



Precast Retaining Wall

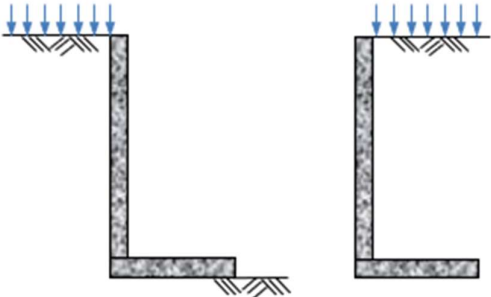
(ref:NI-GW-2604-5000 Rev 1)

DESIGN PARAMETERS

Designed in accordance with BS EN 1990:2002 'Basis of structural design', EN 1997-1:2004 'Geotechnical design' and BS EN 1992-1-1:2004 'Design of concrete structures'.

LOADING CONDITIONS

The precast concrete retaining wall units are designed to be loaded from either face.
 Condition: Level fill with top of the wall and a variable surcharge of upto 25kN/m² height dependent.



SOIL PARAMETERS

Density of soil – 18kN/m³
 Soil shear resistance – 30°
 The units are to be cast in to a suitable concrete base.

Backfilling immediately behind the wall should be a free draining well graded granular material such as a class 6N. Water pressure has not been considered as it is assumed suitable drainage would be provided.

SECTION PROPERTIES

- Concrete: C40/50
- Cement: CEM I
- Chemical resistance: Class DC4z
- Reinforcement: Grade B500B or B500C to BS 4482 or BS 4449
- Exposure class: XD2 BS8500 50-year design life
- Concrete cover: min 30mm
- Wall Height (mm): Upto 5000mm
- Water vapour permeability: NPD

