

#### What is Terraforce?



**TERRAFORCE** is an award-winning South African company that developed a range of interlocking concrete blocks for **earth retaining walls and erosion control**.



land reclamation  $\star$  erosion control  $\star$  seashore protection  $\star$  river and stream erosion control  $\star$  garden landscaping  $\star$  cut slope stabilization  $\star$  noise and blast barriers and much more.



A Terraforce retaining wall Jalila Children's Hospital, Dubai, United Arab Emirates. The blocks alternate between rock and round to create plant pockets.









The original hollow core, closed faced retaining wall system, since 1979



Jalila Hospital, Dubai, with vertical wall with good plant cover, in 2019



(3)

So many profiles, textures and patterns with only one block!











Award winning installation with South African indigenous plants, South Africa











## Beachfront walls at Ritz Plaza and Palm Jumeirah, Dubai











### Why Terraforce?

A proven product since 1979













<u>A living wall</u>: The unique hollow-core design allows you to make plants a part of your wall and allows water to drain back into the ground. Use low-water-use plants to create a landscape that's sustainable. Plant growth also deters graffiti.

<u>Durability</u>: Concrete will not rot and weaken over time, and no chemical preservatives are required. Blocks can be replaced if damage occurs.

<u>Uniquely interlocking</u>: The units are simply stacked up without mortar to provide a cost effective, do-it-yourself system. Can be used for light revetment cladding, medium-to-heavy gravity retaining walls, heavy duty composite walls in combination with earth reinforcing grids (fabrics) or reinforced concrete infill.

Multiple CMA Award winner since 1998



#### Why Terraforce?

### Unmatched versatility in application













<u>Layout flexibility</u>: The half moon interlock easily handles convex and concave curves of unrestricted radius, and the wall angle can vary from vertical to shallow slopes. Create steps by reversing the block, either with a straight or curved alignment. Perfect spiral stairways can be constructed with ease.

<u>Colours and textures</u>: choose between round, straight or rock face finish. Consult your local supplier about available colours.

<u>Easy to use</u>: The blocks are <u>lightweight</u> for easy delivery, handling and installation, yet heavy in mass when filled with soil, gravel, or concrete. Fence and handrail posts can be set within blocks.

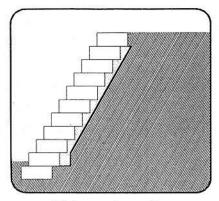
Level four BBBEE, Member of the CMA



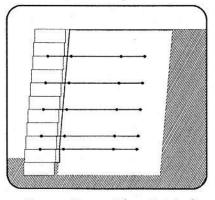
### These drawings illustrate the most common planning options for L Range retaining walls:

The blocks interlock horizontally as well as vertically with optional keys or gravel infill and contain no air voids. They have a closed vertical and open horizontal surface structure, and thus lend themselves ideally to the construction of light terrace walls but also heavy gravity, composite or vertical RC filled retaining walls.

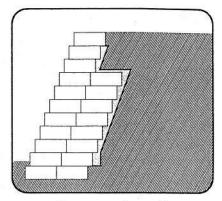
Factors influencing installation costs: as wall angles and heights increase so does cost. Due consideration has to be given to the presence of groundwater or unstable retained soil.



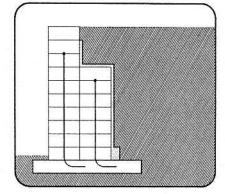
Light gravity wall



Composite wall (geofabrics)



Heavy gravity wall



Vertical / RC Filled wall

The planning stage of a retaining wall depends on environmental, structural and cost factors:

**Type of retaining system**: Resist the temptation to specify slender, stretched-out types or imitations of proven blocks. The system should be chosen for maximum structural mass (no air voids within wall) combined with optimal rooting conditions. This will help in binding the system and embankment together.

**Climatic conditions**: Exposure to factors such as coastal, salt-laden winds, long hours of direct sunlight, deep shadows, etc., should be taken into account.

**Function and type of vegetation**: Herbaceous, deep rooting (low maintenance) or attractive flowers (high maintenance) may be considered. Mixed complimentary species or uniform ground covers can be planted. Feeding values for birds and insects must be investigated for a complete bio-engineering approach.

**Maintenance:** Monitoring of soil fertility, irrigation and regular maintenance operations form an integral part of a growing investment. Indigenous plants are ideally adapted to prevailing climatic conditions. They generally require less water and maintenance, are deep rooting and can contribute considerably toward adding competence to these installations.



With these four basic walls types in mind, the design possibilities are endless!









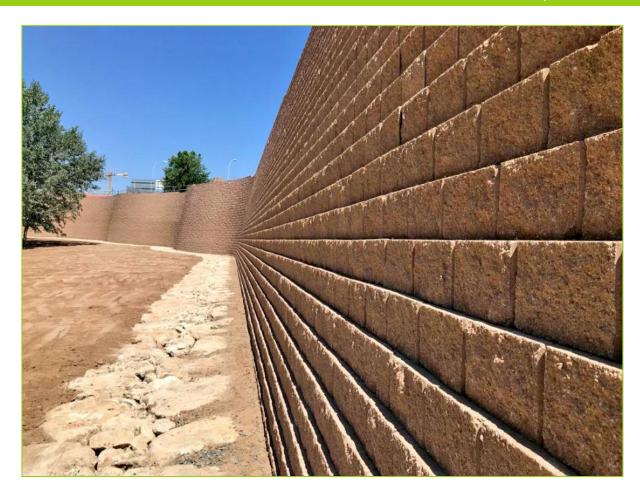




With one block, you can create terraces, curves, corners, vertical walls and steps



## The shape of the block allows for unlimited curves







12

## Keep it green with unrestricted plant growth!













Round, rock or flat face finishes.













(14)

#### Rock face collection.















Terraced, vertical or sloped, whichever suits the best.









Whether sloped or near vertical, planting is possible.







## Clover leaf interchange in round or rock face finish:























## Seashore retaining walls and 4x4 Multi Steps at Durat Al Bahrain, UAE





















(19)

Plants or patterns, you chose!









The three terraces reach up to 18m in height when combined

Green, green and some more green!









The end results are limited by your imagination only...









### Where to purchase TERRAFORCE blocks





## The products are produced on 5 continents:







### Or, alternatively, find your closest supplier:







Call Terraforce directly: +021 465 1907or email Karin: <a href="mailto:karin@terraforce.com">karin@terraforce.com</a> or visit the web site: <a href="mailto:www.terraforce.com">www.terraforce.com</a>



We also offer a professional design service





Professional design service that provides first-class engineering, management, and specialist technical service to users of any of the Terraforce products.

