

# STRONGWELL

## APPLICATION PROFILE



### FRP WEATHER TOWERS STAND TALL AT VANDENBERG AIR FORCE BASE AND CAPE CANAVERAL

Standing more than 62' tall, the weather towers at Vandenberg Air Force Base near Santa Barbara, CA, and at NASA in Cape Canaveral, FL, are impressive sights. Even more impressive is the fact that the towers are primarily composed of Strongwell's EXTREN® structural shapes, ladders and DURADEK® pultruded grating.

Air Force officials came to Strongwell looking for a replacement for their current steel towers, which served as housings for weather equipment. Through the years, harsh weather conditions caused these towers to rust and even fail in some instances. The Air Force wanted new towers that would be low in maintenance, exceptionally strong and could withstand the cold of Alaska, the heat of the Sahara desert and the hurricanes of Florida. That was a tall order – but not for Strongwell's pultruded FRP structural shapes!

The Air Force was on a fast track and wanted to erect the towers from start to finish in just four months, so time was a major factor in the project. Strongwell's engineering and design team worked diligently to develop a design that would hold a live load support of 1.75 tons, withstand winds of 115 mph with a deflection of less than two inches off center and an angular rotation of less than one degree.

Once the design was approved by the Air Force, Strongwell completely fabricated and assembled the towers at its Bristol, VA, manufacturing location in three separate sections each. The sections were then shipped to the respective installation sites in California and Florida. Assembly was quick and easy and the Air Force had its new towers up in just a matter of days. Proof of the towers' strong design was seen in September and October 2004 as the Cape Canaveral tower went through two major hurricanes without sustaining any damage!

### TECHNICAL DATA

Product:	FRP Weather Towers
Process:	Pultrusion, Fiberglass Fabrication
Materials:	EXTREN® Series 525 Fiberglass reinforced, fire retardant polyester DURADEK® I-6000 1½" Grating EXTREN® ladders
Size:	EXTREN® Structural shapes used:  6" x 6" x 3/8" rectangular tube 2" x 2" x 1/4" rectangular tube 6" x 6" x 3/8" wide flange beams 4" x 4" x ½" and L 3 x 3 x 3/8 angle
For:	U. S. Air Force and NASA

#### STRONGWELL



Bristol Division  
400 Commonwealth Ave.  
Bristol, VA 24201-3820 USA  
(276) 645-8000  
FAX: (276) 645-8132

Chatfield Division  
1610 Highway 52 South  
Chatfield, MN 55923-9799 USA  
(507) 867-3479  
FAX: (507) 867-4031

[www.strongwell.com](http://www.strongwell.com)