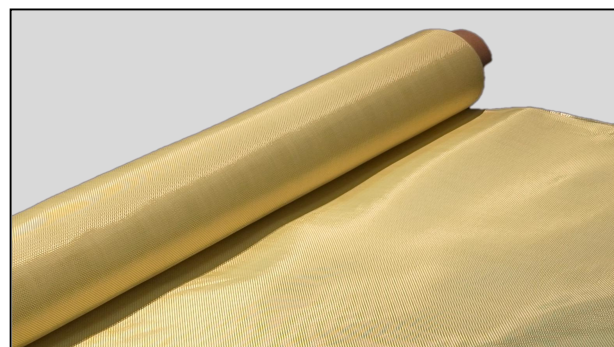


**Brand name:** LOONG-FLEX™  
**SW** (Soft Armor – Woven Fabric Series)  
**Product code:** SW-145H  
**Armor type :** Soft Armor / Flexible Ballistic Panel  
**Construction:** Twill Weave, Single Layer  
**Application :** Body Armor Vest / Soft Ballistic Insert  
**Manufacturing note:** Woven on high-precision rapier looms


**PHYSICAL & DIMENSIONAL PROPERTIES**

Property	Unit	Value
Areal Density	g/m <sup>2</sup>	145
Fabric Width	mm	1600
Roll Length	m	200
Fabric Thickness	mm	0.23 ± 0.05
Warp Yarn Density	yarns/10 cm	162 ± 2
Weft Yarn Density	yarns/10 cm	162 ± 2

**PHYSICAL & DIMENSIONAL PROPERTIES**

Property	Method	Unit	Specification	Typical
Tensile Strength – Warp	ASTM D5035	N/50 mm	≥ 5,800	6,457
Tensile Strength – Weft	ASTM D5035	N/50 mm	≥ 5,800	6,441
Breaking Elongation – Warp	ASTM D5035	%	≥ 3.00	6.88
Breaking Elongation – Weft	ASTM D5035	%	≥ 3.00	4.03
CV of Breaking Strength – Warp	ASTM D5035	%	≤ 7.00	1.76
CV of Breaking Strength –Weft	ASTM D5035	%	≤ 7.00	2.52
Oil Content	ASTM D2257	%	0.8 – 1.5	1.05

**BALLISTIC PERFORMANCE DATA**

Threat Level	Configuration	Areal Weight
NIJ 0101.06-III A 9mm FMJ RN	36 Plies	5.22 kg/m <sup>2</sup>
NIJ 0101.06 Level III A .44 Magnum SJHP	42 Plies	6.10 kg/m <sup>2</sup>
Anti-Trauma Insert	5 mm White EVA Foam	
V50 Ballistic Limit (1.1g / 17gr FSP):		<b>515 m/s at 35 Plies</b>

- All values are typical and representative; they are not guaranteed specifications.
- Ballistic performance data are based on internal laboratory testing.  
End-user validation testing is strongly recommended.
- Properties may vary depending on processing conditions and laminate configuration.
- Export of ballistic materials may be subject to national and international regulations.