## INTSTALLATION TECHNIQUES \& GUIDELINES

Estimating Product Requirements

## GENERAL CONCEPTS

In order to get a more accurate estimate of square footage, it is recommended that a measuring wheel or measuring tape. Some facilities may already have accurate bunker measurements from original course designs or past estimating. It is always a good idea to double check measurements where possible.

It is important to mention the concept of waste at this point. Some facilities will choose to install large, complete pieces or segments and not use small trimmings. Other facilities will choose to maximize material in every way. The trade-offs are minimal when considering labor and fastener costs. Some simply prefer to have the fewest seams possible.
Sandtrapper is available in 56 inch and 90 inch rolls. The wider role provides for fewer seams and reduced installation labor, but will have a higher waste factor. The narrow roll allows for tighter controlls on waste and is easier to handle around the course but will provide for more seams.

If no measurements exist or measurements have not been taken in some time, it is recommended to stay organized, number each bunker for each goal, and record dimensions onto paper or in a spreadsheet. Some may even choose to plot or diagram each of their bunkers.

## BASIC MEASURES

For simple bunker designs, the simplest method for determining area is to take two measurements on the ' $X$ ' and ' $Y$ ' axes. Slightly more accurate is to divide the bunker into four quarters and measure each quarter separately.


## ADVANCED MEASURES

One advanced method is to identify the single largest rectangular object in the bunker and measure it, then taking each small contour and measuring in smaller increments. Another method is to identify 100 square foot blocks and tally how many blocks would fit in the bunker.

## OVERACES

For simple bunker designs is recommended to add $10 \%$ to the base measurement. For moderate bunker designs, 13 to $15 \%$ should be added. For more drastic or complex designs, 18 to $20 \%$ should be added. Some of the overage accounts for overlap and some accounts for waste.

## STAPLE REQUIREMENTS

The most common estimate we see used is one staple per square foot. When bunkers have steeper slopes, the density needs to be increased to 1.5 staples per square foot. Some simply order one box ( 1000 staples) for each 56 inch roll ordered.

## REORDERS

It is common for people to simply miss the estimate, especially if one estimates tightly. Not a problem, as we expedite liner and staple reorders to keep your project on track.

