# Madera Wall & Morteza Wall













**26 DEGREE SOIL** 

Flat at Top and Bottom of Wall
No Surcharge

	l	- Geogrid
		acogna
6" Min.	0 Dr	 ain Pipe
	Gran	ular Leveling Pad

Reinforced Soil Zone



### **30 DEGREE SOIL** · Flat at Top and Bottom of Wall · No Surcharge



#### **GEOGRID PLACEMENT** · Grid is measured from the face of the wall. <u>8′6″</u> <u>7′0″</u> <u>7′3″</u> <u>6'0"</u> <u>7′3″</u> <u>5′3″</u> <u>6'0"</u> <u>7′3″</u> <u>4'3"</u> <u>4′0″</u> <u>7′3″</u> 6'0". <u>4'0"</u> <u>4'3"</u> 10′0″ Exposed Hgt wo cap 4′0″ 6′0″ 8′0″ Amount Buried 1'0" 1′0″ 6″ 6″ 4.5' 6.5' 9.0' 11.0' Total Hgt wo cap Grid Sq Yd per Ln Ft 0.889 1.528 2.778 4.167 8.00 13.75 25.00 37.50 Grid total depth

## See SRW's "Standard Engineering and How-To-Guide" for more information.

Need help figuring your project? Use our Stone Calculator online at www.borgertproducts.com.

## Geogrid Placement Tables - For walls up to 10' using Madera Block & SRW 5 Series Geogrid

The charts on the previous page are applicable for site soils when the friction angle is 26° - 30° degrees and the moist unit weight is 125 lbs. per cubic foot. That is typical for inorganic clays of low to medium plasticity. Site soils are assumed for the reinforced soil, backfill soil, and foundation soil.

1. Sample designs are to be used for preliminary design only when actual soil, site geometry, and surcharge conditions are conservatively represented by the assumptions of the tables in all situations. A qualified engineer using actual design conditions for the proposed site should perform the final as-built design.

2. Sample designs have been prepared exclusively for the use of SRW 5 Series Geogrid.

**3. MINIMUM FACTORS OF SAFETY:** 1.5 for internal reinforcement pullout and tensile overstress, 1.5 for external sliding, 2.0 for external overturning and bearing capacity. NO provision or analysis included for global stability or seismic design.

**4.** Sample designs require adequate drainage provisions for both the reinforced wall fill and retained backfill.

5. Geogrid must be one continuous piece from the face of the retaining wall block to the back of the reinforced soil mass. No splicing of geogrid. Geogrid must butt together at edges but must not be overlapped. Geogrid must be pulled taught and fastened before backfill is placed.

6. Follow the installation instructions that are supplied with the retaining wall system that you are purchasing. (*Which should include foundation preparation, block alignment, core filling of block, drainage rock placement, backfill placement, and compaction.*)

7. See your local building department for permitting requirements.

8. Each design is to be used up to the indicated height only. When the retaining wall exceeds that height a higher design shall be used.

9. When the retaining wall steps up at the bottom of the wall, bottom geogrid layers should be moved up with the steps and not dropped off until the next layer of geogrid is encountered.

**10.** Light traffic is auto or empty pickup truck loading. Any vehicle traffic or parking loads exceeding light traffic vehicle weights at the top of the retaining wall shall require a special site specific preliminary design.

**11.** If there is a slope at the bottom of the wall, additional embedment depth of the bottom courses and additional geogrid may be required.

**12.** If your site does not fit the above site configurations, call SRW Products at 800-752-9326 for a free site specific preliminary design.

See SRW's "Standard Engineering and How-To-Guide" for more information.