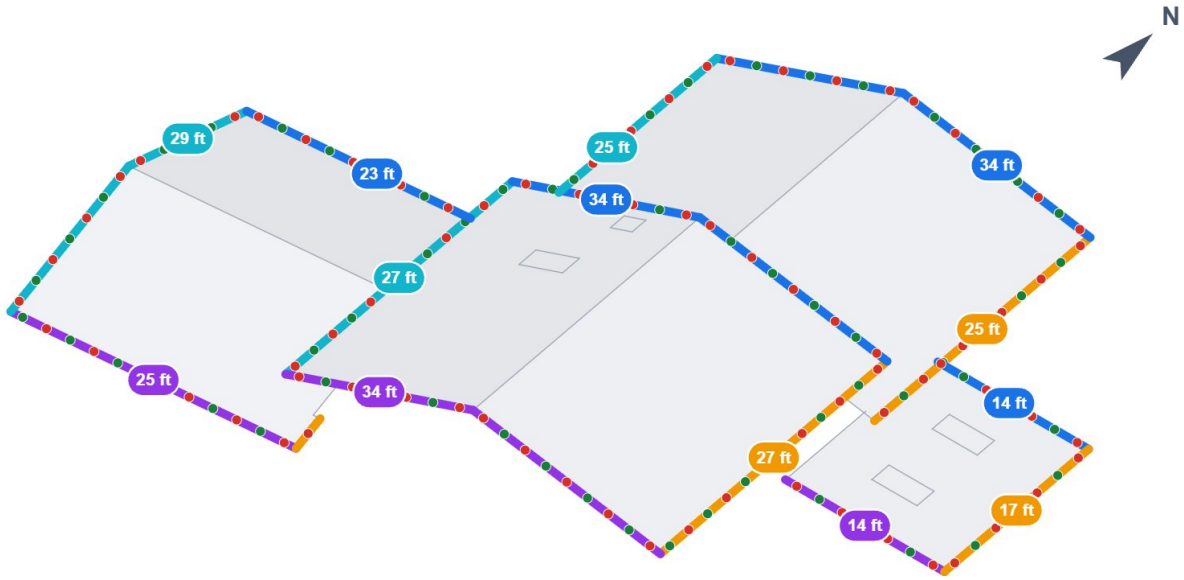
LIGHTS NEEDED

331 ft

BY SIDE

North 106 ft **East** 72 ft **South** 74 ft **West** 80 ft

LIGHT RUNS

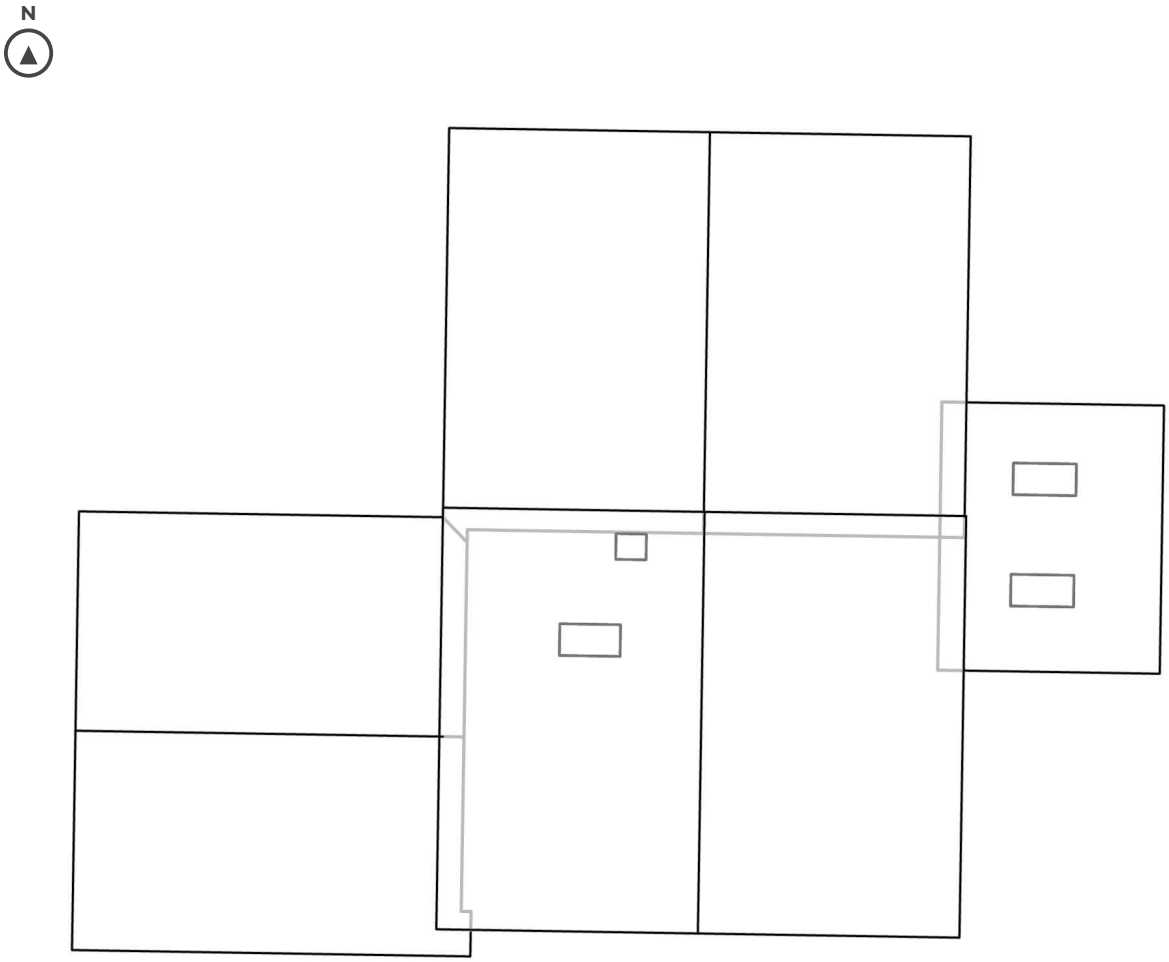


LIGHTS BY SIDE

Side	Eaves	Rakes	Length
North	23 ft	83 ft	**106 ft**
East	69 ft	3 ft	**72 ft**
South	25 ft	49 ft	**74 ft**
West	51 ft	29 ft	**80 ft**

BULBS AND CLIPS BY SPACING

Spacing	6 in	8 in	12 in	15 in	18 in
Bulbs	660	498	**330**	266	218
Clips	660	498	**330**	266	218



PROJECT SUMMARY

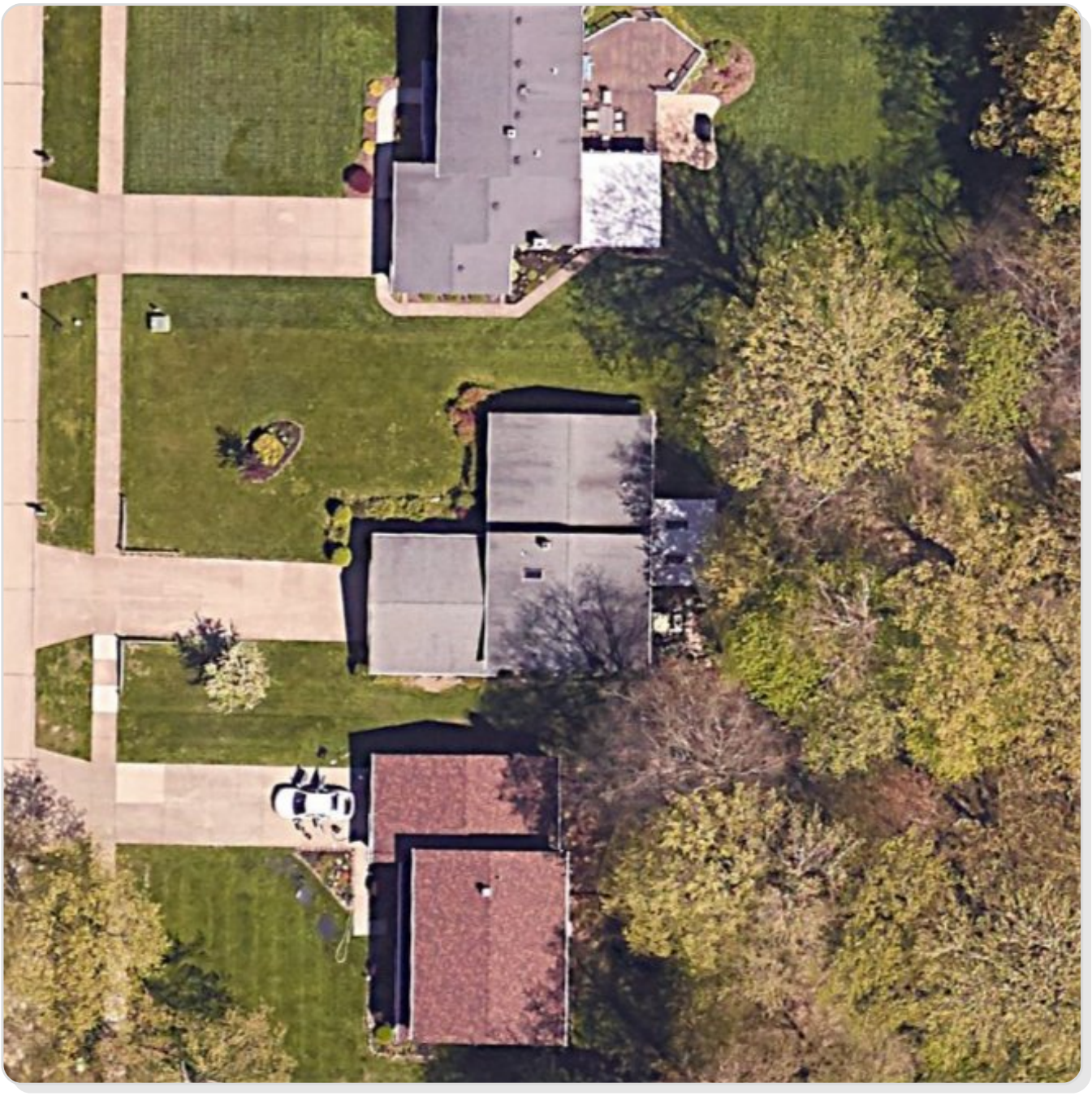
Total Facets: 7
Predominant Pitch: 4/12

Total Squares (Net): 27.58
Total Squares (7% Waste): 29.51

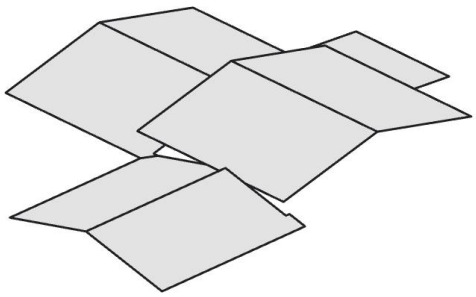
MEASUREMENT BREAKDOWN

Eave:	168'
Rake:	163'
Ridge:	76'
Sidewall Flashing:	59'
Headwall Flashing:	18'
Chimney Back Pan:	2'
Chimney Step:	4'
Chimney Apron:	2'

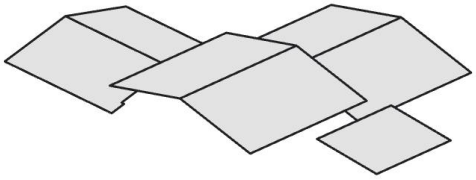
Top View



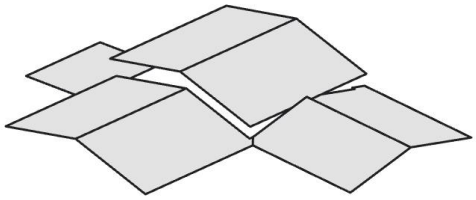
Southwest



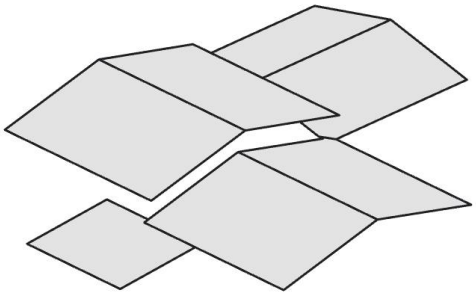
Southeast



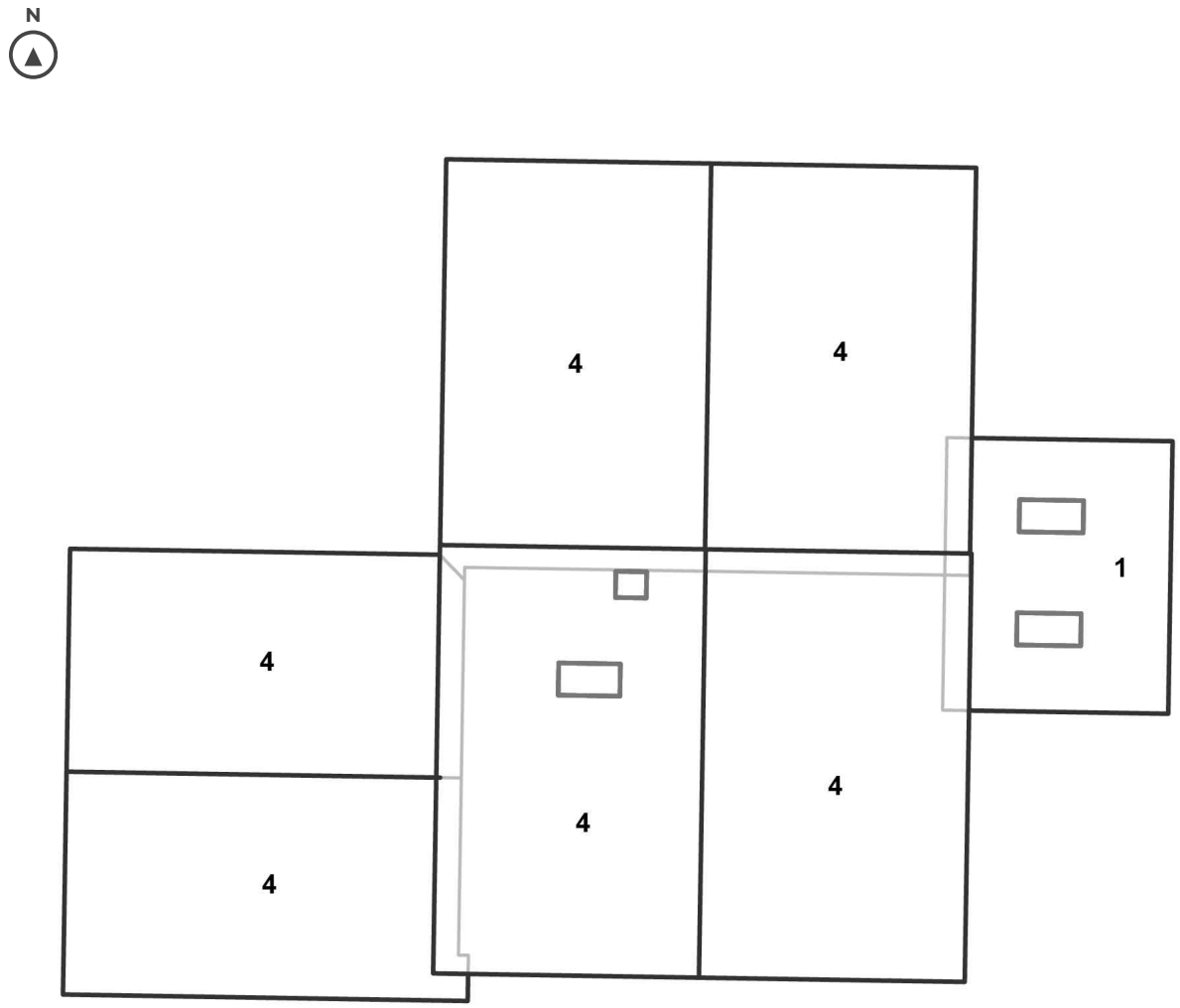
Northwest



Northeast



Total Facets: 7



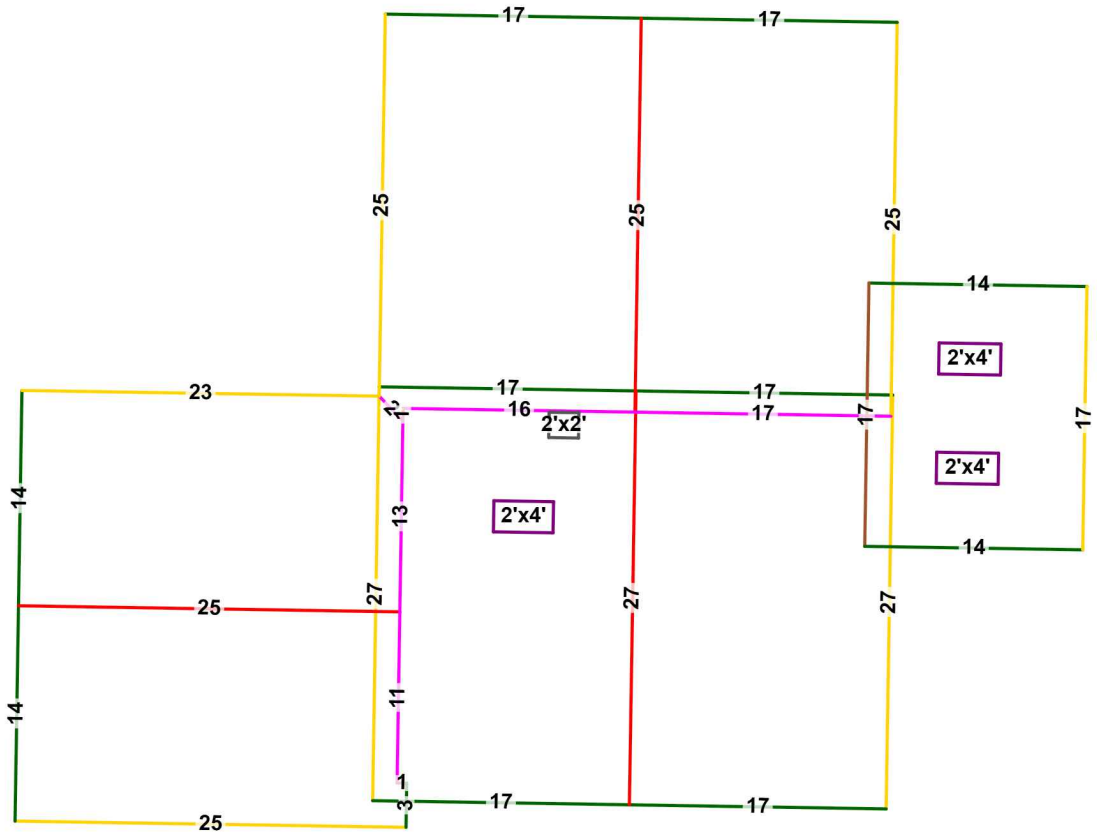
PITCH BREAKDOWN

Pitch	Area	Percent
4/12	**25.20**	**91%**
1/12	2.38	9%



PITCH BREAKDOWN

Pitch	Area	Percent
4/12	25.20	91%
1/12	2.38	9%



Ridge Rake Eave Headwall Flashing Sidewall Flashing

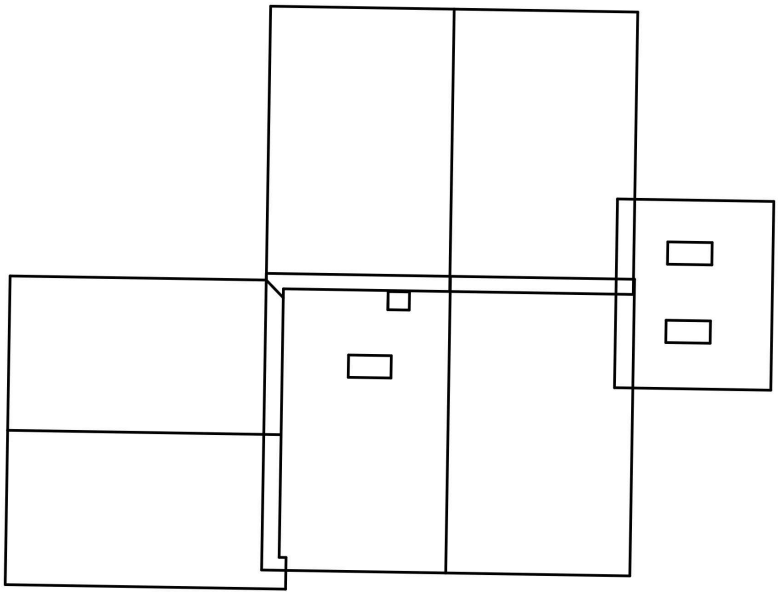
LAYER 1 DETAILS

Facets: 7 **Squares Without Waste: 27.6** **Squares With Waste: 29.5**

Eave: 168'	Rake: 163'	Ridge: 76'	Sidewall Flashing: 59'	Headwall Flashing: 18'

Pitch	1/12	4/12
Area (sq ft)	238	**2,520**
Percent	9%	**91%**

Waste	0%	2%	5%	7%	9%	12%	17%
Area (sq ft)	2,758	2,813	2,896	**2,951**	3,006	3,089	3,227
Squares	28	29	29	**30**	31	31	33



Roof Area	2758 sq ft
Facets	7
Pitch	4 / 12
Skylights	3
Chimneys	1
Ridge	76 ft
Rake	163 ft
Eave	168 ft
Headwall Flashing	18 ft
Sidewall Flashing	59 ft
Chimney Back Pan	2 ft
Chimney Step	4 ft
Chimney Apron	2 ft
Counter Flashing	7 ft

Measurements rounded. Waste guidance only. Installer to verify.

	Waste	0%	2%	7%	12%
Shingle Products					
GAF Timberline HDZ	bundle	76	78	**82**	86
OC TruDef Duration	bundle	76	78	**82**	86
CertainTeed Landmark	bundle	76	78	**82**	86
Malarkey Vista AR	bundle	76	78	**82**	86
Starter Strip					
GAF Pro-Start	bundle	3	4	**4**	4
OC Starter Strip	bundle	4	5	**5**	5
CertainTeed SwiftStart	bundle	4	5	**5**	5
Malarkey Starter Strip	bundle	4	5	**5**	5
Hip & Ridge Cap					
GAF Seal-A-Ridge	bundle	4	5	**5**	5
OC ProEdge	bundle	3	4	**4**	4
CertainTeed Shadow Ridge	bundle	3	4	**4**	4
Malarkey EZ-Ridge	bundle	4	5	**5**	5
Synthetic Underlayment					
GAF FeltBuster	roll	3	4	**4**	4
OC ProArmor	roll	3	4	**4**	4
CertainTeed RoofRunner	roll	3	4	**4**	4
Malarkey Secure Start Plus	roll	3	4	**4**	4
Ice & Water Shield					
36” perimeter application (1374 sq ft)					
GAF WeatherWatch	roll	7	8	**8**	8
OC WeatherLock Flex	roll	7	8	**8**	8
CertainTeed WinterGuard	roll	8	9	**9**	9
Malarkey Secure Start I&W	roll	7	8	**8**	8
18” perimeter application (877 sq ft)					
GAF WeatherWatch	roll	5	6	**6**	6
OC WeatherLock Flex	roll	4	5	**5**	5
CertainTeed WinterGuard	roll	5	6	**6**	6
Malarkey Secure Start I&W	roll	5	6	**6**	6

	Waste	0%	2%	7%	12%
Metals & Flashing					
Eave Drip Edge (10 ft)	piece	17	18	**19**	20
Rake Drip Edge (10 ft)	piece	17	18	**19**	20
Step Flashing (5x7)	piece	136	139	**146**	153
Counter Flashing (10 ft)	piece	7	8	**8**	8
Headwall Flashing (10 ft)	piece	2	3	**3**	3
Chimney Apron (front)	ea	1	2	**2**	2
Chimney Back Pan / Cricket	ea	1	2	**2**	2
Chimney Step Flashing	piece	9	10	**10**	11
Chimney Counter Flash (10 ft)	piece	1	2	**2**	2
Skylight Flashing Kit	kit	3	4	**4**	4
Ventilation					
Ridge Vent (4 ft sections)	piece	20	21	**22**	23
Accessories					
Coil Nails (1.25 in, 50 lb)	box	2	3	**3**	3
Plastic Cap Nails	box	1	2	**2**	2
Roofing Caulk (Tube)	tube	2	3	**3**	3

Flat Roof Area: 237.99 sq ft (2.38 sq) | Waste: 7%

Material	Unit	TPO (Adh)	TPO (MF)	EPDM	PVC	Mod Bit
Membrane System						
Membrane / Cap Sheet	roll	**2**	**2**	**2**	**2**	**4**
Bonding Adhesive	gal	**5**	—	**5**	**5**	—
Insulation & Cover Board						
1/2" 4x8 Cover Board	SQ	**3**	**3**	**3**	**3**	**3**
Cover Board (4'×8')	sheet	**9**	**9**	**9**	**9**	**9**
Polyiso Insulation (4'×8')	sheet	**9**	**9**	**9**	**9**	**9**
3" Insulation Plates	ea	**372**	**372**	**372**	**372**	**372**
2" HD Fasteners	1000	**1**	**1**	**1**	**1**	**1**
Mechanically-Fastened (TPO Only)						
2-3/8" Membrane Plates	1000	—	**1**	—	—	—
Seam Fasteners (for membrane plates)	1000	—	**1**	—	—	—
Edge & Termination						
Termination Bar (10 ft)	piece	—	—	—	—	—
Edge Metal (10 ft)	piece	**37**	**37**	**37**	**37**	**37**
Sealant & Accessories						
Walk Pad (34"×50')	roll	**2**	**2**	**2**	**2**	—
TPO Cut Edge Sealant	each	**2**	**2**	—	—	—
Cleaner	each	**1**	**1**	—	—	—
Universal Single Ply Sealant	tube	**12**	**12**	**12**	**12**	—
Sealant / Caulk	tube	**3**	**3**	**3**	**3**	**3**

Sections at 2/12 or below classified as low-slope. Quantities include 7% waste where applicable. Numbers are estimates only.

VENTILATION SUMMARY

Estimated Attic Area

2,575 sq ft

Footprint: 2,628 sq ft | Surface: 2,758 sq ft

Recommended Exhaust
618 sq in

Recommended Intake
618 sq in

NFVA Requirement

1/300
NFVA: 1236 sq in
Exhaust: 618 sq in
Intake: 618 sq in
Recommended

1/150
NFVA: 2472 sq in
Exhaust: 1236 sq in
Intake: 1236 sq in

Exhaust Options

Ridge Vent
Needed: 34' (@ 18"/lf)
Available: 76'
Capacity sufficient
Recommended

Box Vents
Needed: 13 vents
50 sq in NFA each
Total: 650 sq in

RECOMMENDED INTAKE PRODUCTS

Product	Rating	Qty Needed
Vented Drip Edge	9 sq in/ft	**69 ft**
Soffit Vent	9 sq in/ft	**69 ft**
Bird Blocks	~3.5 sq in	**177 ea**

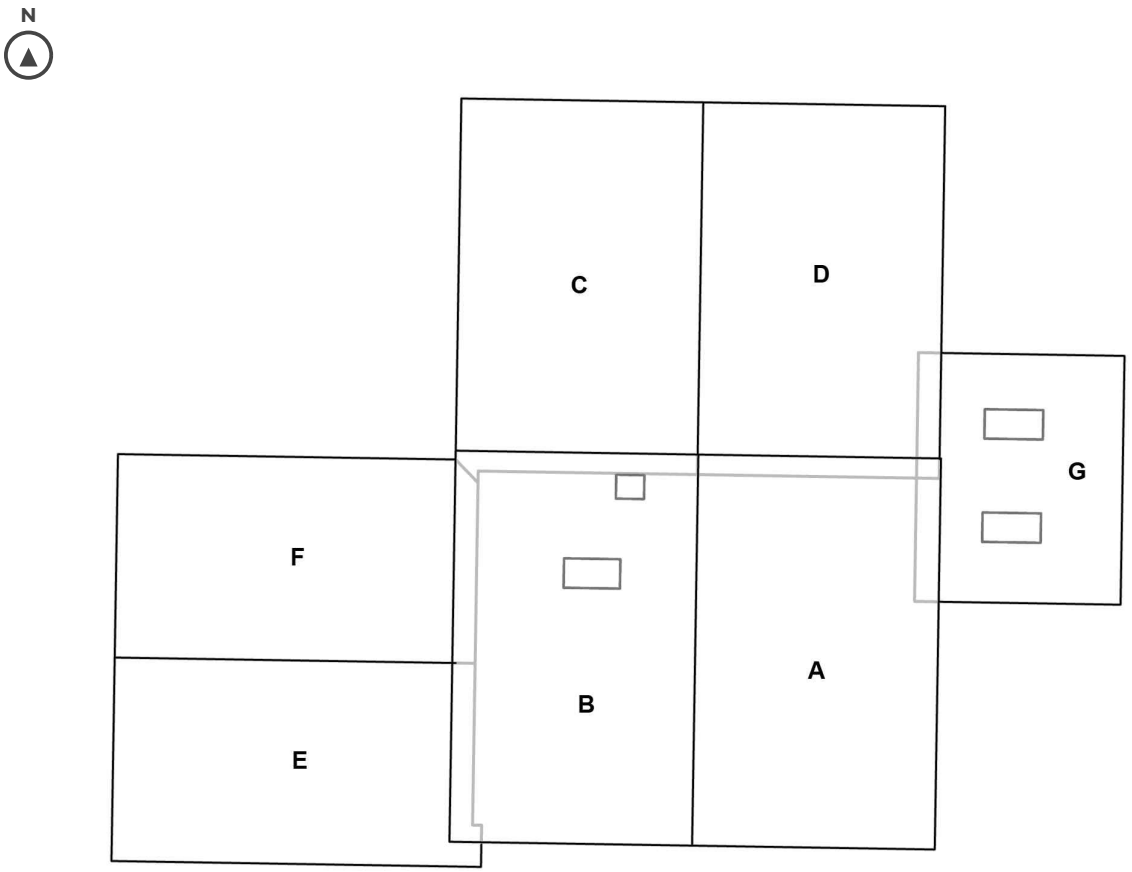
Key

Ridge Vent

Box Vent



Note: The estimated quantity of attic ventilation products in this report is based on the estimated attic floor area and is meant for estimating purposes only. It is the responsibility of the installer to verify the correct quantity and type of attic ventilation products prior to commencement of work. Installer must always review job-specific attic ventilation needs such as local code requirements, attic floor square footage, roof design, and conditioned spaces under the roof. GAF recommends a minimum of 1 square foot of attic ventilation (evenly split between intake and exhaust) for every 150–300 square feet of attic floor space depending on vapor barrier status. The amount of exhaust ventilation at or near the ridge must never exceed the amount of intake ventilation at or near the soffit. See gaf.com/ventcalculator for details.



29.51 sq · 4/12 · 7 facets

NOTES