ACEGrid®

ACE Geosynthetics

To make the Earth more beautiful
Let's march together hand in hand!

Company Profile

ACE Geosynthetics, established in 1996, built the first automatic production line in Taiwan for geogrid manufacturing. The average annual output of ACEGrid® exceeds 20 million square meters. ACE has dedicated itself to developing diverse structures, such as the agriculture net, geotextile, and advanced PP & PE nets.

Our annual net output approaches to 2000 tons for ACETex.

Quality process control in the manufacture of all our products is maintained through our ISO 9001 and CE certifications.

Top quality and service are the keys leading ACE Geosynthetics to rapid and wide expansion.

History Leads to the Future

1996 ACE Geosynthetics was established as a professional geogrid manufacturer.
ACE built the first automatic production line in Taiwan.

1997 ACE secured ISO 9001 certification, the highest quality assurance for international manufacturers.

1999 ACE secured Japan's "Quality Examination Certificate for Imported Materials"

2003 ACE built the most professional service team in Taiwan to integrate the production and application of Geosynthetics.

2005 ACE secured CE certification, the quality endorsed by EU.

2007 ACE projected to invest 15 million for new plant building in Chung Kang Export Processing Zone.

2008 The second 20,000 - square - meter manufacturing plant allowed the extensive production.

ACEGrid®

PROPERTY

ACEGrid® offers superior tensile reinforcement. The geogrid consists of polyester yarns with a protective polymer coating, either PVC or nontoxic substance, providing high resistance to soil microorganism chemicals, UV radiation and mechanical damage.

With highly efficient automatic production lines and quality control system, ACEGrid® is available to different tensile strengths, mesh sizes, and structures having stable, high quality. Installation is problem-free because the material is flexible.

FUNCTION

ACEGrid® reinforces the soil, redeeming the soil strain and increasing its stability. Reinforced walls can be seeded with grass or filled with living plants in the layers during installation. After the plants grow, the wall is beautiful green, providing homes for insects and animals in the environment. This beautiful wall will not be washed away because the ACEGrid® has made it stable anchored to the earth.

Reinforced walls can be used with steel mesh or pre-cast panel material finishes, as well as applied in the retaining embankment or shore environment. Thanks to its flexibility, it withstands earthquakes better than traditional methods.

ACEGrid® can perform better than others:

- Cost and time saving
- Excellent long-term design strength
- Flexible and easily handled
- Customized production
- High creep resistance
- Friendly and ecological surface

APPLICATION

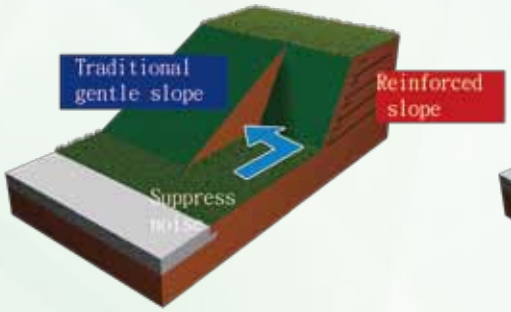
Developed countries actively promote natural and ecologically sound construction methods. ACEGrid® is the best choice for this green construction trend to ensure the stability of structures. The wide range of applications are available for:

- Residential
- Industrial
- Urban
- Slope engineering
- Traffic engineering
- Waste landfill engineering
- River/maritime engineering
- Other civil engineering

Reinforced Structures

ILLUSTRATION

Using reinforcement is not new. Historically, people have reinforced soils and structures with natural elements such as trees or roots. Now, geosynthetics allow constructors to use natural elements in combination with reinforcement tools, providing better, more economical performance and beautiful results. Here are the diagrams for demonstration of the advantages in land use which can be enjoyed employing our reinforcing materials.



Increase the usable area but decrease the stabilization of supporting area

Increase the usable area

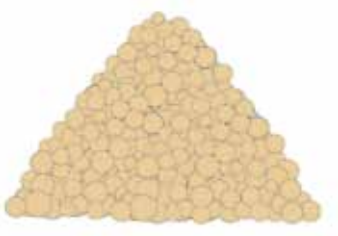
More economical, easier to handle and less environmental influence

PRINCIPLE OF REINFORCEMENT

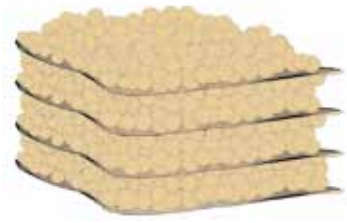
Using the tensile properties of geosynthetic material resists stress or contains deformation in geotechnical structures. (IGS[1] Terminology)

Reinforcement may be incorporated in engineering field, or inserted into natural ground either to provide steeper slopes than would otherwise be possible or to improve load carrying capacity. Reinforcement may also be used to improve the performance of weak soils to support embankments or other resilient structures. (Reference: BSI[2] Standard)

1.IGS: International Geosynthetics Society **2.BSI: British Standards Institution**



1. Soil



2. Add in reinforcement material

3. Wrapped finish

Advantages of Reinforced Structures with Different Facing Types

Wrap-around reinforced structure

- Simple construction equipments
- Rapid construction procedures
- Easy to handle
- Flexibility and capability to absorb deformation
- Higher seismic resistance
- Good drainage
- Cost effective
- Landscape to fit in with environment

Steel mesh reinforced structure

- Simple construction equipments
- Higher seismic resistance
- Good drainage
- Cost effective
- Landscape to fit in with environment

Modular block reinforced structure

- Simple construction equipments
- Higher seismic resistance
- Cost effective
- Excellent aesthetics from versatile molding options

Precast concrete panel reinforced structure

- Higher seismic resistance
- Erosion resistance
- Cost effective
- Horizontal deformation restraint
- Excellent aesthetics from versatile molding options

Main Uses

Slope engineering

- Reinforced retaining wall
- Reinforced slope
- Reinforced embankment

Traffic engineering

- Reinforced structure for roadway
- Reinforced structure for bridge abutment
- Reinforced structure for road repairing

River and maritime engineering

- Reinforced structure for waterways
- Reinforced structure for canals
- Reinforced dike with vegetation

Other engineering

- Reinforced structure for landfill
- Reinforced structure for land increase
- Ground improvement

A . Slope Engineering

Reinforced retaining wall

Athletic Field Landscape Construction in Pu-Tai Elementary School Project

GTB Smarak Project in India

Reinforced slope

Miao Yin Amitabha Association Construction in Yilan

Taipei Rapid Transit Metro System Tucheng Line Depot Construction

Reinforced embankment

Crash Barrier Embankment in Taiwan HSR C250 Project

Rockfall Barrier Embankment in Badouzhi, Keelung

B . Traffic Engineering

Reinforced structure for roadway

Highway Construction Project in Shivpuri, India

Miscellaneous Construction Project in Tamkang University Lanyang Campus

Reinforced structure for bridge abutment

Abutment Construction in Tamkang University Lanyang Campus

Abutment Construction in Yuchang Highway Building Project

Reinforced structure for road repairing

Nantou No.83 Road Repair Construction Project

Yilan First Road Roadbed Repair Construction Project

C . River and Maritime Engineering

Reinforced structure for waterways

Shuangsi No.1 Road Construction Project in Shuangsi River Section

Nantou No.80 Road Repair Project in Beikang River Section

Reinforced structure for canals

Yuan-Dao-Wu Landscape Project in Hsin Chu

Hai-Yue Cottage Construction Project in Miao Li

Reinforced dike with vegetation

Shuhu River Construction Project in Hsin Chu

Reinforced Structure Construction Project near the Channel in Tao Yuan

D . Other Engineering

Reinforced structure for landfill

Toufen Landfill Construction Project in Miao Li

Jhuci Landfill Construction Project in Chia Yi

Reinforced structure for land increase

Commercial Center Parking Lot Project in Jalapa, Ver., Mexico

Conservation Zone Construction Project in Pu-Tai Elementary School

Ground improvement

Railway Foundation Reinforcement in India

Foundation Improvement in Tabasco, Mexico

High Quality

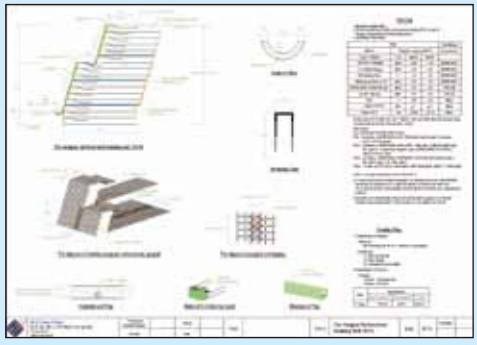
ACEGrid® is ISO 9001 and CE certified. To achieve our high manufacturing quality control standards, we sample test each production line everyday following our quality control plan. Moreover, we cooperate with certificated independent laboratories to prove our quality stability.

ISTITUTO GIORDANO S.p.A.
NOTIFIED BODY No. 0407
EC CERTIFICATE OF CONFORMITY
OF FACTORY PRODUCTION CONTROL
Geogrids for reinforcement

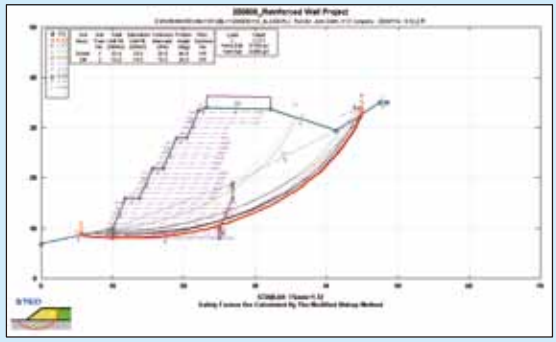
CE Mark

ISO 9001 Certification

Q.C. Lab

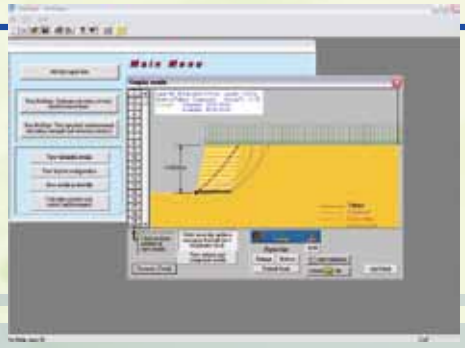


Standard drawing example

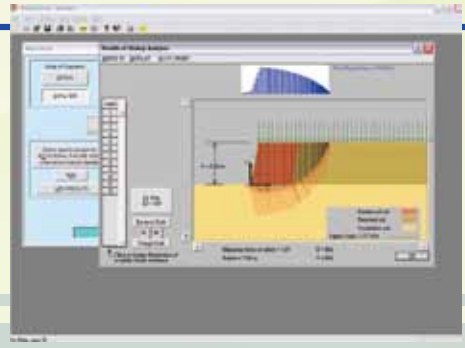


STEDwin stabilization analysis design service

MSEW stabilization analysis design service



ReSlope stabilization analysis design service



ReSSA stabilization analysis design service

Top Service and High Quality

Top Service

To assure the best service of ACEGrid®, ACE Geosynthetics counts on extensive manufacturing plants to meet larger orders as well as a team of professional engineers to provide the most economical and efficient solutions to satisfy the client's needs.

For your design request

- Design suggestion and consulting service
- Stabilization analysis and drawing
- Standard section drawing
- Project installation plan
- Installation self checking list

For your engineering request

- Price analysis and installation evaluation
- Manufacture and shipments in accordance with client's requirements
- Test certificates available

ACE Geosynthetics

www.geoace.com sales@geoace.com

Certified ISO-9001