

The First Law Of Waterproofing

“Keep the water away from the building!”

When designing a building it is important to take careful note of the geography and topography of the area where you are building.

If the topography any of the immediate surrounding area is higher than the ground level where the building is to be located, then any below grade structure will be subjected to a hydrostatic head of water. The higher the surrounding area, the higher the hydrostatic head of water. Since the weight of water is at least 62.4 pounds per cubic foot, this means that for every foot of hydrostatic head of water there is an additional pressure of 62.4 pounds per square foot trying to find a way through any joints, cracks or capillaries in the wall or floor slab.

Since water always takes the path of least resistance, it is highly effective waterproofing to give the water an easier route than that of going through the wall or slab. This may be accomplished by intercepting the water before it reaches the structure and using crushed stone beds with perforated pipe direct the water away from the structure. The water may be diverted around and downhill from the structure or to a dry well far away from the building.

