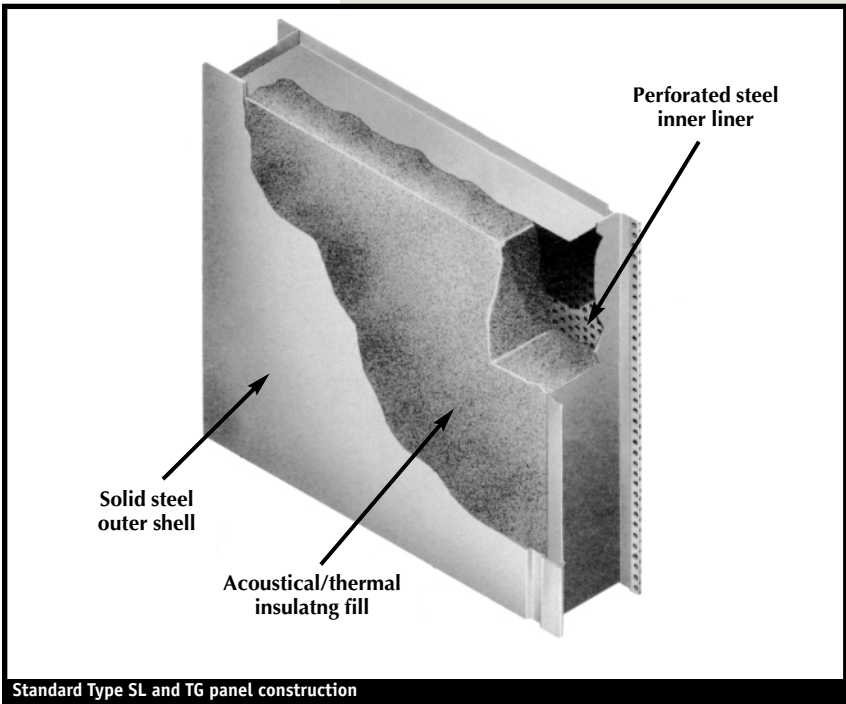- **Quick access to machinery**
  Removal and re-installation of individual panels or entire wall surfaces is fast and easy.
- **Adaptable to "close quarters"**
  More permanent acoustical enclosure systems must provide walkway clearance around interior machinery for maintenance access. This uses up valuable floorspace. The ease of removal and re-installation of RR panel systems eliminates this requirement, allowing an RR panel enclosure to occupy a smaller amount of floorspace.

Assembly of Type SL panels

Assembly of Type TG panels

Assembly of Type RR panels

2

Standard Type SL and TG panel construction

Standard Type RR panel construction

Standard Panel Construction

Standard Type SL, TG, and RR panels are the basic building blocks of all Soundscreen acoustical enclosures. The standard panel for Type SL, TG, and RR systems consists of a sandwich construction of either an 18, 20, or 22-gauge galvanized solid steel outer shell, acoustical/ thermal insulating fill, and (optional for the RR panel) a 22-gauge minimum, perforated, galvanized steel inner liner.

All longitudinal joining channels and internal reinforcing members in Type SL and TG panels are fabricated from a minimum 18-gauge, galvanized steel.
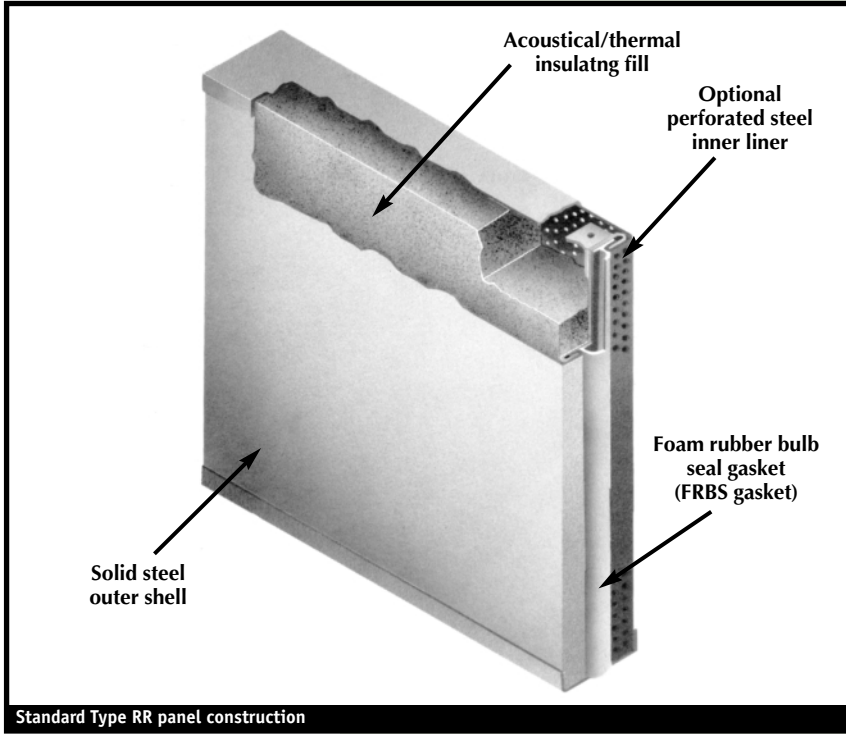
Other skin materials are available including paintable galvanzied steel, types 304 and 316 stainless steel, and aluminum. Septum panels (with an interior dividing sheet) and panels with solid metal outer and inner shells are also available.

Insulation

The acoustical/thermal insulating fill used in all standard Soundscreen panels is glass fiber insulation. It will not settle or promote the growth or bacteria, mold, vermin, or insects. The insulation used in the RR panels without the optional perforated galvanized steel inner liner has an acrylic coating to minimize loose fibers and erosion.
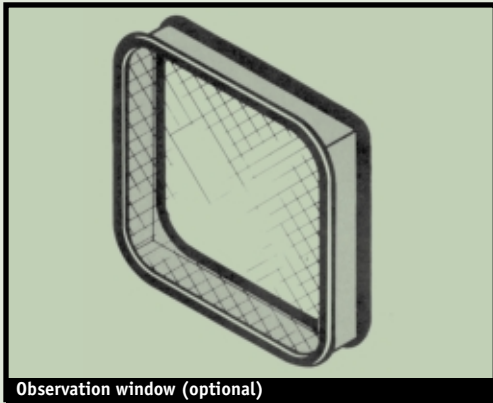
Surface Burning Characteristics

All insulating materials, inner and outer surfaces, and acoustical caulking used in Soundscreen panels meet the requirements of NFPA-90A.

Observation window (optional)

Accessories

Heating, cooling and ventilation systems, electrical systems, factory paint finishes, and telecommunications connectors can be furnished.

Acoustical Doors

All SOUNDSCREEN enclosure systems can be furnished with a wide variety of acoustical doors. These include versions for personnel and industrial applications such as material and machinery access.
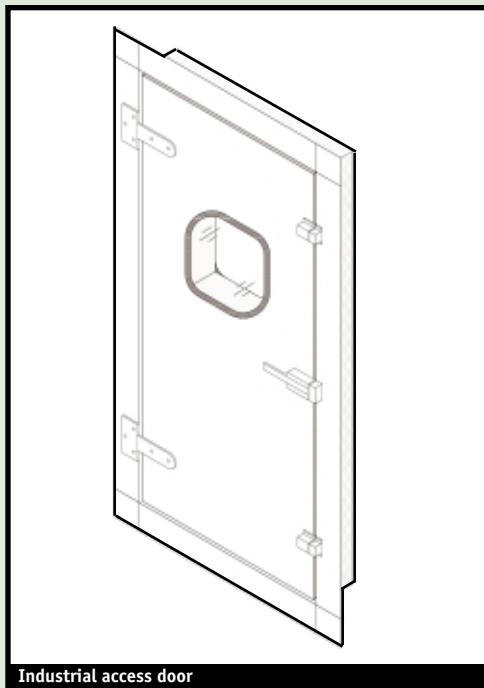
Standard personnel doors are 36 inches wide by 80 inches high and can be supplied with a 24-inch by 30-inch safety glass vision panel with neoprene acoustical edges and bottom seals. Doors are pre-hung, insulated, and equipped with two hinges, one industrial door latch (with inside personnel safety release), and gasketing.

Doors are also available in single- and double-leaf hinged, right- and left-hand swings, single- and double-horizontal slide, vertical slide, bifold constructions, and manual and automatically operated versions. Observation windows can be provided in all doors.
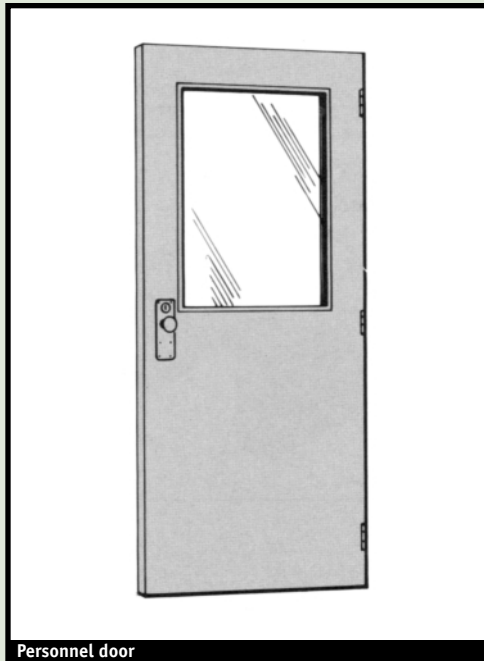
Observation Windows

Standard observation windows for Type SL, TG, and RR panel systems are constructed of double-pane, 1/4-inch-thick safety glass held in place with neoprene acoustical seals and separated by an air space of the same thickness as the panel.
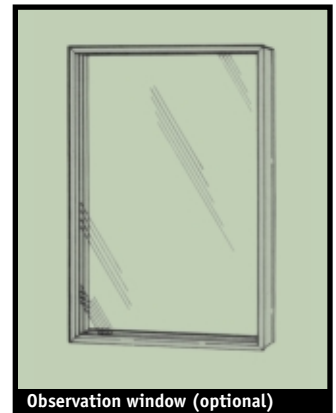
Other optional window materials and optional window configurations are available.

Industrial access door

Personnel door

Observation window (optional)

Standard Panel Dimensions

Panel Type	Available Thicknesses	Standard Manufactured Widths[1]	Maximum Standard Length[2]
SL	4 and 2 inches	24 and 36 inches	16 feet
TG	4 and 2 inches	24 and 36 inches	12 feet
RR[3]	4 and 2 inches	up to 16 inches	8 feet

[1] For most assemblies, at least one panel with a nonstandard manufactured width will be required to complete the specified lengths of each wall, floor, or roof assembly.

[2] Longer lengths are available by special order.

[3] Type RR panels in 4- and 2-inch thicknesses are provided with one foam rubber bulb seal gasket on each length side of each panel.