

GENERAL APPLICATION

Southern States ballistic resistant solutions offer military grade protection and detection for critical infrastructure facilities and equipment. Incorporating these technologies within your security plan will offer valuable performance advantages over commonly used products as well as help to ensure compliance with NERC CIP-014.

For protection purposes, the **Ballisti-Wall®** and **Ballisti-Cover®** provide superior ballistic resistance as well as a significant weight advantage relative to other market options.

The ballistic panels are constructed from multiple layers of woven fiberglass, encapsulated with a proprietary resin system. Their unique composite matrix of panels allow for delamination to retain the projectile and avoid potentially hazardous ricochet. The panel resin can be impregnated with any color and provide a smooth finish with UV protection. Optional coatings are available to provide additional ballistic and UV protection. Standard panel sizes are available with a nominal thickness of 1/4", 3/8", and 1/2". These panels have been tested for UL 752 Levels 1 - 8 and NIJ Levels I, II, & IIIA test standards. Additional higher levels of protection are available upon customer request.

For detection purposes, the **Ballisti-Alert** provides notification of breach detection in only seconds relative to other market options.

Southern States offers patented automated ballistic sensor technology which can be integrated with our ballistic protection solutions to offer immediate breach notification. This technology can signal local law enforcement / first responders and provide an alert via a smart phone, smart watch, or radio device. Further, it can be integrated into any SCADA system to provide additional security options.

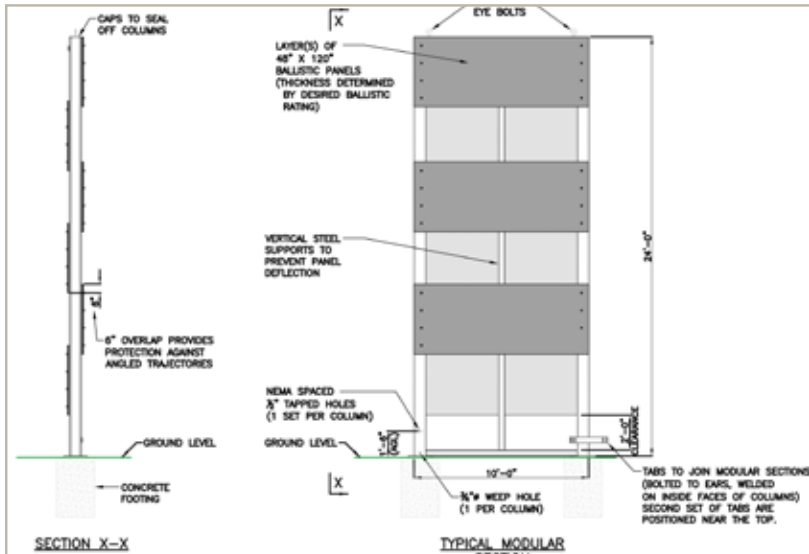
Ballistic Resistant Solutions



Physically Securing Substations and Critical Assets

PROTECTION SOLUTIONS

The patented **Ballisti-Wall®** is custom designed in modular sections allowing for easy installation and removal if required. Each wall section consists of ballistic panels in an alternating back to back louvered configuration on a galvanized steel structure. This patented design provides continuous airflow for transformers and other equipment requiring ventilation to avoid derating.



Each ballistic panel is fire rated for one hour per ASTM E-119-09c Fire Tests of Building Construction & Materials. Panels meet Flame Spread Rating of 45 and Smoke Development Rating of 165 per ASTM E-84-08a, “Standard Method of Test for Surface Burning Characteristics of Building Materials” achieving NFPA & IBC Class A & B Fire ratings.

TABLE OF UL STANDARD 752 PERFORMANCE STANDARDS LEVEL RATING CHART

UL-752 Rating	UL-752 Ammunition Specifications				Number of Shots	Ballistipanel Standard			
	Ammunition	Grain	(g)	Minimum Velocity		Ballistipanel Qty. Level Tested	Total Thickness	Weight lbs/psf	
				fps					(m/s)
Level 1	9 mm full metal copper jacket with lead core	124	8.0	1,175	358	3	1 panel of Level 1	0.25"	2.7
Level 2	.357 magnum jacketed lead soft point	158	10.2	1,250	381	3	1 panel of Level 2	0.375"	4.0
Level 3	.44 magnum lead semi-wadcutter gas checked	240	15.6	1,350	411	3	1 panel of Level 3	0.5"	5.4
Level 4	.30 caliber rifle lead core soft point	180	11.7	2,540	774	1	3 panels of Level 3	1.5"	16.2
Level 5	7.62 mm rifle lead core full metal copper jacket, military ball	150	9.7	2,750	838	1	3 panels of Level 3	1.5"	16.2
Level 6	9 mm full metal copper jacket with lead core	124	8.0	1,400	427	5	1 panel of Level 2	0.375"	4.0
Level 7	5.56 mm rifle full metal copper jacket with lead core	55	3.56	3,080	939	5	3 panels of Level 3	1.5"	16.2
Level 8	7.62 mm rifle lead core full metal copper jacket, military ball	150	9.7	2,750	838	5	3 panels of Level 3	1.5"	16.2

ADVANTAGES

- ▶ Electrically non-conductive
- ▶ Thermally non-conductive
- ▶ Electromagnetically transparent
- ▶ Ease of installation
- ▶ Corrosion resistant
- ▶ Durability
- ▶ Turn key services
- ▶ Non-ricochet, retains projectile
- ▶ Custom colors available
- ▶ Lightweight. Approximately 25% the weight of steel
- ▶ Modular, easily removable if needed



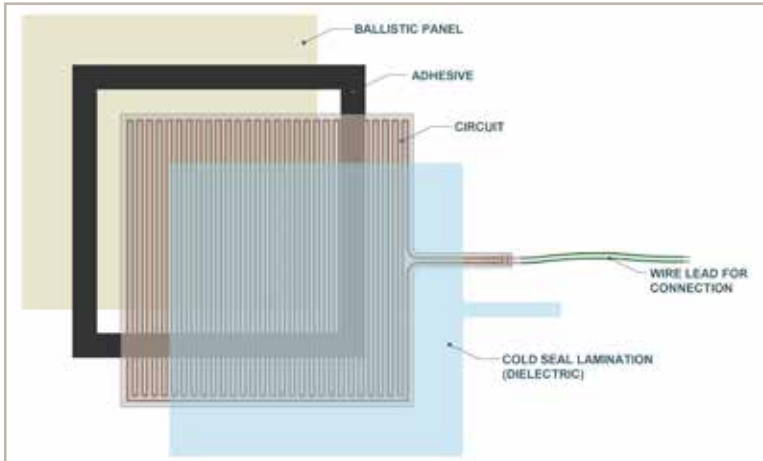
APPLICATIONS

- ▶ Critical asset protection including:
 - Motor operator protection
 - Communications box
 - Safe room
 - Shelter
 - Control house interior panels
 - Battery cabinet protection
 - Power transformers
 - Turn Key applications available
 - Etc.



DETECTION SOLUTIONS

Detecting a threat quickly and efficiently is a vital component of any strategic security plan. Southern States patented automated sensor detection technology **Ballisti-Alert** provides real time alerts (via a mobile device, smart watch, or radio) when critical assets have been breached. Integrating this technology with **Ballisti-Wall®** or **Ballisti-Cover®** can offer the ideal protection to ensure your critical utility assets are in compliance with the NERC CIP-014 standard for physical security. This technology can additionally be integrated with existing SCADA systems to provide additional security functions including the ability to automatically turn on lights, security cameras, or sound an alarm system to notify personnel.



ADVANTAGES

- ▶ Provides immediate notification of security breach
- ▶ CIP-14 compliance
- ▶ Can be mounted directly onto equipment
- ▶ SCADA systems integration
- ▶ Continuously monitors integrity of circuit
- ▶ Can transmit breach notifications to cell phones or radios in 7 seconds or less
- ▶ Customizable alert messages
- ▶ Corrosion resistant
- ▶ Durable
- ▶ Waterproof
- ▶ Wireless or direct wire option
- ▶ Can provide breach location data

APPLICATIONS

- ▶ Critical asset protection - Structural:
 - Control facilities
 - Substation equipment
 - Power transformers
 - Circuit breakers
 - Control houses / control panels
 - Battery Cabinets
 - Motor Operators
 - Etc.