

Internal Swimming Pools

Introduction

Collecta's XPOOL very high compressive strength, closed cell extruded polystyrene (XPS) insulation boards are designed specifically to insulate swimming pool bases and retaining walls. XPOOL boards have excellent life-long thermal performance and very low water absorption, allowing them to be installed below the concrete slab without the use of a DPM. XPOOL insulation is 100% recyclable, with XPOOL^e also having a <5 GWP, making it fully compliant with Code for Sustainable Homes (CSH) Pol 1 requirements.

Key Benefits of *Collecta* swimming pool insulation

- Very high compressive strength able to withstand long-term static loads
- Excellent life long thermal performance
- Very low water absorption (<0.7% after 28 days)
- Environmentally friendly - 100% recyclable

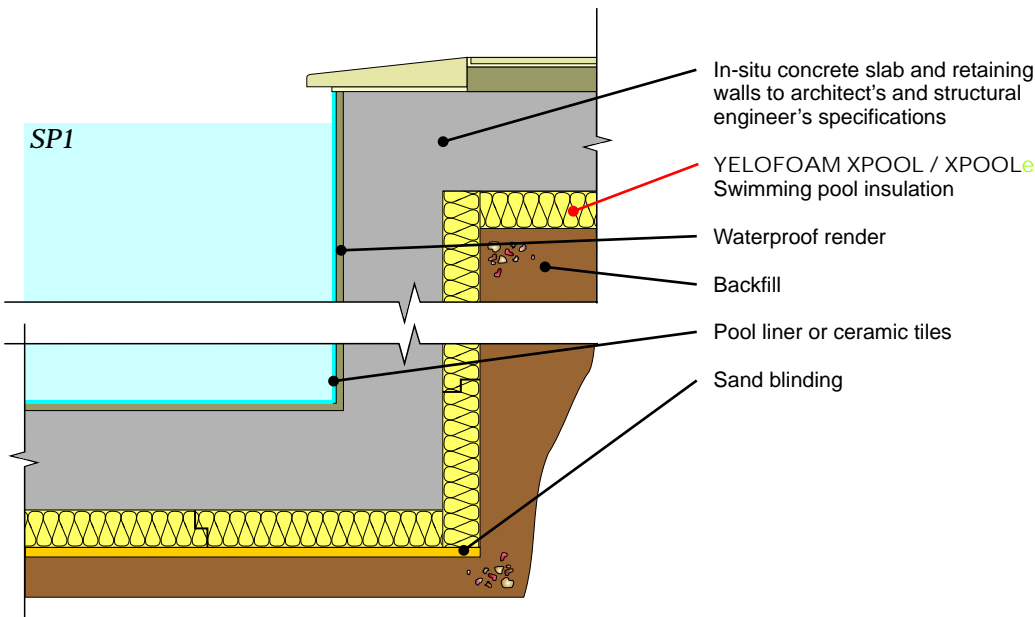


	Compressive strength		Thermal conductivity W/mK (I _{90/30})	Thickness' available (mm)
	10% Value (BS EN 826)	2% Design load (BS EN 1606)		
XPOOL	480 kPa	180 kPa	≤ 60 - 0.030 75 - 80 - 0.032 ≥ 90 - 0.032	50, 60, 75, 80, 90, 100, 120, 140 160
XPOOL^e	500 kPa	180 kPa	≤ 75 - 0.034 80 - 120 - 0.036 ≥ 140 - 0.038	50, 60, 80, 100, 120, 140 160

Board size: 600mm x 1250mm Edge detail: Shiplap all four sides

Internal swimming pool: In-situ ground bearing concrete floor slab and walls

Insulation installed below the concrete slab and behind retaining wall



Building Regulations



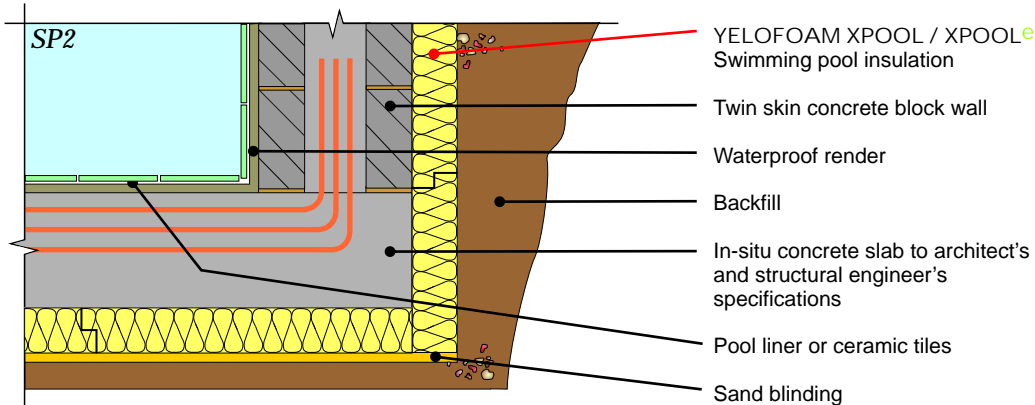
Calculating the thickness of pool insulation required

To comply with the 2010 Edition of Part L of the Building Regulations, where a swimming pool is constructed as part of the dwelling, the pool must achieve a U-value no worse than 0.25W/m²K when calculated in accordance with EN ISO 13370: 1998.

Collecta offers a free U-value calculation service; simply call 08456 71-71-74 with your specific construction details.

Internal swimming pool: In-situ ground bearing concrete floor slab with concrete block walls

Insulation installed below the concrete slab and behind retaining wall



P/A ratio	Typical thickness of XPOOL req'd (mm)				
0.7	80	100	120	140	160
0.6	80	100	120	140	160
0.5	75	90	120	120	160
0.4	60	80	100	120	140
0.3	50	75	80	100	120
	0.25	0.22	0.20	0.18	0.16
U-value (W/m²K)					
<small>Calculated in accordance with ISO 13370</small>					

Note. P/A ratio = Perimeter of the floor divided by the Area of the floor