

VELCRO® Brand
High Technology Hook 42A

Technical Data Sheet
November 2023

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, orthopedics 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.

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
EN-ISO-6330/EN 12243

Maximum 2% after 3 washes at 60°C

Maximum 3% after 3 washes at 90°C



Shrinkage*
EN-ISO-6330/EN 12243

Lengthwise: Average 1% after 1 wash at 60°C

Crosswise: Average 1% after 1 wash at 60°C



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11-65399 Shirley

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

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 and polyester in this fastening system are resistant to cleaning with some solvents and to accidental exposure to common solvents, but any such exposure must not be prolonged (except for strong acids, which hydrolyse it).

Its resistance to fluids used in transport, such as gasoline, motor oil or 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

The polyamide in this fastening system degrades its mechanical properties when exposed to water/high humidity (>80% RH) for long periods of time. These properties are typically recovered when the product dries.



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.

**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.

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.

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

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