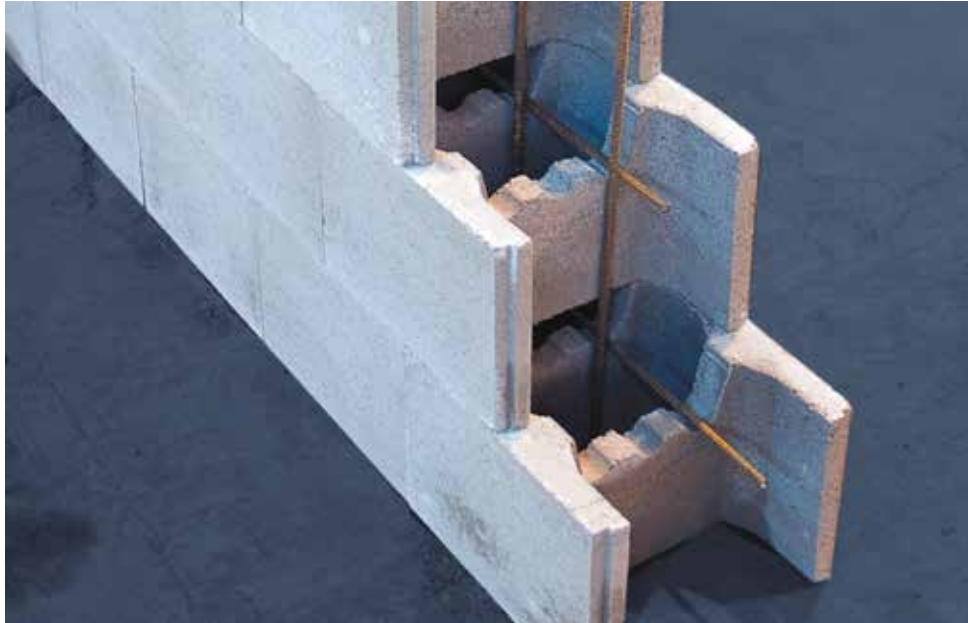


The real alternative to shuttered concrete.



Designed to readily accept vertical and horizontal reinforcement; Stepoc is a system of concrete shuttering blocks that are highly-engineered and dimensionally coordinated.

Stepoc is filled with concrete, which is pumped down through the inter-connected cavities in the blocks. The blocks unique design creates a cascade or waterfall effect which ensures a smooth filling of the pumped concrete, forcing out air and eliminating segregation, to create walls which have immense compressive and lateral strength.

Stepoc walls have achieved the highest rating for a Security Barrier System under the SEAP (Security Equipment Assessment Panel) testing regime.



Stepoc retaining walls



Brick clad Stepoc



Curved Stepoc walls

Stepoc enables the fast construction of single skin retaining walls up to 4.0 metres high, subject to a design carried out by a structural engineer. It can be filled in a single pour from 1.8-2.25m depending on block thickness. Stepoc is available in three widths, 200, 256 and 325mm and at less than 20kg per unit.

Stepoc is proven in use on applications the length and breadth of the UK with a huge growth in sales over recent years proving its suitability and popularity.

Anderton has a team of experienced personnel with a wealth of knowledge in the construction industry on hand to assist the customer. Stepoc combines the ease of blockwork construction with the versatility of in-situ concrete, and yet is faster to apply than both.

Usage

- Retaining walls
- Basement walls
- Flood alleviation schemes
- Swimming pools
- Laterally-loaded panels
- Blast panels
- Lift shafts
- Platform edges
- Multi-storey structures

For more information on this product please call our Structural Division on 0333 234 34 34

Type 200



L2 – Full Length Standard



L3 – Full Length Plain End



L4 – Half Length Plain End

Type 256



V2 – Full Length Standard



V3 – Full Length Plain End



V5 – Third Length Standard



V6 – Third Length Plain End

Type 325



Z2 – Full Length Standard



Z3 – Full Length Plain End



Z4 – Half Length Standard

STEPOC BLOCK DIMENSIONS								
	Unit	Length (mm)	Width	Height	Weight (kg)	Pack Size	m ² per pack	Product Code
TYPE 200	L2	400	200	225	18.5	40	3.60	STEP200L2FLI
	L3	400	200	225	18.5	40	3.60	STEP200L3FLE
	L4	200	200	225	9	80	3.60	STEP200L4HLI
TYPE 256	V2	400	256	225	19.8	32	2.88	STEP256V2FLI
	V3	400	256	225	20	32	2.88	STEP256V3FLE
	V5	133	256	225	8	96	2.88	STEP256V5TLI
	V6	133	256	225	8.5	96	2.88	STEP256V6TLE
TYPE 325	Z2	325	325	225	19.8	24	1.75	STEP325Z2FLI
	Z3	325	325	225	20	24	1.75	STEP325Z3FLE
	Z4	162.5	325	225	10.5	48	1.75	STEP325Z4HLI

- Fire resistant to Euroclass A1.
- **Note:** All products are supplied on pallets and shrink wrapped to aid in transportation and handling.

Pour Heights

There is a maximum height for each pour so that stability is not lost in the dry laid blocks as they are filled. Lower heights for each pour can also be used. We would also recommend the use of temporary propping at free ends and corners during the filling process.



If multiple concrete pours are required, the concrete of the previous pour should finish 50-75mm from the top of the course of Stepoc, with the vertical bars projecting the equivalent of a splice length taken from the engineer’s schedule. This is to ensure a proper key between consecutive pours.

STEPOC MAXIMUM BUILD HEIGHTS		
Stepoc	Max courses	Pour heights (m)
200 Stepoc	8	1.80
256 Stepoc	10	2.25
325 Stepoc	10	2.25

Design

The design of Stepoc walls should be carried out by a qualified structural engineer using the appropriate method for the particular situation. Stepoc walls can either be designed as a reinforced masonry wall to EN 1996-1-1: 2005 +A1:2012 or a reinforced concrete section to BS EN 1992-1-1 (2004 +A1:2014).

Basements

When used in a basement situation waterproofing should be designed by a qualified engineer.

Infill Concrete Mix

The concrete should possess the characteristic strength specified by the structural engineer who has carried out the design of the wall, but not less than C32/40 as per BS EN 206:2013+A1:2016.

The concrete should be designed to be suitable for the specific means of delivery, and a consistence class of S4.

The maximum aggregate size should not exceed 10mm and the mix should contain no less than 380kg/m³ of fresh concrete.

Filling is best accomplished by a concrete pump or skip with a 75mm nozzle, and the design of the concrete should take this into account. Mechanical vibration must not be used. The use of water reducing agents is acceptable to lower cement content in the mix design.

Finishing

Stepoc can be faced with a number of different finishes including brick, stone and render. Wall ties can be incorporated during construction of the walls to allow the facing material to be tied in as appropriate.



Swimming pool applications

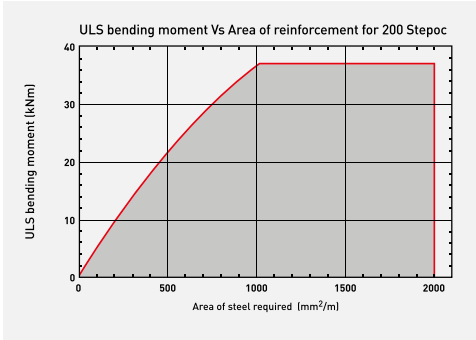


Curved walls

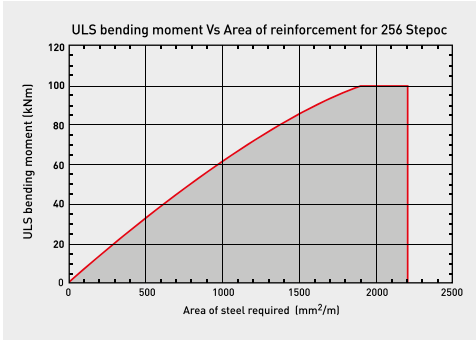


Pouring concrete

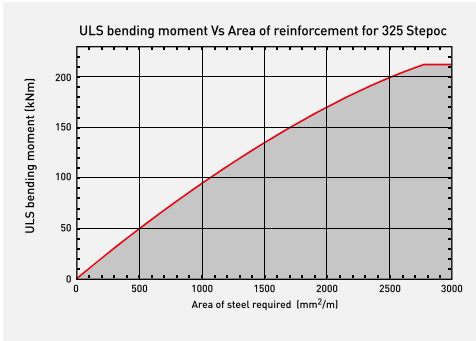
ULS Bending Moment for Stepoc 200, 256, 325



200mm STEP OC



256mm STEP OC



325mm STEP OC

STEP OC VERTICAL BAR CENTRES*	
Stepoc	Centres (mm)
200 Stepoc	200
256 Stepoc	133
325 Stepoc	162.5

STEP OC CONCRETE MIX	
Stepoc	Concrete infill
200 Stepoc	0.11m³ per m²
256 Stepoc	0.15m³ per m²
325 Stepoc	0.19m³ per m²

Did you know?

Anderton Concrete provide typical design examples and additional guidance to assist the engineer with the design process. All products can also be downloaded as CAD files. Anderton Concrete also provide standard setting out drawings for corners, ends and rebar positions.

*Chart for standard wall run, for setting out of corners Stepoc for swimming pool applications and ends please see details supplied with quote.