



VELCRO[®] Brand ALFATEX[®]

Hook FR

Technical Data Sheet October 2021

PRODUCT DESCRIPTION



VELCRO[®] Brand ALFATEX[®] Hook FR is a strong and durable textile hook that has a flame-retardant treatment, making it suitable for fire resistance industrial applications. It is a woven medium profile Polyamide hook tape, that can be opened thousands of times without losing its strength when paired with VELCRO[®] Brand ALFATEX[®] Loop FR.

VELCRO® Brand ALFATEX® Hook FR is designed for a wide range of flame-retardant applications in various demanding industries such as medical, transportation, military, packaging, footwear & apparel and many others.

Available in multiple widths and converted items and compatible with many application methods such as sewing, welding and VELCRO[®] Brand ALFATEX[®] adhesives.

PRODUCT CONSTRUCTION	Fastening system	VELCRO [®] Brand ALFATEX [®] Hook FR
	Construction	Woven Fabric
	Composition	Polyamide and Synthetic coating
	Thickness	1.9 - 2.3 mm
	Weight	340 g/m ² ± 10 %
	Widths available + Variations*	16, 20, 25 ± 1 mm
		30, 38, 50 ± 1.5 mm
		100, 107, 150, 160 ± 5 mm
	Colour available	Check VELCRO [®] Brand ALFATEX [®] colour chart

* Other widths capabilities upon request

PERFORMANCE CHARACTERISTICS* Fastening sys

stem	VELCRO [®] Brand ALFATEX [®] Hook FR

Peel	Minimum: 1.3 N/cm
	Average: 2.3 N/cm
	Tested with VELCRO® Brand ALFATEX® Loop FR
Shear	Minimum: 8.0 N/cm ²
	Average: 10.0 N/cm ²
EN-13760	Tested with VELCRO® Brand ALFATEX® FR Loop
Cycle Life	50% of the minimum performance 10,000 cycles
EN-1414	Tested with VELCRO [®] Brand ALFATEX [®] Loop FR
Tensile Strength	Minimum: 200 N/cm
EN-ISO 13934-1	Average: 320 N/cm
	Tensile Strength

* The average values are only for reference. Suitable performance for a specific intended application should be evaluated by the user.



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PRODUCT COMBINATIONS		VELCRO [®] Brand ALFATEX [®] Hook FR has been designed to be used with VELCRO [®] Brand ALFATEX [®] Loop FR and the VELCRO [®] Brand ALFATEX [®] adhesive range.	
SPECIAL CHARACTERISTICS		Fastening system	VELCRO [®] Brand ALFATEX [®] Hook FR
	×	Shrinkage EN-ISO-6330/EN 12243	Maximum 3.5% after 1 wash at 40°C
	X	Fire resistance FAR 25.853(a)	Burn length ≤ 203mm Flame time ≤ 15sec Drip flame time ≤ 5sec
		OEKO-TEX® STANDARD 100 (Exclusive fluor colours)	OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100 2010AN1511 AITEX Tested for harmful substances. www.oeko-tex.com/standard100

ADDITIONAL PERFORMANCE CHARACTERISTICS



Outdoor use

Since the product is made with Polyamide, which has a known tendency to degrade in UV light, **VELCRO[®] Brand ALFATEX[®] Hook FR** is not recommended for direct, prolonged exposure to UV light.



Resistance to solvents

The Polyamide used in these fastening systems is resistant to cleaning with solvents or dry cleaning (e.g. tetrachloroethylene) and to accidental exposure to the most common solvents, but it is not resistant to prolonged exposure and its resistance to fluids used for transport, such as gasoline, motor oil and transmission fluids, has not been tested. We recommend testing the product for its specific application.



Water/Moisture resistance

Polyamide in this fastening system is resistant to cleaning with some solvents and to accidental exposure to the most common solvents; however, certain fluids used in transport, such as gasoline, motor oil or transmission fluids can cause degradation, particularly over long periods of time and at elevated temperatures. The product should be tested in use for a specific application.

VELCRO[®] Brand ALFATEX[®] Hook FR can lose its properties if it comes in contact with water, and thus uses in water conditions are not recommended.

Sterilisation

These products have not been tested for physical sterilisation (autoclave, steam, gamma rays, etc.) or chemical sterilisation (ethylene oxide, hydrogen peroxide, etc.).



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Colour fastness

Colour fastness to dry-cleaning (ISO 105 D-01): Min. 4 Colour fastness to rubbing (ISO 105 X-12): Min. 4 Colour fastness to water (ISO 105 E-01): Min. 4 Colour fastness to sea water (ISO 105 E-02): Min. 4 Colour fastness to perspiration (ISO 105 E-04): Min. 4 Colour fastness to artificial light (ISO 105-B-02): Min. 5 (not valid for neon fluor) colours) Colour fastness to washing (ISO 105-C06): Min. 4 Colour fastness to ironing (ISO 105-X11): Min. 4



Biocompatibility

VELCRO® Brand ALFATEX® Hook FR has not been tested for biocompatibility.



Electrostatic discharge

VELCRO[®] Brand ALFATEX[®] Hook FR has not been tested for electrostatic discharge after opening and closing the fastener. These products must first be tested in applications where electrostatic discharge is a concern.

Seam strength

to stitching.

VELCRO® Brand ALFATEX® Hook FR can be applied to several substrates by sewing. A square stitch should be used when possible, but all common stitches also offer adequate strength. The choice of thread will depend on the application and substrate, but it should offer similar strength

SUGGESTED APPLICATIONS

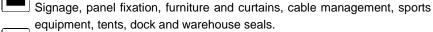
Thanks to its high cycle, VELCRO® Brand ALFATEX® Hook FR can be used in a wide variety of fire resistance applications such as:

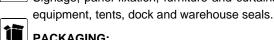


FOOTWEAR & APPAREL: Shoes and ski boots, fashion and sport garments, workwear and military uniforms.

INDUSTRIAL:







PACKAGING:



Returnable packaging applications.

MEDICAL:

Orthopaedics braces.



TRANSPORTATION:

Aerospace and automotive interior fixation.

We recommend testing the product before use since the conditions specific to each application may cause differences in performance.



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(*) Velcro Companies includes all the partner companies involved in the development, manufacture or sale of the products.	

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