

## CERTIFICATION OF ABOVE GROUND FUEL STORAGE TANKS

### - AUSTRALIA & NEW ZEALAND -

#### TANK VARIETIES LISTED BELOW



Single Skin Diesel Tank



Double Skin Diesel Tank



Container Tank / Bunker



Flameshield®



Fuelchief Pyrotector™



Fireguard®



Fuelchief SuperVault™



Tank doesn't meet this certification

### Single Skin Diesel Tank



A tank with a single skin generally sold into areas not requiring a bund. These tanks are made by a variety of tank sellers in the market. At Fuelchief our product below meets this basic requirement and is made in New Zealand.

- Praxis
- Ute Tanks
- Farm Tanks

### Double Skin Diesel Tank



Means a stationary (or transportable) tank that has integral secondary containment where the outer tank envelopes the inner. This adds more security and where by the fuel is contained in the inner tank.

- Vanguard
- Fuelchief DC Series
- TransCubes
- PortaQube

### Container Tank / Bunker



A double skin diesel tank but designed with the same dimensions as an ISO shipping container (ISO or intermodal containers are used for the intermodal transport of freight cargo, these are designed similar).

- Fuelchief FT Series
- Fuelchief FP Series
- Fuelchief FTN Series

### Flameshield®



Flameshield tanks are double wall steel aboveground storage tanks with interstitial monitoring capabilities. Flameshield tanks have been subjected to a 2 hour fire test. Flameshield tanks are built to UL142 specifications and tested per Southwest Research Institute SwRI 97-04 requirements. Flameshield tanks are also built in accordance with the Steel Tank Institute's F-001-01 standard.

### Fuelchief Pyrotector™



A non-insulated double wall steel above ground storage tank that has been subjected to a 2-hour fire test. Pyrotector tanks have been projectile tested and offer a light-weight solution for many industries. They require no further bunding and provide 100% secondary containment. Pyrotector tanks are built to UL142 specifications and tested per Southwest Research Institute SwRI 97-04 requirements.

### Fireguard®



An insulated steel double wall above ground storage tank with projectile, impact and stream hose test ratings with interstitial monitoring capabilities and a 2-hour fire rating.

### Fuelchief SuperVault™



An insulated steel double wall above ground storage tank. The SuperVault has passed projectile, impact and stream hose test ratings with interstitial monitoring capabilities and has a certified 4-hour fire rating. Complies with 'Tanks in Chambers' and meets AS1940; 240/240/240 all certifications listed below.

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WHICH CERTIFICATION APPLIES FOR THE TANK YOU REQUIRE.



## SwRI 95-03

This standard for Protected Tanks is identical to UL 2085 and SwRI 93-01 yet the full-scale fire test is extended to 4 hours. A second test is then carried out to evaluate the tank for re-use after exposure to fire, puncture or heavy-vehicle impact via an additional UL-2085 fire exposure test using the same tank for all tests.



## SwRI 93-01

This standard for Protected Tanks is identical to UL 2085 with two exceptions. SwRI 93-01 requires the tank used in the impact protection test to be anchored, while UL 2085 requires it to be unanchored. In addition, SwRI 93-01 allows the fire test to be extended from 2 hours to 4 hours.



## UL 2085

UL 2085 has the following performance test requirements: The test tank is placed in a 2000°F rapid rise furnace. The temperature recorded on the primary tank at any time during the 2-hour fire exposure must not exceed an average maximum temperature rise of 260°F and a maximum temperature of any single thermocouple (ie measurement of heat) of 400°F. The emergency venting of the tank must not be impaired during the test. Immediately following the fire test, the tank is subjected to the Hose Stream Test and the primary tank must not leak. Following the fire and hose stream tests, the tank is subjected to a ballistics protection test, checking its ability to prevent penetration of a bullet into the primary tank and then an impact protection test checking its ability to prevent leakage of the primary tank if impacted by a vehicle.



## SwRI 97-04

This double walled non-insulated tank assembly is built in accordance with UL 142 and is listed to this SwRI standard to withstand a 2000°F fire for 2 hours without failure of the primary tank or supporting structure, or impairment of the venting system. Also applies to UL 2080.



## UL 142

This Standard covers steel primary, secondary and diked type atmospheric storage tanks intended for non-corrosive, stable flammable and combustible liquids that have a specific gravity not exceeding 1.0 in above ground applications. UL 142 listed tanks are available in carbon steel or stainless steel with single wall and double wall configurations. Each style tank may be fabricated cylindrical or rectangular, horizontal or vertical, with or without multiple compartments.



## AS1692

This Standard specifies requirements for the design and construction of steel tanks for the storage of flammable and combustible liquids. This Standard applies only to tanks that are used to store substances that are liquid at normal temperatures and pressures.



\*Fireguard can be upgraded to 4 hours with 6" of insulation BUT will not have a SwRI 95-03 nameplate so is not 240/240/240 certified as per AS Standards