

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 system	VELCRO® Brand ALFATEX® Hook FR
 Peel EN-12242	Minimum: 1.3 N/cm Average: 2.3 N/cm Tested with VELCRO® Brand ALFATEX® Loop FR
 Shear EN-13780	Minimum: 8.0 N/cm ² Average: 10.0 N/cm ² Tested with VELCRO® Brand ALFATEX® FR Loop
 Cycle Life EN-1414	50% of the minimum performance 10,000 cycles Tested with VELCRO® Brand ALFATEX® Loop FR
 Tensile Strength EN-ISO 13934-1	Minimum: 200 N/cm Average: 320 N/cm

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

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
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Shrinkage
EN-ISO-6330/EN 12243

Maximum 3.5% after 1 wash at 40°C



Fire resistance
FAR 25.853(a)

Burn length ≤ 203mm
Flame time ≤ 15sec
Drip flame time ≤ 5sec



OEKO-TEX®
STANDARD 100
(Exclusive fluor colours)



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.).

**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**

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 to stitching.

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:**

Signage, panel fixation, furniture and curtains, cable management, sports equipment, tents, dock and warehouse seals.

**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.

REGULATORY ELEMENTS

For product declarations of conformity on regulatory elements and additional information, contact sales.commercial@solbi.eu

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.

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