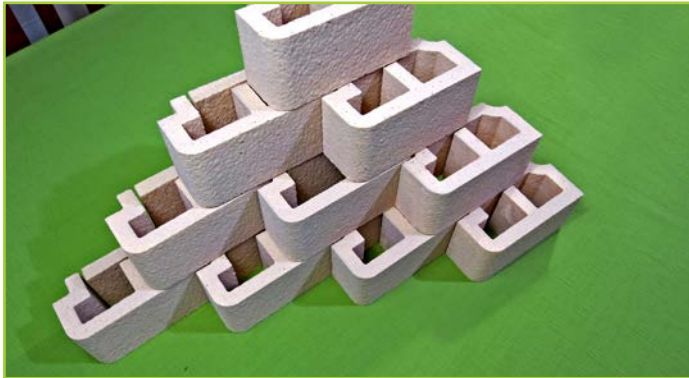


## SOME OPTIONS WITH THE 4X4 STEP BLOCK



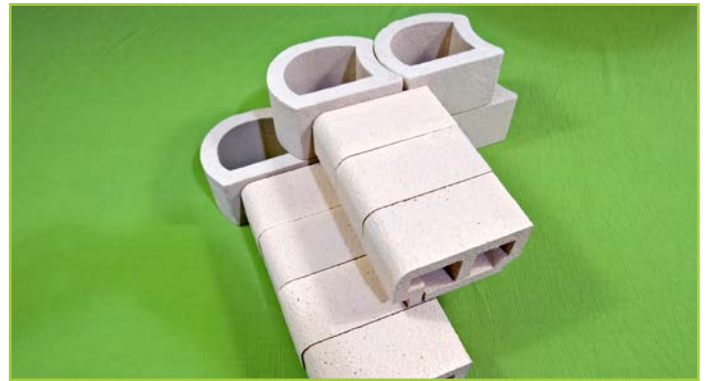
LOW RETAINING



SHALLOW STAIRWAY



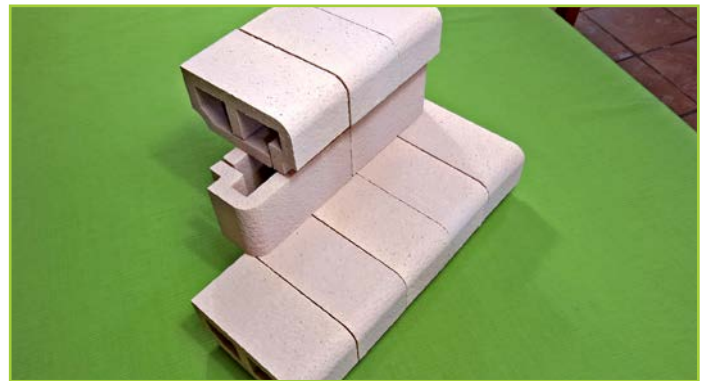
MEDIUM STAIRWAY



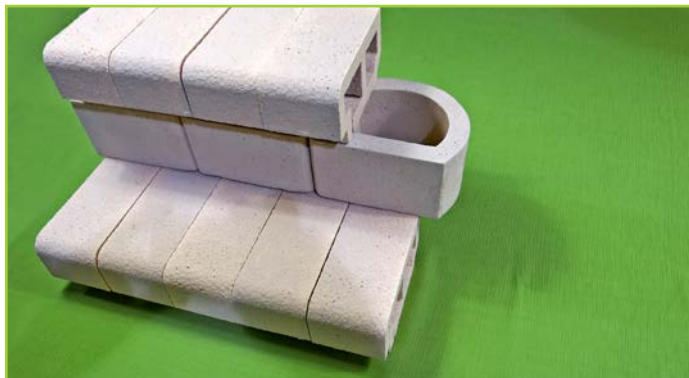
STEEP STAIRWAY



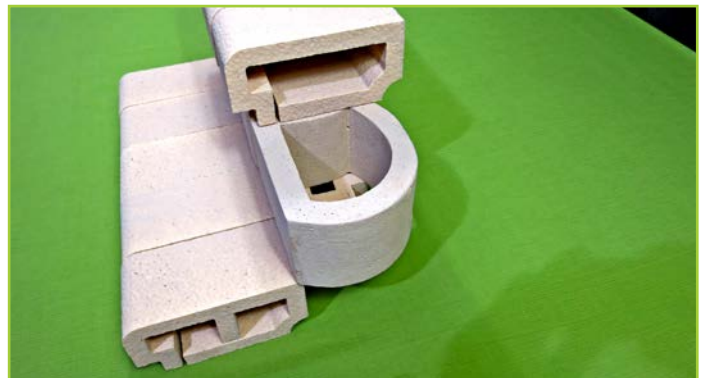
SEATING WITH 4X4 STEP BLOCK



SEATING WITH 4X4 STEP BLOCK

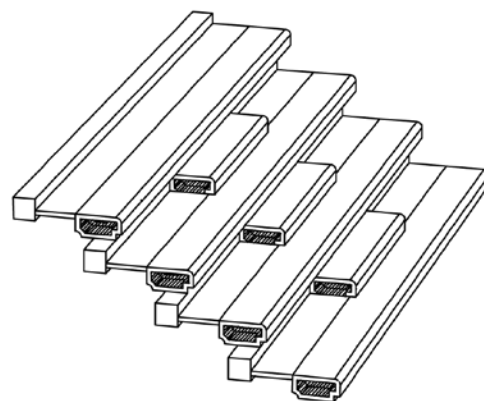


SEATING IN COMBINATION WITH TERRAFORCE L RANGE BLOCKS

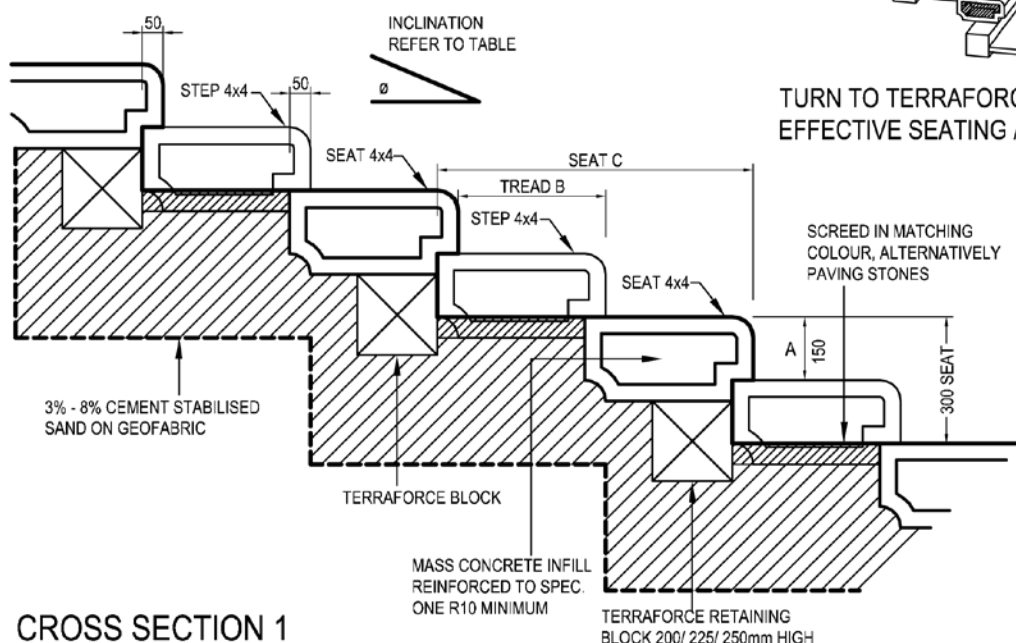


P.T.O

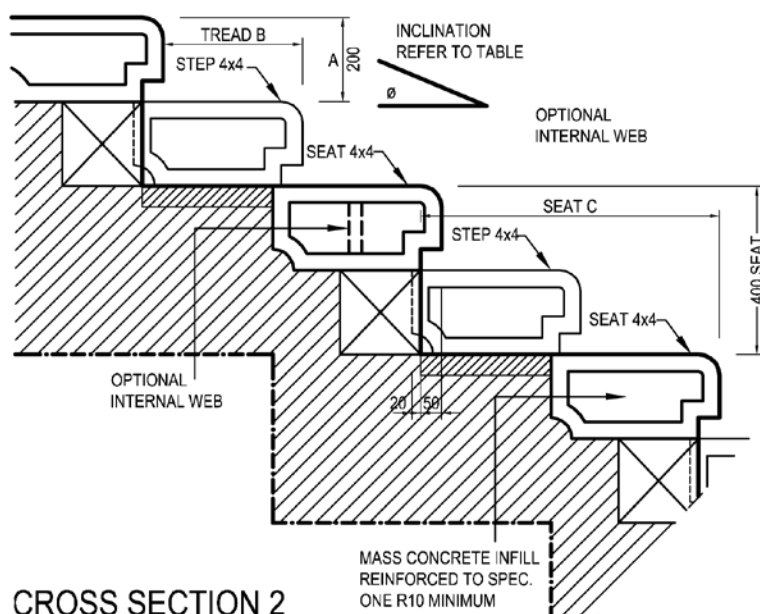
4x4 Step Blocks in combination with **TERRAFORCE** retaining blocks for seating at various inclinations



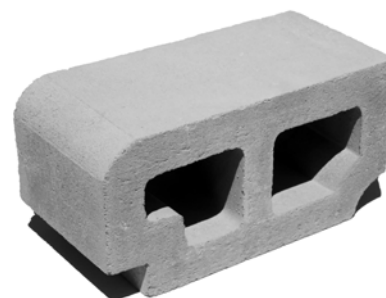
TURN TO TERRAFORCE FOR YOUR COST EFFECTIVE SEATING ARRANGEMENTS



CROSS SECTION 1



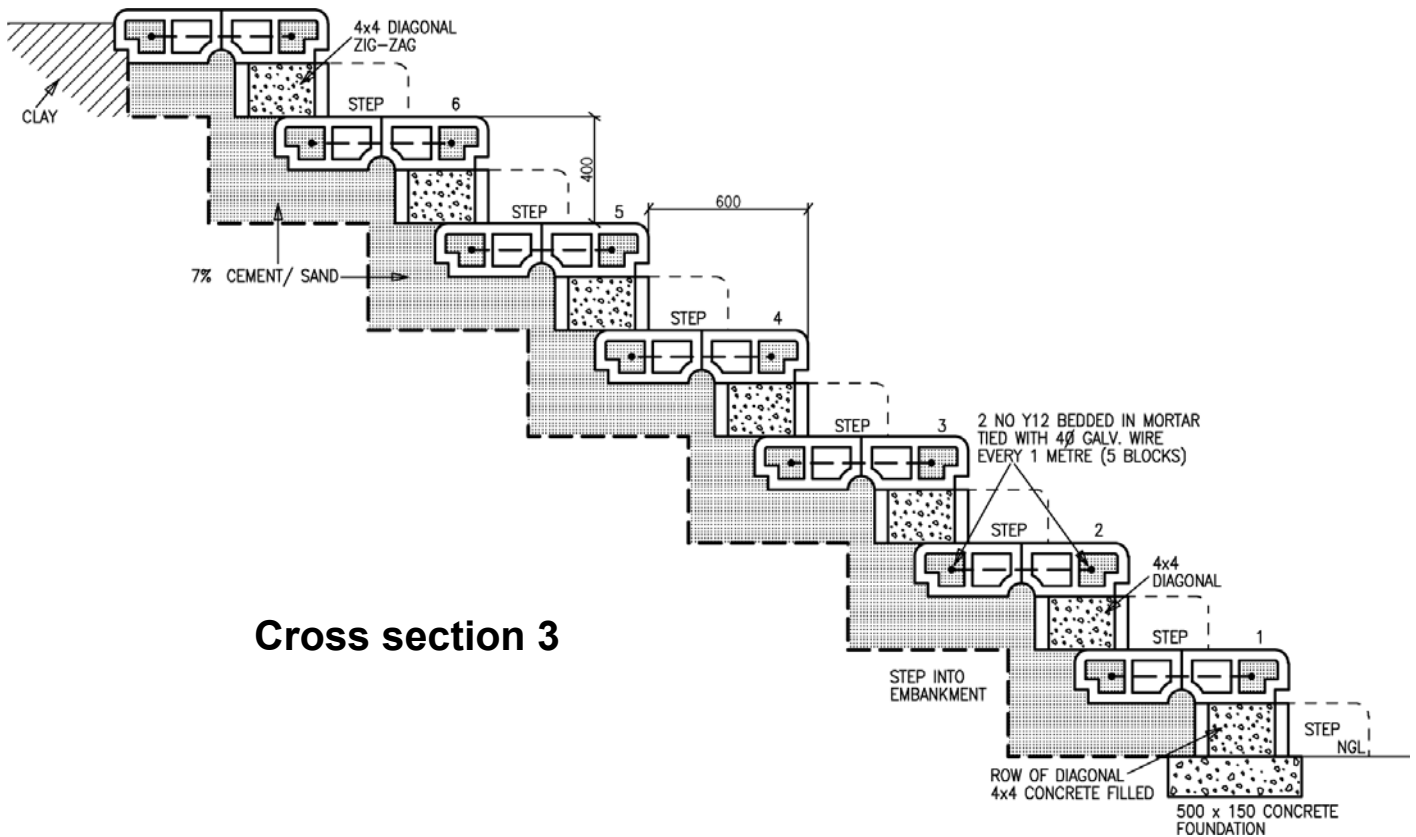
CROSS SECTION 2



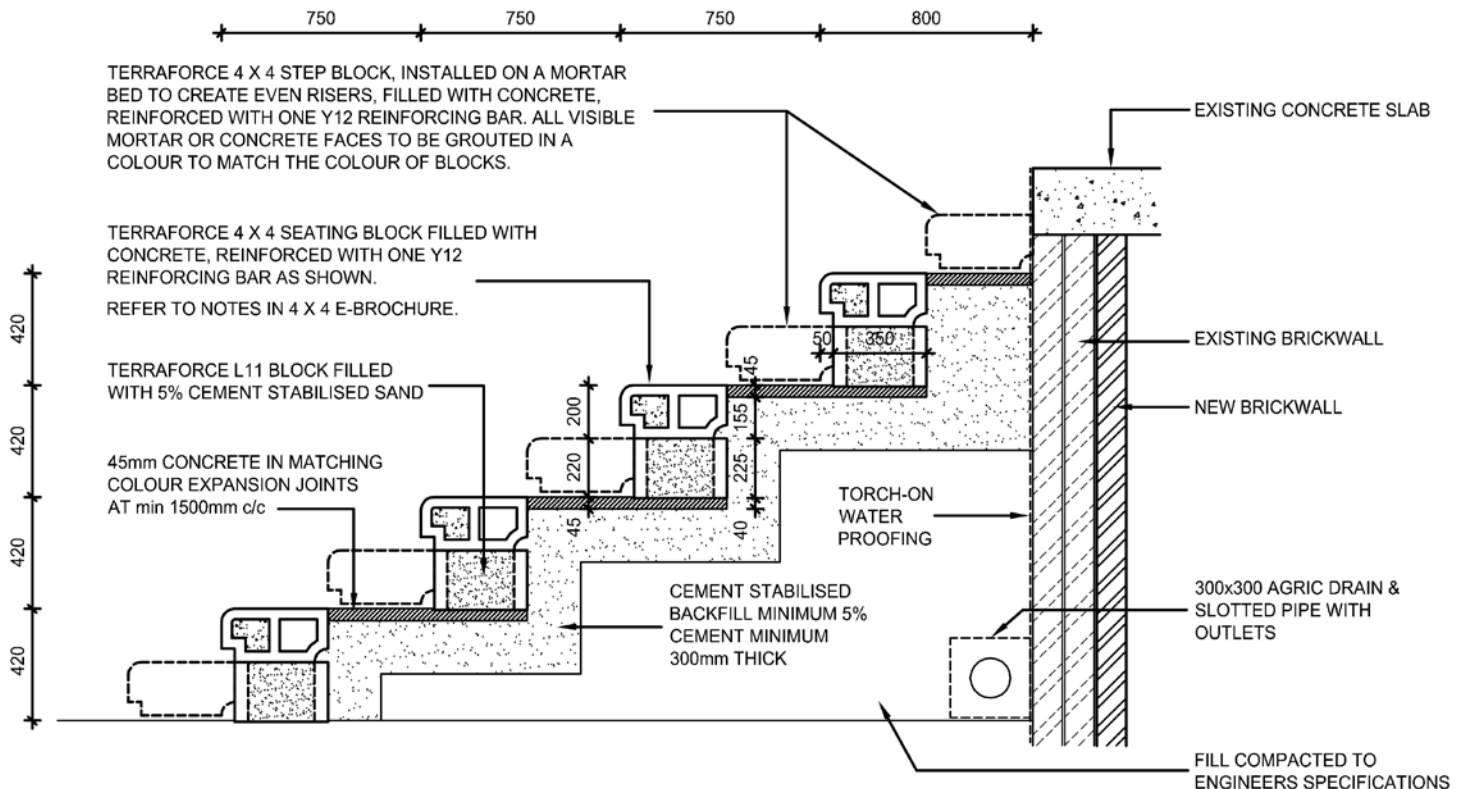
INCLINATION	RISER (mm)	TREAD (mm)	SEAT (mm)
$\theta$	A	B	C
23°	150	350	750
31°	200	330	710
35°	200	300	650
39°	200	250	550

**TERRAFORCE 4x4 STEP BLOCKS  
FOR SEATING INSTALLATIONS**

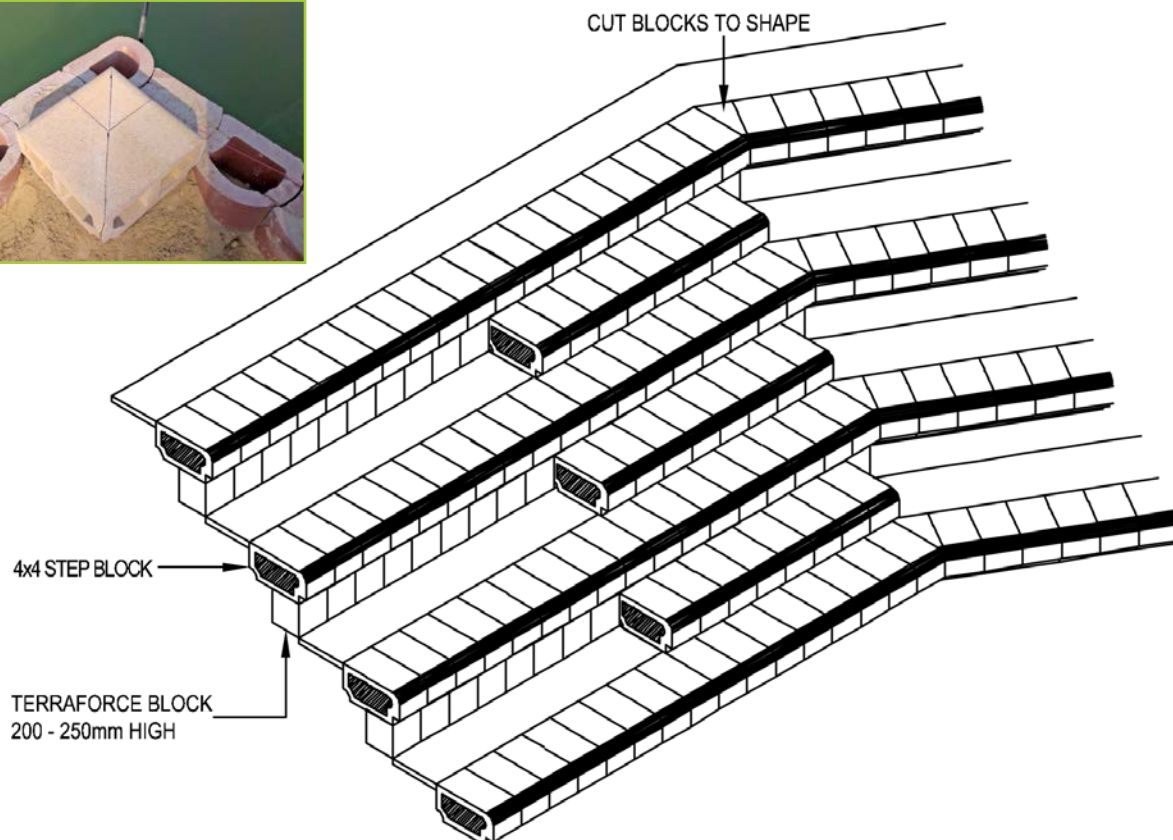


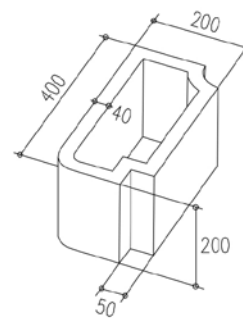
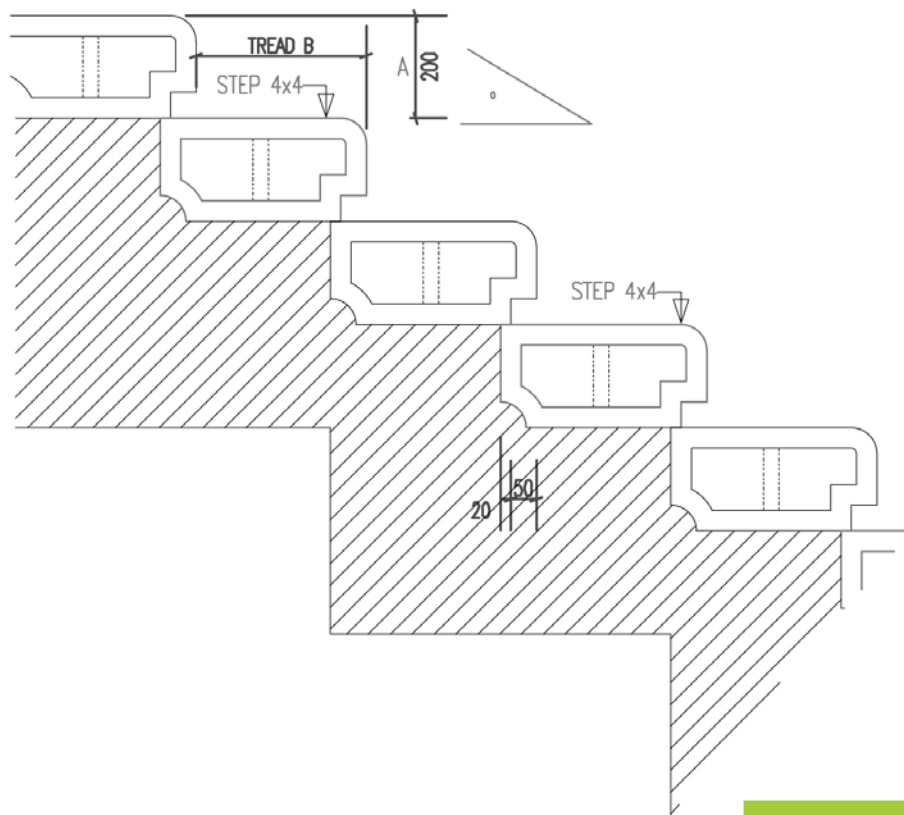


**Cross section 3**



**Installation for an athletics stadium**

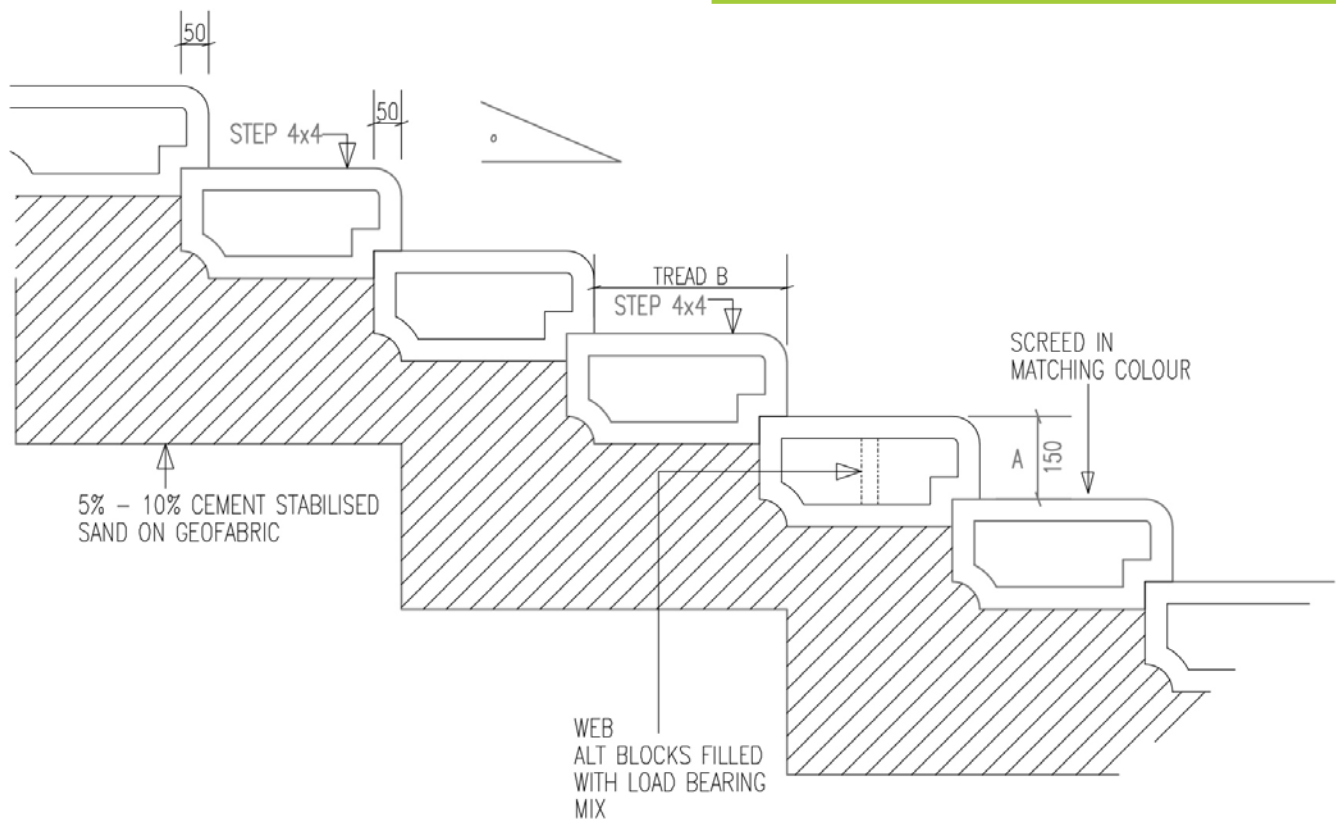


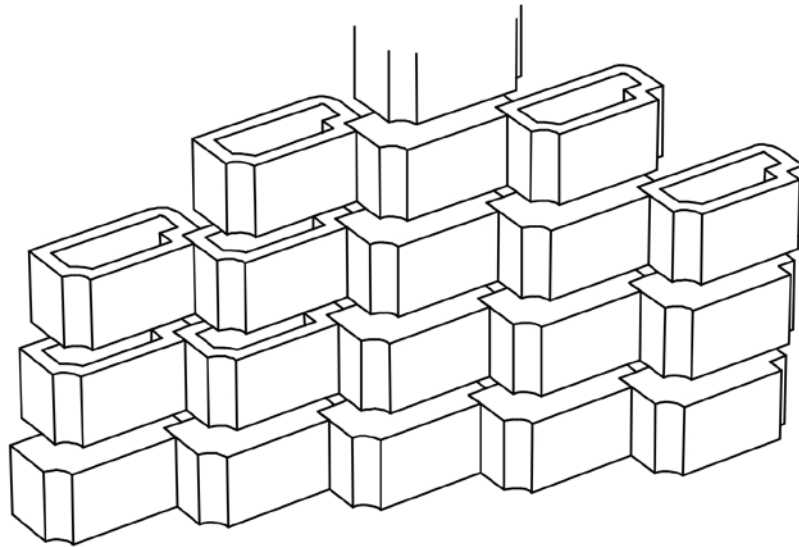


REG. DES. NO. 90/0502

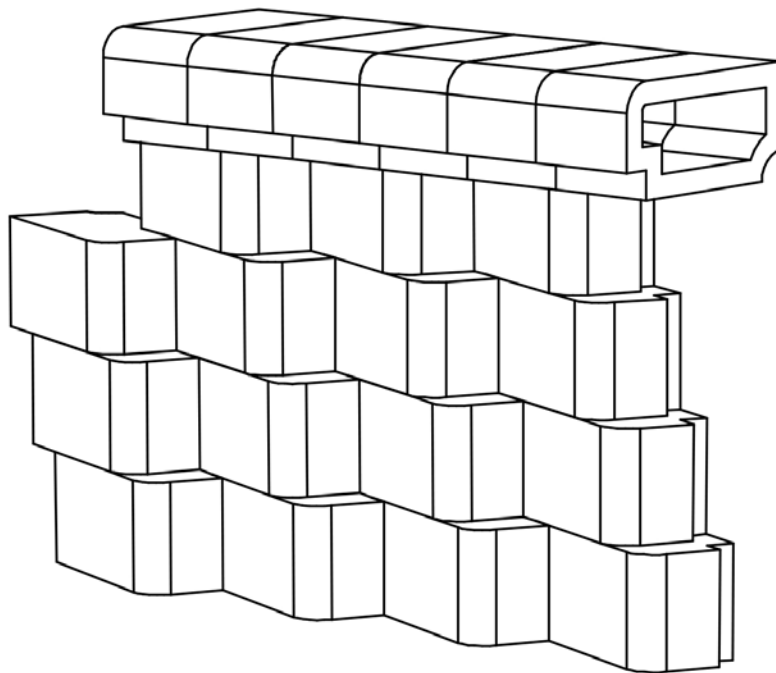
INCLINATION	RISER (mm)	TREAD (mm)
∠	A	B
23°	150	350
31°	200	330
35°	200	300
39°	200	250

## Stairways at various inclinations

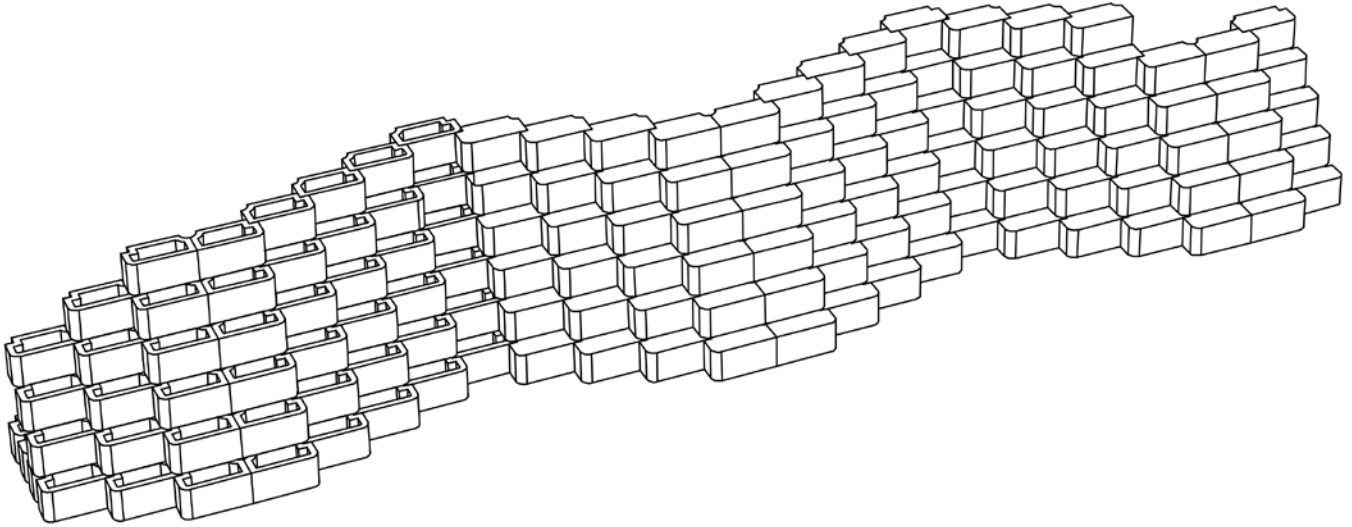




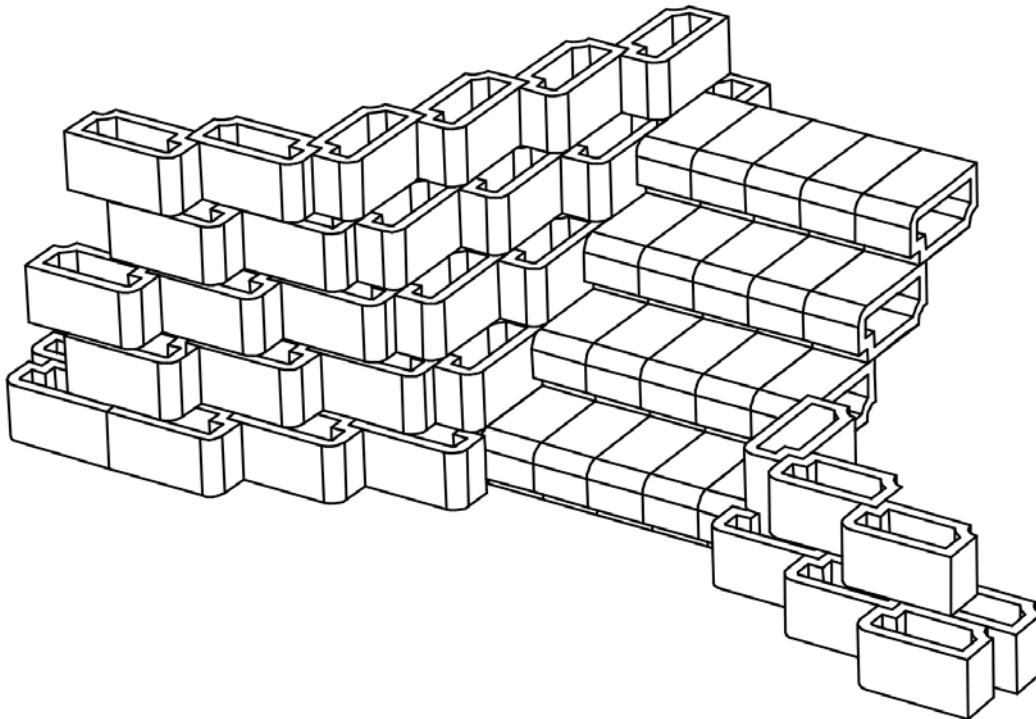
## Options for low retaining (1m max under engineers supervision)







**Low meander (Stability calculation conducted by an engineer essential)**



**Low retaining wall and stairs combined (Only experienced installers to carry out such project)**



## SOME OPTIONS WITH THE 4X4 STEP BLOCK (STAIRS)



TERRACED RETAINING WITH STAIRWAY



STAIRWAY AND RAMP COMBINATION



STRAIGHT STAIRWAY AND RETAINING



SPIRAL STAIRCASE WITH RETAINING WALLS



TIERED STAIRWAY AND PLANTED RETAINING



STAND ALONE STAIR



BEACH FRONT STAIRWAYS



STEPS & RETAINING WITH THE 4X4 STEP BLOCK



## SOME OPTIONS WITH THE 4X4 STEP BLOCK (SEATING)



WEDDING VENUE SEATING ARENA



VIEW POINT SEATING ARENA



CLOSE UP OF BLOCKS CUT TO SHAPE



ATHLECTICS STADIUM SEATING



SCHOOL SEATING ARENA



SEATING ARENA WITH NIGHT LIGHTS



STRAIGHT LINE SCHOOL SEATING



CURVED SCHOOL SEATING AND STAIRS

## Installation of Terraforce 4x4 Step-Blocks for Seating Arrangements

**Note!** Local statutory requirements or site conditions may dictate variations of recommendations below:

- Excavate and trim to lines and grades as shown on plan or as directed. Alternatively bench to required inclination as shown on plan to allow for placement of cement stabilized backfill foundation to seating installation.
- Stockpile sandy backfill material as directed.
- Compact profiled slope as specified by engineer.
- Excavate at the toe of installation for casting of the foundation to engineers detail, with 20 MPa concrete.
- Set out and place first row of concrete filled Terraforce blocks to lines, levels and radius as shown on plan. Repeatedly check levels, longitudinally and across.
- Place cement stabilized (Min 3%) sand backfill and compact as instructed by the engineer.
- Install first row of Terraforce 4x4 step-blocks (on a thin mortar bed, if needed). Install in groups of 4, filled with 15 MPa. Min., low slump concrete (13mm Max. aggregate) to allow for insertion of 10mm to 12mm reinforcing bars with overlapping lengths. Refer to engineer's specification and plan.
- Place and compact cement stabilized backfill as before. Repeat progressively row by row as work progresses.
- Cut blocks to required angles for a neat match at corners or at sharp bends (see sample illustration on page 4).
- Place 50mm screed in matching color (or paving stones) behind front row of 4x4 blocks of seating area as shown on plan. Note this step may be undertaken once all the block rows have been installed.
- Install lines of access stairs with 4x4 step-blocks as shown on plan and section. Check levels.
- All visible in situ concrete for screeds, wedge fillers etc, to be in matching colour and with a neat, brushed, non-slip finish.
- Supply and install subsoil drainage system where and when specified by the engineer.
- Install new rainwater channel along top edge of installation as per plan or as required.
- For best results all work should be executed by an experienced contractor. Consult [www.terraforce.com](http://www.terraforce.com) for a list of recommended Terraforce contractors in various regions.

## General Notes

Cement slurry can occasionally improve appearance with matching color for a uniform finish. Supply and fit railings, screen or wing walls, complementary paving or landscaping, as shown on plan. Supply and fit railings as required by the National Building Regulations, screen or wing walls, complementary paving or landscaping, as shown on plan.

Make good in matching color, any blocks that were chipped during transport and installation. Refer to question 30 of the [Question and Answer section](#)

When in doubt, contact Terrasafe at [www.terraforce.com](http://www.terraforce.com)