

## EX TITA

BIZINGING ROCK BACK TO THE ROLL

The superior choice for tear resistant insulation.

K-FLEX TITAN™ is a flexible, coextruded, jacketed composite material applied to K-FLEX® NBR/PVC tubular insulation. It's polymeric jacketed material offers excellent flexibility, abrasion and weather resistance.





Available on line sets from



623.215.9000 csr@linesetsinc.com www.linesetsinc.com Phoenix, AZ Lawrenceville, GA Ansonia, CT

Linesets, Inc.® is the industry leader in custom line sets. Our ongoing commitment to listening and working with our distributors and their contractor customers allows us to provide innovative solutions of the highest quality and value. Every product design we offer reflects our many years of industry insight and service excellence.



## LINESETS, INC® - K-FLEX TITAN™ LINE SETS

## THE BEST LINE SET AVAILABLE TODAY

- Durable (non-fracturing) with tear resistant skin that improves field installation time.
- Flexible and easily conforms to bends and its low module allows for it to be pushed back on tube for easier installation of fittings.
- The expanded closed-cell structure and unique formulation inherently resists moisture vapor intrusion. Titan needs no additional protection!
- Code Compliant. Meets the outdoor exposure requirements of the 2012 / 2015 IECC Residential & Commercial Co des. Plus, it's ASTM E84 25/50 rated.
- The most durable polymeric jacket we've ever offered. Resistant to damage from UV, equipment maintenance, and handling during install. Only line set insulation to offer a limited 5-year warranty including UV!
- Titan can be used for indoor or outdoor applications with service temperatures ranging from -70°F to +220°F.
- 1-Step Install. No field-applied protective coating or jacketing required.
- Resistant to flames compared to PE type materials!



### **TECHNICAL DATA**

|  | PHYSICAL PROPERTIES  |                       | K-FLEX TITAN™   | TEST METHODS |
|--|--|-----------------------|---|--------------|
|  | Main Composition   |                       | Flame-retarded NBR/PVC elastomeric foam with proprietary copolymer blend jacket | -            |
|  | $\textbf{Thermal Conductivity} \; (\text{Btu-in/hr-Ft}^2\text{-}^\circ\text{F})$ | 75°F (24°C) Mean Temp | 0.245   | ASTM C177    |
|  | Density  |                       | 3-6 lb/ft <sup>3</sup>  | ASTM D1667   |
|  | Operating Temperature Range  |                       | -70°F* (-57°C) to +220°F (+104°C)   | ASTM C534    |
|  | Water Vapor Permeability (Dry Cup)   | (Core Material Only)  | <0.01 perm-in   | ASTM E96     |
|  | Water Vapor Permeance  | (Jacket Material)     | ≤0.05 perms   | ASTM E96     |
|  | Dimensional Stability  |                       | <7% Linear Shrinkage  | ASTM C534    |
|  | Corrosion Risk   |                       | pH neutral  | DIN 1988     |
|  | UV Resistance (Artificial Aging)   | (Jacket Material)     | Pass: No Changes to Surface Condition   | ASTM G153    |
|  | Flammability   |                       | 25/50 (up to 1-1/2")  | ASTM E84     |
|  |  |                       |   |              |

<sup>\*</sup>For applications below -40°F (-40°C), contact K-FLEX technical support.

| PIPE "R" VALUES PER SQUARE FOOT (ALL SIZES ARE NOMINAL) |            |            |            |             |  |  |  |
|---|------------|------------|------------|-------------|--|--|--|
| NOMINAL INSULATION I.D.                                 | 1/2" WALL  | 3/4" WALL  | 1" WALL    | 1-1/2" WALL |  |  |  |
|   | Insul-Tube | Insul-Tube | Insul-Tube | Insul-Tube  |  |  |  |
| 1/4"  | 4.0        | 6.1        | 9.6        | 16.5        |  |  |  |
| 3/8"  | 3.6        | 5.6        | 8.5        | 14.6        |  |  |  |
| 1/2"  | 3.4        | 5.4        | 7.9        | 13.5        |  |  |  |
| 5/8"  | 3.3        | 5.4        | 7.5        | 12.8        |  |  |  |
| 3/4"  | 3.1        | 5.4        | 7.5        | 12.4        |  |  |  |
| 7/8"  | 3.2        | 5.4        | 7.2        | 11.6        |  |  |  |
| 1-1/8"  | 3.1        | 5.5        | 7.1        | 10.8        |  |  |  |

# SPECIFICATION COMPLIANCE 2012 IECC Section R403.3.1 (residential) Section C403.2.8 (commercial) 2015 IECC Section R403.4.1 (residential) Section C403.2.10.1 (commercial)

**2013 California Energy Code, Part 6** Subchapter 3, Section 120.3

ASTM E84 25/50-rated (to 1-1/2")

