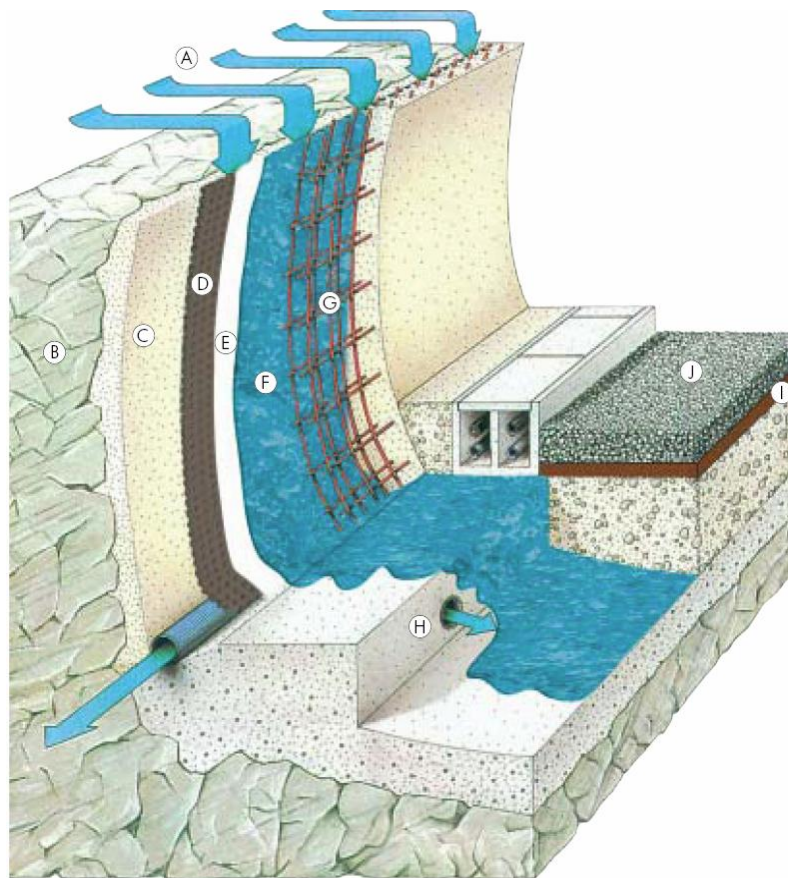


The complete seal option for excessive ground water within the internal tunnel environment.

PmB elastomer complements delta drain in the complete seal of bored tube tunnels with persistent water ingress problems.

In this instance the delta drain is mechanically fixed to the substrate at around 400 centres to provide a fixed drained and dry interface of geotextile suited to the direct application of the PmB spray applied elastomer, which create the continuous elastomeric lining seal. The installed drained and waterproofing seal is then totally supported by the reinforced shotcrete support ring to complete the dry tunnel environment. .

### TUNNEL SECTION: With Delta Drain



**TYPICAL SECTIONAL ELEVATION INCLUDING DELTA DRAINAGE**

A — Water Ingressing, Fissures and Cracks  
B — Bored Rock  
C — Shotcrete Regulating  
D — Delta Drain Mechanical Fixings 400 centres  
E — Geometric Linear Face

F — PmB Sprayed Elastomer Waterproofing  
G — Reinforced Shotcrete Liner Ring Support  
H — Requisite Drainage System  
I — Dense sand Asphalt Protective Layer  
J — Dense Wear Course

For further information regarding this diagram please contact:

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