SHORELINE STRUCTURES & COASTAL PROTECTION

REINFORCED EARTH
SUSTAINABLE TECHNOLOGY

REINFORCED EARTH

CONSTRUCTION SOLUTIONS FOR SHORELINE STRUCTURES & COASTAL PROTECTION

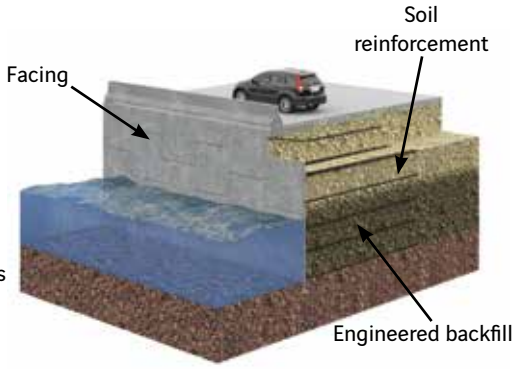
THE VALUE OF
OF THE WORL
IN EARTH R

REINFORCED EARTH® SEAWALLS

Land use is often at a premium in ports and along coastal areas just above high water or normal flood stage elevation. This proximity can pose technical challenges leading to costly alternatives when the river bank or the seacoast is so narrow that new construction encroaches into the waterway.

Under such conditions, retaining structures are required which will be in permanent or temporary contact with either fresh or saltwater. Furthermore, the combined forces of water and water borne debris during storms or floods represent additional environmental considerations that need special attention when designing retaining structures.

Reinforced Earth® represents a proven alternative to other construction methods and materials used to build marine retaining structures. It is easily adapted to complex location and environmental conditions, with wide acceptance as a sound civil engineering application. Reinforced Earth® structures have the inherent advantages of economy, flexibility and speed of construction.

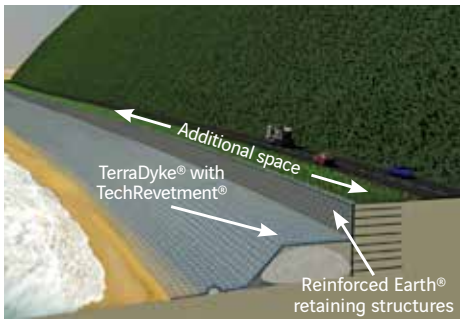


Soil reinforcements:
The wide choise of reinforcements, either metallic or geosynthetic, allows the Reinforced Earth® to be used for all types of water conditions – fresh, brackish or saline.

Facing and Engineered backfill:
Reinforced Earth® precast concrete panels combined with proper backfill material ensure adequate drainage, especially if the structure may be subject to sudden rapid draw down and variation in water level. The panels are designed to resist unique conditions such as shipping impacts, tides and stresses caused by waves, ice or erosion.

TERRADYKE®

TerraDyke® is an engineered solution tailored-made according to each project requirements, that combines the advantages of geosynthetic materials and locally available fill materials. It consists of several components like non-woven Geotextiles, Geotextile Tube, Anti Scour Apron, Anchor Tube, site-specific secondary and primary protective layers appropriate to design.



Design and analysis are carried out with in-house softwares by design experts.

TerraDyke® technology is a protective structure for coast and bank protection. TerraDyke® technology is an appropriate solution for the following applications:

- Shoreline management
- Land Reclamation
- Beach Protection / Nourishment
- Breakwater
- Jetties
- Bank protection and flood mitigation works

TECHREVETMENT®

TechRevetment® is an alternative and durable solution for erosion protection with ariculated concrete block. High strength woven Geotextile former is used to provide the shape and form. Essential components of TechRevetment® are non-woven geotextile, geotextile fabric form and fine aggregate concrete. Depending upon the design requirement and specific application, the type of fabric form to be used is chosen.

Type of fabric form

TechRevetment® is appropriate for:

- Protecting river banks or shore lines from wave action
- Forming impermeable linings for containment ponds or canals
- Scour prevention or scour repair
- Controlling erosion along the bridge abutments in flowing river
- River training works

TechRevetment® can be installed in underwater condition. This provides a unique advantage to the client where dewatering or constructing coffer dam is not possible, such as canal bank protection / canal bank lining, river bank protection, abutment or pier protection under flowing water.

EXPERIENCE
LDWIDE LEADER
ETAINING STRUCTURES


Dyke protection


Coastal protection structures

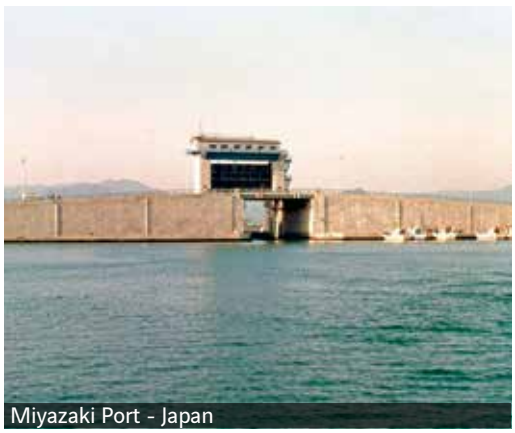

Periyakulam Tank - Coimbatore, India


Periyakulam Tank - Coimbatore, India

Bing Bong wharf - Australia


Seawall - Port-Cartier, Canada


The Réunion island Coastal Road - France


Miyazaki Port - Japan


Owensboro - Kentucky, USA


Dun Laoghaire breakwater - Ireland

REINFORCED EARTH
SUSTAINABLE TECHNOLOGY

A WORLDWIDE NETWORK OF EXPERTS FOR YOUR PROJECTS

Our engineers provide their assistance at every stage of the project:

+ Conception and feasibility
+ Design
+ Procurement
+ Construction
+ Maintenance
+ Upgrade

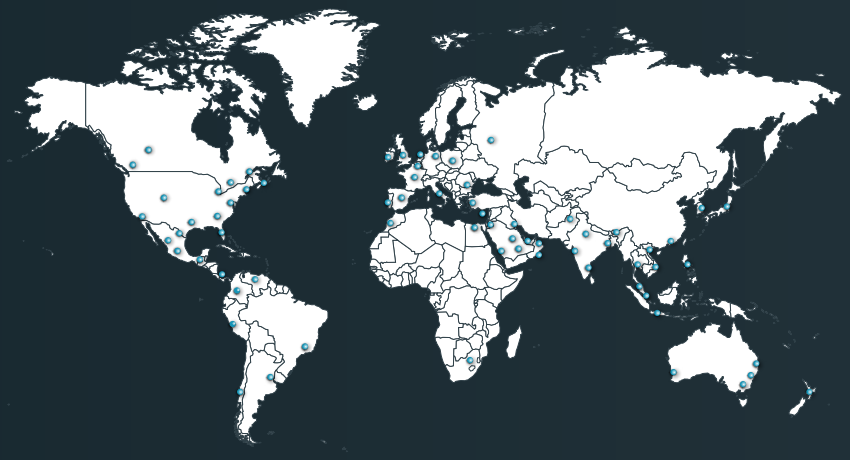
Experience

Reliability

Solution Provider

Reinforced Earth enables projects stakeholders, owners, consulting engineers, architects, city planners and main contractors, to benefit from the experience collectively accumulated for more than half a century.

Presence in more than 40 countries on 5 continents



www.terre-armee.com

Follow us on:

Publication: 10/2016 - Printed in France