McGill AirFlow™

Duct Systems—

Products and Services

United McGill® products
McGill AirFlow™ Duct Systems

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The products depicted in this brochure were current at the time of publication. As a quality-conscious manufacturer, McGill AirFlow continually seeks ways to improve its products to better serve its customers. Therefore, all designs, specifications, and product features are subject to change without notice.
Our Full Service Philosophy

Since 1951, customers have depended on McGill AirFlow Corporation for quality ductwork. But what sets us apart from other duct manufacturers is the technical assistance and personal service that we offer. We are not only a manufacturer, but also a sales engineering and product distribution organization. Our roots are in HVAC engineering and contracting, so we understand the day-to-day problems that engineers and contractors face. We continually work to make our products and services more accessible and beneficial. By responding to the changing needs of our customers, we have developed a comprehensive line of duct and fittings and related products plus a total service program. We provide a convenient, single source for all duct system needs.

James D. McGill
President
Meeting Customer Needs

McGill AirFlow Corporation is dedicated to helping customers meet all their airflow needs. We are able to do this because we have a nationwide network of sales associates, engineers, and representatives. There is a sales engineer in the area, ready to provide assistance at every stage of the job, from design through startup. Our engineers can suggest ways to improve the performance and profitability of an existing commercial or industrial duct system design or come up with a totally new design to fit an application’s needs. Our engineering staff also presents duct system design seminars and publishes a series of technical bulletins and reports to keep engineers and contractors up-to-date on the latest design technology.

To assist engineers and contractors during a project’s design stage, we offer a state-of-the-art computerized duct system design service to our customers. McGill AirFlow’s PC-based UNI-DUCT® software for designing duct systems can help keep even fast-track projects on schedule while cutting engineering and material costs by as much as 30 percent. The UNI-DUCT program can design a system to meet specific acoustical or budgetary requirements, or to incorporate a specific duct configuration. The systems designed with the UNI-DUCT program operate efficiently and at the lowest possible cost.

When tight construction schedules are a factor, one of McGill AirFlow’s mobile “factories” or Duct Express™ warehouses can help. Our mobile duct machines bring the duct manufacturing to the job-site. This reduces time and costs for shipping, material handling, and field installation. We have over 30 Duct Express warehouses conveniently located across the country. They stock the most commonly used sizes of round spiral duct and fittings, all ready for immediate pickup or delivery.
We can use our UNI-DUCT software to design efficient, economical duct systems. The UNI-DUCT program can produce a new design within minutes, complete with acoustical analysis and bill of material. The program designs supply and exhaust airflow systems using the optimized static regain method.

Material handling costs, shipping costs, and valuable timel are saved when a mobile duct machine is put to use. Our mobile duct machines can be moved easily on their self-contained trailers. Operated by only one worker, each machine can produce spiral duct in varying lengths, diameters, gauges, and materials right on the job site.

Our engineers prepare technical engineering bulletins and reports addressing airflow, noise control, and other related topics. These publications provide valuable information that can help in the proper selection of a duct system design and airflow components to meet the needs of an application. The literature is available free upon request to contractors and engineers throughout the HVAC industry.

McGill AirFlow's engineers provide technical seminars addressing a variety of duct system engineering topics. These include supply or exhaust system design, acoustics, duct system product selection and specification, and duct system leakage. These seminars are provided free of charge.

UNI-DUCT®, is a registered trademark, and Duct Express™ a trademark, of United McGill Corporation.
Quality Duct and Fittings

Dedication to quality and service has made us the country’s leading manufacturer of spiral duct. Over the years we have developed a comprehensive product line that includes duct and high-performance fittings designed for a variety of applications.

We manufacture single-wall duct and fittings, double-wall duct and fittings, and single-wall duct and fittings with an insulating liner. All are available in round, flat oval (for space restrictions), and rectangular configurations. Each can be ordered in a variety of sizes, lengths, gauges, and types of metal. Our fittings are designed to have minimum static pressure losses and to be interchangeable among McGill AirFlow’s different duct types. Skilled craftsmen using the latest fabrication techniques and equipment ensure that our fittings are of consistent quality, resulting in low leakage and easy, accurate field assembly.

McGill AirFlow pioneered the manufacture of spiral lockseam duct and specializes in its production. Our UNI-SEAL™ spiral lockseam duct is offered in a wide range of gauges, making it easy and economical for users to meet industry standards. An interlocking helical seam runs the entire length of the duct, adding structural strength while maintaining a smooth, obstruction-free interior. Spiral lockseam duct is machine-formed and known for its uniform size and quality, predictable performance, easy installation, and almost total elimination of leakage. UNI-SEAL fittings are available in a variety of gauges to match the UNI-SEAL duct line.

We also offer spiral lockseam duct with a standing rib. Our UNI-RIB® (single-wall) duct and UNI-RIB-k27® (double-wall) duct are manufactured with an external stiffening rib for added strength and rigidity. UNI-RIB ductwork saves money by using lighter gauges that are as strong as heavier gauges of standard duct. Duct costs less and is easier and less expensive to install.

McGill AirFlow’s new UNI-GASKET™ round fittings are designed to reduce installation time and costs. UNI-GASKET fittings feature a proprietary gasket design which creates an airtight friction-fit joint. Duct and fittings assemble easily and quickly and sealing each joint with duct sealer is not necessary.

We can supply duct and fittings lined with fiberglass insulation for acoustical and thermal control. One option is ACOUSTI-k27® double-wall duct and fittings. They are made with a perforated or solid inner metal liner, a layer of insulation, and a solid outer metal pressure shell. A second option is the use of ACOUSTI-LINE™ insulation with a protective coating as an internal liner for metal ductwork.

For underground and other appropriate applications, we manufacture UNI-COAT® duct and fittings. UNI-COAT duct is made of galvanized steel coated with polyvinyl chloride (PVC) plastic.

For applications involving heavier-gauge materials or very large diameters, we offer longitudinal seam (solid-welded) duct.

We also supply products designed to meet the requirements of specialized duct system applications. They include FIBER-PLAS™ fiberglass-reinforced plastic (FRP) ductwork, UNI-STACK™ chimney duct, SILVERGUARD™ ductwork with an antimicrobial coating, and LEAK DETECTIVE™ test kits for measuring duct system leakage and performance.
By using state-of-the-art computerized equipment, such as this rectangular duct coil line, our highly trained production associates can manufacture quality products efficiently and uniformly.

Our skilled production associates are dedicated to the production of quality airflow products. Many of them have been in the sheet metal ductwork industry for decades.

UNI-RIB®, ACOUSTI-K27®, k27®, and UNI-COAT® are registered trademarks, and UNI-SEAL™, UNI-STACK™, ACOUSTI-LINE™, UNI-GASKET™, LEAK DETECTIVE™, SILVERGUARD™ and FIBER-PLAS™ are trademarks of United McGill Corporation.

Alamodome—San Antonio, Texas
Our single-wall, round duct and fittings offer efficient performance and economic benefits. Because of reduced leakage and pressure losses, you save on operating costs. Single-wall, round duct is available in spiral lockseam, spiral lockseam with a standing rib, and longitudinal seam. A complete line of fittings is available with solid welded, spot welded and sealed, or standing seam constructions.

Our single-wall, round duct and fittings offer efficient performance and economic benefits. Because of reduced leakage and pressure losses, you save on operating costs. Single-wall, round duct is available in spiral lockseam, spiral lockseam with a standing rib, and longitudinal seam. A complete line of fittings is available with solid welded, spot welded and sealed, or standing seam constructions.

McGill Airflow's rectangular ductwork is constructed with strengthening beads around the perimeter to reinforce the ductwork. Longitudinal seams are typically made with Pittsburgh locks or button punch snap locks. Duct and fittings are available with integral TDC™ connectors, S & drive slip joints, or four-bolt connectors.

Our UNI-GASKET round fittings eliminate the need for sealing each joint with duct sealer, reducing installation time and costs. UNI-GASKET fittings feature a single-leg EPDM rubber gasket which provides a reliable, airtight, friction-fit joint that meets or exceeds SMACNA Class 3 for leakage at -20 inches wg to +20 inches wg. UNI-GASKET fittings are compatible with all of McGill AirFlow's round, single-wall duct types and are available in diameters of 3 through 24 inches.

TDC™ is a trademark of the Lockformer Company.
For applications in which space restrictions prohibit the use of round duct, we offer single-wall, flat oval duct and fittings. Our flat oval duct is available in spiral lockseam and longitudinal seam constructions. Because we manufacture flat oval duct with the same techniques used to make round duct, our flat oval duct shares many of the same performance characteristics of round duct to help you save operating costs. Fittings are available with solid welded, spot welded and sealed, or standing seam constructions.

McGill AirFlow’s SILVERGUARD ductwork, with its special antimicrobial coating, deters the growth of bacteria, mold, mildew, and fungus that can reside in common HVAC duct systems.
McGill Airflow’s double-wall, round duct and fittings provide exceptional noise and thermal control in airflow applications. They are constructed of a solid sheet metal outer pressure shell and a sheet metal inner liner with a layer of insulation in between. Our insulated duct saves time by eliminating the job of applying external insulation to a duct system. Double-wall, round duct is available with spiral lockseam, spiral lockseam with a standing rib, and longitudinal seam. The double-wall, round fittings are available in solid welded, spot welded and sealed, or standing seam constructions.
When space restrictions prohibit the use of round duct, we offer double-wall, flat oval duct and fittings. Providing noise and thermal control, this duct is available in spiral lockseam and longitudinal seam constructions. Each piece is constructed of an inner liner (either perforated or solid metal) surrounded by a layer of insulation and covered by a solid metal pressure shell. Double-wall, flat oval fittings come in solid welded, spot welded and sealed, or standing seam constructions.

Our Rectangular-k27 duct and fittings provide exceptional noise and thermal control in airflow systems. This double-wall, insulated ductwork is constructed of a solid metal outer pressure shell and a metal inner liner with a layer of insulation sandwiched between. Rectangular-k27 ductwork provides a dependable, erosion-resistant alternative to lined rectangular ductwork with insulation exposed to the airstream.
Round duct and fittings are available with an internal insulating liner for acoustical and thermal control. ACOUSTI-LINE coated fiberglass insulation is designed to minimize fibers entering the airstream.
We can supply rectangular duct and fittings with an internal insulating liner for acoustical and thermal control. The coated fiberglass insulation is designed to minimize fibers entering the airstream.

Single-Wall Duct and Fittings with Insulating Liner

Columbus Convention Center—Columbus, Ohio
Airflow Products

We make purchasing and project coordination tasks easier by providing a dependable, single source for duct system needs. We offer a complete line of products to complement our duct and fittings. Assemblies (manifolds), access doors, bonding materials, angle rings, and terminal outlets round out McGill AirFlow’s line of duct and fittings and related products.

Inset: All McGill AirFlow’s manufacturing facilities offer made-to-order assemblies of duct and fittings. With careful designing, assemblies can save time and money in field construction.

Access doors allow visual inspection of the inside of the ductwork without shutting down the system and also make it easier to clean out areas in exhaust systems. Some doors also serve as vacuum relief doors, opening automatically if negative pressure becomes too great. Round and square doors are available.

Various products are available for connecting and reinforcing duct: slip couplings, self-sealing couplings, flange/hoop connectors, van stone/hoop connectors, draw-band connectors, and bolted flange connectors.

McGill AirFlow offers FACTAIR™ terminal outlets for easy, efficient, and individual control of the airflow being discharged into work zones. FACTAIR outlets offer adjustable direction, volume, pattern, and velocity control.

McGill AirFlow’s DUCT-D-FUSER™ air diffusion products provide widespread distribution of ducted air. They are available as loose, framed grilles or as completed fittings.

FACTAIR™ and DUCT-D-FUSER™ are trademarks of United McGill Corporation.
McGill AirFlow supplies volume control dampers to regulate airflow in duct systems. They are available with manual, electric, and pneumatic actuators.

McGill AirFlow supplies two standard sizes of calibrated LEAK DETECTIVE test kits for measuring the leakage and performance of duct systems. Each can be ordered as a kit or as an assembled unit mounted on a wheeled cart.

UNI-STACK chimneys
FIBER-PLAS fiberglass-reinforced plastic (FRP) duct and fittings are designed for industrial and underground applications where corrosion resistance is required. These strong, lightweight products are easy to handle and install.

UNI-STACK ductwork is used for prefabricated chimney, breeching, and exhaust systems for boilers, incinerators, heating appliances, and industrial processes. Single-wall, double-wall, and refractory-lined constructions are available for a variety of corrosion-resistance requirements.
Commercial HVAC Acoustical Products

We provide noise control solutions for a broad range of HVAC applications. We design and manufacture customized enclosures and both standard and customized duct silencers to complete the requirements of your airflow system.
SOUNPAK® duct silencers for HVAC applications are available in round or rectangular construction, or in a special NO-LOSS™ configuration that provides broad band attenuation with no additional pressure drop. Standard round silencers are available in both single-wall and double-wall constructions. Standard rectangular silencers are available with several internal baffle configurations.