

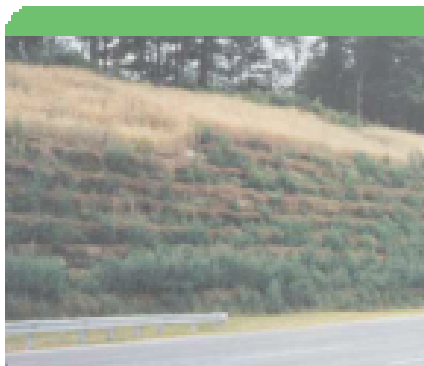
# WIRE MESH SLOPE AND RETAINING WALL SYSTEMS



Economical, Engineered  
Geosynthetic Reinforced  
Slopes and Walls

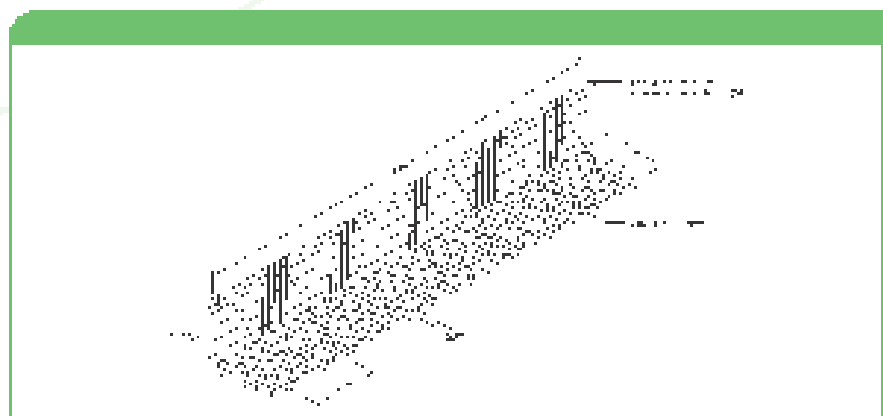
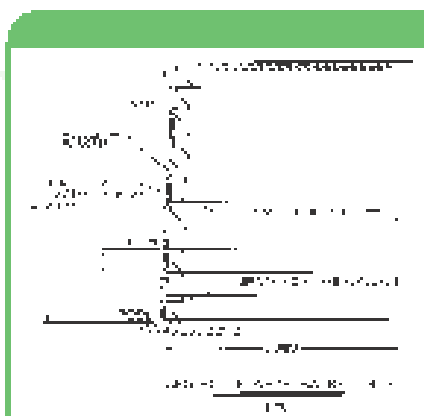
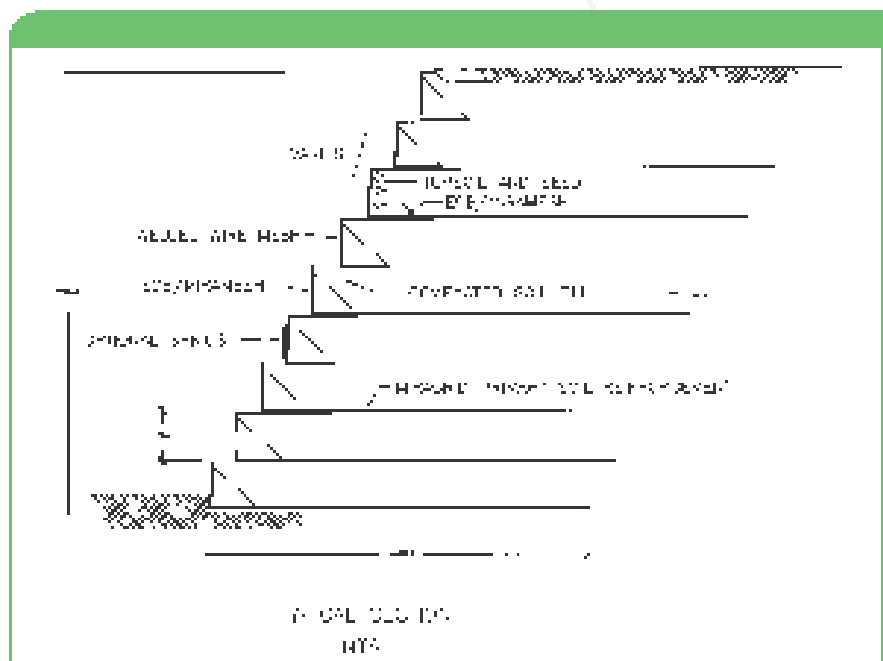


# Geosynthetic Reinforced Slopes and Walls With Wire Mesh Facing



Reinforced steepened slopes, also termed Mechanically Stabilized Earth (MSE) slopes, are defined as structures with face inclinations of less than 70°. Steepened slopes have become increasingly popular due to the desire to increase land usage and decrease site development costs. The proven concept of geosynthetic tensile reinforcement allows construction of slopes with far steeper face angles than are permitted by the soil's natural internal angle of friction often using on site soils. Steepened slopes reinforced with MIRAFI® XT Polyester Geogrids can utilize on site soils and increase land

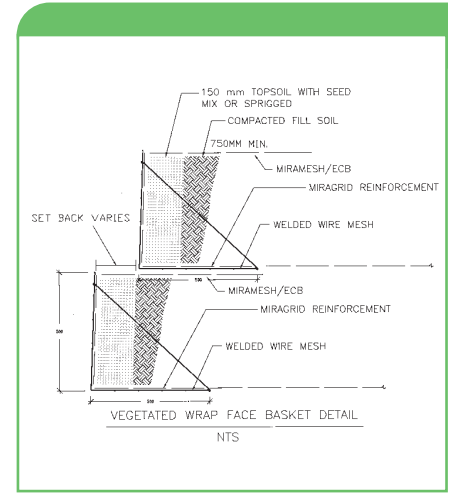
usage substantially while providing a natural appearance. A critical aspect of the design of reinforced slopes is the facing system. The Armtec Wire Mesh Slope System includes the durable facing of a metal wire mesh basket and surface erosion protection of either Miramesh™ GR and/or an Erosion Control Blanket or Rock Face. The erosion protection facilitates the establishment of vegetation, while the metal wire baskets provide structural support for the forming of over-steepened slope faces. These systems are ideally suited to projects where settlements may occur due to compressible foundation soils.



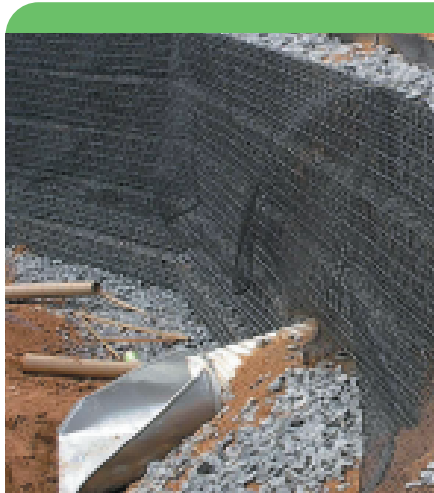
# Vegetated Green Slopes



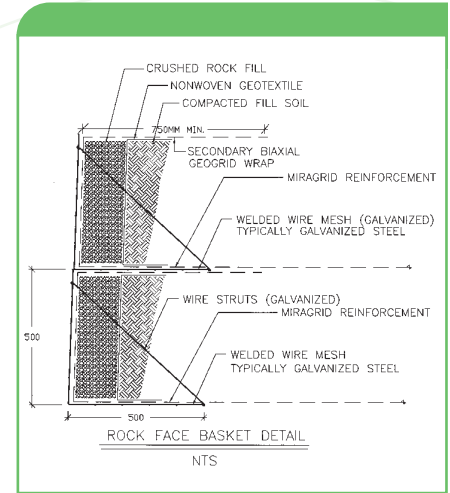
The combination of a wire basket facing, Miramesh™ GR secondary reinforcement wrap and Miragrid®, geogrid primary soil reinforcement produces a green steepened slope. These systems are cost-effective while providing an aesthetically pleasing structure. The soil reinforcement offers tensile strength to the slope while the facing system provides long-term vegetation growth controlling erosion at the face. The walls can be seeded conventionally, hydro-seeded or sodded.



# Rock Faced Slopes



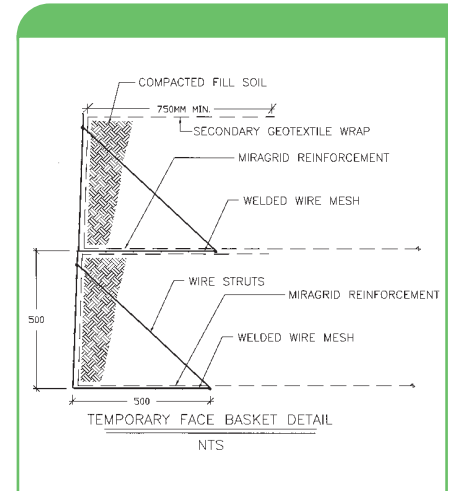
The combination of a wire basket facing, BasXgrid®, biaxial geogrid wrap and Miragrid®, geogrid soil reinforcement produces an aggregate facing. These systems are cost-effective and reliable. Aggregate Faced Systems are best suited for structure geometries that are too steep to support vegetation and for areas like detention ponds where hard armour protection is required.



# Temporary Walls/Slopes



The combination of a wire-basket facing, Armtex non-woven geotextile wrap and Miragrid® soil reinforcement or Geolon® HP and HS High Strength Woven Geotextiles produces a cost effective and reliable temporary wall facing. Temporary walls reinforced with Mirafi® geosynthetics are a valuable tool for construction sites that need to divert traffic, water flow or apply a surcharge to consolidate foundation soils while maintaining the existing surroundings.



# Reinforced Slope and Wall Facing Application Guidelines

## Permanent Retaining Walls and Slopes

- Land Development
- Golf Courses
- Highway/Road Structures
- Headwalls

## Temporary Walls/Slopes

- Forestry
- Mining
- Oil/Gas
- Highway Detours
- Preload Embankments

Soil Face Angle	Vegetated Green Face with Geosynthetic Wrap <sup>1</sup>	Rock Face Slopes with Geosynthetic Wrap <sup>2</sup>	Geotextile Wrapped Face <sup>1,3,5</sup>
Vertical <sup>6</sup>	Miramesh® GR or biaxial geogrid <sup>7</sup> and TRM with seed, sod, sprigs <sup>5</sup> 1.2m wrap-back length Wire face mandatory	Biaxial geogrid <sup>7</sup> wrap 1.0m wrap-back length	Geolon® HP or Non-Woven wrap 1.0m wrap-back length
0.8H - 0.5H : 1V		Biaxial geogrid <sup>7</sup> wrap 1.2m wrap-back length	
0.5H - 1V			
1 - 1.5H : 1.0V	Miramesh® GR or biaxial geogrid <sup>7</sup> and TRM with seed, sod, sprigs 1.2m wrap-back length Wire face optional <sup>4</sup>	Biaxial geogrid <sup>7</sup> wrap 1.2m wrap-back length	Geosynthetic wrap optional
1.5 - 2.0H : 1.0V	Miramesh® GR or biaxial geogrid <sup>7</sup> and TRM with seed, sod, sprigs 1.5m wrap-back length Wire face optional <sup>4</sup>	Not typically required	Not typically required
Minimum Wire Basket Set Back During Construction	25mm (1in) (<0.5H:1V) 150mm (6in) (≥0.5H:1V)	0mm (0in)	0mm (0in)

1. Typically black steel is specified.
2. Typically galvanized steel is specified.
3. Not recommended for permanent applications.
4. Wire baskets can be formed to specified slope face angle.
5. Temporary wood forms can be used instead of wire baskets.
6. Vertical and North facing walls may be difficult to establish and maintain vegetation.
7. Recommended biaxial geogrid to be either AXE or BasXgrid® Geogrid.

### Notes:

\* Custom wire basket configurations available. Please contact your Armtec representative.

\*\* Primary geogrid reinforcement Miragrid® XT high tenacity polyester.



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