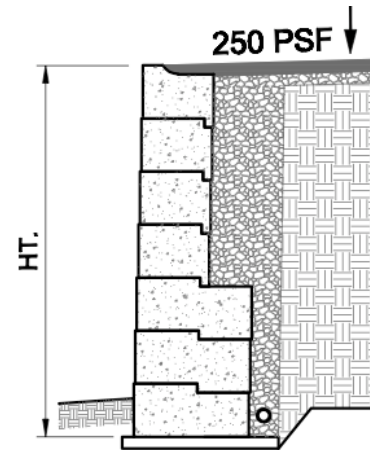




# GRAVITY WALL DESIGN CHARTS

**4 Degree Batter  
No Back Slope  
250 psf Surcharge**



**Wall Elevation**

Soil Type	Wall Ht		1.5'	3.0'	4.5'	6.0'	7.5'	9.0'
<b>34°</b> <i>Sand/Gravel</i>	3.0'	Unit Depth	24	24				
	4.5'		24	24	24			
	6.0'		45	24	24	24		
	7.5'		45	45	24	24	24	
	9.0'		45	45	45	24	24	24
<b>30°</b> <i>Silty Sand</i>	3.0'	Unit Depth	24	24				
	4.5'		45	24	24			
	6.0'		45	45	24	24		
	7.5'		45	45	45	24	24	
<b>28°</b> <i>Silt/Lean Clay</i>	3.0'	Unit Depth	24	24				
	4.5'		45	24	24			
	6.0'		45	45	24	24		
	7.5'		45	45	45	24	24	

The information contained in the charts above were compiled by Big Block, Inc. and represents the product use in the application illustrated to the best of our knowledge. The charts are for estimating purposes and conceptual reference only. Big Block accepts no liability for improper use or actual construction utilizing these charts. A qualified professional engineer with knowledge of actual site conditions and materials should perform specific wall design.

**Notes:**

- 1.Design calculations follow NCMA standards as outlined in Design Manual for Segmental Retaining Walls (2nd Ed).
- 2.Minimum safety factors are 1.5 for sliding, 1.5 for overturning and 2.0 for bearing capacity.
- 3.Global stability analysis has not been addressed in the charts.
- 4.Unit weight of soils is assumed to be 120 pcf.
- 5.The phi angle of the retained and foundation soil is assumed to be the same for chart calculations. See typical base block detail for leveling pad recommendations.
- 6.Wall installations shall follow Big Block guidelines plus any additional requirements of the engineer of record, site specifications and pertinent documents.