



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 your local sales engineer of Tyco Adhesives representative.

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's 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

	TWDB
Max. operating temperature	70°C (158°F)
Compatible line coatings	Jointing galvanized ducts
Min. preheat temperature	Remove moisture + surface oil
Recommended pipe preparation	ST3
Soil stress restrictions	Not applicable

Product thickness

	TWDB
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

Property	Test method	Typical value
Backing		
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%

Property	Test method	Typical value
Adhesive		
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

System requirements		
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

Ordering information

TWDB type products are available:

- as a roll

Example: TWDB-2x165

Standard ordering options		
2	Sleeve width in inches	2" (50 mm), 3" (75 mm), 4" (100 mm)
165	Roll length in feet	165 ft (= 50 m)

- closure patches included

TWDB-	Closing patch quantity
2x165	150
3x165	60
4x165	30

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.