# How to Calculate the Number of UltraBaseSystems ${ }^{\circledR}$ Panels and Amount of Geosynthetic Fabric Needed For Your Project 



## UliraBuseSystems ${ }^{\circ}$

This worksheet is designed to show the different types of UltraBaseSystems (UBS) panels and to show how to layout your desired synthetic grass or paver project. This worksheet will give you an idea of how many UBS panels you will need to order. If you have any questions please don't hesitate to call us at (727) 391-9009 or email sales@ultrabasesystems.com.

## Getting Started:

What you need to know about your project:

- Your desired size
- Your desired shape
- Type of installation (landscape, paver, patio, golf green etc.)


## Choose your Design Sheet:

The size of your project will determine what size design sheet is needed. There are several design sheets that vary by size. Blank design sheets are at the end of this document.

## Identifying the Type of Panel Needed:



Champion Panel
Panel Dimensions:
$30 " \times 30 " \times .75 " / 762 \mathrm{~mm} \times 762 \mathrm{~mm} \times 19.05 \mathrm{~mm}$

Professional Panel
Panel Deminstions:
$30 " \times 30 " \times 1.25^{\prime \prime} / 762 \mathrm{~mm} \times 762 \mathrm{~mm} \times 31.6 \mathrm{~mm}$
** A golf cup hole can be cut in the Professional Panel if the use of a golf cup is required.

## Setting Up Your Design Sheet:

- Position your design sheet vertical with "Ultra Base Design Sheet" at the bottom.
- Starting in the bottom left corner, count up the left side to the desired length and put a mark. (Figure 2.1)
- Starting in the bottom left corner, count along the bottom to the desired width and put a mark. (Figure 2.1)
- Box off the area and the inside will be your workspace. (Figure 2.2)

NOTE: The panels can be cut to form any shape. With that in mind, if your design intersects a partial box, this is acceptable.


Unite Dese Design Sheet
Figure 2.1


Ulitp Desse Design Sheet
Figure 2.2

## Setting Up Your Design Sheet Continued:

- Draw your desired shape inside the workspace (Figure 3.1).

NOTE: When creating your design, try to eliminate the need for extremely small pieces of panels. It is often easier to simply adjust your design to eliminate this situation.

- Square off your shape to nearest full box. (Figure 3.2).
- Count the number of boxes (Figure 3.3) and add it in the chart (Figure 4.4) in the section "Number of Panels".

| Figure Key |
| :---: |
| $\square=$ Workspace |
| $\square=$ Project Shape |
| $\square=$ Square Off Marks |



URtion Base Desigin Sheet
Figure 3.1


Figure 3.2


Figure 3.3 shows the number of panels in each row.

Figures 3.1-3.3 show a paver area where the home owner only had a $20^{\prime} \times 20 x$ space.

## Double Cuts:

Double cutting the panel is key to material and cost savings. A general rule is, if the edge of your project cuts through less than half of the panel, that panel can reused and cut again. See Figures 4.1 and 4.2



Figure 4.1 Can be Double cut


Figure 4.2
Can be double cut if a small corner piece is required.

## Identifying the Number of Panels Needed:

- Count the total number of panels. Put that amount in the "Number of Panels" box.
- Count the panels that can be double cut, divide it by two, then put the amount in the box. (Figure 4.3) NOTE: The panels that can be double cut are marked with an "X"
- Calculate the difference between the "Number of Panels" and the total number of double cuts. This will give you the total number of panels you will need to order.


| Panel | Total |
| :--- | :--- |
| Number of Panels | 60 |
| Double Cuts | 4 |
| Total Amount of Panels Needed | 56 |

Figure 4.4


UMT: Base Design Sheet


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## HOW TO LAYOUT AROUND EXISTING OBJECTS:

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            Key
Existing Object
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Ultro Base Design Mheet





UMTE Base Design Sheet



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This example above will require 106 panels.
Total panels minus amount of panels that can be double cut equals the total number of panels needed. To calculate the number of panels that can be doulbe cut reference page 4.

111-5=106
How to Calculate the amount of Geosynthetic Fabric Needed: This example is calculated for a $25^{\prime} \times 75^{\prime}$ area

Note: Permeable Fabric Rolls 15' wide and Impermeable Fabric Rolls 12 ' wide

## Formulas

Square Feet=Length times Width
Geo Length=Square Feet divided by Geo Width

## Square Feet

Square Feet=25' x 75'
Square Feet=1,875 sq ft

## Geosynthetic Fabric 15'

Geosynthetic Fabric Width $=1,875 / 15$
Geosynthetic Fabric Width $=125$

In this example a $15^{\prime} \times 125^{\prime}$ piece of Geosynthetic Fabric is needed.

## UltraBaseSystems*

## WORKSHEET:

Contact: $\qquad$ Phone: $\qquad$ Email: $\qquad$
Project Name: $\qquad$ Date of Installation: $\qquad$
Project Address: $\qquad$
Desired Size (In Feet): $\qquad$ X $\qquad$
Type of Panel:ChampionProfessional

Installation Type:Indoor$\square$ Outdoor $\square$ Rooftop

Project location (ie: up against an exterior wall, border by sidewalk etc.) $\qquad$

Panel Count:

| Panel | Total |
| :--- | :--- |
| Number of Panels |  |
| Double Cuts |  |
| Total Amount of Panels Needed |  |

Type of Geosynthetic Fabric: $\square$ Permeable $\square$ Impermeable

Size of Geosynthetic Fabric Needed (In Feet): $\qquad$

Additional Comments:

Please send this sheet and your completed design sheet to: sales@UltraBaseSystems.com or Fax: 727 391-9980.

Call 727 391-9009 if you have any questions









