



1. Product Name

- Airex Pro-System Kit™

2. Manufacturer

Airex Manufacturing, Inc.
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3. Product Description

Basic Use

The Airex Pro-System Kit is a two-in-one system used to seal HVAC refrigerant lines when penetrating through exterior walls from air-leakage (Airex Titan Outlet) and to protect insulation (Airex E-Flex Guard) around the same refrigerant lines from outdoor weather and/or physical damage.

The Airex Pro-System Kit can be used on vertical building walls, rooftop applications such as parapet walls and also roof service stations, etc.

The wall outlet seal mechanically fastens to many exterior wall surfacing of vertical walls while the wall sleeve secures and isolates the refrigerant lines that penetrate. The insulation protective cover mechanically connects to the wall sleeve with a stainless-steel clamp. This solution provides a system that combines a compression gasket seal with insulation protection for long-term, sustainable weather and physical damage protection.

Composition and Materials

The Airex Titan Outlet, wall penetration seal, is made of weather-resistant ASA (acrylonitrile styrene acrylate) polymer.

The elastomeric wall sleeve on the outlet consist of Santoprene polymer for air tight sealing with added weatherability properties.

Additionally, the outlet and the sleeve are bonded together without the use of adhesives, which is accomplished by a process called over-molding where the elastomer sleeve is chemically bonded to the ASA polymer of the outlet.

The wall surface gasket is a weatherable PVC foam that creates a positive seal even on irregular surfaces. The screws provided are ICC ES listed and are all-material screws made of carbon steel with blue Climaseal® coating providing extra corrosion resistance and are Miami-Dade County approved for hurricane protection.

The mechanical connection between the wall sleeve and insulation protector is secured with a stainless-steel clamp.



Airex E-Flex Guard (left) and Airex Titan Outlet (right)

The Airex E-Flex Guard is made of PVC material that resists heat and solar radiation, and UV. It uses a dual-bonded fastening system with hook and loop fasteners that are high-temperature welded and double stitched with 50-pound UV-resistant nylon into the PVC, securing that the fastener never comes off and remains intact while cutting to appropriate length. Also, provided are UV nylon cable ties to secure against wind and tampering.

Features and Benefits

- No painting required
- Fire and smoke rated
- Antimicrobial, antifungal
- Protects without adhesives
- Indoor air quality protection
- Flexible for multiple configurations
- Removable, reusable for maintenance
- Protector and class II vapor retarder all-in-one
- Outdoor UV weather-grade resistant materials
- Prevents physical wall damage and pest intrusion
- Provides air leakage and weather moisture protection
- Piping isolation and reduces piping vibration and noise
- Easy install, with self-gripping dual-bonded hook and loop fastening system

Models, Sizes and Types

The **Airex Pro-System Kit: TGS Series** are catalogued [here](#).

The **Airex Pro-System Kit: TSS Series** are catalogued [here](#).

The **Airex Titan Outlets** are catalogued [here](#).

The **Airex E-Flex Guards** are catalogued [here](#).



Airex Pro-System Kit illustration



Residential application



Airex E-Flex Guard 6ft., 75 ft., and 90-degree elbows available

SDS Information

The **SDS document** is available from Airex Manufacturing, Inc.

Accessories/Options

Thicker wall gasket for wall outlet and 90-degree elbow insulation protectors available.

System Functionality

The entire system is part of the HVAC equipment install whereas the outlet seals HVAC refrigerant lines when penetrating through exterior walls from air-leakage and at the same time protecting the insulation around the same refrigerant lines from outdoor weather and/or physical damage.

The wall outlet mechanically fastens to many typical exterior wall surfacing of vertical walls and refrigerant lines penetrate through wall sleeve section and at point of connection then mechanically receive insulation protection cover as a two-in-one system that consists of a compression gasket seal combined with a vapor retarding insulation protector.

Product Limitations

This product is to be used only on vertical applications such as walls, parapet walls, roof service stations, etc.

4. Technical Data

Applicable Standards Airex Titan Outlet

ASTM International

- **ASTM D412** Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
- **ASTM D573-04** Standard Test Method for Rubber—Deterioration in an Air Oven
- **ASTM D648-07** Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position

- **ASTM D746-07** Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact
- **ASTM D1525** Standard Test Method for Vicat Softening Temperature of Plastics
- **ASTM E331** Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- **ASTM E283** Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- **ASTM G153** Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

UL International

- **UL 746C** Standard for Polymeric Materials - Use in Electrical Equipment Evaluations - fl Rating

Applicable Standards Airex E-Flex Guard

- **ASTM D412** Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
- **ASTM D570** Standard Test Method for Water Absorption of Plastics
- **ASTM E84/UL 723** Standard Test Method for Surface Burning Characteristics of Building Materials
- **ASTM E96** Standard Test Methods for Water Vapor Transmission of Materials
- **ASTM G21** Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi

Substitution Limitations

Airex Titan Outlet: Substitutions are not advised to ensure long-term air leakage and water penetration are prevented according to IECC national and/or state energy codes. Meeting tests ASTM E283 and ASTM E331. Impacted products will be non-gasket-and-seal products used for this specific application.



Commercial rooftop application

Airex E-Flex Guard: Substitutions are not advised to ensure long-term lifespan of pipe insulation. This product also ensures removable and reusable for maintenance requirements according to IECC national and/or state energy codes. Adhesive tapes shall not be allowed and other important features such as class II permeability rating may also be additional factors required by the abovementioned codes.

5. Installation

Preparatory work

Airex Titan Outlet is recommended to be installed before final connection to HVAC equipment. Airex E-Flex Guard is recommended to be used over new insulation or undamaged insulation. Also, read all product install instructions to ensure easiest method of install.

Method

Installation video [here](#).

Installation documentation [here](#).

6. Availability and Cost

Availability

Readily available through nationwide distribution (HVAC Wholesalers)

Cost

Market accepted, competitive, mass production price. Project quotation pricing available.

7. Warranty

Airex Manufacturing 10 Year Limited Warranty

Warranty Period Coverage: subject to the following paragraphs, this warranty is for a period of (10) years, beginning on the date of the initial installation.

Warranty Coverage/Non-Coverage: warranty covers that Airex Manufacturing, Inc., products correctly installed on (Property) will be free from defects and material workmanship (manufactured defects). This limited warranty shall not be effective or enforceable unless the warranted products were properly installed and the building or structure upon where the Airex Manufacturing, Inc., products were installed was constructed in accordance with all applicable codes, regulations, plans, specifications and manufacturer's installation instructions. This warranty does not cover product that was not installed for its normal and intended use or application. This warranty does not cover defects resulting from damage through accident or casualty occurring during or after Product shipment from Airex Manufacturing, Inc. This warranty does not cover acts of God such as falling objects, fire, floods, tornados, etc.

Warranty Remedy: upon receipt of notice, Airex Manufacturing, Inc., shall be authorized to inspect the Property, If following the inspection of the Property, Airex Manufacturing, Inc., determines that a valid claim exists, Airex Manufacturing, Inc., shall repair or replace, at its option, (i) the defective part, (ii) the damage to those portions of the Property caused by the defect. All work shall be performed by Airex Manufacturing, Inc., or subcontractors chosen by Airex Manufacturing, Inc.

Note: Any determination depends upon the sole decision and discretion of Airex Manufacturing, Inc. (Upon the sole discretion of Airex Manufacturing, Inc., excludes—Employees, Representatives, or Agents of Airex Manufacturing, Inc., or any other Person).

Warranty Claim Submission – Submit all claims in writing WITHIN 30 DAYS after defect has been discovered to:

Airex Manufacturing, Inc.

72-170 Dunham Way

Suite D

Thousand Palms, CA 92276

Other Possible Warranty Rights: this warranty provides specific legal rights, and may also provide other rights which vary from state to state.

8. Maintenance

No follow up service maintenance required by facilities maintenance staff.

9. Technical Services

Airex Manufacturing Technical Assistance hotline by phone: (760) 343-2277 and/or email: customerservice@airexmfg.com or local sales representative agency.



Engineered HVAC Wall Penetration Sealing & Insulation Protection
Rooftop, Ground Level, Commercial, Multi-Family and Residential Applications



Makeshift methods are frequently used if not specified and detailed

10. Filing Systems

- ConstructConnect
- Product MasterSpec
- BSD SpecLink
- Sweets
- Airex Manufacturing <http://www.airexmfg.com/cad-library/>

BIM objects (SmartBIM, other etc.)

- Airex Manufacturing CAD Library
- Sweets

CAD drawings listings

- Airex Manufacturing CAD Library
- Sweets

- Additional product information is available from the manufacturer upon request ↗