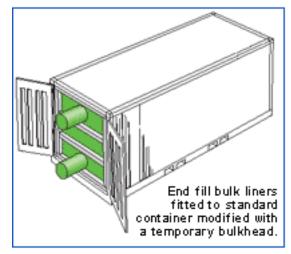
## **End Fill Container Liners**

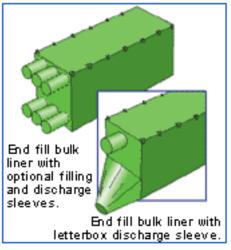
**Description** A totally enclosed liner which can fit any standard container modified with a temporary bulkhead

**Cargo** Free-flowing bulk powders, pellets, granules and grain

Installation The bulk liner is suspended in place by attaching the fixing points to hooks in the roof of the container. The filling sleeves and discharge sleeves correspond with the respective top and bottom holes in the temporary bulkhead. Similar liner retention systems to the top fill bulk liner are employed—namely self adhesive strips along the bottom of the liner or restraining flaps at the end of the liner.

Handling The container is usually loaded by pumping or throwing cargo through the filling sleeve. This liner may be inflated before filling. To discharge the cargo, the container is tipped, allowing cargo to flow out of the discharge sleeve into a silo or hopper. Rotary flow pumps are often used to pump the cargo into above-ground silos.





# **Open Top Container Liners**

**Description** The open top bulk liner was developed specifically for cargos carried in open top containers. Grain is common cargo although plastic or chemical powders, cement, milk powder, sugar and salt are also carried. Open top bulk liners can also be used in top fill bulk containers, thus providing a very economical alternative.

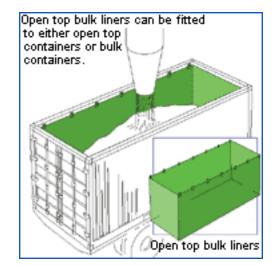
Cargo

Any granular or free-flowing material

**Installation** The bulk liner is suspended in place by attaching to the hanging points and to the four corners. Self adhesive tape on the bottom of the liner can be added to help secure the liner in place. They are normally covered by tilt sheet.

Handling

Cargo loading is achieved very simply by using front end loaders, conveyors, silos, gravity-fed hoppers or rotary flow pumps. The cargo is normally discharged by tipping into a silo or hopper. Open top bulk liners can be fitted to either open top containers or bulk containers.



# **Top Fill Container Liners**

**Description** A totally enclosed liner made to fit bulk containers specially equipped with

filling hatches on the roof of the container

**Cargo** Free-flowing bulk powders, pellets, granules and grain

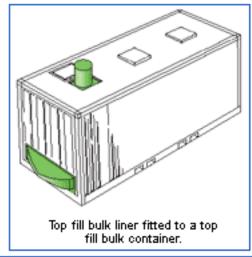
**Installation** The bulk liner is suspended in place by attaching the fixing point to hooks

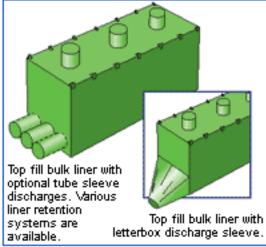
in the roof of the container. Filling sleeves correspond to the filling hatches. Strips of self adhesive tapes or restraining flaps are located on the bottom of the liner to ensure that the liner is fixed to the floor and retained during discharge, especially when tipping. Depending on the type of bulk container used, the discharge sleeve is either full width or

circular.

Handling

Gravity-fed hoppers are normally used for cargo loading although conveyors or pumps may also be employed. The liner may be inflated with air before filling. The container is usually tipped to discharge the cargo into a silo or hopper.





### Wide Access Container Liners

**Description** This is basically a huge bag which is suspended inside a container and sealed after the cargo has been loaded. A very simple and totally enclosed versatile liner used to protect ANY containerized cargo. Often equipment or materials have to be protected from salt air, dust, grime and other pollution which collect during transit. The wide opening allows for unrestricted access to the container during the loading.

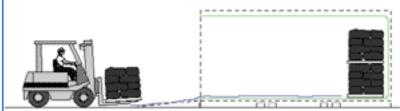
### Cargo

Any equipment, materials or palletized goods.

**Installation** The bulk liner is suspended in place by attaching the hanging points to hooks in the roof of the container. Where no hooks are fitted in the container, conventional "S" hooks may be used. No further attachments are necessary.

## Handling

The container is loaded in the normal manner using fork lifts or pallet trucks. A reusable heavy duty carpet may be used to protect the bulk liner from punctures when loading and is removed in stages during the operation. As soon as the loading is complete, the oversize open end of the liner is gathered and tied together thus completely sealing the contents. If required, ventilation holes may be punched in the liner to allow air circulation. Where an air-tight chamber is required, packets of moisture absorbent chemicals can be supplied to remove airborne moisture and thus minimize the risk of condensation forming as the container is subject to temperature fluctuation during transit through different climates.



Awide access bulk liner fitted to a standard container. Note the protective carpet which is progressively removed as the cargo is loaded.

