



G.L.V. INTERNATIONAL

Wide range of high quality flexible duct products



infraAIR

G.L.V International

Major Technological Breakthrough Announcement



Success in the clothe dryer market,
Rigiflex now provides the optimal solution for
bathroom and kitchen air extraction to any outlet.

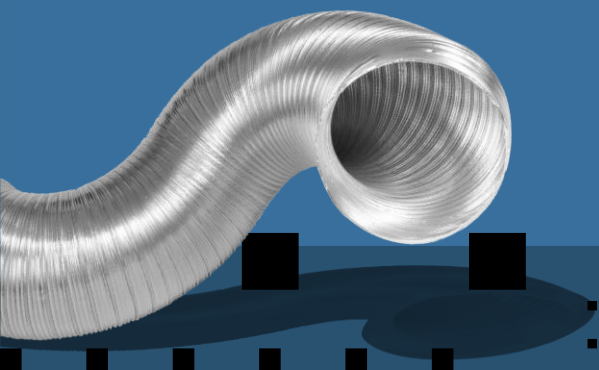
The problem

Although insulated 181 air duct products are **not optimal**, they are being used **unnecessarily**, because up till now, there were no class 0 semi rigid non insulated UL 181 Air Ducts, on the market.

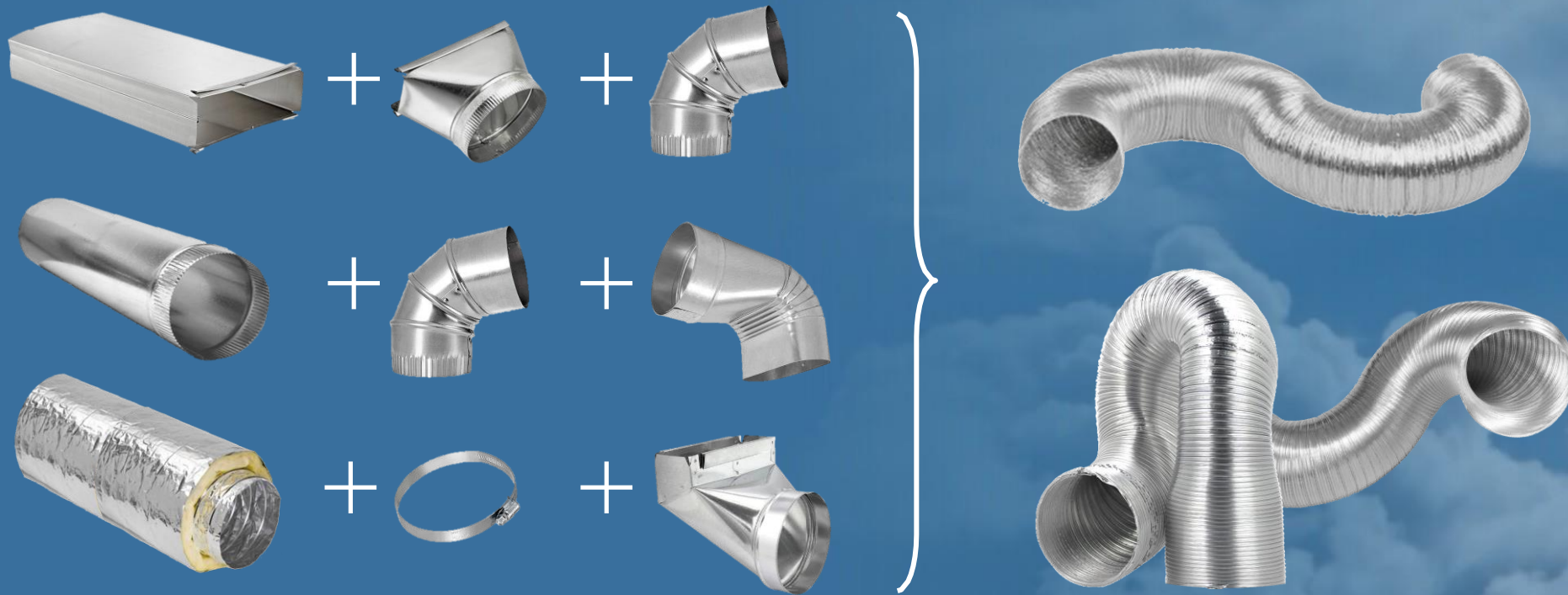
The solution

With new breakthrough technology, Rigiflex is now a flexible class 0 non insulated UL 181 semi rigid Air Duct and suitable for extraction of air to any outlet.

The duct can be used anywhere in the roof, using any length and the only restriction would be to ensure that there is a gravity dumper at the source of the extraction from the house.



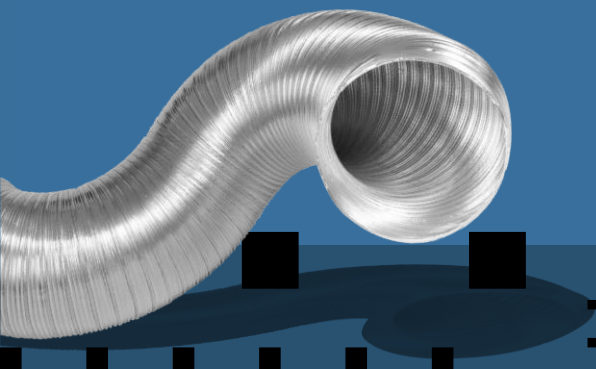
From rigid UL 181 air ducts / insulated 181 class 1 air duct to a non insulated semi rigid UL 181 class 0 air duct.



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER

Cost savings throughout the entire value chain in the non insulated product vs insulated and rigid (product level, installation, shipment, warehousing, wastage, etc.).

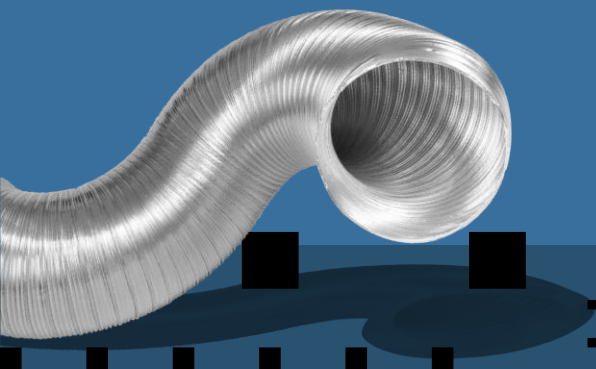


Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER

- IT'S SAFER

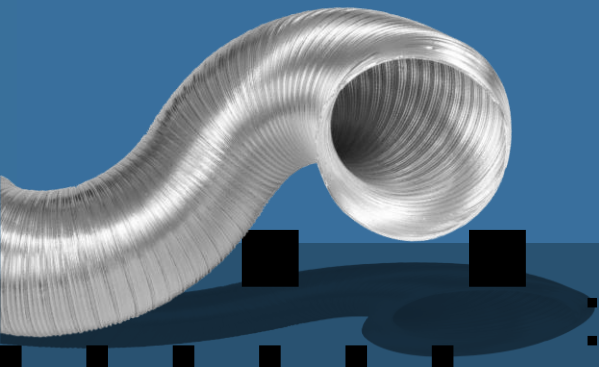
In addition to the normal advantages of semi rigid over rigid duct, GLV non insulated has a Class 0 rating vs insulated duct that has a class 1 rating.



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER
- IT'S SAFER
- ENERGY EFFICIENT

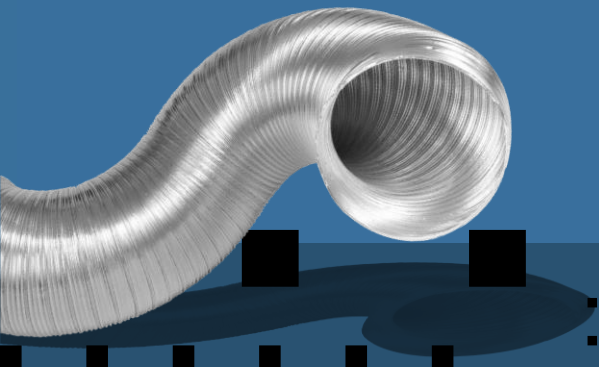
Allows stable and effective airflow without loss along the way.



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER
- IT'S SAFER
- ENERGY EFFICIENT
- IT'S EASY TO INSTALL

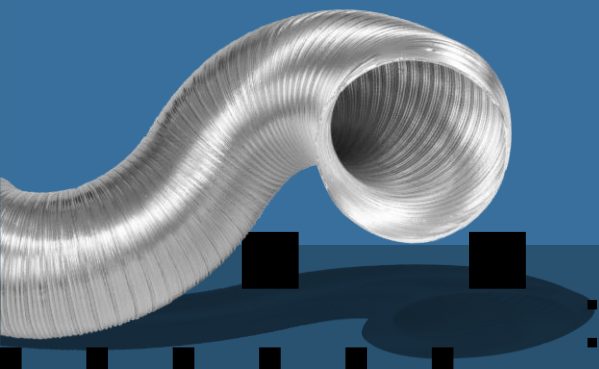
The product is much EASIER TO INSTALL, considering it's mechanical features e.g. the ability to stay stable at a vertical and/or horizontal grip.



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER
- IT'S SAFER
- ENERGY EFFICIENT
- IT'S EASY TO INSTALL
- FAR LESS WASTAGE

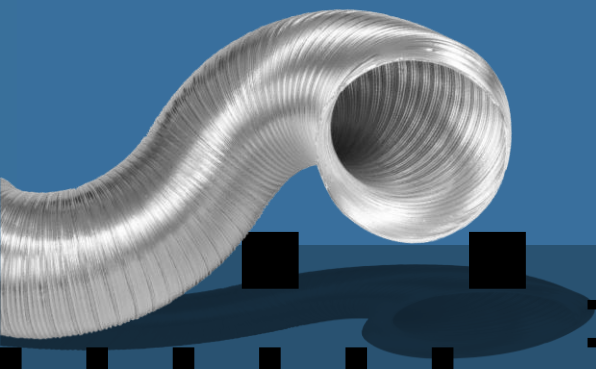
The duct comes in 25ft pieces and only the required lengths are used (vs releasing a 25ft piece of insulated duct that cannot be compacted again).



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER
- IT'S SAFER
- ENERGY EFFICIENT
- IT'S EASY TO INSTALL
- FAR LESS WASTAGE
- SAVE A LOT OF SPACE

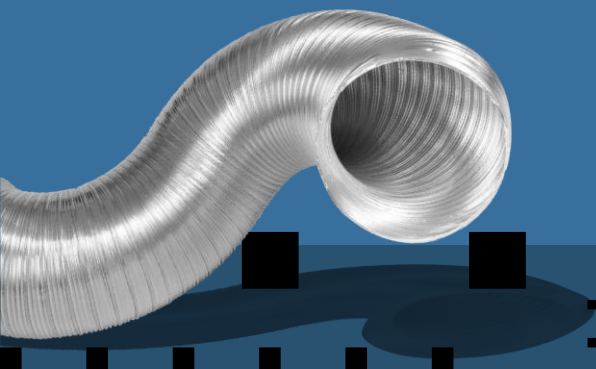
Due to its ability to compact, it will save a lot of space on shelves and/or in transport.



Rigiflex for the building industry – Major Advantages

- IT'S CHEAPER
- IT'S SAFER
- ENERGY EFFICIENT
- IT'S EASY TO INSTALL
- FAR LESS WASTAGE
- SAVE A LOT OF SPACE
- SPACE SAVING IN TIGHT SPOTS

Can be supplied in an oval shape for space saving in tight spots, wall cavities, etc.



Rules for Flexible air duct and Air connectors ICC Codes

Air Ducts Versus Air connectors and limitations involved with Air connectors, as published at ICC Digital Codes ([click here](#))

603.6.1 Flexible air ducts.

Flexible air ducts, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such ducts shall be *listed* and *labeled* as Class 0 or Class 1 flexible air ducts and shall be installed in accordance with Section 304.1.

603.6.1.1 Duct length.

Flexible air ducts shall not be limited in length.

603.6.2.2 Connector penetration limitations.

Flexible air connectors shall not pass through any wall, floor or ceiling.



The screenshot displays the ICC Digital Codes interface. On the left, a sidebar lists various code sections under the heading 'All Codes'. The main content area on the right shows the details for '603.6 Flexible air ducts and flexible air connectors'. It includes a summary paragraph, followed by three highlighted sections: '603.6.1 Flexible air ducts', '603.6.1.1 Duct length', and '603.6.2.2 Connector penetration limitations'. The interface also features a 'Legend Information' tab and a 'MY NOTES' section at the top of the main content area.

603.6 Flexible air ducts and flexible air connectors.
Flexible air ducts, both metallic and nonmetallic, shall comply with Sections 603.6.1, 603.6.1.1, 603.6.3 and 603.6.4. Flexible air connectors, both metallic and nonmetallic, shall comply with Sections 603.6.2 through 603.6.4.

603.6.1 Flexible air ducts.
Flexible air ducts, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such ducts shall be *listed* and *labeled* as Class 0 or Class 1 flexible air ducts and shall be installed in accordance with Section 304.1.

603.6.1.1 Duct length.
Flexible air ducts shall not be limited in length.

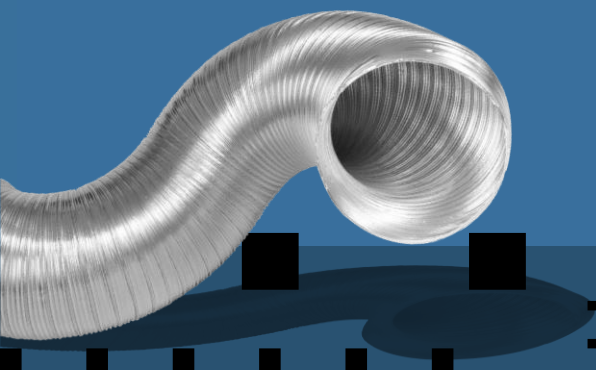
603.6.2 Flexible air connectors.
Flexible air connectors, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such connectors shall be *listed* and *labeled* as Class 0 or Class 1 flexible air connectors and shall be installed in accordance with Section 304.1.

603.6.2.1 Connector length.
Flexible air connectors shall be limited in length to 14 feet (4267 mm).

603.6.2.2 Connector penetration limitations.
Flexible air connectors shall not pass through any wall, floor or ceiling.

603.6.3 Air temperature.
The design temperature of air to be conveyed in flexible air ducts and flexible air connectors shall be less than 250°F (121°C).

603.6.4 Flexible air duct and air connector clearance.
Flexible air ducts and air connectors shall be installed with a minimum clearance to an appliance as specified in the appliance manufacturer's installation instructions.



Rules for Flexible air duct and Air connectors ICC Codes

Air Ducts Versus Air connectors and limitations involved with Air connectors, as published at ICC Digital Codes ([click here](#))

603.6.3 Air temperature.

The design temperature of air to be conveyed in flexible air ducts and flexible air connectors shall be less than 250°F (121°C).

603.6.4 Flexible air duct and air connector clearance.

Flexible air ducts and air connectors shall be installed with a minimum *clearance* to an *appliance* as specified in the *appliance* manufacturer's installation instructions.



The screenshot displays the ICC Digital Codes application. On the left, a sidebar lists various code sections, with 'CHAPTER 6 DUCT SYSTEMS' expanded to show 'SECTION 603 DUCT CONSTRUCTION AND INSTALLATION'. The main content area shows the '603.6.3 Air temperature' rule highlighted in yellow. Below it, the '603.6.4 Flexible air duct and air connector clearance' rule is visible. The interface includes a 'Legend Information' header, a 'CODE SECTIONS' table, and a 'MY NOTES' column. At the bottom, there are 'Feedback' and 'Live Chat' buttons.

CODE SECTIONS	MY NOTES
CHAPTER 6 DUCT SYSTEMS	
SECTION 601 GENERAL	
SECTION 602 PLENUMS	
SECTION 603 DUCT CONSTRUCTION AND INSTALLATION	
SECTION 604 INSULATION	
SECTION 605 AIR FILTERS	
SECTION 606 SMOKE DETECTION SYSTEMS CONTROL	
SECTION 607 DUCT AND TRANSFER OPENINGS	
SECTION 608 BALANCING	
CHAPTER 7 COMBUSTION AIR	
CHAPTER 8 CHIMNEYS AND VENTS	
CHAPTER 9 SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT	
CHAPTER 10 BOILERS, WATER HEATERS AND PRESSURE VESSELS	
CHAPTER 11 REFRIGERATION	

603.6.3 Air temperature.
The design temperature of air to be conveyed in flexible air ducts and flexible air connectors shall be less than 250°F (121°C).

603.6.4 Flexible air duct and air connector clearance.
Flexible air ducts and air connectors shall be installed with a minimum *clearance* to an *appliance* as specified in the *appliance* manufacturer's installation instructions.

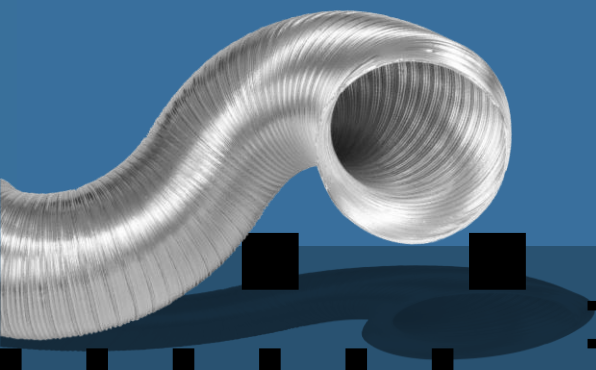
603.6.2 Flexible air connectors.
Flexible air connectors, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such connectors shall be listed and labeled as Class 0 or Class 1 flexible air connectors and shall be installed in accordance with Section 604.1.

603.6.2.1 Connector length.
Flexible air connectors shall be limited in length to 14 feet (4267 mm).

603.6.2.2 Connector penetration limitations.
Flexible air connectors shall not pass through any wall, floor or ceiling.

603.7 Rigid duct penetrations.
Duct system penetrations of walls, floors, ceilings and roofs and air transfer openings in such building components shall be approved as required by Section 607. Ducts in a private garage that penetrate a wall or ceiling that separates a dwelling from a private garage shall be continuous, shall be constructed of sheet steel having a thickness of not less than 0.0187 inch (0.4717 mm) (No. 26 gage) and shall not have openings into the garage. Fire and smoke dampers are not required in such ducts passing through the wall or ceiling separating a dwelling from a private garage except where required by Chapter 7 of the International Building Code.

603.6 Underground ducts.
Ducts shall be approved for underground installation. Metallic ducts, not having an approved protective coating, shall be completely encased in not less than 2 inches (51 mm) of concrete.



Rules for Flexible air duct and Air connectors ICC Codes

Rules where to use insulated or non insulated duct ([click here](#))

R403.6 Mechanical ventilation (Mandatory).

The building shall be provided with ventilation that meets the requirements of the *International Residential Code* or *International Mechanical Code*, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

All Codes
Legend Information
CODE SECTIONS
MY NOTES
CHAPTER 6 DUCT SYSTEMS
SECTION 601 GENERAL
SECTION 602 PLENUMS
SECTION 603 DUCT CONSTRUCTION AND INSTALLATION
SECTION 604 INSULATION
SECTION 605 AIR FILTERS
SECTION 606 SMOKE DETECTION SYSTEMS CONTROL
SECTION 607 DUCT AND TRANSFER OPENINGS
SECTION 608 BALANCING
CHAPTER 7 COMBUSTION AIR
CHAPTER 8 CHIMNEYS AND VENTS
CHAPTER 9 SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT
CHAPTER 10 BOILERS, WATER HEATERS AND PRESSURE VESSELS
CHAPTER 11 REFRIGERATION

R403.5.4 Drain water heat recovery units.
Drain water heat recovery units shall comply with CSA B55.2. Drain water heat recovery units shall be tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units shall be less than 3 psi (20.7 kPa) for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units shall be less than 2 psi (13.8 kPa) for individual units connected to three or more showers.

R403.6 Mechanical ventilation (Mandatory).
The building shall be provided with ventilation that meets the requirements of the *International Residential Code* or *International Mechanical Code*, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

R403.6.1 Whole-house mechanical ventilation system fan efficacy.
Mechanical ventilation system fans shall meet the efficacy requirements of Table R403.6.1.
Exception: Where mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

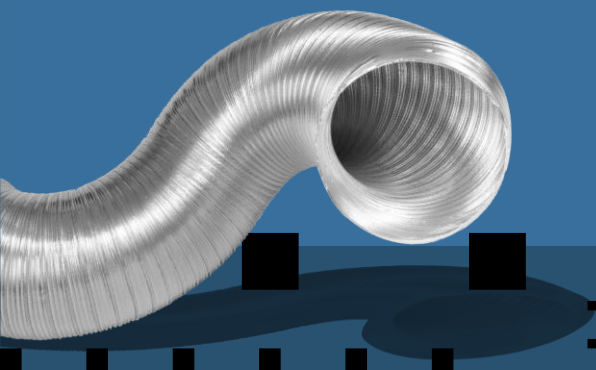
TABLE R403.6.1 MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	< 90
Bathroom, utility room	90	2.8 cfm/watt	Any

For 10: 1 dbm = 28.3 L/min.

R403.7 Equipment sizing and efficiency rating (Mandatory).
Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. New or replacement heating and cooling equipment shall have an efficiency rating

Feedback
Live Chat





How to Order

Contact your infraAIR representative, or reach us at **orders@infraAIR.ca | 1-800-707-6297**

40 Ironside Crescent #2, Scarborough, ON M1X 1G4

www.infraAIR.ca