



# Aluminum Duct Products

For  
Special Applications



CLASS 0



CLASS 1



NON LISTED, NON-LABELED

**UPC #017**

**Uninsulated**

**UPC #018**

**R-Value 4.2/6.0/8.0**

**UPC #020**

**Uninsulated**

All thermal performance (R-Values) are classified by Underwriters Laboratories in accordance with ADC Flexible Duct Performance and Installation Standard (1991) using ASTM C-518 (1991), at installed wall thickness, on flat insulation only.

## Description

- UPC #017 is a UL 181, Class 0 Air Duct which meets the requirements of NFPA (90A & 90B).
- UPC #018 is an insulated UL 181, Class 1 Air Duct which meets the requirements of NFPA (90A & 90B).
- UPC #020 is a low cost, general purpose, venting duct designed for use where a UL 181 listing is not required.
- All three are made from non-combustible, corrugated aluminum with watertight lock seams.

## Construction

Both #017 and #018 are constructed of heavy gauge corrugated aluminum, while the #020 is constructed of a slightly lighter gauge. All three have watertight continuous lock seams. #018 is wrapped in a thick blanket of fiberglass insulation and a durable metalized polyester vapor barrier. All three are compressed for easy storage and handling.



## FEATURES & BENEFITS



- Rugged All Metal Inner Core Construction - Non-combustible / puncture resistant
- Semi-Rigid Yet Flexible - Easily shaped into bends, maintains shape / Will not sag between supports
- Lightweight Compact Cartons - Reduces warehouse / jobsite handling costs and is easily stored
- UPC #018 - Thick Blanket of Fiberglass Insulation - Energy efficient / Excellent thermal characteristics
- UPC #017 & #018 - Universal Male/Female Fittings - Lengths easily connected to terminal devices or other ducts
- UPC #020 - One End Crimped/One End Plain - Lengths easily connected to terminal devices or other ducts



## APPLICATIONS & CODE COMPLIANCES\*



ATCO #017 and #018 are used as supply, return, and exhaust ducts in low, medium, and high pressure heating, air conditioning, and exhaust systems. Both can be used in an air distribution system, connecting ducts, mixing boxes, diffusers, light troffers, room inlets, or other terminal devices. UL 181, UMC 10-1 (ICC ESREPORT NO. ESR-1268). HUD 515-2.1 (b), NFPA 90A & 90B, Cities of Chicago, New York & San Francisco, County of Dade (Florida), California State Fire Marshal.\*

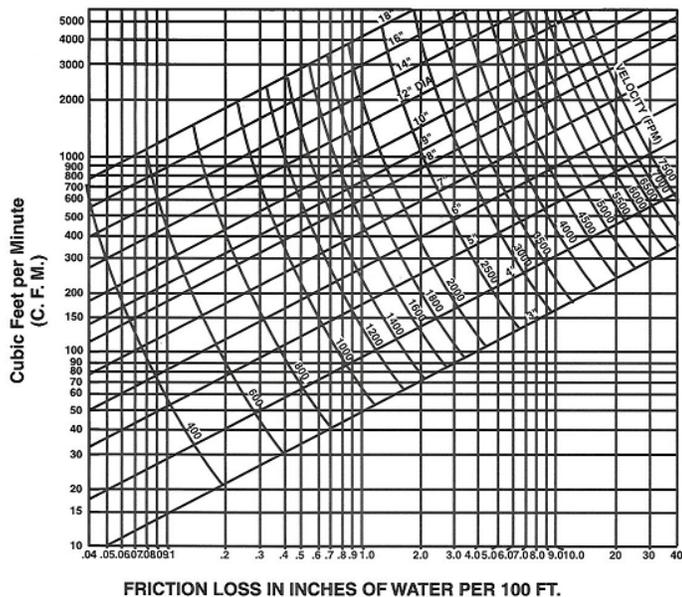
\*ATCO recommends that you check with the local code body having jurisdiction in your area to determine applicable codes.



# PRODUCT & PERFORMANCE DATA



## Air Friction Chart \*



### PRODUCT DATA

- Length: 8'
- Diameter: (3" #020 only) 6", 7", 8", 9", 10", 12", 14", 16", 18"
- End Treatment (#017/#018): Universal Male/Female Fittings
- End Treatment (#020): One end crimped, one end plain

### INSTALLATION

Air duct connections and joints shall be made per installation instructions outlined by ATCO Rubber Products, Inc. and as required by the UL 181 listing procedure.

(Installation instructions are included inside each carton.)

### STRAIGHT RUN

\* FD 72-R1 Test Code of the Air Diffusion Council. Friction loss is computed in inches of water gauge per 100 ft. of duct. By using CFM or FPM values for a given duct dimension, the friction loss can be determined. Conversion of CFM to FPM also can be made.



## PERFORMANCE DATA



### UPC #017 Uninsulated

- Recommended Operating Pressures:
- Maximum Positive and Negative:  
12" w.g. - 4" thru 10" Diameters  
8" w.g. - 12" thru 18" Diameters
- Maximum Velocity: 5,000 FPM
- Operating Temp. Range: -100°F to 400°F
- Flame Spread: 0
- Smoke Developed: 0

### UPC #018 R-Value 4.2/6.0/8.0

- Recommended Operating Pressures:  
Maximum Positive and Negative:  
12" w.g. - 4" thru 10" Diameters  
8" w.g. - 12" thru 18" Diameters
- Maximum Velocity: 5,000 FPM
- Operating Temp. Range: -100°F to 250°F
- R-Value: R4.2, R6.0, and R8.0  
(In accordance with ADC Flexible Duct Performance and Installation Standards (1991) using ASTM C-518 at installed wall thickness on flat insulation only.)
- Flame Spread: Less than 25
- Smoke Developed: Less than 50

### UPC #020 Uninsulated

- Recommended Operating Pressures:  
6" Positive and negative all diameters
- Maximum Velocity: 5,000 FPM
- Operating Temp. Range: -100°F to 300°F

**Warranty** - ATCO warrants that all flexible ducts will be free from defects in material and workmanship for a period of five years from the date of purchase only if the ducts are installed in accordance with ATCO's installation instructions and under conditions specified in ATCO's performance data. The buyer's exclusive remedies for any defect in the flexible ducts shall be replacement or refund of the purchase price, at ATCO's option. ATCO MAKES NO OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE. IN PARTICULAR, ATCO MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ATCO SHALL HAVE NO LIABILITY TO THE BUYER OR ANY THIRD PARTY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, LOST PROFITS OR OTHER ECONOMIC INJURY DUE TO ANY DEFECT IN THE FLEXIBLE DUCTS. MATERIALS AND SPECIFICATIONS FOR THE FLEXIBLE DUCTS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

### Shipping Locations



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Greensboro, NC • Fort Worth, TX • Indianapolis, IN  
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