

Brand name LOONG-FLEX™
SA Series (Soft Armor – UHMWPE UD)
Product code: SJ300-160S
Armor type : Soft Body Armor
Construction: UD Cross-Ply Laminate
Application : Ballistic Vest / Soft Body Armor Panel


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 — SJ300 Grade
Fiber Tenacity	40 – 42 cN/dtex
Matrix / Binder	Waterborne Polyurethane (WPU)
Product Form	Roll

BALLISTIC PERFORMANCE DATA

Threat Level	Configuration	Areal Weight
NIJ 0101.06-IIIA 9mm FMJ RN	22 Plies	3.52 kg/m ²
NIJ 0101.06-IIIA .44 Magnum SJHP	24 Plies	3.84 kg/m ²
V50 Ballistic Limit (1.1g / 17gr FSP):	560 ± 15 m/s (at 3.5 kg/m²)	
Anti-trauma Materials (NIJ 0101.06-IIIA) :	5 mm White EVA Foam	

PRODUCT FEATURES & ADVANTAGES

Flexibility Rating:	++
Key Advantage:	Combines J300 ultra-high tenacity fiber with special film for maximum conformability; ideal for ESAPI backer, fragment vests, covert armor
Resin System :	Waterborne polyurethane — low VOC, eco-friendly
Multi-hit Capability:	Outstanding
Processing :	Compatible with cold/warm 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.