

MetalRoofingDIY.com

P.O. Box 316 Three Rivers MI 49093 P: 1.888.273.6202 F: 269.278.1606 Billing@MetalRoofingDIY.com

Measuring Guide

1. Introduction
 - Welcome!
 - Safety
 - What You'll Need
2. Learning the Parts of Your Roof
 - Basic Roof Terms:
 - Eave
 - Gable-End/Rake
 - End-Wall
 - Valley
 - Ridge & Hip
 - Dormer
 - Slope
 - Slope Factor
3. Measuring Your Roof
 - Roof Top Measurement Method
 - "Slope Factor" Measurement Method
4. Inspecting Your Roof
5. Final Steps
 - Forwarding Your Information
 - Customer Support and Guarantee
6. Worksheets
 - Fax Cover Sheet
 - Roof Drawing Worksheet
 - Roof Overview Worksheet

Introduction

Welcome!

Our approach to the Do-It-Yourself market is focused on providing quality metal roofing kits to homeowners nationwide. Through clear and easily accessible instruction, we are successfully empowering homeowners with the ability to install a new metal roof at a fraction of the contractor installed cost.

Metal Roofing DIY is committed to making your new metal roof a success. Every aspect of the measuring and installation process are available in a downloadable format to provide you with the information you need to get the job done. DIY backs every order with a 100% Customer Support Guarantee and offers additional support through email, online message boards, and video instruction. Still stuck? Our Technical Support Team is standing by to provide you with live one-on-one phone support during regular business hours.

Safety

First and foremost, be careful! Working on any roof can be a dangerous situation. Please don't take chances, serious accidents can happen. We suggest using a personal fall arrest system at all times while working on or measuring your roof. A personal fall arrest system consists of a roof anchor tie off point, an approved safety line, a shock absorbing lanyard and a full body harness. High quality personal fall arrest kits can be purchased at most home improvement centers.

What You'll Need

It always helps to have everything you need before starting any project. Here is a list of the basic items you will need in order to get accurate measurements of your roof:

- 1 - Metal Roofing DIY Measuring Guide
- 2 - Tape Measure
- 3 - Pencil
- 4 - Clipboard (Optional)
- 5 - Pitch Finder (Slope gauges are very inexpensive and can be purchased at most Home Improvement Centers)
- 6 - Personal Fall Arrest System
- 7 - Measuring Partner (Optional)

TIP: While a Measuring Partner is not required it will make measuring your roof much easier. If you are not able to find someone to help take measurements try getting a wind-up construction style Tape Measure that has a cleated clip on the end of the tape. By hooking the cleated clip around the end of a shingle you can easily walk out the measurement with only one person.

Learning the Parts of Your Roof

Basic Roof Terms

While some of you reading this may already be familiar with the different sections of your roof many of you may not. Either way, we'll go over everything just to make sure we're all on the same page before we get up on the roof.

The most important thing here is to be aware of what you are measuring! This will help you establish an accurate roof drawing that is labeled with the correct measurements.

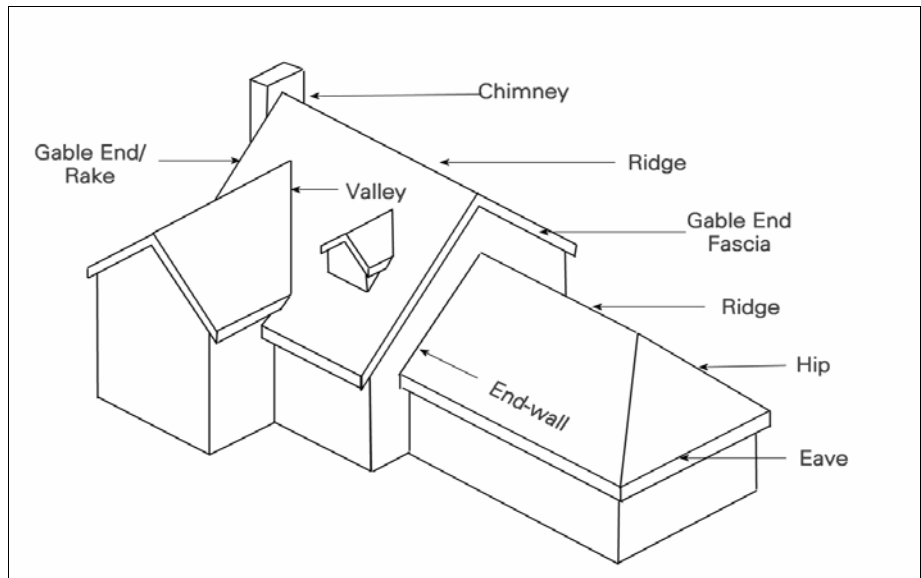


Diagram 1: The above diagram identifies the parts of your roof that you will need to become familiar with to accurately measure for your new metal roof.

TIP: If you are just getting to know the parts of your roof try walking around your house to see if you can identify everything in the diagram above. By doing this from the ground you will be able to familiarize yourself with the areas to be measured before you actually start walking on the roof.

Eave

This is the roof edge that is parallel to the ground and is considered the “low edge” of the roof. This is the area where water ‘runs off’ your roof.

Gable End/Rake

This is the edge located at the end of your roof. It runs at an angle from the eave to the ridge and usually forms a triangle.

End-wall

This is where the roof meets a wall or vertical roof section. This is an important ‘flashing detail’ area during installation.

Valley

When two roof sections meet at a dip the juncture is called a valley. Valleys are very important because they have the largest amount of water passing through them.

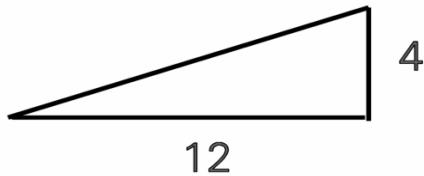
Ridge & Hip

When two roof sections meet at the peak of your roof the area is called a ridge. When the juncture of the two sections meet at an angle traveling up the roof the area is called a hip. Often the finishing touches on these areas are the final part of the installation.

Dormer

A dormer is a structure that extends out of the roof surface. Dormers usually have two roof sections joined at the top by a ridge and the bottom by two valleys.

Slope



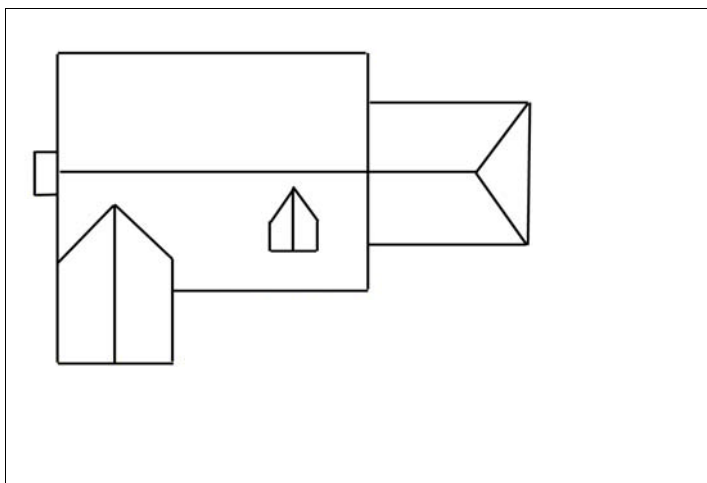
Slope refers to the angle of your roof. A roof with a slope of 4/12 would refer to a 4” vertical rise and a 12” horizontal run. You can easily determine the slope of your roof by using a slope gauge. Slope gauges are very inexpensive and can be purchased at most Home Improvement Centers.

Slope Factor

This is a number that allows you to adjust the horizontal measure to get the actual surface measure. For example, if you have a roof section that measures 10’x10’ on the ground, and the slope is 12/12, then you multiply the horizontal area (10’x10’ = 100 sqft) by the slope factor (1.414 for slope of 12/12) to get the surface area of 141 sqft. This method is particularly useful if your roof is too steep to safely traverse to measure and allows you to get an accurate measurement from the ground. Later in this guide you will find a table of slope factors for your use.

Measuring Your Roof

This section is broken into two sections in order to outline both the “Roof Top Method” and “Slope Factor Method” of measuring your roof. Keep in mind that the shingles and underlayment material you will need to cover the roof are measured in square feet, while all trim pieces (any straight section of material covering an edge or other linear area) are measured by total length.



TIP: Before getting on your roof it is helpful to make a roof drawing which you can quickly and easily label while taking measurements. Imagine yourself as a bird looking down on your home. Draw a picture of your roof as if you were looking straight down on it.

Diagram 2: The above diagram shows a sample roof drawing. This can easily be labelled once you’re on your roof.

Measuring the Square Feet of Your Roof

Metal Roofing DIY suggests getting up on your roof to in order to take the most accurate measurements. However, if your roof is too steep to get on without a personal arrest system you can measure it from the ground utilizing the “Slope Factor” method.

Roof Top Measurement Method

If you are performing a Roof Top Measurement simply write the measurements on the roof drawing you have prepared. Be sure to measure all Eave Edges, Gable Ends, Roof-to-Wall Intersections, Valleys, Ridges, and Hips.

“Slope Factor” Method

This method can easily be used to find your measurements if your roof is too steep to get on without a personal arrest system. To do this take the horizontal projection of the roof onto the ground, adjust the area by the “Slope Factor” and you will have your total surface area. Follow these instructions when using the “Slope Factor” Method:

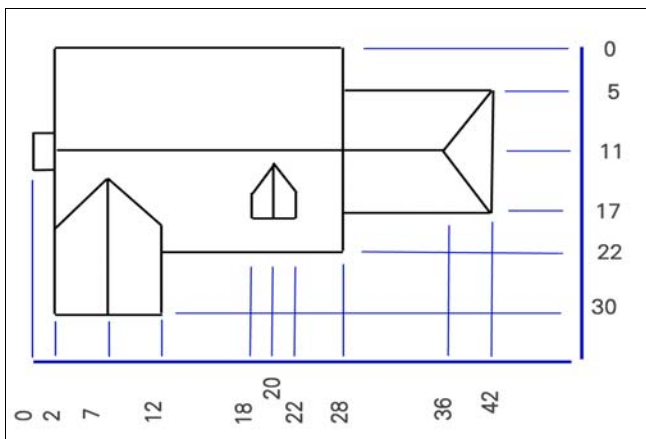


Diagram 3: The above diagram shows a sample roof drawing utilizing the “Slope Factor” Method. Notice the “zero” points in the top-right and bottom-left corners.

SLOPE	FACTOR
3-12	1.03
4-12	1.05
5-12	1.08
6-12	1.12
8-12	1.20
10-12	1.30
12-12	1.41
14-12	1.54
16-12	1.67
18-12	1.80
20-12	1.94

Diagram 4: The above chart shows the multiplier for different slopes when using the “Slope Factor” Method.

Designate a corner as the “zero” point (for example the left rear corner of the house), and establish two baselines perpendicular to each other.

Measure each roof feature along the baseline, marking it on your drawing. Do this on the perpendicular baseline as well, and you will have created a grid with every roofing feature marked on it.

Once you’ve finished your drawing and measurement, you will note that your roof will most likely be split up into various rectangles and triangles. To obtain the amount of material needed to cover a rectangle, you multiply the horizontal width by the horizontal length, which gives you the area projected onto the ground. You then multiply it by the slope factor to get the surface area of the rectangle.

For triangular sections, the process is similar. You multiply the horizontal length (the base of the triangle) by the height (the perpendicular line from the base to the opposite point of the triangle) and then divide by two. Now that you’ve got the horizontal projection, you multiply by the slope factor to get the surface area of the triangle.

Note: To simplify the measuring process, all waste factors are calculated either by a member of our Customer Support Team or by our automatic online project estimator (available after June 15th, 2005).

Inspecting Your Roof

While measuring your roof you will need to inspect the entire area of your roof for any deteriorated wood decking or other problems that will require attention during the installation of your new roof.

In addition to the general roof area, you will also need to inspect any roof accessories up on your roof. Accessories would include items such as skylights, vents, plumbing, and stacks. Also, be sure to carefully examine the condition of any chimney or wall that adjoins to your roof. You will need to address all of these things and get them in watertight shape before installing your new metal roof.

Final Steps

Forwarding Your Information

After you have safely completed your roof drawing and measurements you can forward us your information by one of the following methods:

Fax: 269.278.1606
Email: Sales@MetalRoofingDIY.com
U.S. Postal Service: P.O. Box 316, Three Rivers, MI 49093

Once we receive your information we will calculate all the materials needed for your project and then provide you with a price estimate for your home. Again, make sure to document the slope of your roof on the information you forward to us.

We will need you to also include photos of your existing roof to help us determine your exact requirements. A few overview photographs should give us the extra information we need.

The building code in many states allows homeowner's to re-roof their home by overlaying a metal roof on their existing asphalt shingle roof. If this situation applies to you, it is recommended that you determine the thickness of your existing roofing material so that we can ensure you receive the proper length of nails for the installation of your new roof.

Customer Support and Guarantee

Remember, Metal Roofing DIY is committed to making your new metal roof a success. Every aspect of the measuring and installation process are available in a downloadable format to provide you with the information you need to get the job done. DIY backs every order with a 100% Customer Support Guarantee and offers additional support via email, online message boards, and video instruction. Still stuck? Our Technical Support Team is standing by to provide customers with live one-on-one phone support during regular business hours.

If you have any questions regarding measuring your roof please e-mail us at Sales@MetalRoofingDIY.com or call our Customer Support Team toll-free at 888.273.6202.

“Our goal is to make your DIY metal roofing project a success!”

MetalRoofingDIY.com

P.O. Box 316 Three Rivers MI 49093 P: 1.888.273.6202 F: 269.278.1606 Billing@MetalRoofingDIY.com

SUBJECT:

Date:

Time:

To: Metal Roofing DIY
ATTN: Sales

From:

Fax: 269-278-1606

Fax:

Phone: 888.273.6202

Phone:

email: Sales@MetalRoofingDIY.com

email:

Pages (including cover page):

Comments:

Name:	Address:
Email:	

Roof Drawing Worksheet

Overview Worksheet

Please fill in the total linear feet measured for each of the following items:

Eave:	<input type="text"/> ft	Gable-End:	<input type="text"/> ft
End-Wall:	<input type="text"/> ft	Valley:	<input type="text"/> ft
Ridge:	<input type="text"/> ft	Hip:	<input type="text"/> ft

Please fill in a general description of the quality/appearance for each of the following items:

Decking:

Skylights:

Vents:

Conduits/Stacks:

Other Notes: