



# Flexible Duct Systems



25' Insulated  
UL 181  
Class 1 Air Duct



**UPC #080**  
**R-Value 4.2**

**UPC #086**  
**R-Value 6.0**

**UPC #088**  
**R-Value 8.0**

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

ATCO #080, 086, and 088 are UL 181, Class 1 Air Ducts and are manufactured with a durable black polyethylene jacket. The inner core of all three products is air-tight and designed for low-to-medium operating pressures in HVAC systems. ATCO #086 and 088 have increased insulation for superior thermal performance.

## Construction

A double lamination of tough polyester which encapsulates a steel wire helix forms the air-tight inner core of the ATCO #080, 086, and 088. The double-layer core of each product is wrapped in multiple thicknesses of fiberglass insulation. All three products are sheathed in a durable polyethylene jacket.



## FEATURES & BENEFITS



- Air-tight Inner Core** - Energy efficient / No fiberglass erosion into air stream.
- Encapsulated Wire Helix** - No unraveling when cut to length / Quick installation
- Smooth Inner Core** - Low friction loss / Low operating cost.
- Thick Blanket of Fiberglass Insulation** - Energy efficient / Excellent thermal characteristics
- Durable Black Polyethylene Jacket** - Tear and puncture resistant / Low maintenance.
- Lightweight Compact Carton** - Reduces warehouse and Jobsite handling cost.



## APPLICATIONS & CODE COMPLIANCES\*

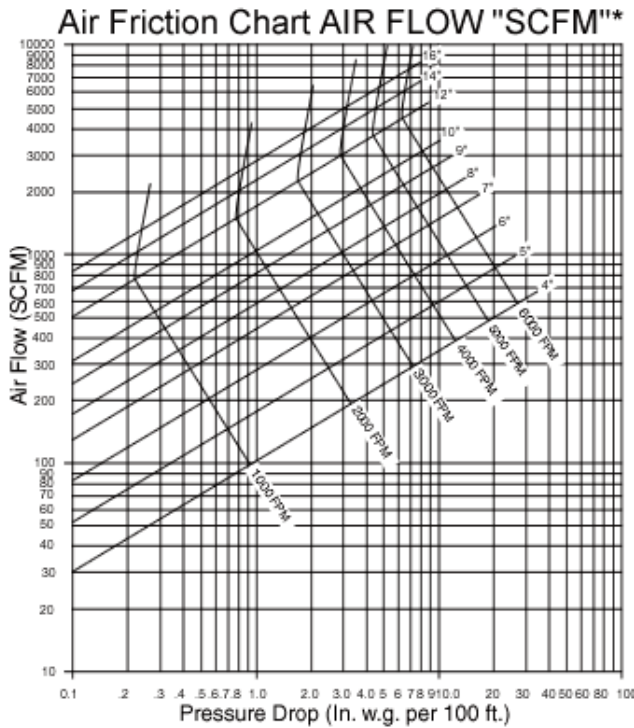


ATCO #080, 086, and 088 are designed for indoor use as a supply and return air duct in residential and commercial low-to-medium pressure heating and air conditioning systems. All three models can be used as a complete air duct system and/or a branch duct connecting to mixing boxes, diffusers, light troffers, room inlets, or other terminal devices. UL 181, NFPA 90A & 90B, IMC, IRC, UMC 10-1 (ICC ES REPORT NO. ESR-1268), HUD 515-2.1 (b), 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



## PRODUCT DATA

- Length: 25', 50' (Other lengths available as special order)
- Diameter: 3", 4", 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", 20"
- Vapor Barrier: Seamless Black Polyethylene
- End Treatment: 25', 50' -plain ends
- Packaging: 1 piece per carton

## 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 #080**  
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**UPC #088**  
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- Rated Positive Pressure: 10" w.g. per UL-181 (UL Listed pressure) ratings are determined in straight lengths @ ambient temperatures.)
- Recommended Operating Pressures: (Determined in a 90° bend at elevated temperatures in accordance with ADC FD 72-R1 Test Code.)
  - Maximum Positive:
    - 6" w.g. - 4" thru 12" Dia.
    - 4" w.g. - 14" thru 20" Dia.
    - (With factory installed metal collars, 2" w.g. - all diameters)
  - Maximum Negative: 1" w.g. 3"-12" Dia. and 3/4" w.g. - 14"-20" Dia.
  - Maximum Velocity: 5,000 FPM

- Vapor Transmission: .17 perms
- Maximum Operating Temperatures:
  - 20°F to 140°F Continuous (@ maximum pressure)
  - 20°F to 180°F Continuous (@ 2" pos. w.g. max.)
  - 20°F to 250°F Intermittent (@ 1/2" pos. w.g. max.)
- Flame Spread: 25 max  
Smoke Developed: 50 max



**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.

### Manufacturing & Shipping Locations



Baltimore, MD • Cartersville, GA • Fort Worth, TX  
Greensboro, NC • Houston, TX • Indianapolis, IN • Phoenix, AZ  
Plainville, GA • Plant City, FL • Wiggins, MS  
Sacramento, CA • Springdale, AR • Vineland, NJ

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