

**TOPPROOF**

# Proven performance

**PREMIER INN, ABERGAVENNY**

## The challenge

The Abergavenny Premier Inn hotel formed part of the expansion of the Whitbread owned chain in 2015. The hotel is similar in construction to many others and had plans for a lift to be installed in the building. Building techniques and design called for a solution to waterproof the basement to stop the ingress of water whether from the water table, storm water leakage, water main burst or leakage. Lift pits can be subject to hydrostatic pressure and traditional methods for lift pit waterproofing systems utilize some form of tanking. The original design had the objective of effectively cocooning the lift pit in a waterproof membrane and thus prevent ground water ingress. However, they are usually small with the need to be externally tanked in difficult, wet and confined working conditions.

## Our solution

Tarmac's TOPPROOF concrete had been used successfully in the past by Carter Lauren on similar projects for Premier Inns, so they proposed its use on the Abergavenny project. The pit was constructed in 2 pours: 12m<sup>3</sup> on 1<sup>st</sup> Dec and 6m<sup>3</sup> 7 days later. TOPPROOF waterproof concrete contains two specially formulated admixtures. The first reduces the water/cement ratio, increasing the density of the mix and minimising the size of the pores. The second fills the remaining pores ensuring a completely watertight finish. This means there is no need for external membranes, reducing cost and labour.

## Results and benefits

TOPPROOF eliminates the need for oil based chemicals and synthetic materials, greatly reduces waste on site, cuts vehicle movements and is 100% recyclable. TOPPROOF is laid in exactly the same way as ordinary concrete so no special skills or equipment are required. Should you require any help all you have to do is ask, Tarmac offers full training and professional on-site support.