

Securing Shelters for Transportation

Enidine Wire Rope Isolator Application

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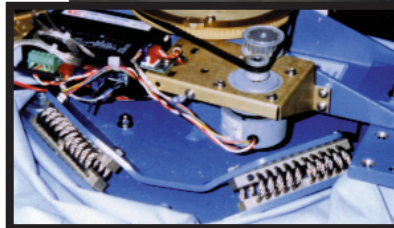
Application Overview

Military shelters contain a variety of electronic components that must be protected during transportation to the required location.

A leading shelter manufacturing company received a contract from the US Army to build military communications shelters. They needed a cost effective shock and vibration solution to transport the shelters, which contained sensitive communications equipment that would need to arrive on location without damage.

The project came with a number of requirements:

- ✦ Maximum shelter weight: 10,000 lbs
- ✦ Must withstand Munson Road Testing and aircraft transport per MIL-STD-810E
- ✦ Shelter design must be capable of withstanding an 18 inch drop onto concrete
- ✦ Removable skids must be designed to limit the shock input to the sheltered equipment to less than 20g, 11 msec during the drop shock.



Product Solution

ITT Enidine Inc. designed a removable skid assembly, which contained nine WR20 Wire Rope Isolators and two aluminum plates.

The Wire Rope Isolators are positioned between the aluminum top plate and an aluminum channel on the bottom of the assembly. Three (96 in) skid assemblies were placed evenly under the shelter, along the entire width.

Application Opportunity

The ITT Enidine Inc. Wire Rope Isolator skid assemblies are meeting the requirements of the US Army. The shelter manufacturer was pleased with the service and quality of the shock/vibration assemblies, which were designed, built and shipped in four weeks. Shelter manufacturers (SIC 3448) are great applications for wire rope isolator products, which provide shock and vibration isolation in harsh environments during transport to remote sites.