

## HS STORM PANEL vs. PLYWOOD

### for Storm Protection

#### SIMULATED TORNADO WINDS



**RESULT: PASS**

**RESULT: FAIL**

Strongwell's fiberglass HS Storm Panels are designed for ballistics and high impact performance. The panels are made with a proprietary resin mix and fiberglass fabric consisting of woven rovings to create panels that absorb large amounts of impact energy. Independent testing at Texas Tech University's Wind Science and Engineering Research Center has verified HS Storm Panels meet the criteria of FEMA 320 and are suitable for above ground shelter sheathing.

As seen above, a 15 lb. 2x4 timber missile propelled at 100mph is required by FEMA 320 testing. This relates to a missile propelled horizontally by a 250mph ground speed tornado. A single 1/4" thick HS Storm Panel met the FEMA 320 criteria whereas five layered sheets of 3/4" thick plywood failed.

**Protect yourself. Try HS Storm Panel for hurricane or tornado protection.**  
*Compare the features of fiberglass HS Storm Panel and plywood protection on the next page.*

## FIBERGLASS HS STORM PANEL

vs.

## Plywood

IMPACT RESISTANCE	HS Storm Panel can absorb numerous impacts from flying debris. Meets FEMA 320 criteria for tornados.	Very poor impact resistance. Multiple layers do not meet FEMA 320 criteria.
ROT RESISTANCE	Superior resistance to water absorption and a wide range of chemicals. Will not rot and can be reused several times.	Will warp, rot, and decay due to water and chemical exposure. Generally discarded after one-time use.
INSECT RESISTANCE	Unaffected by insects.	Susceptible to insect attack (marine borers, termites, etc.). Coatings to increase resistance to insects can be environmentally hazardous.
ENVIRONMENTAL IMPACT	HS Storm Panel is inert and does not release toxic chemicals.	Treated wood has been banned for several applications. Extreme care in use and disposal is often required.
ELECTRICAL CONDUCTIVITY	Low conductivity properties. High dielectric capability.	Timber can be conductive when it is wet.
COST	Lower maintenance, longer product life often equals lower overall costs. HS Storm Panel can be stored for later reuse.	Lower initial cost.
WEIGHT	Very thin and lightweight, therefore, easy to install.	Too heavy to be viable if sufficient layers are used to offer adequate protection.

**Watch hurricane and tornado testing simulations  
at [www.strongwell.com/tools/product-videos/](http://www.strongwell.com/tools/product-videos/).**



**STRONGWELL**

*ISO 9001 Quality Certified Manufacturing Plants*

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