

ACEModule™

ACEModule™ is a box-like hollow precast concrete unit specifically built for projects that eco-environment and natural aesthetic landscape are particular concerns. ACE provides not merely a precast concrete unit but an iron mold for self-casting.



Applications

ACEModule™ is a monolithic element made up of 3,000~4,500 psi reinforced concrete material. It can be applied to build revetment or toe protection where the waterfront environments such as riverbank, channel, pond and lake etc. are vulnerable to erosion damage.



Benefits

In addition to being applied to slopes and landscaping, ACEModule™ is particularly suitable for wild creek revetment and amenity waterfront environment. It is preferable as an interface between humanities and natural ecology, as ACEModule™ is capable of integrating engineering protection with the overall surrounding environment. Apart from being filled with soil to offer a good effect on landscape greening, ACEModule™ can also be filled with cobbles or crushed stones to build porous habitats for aquatic and burrowing animals. ACEModule™ can be customer-designed to adapt to the curvature along the natural topographic winding variations and avoid the appearance of structural monotonous, which greatly improves the overall visual aesthetic of the project.



Construction

At the site, ACEModule™ can be easily laid and stacked according to the designated alignment and level similar to those for a simple segmental block wall. Each ACEModule™ can be connected in a variety of ways, such as mutual tenoned or buckled, to give full capability to the advantages of structural flexibility and overall rigidity. Infill materials within the ACEModule™ can be local soils, ACEBag™, cobbles or crushed stones dependent upon customer's needs. Each layer of ACEModule™ is installed similarly, and all layers are stepped stacked upward and backward to form a stable slope.

Features

1. **Rough, porous surface with arc-shaped facade –**
 - Present variable appearance and eliminate structure monotonous.
 - Conducive to aquatic plants and animal habitat.
 - Reduce flow velocity for a better safety.
2. **Box-like hollow design –**
 - Allow options for different backfill materials.
 - Produce spaces for vegetation or plants to grow and develop if infilled with soil.
 - Initiate eco-friendly environment for aquatic and burrowing animals if infilled with cobbles or crushed stones.
3. **Precast reinforced concrete unit –**
 - Present stronger material with high durability.
 - Allow better engineering control for higher quality.
 - Cost less for labor, material and equipment.
4. **Simple construction in field –**
 - Install easily for designated alignment and level.
 - Use tenoned or buckled connections with structural flexibility and overall rigidity.
 - Easy construction with duplicate procedures.
 - Lesser requirement for labors and equipment.
 - Promote a stable slope with stepped stacked upward and backward.
 - Segmental arrangement adapts to the curvature along the natural topographic winding variations.
5. **Sustainable eco-environment –**
 - Ensure an eco-friendly environment for vegetation and natural species.
 - Present overall visual aesthetic for a greening and blooming appearance.
 - Initiate an amenity waterfront leisure and comforting locality.

