Red PE Liner

Firm acrylic foam (D1, D2)

PFAS/PFOS FREE

5312
Direct Foam

Version:	01-2025
Density:	880 kg/m³ (55 lb/ft³)
Thickness:	2.0 mm (0,079") ±10%
Color:	White
Temperature Resistance	
Long Term:	120 °C / 248 °F / 393 K
Short Term:	190 °C / 374 °F / 463 K
Minimum Temperature:	-40 °C / -40 °F / 233 K
Liner:	Red PE Liner
	(Custom liners available)



AFTC SilverTape 5312

This product is a double-sided high-performance acrylic-based adhesive tape, specially designed for materials with high surface energy such as glass, aluminium and steel. Capable of absorbing the different thermal expansions of two materials, when used on the right high surface energy substrates, this acrylic foam tape creates the strongest available bond thanks to its high density. It also offers a very high temperature resistance. In combination with a primer, this SilverTape family guarantees excellent adhesion performance even on medium and low surface energy substrates.

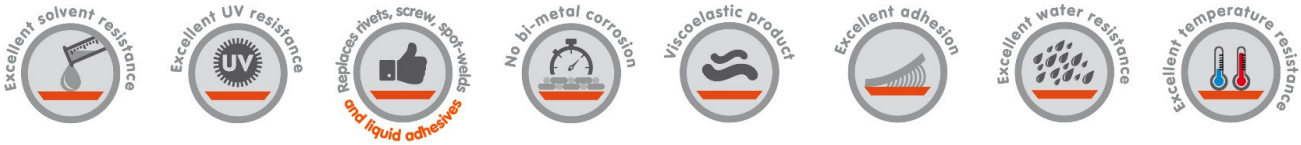
90° Peel Adhesion N/10mm (lb/in) (ASTM D 3330)	Normal Tensile kPa (lb/in²) (ASTM 897)	Dynamic Shear kPa (lb/in²) (ASTM 1002)	Static Shear (g/312mm² > 10.000min. (7 days)) (ASTM 3654)				
			22°C (72°F)	66°C (150°F)	93°C (200°F)	121°C (250°F)	177°C (350°F)
38 (22)	490 (71)	540 (78)	1000	500	500		

Suitable for:*

- glass, glass/epoxy, stainless steel, galvanized steel, anodized steel, coated aluminum

Available sizes:

- jumbo: 900mm x 165 m (75mm /3" core)
- log: 900mm x 16,5/33 m (75mm /3" core)
- slit roll: 4 – 250mm x 16,5/33 m (75mm /3" core)
- spool roll: 4 – 30mm/ Length depends on width (150mm /6" core)



The best ideas are the ones that stick

5312

Direct Foam

Surface

Tape bonding is one of the most variable and easy technology mating substrates. Especially for assemblies made of different substrates having different thermal expansion rates bonding is an easy method for a long term durable joint. AFTC® tape allow a high variation in such substrates as all are available in different thickness. To ensure proper performance of such bonded part follow the following recommendations.

Design

A proper tape bond design means avoiding cleavage and peel forces. Design leading to pure shear and tensile loads have to be preferred to utilize full AFTC® SilverTape™ performance.

Surface Preparation

All bonding process require proper surface preparation / cleaning. This will enable AFTC® SilverTapes™ to get in direct contact with the surface creating full adhesion force. AFTC® SilverClean Dirt & Dust will remove most (polar) contaminations such as fingerprints and light oil. AFTC® SilverClean Oil & Grease is used for more non-polar contaminations as grease or mould release agents. Check suitable cleaner with surface test inks. Use lint free tissues for such operations.

Surface Modification

If simple cleaning cannot achieve appropriate adhesion forces the following surface modifications can be used. For larger scale process operations the use of e.g. flame activation can be used. On smaller scale / repair operations the use of AFTC® SilverPrime or AFTC® SilverActivate might be a solution. AFTC® SilverPrime 101(UV) is used for plastics or similar coatings which have a low surface energy (PE, PP). For glass AFTC® SilverPrime 201 is used when exposed to humid environments. AFTC® SilverActivate 301 is a "one step clean and prime" solution used for a variety of car paints. All primer / activators should only be used on the area for bonding. Excess material has to be cleaned immediately. For mill finished aluminium or stainless steel mild abrasion using AFTC® SilverPads followed by cleaning using AFTC® SilverClean Dirt & Dust is an option.

Temperature

After proper surface preparation / modification AFTC® SilverTapes™ should be applied at a temperature level above 18°C (65°F). For temperatures below this but above 0°C (32°F) use AFTC® low temperature SilverTapes™.

Pressure

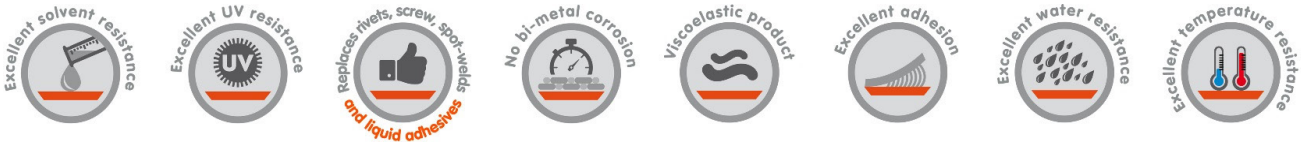
Ensure immediate part assembly after liner removal. Pressure should be applied in rolling fashion at 10-50 N/cm, ideally 30N/cm depending on the application at a speed of 10mm/s (24 in./min.). Higher velocities might require higher pressure and can be controlled with surface pressure films. AFTC® SilverTapes™ achieve their full strength after 24h at ambient temperature. Higher temperatures can accelerate strength development.

Storage & Shelf life

Store AFTC® SilverTapes™ between 5° and 35°C (40°-95°F). Humid condition causing condensation should be avoided. All AFTC® SilverTapes™ have a shelf life of 24 months from date of manufacture except AFTC® Splice and Tabbing Tape which has a shelf life of 12 months.

Disclaimer

All technical data in this product data sheet are based on AFTC's experience and external testing institutes. These values are representative for the overall performance. These data sheets are NOT to be used for specification purposes or for your own specific application. It is your responsibility to test whether the tape is suitable for your application or project. AFTC® will NOT be held liable for any information provided on this data sheet. Please follow the rules and regulations that are applicable in the state, county or country where the AFTC product(s) are being used. If you have any questions regarding the use of the AFTC® SilverTape™ acrylic foam tapes, please contact your local sales team. For questions on the standard warranty, please review our terms and conditions. For all other warranties, please review all documents that should have been agreed to in writing prior to the sale between AFTC® and the customer. SilverTape™ is a brand name of AFTC®.



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