

QUOTATION SHEET

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Products Detail

Reno Mattresses

Reno Mattresses are thin flexible cages (less than 500mm thick), made of hexagonal double twisted woven wire mesh. The Mattress is divided into cells by internal diaphragms/partitions positioned at 1 m centres to limit rock fill movement during high flow conditions.

Material of Reno Mattresses

The metal wire is usually with zinc coated which is meet or exceed the requirements of ASTM A475-89, and can either be Galvan (95% Zinc 5% Aluminium Mischmetal Alloy) coated mild steel or Galvan coated with an additional PVC coating if required. Galvan has significantly improved corrosion resistance to zinc in both chemical and physical terms. This technology when applied to steel wire products provides up to about three times greater protection per unit coating mass, than do zinc coatings. PVC coated units are recommended in River or fluvial conditions where abrasive sediments may exist, marine conditions, mining applications, where soil is highly acidic or alkaline or where an extended design life is required.

All the physical and mechanical properties of Reno mattresses meet or exceed the requirements of ASTM A975-97.

Use of Reno Mattresses

Reno mattresses are used for river bank and scour protection, channel linings for erosion control, and embankment stability. They are filled with rock at the project site to form flexible, permeable, monolithic structures to promote rapid growth of natural vegetation. The base section of the Reno mattress is divided into compartments and filled with stones at the project site. With lids secured, Reno mattresses form flexible, permeable, monolithic structures.

Advantages of Reno mattresses:

- 1)Flexibility The woven mesh system has the capability of withstanding unexpected and/or localized stresses due to ground settlements and scour by deflection while maintaining its structural integrity.
- 2)Permeability The stone fill allows the water to seep through the structure while retaining the soil, therefore no additional drainage is required to relieve the hydrostatic pressures.
- 3)Cost Effective, Easy to Build Reno mattress construction does not require skilled labor because they are very easy to build. Standard construction equipment can be used. Structures can be built in stages, if necessary, and baskets can be prefilled and launched to enable the installation under water.

