LOW-SLOPE ROOFING
SHOP DRAWING SUBMITTAL

Section 07 22 00, 07 54 23, 07 62 00, 07 71 00, 07 72 00

PROJECT	**Sample Retail Building, TPO roof**
ADDRESS	
OWNER	**Sample Retail Co.**
ARCHITECT	
INTERIOR DESIGN	
GENERAL CONTRACTOR	
SUBMITTED BY	
SPEC SECTION	**07 22 00, 07 54 23, 07 62 00, 07 71 00, 07 72 00**
ITEM	
SUBMITTAL NO.	**revision 0**
DATE	**11/6/2026**

REVISIONS

REV 0 11/6/2026	**Issued for review (submittal)**

SHEET INDEX

A7-0 Cover sheet and sheet index
A7-1 Roof plan and schedules
A7-2 Tapered insulation plan
A7-3 Attachment zone plan
A7-4 Details

GENERAL NOTES

1. Verify the roof dimensions, the deck, the drains, the curbs and the penetrations in the field before ordering. Report discrepancies to the architect and the general contractor before proceeding.
2. Roof system and insulation attachment per the membrane maker's listed assembly for the zone design pressures; the rates shown are typical.
3. Products per the product data log; generic products, the manufacturer per the specification.
4. Codes checked: IBC 2021 ch. 15, IPC ch. 11 (as adopted), IECC 2021 C402. Checks, not a certification.

CONTRACTOR'S REVIEW
Reviewed by / date

ARCHITECT / ENGINEER REVIEW STAMP
Reviewer's stamp area

NOT AN ENGINEERED DESIGN. Verify every dimension and condition in the field. The stamp areas are for the reviewers; the roofing contractor does not fill them in.

PREPARED BY

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SAMPLE RETAIL BUILDING, TPO ROOF

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Sample Retail Co.

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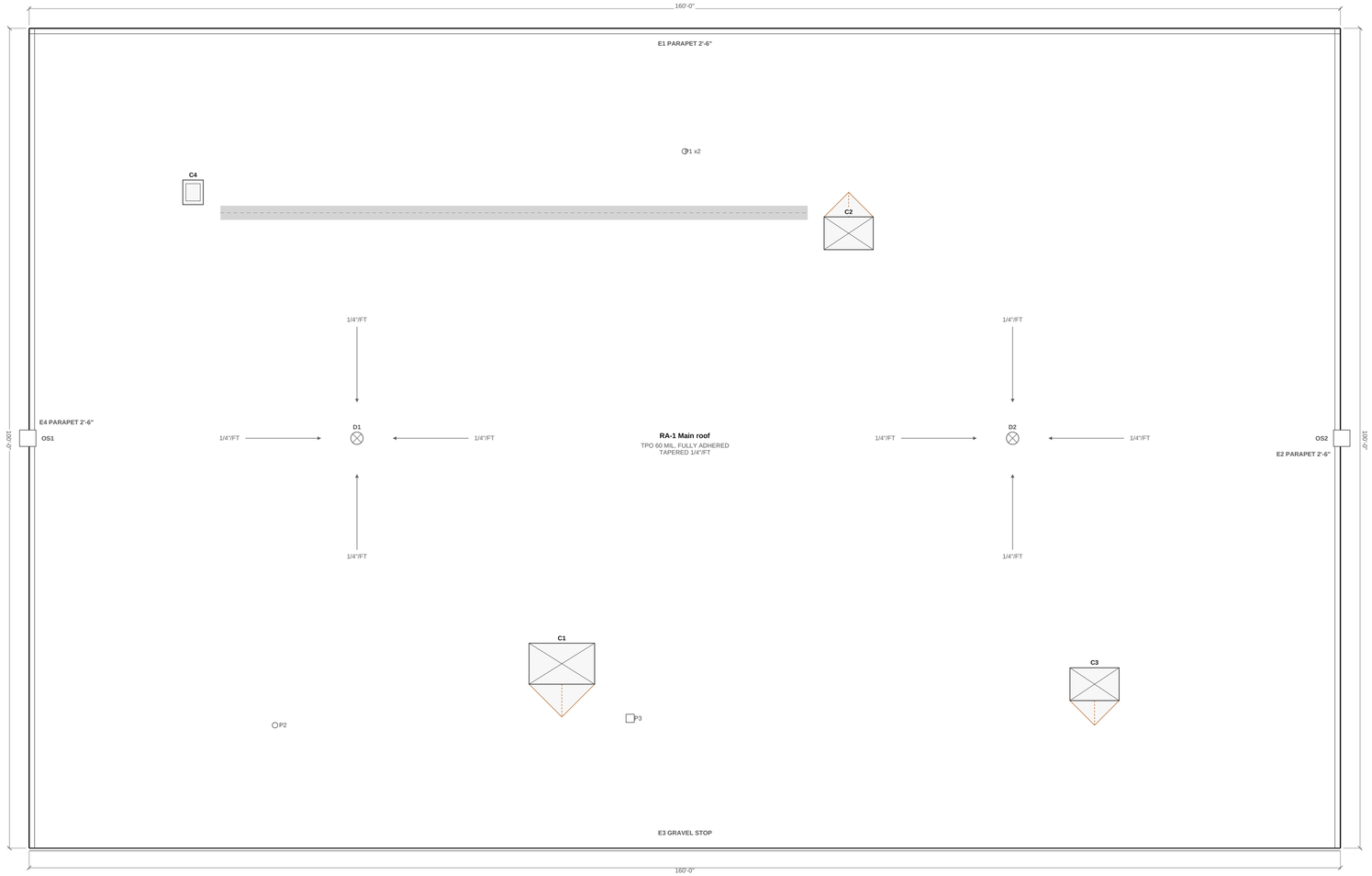
SCALE
NTS

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SHEET SIZE
ARCH D (24" x 36")

SHEET TITLE
COVER SHEET AND SHEET INDEX

A7-0



1 ROOF PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. Verify the roof dimensions, the deck, the drains and the curbs in the field before ordering. Quantities on the buy list are from the layout shown, with the laps and waste listed.
2. Roof system, insulation attachment and membrane attachment per the membrane maker's published requirements for the listed assembly at the zone design pressures the engineer gives (IBC 1504.4); the fastening and adhesive rates shown are typical.
3. Tapered insulation: the panel marks on the tapered plan; every panel row is the panel width along the slope; crickets on the upslope side of curbs and between drains on a sloped deck. Thickness at the drains not under 1 in. (IECC C402.2.1.2).
4. Edge metal and copings: a system tested per ANSI/SPRI ES-1 (IBC 1504.6). Flashings, edgings and drain outlets that are rusted or damaged are not reinstalled (IBC 1512.4).
5. Drains, leaders and the overflow discharge by the plumbing contractor unless noted; overflow drains and scuppers discharge separately from the primary system.
6. The checks in this set flag the code sections named. They are not a certification: the building department, the engineer and the project documents govern.

DRAINS AND SCUPPERS

TAG	TYPE	SIZE	CAPACITY
D1	Primary drain	6" leader	538 gpm (Table 1106.2 leader)
D2	Primary drain	6" leader	538 gpm (Table 1106.2 leader)
OS1	Overflow scupper	24" x 6" at E4	203 gpm (weir, 2" head)
OS2	Overflow scupper	24" x 6" at E2	203 gpm (weir, 2" head)

CURBS

TAG	TYPE	SIZE	CRICKET
C1	Rooftop unit curb	8'-0" x 5'-0" x 14"	8'-0" wide, 4'-0" long, 2" high
C2	Rooftop unit curb	6'-0" x 4'-0" x 14"	6'-0" wide, 3'-0" long, 1 1/2" high
C3	Rooftop unit curb	6'-0" x 4'-0" x 14"	6'-0" wide, 3'-0" long, 1 1/2" high
C4	Roof hatch	2'-6" x 3'-0" x 12"	-

EDGES AND SHEET METAL

EDGE	KIND	LF	HEIGHT
RA-1 E1	Parapet with coping	160	30"
RA-1 E2	Parapet with coping	100	30"
RA-1 E3	Gravel stop / edge metal	160	-
RA-1 E4	Parapet with coping	100	30"

PRODUCT DATA AND SAMPLES

SPEC SECTION	PRODUCT	MANUFACTURER	DATA SHEET	SAMPLES	USED ON
07 54 23 Thermoplastic-Polyolefin Roofing (verify against your project manual)	TPO 60 mil, fully adhered, White; Per the maker (typical)	Per the specification	To attach	To be submitted	RA-1
07 22 00 Roof and Deck Insulation (verify against your project manual)	Polyiso roof insulation boards	Per the specification	To attach	To be submitted	RA-1
07 22 00 Roof and Deck Insulation (verify against your project manual)	Tapered polyiso insulation, 1/4" per ft series	Per the specification	To attach	To be submitted	RA-1
07 22 00 Roof and Deck Insulation (verify against your project manual)	High-density polyiso cover board 1/2 in.	Per the specification	To attach	To be submitted	RA-1
07 22 00 Roof and Deck Insulation (verify against your project manual)	Insulation attachment: fasteners and plates	Per the specification	To attach	To be submitted	RA-1
07 71 00 Roof Specialties (verify against your project manual)	Coping on cleats (tested per ANSI/SPRI ES-1)	Per the specification	To attach	To be submitted	RA-1
07 71 00 Roof Specialties (verify against your project manual)	Edge metal (gravel stop / edge metal) on a continuous cleat (ANSI/SPRI ES-1)	Per the specification	To attach	To be submitted	RA-1
07 71 00 Roof Specialties (verify against your project manual)	Scuppers	Per the specification	To attach	To be submitted	OS1, OS2
07 62 00 Sheet Metal Flashing and Trim (verify against your project manual)	Curb flashing and counterflashing caps	Per the specification	To attach	To be submitted	C1, C2, C3, C4
07 72 00 Roof Accessories (verify against your project manual)	Pipe boots and pitch pans	Per the specification	To attach	To be submitted	P1, P2, P3
07 72 00 Roof Accessories (verify against your project manual)	Walkway pads	Per the specification	To attach	To be submitted	walkways

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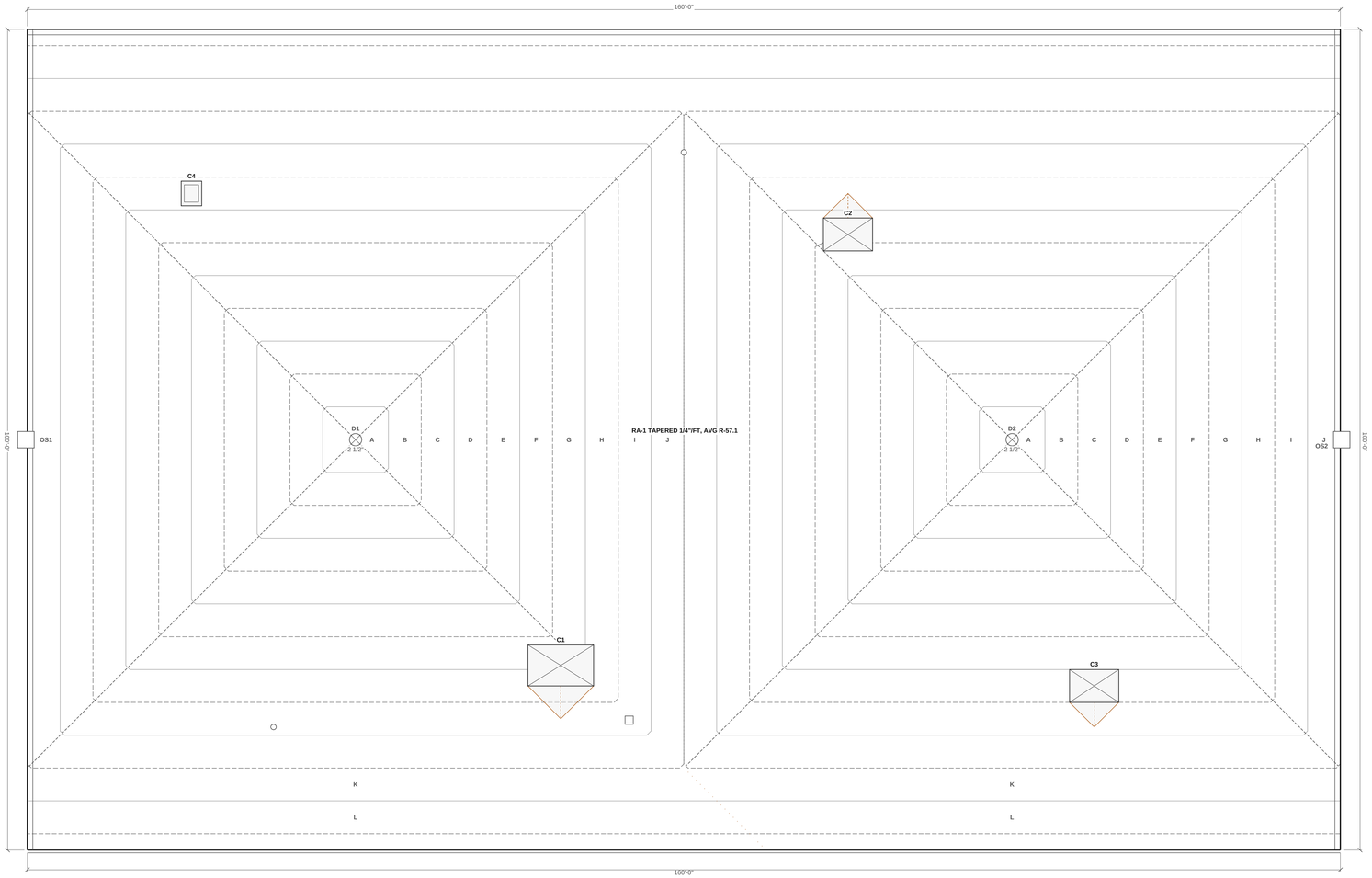
SCALE
As noted

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SHEET SIZE
ARCH D (24" x 36")

SHEET TITLE
ROOF PLAN AND SCHEDULES

A7-1



1 **TAPERED INSULATION PLAN**
SCALE: 1/8" = 1'-0"

INSULATION ASSEMBLIES

AREA	LAYERS	TAPER	AVG R
RA-1	1 1/2" polyiso; High-density polyiso cover board 1/2 in.	Tapered 1/4" per ft, 1/2" to 12 15/16" (avg 8 1/16")	57.1

TAPERED INSULATION BY MARK

MARK	PANEL	FILL	THICKNESS	SF	PANELS
RA-1 A	T1	-	1/2" to 1 1/2"	128	9
RA-1 B	T2	-	1 1/2" to 2 1/2"	384	27
RA-1 C	T1	1 x 2"	2 1/2" to 3 1/2"	640	44
RA-1 D	T2	1 x 2"	3 1/2" to 4 1/2"	896	62
RA-1 E	T1	2 x 2"	4 1/2" to 5 1/2"	1,152	80
RA-1 F	T2	2 x 2"	5 1/2" to 6 1/2"	1,402	97
RA-1 G	T1	3 x 2"	6 1/2" to 7 1/2"	1,625	112
RA-1 H	T2	3 x 2"	7 1/2" to 8 1/2"	1,870	129
RA-1 I	T1	4 x 2"	8 1/2" to 9 1/2"	2,176	150
RA-1 J	T2	4 x 2"	9 1/2" to 10 1/2"	2,432	168
RA-1 K	T1	5 x 2"	10 1/2" to 11 1/2"	1,280	88
RA-1 L	T2	5 x 2"	11 1/2" to 12 1/2"	1,280	88
RA-1 M	T1	6 x 2"	12 1/2" to 13 1/2"	640	44

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SHEET TITLE
TAPERED INSULATION PLAN

A7-2



1 **ATTACHMENT ZONE PLAN**
SCALE: 1/8" = 1'-0"

ATTACHMENT BY ZONE (TYPICAL)

AREA / ZONE	SF	MEMBRANE	INSULATION
RA-1 Interior field (zone 1')	6,629	fully adhered	1658 (8 per 4x8 board)
RA-1 Field (zone 1)	4,178	fully adhered	1045 (8 per 4x8 board)
RA-1 Perimeter (zone 2)	4,847	fully adhered	1818 (12 per 4x8 board)
RA-1 Corner (zone 3)	250	fully adhered	126 (16 per 4x8 board)

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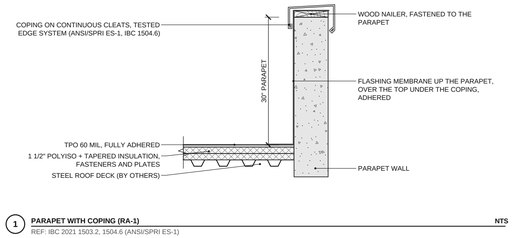
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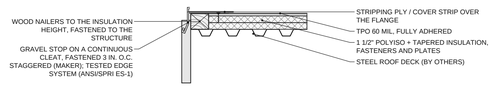
SHEET TITLE
ATTACHMENT ZONE PLAN

A7-3



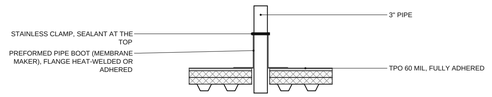
1 **PARAPET WITH COPING (RA-1)** — **NTS**

REF: IBC 2021 1503.2, 1504.6 (ANSI/SPRI ES-1)



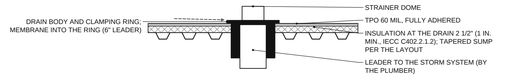
2 **GRAVEL STOP AT THE ROOF EDGE (RA-1)** — **3/4" = 1'-0"**

REF: IBC 2021 1504.6 (ANSI/SPRI ES-1)



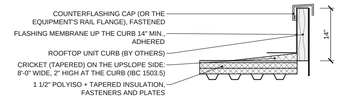
6 **PIPE BOOT (P1)** — **3/4" = 1'-0"**

REF: Membrane maker's pipe flashing detail



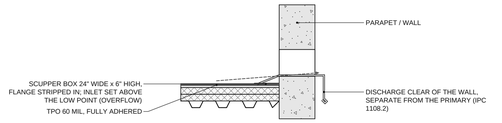
3 **ROOF DRAIN (D1)** — **NTS**

REF: IBC 2021 1502; IPC 1106, 1108; IECC 2021 C402.2.1.2



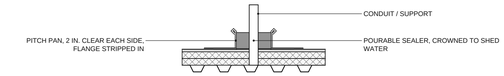
5 **CURB FLASHING AND CRICKET (C1)** — **NTS**

REF: IBC 2021 1503.5



4 **OVERFLOW SCUPPER THROUGH THE PARAPET (OS1)** — **3/4" = 1'-0"**

REF: IBC 2021 1502.3 (4 in. min.)



7 **PITCH PAN (P3)** — **3/4" = 1'-0"**

REF: Membrane maker's pitch pan detail

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SHEET TITLE
DETAILS

A7-4

SHEET 5 OF 5