

One Ecological Landscape Park with ACEMat™ R – Taichung Pinglin Forest Park

◆ Background

Taichung Pinglin forest park covering about 11.7 hectares, is located opposite the Taichung Armed Forces General Hospital, near to the National Chin-Yi University of Technology. This park sits on the land originally reserved for military use. In recent years, due to the decrease of the military, reducing the demand of land, and the governments urban plan policy, the government intended to reconstruct this area as a multifunction ecological park providing recreational space, a scenic environment and a water-detention basin.

◆ The Problem / Task

In this case, in order to achieve the government's policy objectives and improve the greening rate, the owner intends to plan a forest area exceeding 3.7 hectares, plus a water-retention basin of 32,000 square meters. It not only provides the function as a detention basin, water collection during the flood but also offers a pleasant forested place for the residents to enjoy their time in normal period, moreover promotes the development of this area.

◆ The Solution / Design & Construction

In this case, the area start up to construct the green park and ecological water-retention basin, in order to make a green landscape, using the Rectangular Pyramidal Geomat, ACEMat™ R to do the green beautify work. The area covered by the ACEMat™ R is about 8,000m². ACEMat™ R manufactured by polypropylene yarns, with the three-dimensional structure can closely integrated with the soil which supporting vegetation. Furthermore, thanks to the increase of the surface roughness, surface soil eroded by the rainfall can be avoided. ACEMat™ R can protect slope and also prevent the erosion rill formed naturally to expand. In addition, ACEMat™ R with the flexibility characteristic can be adapted to the local terrain condition and be installed easily.

◆ Result

The construction of the Pinglin forest park provide an environment which can not only conserve water, adjust temperature, provide a biological habitats but also maintain the current landscape. The use of the green materials ACEMat™ R avoid the visual oppressive of concrete and form a multifunctional ecologically sustainable green park to adjust the temperature in the near region and effectively decrease the air pollution.



Before construction



Under construction



After construction