

# Using the Compression Boot in Fiberglass Topper Shell Applications

## Abstract

In this white paper I will present a viable method for attaching a fiberglass topper to a pickup truck's cabin. This method will create a weather tight seal that will keep the outside environment from entering the truck cab.

## The Problem

A popular accessory for many pickup trucks is the fiberglass topper shell. This accessory attaches to the top of the truck's bed and creates a covered enclosure. One problem found in this application, is a gap between the fiberglass shell and the truck cab. That gap needs to be filled. If it is not filled the interior of the truck is susceptible to damage from the outside environment. Weather such as wind, rain, and snow can enter and damage the vehicle's interior.

Another issue regarding this application is gaining access to the enclosed truck bed through the truck's cabin. Some toppers are installed with a front window and that limits access through the truck cab. The window must be removed in order gain access between each compartment.

There is the additional issue in regards to the removal of the truck's rear window. This can be difficult and will usually require a professional to do it.

## **Understanding the Product's Design**

The compression boot is manufactured in EPDM rubber. This material has superior qualities that make it an excellent choice for this product. It is flexible and highly resistant to the weather. The EPDM rubber is extruded through a die in the factory. The profile is a straight flap. The material attaches to the fiberglass shell with embedded metal clips. The seal is created when the rubber flap compresses to the truck cab. The seal is similar to the concept of a rubber dart.

The design allows for movement and flexibility required between the truck cab and the fiberglass topper shell because these separate compartments move in slightly different directions as the vehicle is driving down the road. The compression boot flap will also allow for minor differences in distances between the two compartments.

Embedded in the rubber extrusion is an embedded metal clip that runs the length of the compression boot. The reason for these clips is to help secure the rubber to the window opening in the fiberglass shell.

## **How the Product Solves the Problem**

When the compression boot is installed it creates a weather-tight seal between the truck's cab and the fiberglass topper shell as it presses against the truck cab. It also provides access between both compartments. Because of the material, the compression boot is made so it protects the inside from the outside environment.

As stated before window removal can be difficult. However, window removal in trucks with rear sliding windows is not necessary.

## **Conclusion**

The compression accordion boot provides a superior seal between a truck's cab and an enclosed fiberglass topper shell. By using this product a weather-tight seal is created that keeps the environment out. To find out more about this product visit <http://www.accordionboot.com>