



BlastJacket is a high strength energy absorbing polyurea designed to deliver extensive elastomeric resiliency when subjected to explosive energy forces. It is a military grade formulation which possesses extremely high material tear strength and superior toughness. When subjected to an exothermic explosion, the BlastJacket's molecular geometry is pushed to a very high energy state enabling it to absorb the kinetic energy of the blast's shock wave. It will provide containment of its underlying fractured substrate preventing the debris of shrapnel fragments. Military testing has demonstrated blast pressure rates in the order of 250 psi/ms performance at 0.25" thickness. There are 2 primary super-polymer formulations used in military protection applications. BlastJacket - which is used for explosive blast containment and BallisticJacket which is designed to stop armor piercing bullets. BallisticJacket is constructed as a NEAT SprayEZ or as a composite fabrication. Material thicknesses of the SprayEZ's are dictated by the required level of protective performance along with application specific required substrates. Typical material substrates include very high strength steel, 6061 Aluminum, UHMW engineering polymers, fabric composites, masonry and concrete. Please contact our technical support group for specific substrate application procedures, spray machines, safety gear and clean-up kits. Refer to MSDS for material and safety standard procedures.

Tear Strength	ASTM D624 550 lbs/ linear in.
Impact	ASTM D2794 >300 in. lbs
Tensile Strength	ASTM D412 3610 psi
Elongation	ASTM D412 >500 %
Hardness Shore D	ASTM D2240 45-50
Abrasion -TaberCS17	ASTM D4060 25 mg/1k cycles
Gel Time	Time 2-5s
Mix Ratio	PBV 1:1

TECHNICAL APPLICATION DATA BlastJacket is a two component 100% solids formulation which does not contain VOCs. Skin thickness has no limitation. BlastJacket must be applied using a 2-component high pressure liquid pumping spray machine. Proper safety wear is mandatory. Surface application temperature ranges from 0°F to 150°F. Spray cure time 2-5s. Surfaces must be prepped for cleanliness and/or may require the use of an adhesion promoter primer to acquire superior adhesion. Functional operation temperature ranges from -40°F to 250°F. Final top-coat appearance is glossy smooth. Coverage at 16 mils is 100 sq. ft./ mixed gal or 9 sq.ft. at 1/4" thickness. Adhesion Results of Typical Substrates per ASTM D-4541 Elcometer Concrete-Primed >300 psi Concrete cohesive failure; excellent bonding
Steel- Primed >1000 psi Excellent bonding Wood- Primed >250 psi Wood failure; excellent bonding. Preparation of substrate surface prior to the application of SprayEZ's is extremely important as durability is only as good as the weakest link in the coating system. Concrete must be fully cured and should be prepared with a sandblasting, diamond grinding or machine sanding depending on the severity of the concrete surface condition. Similar proper preparation must be performed for metals. Primers also require this proper preparation. Always power clean using mild detergent prior to sanding, etc. Call TechSupport Group for assistance with selecting SprayEZ's application system. Also read the Application Page on this website. If patching concrete, use our mineral filled fast-set Acrylic Modified Epoxy applied by trowel. For expansion joints, use Joist Seal applied by hand cartridge dispensing gun. It is always best to perform a test within a small section of the application area prior to full scale engagement. This technical data information is accurate to the best of our knowledge. Spray Equipment and Coatings Inc. makes no warranty, expressed or implied within the materials on this website, its use or with its any application. Spray Equipment and Coatings Inc. shall not be liable for material or application related injuries, material non-conformance, application failures or any consequential damage by the use of this product.