

Figure 1. Minimum Anchor Pattern

Maximum Design Conditions			Anchor Pattern
Shear Stress	Velocity	Wave Height	
<= 6 lbs/ft ²	<= 14 ft/s	6 in.	F
> 6-8 lbs/ft ²	> 14-18 ft/s	12 in.	G
> 8 lbs/ft ²	> 18 ft/s	18 in.	H

Figure 2. Minimum Anchor Type

Soil Type	Anchor Type
Clay-Clay Loam	10 in Wire Staple
Silt Loam - Loam	10 in Wire Staple
Sandy Loam	12 in Wire Staple
Sand / Muck <= 6 in	12in Rebar Staple
Sand / Muck 6-12 in	18 in Rebar Staple
Sand / Muck 12-18 in	24 in Earth Anchor + 12 in Rebar Staple
Sand / Muck > 18 in	36 in Earth Anchor = 18 in Rebar Staple

Figure 3. Anchor Patterns for use with Wire/Rebar Staples

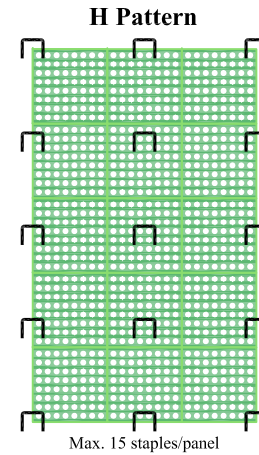
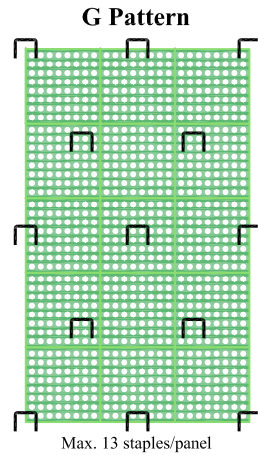
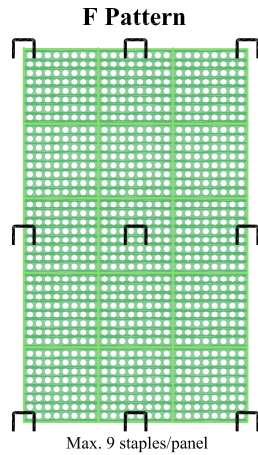
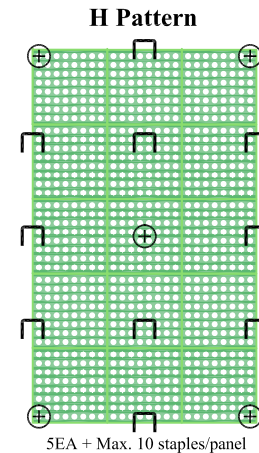
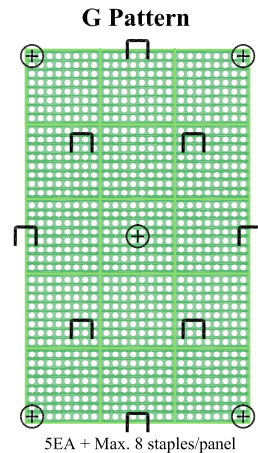
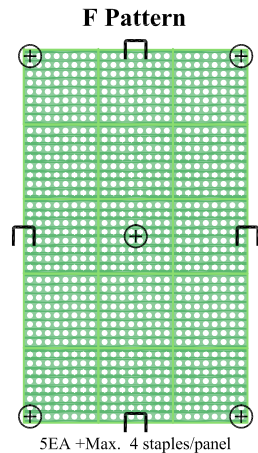


Figure 4. Anchor Patterns for use with Combination of Earth Anchors and Staples



ANCHORING GUIDE

1. When installing ShoreMax mat, the anchor pattern (figure 3 or 4) should be selected based on the expected maximum design conditions (shear stress, velocity, or wave impact) (figure 1).
2. Anchor selection should be based on the soil type and pull-out strength required (figure 2). In soft, highly erodible soils percussion earth anchors may be necessary. Earth anchors can be installed in conjunction with rebar staples (figure 4).
3. When using percussion earth anchors, position anchors in each corner and the center of the panel. Place staples in the appropriate pattern through remainder of mat. Staples can be shared between two adjacent panels.

***Note:** Number of staples used per panel can be reduced by 30-40% when sharing staples between panels.

☐ - Wire/Rebar Staple

⊕ - Percussion Earth Anchor



Disclaimer:

The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.