

# ANCO Flex Systems

Flexible Air Ducting for Residential and Commercial Heating and Cooling Systems



*Today's Efficient,  
Affordable and Safe  
Solution for Quality  
Air Distribution*



# PRODUCT FEATURES

## TextraSOFT™ INSULATION

ANCO manufactures its own TextraSOFT™ fiberglass insulation. Anco uses a unique process using reclaimed long, textile continuous filament glass fibers that are bonded together in random orientation by a formaldehyde free binder. This process produces an unusually strong, shock and vibration resistant insulation.

**THE MOST IMPORTANT FACTOR IN THERMAL PROPERTIES OF INSULATION IS ITS RETAINED THICKNESS.** All nonmetallic flexible air duct products are compression packaged, saving space and transportation cost. Products insulated with common rotary-spun fiberglass show a significant reduction in insulation thickness when removed from their package; the insulation thickness does not completely recover.

In addition, due to its strength **ANCO's TextraSOFT™** long filament insulation meets the U.L. 181 flame penetration test without the need for scrim reinforcement yarn. This **ELIMINATES THE ASSOCIATED DIFFICULTY OF HAVING TO CUT THE SCRIM** during installation in the field.

**ANCO's TextraSOFT™** insulation is safer and more comfortable to work with. Another added benefit of its extremely long fibers is that our insulation is **far less likely to cause the irritating itch** that goes along with working with rotary spun fiberglass. This can be a real benefit to your installers.

In addition to all the benefits listed, **ANCO's TextraSOFT™** insulation provides important environmental benefits. Several million pounds of waste long filament fibers are reclaimed and processed into **ANCO's TextraSOFT™** brand fibrous glass insulation. ***Not only do we recover the energy that was used to produce the fibers—we turn it into a quality insulation product that saves more energy.***

## ULTRA-10 CORE

ANCO's popular 4625 and 5625 air duct's excellent performance rating are based on our **ULTRA-10 CORE SYSTEM**. In the manufacture of ULTRA-10, two layers of polyester film are bonded together over a wire helix to form an impervious tube or "core" for the transmission of conditioned air completely isolated from the surrounding insulation.

Polyester is a material with properties ideally suited for use as an air duct core material.

- Flame retardant with low smoke generation.
- Very high impact and tear strength.
- Resistant to the effects of heat, cold and moisture.
- Excellent long-term aging and durability.
- Provides a versatile product for a wider range of high- and low-pressure applications.

## GALVANIZED WIRE

ANCO uses only **galvanized spring steel wire** to form the wire helix that supports the inner core providing a strong **corrosion resistant framework** for the duct. The wire is fully encapsulated by the two layers of the polyester film, and sealed tightly by means of a very strong polymer adhesive. This provides for a smooth surface for a QUIETER AIR FLOW.

## VAPOR BARRIERS

The final component of ANCO-Flex insulated air ducts is the vapor barrier (jacket). Our popular 4625 ducts are supplied with a durable, puncture-resistant, ultraviolet resistant black polyethylene vapor barrier. ANCO's standard black vapor barrier reduces this concern; however, we still do NOT recommend installation where there is exposure to the direct sunlight.

For applications where the duct may be exposed to direct sunlight or in outdoor applications, ANCO recommends the use of our **4625UVR** product. Our **4625UVR** product even has a **heavier duty black UV-resistant polyethylene vapor barrier** that will also inhibit damage caused by small rodents.

ANCO's popular 5625 ducts are made with a **metalized polyester vapor barrier** intended to match aesthetically with FSK board materials. ANCO manufactures this vapor barrier in-house allowing us to provide a high quality vapor barrier that is very strong and durable.

## PACKAGING

ANCO offers its insulated air ducts packed in either **corrugated boxes or in poly bags**. Most installers prefer the bag over the box because it is easier to handle, and it is far easier to dispose of on the jobsite.

# INSULATED & METALIZED

## SYSTEM 4625



### SYSTEM 4625 with “ULTRA 10” CORE and BLACK POLYETHYLENE VAPOR BARRIER

ANCO-Flex 4625 is constructed around Anco’s “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious inner tube. This core is then wrapped with a blanket of thermally certified energy-saving insulation. A protective vapor barrier of seamless black polyethylene then covers the core and the insulation. 4625UVR is supplied with an even heavier duty UV resistant vapor barrier for situations where the product will be installed outdoors, or where it is exposed to direct sunlight. Ducts are available in 3”-20” diameters.

## SYSTEM 5625



### SYSTEM 5625 with “ULTRA 10” CORE and METALIZED POLYESTER VAPOR BARRIER

ANCO-Flex 5625 is constructed around Anco’s “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious inner tube. This core is then wrapped with a thick blanket of thermally certified energy-saving insulation. A protective seamless vapor barrier of 2-ply metalized polyester/polyester then covers the core and the insulation. The metalized vapor barrier is intended to match aesthetically with FSK board products. Ducts are available in 3”-20” diameters.

## APPLICATIONS

ANCO-Flex 4625 and 5625 are very versatile air duct products capable of performing in a multitude of low to high pressure residential or commercial HVAC applications. Both are well suited for main trunk lines, supply and return lines, connecting lines, as well as runs to diffusers and room registers. The 5625 metalized vapor barrier is intended to match aesthetically with FSK board materials. As Class 1 air ducts, there are no associated limitations for installed length unless limited by a code body.

## PERFORMANCE DATA

- **AVAILABLE DIAMETERS:** 3", 4", 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", and 20" diameters. (Oversized by 3/8" for easy fitting).
  - **SURFACE BURNING CHARACTERISTICS:** Flame Spread: Less than 25; Smoke Developed: Less Than 50
  - **CODE APPROVALS:** This product meets or exceeds the requirements of most federal, state, and local codes including UL 181; NFPA 90A/90B; HUD/FHA Std 515; Standard Mechanical Code; National Mechanical Code; Uniform Mechanical Code; Florida Energy Code; the Cities of Chicago and New York, etc. just to name a few. We recommend you always check with your local authorities when in question.
  - **UL/ADC CERTIFIED R-VALUES:** This product is certified for thermal performance in accordance with the ADC Flexible Duct Performance & Installation Standards. Certified R-Values with the ADC label are essential to ensure compliance with regulatory codes.
  - **R-VALUES AVAILABLE:** R 4.2, R 6.0, R 8.0, and R-10. R-10 ducts are a special order item.
  - **INSULATION:** We use our own very special TextraSOFT™ long fiber insulation. Due to the fiber length, TextraSOFT™ is rated by the International Agency for Research Cancer (IARC) as an IARC-3, Non-Hazardous Material. Additionally, TextraSOFT™ does not itch like others and also maintains its installed thickness over its lifetime; therefore, R-Values and thermal efficiencies are retained.
- \*Note: 4625 and 5625 may also be insulated with a rotary fiberglass that requires scrim yarn reinforcement, if requested.
- **ULTRA-10 CORE:** Two layers of polyester film are bonded together over a galvanized wire helix to form an impervious tube that is tested in accordance with ADC FD 72-R1 for static pressure and temperature performance. The galvanized wire is UL rated for corrosion protection.
  - **UL RATED PRESSURE:** 3"-20"-Maximum 10" W.C. positive. 3"-10" Diameters: 1/2" W.C. negative; 12"-20" Diameters: 1/2" W.C. negative. Although rated higher, we recommend maximum operating pressures at around 6" W.C. positive.
  - **UL RATED MAXIMUM AIR VELOCITY:** 4000 FPM
  - **UL RATED OPERATING TEMPERATURE:** -20° F to 200° F
  - **VAPOR BARRIER (4625):** Very durable, puncture resistant black polyethylene vapor barrier that provides improved protection against UV light. Despite the improved UV resistance, we still do not recommend installations in direct sunlight or in outdoor applications. For these applications, we recommend 4625UVR (same specifications as 4625), which uses even a heavier duty black polyethylene vapor barrier or our 5625 product.
  - **VAPOR BARRIER PERMEANCE RATING (4625):** 0.1 (ASTM E96 Method "A")
  - **VAPOR BARRIER (5625):** Very durable, puncture resistant 2-ply metalized polyester/polyester vapor barrier providing improved protection against UV light. The metalized vapor barrier is designed to match aesthetically with FSK board materials.
  - **VAPOR BARRIER PERMEANCE RATING (5625):** 0.04 (ASTM E96 Method "A")

**R8.0**

**R6.0**

**R4.2**

Our packaging features a highly visible means of determining R-Value. Our products are marked with bright, easy to read from a distance, color-coded labels for identification.

# NON INSULATED

## SYSTEM 3100 PRODUCTS



### SYSTEM 3100-B with “ULTRA 10” CORE with 2-PLY POLYESTER/POLYESTER

ANCO-Flex 3100-B is the economy grade in available Class 1 Air Connectors. It is constructed around Anco's “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious tube. 3100-B is manufactured in the same manner as the internal core of our flex ducts, and is made with a black tinted adhesive to give it a darker shade.



### SYSTEM 3100-M with “ULTRA 10” METALIZED CORE with 2-PLY METALIZED POLYESTER/POLYESTER

ANCO-Flex 3100-M is a mid-grade in available Class 1 Air Connectors. It is constructed around Anco's “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious tube. The outer layer of this polyester film is also metalized for aesthetics.



### SYSTEM 3100-F with “ULTRA 10” FOIL CORE with 3-PLY ALUMINUM FOIL/POLYESTER/POLYESTER

ANCO-Flex 3100-F is the mid-grade in available Class 1 Air Connectors. It is constructed around Anco's “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious tube. The outer layer of this core also has a single ply of aluminum foil laminated to it for added strength and performance.



### SYSTEM 3100-FF with “ULTRA 10” CORE with 4-PLY ALUMINUM FOIL POLYESTER/POLYESTER ALUMINUM FOIL

ANCO-Flex 3100-FF is the top of line in available Class 1 Air Connectors. It is constructed around Anco's “ULTRA-10” core, using a galvanized spring steel wire helix is completely encapsulated within two layers of tough polyester film securely bonded together making an impervious tube. The outer and inner layer of this core also has a single ply of aluminum foil laminated to it for added strength and performance.

## APPLICATIONS

**ANCO-Flex 3100-B, 3100-M, 3100-F and 3100-FF** are very versatile air connector products capable of performing in a multitude of low to medium-pressure residential or commercial HVAC applications. All 3100 products are well suited for main trunk lines, supply and return lines, connecting lines, as well as runs to diffusers and room registers, and other terminal devices in spaces where insulation is not required. It also is perfect for a multitude of venting and exhaust applications. Do not use for the venting of cooking and clothes drying appliances. ANCO's 3100 line is the product of choice for applications calling for Class 1 Air Connectors especially where insulation is not necessary.

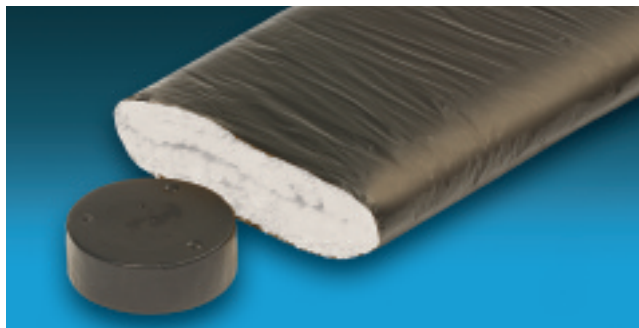
## PERFORMANCE DATA

- **AVAILABLE DIAMETERS:** 2", 3", 4", 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", and 20" diameters. (Oversized by 3/8" for easy fitting).
- **SURFACE BURNING CHARACTERISTICS:** Flame Spread: Less than 25; Smoke Developed: Less Than 50
- **CODE APPROVALS:** This product meets or exceeds the requirements of most federal, state, and local codes including UL 181; NFPA 90A/90B; HUD/FHA Std 515; Standard Mechanical Code; National Mechanical Code; Uniform Mechanical Code; Florida Energy Code; the Cities of Chicago and New York, etc. just to name a few. We recommend you always check with your local authorities when in question. As per NFPA 90A/90B, air connectors in applicable HVAC applications are limited to a maximum of 14' of installed length among other restrictions. Do not use 3100-B for the venting of cooking and clothes drying appliances.
- **UL RATED PRESSURE:** 2"-10" Diameters-Maximum 6" W.C. positive; 12"-20" Diameters: 4" W.C. positive. 2"-20": 1/2" W.C. negative.
- **UL RATED MAXIMUM AIR VELOCITY:** 4000 FPM
- **UL RATED OPERATING TEMPERATURE:** -20° F to 200° F

**PACKAGING:** The standard is 5 pieces per carton (125'). Special packaging is available upon request from one piece per box up to bulk packaged bundles in larger boxes suitable for big jobs. (Special pricing applies)

# SLEEVE

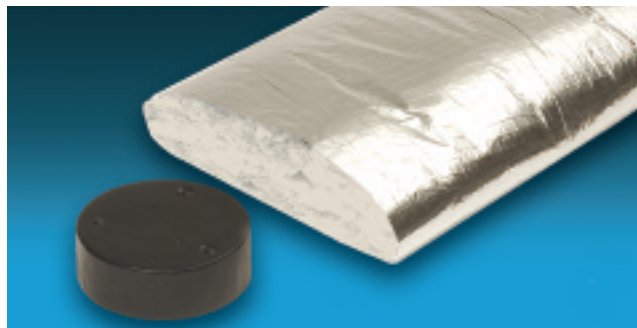
## SYSTEM 6000



### SYSTEM 6000 - SLEEVE with BLACK POLYETHYLENE VAPOR BARRIER

ANCO-Flex 6000 Sleeve is constructed as a "slip-on" insulation product for fast, economical installation on round metal or PVC pipe. The product is composed of a thick blanket of thermally certified energy-saving insulation. A protective vapor barrier of seamless black polyethylene then covers the insulation. The product comes in convenient 5' sections sized to fit standard sheet metal pipe diameters. A starter cap is included in each carton for ease of installation. The product is UL Classified which certifies the product's flame and smoke capabilities. Sleeves are available in 3"-20" diameters.

## SYSTEM 6100



### SYSTEM 6100 - SLEEVE with METALIZED POLYESTER VAPOR BARRIER REINFORCED WITH SCRIM YARN

ANCO-Flex 6100 Sleeve is constructed as a "slip-on" insulation product for fast, economical installation on round metal or PVC pipe. The product is composed of a thick blanket of thermally certified energy-saving insulation. A protective seamless vapor barrier of 2-ply metalized polyester/polyester reinforced with scrim yarn then covers the insulation. The product comes in convenient 5' sections sized to fit standard sheet metal pipe diameters. A starter cap is included in each carton for ease of installation. The product is UL Classified which certifies the product's flame and smoke capabilities. Sleeves are available in 3"-20" diameters.

## APPLICATIONS

ANCO-Flex 6000 and 6100 Sleeve is a very versatile round metal duct insulation product capable of performing in a multitude of residential or commercial HVAC applications. Both are well suited for any situation involving round metal duct or PVC pipe requiring insulation from ambient unconditioned spaces. It is designed to "slip-on" over the round pipe with the aid of starter caps that are also furnished. The 6100 metalized vapor barrier is intended to match aesthetically with FSK board products. It provides a neat, professional appearance and eliminates the need for bulky duct wrap rolls on the job.

## PERFORMANCE DATA

- **AVAILABLE DIAMETERS:** 3", 4", 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", and 20" diameters. (Oversized to easily fit on round pipe).
- **SURFACE BURNING CHARACTERISTICS:** Flame Spread: Less than 25; Smoke Developed: Less Than 50
- **CODE APPROVALS:** This product meets or exceeds the requirements of most federal, state, and local codes. It carries the UL Classified label as Pipe and Equipment Covering. We recommend you always check with your local authorities when in question.
- **UL/ADC CERTIFIED R-VALUES:** Although the insulation is not technically certified by UL or ADC within this application, Anco uses the same insulation in this product as it does within its certified flex duct products. Anco Products, Inc. will provide written certification of the R-values if necessary.
- **R-VALUES AVAILABLE:** R 4.2, R 6.0, R 8.0, and R-10. R-8 and R-10 sleeves are a special order item.
- **INSULATION:** We use our own very special TextraSOFT™ long fiber insulation. Due to the fiber length, TextraSOFT™ is rated by the International Agency for Research Cancer (IARC) as an IARC-3, Non-Hazardous Material. Additionally, TextraSOFT™ does not itch like others! TextraSOFT™ also maintains its installed thickness over its lifetime; therefore, R-Values and thermal efficiencies are retained.
- **OPERATING TEMPERATURE:** As with our other flex duct products, we recommend operating between -20° F to 200° F.
- **VAPOR BARRIER (6000):** Very durable, black polyethylene vapor barrier that provides improved protection against UV light. Despite the improved UV resistance, we still do not recommend installations in direct sunlight or in outdoor applications. For these applications, we recommend our 6100 Sleeve product.
- **VAPOR BARRIER PERMEANCE RATING (6000):** 0.1 (ASTM E96 Method "A")
- **VAPOR BARRIER (6100):** Very durable, puncture resistant 2-ply metalized polyester/polyester vapor barrier reinforced with scrim yarn that provides improved protection against UV light. The metalized vapor barrier is designed to match aesthetically with FSK board materials.
- **VAPOR BARRIER PERMEANCE RATING (6100):** 0.04 (ASTM E96 Method "A")



Anco Products is committed to the improvement of Indoor Air Quality. Our flexible air ducts are stringently certified by GREENGUARD. Not only are they GREENGUARD certified, but they are rated for **Children & Schools** as well. GREENGUARD Children & Schools Product Certification Program complies with the State of California's Department of Health Services Standard Practice (CA Section 01350) for testing chemical emissions from building products used in schools. As such, GREENGUARD Children & Schools Certified products can be used as a strategy to earn valuable credits in the CHPS Best Practices Manual for K-12 schools.



# GENERAL PRODUCT INFORMATION

## ANCO-FLEX CERTIFICATIONS

**CODE APPROVALS:** ANCO Flexible Duct products meet or exceed the requirements of most federal, state, and local mechanical and energy codes. The majority of the codes require U.L. 181 and installation in accordance with NFPA 90A and 90B. ANCO-Flex complies with the Standard Mechanical Code, the National Mechanical Code, the Uniform Mechanical Code, SBCC, ICBO, BOCA, HUD/FHA Standard 515-2.1(b), the Florida Energy Code, and the Cities of Chicago and New York just to name a few. We recommend that you check with the local code body, having jurisdiction in your area, to determine applicable codes.

**U.L. Listed:** All ANCO-FLEX products have been tested in accordance with the **UNDERWRITERS LABORATORIES U.L. 181 STANDARD** for Safety for Factory-Made Air Ducts and Air Connectors. The **U.L. 181 TEST PROCEDURE** for flexible air duct consists of fifteen mechanical, burning, and aging tests. Included in these tests are flame penetration, puncture, static load, and impact. U.L. Listed "Connectors" are not subject to all of these same tests. U.L. Listed Connectors must be identified by a round shaped U.L. label; whereas, U.L. Listed Air Ducts are identified by a square or rectangular U.L. label.

**NFPA 90A AND 90B:** These U.L. test requirements apply to materials for the fabrication of air duct and connector systems for use in accordance with Standards of the National Fire Protection Association for the Installation of Warm Air Heating and Air Conditioning, **NFPA 90A AND 90B**.

**ADC CERTIFIED:** ANCO Products, Inc. Is a proud and active member of the **AIR DIFFUSION COUNCIL (ADC)**, which is the national trade association for all flexible air duct manufacturers. The ADC promotes uniform standards for the entire flex industry, and ANCO-Flex is proud to bear the ADC Seal of Certification in accordance with the **ADC FLEXIBLE DUCT PERFORMANCE & INSTALLATION STANDARD**. Part of this ADC standard establishes a thermal performance certification program that is certified by U.L. using **ASTM C-518** at installed wall thickness on flat insulation only. This provides for a uniform standard across our entire industry for measuring insulation values of flexible air duct products. Only the manufacturers that follow this procedure are allowed to display the ADC Seal of Certification on their product, and we strongly recommend to our customers that they **ONLY USE PRODUCTS THAT BEAR THE ADC SEAL**. It is your guarantee.

## ANCO INSULATED FLEXIBLE AIR DUCTS

All ANCO-FLEX insulated duct products, including the various "cut-to-length" sizes, are Class 1 Air Duct Materials WITHOUT any associated limitations for the installed length. This applies to all our 4625 and 5625 systems.

## ANCO UNINSULATED FLEXIBLE AIR CONNECTORS

The only connectors we offer are uninsulated and can be found in our 3100 product line. Unlike Class 1 air ducts, connectors are limited to a maximum of fourteen (14) feet of installed length among other restrictions. Although connectors may be similar in appearance to Class 1 air ducts, they are clearly identified by the use of a round U.L. listed label.

**CERTIFICATIONS/QUALIFICATIONS**  
U.L. Listed and Inspected  
Authorized by All Major Code Bodies  
Approved by the Air Diffusion Council  
Including ADC Certified R-Values

## ANCO ADVANTAGES

Easy Installation-Less Labor  
Low Cost Duct Option  
Superior Air Delivery  
High Efficiency-Low Leakage  
Effective Thermal Performance  
Energy Savings  
Superior Acoustical Value  
Excellent for Indoor Air Quality



### THINK "GREEN" AND QUALITY DRIVEN:

Anco is recognized nationally as being a major proponent for recycling. Our TextraSOFT manufacturing processes reclaim millions of pounds of byproduct fibers annually. Additionally, the TextraSOFT product line is ISO 9002 certified. Anco Products, Inc. is also a recipient of the Indiana Quality Improvement Award in 1999 and 2000.

**WARRANTY:** Anco Products, Inc. flexible duct products are protected by our serious commitment to quality. Our products are warranted to be free of defects in material and workmanship for a period of one year from the date of purchase only if the products are installed in accordance with Anco's installation instructions, applicable codes, and under conditions specified in Anco's performance data. The buyer's exclusive remedies for any defect in the products shall be replacement or refund of the purchase price, at Anco's option in accordance with Anco's return authorization procedure. Anco makes no other warranties, expressed, implied, statutory, or otherwise. In particular, Anco makes no warranty of merchantability or fitness for a particular purpose. Anco shall have no liability whatsoever, including, but not limited to, personal injury, property damage, lost profits or other economic injury due to any defect in the products made by Anco. Anco shall not be responsible to buyer or any third party for any special, secondary, incidental, or consequential damages however arising. Materials and specifications for the products are subject to change without notice. Nothing in this provision shall invalidate or restrict any right or remedy otherwise available under state or federal law. USGBC and related logo is a trademark owned by the U.S. Green Building Council and is used by permission.

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