GST® Containment System

AS A PRIMARY BARRIER :

a flexible (1.2mm) stainless steel membrane

The double network of corrugations absorbs the thermal contractions due to the very low temperature of the LNG.

Insulating panel

The thickness of the panels can be adjusted to provide a large range of boil-off rates according to the operator's requirements (typically 0.05% per day).

Plywood

Reinforced polyurethane foam

AS A SECONDARY BARRIER :

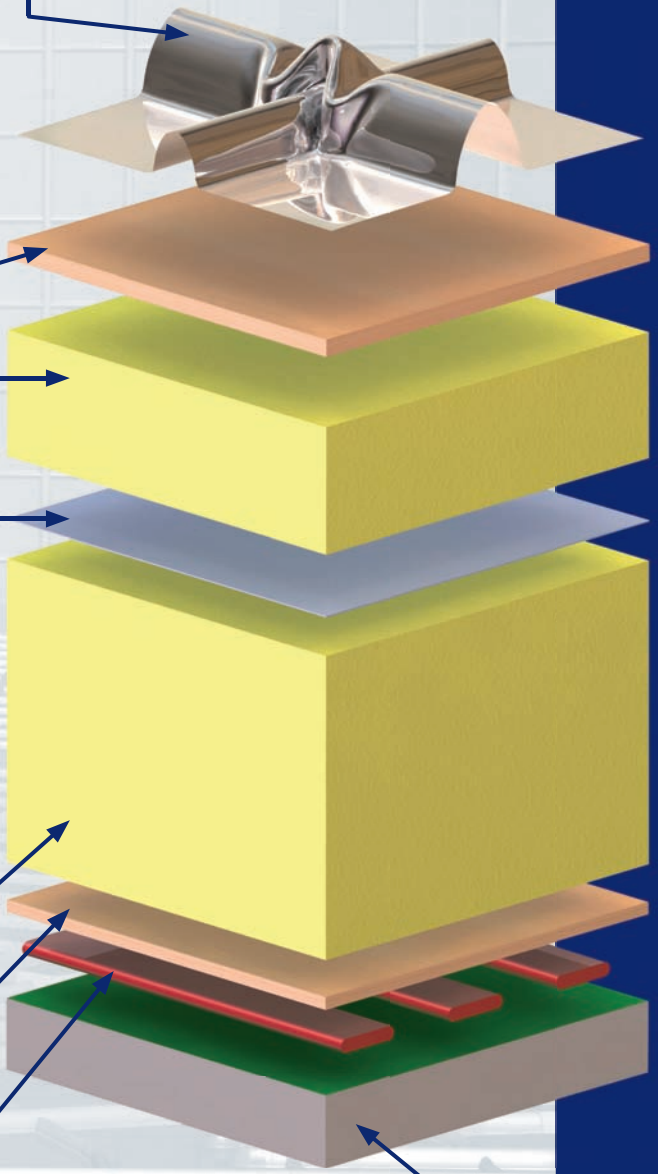
a composite laminated material

This consists of a thin sheet of aluminium between two layers of glass cloth and resin.
In the event of a failure of the primary membrane, it prevents the build-up of stress concentrations on concrete corner and ensures the liquid tightness of the concrete wall.

Reinforced polyurethane foam

Plywood

Mastic



Post-tensionned concrete covered by a moisture barrier

The outer concrete container provides the *structural resistance* to internal (LNG hydrostatic & dynamic pressure, and vapour gas pressure) and external (wind, snow, ice) loads.
A moisture barrier, applied on its inner side, prevents moisture from entering the tank.