

# Typical Specifications

The following specification is offered as a sample. Details will change according to the product required and the particular application. For further details consult Ruthin Precast Concrete Environmental Engineering.

## Dytab flexible interlocking revetment system

i) The embankment shall be protected over the areas shown on the drawings by means of Dytab\* thick interlocking solid concrete revetment system with (a) plain concrete face or (b) natural random stone face as per sample reference code x or to be agreed. As manufactured by Ruthin Precast Concrete Limited, Quarryfields, Ruthin, Denbighshire, LL15 2UG, Telephone: 01824 702493 Facsimile: 01824 704527.

ii) The concrete revetment blocks shall have a minimum thickness of \*mm, unit weight not less than \*kg giving a minimum weight of \*kg per m<sup>2</sup>.

iii) (a) The precast revetment blocks shall be manufactured from concrete with a mix design strength conforming with Grade C35 in Table 9 of BS5328: 1991, using Portland cement to BS12 and aggregate to BS882. Resistance to sulphate attack shall be Class 2 as defined in Table 7 of BS5328: 1991.

OR (b) As above but sulphate resisting Portland cement to BS4027. Resistance to sulphate attack shall be class 3 as defined in Table 7 of BS5328: 1991. The minimum cement content to be 370kg/m<sup>3</sup>, the maximum aggregate size 10mm and the maximum free water cement ratio not exceeding 0.50.

iv) (a) The blocks shall mechanically interlock and bond together and shall be hand laid in courses of stretch bond to the areas shown on the drawings in accordance with the manufacturer's recommendations.

OR (b) The blocks shall mechanically interlock and bond together and shall be formed into flexible articulated panels by interlacing longitudinally with (a) type 316 stainless steel cables of 7 x 7 construction or (b) galvanised wire cables of 7 x 7 construction.

Cable ends to be suitably terminated by means of hydraulically swaged aluminium or copper ferrules to facilitate mechanical handling. A minimum panel handling safety factor of 5 shall be required for the cables and terminations. The revetment panels shall be laid with butt tight joints along perpendicular edges. Changes in direction shall be accommodated by cutting blocks and/or infilling with concrete and matching masonry in accordance with the manufacturer's recommendations and suggested layout details.

v) The width and length of revetment panels shall be such as to suit the areas shown on the drawings. The top of each revetment panel shall be anchored via cables on to suitably designed anchors or beam at the crest of the revetment. Further details available on request. Cables to be terminated and tensioned in accordance with manufacturer's recommendations. Alternative concrete specifications may be adopted to suit particularly harsh or aggressive environments (item iii).

Where plain and natural stone faced articulated blocks are to be used the revetment panels can either be site or works assembled. If works assembled, panel width will be limited to 2.28m.

## Dytab natural stone faced walling system

i) The wall shall be constructed as shown on the drawings by means of Dytab 100mm thick interlocking solid concrete system with natural stone facing as per sample reference code \* or to be agreed. As manufactured by Ruthin Precast Concrete Limited, Quarryfields, Ruthin, Denbighshire, LL15 2UG, Telephone: 01824 702493 Facsimile: 01824 704527.

ii) The concrete walling blocks shall have a minimum thickness of

100mm, unit weight not less than 27kg giving a weight per m<sup>2</sup> of 270kg.

iii) The precast Dytab blocks shall be manufactured from concrete with a mix design strength conforming with Grade C35 in Table 9 of BS5328: 1991, using Portland cement to BS12 and aggregates to BS882. Resistance to sulphate attack shall be Class 2 as defined in Table 7 of BS5328: 1991.

The minimum cement content to be 370 kg/m<sup>3</sup>, the maximum aggregate size 10mm and the maximum free water cement ratio not exceeding 0.50.

iv) The blocks shall mechanically interlock and bond together and shall be bedded and joined in 3 to 1 sand cement mortar to a stretcher bond. The blocks are so designed for 8mm mortar joints which shall be struck flush with the concrete face and brushed.

v) The blocks shall be so built as to incorporate proprietary wall ties of the type and to the centres shown on the drawings. Where the Dytab blocks are built vertically and used as permanent formwork to a mass reinforced concrete fill the height of concrete poured behind shall be limited to 680mm, i.e. 3 courses.

vi) Special Dytab blocks incorporating uPVC lined weep holes shall be incorporated to heights and centres shown on the drawings.

viii) Appropriate straight edges and mitred blocks shall be used to construct the walls to the shapes and dimensions shown.

\* to be completed by specifier.