



R-VALUE	MODEL#
R-4.2	GF
R-6.0	GF-6
R-8.0	GF-8



## BLACK POLYETHYLENE DUCT

### DESCRIPTION:

Gray Flex's models GF(R-4.2), GF-6(R-6.0), GF-8(R-8.0) are tested in accordance with U.L.181 and approved for use as a Class 1 air duct material. Jacketing is printed with certification label, foot markers, size and performance data every 24"- (Foot markers every 12"). It is jacketed with a black polyethylene vapor barrier. The airtight core is our exclusive patented, reinforced inner liner. Fiberglass insulation is a minimum of 1 1/4" thick for GF, min. of 2" for GF-6, and min. of 2 5/8" for GF-8.

### APPLICATIONS:

Gray Flex air ducts are used primarily for runouts to ceiling diffusers or mixing boxes or wherever the flexible feature will facilitate duct runs in difficult spaces or around obstacles. They are suitable for use in supply or return residential heating/cooling or commercial duct systems within the limits of their performance characteristics. This duct is designed for indoor use only.



### PATENTED CORE

PAT.# 5,526,849

The above pictured close up view of our exclusive inner core shows the unique construction. We incorporate a high strength textile fiber helix in conjunction with a spring steel wire helix encapsulated with multiple layers of polyester film to form an airtight continuous core that has a 10"WG pressure rating.\*

### BENEFITS:

- \* Exclusive Patented inner core
- \* Energy Efficient
- \* Lightweight and flexible/Installs quickly
- \* Compression packaged to less than 10% of its extended length for less storage and handling
- \* Air tight inner core to insure no fiberglass contact with the air stream
- \* Low maintenance scuff resistant polyethylene jacket
- \* Thick fiberglass insulation helps prevent condensation
- \* Easier to cut than a standard scrim reinforced product
- \* Data printed on the jacket for ease of inspectors and installers

### CODE COMPLIANCE:

Meets requirements of U.L.181, SBCC, BOCA, NFPA 90A and 90B, HUD 515-2.1 (b)



## PERFORMANCE DATA:

- \* R-Value 4.2(GF), 6.0(GF-6), and 8.0(GF-8) determined in accordance with ADC Flexible Duct Performance and Installation Standards as published (1991) per ASTM C-518 at installed wall thickness in flat configuration.
- \* Rated Pressure: 10" positive, 3/4" W.G. negative per U.L.181.\*
- \* Pressure rating above is based on U.L. test procedure run at 2 1/2 times rated pressure (25" Water Gauge) in straight lengths at room temperature independent of other conditions per U.L.181 procedure. To ensure a margin of safety, Gray Flex recommends pressure not greater than 3" Water Gauge positive when operating conditions of maximum velocity and temperature above 160° may exist simultaneously.
- \* Maximum Velocity: 5500 FPM
- \* Maximum Operating Temperatures: -20°F to 250°F
- \* Moisture Vapor Transmission: (Jacket only) .1 or less perms per ASTM E96
- \* Fire Safety Rating: U.L. 181 (Flame spread less than 25, smoke developed less than 50)

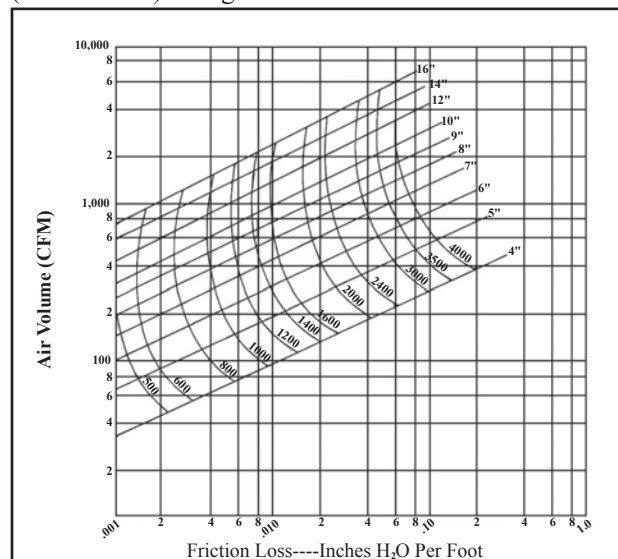
## SIZES & PACKAGING:

- \* Length: 25'
- \* Diameter: 4", 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", 20"
- \* Packaging: 1 piece per carton or 1 piece per bag

## WARRANTY:

Gray Flex warrants for a period of five years from the date of purchase that all flexible ducts will be free from defects in material and workmanship only if the ducts are installed in accordance with Gray's installation instructions and under conditions specified in Gray's performance data. Gray Flex shall have no responsibility to the buyer or any third party for any special, secondary, incidental or consequential damages however arising including but not limited to; personal injury, property damage, lost profits or other economic injury due to any defect in the flexible ducts. The exclusive remedies available to the buyer for any defect in the flexible ducts shall be replacement or refund of the purchase price at Gray's option. Gray makes no warranty of merchantability or fitness for a particular purpose. Gray Flex makes no other warranties, express, implied, statutory or otherwise.

## Friction Loss (ADC 72-R1) Straight Sections



Straight lines -- Nominal Duct ID  
Curved lines -- Velocity in fpm

## Acoustical Performance

Acoustical data in table below is based on 10' long straight lengths for all duct diameters up to 12" and on 14" lengths for 16" diameter duct.

		Noise Insertion Loss (ADC 72-R1) Straight Sections -- dB/ft.						
Duct Dia.	Air Flow fpm	Octave Bands (Hz)						
		125	250	500	1000	2000	4000	8000
4"	0	3	8	28	43	42	39	29
	2500	3	8	27	42	40	38	27
6"	0	6	8	35	38	40	36	21
	2500	5	7	32	36	41	36	20
7"	0	5	11	32	36	43	35	21
	2500	7	12	32	37	44	37	23
8"	0	5	11	29	33	44	28	16
	2500	4	11	27	31	42	31	18
10"	0	8	23	30	29	37	24	16
	2500	9	23	28	28	38	26	17
12"	0	11	27	28	30	33	22	15
	2500	11	26	28	29	34	22	16
16"	0	17	26	29	39	38	22	18
	2500	16	26	30	40	41	24	19



GRAY FLEX SYSTEMS, INC.

Manufacturers of Flexible Air Duct  
P.O. Box 1326  
Coats, N.C. 27521  
PH: 910-897-3539  
FX: 910-897-2222  
WWW.GRAYFLEX.COM

\* GRAY FLEX SHIPPING LOCATIONS \*  
\* COATS, NC. -- LAKE PARK, GA. \*