



## Ductwork Solutions **Educational**



## What distinguishes Educational projects from others?

Today's schools can expect to house up to four times as many occupants than a typical office building. The health and safety of students and staff members and their link to attendance and performance can be directly associated with changes in the design and construction of educational facilities. As more light is shed on the importance of indoor air quality (IAQ), proper installation and maintenance of educational buildings becomes paramount.

Adding to the level of maintenance difficulty is the volume of equipment, systems, and variety of room types. Laboratories, natatoriums, gymnasiums, and libraries are commonplace and each hold unique ventilation concerns. In addition to IAQ concerns, schools face significant budgeting pressures. Reduction of initial construction costs and future operating expenses is vital.

## Does ductwork play a role in the solution?

HVAC systems account for upwards of 40% of a building's annual energy usage. Nearly 30% of energy wasted is attributed to air duct leakage. High efficiency equipment is one way to reduce the annual utility costs; however, understanding the different styles

of duct systems and the impact on system leakage is key to realizing maximum system efficiency. Current goals for energy waste reduction and IAQ improvements in schools incentivize engineers to evaluate the HVAC ductwork.



**Schools are more than just classrooms.** Balanced ventilation is required for a number of unique settings. The requirements for a gymnasium vastly differ from a school library.

### It's Consistent

Linx Industries understands the importance of efficient duct systems. Linx's spiral ductwork is manufactured to strict published manufacturing tolerances to ensure consistent quality. Linx's patented evenly spaced integral seam locking feature assures consistent adherence to design tolerances by preventing seam slippage even during field cutting.



### It's Round.

There are several reasons for specifying round ductwork versus rectangular ductwork. Its round spiral shape conveys airflow with minimal energy loss while also reducing the system's noise signature. Round ductwork has the lowest possible duct friction loss for a given perimeter. It is lighter, thus easier to install and cheaper to transport. Round ductwork requires less supports per running foot and handles negative pressures with less weight and reinforcement. A round duct system can be sealed at a lower cost than rectangular. Lastly, round ductwork handles higher air velocities than rectangular ductwork while achieving the same acoustic design criteria.



### It's Safe.

Linx Industries is the only manufacturer of the Lindab Safe® self-sealing air duct system. An installed Lindab Safe system is built in accordance with 2005 SMACNA HVAC Duct Construction Standards for +10" WG and meets SMACNA's Leakage Class 3 performance. The factory-installed double-lipped EPDM gasket creates a snug single-slip connection limiting air leakage. This system does not require installers to double back and glue connection points to prevent air leakage. In fact, installation with the Lindab Safe product line is easier to maneuver, faster to install, and less expensive in operation.

Ventilation designs incorporating the Linda Safe duct system, installation time will be reduced, thus saving valuable construction funds. Although duct leakage has been overlooked in the past, now is the time to change and make ductwork energy efficient.

### It's Strong.

Linx's sheet metal ductwork is durable. The edges on fittings are rolled to add strength and reduce the risk of injury in handling. Linx's spiral ductwork 8" diameter and larger are manufactured with multiple corrugations. These corrugations dramatically increases the structural strength of the duct.



### It's Responsible.

100% of Linx's materials are recyclable. Even decades after use, Linx products will never end up in a landfill. Volatile organic compounds (VOCs) have adverse health effects and are consistently found in higher concentrations in indoor environments. Building owners can rest easy as Linx's products do not emit VOCs.



## Show Your Spirit With Architectural Coatings

Linx Industries' ductwork is paintable. The use of a "paint grip" or "mill phosphatized" surface is not necessary in order to facilitate surface painting. The use of direct to metal (DTM) paint products can be used on all of Linx's standard galvanized products.

For consistent cover and unlimited color options, Linx offers Architectural Coatings. The "baked on" powder coating system has

a zinc rich epoxy base coat and a polyester top coat. The epoxy base coat provides superior chemical resistance equal to or better than PVC. The polyester top coat is applied to protect the base coat and for improved appearance. This finished product has a glossy appearance.

Linx can match any RAL paint swatch. So, go ahead! Show off your school colors!



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