

Insulation with integrity, from people who care.

TDAB III Heat Shrink Duct Bands

Description:



TDAB III Duct Bands solve the costly problems of sealing joint leaks in HVAC duct systems. It is approved for marine applications.

Made of Raychem® cross-linked polyolefin, it is pre-coated with a sealant. TDAB III Heat Shrink Duct Bands give mechanically strong, pressure tight seals that are permanent and easily installed.

When heated,, TDAB III Duct Bands shrink and forces the hot melt sealant into all surface irregularities, while the polyolefin conforms and adheres to the surface substrate.

Specifications:

TWDB Thermofit Duct Band

Standard Size:

4" Wide x 100 LF rolls, with 30 closure strips

Installation Instructions:

1. Join spiral duct sections using internal sleeves. Two screws 180° apart are usually sufficient for initial securement.
2. Wipe joint area to remove foreign materials, and pre-heat to remove moisture and surface oil that may be present.
3. Cut TDAB III duct band to allow a loose fit plus approx. 2" overlap.
4. Using supplied high temperature tape, secure the loose TDAB III end by taping in place.
5. Using a standard propane torch, heat TDAB III on all sides until it has shrunk uniformly and adhesive is showing at each side.
6. Smooth down overlap with gloved hand to ensure proper contact with duct.

Main Branch:

PO Box 23781
New Orleans, La 70183
www.rblc.com

Phone: 504-841-0035
Fax: 504-841-0036
E-mail: sales@rblc.com

San Diego Branch:

1995 Main Street
San Diego, Ca 92113

Phone: 619-234-2620
Fax: 619-234-2432

All statements herein are expressions of opinion that we believe to be true and reliable. However, they are represented without guaranty or warranty. Statements regarding the use of our products for their use alone or in conjunction with any other materials should not be intended as recommendations. Nothing herein is intended to infringe on any patents. No patent warranty of any kind, express or implied is hereby made.

TWDB Thermofit Wraparound Duct Band

Heat-shrinkable tape for sealing duct joints on round air conditioning or heating systems.

Product description

TWDB duct joint sealing tape (band).

Construction: Two-layer system:

First layer: Copolymer adhesive.

Second layer: Thick-walled, radiation-cross-linked, high density polyethylene. TWDB is a hot applied duct sealing tape composed of heat-shrinkable backing with a heat resistant pressure sensitive, non-drip adhesive and a closure patch.

TWDB is installed using propane gas torches. The ducts are assembled and raised into position after installation. The tape is wrapped around the ducts where joined, a closure is then applied, allowing the tape to essentially form a tube or band around the joint. When heated in excess of 120°C (250°F), the tape shrinks tightly around the substrate of the joint area. During recovery, the adhesive softens and flows to form a tenacious bond with the substrate and to fill the irregularities such as the interlocking seams. The bond strength builds up during cool down and is fully retained after completion of the job. Mechanically strong, pressure tight seals are provided.

Note: TWDB is not intended to be used in industrial environments where organic solvents, oil or chemicals are present. For resistance to industrial chemicals, please contact RB, LLC.

Product features/benefits

- **No primer required**

No drying time and easy application.

- **Low preheat sensitivity & proven functionality**

Allows easy application combined with high functional performance.

- **High mechanical resistance backing**

TWDB resists to vibration in high velocity systems operating up to 70°C (158°F).

- **Minimal inventory cost**

TWDB cut-to-length system eliminates the need for multiple sizes.

- **Specially formulated sealant**

Ensures a reliable protection.

Provides high peel and shear values after installation.

- **No special equipment or skills required**

Makes installation fast and easy.

Keeps installation costs low.

Product selection guide

| | |
|-------------------------------|-------------------------------|
| | <u>TWDB</u> |
| Max. operating temperature: | 70°C (158°F) |
| Compatible line coatings: | Joining galvanized ducts |
| Min. preheat temperature: | Remove moisture + surface oil |
| Recommended pipe preparation: | ST3 |
| Soil stress restrictions: | Not applicable |

Product thickness

| | |
|--------------------------------|---------------------|
| | <u>TWDB</u> |
| Backing (as supplied) | 0.018 in. (0.45 mm) |
| Backing (fully free recovered) | 0.022 in. (0.55 mm) |
| Adhesive (as supplied) | 0.030 in. (0.75 mm) |

Product properties: TWDB

| <u>Property</u> | <u>Test method</u> | <u>Typical value</u> |
|--------------------------------------|-----------------------------|---|
| <u>Backing</u> | | |
| Tensile strength | ASTM D-638 | 3000 psi 20 MPa |
| Ultimate Elongation | ASTM D-638 | 580% |
| Hardness, Shore D | ASTM D-2240 | 55 |
| Shrink force | ASTM D-638 150°C (302°F) | 40 psi |
| Dielectric strength | ASTM D-149 | 680 volts/mil 27 kV/mm |
| Water absorption | ASTM D-570 | 0.05% |
| <u>Adhesive</u> | | |
| Softening point | ASTM E-28 | 120°C (248°F) |
| Peel strength to galvanized steel | ASTM D-1000 | 21 lbs/in. width 37 N/cm |
| Shear strength | ASTM D-1002 | 750 psi 517 N/cm ² |
| <u>System requirements</u> | | |
| Axial pull-out resistance | RUD 5047* | > 2200 N (495 lb) |
| Pressure rating | RUD 5047* | No leakage after 24hrs, at 0.1 bar, @ 50°C (122°F) |

RUD 5047* Tyco Adhesives CPG Technical specification

Tyco Adhesives warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Tyco Adhesives' written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Tyco Adhesives' liability is stated in the standard terms and conditions of sale. Tyco Adhesives makes no other warranty either expressed or implied. All information contained in this technical data sheet is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.