

HOT PRESSED SECTIONAL STEEL TANK INSULATION

BelTherm 70

A pre-requisite of any water storage system is the need to provide a safe and reliable supply of clean water at all times. Consideration must therefore be given to temperature stabilisation of stored water to ensure that environmentally induced heat transfer does not raise the content temperature to a level that supports microbiological growth, or reduce to a level that initiates freezing. Effective insulation is critical in performing this role and minimum insulation standards are given in BS6700: 1997.



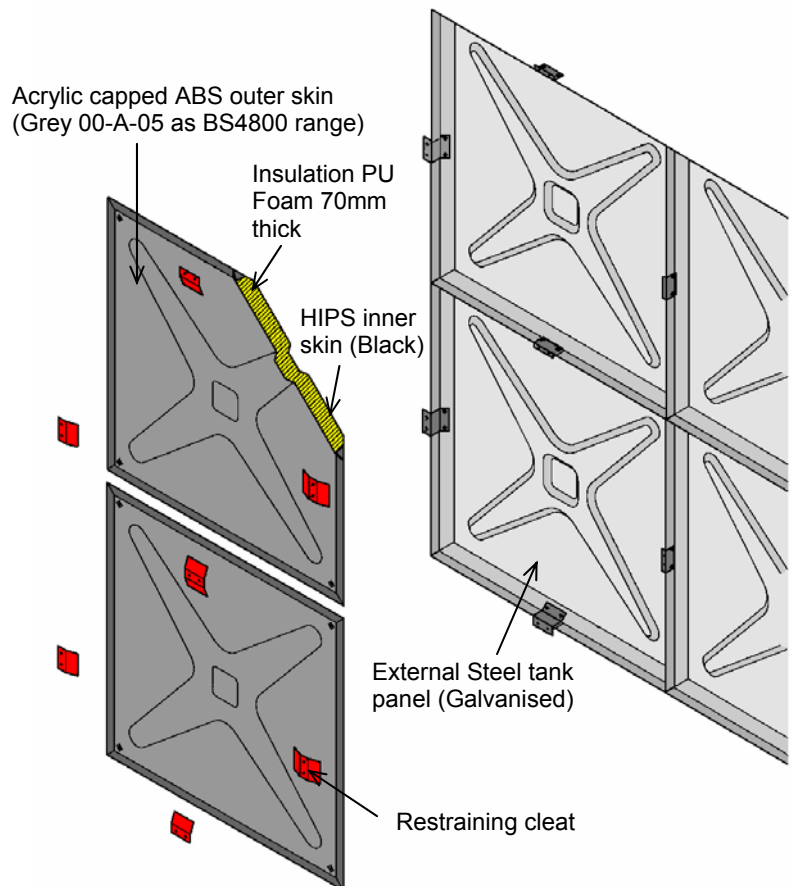
In extreme cold conditions, such as an exposed elevated tank, subject to low winter temperatures and high wind chill factors, consideration should be given to incorporating the highest thermal insulation protection coupled with an immersion heater for the sole purpose of providing frost protection. Heaters should be sited directly under the inlet valve to ensure the float and lever is free from ice at all times. Consideration should also be given to trace heating & insulation of exposed pipework and maintaining a forced through flow of water at all times.

BelTherm 70 CONCEPT

The highly efficient ***BelTherm 70*** system utilises a purpose moulded 70mm thick CFC free low-density polyurethane core, shaped to the profile of the tank plate, as the primary insulating material. This core is bonded to an external acrylic capped ABS weathering skin (Colour Grey, 00-A-05 as per BS4800 range), which provides protection to the core and a pleasing aesthetic finish to the tank itself. The resultant panel is mechanically fixed to the tank via purpose fabricated clamps and restraining cleats designed to allow the system to flex in sympathy with the cyclic loading of the tank and to cater for differential rates of thermal expansion. Additional support to the inner side is provided with a skin of high impact polystyrene.

The tank cover is insulated from within the interior of the tank to provide increased protection from both the elements and mechanical damage. Cover insulation utilises a similar polyurethane material and is mechanically clamped within the confines of the roof bearers.

The system is developed for installation after completion of the tank itself and is therefore suited to new projects or tank refurbishment applications.



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