



Technical Data Sheet November 2017

# **PRODUCT DESCRIPTION**



The VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener is a self-engaging tape with mushroom shaped hooks that provides a strong and reliable connection. VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener is a non-directional closure that is easy to use since the two parts can be engaged in any position by pressing them firmly together.

#### COUNTRY OF ORIGIN

Belgium

PRODUCT
CONSTRUCTION

Fastener	VELCRO <sup>®</sup> Brand ALFA-LOK <sup>™</sup> Tape
Construction	Woven
Material Composition	Base: Polyester Engaging elements (mushrooms heads): Polypropylene
Color	Black
Overall width	Avg. = 25 mm *
Thickness (single)	Avg. = 4.7 mm *;**
Thickness (closed position)	Avg. = 7.5 mm *;**
Overall weight	Avg. = 1,650 – 1,950 gr/ m <sup>2</sup> *;**
Standard roll size	Avg. = 25 m * (other options under request)
Heads per cm <sup>2</sup>	Avg. = 48 mushrooms/cm <sup>2</sup> *

\*Average according typical values.

\*\* Reference values for combination VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> Tape + Adhesive

# PRODUCT COMBINATIONS

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has been designed to be combined with the AFTC adhesives as AFTC SilverTape<sup>™</sup> 5310, AFTC SilverTape<sup>™</sup> 5345 & AFTC SilverTape<sup>™</sup> 6411. Other kind of combinations are under development.



PERFORMANCE CHARACTERISTICS		Fastener	VELCRO <sup>®</sup> Brand ALFA-LOK™ Tape
	$\left  \begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right $	Tensile Disengagement (0-180º)	Avg. = 40 N/cm <sup>2</sup> *
	$\mathbf{\mathbf{x}}$	Peel Strength	Avg. = 2 N/cm *
		Shear Strength	Avg. = 55 N /cm <sup>2</sup> *
*Average according typical v	values.		

### ADDITIONAL PERFORMANCE CHARACTERISTICS



Polyester component of the material has a good resistance under UV light, nevertheless, PP has poor resistance to UV light, for that reason VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener is not designed intentionally to use for direct UV light contact.

The product should be tested in use for a specific application.



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# Solvent Resistance

The Polyester component in this fastener will resist some solvent cleanings and incidental exposure to common solvents but should not be exposed for extended lengths of time (except alkalis that hydrolyse it).

The Polypropylene component in this fastener will resist some solvent cleanings and incidental exposure to common solvents, except halogenated that dissolve it.

The product should be tested in use for a specific application and has not been tested for resistance to transportation fluids such as gasoline, motor oils, and transmission fluids.



# **Flammability Resistance**

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener meets certification requirements for FMVSS 302 and is classified B-2 under DIN4102.



# Water/Humidity resistance

Polyester & Polypropylene material absorbs low quantities of water for that reason performance should be stable when it is exposed to water/high humidity (> 80% H.R.) for extended lengths of times.

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# Sterilization

This product has not been tested for autoclaving, gas, or steam sterilization.

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# Washing and Dry Cleaning

This product has not been designed to be used for washing and dry cleaning applications.



#### **Biocompatibility**

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has not been tested for biocompatibility.



# Static Discharge

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has not been tested for static discharge after opening and closing the fastener. If static discharge is a concern it should be tested for in the end use application.





## **Sewing Resistance**

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has not been designed to be sewed.

# **APPLICATION IDEAS**

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has been designed to combine the easy connection of a VELCRO<sup>®</sup> Brand re-closable product and the adhesion of specific adhesives. This re-closable system is easy to align and easy to know when it is closed.

Below are some typical applications where VELCRO<sup>®</sup> Brand ALFA-LOK<sup>TM</sup> fastener product has been used.

It is recommended that testing be completed on the product prior to use since the conditions of each application can cause variations in performance.



# TRANSPORTATION

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has been used in a wide range of automotive, trains, buses and marine applications including the fixation of headliners, interior panels (doors, cabin) or window panels.



# CONSTRUCTION

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has been used in construction applications for decorative panels, ceiling panels, semi-structural panels, insulation systems, solar panels and window elements.



# INDUSTRIAL

VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener has been used in industrial applications ranging from display and POS, temporary textile architecture (canvas), electronic, exhibition stands, attachment to aluminum profiles and general industrial applications.

CERTIFICATIONS	VELCRO <sup>®</sup> Brand ALFA-LOK™ fastener meets requirements for FMVSS 302 and obtains classification B-2 under DIN 4102.
REGULATORY REQUIREMENTS <sup>(3)</sup>	<ul> <li>VELCRO<sup>®</sup> Brand ALFA-LOK<sup>™</sup> fastener meets the requirements of following documents:</li> <li>Regulation (EC) No 1907/2006 REACH</li> <li>Directive 2000/53 (ELV) and amendments</li> <li>Directive 2011/65 (RoHS) and amendments</li> <li><sup>(3)</sup> List of most important Regulatory Requirements. Ask for specific Regulatory Requirements per product.</li> </ul>

# PRODUCT USE

The information, statements, and comments contained within this document are based on our experience and testing and are believed to be accurate. However, because there are many factors involved in specific applications that can impact end use and performance, product users should always test the product for its ability to meet the requirements of their specific use and method of application.



#### LIMITED WARRANTY

Velcro Europe, S.A. warrant that each product will substantially comply with its written specifications at the time of shipment. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. The product user is responsible for determining whether the product is fit and suitable for intended application. If the product does not meet specifications as warranted, we will, at our option, repair or replace the product, or credit or refund the purchase price. The foregoing constitutes the user's sole remedy and our sole obligation hereunder.

### LIMITATION OF LIABILITY

To the maximum extent permitted under applicable law, our liability for any losses or damages relating to use of the product shall not exceed the purchase price for such product, regardless of whether such losses or damages are direct, indirect, special, incidental or consequential, and regardless of the legal theory asserted, including, but not limited to, warranty, contract, negligence or strict liability.

Given the diversity of use of our products we advise our customers to ensure themselves that the product meets the requirements of their application. The responsibility for the application and use of the product remains with the customer.

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