

Typical Cross Section Drawings

	1.0M	1.0M
	1.5M _{GEO}	TEXTILE 1.0M
	2.0M	1.0M
	2.5M	BACK FILLING 1.0M
	3.0M	1.0M
1.0M Embentment	3.5M	1.0M

Disclaimer:

These are typical cross section drawings and not to be used for construction purpose. Actual drawings might vary as per site conditions, soil nature, load factor and different parameters affecting directly. Kindly contact our design team for further details.

NOTES:

<u>General</u>

All Dimesnsions are in meteres unless otherwise specified.

Material Specification

- Gabions are made with double Twisted hexagonal shaped steel woven wire mesh& Mechanically selvedged, Mesh size 10X12 Wire dia 2.7/3.70mm with Zinc+PVC coating.
- Non woven Geotextile is to be provided as a separator at the rear end of Gabion Wall.

Construction

- The Backfill soil shall be well compacted to density greater than or equal to 95% Modified Proctor value.
- G.I. or M.S. pipe frame work shall be provided for good aesthetic appearance of the Gabion wall.
 Bracing Wire shall be Provided to Control bulging at 0.3C/C along height and length.
- Gabion filling shall be done in three layers, the size of rock shall be 150mm to 250mm. Lacing should be done in single & double looping fashion at 100mm spacing.
- Gabion shall be placed at the locations as indicated in the drawing.
- The front face shall be neatly packed with good facia rocks for the lacing of Gabion wall.
- Gabion being a inherently flexible structure, there will be
 movement and marginal settlements during when subjected
 to heavy loads which can be safely taken by the structure.
- Heavy vehicle movement shall be restricted and not allowed within the distance of 2m from facia of Gabion wall.
- Gabion wall location which will be in direct contact of flowing River shall be protected by scour apron of Gabion mattress size 3mx0.5m(thick) specification shall be same as mentions in material specification (point 1)

Design Considerations**

1. Soil Properties

Soil	C(kN/m²)	Ф (°)	⋎ (kN/m³)
Structural/Backfill	0	30°	18
Foundation Soil	5	25°	18

2. Propertise of Rockfill

Rockfall Unit Weight = 26kN/m³ Porosity of Filled Gabion = 35%

- 3. Load Consideration considered for the design are
- A) Seismic
- B) Static*
- *Standard unit weight has been considered for the backfill in Design.
- 4. 10 kPa load has been considered in design as a live load.