

The Garland Company, Inc.

Roof Asset Management Program



CGP Travel Information Center

Prepared By
Michael MacGregor

Prepared For
Ray Riedinger

Table of Contents

Tourist Information Center / Facility Summary3

Tourist Information Center / Tile Roof / Construction Details4

Tourist Information Center / Tile Roof / Inspection: Nov 19, 20155

Tourist Information Center / Tile Roof / Solution: Dec 1, 20158

Tourist Information Center / Tile Roof / Photo Report: Dec 7, 2015 - Examples of Terra Cotta Metal9

Eagleview Package File - 12666249.PDF11



Facility Summary

Client: City of Grand Prairie

Facility: Tourist Information Center

Facility Data

Address 1	2170 N Belt Line Rd.
Address 2	-
City	Grand Prairie
State	Texas
ZIP	75050
Type of Facility	Municipal
Square Footage	5,700
Contact Person	Ray Riedinger

Asset Information

Name	Date Installed	Square Footage	Roof Access
Tile Roof	NA	6,500	Ladder Needed



Construction Details

Client: City of Grand Prairie

Facility: Tourist Information Center

Roof Section: Tile Roof

Information			
Year Installed	NA	Square Footage	6,500
Slope Dimension	5:12	Eave Height	12'
Roof Access	Ladder Needed	System Type	Clay Roof Tiles



Inspection Report

Client: City of Grand Prairie

Facility: Tourist Information Center

Report Date: 11/19/2015

Roof Section: Tile Roof

Inspection Information

Inspection Date	11/19/2015	Core Data	No
Inspection Type	Visual Inspection	Leakage	No
Deck Conditions	-		

Flashing Conditions

Perimeter	-	Wall	-
Projections	-	Counterflashing	-

Miscellaneous Details

Reglets	-	Debris	No
Control Expansion Joints	-	Ponding Water	-
Parapet Wall	-	Coping Joints	-

Overall

Rating	Failed
Condition	Tile Roof has failed and replacement of cracked tiles is being completed on regular basis. Replacing tile is not currently keeping the interior water-tight.



Photo 1

Roofing section with many cracked and broken tiles. Many of these have been repaired the past couple of years and continue to leak on the interior.



Photo 2

Roofing section with many cracked and broken tiles. Many of these have been repaired the past couple of years and continue to leak on the interior.



Photo 3

Upper section with many missing tiles.



Photo 4



Photo 5

Wood Decking as roofing substrate.



Photo 6



Photo 7



Photo 8




Solution Options

Client: City of Grand Prairie

Facility: Tourist Information Center

Roof Section: Tile Roof

Replace Options

Solution Option:	Replace 	Action Year:	2015
Square Footage:	6,500	Expected Life Years:	30
Budget:	\$115,000.00		

R-Mer Span Standing Seam Roof System

This solution involves installing a new retrofit framing system over the existing roof system. The new roof system includes perimeter and penetration flashings with a 30-year watertight roof system warranty and typically 50-years of performance. The current detail of R-Mer Span is included in this proposal.

The process using this product is as follows:

1. Remove existing Clay Tile roof and install Waterproofing membrane at eaves and valleys.
2. Install R-Mer Span** structural standing seam roof system.

**R-Mer Span is a structural standing seam roof system. R-Mer Span consists of a unique profile containing mesas throughout the panel to minimize "oil canning". The 2 3/8" high vertical seam makes R-Mer Span both aesthetically pleasing as well as the ideal roof system that is tested to withstand the most severe weather conditions. The heavy duty one piece clip allows for unlimited expansion and contraction. R-Mer Span can be used on slopes down to 1/4" per foot for both retrofit and/or new construction.



Photo Report

Client: City of Grand Prairie

Facility: Tourist Information Center

Roof Section: Tile Roof

Report Date: 12/07/2015

Title: Examples of Terra Cotta Metal

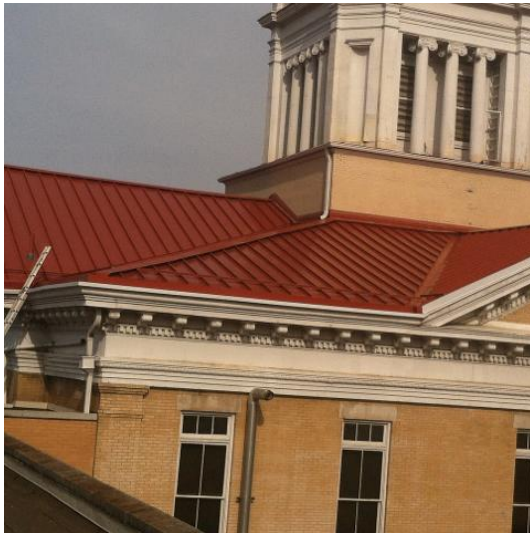


Photo 1

Example of Terra Cotta Standing Seam Metal Roof.



Photo 2

Example of Roof Valley.



Photo 3

Example of Terra Cotta Roof.



ROOF MEASUREMENT REPORT

2170 N Belt Line Rd., Grand Prairie, TX 75050

Report Contents



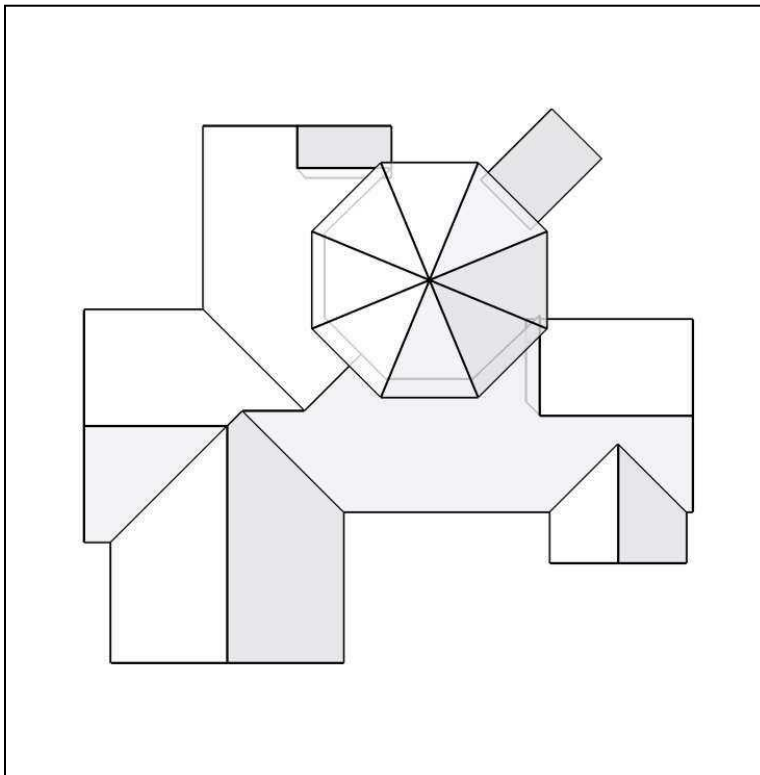
Images	1
Length Diagram.....	4
Pitch Diagram.....	5
Area Diagram	6
Penetrations Diagram	7
Notes Diagram	8
Property Info.....	9
Report Summary.....	10

Report Details

Date:	12/01/2015
Report:	12666249

Roof Details

Total Area:	5,698 sq ft
Total Roof Facets:	19
Predominant Pitch:	5/12
Number of Stories:	>1
Total Ridges/Hips:	292 ft
Total Valleys:	101 ft
Total Rakes:	32 ft
Total Eaves:	296 ft
Total Penetrations:	10
Total Penetrations Perimeter:	46 ft
Total Penetrations Area:	14 sq ft



In this 3D model, facets appear as semi-transparent to reveal overhangs.

Contact Us

Contact:	Michael MacGregor
Company:	The Garland Company Inc.
Address:	3800 East 91st St Cleveland OH 44105
Phone:	216-641-7500

Measurements provided by www.eagleview.com



Certified Accurate

www.eagleview.com/Guarantee.aspx

This document is provided under License by EagleView Technologies to the requestor for their Internal Use Only subject to the terms and conditions previously agreed to by the requestor when they registered for use of EagleView Technologies Services. It remains the property of EagleView Technologies and may be reproduced and distributed only within the requestor's company. Any reproduction or distribution to anyone outside of the requestor's company without EagleView's prior written permission is strictly prohibited. All aspects and handling of this report are subject to the Terms and Conditions previously agreed to by the requestor.

Copyright ©2008-2015 EagleView Technologies, Inc. – All Rights Reserved– Covered by U.S. Patent Nos. 8,078,436; 8,145,578; 8,170,840; 8,209,152; 8,515,125. Other Patents Pending.



REPORT IMAGES

The following aerial images show different angles of this structure for your reference.



Top View

REPORT IMAGES



North View



East View

REPORT IMAGES



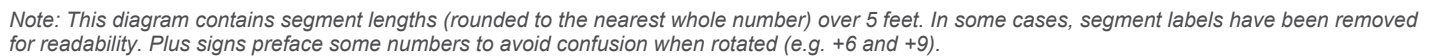
South View



West View



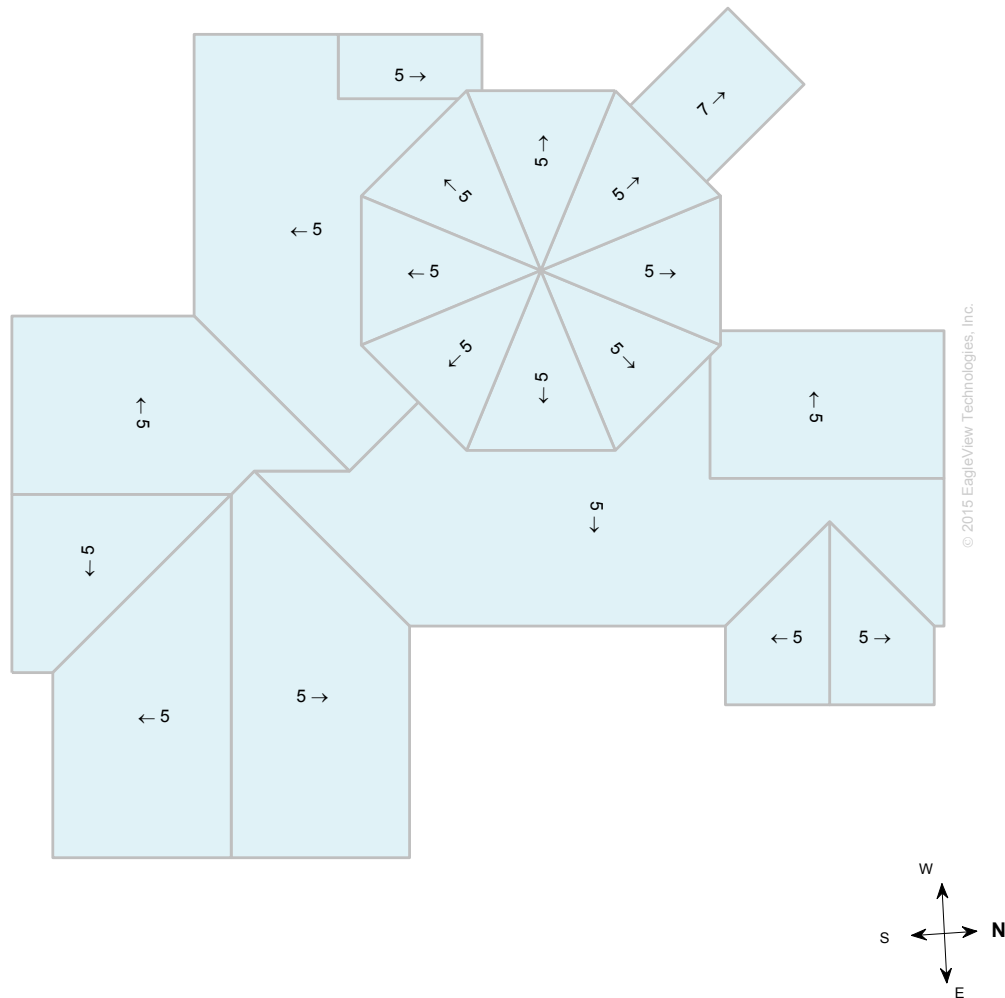
Total Line Lengths: Ridges = 113 ft Valleys = 101 ft Flashing = 36 ft Eaves = 296 ft
 Hips = 179 ft Rakes = 32 ft Step flashing = 269 ft Parapets = 0 ft



Copyright ©2008-2015 EagleView Technologies, Inc. – All Rights Reserved – Covered by U.S. Patent Nos. 8,078,436; 8,145,578; 8,170,840; 8,209,152; 8,515,125. Other Patents Pending.

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 5/12.



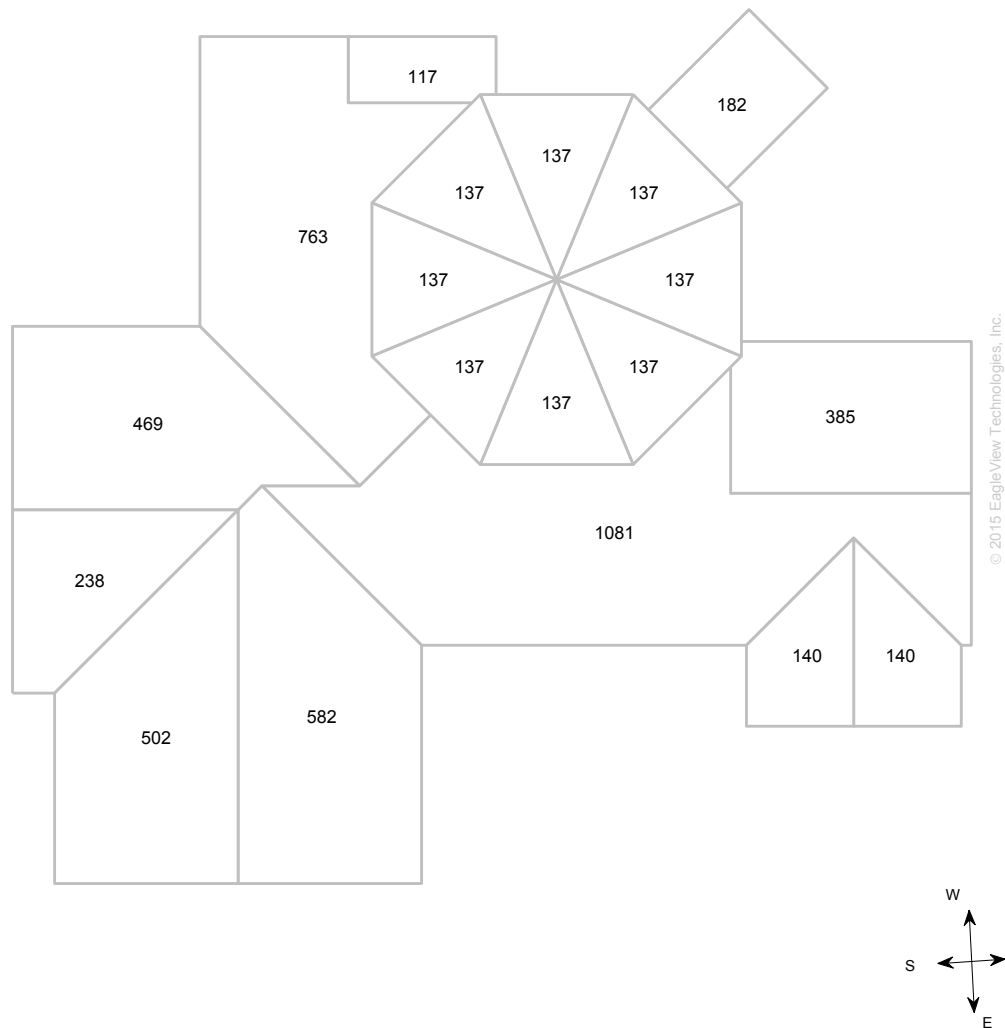
Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).

This document is provided under License by EagleView Technologies to the requestor for their Internal Use Only subject to the terms and conditions previously agreed to by the requestor when they registered for use of EagleView Technologies Services. It remains the property of EagleView Technologies and may be reproduced and distributed only within the requestor's company. Any reproduction or distribution to anyone outside of the requestor's company without EagleView's prior written permission is strictly prohibited. All aspects and handling of this report are subject to the Terms and Conditions previously agreed to by the requestor.

Copyright ©2008-2015 EagleView Technologies, Inc. – All Rights Reserved – Covered by U.S. Patent Nos. 8,078,436; 8,145,578; 8,170,840; 8,209,152; 8,515,125. Other Patents Pending.

AREA DIAGRAM

Total Area = 5,698 sq ft, with 19 facets.



Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

PENETRATIONS

Penetrations Notes Diagram

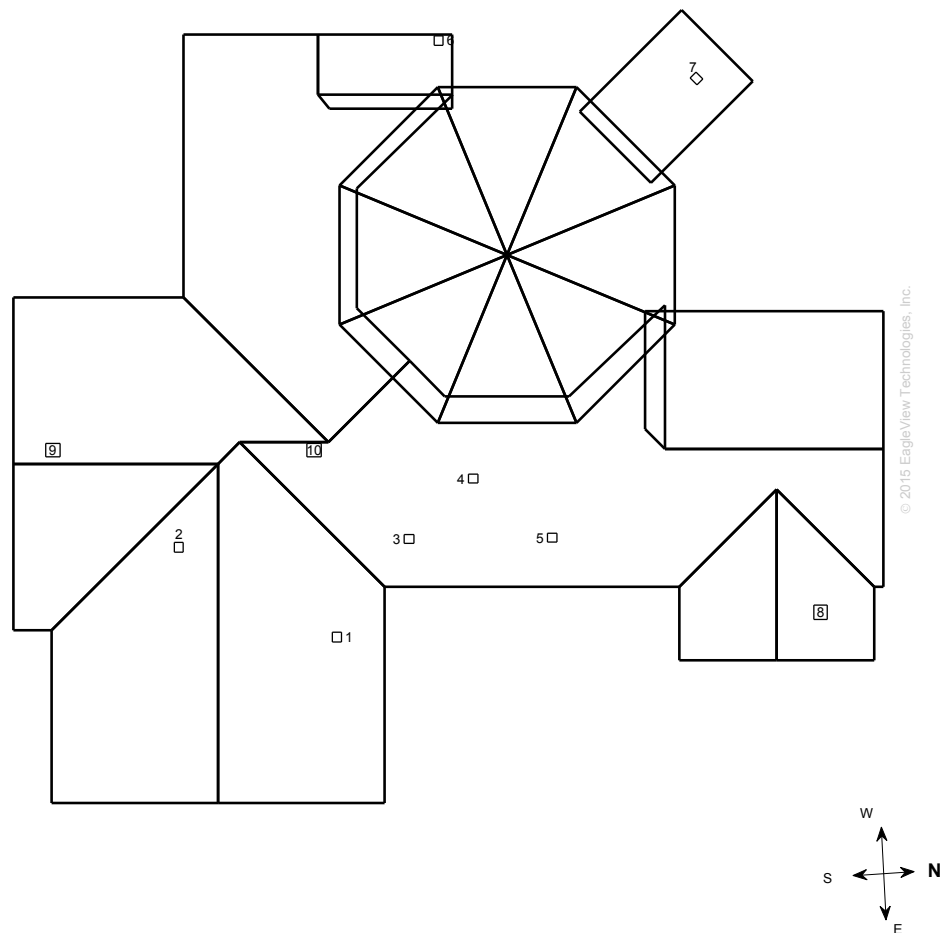
Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 10

Total Penetrations Perimeter = 46 ft

Total Penetrations Area: 14 sq ft

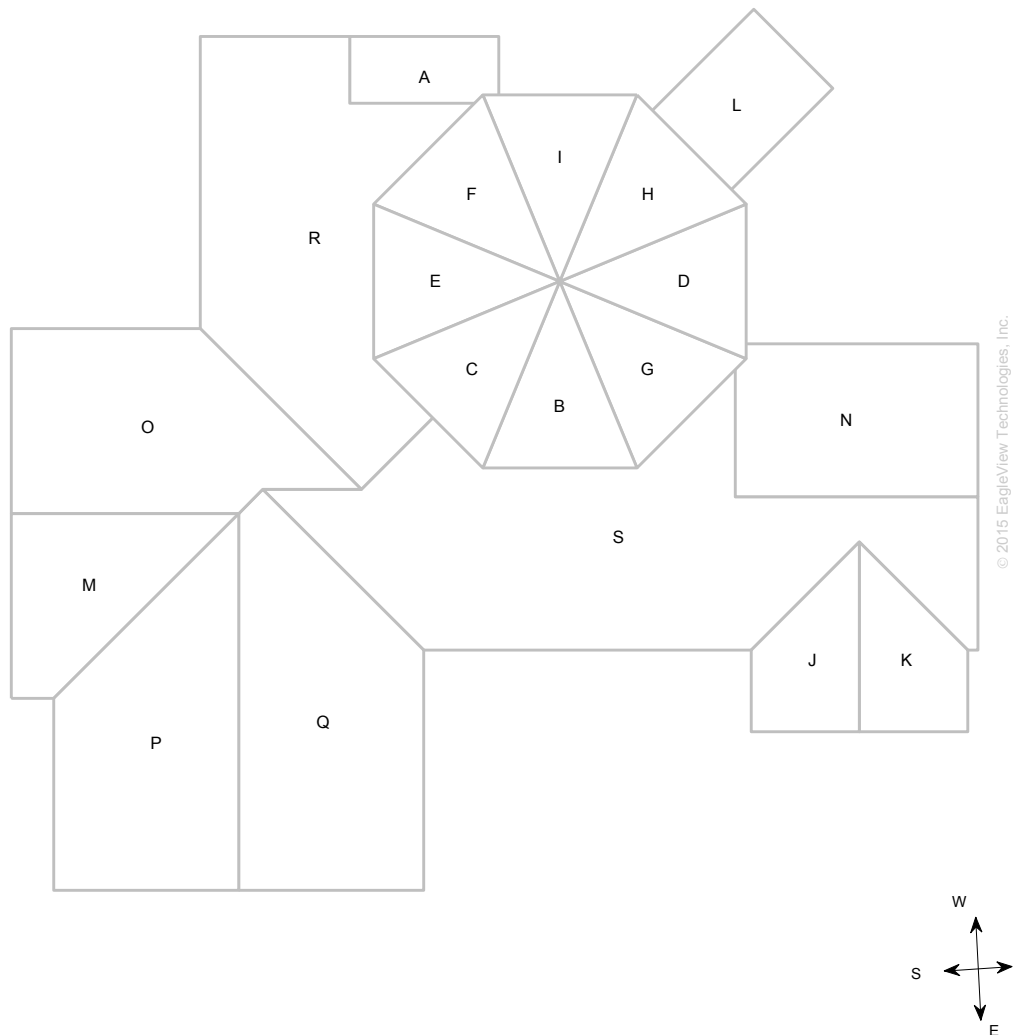
Total Roof Area Less Penetrations = 5,685 sq ft



Note: Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.



Property Info



Property Location

Longitude = -96.9940468

Latitude = 32.7725649

Online map of property:

http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=2170+N+Belt+Line+Rd.,Grand+Prairie,TX,75050

Property Info

Year Built:

Effective Year Built: *

.*



Notes

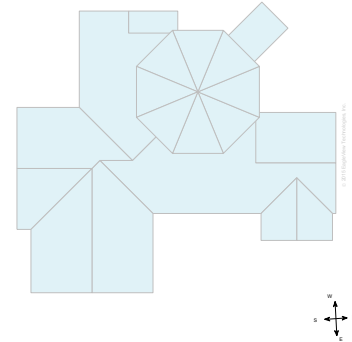
This was ordered as a commercial property. There were no changes to the structure in the past four years.

REPORT SUMMARY

Below is a measurement summary using the values presented in this report.

Lengths, Areas and Pitches

Ridge.....	113 ft (6 Ridges)
Hips	179 ft (10 Hips)
Valleys.....	101 ft (5 Valleys)
Rakes*	32 ft (2 Rakes)
Eaves/Starter**	296 ft (20 Eaves)
Drip Edge (Eaves + Rakes)	328 ft (22 Lengths)
Parapet Walls	0 ft (0 Lengths)
Flashing	36 ft (3 Lengths)
Step Flashing	269 ft (20 Lengths)
Total Area	5,699 sq ft
Total Penetrations Area	14 sq ft
Total Roof Area Less Penetrations.....	5,685 sq ft
Total Penetrations Perimeter	46 ft
Predominant Pitch.....	5/12



Total Roof Facets = 19

*Rakes are defined as roof edges that are sloped (not level).

** Eaves are defined as roof edges that are not sloped and level.

Areas per Pitch

Roof Pitches	5/12	7/12
Area (sq ft)	5516.4	182.3
% of Squares	96.8%	3.2%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Waste Calculation Table

Waste %	0%	10%	12%	15%	17%	20%	22%
Area (sq ft)	5,698	6,269	6,383	6,554	6,668	6,839	6,953
Squares	57.0	62.7	63.8	65.5	66.7	68.4	69.5

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.

Penetration Table

	1-7	8	9-10
Area (sq ft)	1	2.2	2.3
Perimeter (ft)	4	6	6

Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.