Sample Warehouse, standing seam roof

Steep-slope metal roofing, sections 07 22 00, 07 26 00, 07 31 00, 07 41 13, 07 62 00, 07 72 53

FINISHES

MR-1 Structural standing seam, clips and splice kits (07 41 13)
MR-2 Architectural standing seam, clips and splice kits (07 41 13)
Self-adhered vapor retarder (07 26 00)
Polyiso roof insulation boards; Faced blanket insulation over the purlins (07 22 00)
Gypsum cover board 1/2 in. (07 22 00)
High-temperature self-adhered underlayment (07 31 00)
Roof trims, flashings, curb and pipe flashings (07 62 00)
Snow retention rails and seam clamps (07 72 53)

NOTES

1. Verify all dimensions, slopes and penetrations in the field. Report discrepancies to the architect and the general contractor.
2. Roof wind zones and snow retention are flagged for review; not a certification.
3. Deck, purlins and the structure by others.

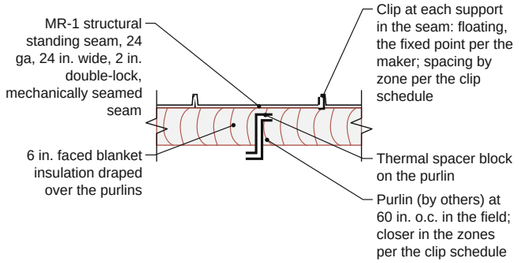
SHEET INDEX

R-0 Cover, finishes and sheet index
R-1 Typical details
R-2 Typical details (cont.)
R-3 Roof plan
R-4 Snow retention plan
R-5 Roof systems
R-6 Roof assemblies
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R-8 Roof panel cut list
R-9 Roof panel cut list (cont.)
R-10 Clips by zone
R-11 Snow retention
R-12 Roof trim and flashing
R-13 Roof access

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

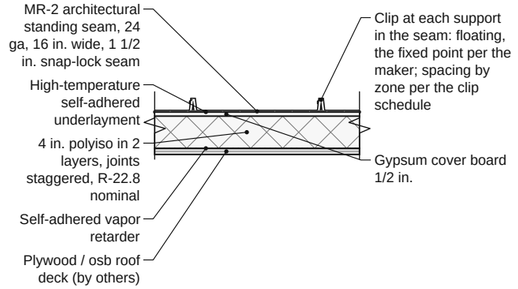
TITLE
Cover, finishes and sheet index

SIZE	DRAWING NO.	REV
11x17	R-0	0
DATE		SHEET
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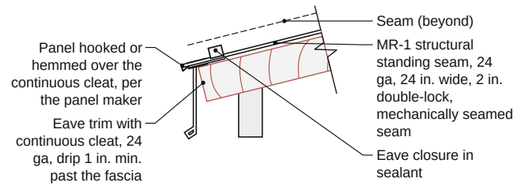
1 ROOF ASSEMBLY RA-1 WITH MR-1 NTS

REF: the panel, clip, insulation and underlayment makers' data



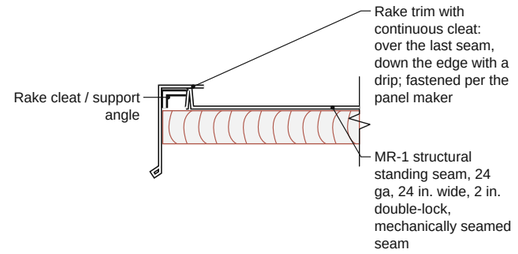
2 ROOF ASSEMBLY RA-2 WITH MR-2 NTS

REF: the panel, clip, insulation and underlayment makers' data



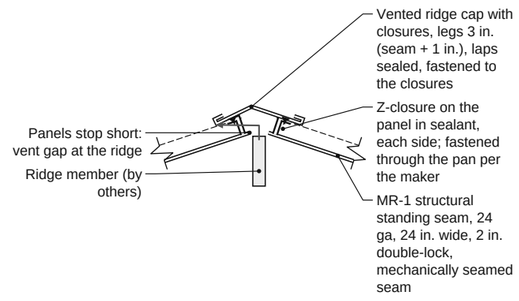
3 EAVE 3/4" = 1'-0"

REF: the panel maker's eave detail



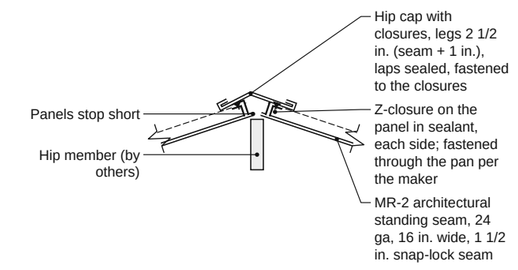
4 RAKE NTS

REF: the panel maker's rake detail



5 RIDGE, VENTED NTS

REF: the panel maker's ridge detail



6 HIP NTS

REF: the panel maker's hip detail

GENERAL NOTES

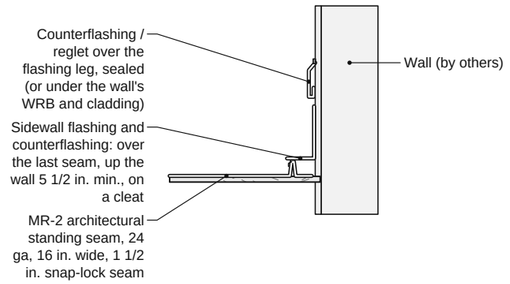
1. Verify all dimensions in the field.
2. Install per the roof panel maker's installation instructions.
3. Not an engineered design.

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Typical details

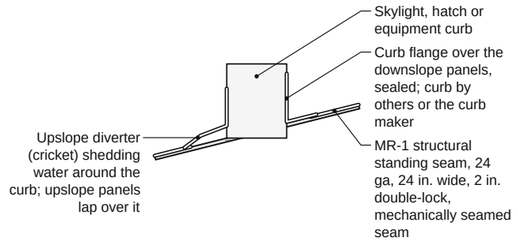
SIZE	DRAWING NO.	REV
11x17	R-1	0

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7 **SIDEWALL** **3/4" = 1'-0"**

REF: the panel maker's sidewall detail



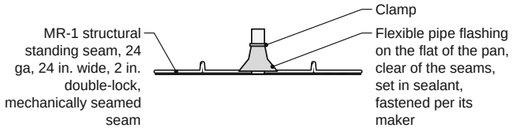
8 **CURB FLASHING** **NTS**

REF: the panel maker's curb detail; the curb maker's data



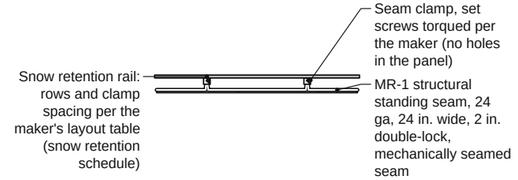
10 **PANEL END SPLICE** **NTS**

REF: the panel maker's end splice detail



9 **PIPE PENETRATION** **NTS**

REF: the pipe flashing maker's data



11 **SNOW RETENTION** **NTS**

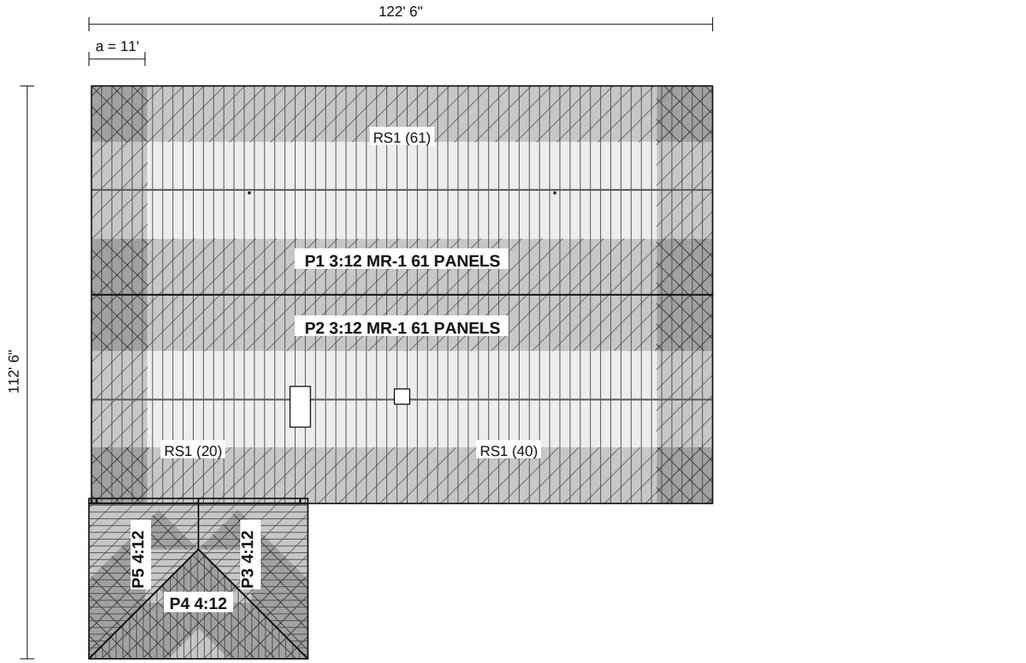
REF: the snow-retention maker's layout table and installation instructions

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TITLE
Typical details (cont.)

SIZE	DRAWING NO.	REV
11x17	R-2	0

DATE	SHEET
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MR-1 Structural standing seam, 24 in. panels

MR-2 Architectural standing seam, 16 in. panels

Corner zone, where two edge zones meet (shapes simplified: the ASCE 7 figures govern)

NORTH IS UP

Edge zone, a = 11' wide along eaves, rakes, ridges and hips

End splices

1 ROOF PLAN: PANEL LAYOUT AND WIND ZONES

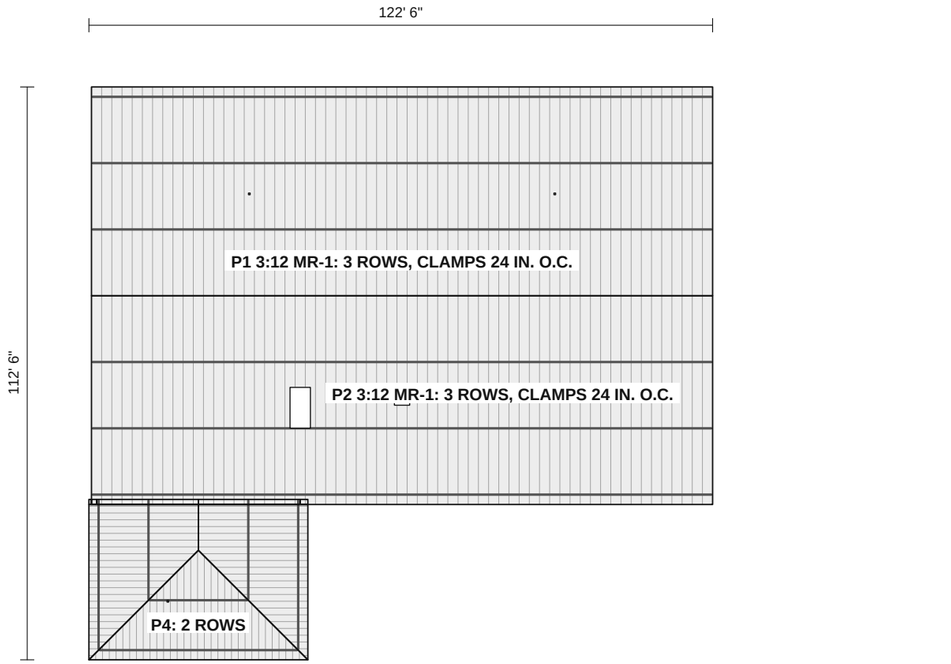
SCALE: 1" = 30'-0"

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Panel marks as the roof panel cut list; zones a = 11'.
2. Clip spacing per zone per the maker's tested tables.

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE: **Roof plan**		
SIZE: **11x17**	DRAWING NO.: **R-3**	REV: **0**
DATE: **11/5/2026**	SHEET: **4 of 14**	



1 **SNOW RETENTION PLAN**

SCALE: 1" = 30'-0"

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Rows and clamp spacing per the snow-retention maker's layout table.
2. Typical, not engineered.

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Snow retention plan

SIZE	DRAWING NO.	REV
11x17	R-4	0

DATE	SHEET
11/5/2026	5 of 14

Roof systems

TAG	SYSTEM	PANEL	GAUGE / FINISH	SUPPORT	LENGTHS	AREA
MR-1	Structural standing seam	24 in. wide, 2 in. seam, double-lock, mechanically seamed	24 ga, PVDF, silver	Over purlins at 60 in. o.c.	Longest 40', 6 in. end laps	10,311.9 sf
MR-2	Architectural standing seam	16 in. wide, 1 1/2 in. seam, snap-lock	24 ga, PVDF, Charcoal	On a solid deck	Longest 45', 6 in. end laps	1,427.8 sf

1 **ROOF SYSTEMS**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof systems (generic; panel width, seam, minimum slope and lengths per the panel maker's data)

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Roof systems

SIZE	DRAWING NO.	REV
11x17	**R-5**	**0**

DATE	SHEET
11/5/2026	**6 of 14**

Roof assemblies

TAG	DECK	VAPOR RETARDER	INSULATION	COVER BOARD	UNDERLAYMENT	PLANES	AREA
RA-1	None: open purlins	None	6 in. faced blanket insulation over the purlins, R-19.2 nominal	None	None	P1, P2	10,311.9 sf
RA-2	Plywood / OSB roof deck (by others)	Self-adhered vapor retarder	4 in. in 2 layers, polyiso roof insulation boards, R-22.8 nominal	Gypsum cover board 1/2 in.	High-temperature self-adhered underlayment	P3, P4, P5	1,427.8 sf

1 **ROOF ASSEMBLIES**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof assemblies (r-values nominal, from the r per inch set)

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Roof assemblies

SIZE	DRAWING NO.	REV
11x17	**R-6**	**0**

DATE	SHEET
11/5/2026	**7 of 14**

Roof planes

PLANE	SECTION	SLOPE	SYSTEM / ASSEMBLY	AREA	PANELS	RUN (SLOPE)	CLIPS
P1	S1	3:12	MR-1 / RA-1	5,155.9 sf	61 panels, 61 splices	42' 3 1/4"	947
P2	S1	3:12	MR-1 / RA-1	5,155.9 sf	61 panels, 60 splices	42' 3 1/4"	947
P3	S2	4:12	MR-2 / RA-2	470.3 sf	24 panels	22' 8"	200
P4	S2	4:12	MR-2 / RA-2	487.3 sf	33 panels	22' 8"	245
P5	S2	4:12	MR-2 / RA-2	470.3 sf	24 panels	22' 8"	200

1 **ROOF PLANES**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof planes

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Roof planes

SIZE	DRAWING NO.	REV
11x17	**R-7**	**0**

DATE	SHEET
11/5/2026	**8 of 14**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof panel cut list by mark (lengths on the slope; the fabricator confirms from field measurements)

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE: **Roof panel cut list**		
SIZE: **11x17**	DRAWING NO.: **R-8**	REV: **0**
DATE: **11/5/2026**	SHEET: **9 of 14**	

Roof panel cut list

MARK	SYSTEM	LENGTH	QTY	AREA	PLANES
RS1	MR-1	21'-5"	242	10,365.7 sf	P1, P2
RS2	MR-1	18'-5 3/4"	1	37 sf	P2
RS3	MR-1	15'-7 1/4"	1	31.2 sf	P2
RA1	MR-2	22'-8 1/2"	17	514.7 sf	P3, P4, P5
RA2	MR-2	22'-6 1/2"	1	30.1 sf	P4
RA3	MR-2	22'-1/4"	2	58.7 sf	P3, P5
RA4	MR-2	21'-5 3/4"	1	28.6 sf	P4
RA5	MR-2	21'-1 1/2"	1	28.2 sf	P4
RA6	MR-2	20'-7 1/4"	2	54.9 sf	P3, P5
RA7	MR-2	20'-1"	1	26.8 sf	P4
RA8	MR-2	19'-8 3/4"	1	26.3 sf	P4
RA9	MR-2	19'-2 1/2"	2	51.2 sf	P3, P5
RA10	MR-2	18'-8"	1	24.9 sf	P4
RA11	MR-2	18'-4"	1	24.4 sf	P4
RA12	MR-2	17'-9 1/2"	2	47.4 sf	P3, P5
RA13	MR-2	17'-3 1/4"	1	23 sf	P4
RA14	MR-2	16'-11"	1	22.6 sf	P4
RA15	MR-2	16'-4 3/4"	2	43.7 sf	P3, P5
RA16	MR-2	15'-10 1/4"	1	21.1 sf	P4
RA17	MR-2	15'-6 1/4"	1	20.7 sf	P4
RA18	MR-2	14'-11 3/4"	2	39.9 sf	P3, P5
RA19	MR-2	14'-5 1/2"	1	19.3 sf	P4
RA20	MR-2	14'-1 1/4"	1	18.8 sf	P4
RA21	MR-2	13'-7"	2	36.2 sf	P3, P5
RA22	MR-2	13'-3/4"	1	17.4 sf	P4
RA23	MR-2	12'-8 1/2"	1	16.9 sf	P4
RA24	MR-2	12'-2"	2	32.4 sf	P3, P5
RA25	MR-2	11'-7 3/4"	1	15.5 sf	P4
RA26	MR-2	11'-3 1/2"	1	15.1 sf	P4
RA27	MR-2	10'-9 1/4"	2	28.7 sf	P3, P5
RA28	MR-2	10'-3"	1	13.7 sf	P4
RA29	MR-2	9'-10 3/4"	1	13.2 sf	P4
RA30	MR-2	9'-4 1/4"	2	24.9 sf	P3, P5
RA31	MR-2	8'-10"	1	11.8 sf	P4
RA32	MR-2	8'-5 3/4"	1	11.3 sf	P4
RA33	MR-2	7'-11 1/2"	2	21.2 sf	P3, P5
RA34	MR-2	7'-5 1/4"	1	9.9 sf	P4
RA35	MR-2	7'-1"	1	9.4 sf	P4
RA36	MR-2	6'-6 3/4"	2	17.5 sf	P3, P5
RA37	MR-2	6'-1/4"	1	8 sf	P4
RA38	MR-2	5'-8"	1	7.6 sf	P4
RA39	MR-2	5'-1 3/4"	2	13.7 sf	P3, P5
RA40	MR-2	4'-7 1/2"	1	6.2 sf	P4
RA41	MR-2	4'-3 1/4"	1	5.7 sf	P4
RA42	MR-2	3'-9"	2	10 sf	P3, P5
RA43	MR-2	3'-2 1/2"	1	4.3 sf	P4
RA44	MR-2	2'-10 1/4"	1	3.8 sf	P4
RA45	MR-2	2'-4"	2	6.2 sf	P3, P5
RA46	MR-2	1'-9 3/4"	1	2.4 sf	P4
RA47	MR-2	1'-5 1/2"	1	1.9 sf	P4
RA48	MR-2	0'-11 1/4" (ripped 10 in.)	2	1.6 sf	P3, P5
RA49	MR-2	0'-4 3/4" (ripped 4 in.)	1	0.1 sf	P4

1 **ROOF PANEL CUT LIST**

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TITLE
Roof panel cut list (cont.)

SIZE	DRAWING NO.	REV
11x17	**R-9**	**0**

DATE	SHEET
11/5/2026	**10 of 14**

Clips by zone

PLANE	ZONE	AREA	CLIPS APART	SUPPORTS APART	CLIPS
P1	Field (zone 1)	1,958.5 sf	60 in. o.c.	60 in. o.c.	196
P1	Edge (zone 2)	2,698.6 sf	30 in. o.c.	30 in. o.c. (closer than the 60 in. supports)	540
P1	Corner (zone 3)	498.9 sf	20 in. o.c.	20 in. o.c. (closer than the 60 in. supports)	150
P2	Field (zone 1)	1,958.5 sf	60 in. o.c.	60 in. o.c.	196
P2	Edge (zone 2)	2,698.6 sf	30 in. o.c.	30 in. o.c. (closer than the 60 in. supports)	540
P2	Corner (zone 3)	498.9 sf	20 in. o.c.	20 in. o.c. (closer than the 60 in. supports)	150
P3	Edge (zone 2)	239.6 sf	30 in. o.c.	deck	72
P3	Corner (zone 3)	230.7 sf	20 in. o.c.	deck	104
P4	Edge (zone 2)	52.9 sf	30 in. o.c.	deck	16
P4	Corner (zone 3)	434.4 sf	20 in. o.c.	deck	196
P5	Edge (zone 2)	239.6 sf	30 in. o.c.	deck	72
P5	Corner (zone 3)	230.7 sf	20 in. o.c.	deck	104

1 **CLIPS BY ZONE**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Clips by roof wind zone: a = 11'. spacing per the panel maker's tested attachment tables (ul 580 / fm / astm e1592 data); past them, the engineer to confirm

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Clips by zone

SIZE	DRAWING NO.	REV
11x17	**R-10**	**0**

DATE	SHEET
11/5/2026	**11 of 14**

Snow retention

PLANE	SLOPE	RUN H / SLOPE	SNOW ON THE RUN (PF X RUN)	DOWNSLOPE FORCE	ROWS	CLAMPS	ROW LF / CLAMPS
P1	3:12	41 / 42.3 ft	35 x 41 = 1,435 lb/ft	1,435 x sin 14° = 348 lb/ft	3 (table), 116 lb/ft a row vs 400	24 in. o.c.	366 LF / 186
P2	3:12	41 / 42.3 ft	35 x 41 = 1,435 lb/ft	1,435 x sin 14° = 348 lb/ft	3 (table), 116 lb/ft a row vs 400	24 in. o.c.	366 LF / 186
P3	4:12	21.5 / 22.7 ft	35 x 21.5 = 752.5 lb/ft	752.5 x sin 18.4° = 238 lb/ft	2 (table), 119 lb/ft a row vs 400	24 in. o.c.	49.4 LF / 27
P4	4:12	21.5 / 22.7 ft	35 x 21.5 = 752.5 lb/ft	752.5 x sin 18.4° = 238 lb/ft	2 (table), 119 lb/ft a row vs 400	24 in. o.c.	58.8 LF / 32
P5	4:12	21.5 / 22.7 ft	35 x 21.5 = 752.5 lb/ft	752.5 x sin 18.4° = 238 lb/ft	2 (table), 119 lb/ft a row vs 400	24 in. o.c.	49.4 LF / 27

1

SNOW RETENTION

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Snow retention (typical, not engineered): force = roof snow load x horizontal run x sin(slope); rows per the maker's layout table

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Snow retention

SIZE	DRAWING NO.	REV
11x17	**R-11**	**0**

DATE	SHEET
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Roof trim and flashing

TRIM / FLASHING	WHERE	LENGTH	PIECES	LEG
Eave trim with continuous cleat	Eave	350 LF	39 pcs	-
Rake trim with continuous cleat	Rake	169.6 LF	21 pcs	-
Vented ridge cap with closures	Ridge	132 LF	14 pcs	3 in.
Hip cap with closures	Hip	62.5 LF	8 pcs	3 in.
Sidewall flashing and counterflashing	Sidewall	43.7 LF	6 pcs	3 in.
Curb flashings with upslope diverter / cricket	Curbs	4	each	-
Pipe penetration flashings	Pipes	3	each	-

1 **ROOF TRIM AND FLASHING**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof trim and flashing

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TITLE
Roof trim and flashing

SIZE	DRAWING NO.	REV
11x17	**R-12**	**0**

DATE	SHEET
11/5/2026	**13 of 14**

Roof access

ITEM	BASIS	DAYS
Install	11,739.7 sf	16 crew-days (starting figures: set yours)
Boom lift	Eave 24'	16 days (auto: eave over 16 ft)
Crane	Longest panel 22'-8 1/2"	0 days (auto)

1 **ROOF ACCESS**

NOTES (DIMENSIONS IN FEET AND INCHES)

1. Roof access (starting figures: set yours)

SHOP DRAWING FOR REVIEW. NOT AN ENGINEERED DESIGN.

TITLE
Roof access

SIZE	DRAWING NO.	REV
11x17	**R-13**	**0**

DATE	SHEET
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