

VELCRO® BRAND ALFA-LOK® FASTENER



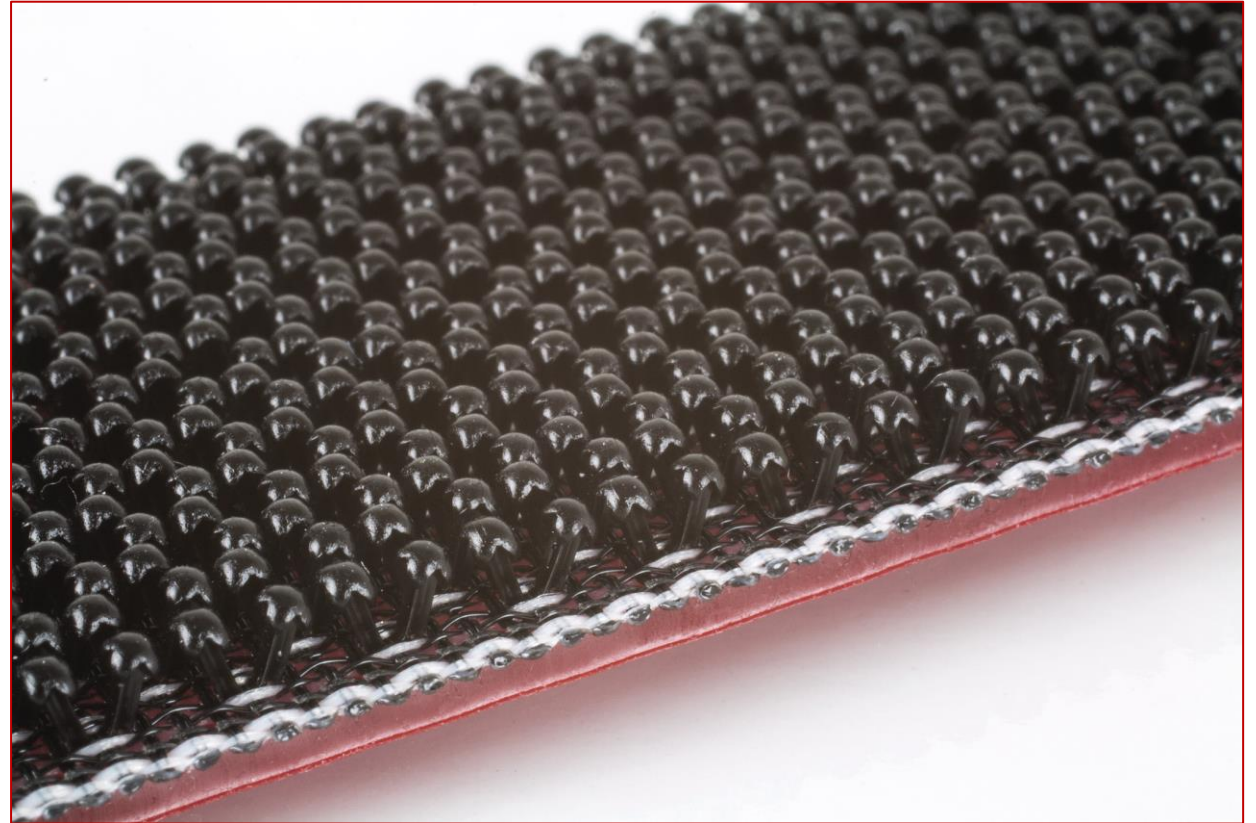
ORIGINAL
THINKING™

Velcro Companies

January 2022
Barcelona, Spain
Daniel Moreno

Agenda

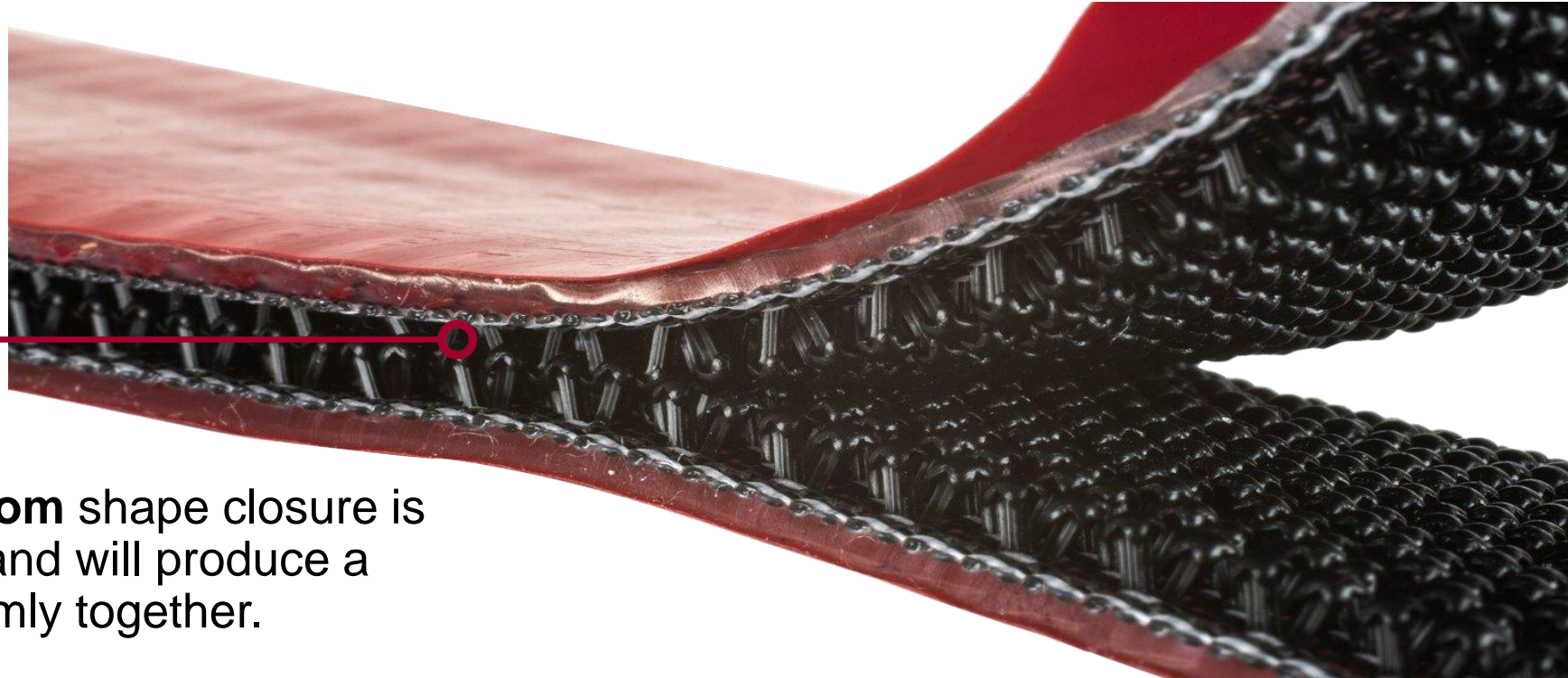
1. Why chose VELCRO® Brand ALFA-LOK® Fasteners
2. What are the main benefits
3. Technical details
4. Product & adhesive range
5. Where to use it



WHY CHOSE VELCRO® Brand ALFA-LOK® Fasteners

The VELCRO® Brand ALFA-LOK® Fastener

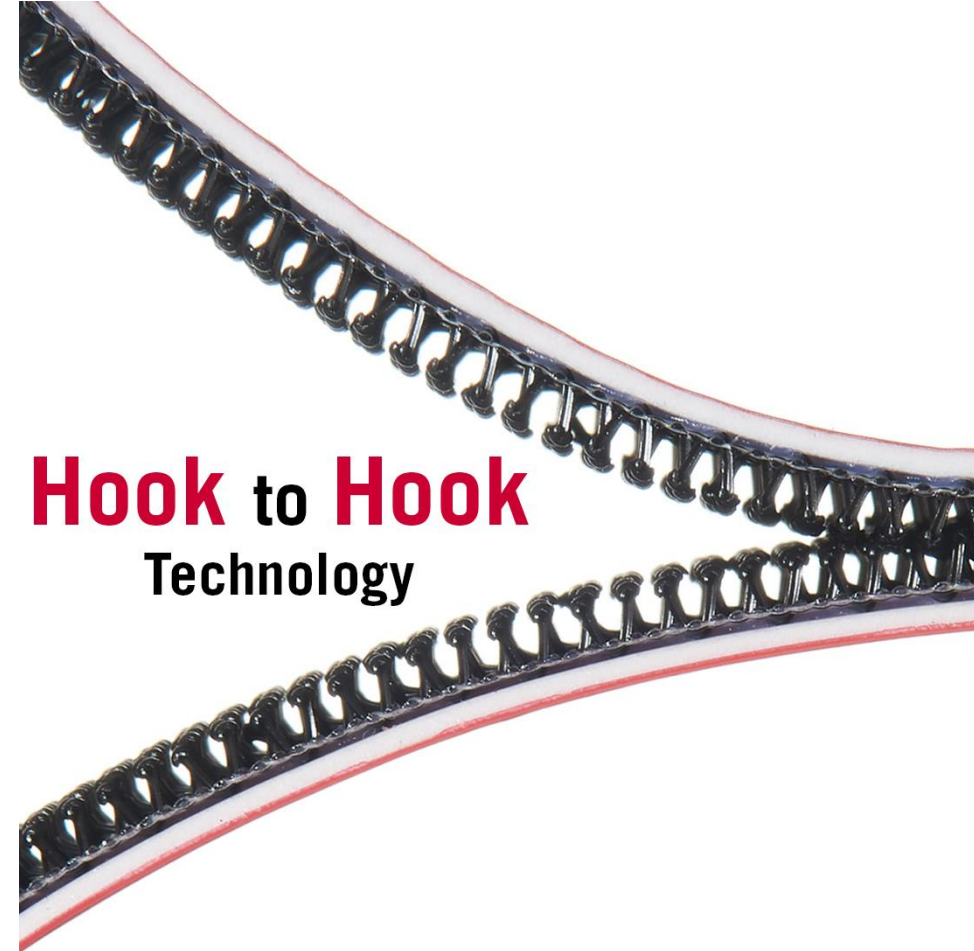
is a **self-engaging** single component “**snap**” fastener ideal to **replace mechanical fasteners** for indoor and outdoor applications that require a **reliable, durable and high-performance** connection.



This **non-directional mushroom** shape closure is **designed for rigid surfaces** and will produce a **snap sound** when pressed firmly together.

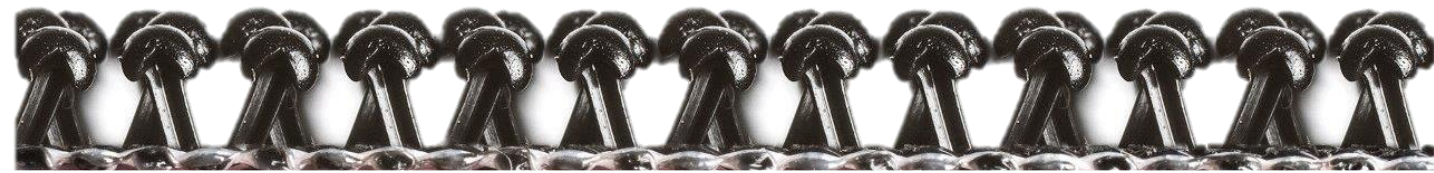
WHAT ARE THE MAIN BENEFITS

- **Strong & durable alternative to mechanical fastening systems** such as screws & nails. Provides high tensile disengagement & shear strength
 - Invisible & avoids the need to make holes
 - Corrosion free & foam helps reduce vibration
- **Easy to position & engage in any direction**
- **Audible snap closure**
- **Temperature, UV and moisture resistant**
- **Adhesive range to cover your needs** (surface energies & temperature range)



Hook to Hook
Technology

TECHNICAL DETAILS



Data	VELCRO® Brand ALFA-LOK® Fastener
Construction	Woven quadrilobal mushroom tape
Base material	Base: Polyester (PES) Mushrooms: Polypropylene (PP)
Heads/cm ²	Average 48 heads/cm ²
Thickness single and close position	Single: Average 3,6 mm Close position: Average XX mm
Tensile disengagement (0-180°)	Average 40 N/cm ²
Tensile engagement (0-180°)	Average 12 N/cm ²
Shear Strength	Average 50 N/cm ²
Application method	Sew On, Adhesive backed
FR capabilities	FMVSS 302: Self-Extinguishing (SE) DIN4102: Classified B-2

PRODUCT & ADHESIVE RANGE

Product Range	VELCRO® Brand ALFA-LOK® Tape PS-6411 Low Surface Energy	VELCRO® Brand ALFA-LOK® Tape PS-5345 General Purpose	VELCRO® Brand ALFA-LOK® Tape PS-5310 High Surface Energy
Base Material	Modified Solvent based Acrylic Polymer	Modified Solvent based Acrylic Polymer	Modified Solvent based Acrylic Polymer
Acrylic adhesive colour	Black	White	Transparent
Temperature range of use	Long Term: From -40 °C to +90 °C Short Term: 120 °C	Long Term: From -40 °C to +100 °C Short Term: 160 °C	Long Term: From -40 °C to +100 °C Short Term: 160 °C
Peel 180° Adhesion (FINAT-FTM 01) AVG	12 N/cm * 15 N/cm * - (after 24 h)	11 N/cm * 14 N/cm * - (after 24 h)	11 N/cm * 16 N/cm * - (after 24 h)
Static Shear (ASTM 3654)**	1,000 gr. at 22 °C 500 gr. at 66 & 93 °C 250 gr. at 121 °C	1,000 gr. at 22 °C 500 gr. at 66 & 93 °C	1,000 gr. at 22 °C 500 gr. at 66 & 93 °C
Softening Point	90 °C	90 °C	100 °C
Tack	Very High	High	Medium/Low
FR Capabilities	FMVSS 302: Burn (B) ≤ 100mm/min***	FMVSS 302: Burn (B) ≤ 100mm/min***	FMVSS 302: Burn (B) ≤ 100mm/min***
Application	High, medium and low surface energy	High and medium surface energy, general use	High surface energy, highly transparent bond

All versions available in

- **25mm width**
- **Hook color black & white**
- **standard put-up 25m rolls with flanges**
- **Box quantity of 100 m.**

* Average according typical values. The specifications are as a reference and are pending to confirm.

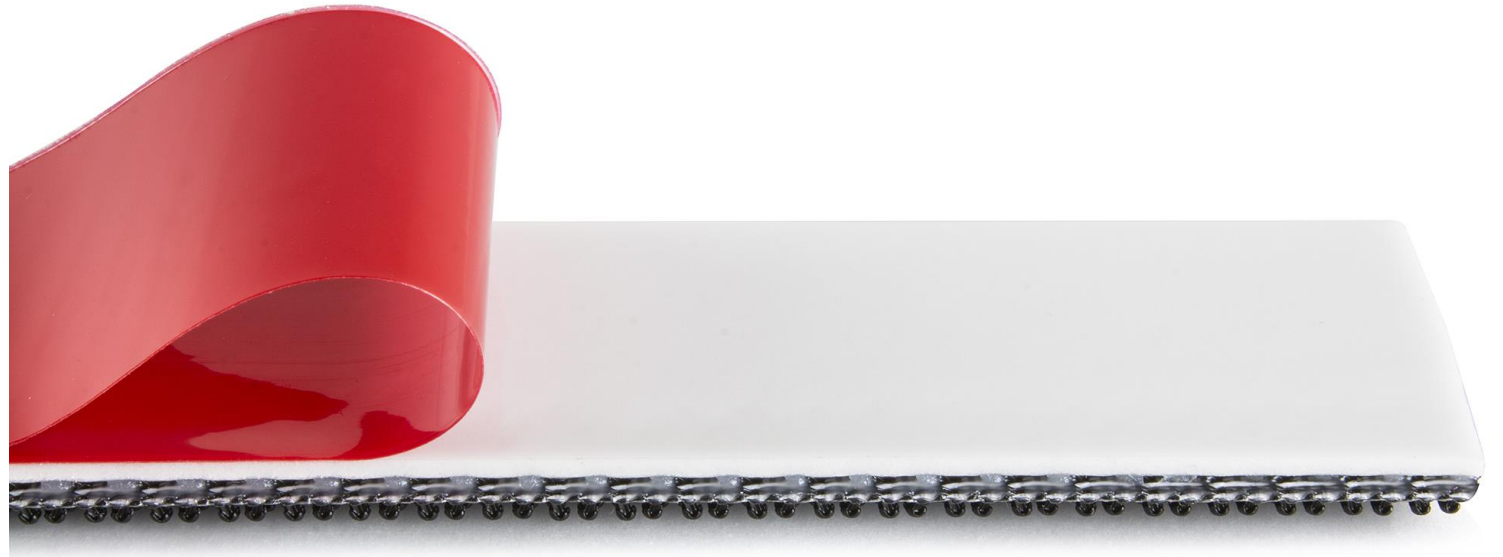
** Weight that ½ square inch will hold 10,000 minutes (7 days).

*** Reference values for combination VELCRO® Brand ALFA-LOK® Tape + PS Adhesive

ADHESIVE RANGE SUBSTRATE COMPATIBILITY

SUBSTRATES	VELCRO® Brand ALFA-LOK® PS 5310 High Surface Energy	VELCRO® Brand ALFA-LOK® PS 5345 General Purpose	VELCRO® Brand ALFA-LOK® PS 6411 Low Surface Energy
GLASS	✓	✓	✓
ALUMINUM (ANODIZED, RAW)	✓	✓	✓
STEEL (STAINLESS, GALVANIZED)	✓	✓	✓
PLYWOOD/MDF	✓	✓	✓
FORMICA (POLISHING SIDE)	✗	✓	✓
CARDBOARD	✗	✓	✓
PAINTED WALLBOARD	✓	✓	✓
CONCRETE	✓	✓	✓
STONE	✓	✓	✓
ABS	✓	✓	✓
POLYESTER	✓	✓	✓
VINYL	✓	✓	✓
POLYACRYLIC/PMMA	✓	✓	✓
POLYCARBONATE	✓	✓	✓
POLYETHYLENE	✓	✓	✓
POLYPROPYLENE	✓	✓	✓

✓ Recommended ✗ Not Recommended ✓ Recommended with Primer



SELF-ENGAGING MUSHROOM

WHERE TO USE IT

Exterior Accessories



Interior Accessories



Maintenance, Repair & Operations



LED Lighting



Panel Fixation



Signage, Displays & Event



WHERE TO USE IT

Interior Fixation Automotive



Headliner Fixation Automotive



Mirror Fixation Automotive



Indoor/outdoor Trains & Buses



Indoor/outdoor Public Transport



Campers & Boats







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