

Brand name	LOONG-FLEX™
	SA Series (Soft Armor – UHMWPE UD)
Product code:	SJ280-160S
Armor type :	Soft Body Armor
Construction :	UD Cross-Ply Laminate
Application :	Ballistic Vest / Soft Armor Panel / Plate Carrier


PHYSICAL & DIMENSIONAL PROPERTIES

Construction	4-Ply 0°/90°/0°/90° Cross-ply
Areal Density (with film)	160 g/m ² ± 5 g/m ²
Fabric Width	1600 mm
Roll Length	100 m (standard) / Customizable
Fiber Type	UHMWPE — SJ280 Grade
Fiber Tenacity	37 – 39.5 cN/dtex
Matrix / Binder	Waterborne Polyurethane (WPU)
Product Form	Roll

BALLISTIC PERFORMANCE DATA

Threat Level	Configuration	Areal Weight
NIJ 0101.06-III A 9mm FMJ RN	24 Plies	3.84 kg/m ²
NIJ 0101.06-III A .44 Magnum SJHP	27 Plies	4.30 kg/m ²
V50 Ballistic Limit (1.1g / 17gr FSP):	680 ± 15 m/s (at 5.4 kg/m²)	
Anti-trauma Materials (NIJ 0101.06-III A) :	5 mm White EVA Foam	

PRODUCT FEATURES & ADVANTAGES

Flexibility Rating:	++
Key Advantage:	High-performance mid-premium grade; excellent for lightweight vests
Resin System :	Waterborne polyurethane — low VOC, eco-friendly
Multi-hit Capability:	Excellent
Processing :	Compatible with standard hot-press lamination

- 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.