



Retaining Wall Design

A reinforced earth wall will be designed with the geometric characteristics and soil properties that are given below. Design the reinforcements (horizontal and vertical spacings, length and etc). You may use any type of reinforcement (steel bars, geotextile and so on) in design. You are expected to prepare a ~10 min. presentation and a report of 8-10 pages.

Geometric properties:

$H=10\text{m}$, $D=1\text{m}$, $\beta=20^\circ$, $\theta=90^\circ$

Soil Properties:

Soil Name	γ (kN/m ³)	ϕ (°)	c
Reinforced Fill:	19.5	33	0
Retained Fill	18.0	30	10
Foundation Soil	20	39	25

