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VELCRO® Brand
High Technology Hook 42A

Technical Data Sheet
May 2022

PRODUCT DESCRIPTION



The **VELCRO® Brand High Technology Hook 42A** is a lightweight, flexible and soft, non-abrasive fastener, perfect for applications close to the skin that require a durable, high-performance closure.

This polyamide low profile "T" shape hook is laminated with a polyester scrim. It is called the **VELCRO® Brand SLEEK & THIN™** fastener when combined with the **VELCRO® Brand Velour 3894**.

The **VELCRO® Brand SLEEK & THIN™** fastener is designed for every day applications in footwear & apparel, military, orthopaedics and especially those that are close to the skin.





Available in multiple widths and compatible with different sewing application methods, perfect for light weight fabrics.

PRODUCT CONSTRUCTION

| Fastening system | VELCRO® Brand High Technology Hook 42A |
|-----------------------------------|--|
| Construction | Extruded Hook on Loop fabric |
| Composition | Polyamide 12 / Polyester |
| Thickness | 0.72 - 0.82mm |
| Weight | 290 g/m ² ± 12% |
| Widths available + Variations* | Up to 160mm Nominal ± 1.5mm |
| Colour available | Black, white |

* Other widths capabilities upon request

PERFORMANCE CHARACTERISTICS*

| Fastening system | VELCRO® Brand High Technology Hook 42A |
|--|--|
|  Peel EN-12242 | Minimum: 0.20 N/cm Average: 0.80 N/cm Tested with VELCRO® Brand Velour 3894 |
|  Shear EN-13780 | Minimum: 12.0 N/cm ² Average: 25.0 N/cm ² Tested with VELCRO® Brand Velour 3894 |
|  Tensile Strength EN-ISO 13934-1 | Minimum: 60 N/cm Average: 100 N/cm |
|  Cycle Life EN-1414 | 50% of the minimum performance 10,000 cycles Tested with VELCRO® Brand Velour 3894 |

* 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

The **VELCRO® Brand High Technology Hook 42A** has been designed to be used with **VELCRO® Brand Velour 3894**.

SPECIAL CHARACTERISTICS

Fastening system **VELCRO® Brand High Technology Hook 42A**



Shrinkage Maximum 2% after 3 washes at 60°C
EN-ISO-6330/EN 12243 Maximum 3% after 3 washes at 90°C



OEKO-TEX® STANDARD 100 Under evaluation

ADDITIONAL PERFORMANCE CHARACTERISTICS



Outdoor use
 Since the product is made with polyamide, which has a known tendency to degrade in UV light, the **VELCRO® Brand High Technology Hook 42A** 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.



Fire resistance
 The **VELCRO® Brand High Technology Hook 42A** does not have flame-retardant properties, so their use in applications that require limited flame propagation is not recommended.



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. The **VELCRO® Brand High Technology Hook 42A** can lose its properties if it comes in contact with water, and thus uses in water conditions is 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
 No relevant information available.



Biocompatibility
 The **VELCRO® Brand High Technology Hook 42A** has not been tested for biocompatibility.



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Electrostatic discharge

The **VELCRO® Brand High Technology Hook 42A** 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

The **VELCRO® Brand High Technology Hook 42A** 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

The **VELCRO® Brand High Technology Hook 42A** can be used in a wide variety of applications such as:



MEDICAL:

Orthopaedics Braces, Gowns.



FOOTWEAR & APPAREL:

Outdoor and sports apparel, footwear, bags, backpacks & accessories, workwear, fashion, infant & children's wear.



MILITARY & GOVERNMENT:

Military uniforms and workwear, bags, backpacks & accessories.

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



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COUNTRY OF ORIGIN

USA

REGULATORY ELEMENTS

For product declarations of conformity on regulatory elements and additional information, contact productcompliance_emea@velcro.com.

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 Companies^(*) warrants that all of its products 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 the 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.

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

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 our products, we recommend that our customers verify that the product satisfies the requirements of their application. The customer is responsible for the application and use of the product.

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