

GRP Sectional Cold Water Storage Tanks
Manufacturing Tanks Since 1973



TRICEL
WATER STORAGE

Sectional Tank Brochure



www.tricel.ie

GRP Sectional cold water storage tanks

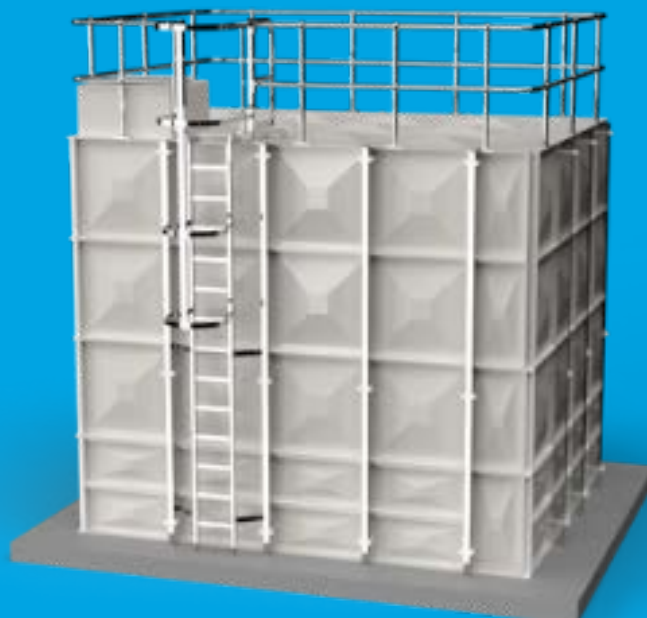
We are one of the few companies who possess the technical expertise and the advanced manufacturing facilities - not only to produce hot press moulded tanks but also to produce in-house, the single most important element, Sheet Moulding Compound (SMC).

This advanced composite, SMC, is manufactured in Killarney with all the necessary characteristics that are required, being incorporated into the design.

Our experience in composites technology extends over 40 years, during which time we have grown to become a market leader, having achieved a pre-eminent position in our chosen field.

Drawing upon 40 years' experience in the GRP industry, Tricel is in a unique position to offer a range of superior systems to our customers. We are totally committed to the pursuit of excellence and are accredited to the quality standard ISO 9001.

- ISO 9001 accredited
- 40 years' service to the construction industry
- Backup of trained and experienced technical staff
- Site assembly by fully trained personnel
- Suitable for the storage of potable water
- Available insulated to Format 30 (F30)
- Design and supply of steel towers for elevated sites
- Internally or externally flanged base available
- Light or heavy covers available



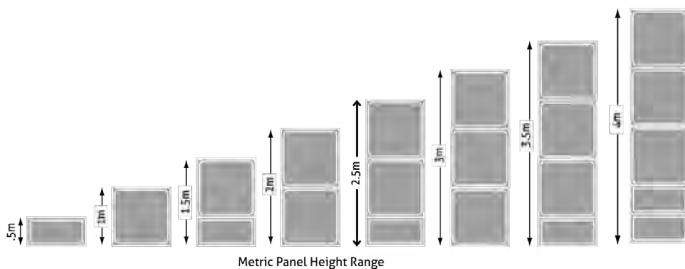
Panel types and sizes

Tank panels are available in metric size. There are no restrictions to the length or width available.

Metric tanks are available to a height of 4m.

Tank lengths, widths and heights are available in half panel increments i.e. 6.65m x 4.65m x 2.5m (h)

| Capacity Tables - Metric Panels | | | | | | | | | | | | | | | |
|--|-----------|---------|-----------|---------|-----------|---------|-----------|---------|---------|--------|---------|---------|---------|---------|---------|
| Panel sizes available: 1m x 1m, 1m x 0.5m, 0.5m x 0.5m. Tank sizes given in this table are based on their external dimensions which are 150mm greater than the internal dimensions. Nominal capacities are calculated based on internal dimensions as follows: INTERNAL LENGTH x WIDTH x HEIGHT IN METRES = M3 x 1000 = Litres (divided by 4.546 = Gallons). | | | | | | | | | | | | | | | |
| Ext length | Ext width | 1m high | 1.5m high | 2m high | 2.5m high | 3m high | 3.5m high | 4m high | | | | | | | |
| m | m | litres | gallons | litres | gallons | litres | gallons | litres | gallons | litres | gallons | litres | gallons | litres | gallons |
| 1.15 | 1.15 | 1000 | 220 | 1500 | 330 | 2000 | 440 | 2500 | 550 | 3000 | 660 | 7875 | 1732 | 9000 | 1980 |
| 1.65 | 1.15 | 1500 | 330 | 2250 | 495 | 3000 | 661 | 3750 | 826 | 4500 | 991 | 9529 | 2096 | 7590 | 1670 |
| 2.15 | 1.65 | 3000 | 660 | 4500 | 991 | 6000 | 1322 | 7500 | 1651 | 9000 | 1982 | 16179 | 3559 | 14190 | 3121 |
| 2.65 | 1.15 | 2500 | 550 | 3750 | 825 | 5000 | 1101 | 6250 | 1377 | 7500 | 1652 | 24579 | 5407 | 12190 | 2681 |
| 2.65 | 1.65 | 3750 | 825 | 5625 | 1278 | 7500 | 1652 | 9375 | 2065 | 11250 | 2478 | 15304 | 3366 | 17490 | 3847 |
| 2.15 | 1.15 | 2000 | 440 | 3000 | 660 | 4000 | 880 | 5000 | 1,100 | 6000 | 1320 | 8654 | 1904 | 9890 | 2176 |
| 2.15 | 2.15 | 4000 | 880 | 6000 | 1320 | 8000 | 1760 | 10000 | 2200 | 12000 | 2640 | 16179 | 3559 | 18490 | 4067 |
| 3.15 | 1.15 | 3000 | 660 | 4500 | 990 | 6000 | 1320 | 7500 | 1650 | 9000 | 1980 | 12679 | 2789 | 14490 | 3187 |
| 3.15 | 2.15 | 6000 | 1320 | 9000 | 1980 | 12000 | 2640 | 15000 | 3300 | 18000 | 3960 | 23704 | 5214 | 27090 | 5959 |
| 3.15 | 3.15 | 9000 | 1980 | 13500 | 2970 | 18000 | 3960 | 22500 | 4949 | 27000 | 5939 | 34729 | 7639 | 39690 | 8731 |
| 4.15 | 1.15 | 4000 | 880 | 6000 | 1320 | 8000 | 1760 | 10000 | 2200 | 12000 | 2640 | 16704 | 3674 | 19090 | 4199 |
| 4.15 | 2.15 | 8000 | 1760 | 12000 | 2640 | 16000 | 3520 | 20000 | 4399 | 24000 | 5279 | 31229 | 6870 | 35690 | 7851 |
| 4.15 | 3.15 | 12000 | 2640 | 18000 | 3960 | 24000 | 5279 | 30000 | 6599 | 36000 | 7919 | 45754 | 10065 | 52290 | 11502 |
| 4.15 | 4.15 | 16000 | 3520 | 24000 | 5279 | 32000 | 7039 | 40000 | 8799 | 48000 | 10559 | 60279 | 13260 | 68890 | 15154 |
| 5.15 | 1.15 | 5000 | 1100 | 7500 | 1650 | 10000 | 2200 | 12500 | 2750 | 15000 | 3300 | 20729 | 4560 | 23690 | 5211 |
| 5.15 | 2.15 | 10000 | 2200 | 15000 | 3300 | 20000 | 4399 | 25000 | 5499 | 30000 | 6599 | 38754 | 8525 | 44290 | 9743 |
| 5.15 | 3.15 | 15000 | 3300 | 22500 | 4949 | 30000 | 6599 | 37500 | 8249 | 45000 | 9899 | 56779 | 12490 | 64890 | 14274 |
| 5.15 | 4.15 | 20000 | 4399 | 30000 | 6599 | 40000 | 8799 | 50000 | 10999 | 60000 | 13198 | 74804 | 16455 | 85490 | 18806 |
| 6.15 | 1.15 | 6000 | 1320 | 9000 | 1980 | 12000 | 2640 | 15000 | 3300 | 18000 | 3960 | 24754 | 5445 | 28290 | 6223 |
| 6.15 | 2.15 | 12000 | 2640 | 18000 | 3960 | 24000 | 5279 | 30000 | 6599 | 36000 | 7919 | 46279 | 10180 | 52890 | 11634 |
| 6.15 | 4.15 | 24000 | 5279 | 36000 | 7919 | 48000 | 10559 | 60000 | 13198 | 72000 | 15838 | 89329 | 19650 | 102090 | 22457 |
| 6.15 | 5.15 | 30000 | 6599 | 45000 | 9899 | 60000 | 13198 | 75000 | 16498 | 90000 | 19798 | 110854 | 24385 | 126690 | 27868 |
| 6.15 | 6.15 | 36000 | 7919 | 54000 | 11879 | 72000 | 15838 | 90000 | 19798 | 108000 | 23757 | 132379 | 29120 | 151290 | 33280 |
| 7.15 | 1.15 | 7000 | 1540 | 10500 | 2310 | 14000 | 3080 | 17500 | 3850 | 21000 | 4619 | 28779 | 6331 | 32890 | 7235 |
| 7.15 | 2.15 | 14000 | 3080 | 21000 | 4619 | 28000 | 6159 | 35000 | 7699 | 42000 | 9239 | 53804 | 11835 | 61490 | 13526 |
| 7.15 | 3.15 | 21000 | 4619 | 31500 | 6929 | 42000 | 9239 | 52500 | 11549 | 63000 | 13858 | 78829 | 17340 | 90090 | 19817 |
| 7.15 | 6.15 | 42000 | 9239 | 63000 | 13858 | 84000 | 18478 | 105000 | 23097 | 126000 | 27717 | 153904 | 33855 | 175890 | 38691 |
| 7.15 | 7.15 | 49000 | 10779 | 73500 | 16168 | 98000 | 21557 | 122500 | 26947 | 147000 | 32336 | 178929 | 39360 | 204490 | 44982 |
| 8.15 | 1.15 | 8000 | 1760 | 12000 | 2640 | 16000 | 3520 | 20000 | 4399 | 24000 | 5279 | 32804 | 7216 | 37490 | 8247 |
| 8.15 | 2.15 | 16000 | 3520 | 24000 | 5279 | 32000 | 7039 | 40000 | 8799 | 48000 | 10559 | 61329 | 13491 | 70090 | 15418 |
| 8.15 | 3.15 | 24000 | 5279 | 36000 | 7919 | 48000 | 10559 | 60000 | 13198 | 72000 | 15838 | 89854 | 19765 | 102690 | 22589 |
| 10.15 | 5.15 | 50000 | 11013 | 75000 | 16520 | 100000 | 22026 | 125000 | 27533 | 150000 | 33039 | 182954 | 40245 | 209090 | 45994 |
| 16.15 | 6.15 | 96000 | 21145 | 144000 | 31718 | 192000 | 42290 | 240000 | 52863 | 288000 | 63436 | 347629 | 76469 | 397290 | 87393 |
| 48.15 | 24.15 | 1.15m | 25330 | 1.73 m | 381057 | 2.31 m | 508810 | 2.88 m | 634361 | 3.45 m | 759911 | 4069879 | 895266 | 4651290 | 1023161 |



Access for erection: Full access specifications are available on our website. Please phone sales on +353 (0) 64 6632421 for any technical help that you may require, or simply to size a tank into the space available to you.

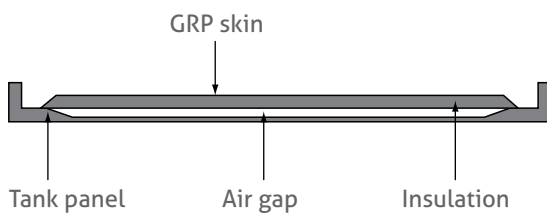
Our trained technical staff are here to help and advise you, to ensure that you achieve the most economical solution on all of your water storage requirements.

Format 30

Format 30 is Tricel's description of tanks with Heavy Duty panel covers, complete with screened vents, overflows, warning pipes etc. and having roof panels and side walls insulated with encapsulated CFC-Free polyurethane foam insulation. This meets the requirements of section 30 of the water bye laws in the majority of situations. Tanks in boiler rooms etc. may also need base insulation.

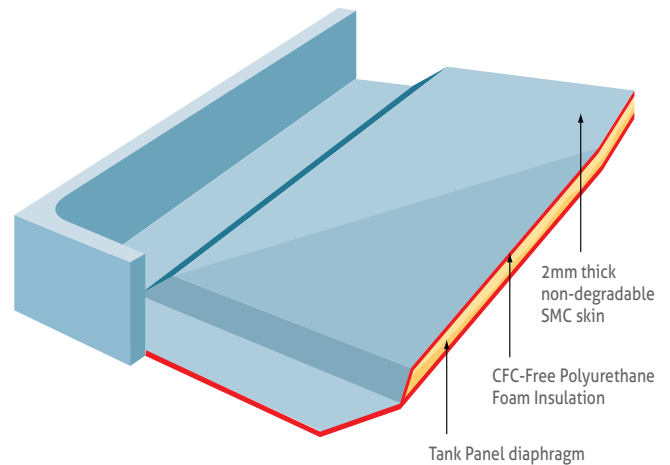
Please Note:

Insulation slows down but does not prevent heat loss or gain over protracted periods. Additional information is available in BS EN 13280:2001 & BS EN 806-1:2000, BS EN 806-2:2005, BS EN 806-3:2006, BS EN 806-4:2010, BS EN 806-5:2012, BS 8558:2011



Tanks Insulated and finished to Format 30

Note: This is only an example of one type of insulation skin, there are different arrangements for different types of tanks.



Pipe Connections for Insulated Cold Water Storage Tanks

The areas where pipe connections can be made on insulated tanks are more restricted than in standard tanks, the picture shows a recess in the insulation panel to allow for the pipe connection.



- Current legislation states that hot or cold water in any premises that might be used for human consumption must be of potable quality.
- In addition to tank material specifications, there are now further requirements for lid design, the screening of vents, breathers, overflows, warning tell-tale pipes and the provision of insulation which will help prevent freezing and also help keep water as cool as practicable, ideally less than 20 °C.

Guidelines for different models of tanks

- **Standard tank**

This tank is complete with internally flanged base, externally flanged side walls. All under water stays are stainless Steel.

- **Light duty cover**

Only suitable for indoor use, and for the storage of foul water. They are not designed to take man weight.

- **Heavy duty cover**

Suitable for indoor and outdoor use, and for the storage of foul water. These tanks have internally flanged lid panels, similar to those used in the base.

- **Heavy duty cover and finished to format 30**

Suitable for indoor, outdoor use and for the storage of potable (drinking)water.

- **Types of bolts**

Standard tanks come complete with bolts galvanised to BS EN ISO 1461:2009, we recommend that consultants specify Stainless Steel grade 316 S16 bolts under water.

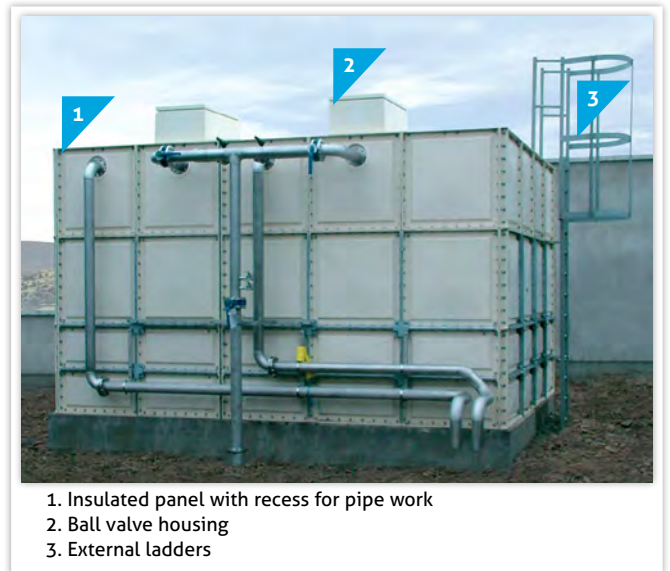
- **Dividers**

In any situation where there is only one water storage tank in a building and the capacity is greater than 1000 litres (220 gallons), BS 6700 states "To avoid interruption of the water supply when carrying out repairs or maintenance, the cistern shall be provided with compartments or standby cistern". *Note: we recommend that two separate tanks be used, where an uninterrupted water supply is critical.*



- **Condensation trays**

These should be used in any instance where condensation, drips from pipe work, or from the tank could cause nuisance damage or render floors wet and slippery. Tricel manufacture condensation trays to suit all sizes of water storage tanks.



1. Insulated panel with recess for pipe work
2. Ball valve housing
3. External ladders

- **Ball Valve housing**

Enclosed chamber containing an access hatch above the level of the cover, permitting the level control mechanism to be mounted at a higher level than would otherwise be possible.

- **Ladders**

Where tank depth is 1.5 m or greater, internal and external ladders should be specified. If the tank is on a raised platform then ladders may be required on tanks lower than this height.

- **Reverse base tanks**

(Externally flanged base) These types of tanks allow the tank to be totally drained down, as the base is flat and they also allow access to all the bolts from outside the tank.

- **Weir**

Construction of one or more panels within a tank, which divides the tank but to less than its full depth such that the contents can spill over from one side of the weir to the other.

- **Baffle**

Construction of one or more panels within a tank, which partially subdivides the tank in order to increase the length of the flow-path between the inlet and the outlet from the tank.



Tricel is a global provider of high performance solutions for the Water, Environmental, Construction and Materials industries. Our company ethos "Generations of Innovation" is built around three interlinking themes; Innovation, Quality and Heritage, which have been developed over the last 40 years. We deliver innovative quality solutions that our customers can trust. With manufacturing locations in 5 countries we possess a broad and distinct range of capabilities enabling us to supply a comprehensive range of products to over 50 countries worldwide.

One-piece tanks

Tricel manufactures a variety of One-Piece cold water storage tanks. These durable Fibreglass (GRP) tanks are easy to install and represent excellent value for money. They come in sizes from 45 to 4,546 Litres and are available ex-stock.

All of our One-Piece tanks can be supplied Factory Insulated to Format 30, thus meeting requirements for Break Tanks. All capacities are nominal.

Modular building systems

The modular building system is constructed of GRP (fibreglass) modules to various sizes and colours to meet customers specifications.

Architecture

Modular building systems can help you meet strict planning regulations, by hiding unsightly booster-sets, pumps, air-conditioning systems & water tanks. These Modular systems from Tricel can help blend rooftops into more natural surroundings.

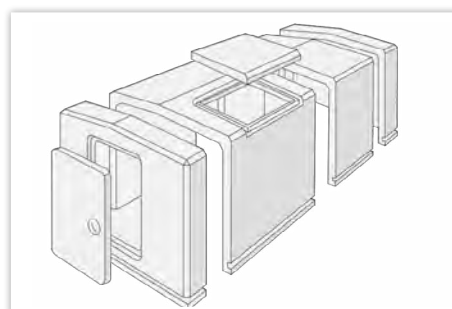
Lowline housings - insulated housings for tanks and equipment

Lowline insulated housing systems offer complete design flexibility for use in many applications, from a simple tank housing to a complex extended insulated covering for duct and pipework runs. Unit height can be varied by adjusting the dwarf walls on which it stands.

Tricel's design department are always available for consultation, technical advice and assistance. We have many years of experience in the construction industry and can offer sound advice on our products in association with particular building applications.

Liquid storage tanks

Liquid storage tank systems for below or above ground applications, with the provision of a storage capacity of 15,000 litres and upwards. They are designed primarily for buried sites, where below ground storage is required for climactic or environmental reasons. The walls are formed from rigid, flanged, self-supporting, hemi-cylindrical GRP sections.



TRICEL
GENERATIONS OF INNOVATION

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In accordance with Tricel's normal policy of product development these specifications are subject to change without notice.
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