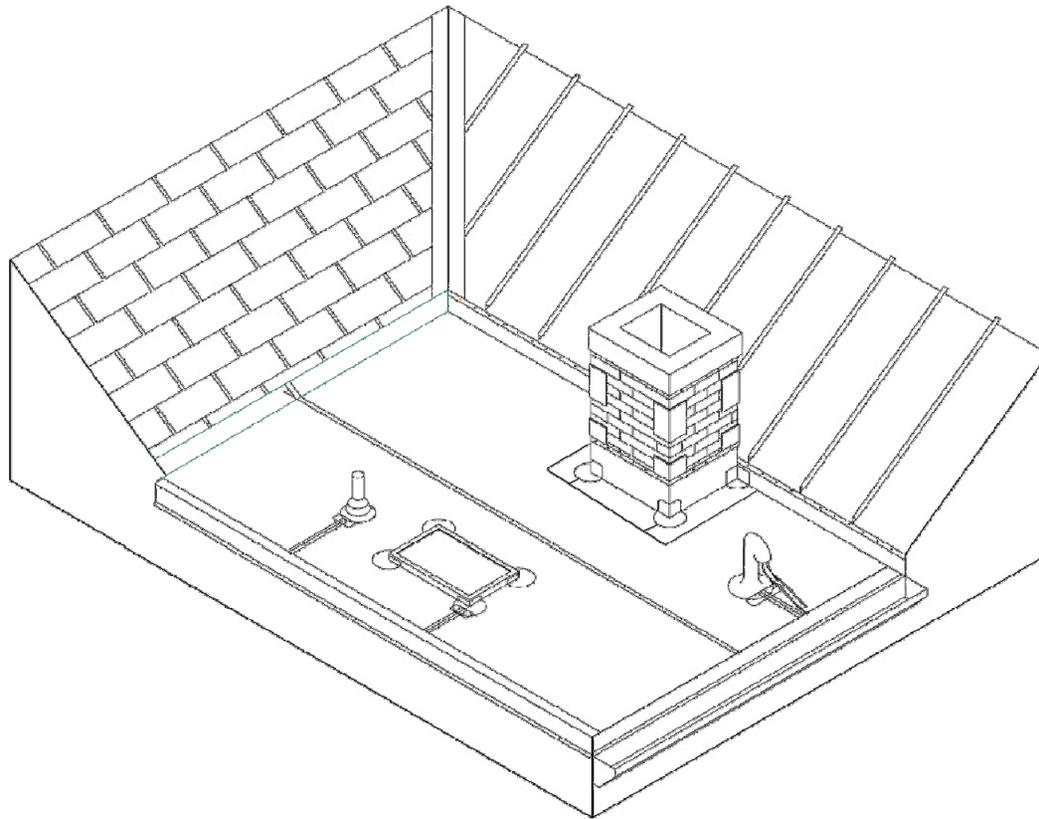


How to Measure a Roof

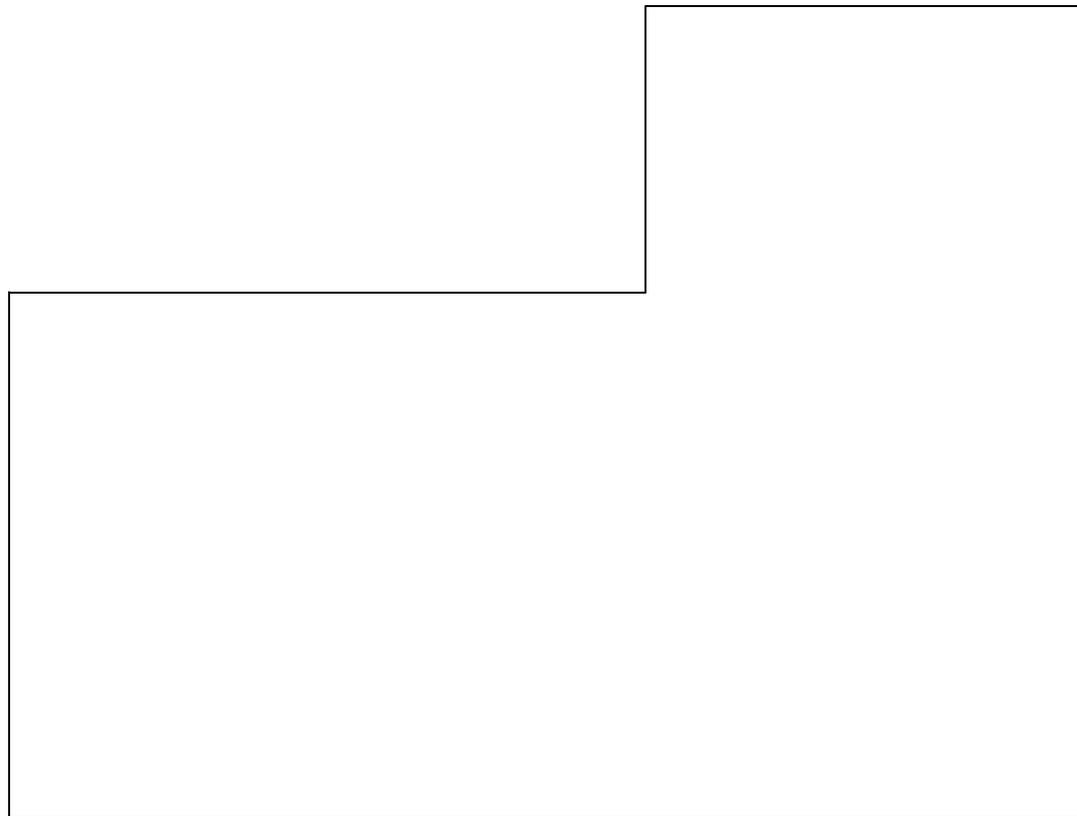
Before you can prepare for a roofing project you need to know exactly what the project is going to entail. This is accomplished by systematically measuring your roof and identifying key features that affect the material requirements of the project. This guide will help you identify important points of measurement that must be known before using the material calculator.



1. ROOF SKETCH

The very first step in calculating the necessary materials for a GenTite roof installation is to make a sketch of your roof area. The roof sketch will provide an organized place to record your measurements and to identify specific details and conditions that affect material requirements for the project.

A blank sketch sheet is included at the end of this guide for your use.



2. CALCULATE THE ROOF AREA

Determine the area of the roof.

To do this, measure the long dimension of the roof, then measure the short dimension of the roof and then multiply the long dimension by the short dimension to determine the square footage of the roof. If the roof is irregularly shaped, or has areas that stick out of the square or rectangle profile then break the roof area down into easy to measure geometric shapes, measure the areas and multiply the cross directional measurements to determine the square footage for each area and then add the square footage values for each area together to determine total roof square footage.

Or just collect the measurements and let the GenTite material calculator do the math for you.

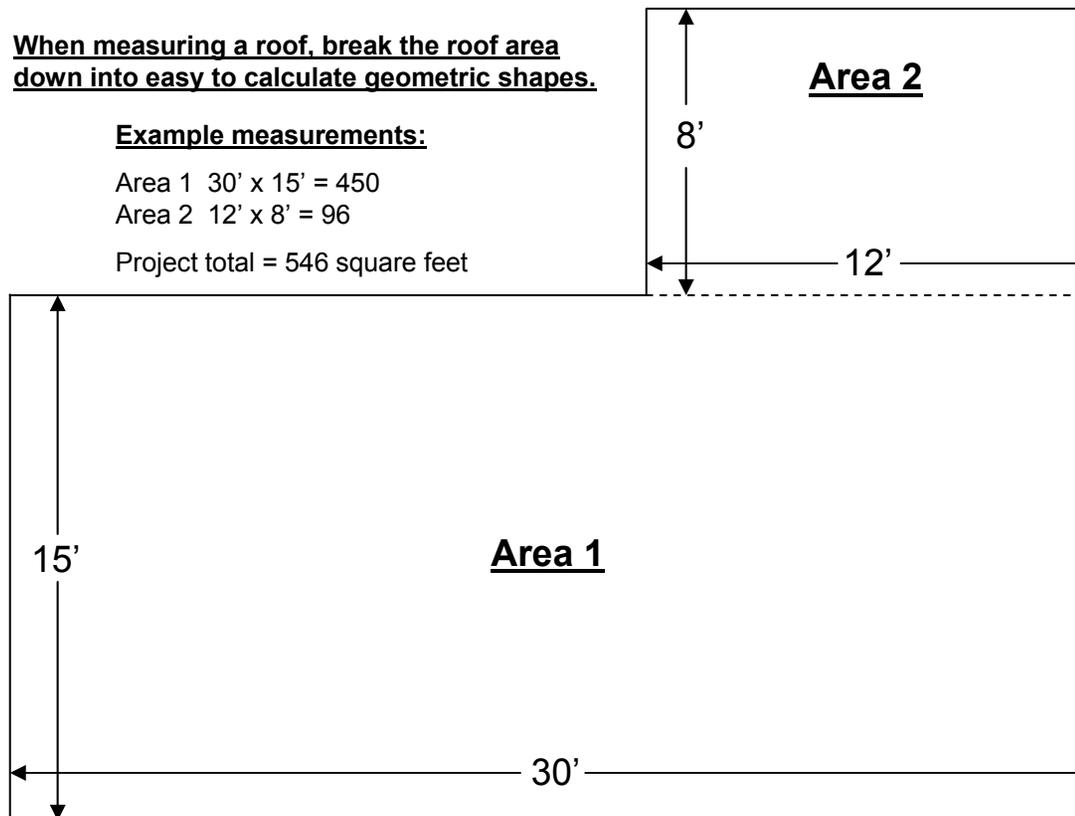
When measuring a roof, break the roof area down into easy to calculate geometric shapes.

Example measurements:

Area 1 30' x 15' = 450

Area 2 12' x 8' = 96

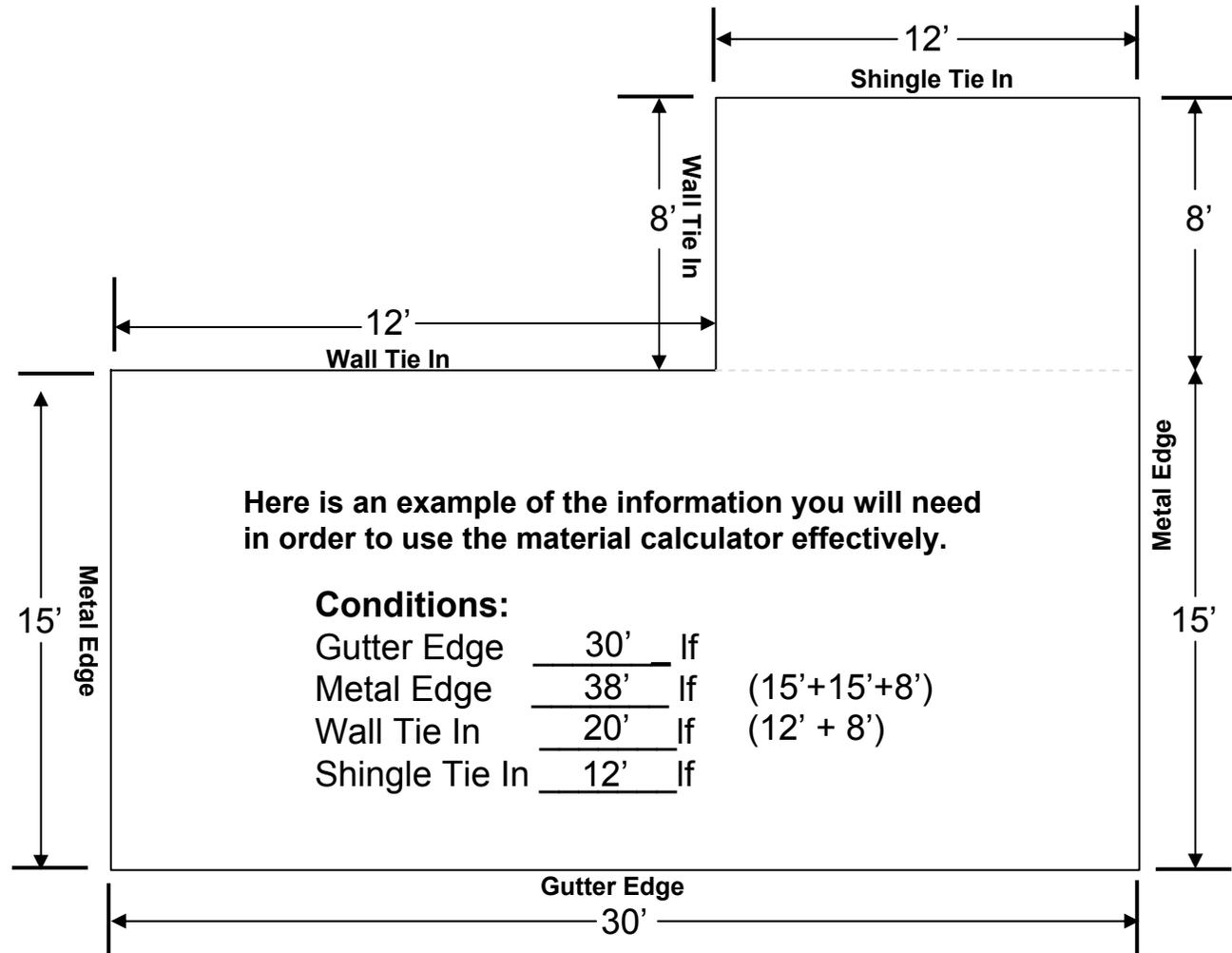
Project total = 546 square feet



3. IDENTIFY AND MEASURE CONDITIONS THAT WILL IMPACT YOUR MATERIAL REQUIREMENTS

Identify and measure edge conditions.

Once you have determined the square footage of the roof area you will need to identify roof edge termination conditions because how you plan to address those conditions will affect the material calculation. Adjustments to the material list are built in for the most common conditions which are: Metal drip edges, gutter edges, tie in at a wall, and tie in at a shingle roof.



4. ROOF PENETRATIONS

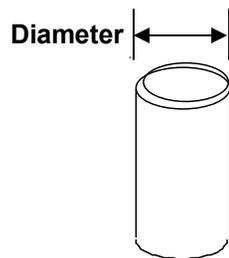
Identify and measure any roof top penetrations.

GenTite offers a full line of flashing materials to address roof top penetrations including pre-molded pipe boots and fully moldable flashing in a 12" wide roll. To use the material calculator to help you determine your material needs you will need to know how many and what kind of penetrations you have on your roof, if any.

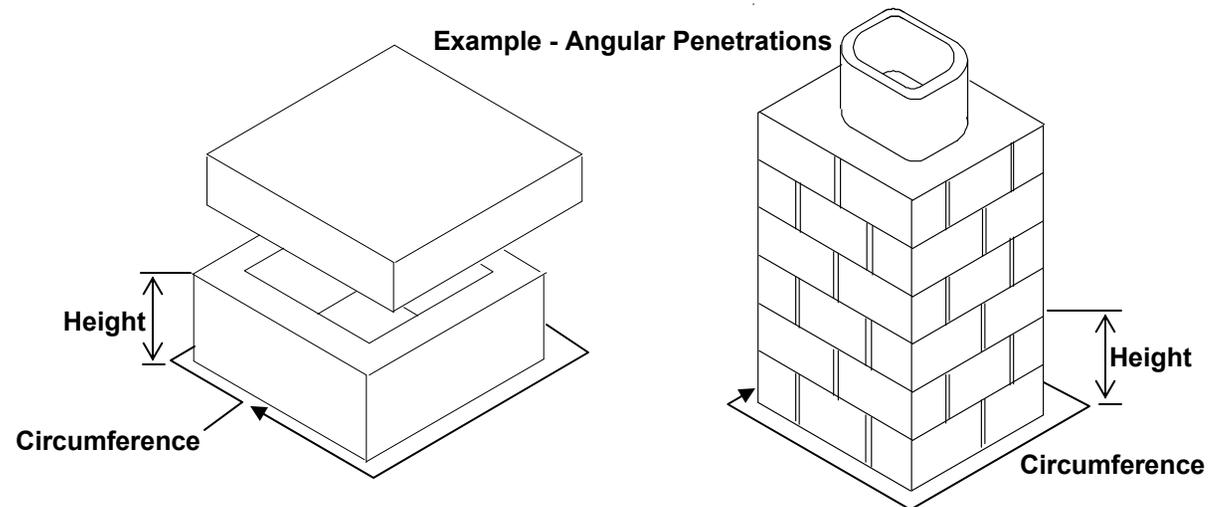
For pipes or round roof penetrations you need to know the penetration diameter(s) and the total number of penetrations. GenFlex Pipe Boots are suitable for use on pipes from 1" to 6" in diameter. Pipe Boots come with a stainless steel clamping band and requires Seam Primer, Waterstop, and Edge Sealant to complete the detail. These products are calculated for you in the material calculator.

For angular penetrations such as roof curbs or chimneys, you will need to know the number of angular penetrations, the combined circumferences in linear feet of ALL angular penetrations, and the intended flashing height. The material calculator will adjust the roof square footage by the amount of membrane required to flash the penetration, add in enough Bonding Adhesive to bond the flashing to the penetration, and add in sufficient seam tape to seam the flashing flange to the roof surface.

Example - Pipe



Example - Angular Penetrations

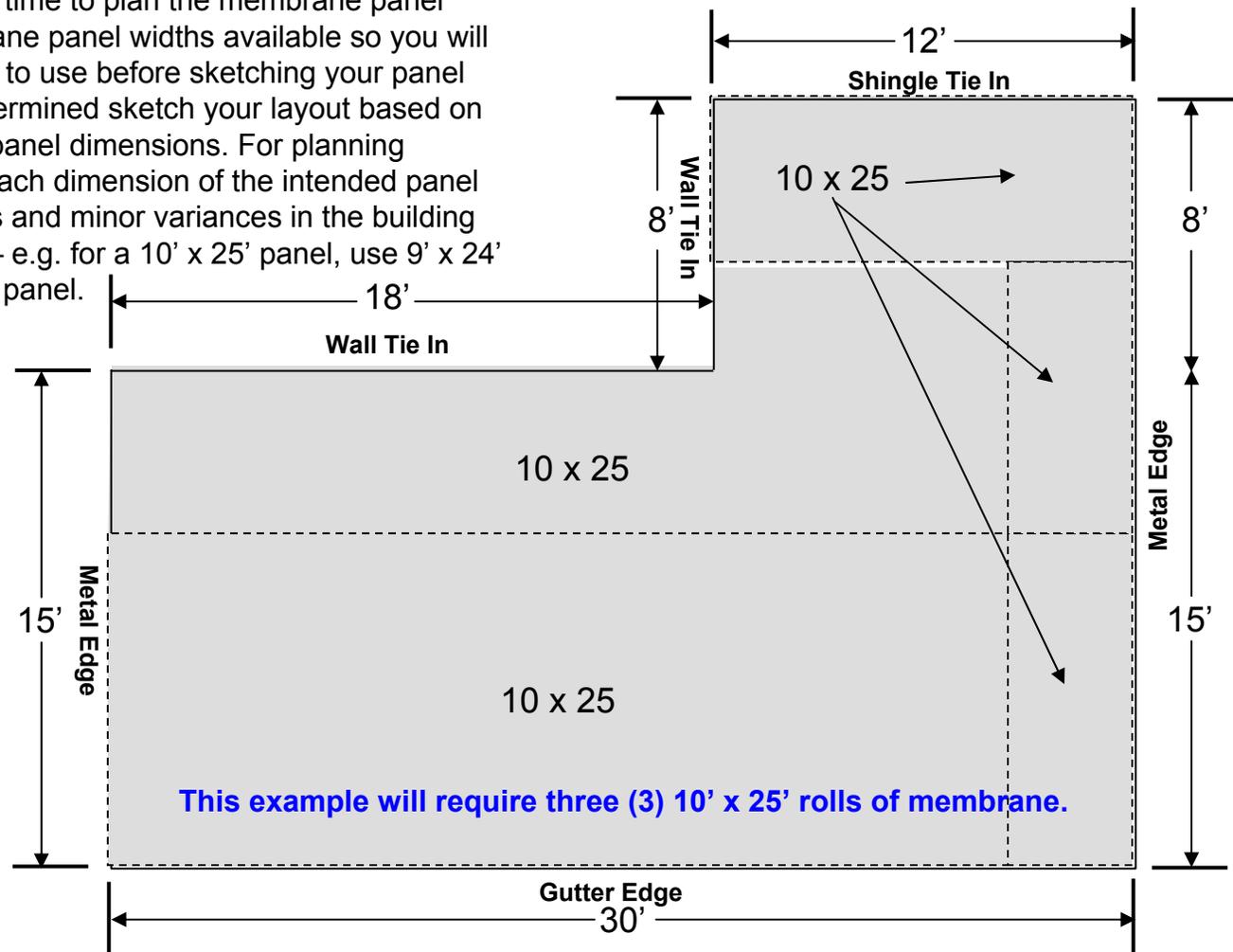


5. ROOFING MEMBRANE LAYOUT PLAN

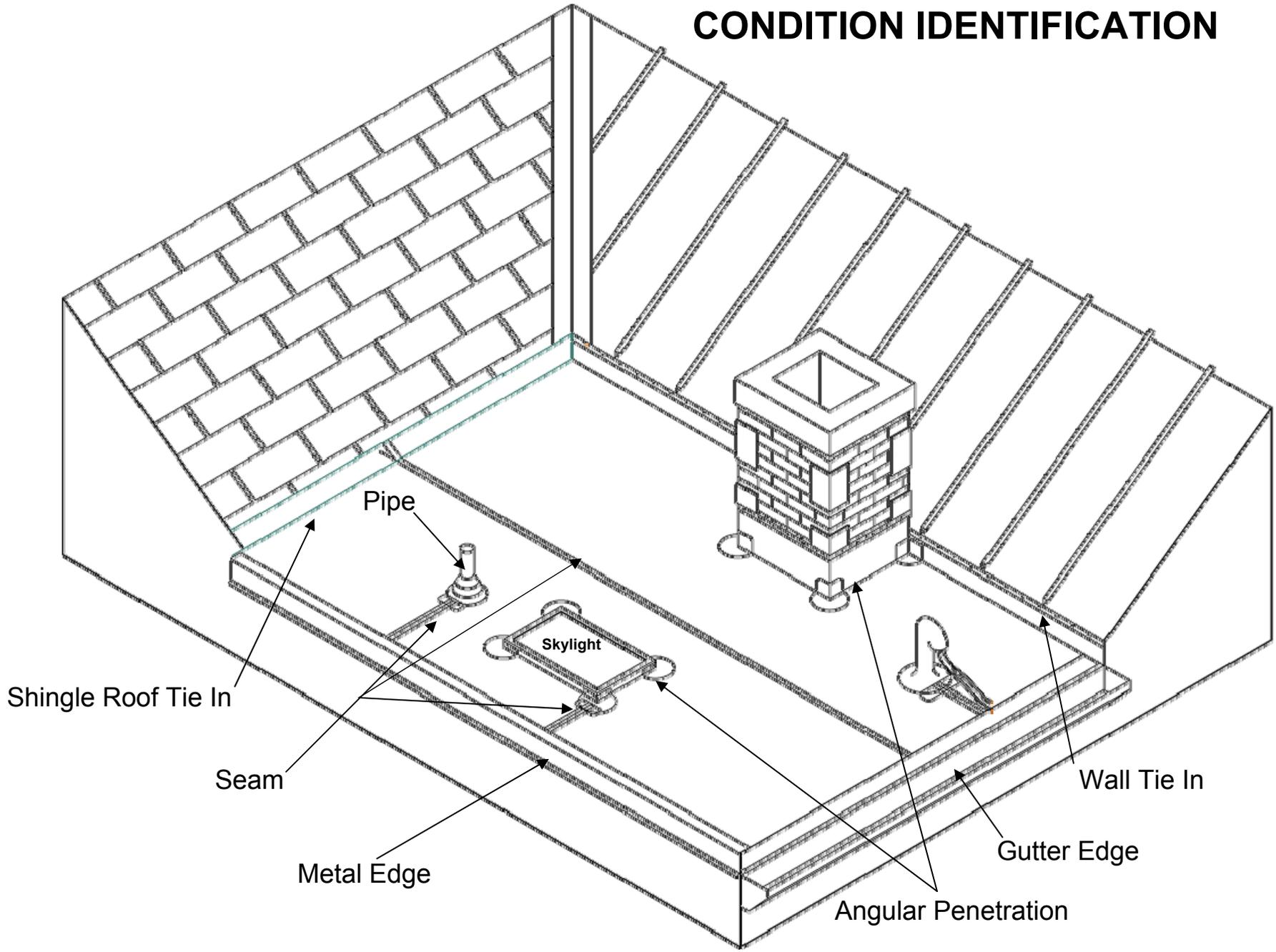
Once you have determined the dimensions of the roof area and the detail conditions and lengths, it is time to plan the membrane panel layout. There are several membrane panel widths available so you will need to decide which panel width to use before sketching your panel layout, once the panel size is determined sketch your layout based on the drawing dimensions and the panel dimensions. For planning purposes, deduct one foot from each dimension of the intended panel size to account for seam overlaps and minor variances in the building construction (out of square, etc) – e.g. for a 10' x 25' panel, use 9' x 24' as the intended coverage for that panel.

By drawing a layout plan you are beginning to determine your material needs.

This step also provides you the anticipated linear feet of seams required to assemble the roof – this information is needed to use the material calculator.



CONDITION IDENTIFICATION



CONDITION DEFINITIONS

(based on drawing on previous page)

Angular Penetration: Any square or rectangular penetration through the roof surface, such as a skylight, raised ventilation fan, etc.

Gutter Edge: A roof edge that will be terminated with a gutter.

Metal Edge: A roof edge that will be terminated with a metal drip edge.

Pipe: Plumbing and some furnaces vent exhaust gases through pipes that penetrate the roof from within the building.

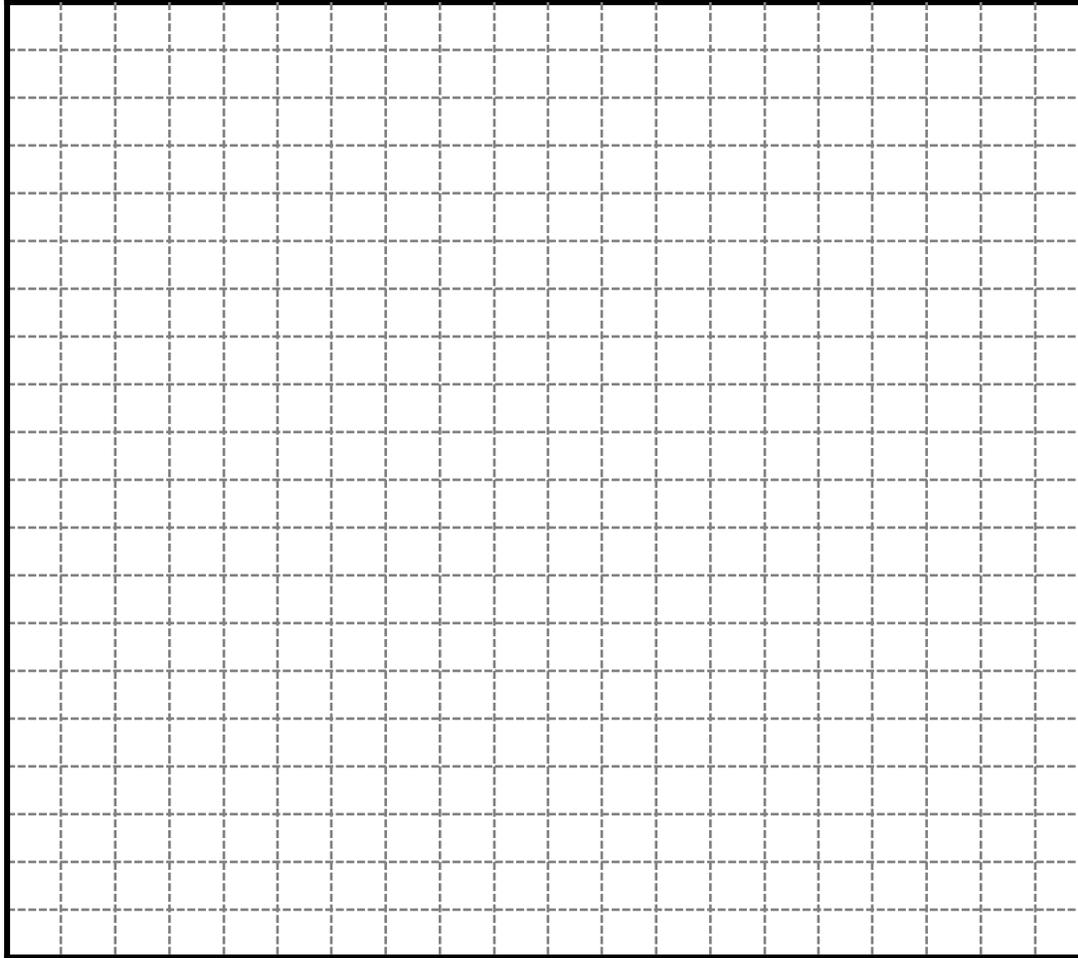
Seam: A joint formed by mating two separate sections of material. Seams can be made or sealed in a variety of ways. Fully Adhered TPO and EPDM installations are seamed using the appropriate Seam Tape. Peel & Stick TPO (SA) has factory-applied adhesive and does not require Tape.

Shingle Roof Tie In: Area of roof that abuts a shingle roof.

Skylight: An opening in a roof that is glazed with a transparent or translucent material; used to admit diffused light to the space below. Typically mounted on a curb of some sort to raise it above the anticipated waterline.

Wall Tie In: Area of roof that abuts a transitional wall.

Roof Sketch:



Roof Penetrations:

Please enter the number or measurements required below.

1. Number of Pipe Penetrations: _____
2. Number of Angular Penetrations ("Curbs): _____
3. Combined Circumference of all Curbs: _____' _____"
4. Flashing Height for the Curbs: _____"
(In case of multiple heights, use the measurement of the tallest curb.)

Measurements:

Roof Area Dimensions:

Please enter the dimensions of your roof area(s) in feet & inches.

1. Length _____' _____" X Width _____' _____"
2. Length _____' _____" X Width _____' _____"
3. Length _____' _____" X Width _____' _____"
4. Length _____' _____" X Width _____' _____"
5. Length _____' _____" X Width _____' _____"
6. Length _____' _____" X Width _____' _____"
7. Length _____' _____" X Width _____' _____"
8. Length _____' _____" X Width _____' _____"

Flashing Conditions:

Please enter the length of any applicable roof edge conditions listed below. Round up to the nearest whole number, when necessary.

1. Metal Edge: _____'
2. Gutter Edge: _____'
3. Shingle Tie In: _____'
4. Wall Tie In: _____'
5. Field Seam: _____'