

Phi Modular Block

Phi (Ireland) Ltd. provides full design, supply and installation service on all our products.

Our experienced design teams and installation crews provide clients and contractors with optimum peace of mind and minimum risk.

Introduction

Phi Modular Block is a purpose designed modular block retaining wall system. It is very economical, easy to install, aesthetically pleasing and is an economical alternative to in-situ concrete retaining walls.

Phi Modular Block can be used as a gravity wall for heights of up to 1m or as a facing for a mechanically reinforced soil wall for taller or heavily loaded retaining walls. It is supplied with CE certified Secugrid geogrid when used as a mechanically reinforced soil wall.

Interlocking fibre concrete pins provide positive mechanical connection between block and geogrid to prevent slipping.

It is available in a wide variety of colours, shapes, face textures to suit most requirements.

Advantages

- φ Aesthetically pleasing with colour options, different face styles and shapes.
- φ Easy installation, utilising mortarless, interlocked block system.
- φ Fibre concrete pins provide mechanical anchorage between block and geogrid.
- φ Durable.
- φ Versatile, allowing easy construction of curves.
- φ High strength concrete mix.
- φ Water repellent admixture reduces efflorescence

Applications

- φ Housing, Commercial and Industrial Developments
- φ Hotels, Restaurants and Shopping Centres
- φ Marinas, Ponds, Streams and Canals
- φ Parks, Golf Courses and Swimming Pools
- φ Roads, Highways and Railways
- φ Landscaping Projects



Specification

Composition

Phi Modular Blocks are manufactured from limestone aggregates and cement.

Block Dimension

457mm (W) x 203mm (H) x 290mm (D)

Density

Typical material density = 2100 kg/m³

Block weight = 34 kg

Water Absorption

6% maximum

Compressive strength

The minimum average compressive strength is 20 N/mm²

Reinforcement

For taller walls or walls with higher loadings, the Phi Modular Block can be used in conjunction with our CE certified Secugrid Geogrid or Galvanised Steel Ladders to form a reinforced earth retaining wall.



Finishes

The standard Phi Modular Block is available with a smooth face and straight Split face. Split face with Bevelled edges are optional and is available on request only.

Phi Modular Block can also be supplied with special corner blocks to ease the construction of corners while the special capping blocks caps of the top of a retaining wall.

The wedge shape of the Phi Modular Block is purposely designed to allow for the easy construction of retaining walls with gentle curves. This makes it ideal for low impact retaining walls which hug the contours and blend in



Colours

The Phi Modular Block is initially available in the following standard colours, some of which are indicated below. Most other colours are usually available on request. Water repelling admixture is added to the concrete mix to reduce efflorescence and help maintain the long term appearance of the retaining wall.

The colour reproduction may vary slightly from the original due to the limitations of the printing process.



Flint



Ivory



Green



Straw



Sandstone