TECHNICAL DATA SHEET

Nitto Denko Corporation

Development Dept.
Industrial Products Div.
Functional Base Products Sector

Weatherable Waterproofing Tape [LA-ST1] Introduction

Document No. : Ind.2103-0055

Date : March 11, 2021

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Weatherable Waterproofing Tape "LA-ST1"

CUI cover joint waterproofing tape with flame retardance, high durability, tear resistance

Product Structure	Product Concept			
	Conventional Item			
◆ Multilayer of Aliminum (t=0.2mm)	<u>Moisture</u> <u>Permeability</u>	Waterproofing Performance	<u>Easy</u> to install	
→Butyl rubber adhesive (t=0.2mm) → Release paper	Aluminum is highly permeable against moisture	Butyl adhesive has excellent airtight/waterproofing performance	Aluminum × Butyl adhesive Allows the tape to adhere well to rough surface by just	
	Less that 1g/m2 • 24hr (≒0)		patching it on.	
	LA-ST1			
	Flame Retardant	High Tensile Strength	High Durability	
	Achieve ASTM E84 Class a with a simple installation	Excellent Tear Resistance	Applicable in Outdoor	
	FSI<25, SDI<100	Tensile strength higher than 500N/25mm	Outdoor durability at approx. 5~10 years.	



Physical Properties

Items	Valu	Standards			
Thickness [mm]	0.	_			
180° peeling adhesive strength [N/25mm]	-10℃	34	PSTC 101		
	10℃	32			
	23℃	28			
Breaking strength [N/25mm]	870		PSTC 131		
Moisture permeation [g/m2 · 24hrs]	<1		ASTM E96(E)		
Flame resistance	Corresponding to Class A				ASTM E84 (Steiner tunnel test)



Outdoor Application

LA-ST1 was applied on pipe joints, appearance was observed afterward.





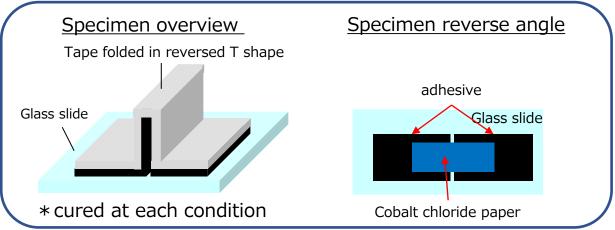


6 months after installation, no defects such as wrinkles or crack is seen.



Water Proofing/Moisture Permeability

Insert cobalt Chloride Paper into the specimen to observe the water tightness

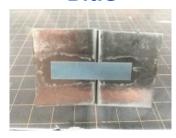


Once contact with moisture color of cobalt chloride paper will turn from:

Blue

to

Red



Moisture existence



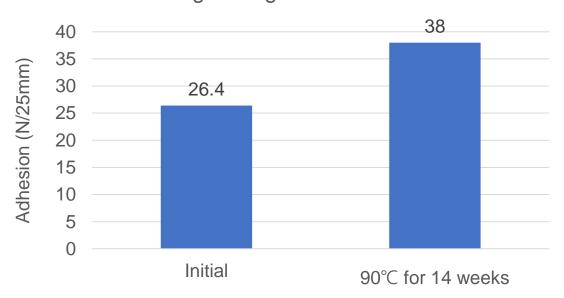
<Test Result>

	LA-ST1				Competitor	
	Initial	Room temperature	50°C 12weeks	40°C/95%	0°C 12weeks	Tape
Discoloration of Cobalt chloride color	No discoloration				discolored	
Waterproofness	Water proofing				Water Leakage	



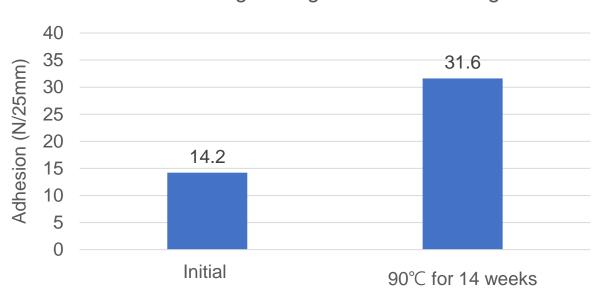
Long Term Adhesion Under High Temperature

180° Peeling Strength on Stainless Plate



Test Method: in Accordance with <JIS Z 0237>

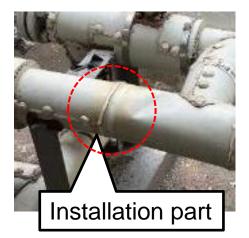
180° Peeling Strength on Self Backing



LA-ST1 able to maintain its adhesion even after a long period of curing under high temperature.



Installation Procedure



XClean the surface before installation



Carefully position tape on joint, cut it into the length accordingly.

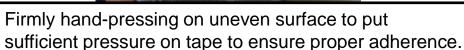






Wrap the tape around the pipe and finish it with the overlapping section facing downward.

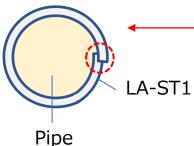






Installation done.
No wrinkles over the time.

Overlapping section facing downward







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