

March 3, 2012

Shadix Co.
344 Co. Rd. 1177
Cullman, Al. 35057

To Whom It may Concern:

On Thursday March 2, 2012 I observed the pre-fabricated storm shelter at the Shadix Company installed in the ground and the excavated hole was filled with approximately 4.5 feet of water and the shelter remained stable and did not float. This shelter is designed to be installed in the ground 4.0 feet and weighs approximately 15,000 lbs. The length of the shelter is 104 inches and the width is 80 inches. The buoyant force on the storm shelter could possibly be $8.67' \times 6.67' \times 4.0' \times 62.4 \text{ lb/cuft} = 14,434 \text{ lbs}$. The skin friction between the shelter and the soil surrounding the shelter will add to the stability and this will make for a stable installation of the storm shelter.

Sincerely



Fred Penn
Al. Reg. No. 23131