

ZENTEN TAPE LA-ST1

Product Description

Zenten Tape LA-ST1 is a self-adhered waterproofing airtight tape with aluminum backing designed for sealing the joint openings where require waterproofing. This product has a butyl rubber adhesive that offers superior adhesion durability and an aluminum backing allows the tape could adhere well to most of building material and could resist the UV radiation at the same time.

Product Construction

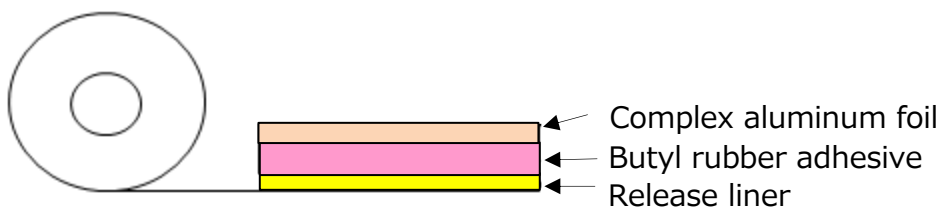


Figure 1

Features

- UV resistant.
- Tear resistant due to its high tensile strength.
- High level of adhesion to a variety of substrates - adheres well to rough surfaces.
- Excellent adhesion durability – to ensure tight and durable joints.
- Instant sealing, no drying required.
- No adhesive melting or staining in summer heat.
- Extremely low vapor transmission rate.
- Extremely low permeability to air, gas and moisture.
- Good workability on straight joint and angled bend as the aluminum backing allows the tape to retain a straight line and required shape to conform the bends.
- Bonds to most construction materials without a primer.
- Solvent free and non-toxic.

Recommended Applications

- Ideal for waterproofing of:
 - Joints in insulation jacket for pipes.
 - Joints in metal roof panels.
 - Joints in HVAC air duct.

Available Sizes

Standard Widths:

50mm x 30m	16 rolls/case
75mm x 30m	8 rolls/case
100mm x 30m	8 rolls/case
150mm x 30m	4 rolls/case

Physical Properties

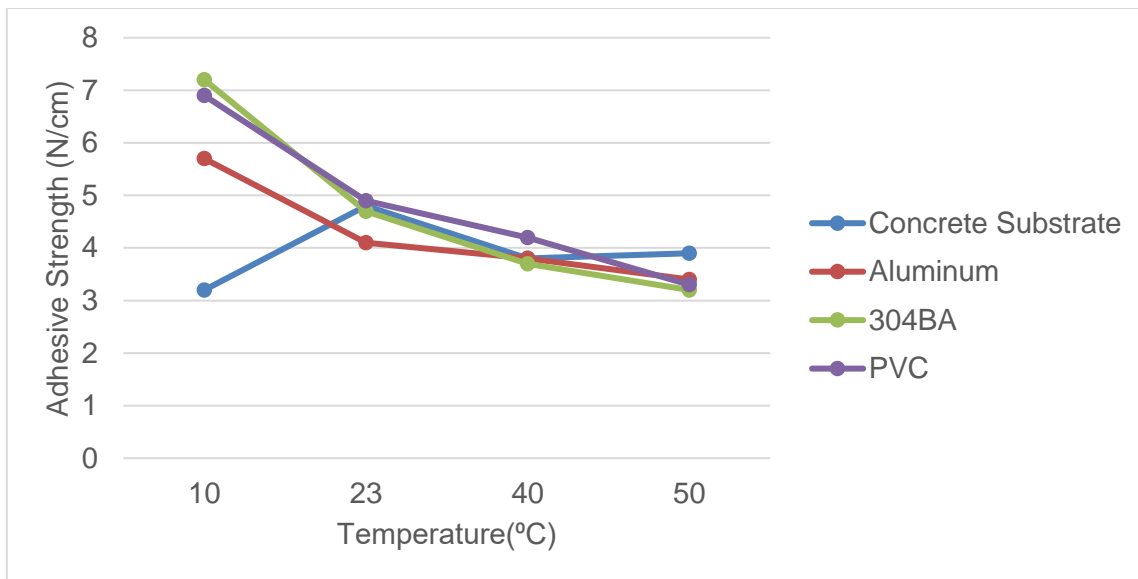
Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Tape Colour		Silver (Backing) Black (Adhesive)
Thickness, mm (ASTM D-3652)		0.40
Tape Tensile Strength, N/cm (ASTM D-3759)		217 (Machine Direction) 209 (Cross Direction)
Tape Elongation, % (ASTM D-3759)		6 (Machine Direction) 7 (Cross Direction)
90 Degree Peel Adhesion, N/cm (ASTM D-3330, Method F, 23°C)	Concrete Substrate	5
	Aluminium Plate	4
	Stainless Steel	5
	PVC	5
90 Degree Peel Adhesion, N/cm On Anodized Aluminium after Thermal Cycling (25 cycles) Tested per AAMA 711-05		8
Moisture Vapour Transmission Rate, g/m²/hr (ASTM E96, Procedure E)		0.003
Against permeable humidity, m²·s·Pa/ng (ASTM E96, Procedure E)		7.44
Application Temperature, °C Tested per AAMA 711-05		10 ~ 50
Service Temperature, °C Tested per AAMA 711-05		-40 ~ 60

- Adhesive properties

Adhesive force is measured by 90°peeling test at each temperature.

- Test method: In accordance with ASTM D3330, Standard Test Method for Peel Adhesion of Pressure Sensitive Tape, Method F
- Measurement method:
After leaving the tape specimen and substrate sample for 2 hours at each temperature, the tape specimen is laminated onto the substrate sample with a 2kg roller, 2 pass back and forth. The peeling adhesion strength at each temperature is measured with a dwell time of 1 min.
- Peeling speed: 300mm/min



Usage

Surface Preparation

Ensure that the surface is clean, dry and free from any surface contaminant such as dust and grease and flatten the surface as much as possible if it is rough and uneven. Priming is not usually necessary unless testing indicates a need to do so.

Installation

To obtain the best adhesion, Zenten LA-ST1 should be installed when temperatures range from 10°C to 50°C over levelled surfaces free from debris.

Remove approximately 50mm of the liner and carefully position the tape into place. Steadily remove the liner while applying firm pressure to the tape surface as it comes into contact with the substrate surface. Use a hand roller (rubber, wood or steel-J roller) to apply sufficient pressure to the tape to ensure proper adhesion to the substrate and to avoid air being trapped underneath the tape.

If the application location is an angled bend, it could ease the installation work by folding the tape into required angle as the tape could retain the shape due to the nature of material.

Precautions

The tape can be used as an exposed waterproofing material, no finishing material required on top of it.

The paper release liner should not be walked or stood on at any time as this may result in slips or falls. Discard the paper release liner in a designated container.

When overlapping of tape is required, please ensure adequate pressure is applied and the inlet on overlap does not face the direction of water flow.

Storage

- Store the tapes lying flat on their sides in original cartons in a cool dry place.
- Avoid exposure to direct sunlight and store in well ventilated room to prevent deterioration and deformation of the product.
- Do not over stack the product as this may cause deformation.

Shelf Life

When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

Technical Information and Product Use

The technical information, recommendations and other statements contained in this document are based upon tests or experience that Nitto Denko Corporation believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Many factors beyond Nitto Denko Corporation's control and uniquely within user's knowledge and control can affect the use and performance of the product in a particular application. Given the variety and factors that can affect the use and performance of a product, user is solely responsible for evaluating the product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy and Disclaimer

The following is made in lieu of all warranties, expressed or implied, including the warranty of merchantability and fitness for a particular or ordinary purpose. Nitto Denko Corporation and any of its affiliates (hereafter collectively the "Company") warrant that its products meet the applicable specifications at the time of shipment from our warehouse and the Company's sole obligation shall be to replace any such quantity of the product which fails to meet the Company's specifications, or to issue a credit for such merchandise, for a period of six (6) months from the date of shipment.

THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Limitation of Liability

The Company shall not be liable for any injury, loss or damage, direct or consequential, arising out of or in connections with the use or the inability to use the product, nor shall any recovery of any kind in total against the Company be greater in amount than the purchased price of the specific material sold causing the alleged loss, damage or injury. Before using, buyer shall be responsible to determine the suitability of the product for his intended use, and buyer assumes all risk and liability in connection therewith. The foregoing may not be altered except by an agreement signed by an officer of the Company.

Any delays in or failure by either party hereto in the performance of any obligations hereunder shall be excused if and to the extent caused by occurrences beyond such party's reasonable control, including Acts of God, strikes or other labor disturbances, war, whether declared or not, fire, inability to secure transportation or any other cause or causes which cannot be reasonably controlled by such party.