



# AIREX EFLEXGUARD™

Performing Insulation Protection

Energy Efficient Product 

**30%**  
Energy Savings  
Mandate\*

**72 Series**  
(6 ft. Standard Roll)

**E-FLEX GUARD™**

**Protects Piping Insulation**

- Outdoor UV/Weather Grade Resistant Construction
- Self-Gripping, Dual-Bonded Hook & Loop Fastening System
- Removable/Reusable for Maintenance
- Protector and Class II Vapor Retarder (All-In-One)
- Meets ASTM G153 Weatherization and UV
- Meets ASTM E-96 Water/Vapor Permeability

U.S. Patents #9,091,377 B2  
#9,523,200 B2  
Copper Piping & Pipe Insulation Are  
Shown for Illustration Purposes Only

**Meets New Code Requirements:**

- ✓ Building Codes
- ✓ Energy Codes
- ✓ Residential Codes
- ✓ Mechanical Codes
- ✓ Green Codes



**750 Series**  
75 ft.  
Mega Rolls



Applications for:



**90 Series**  
90°  
Elbows

**Weather Damage Protection**



**Physical Damage Protection**



**Residential**

**Commercial**

**Multi-Family Units**

**Approved Material & Performance Testing**

**Material Testing Standards**

- ASTM G153 – Weatherization and UV Exposure
- ASTM E96 – Water/Vapor Permeability
- ASTM G21 – Anti-Fungal/Anti-Microbial
- ASTM D412 - Tension Deformation Test (UV Exposure & Water Immersion)
- ASTM D570 – Water Absorption
- ASTM E84/UL 723 - Flame and Smoke Rating 25/450

**Codes & Standards Compliance**

**Pipe Insulation Protection for Compliance per:**

- IECC - 2012 Protection of Piping Insulation – Commercial Section C403.2.8.1
- IECC - 2015 Protection of Piping Insulation – Commercial Section C403.2.10.1
- IRC - 2018 Refrigerant Line Insulation Protection – M1411.6.1 - Section N1103.4.1
- California Building Energy Efficiency Standards (Title 24 Energy Code) 2013 - Residential & Commercial Requirement for Pipe Insulation 120.3 - Section: 150.0(j) 3a & b
- California Building Energy Efficiency Standards (Title 24 Energy Code) 2016 - Residential & Commercial Requirement for Pipe Insulation 120.3 - Section: 150.0(f) 2 & 3 – Section 150.0(m) 9
- ANSI/ASHRAE/IESNA Standard 90.1 - 2004, 2007, 2010

**2012 & 2015 International Energy Conservation Code (IECC)**

**Residential Section R403.3.1 (2012), R403.4.1 (2015)**  
**Commercial Section C403.2.8.1 (2012), C403.2.10.1 (2015)**

**Protection of Piping Insulation:**

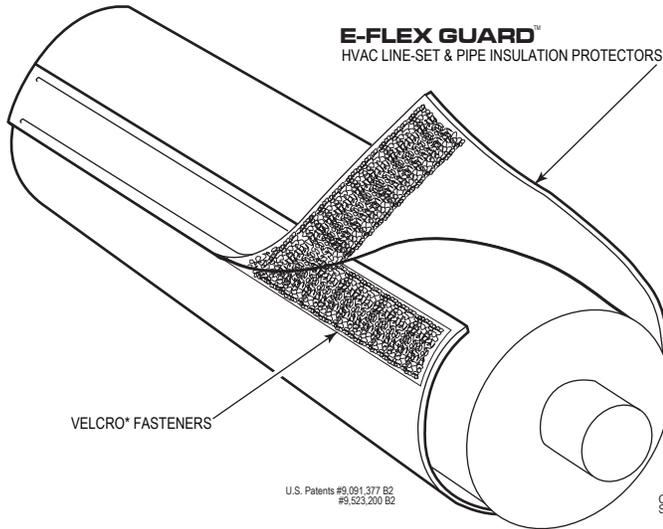
Piping insulation exposed to weather shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, wind and shall provide shielding from solar radiation that can cause degradation of the material. **Adhesive tape shall not be permitted.**

\*Based on HVAC Industry and Manufacturer's Independent Study on a Combined ROI & Sustainable Energy Savings Calculation. A contributing product to the U.S. Energy Department's 30% Energy Savings Solution Initiative.





Project \_\_\_\_\_  
 Contractor \_\_\_\_\_  
 Date \_\_\_\_\_  
 Specification Reference \_\_\_\_\_  
 Comments \_\_\_\_\_



**E-FLEX GUARD MODEL NUMBERS**

| Airex Part Number   | Recommended Sizing Chart  |
|---------------------|---|
| <b>72E-B</b> (6 ft) | Fits: 1/2" wall thickness pipe insulation with 5/8", 7/8" tube.   |
| <b>72C-B</b> (6 ft) | Fits: 3/4" wall thickness pipe insulation with 5/8", 7/8" tube or 1/2" wall thickness pipe insulation with 1-1/8" tube. |
| <b>72X-B</b> (6 ft) | Fits: 1" wall thickness pipe insulation with 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube.   |

**E-FLEX GUARD™**  
Color Options

|                                   |           |
|-----------------------------------|-----------|
| Black - B                         | White - W |
|                                   |           |
| Substitute (B) with (W) for White |           |

**Product Description and Specification**

**AIREX E-FLEX GUARD™** - An insulation protective cover by Airex Manufacturing Inc., shall be provided and installed to be flexible, U/V and weather resistant. The PVC plastic pipe insulation cover shall feature an integrated, outdoor-rated durability, industrial-grade, full-enclosure fastening system that is double secured by molecular bonding, allowing custom, cut-to-length installations. The cut-to-length installations shall comprise of a non-unraveling PVC cover material that does not compromise long-term-effectiveness or require specialized tools and cutting equipment. The engineered fastening system is to allow the cover to be removable and reusable for maintenance without the use of adhesives as an attachment in any way shape or form, including either in the protector's construction, installation, or attachment to pipe insulation, as this will negatively affect insulation permeance performance and promote insulation material degradation which causes added energy usage by equipment. WRAPPING TAPE OR ADHESIVE TAPE SHALL NOT BE PERMITTED AS PER ENERGY CODES. Insulation Protector shall be tested and meet the following testing: ASTM E 96 (Vapor Transmission of Materials), ASTM G 153 (Carbon Arc Light Exposure – Accelerated Weathering), ASTM D 412 (Tensile Strength after UV Exposure and Water Immersion) ASTM 570 (Water Absorption of Plastics), ASTM E 84/UL 723 (Surface Burning Characteristics of Building Materials), ASTM G 21 (Fungal Growth). UV/Protector Pipe Insulation Material shall Meet Class II vapor retarder per ASTM E 96 (vapor/moisture permeability test) "1 perm or less". THE USE OF U/V PAINT OR NON-PERMEABLE MATERIALS OR ADHESIVES ARE NOT PERMITTED FOR THIS APPLICATION. **AIREX E-FLEX GUARD™** combines U/V weather and physical protection with a Class II rated vapor retarder permeability performance material, as required per energy codes.

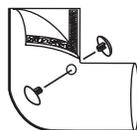
**Approved PVC Material Performance Testing**

| Material Testing Standards   |
|--|
| • ASTM G153 – Weatherization and UV Exposure                           |
| • ASTM E96 – Water/Vapor Permeability                                  |
| • ASTM G21 – Anti-Fungal/Anti-Microbial                                |
| • ASTM D412 - Tension Deformation Test (UV Exposure & Water Immersion) |
| • ASTM D570 – Water Absorption   |
| • ASTM E84/UL 723 - Flame and Smoke Rating 25/450                      |



| Airex Part Number     | Recommended Sizing Chart  |
|-----------------------|---|
| <b>750E-B</b> (75 ft) | Fits: 1/2" wall thickness pipe insulation with 5/8", 7/8" tube.   |
| <b>750C-B</b> (75 ft) | Fits: 3/4" wall thickness pipe insulation with 5/8", 7/8" tube or 1/2" wall thickness pipe insulation with 1-1/8" tube. |
| <b>750X-B</b> (75 ft) | Fits: 1" wall thickness pipe insulation with 3/4", 7/8" tube or 3/4" wall thickness pipe insulation with 1-1/8" tube.   |

**90 Series**  
90° PVC Insulation Protectors



| Airex Part Number | Recommended Sizing Chart |
|-------------------|--------------------------|
| <b>90E-B</b>      | 90° Angle fits E Series  |
| <b>90C-B</b>      | 90° Angle fits C Series  |
| <b>90X-B</b>      | 90° Angle fits X Series  |