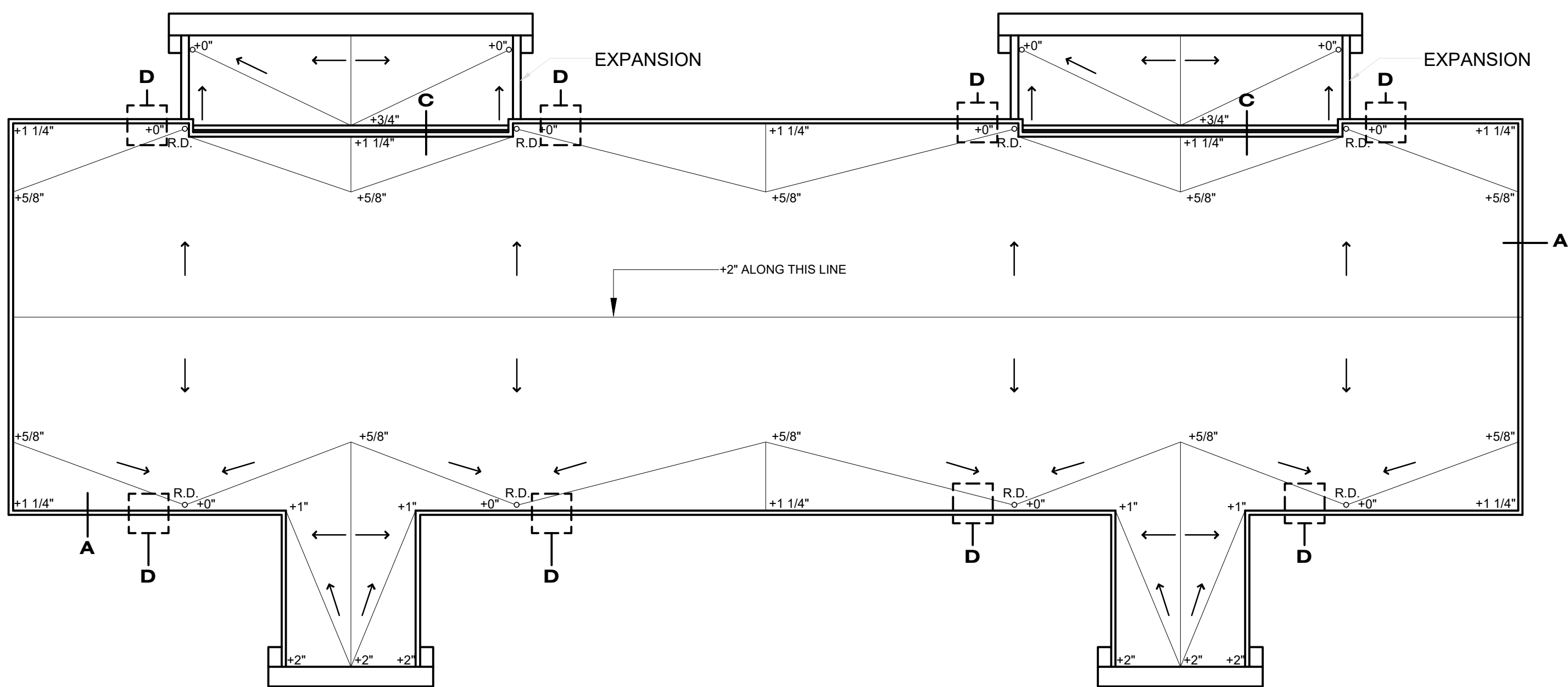


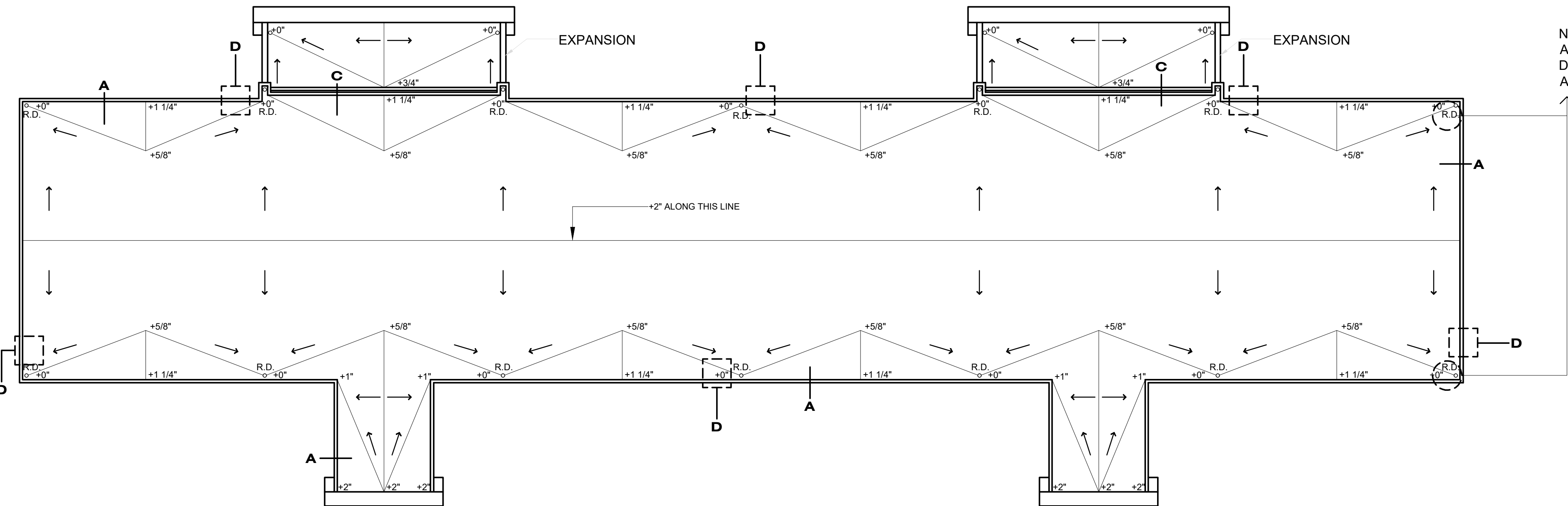
**BUILDING TYPE I ROOF DRAIN PLAN**

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



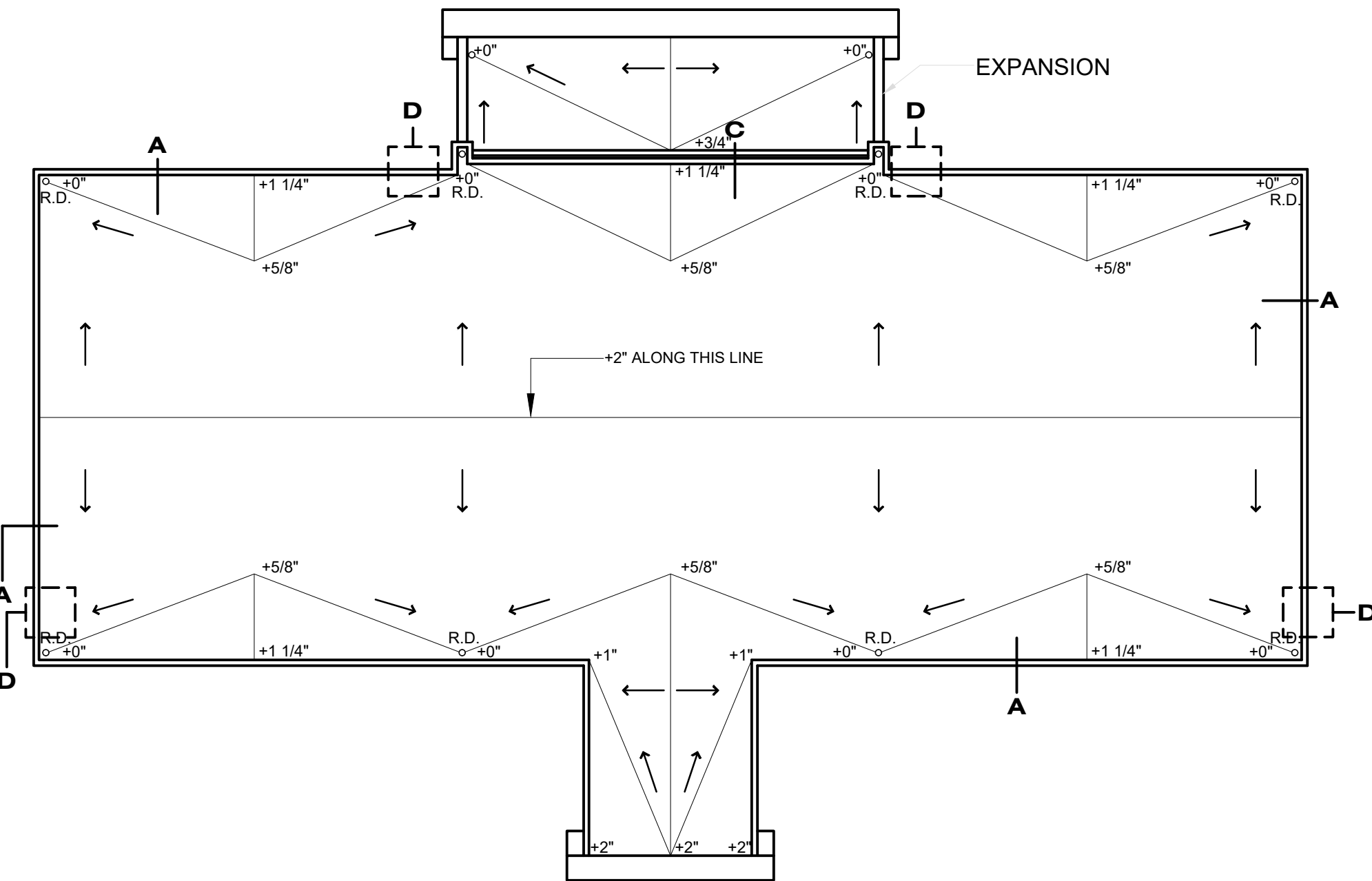
**BUILDING TYPE II ROOF DRAIN PLAN**

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



**BUILDING TYPE III ROOF DRAIN PLAN**

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

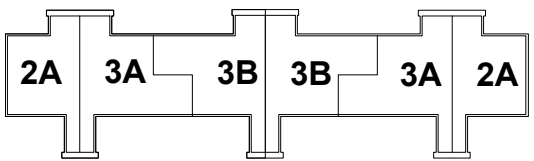


**BUILDING TYPE IV ROOF DRAIN PLAN**

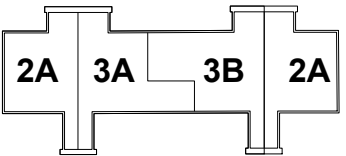
SCALE : 1/8" = 1'-0"

NOTE:  
ALL EXISTING ROOF  
DRAIN WILL BE REPLACED  
APPLYING DETAIL "F"

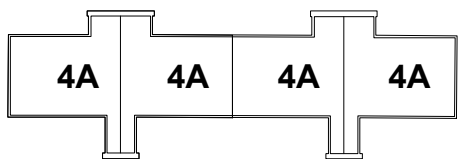
**HOUSING BUILDINGS LEGEND**



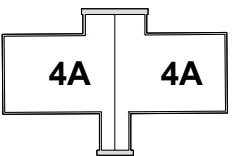
**TYPE I**  
HOUSING BUILDING TYPE I  
(BUILDINGS # 2, 4, 6, 8, 10, 15,  
16, 20)



**TYPE II**  
HOUSING BUILDING TYPE II  
(BUILDINGS # 5, 7, 9, 13, 14,17,  
18,19)



**TYPE III**  
HOUSING BUILDING TYPE III  
(BUILDINGS # 1, 3, 11, 12)



**TYPE IV**  
HOUSING BUILDING TYPE IV  
(BUILDING # 21)

① HOUSING BUILDING  
NUMBER

**3B** APARTMENT DESIGNATION  
BY BEDROOM COUNTING  
TYPE OF CONFIGURATION  
NUMBER OF ROOMS

**SPACE NUMBER LIST**

100	KITCHEN
101	LIVING ROOM
102	BEDROOM
103	BATHROOM
104	CLOSET
105	BALCONY
106	STAIRS

**SYMBOLS KEY**

	EXISTING STRUCTURE
	SELECTED TO BE DEMOLISHED
	PROPOSED C.M.U. WALLS
	NEW BALCONY ADDITION

	BUILDING SECTION
	WALL SECTION
	BLOW UP
	SPACE NUMBER
	FLOOR STEP
	CHANGE OF MATERIAL
	DOOR MARK
	WINDOW MARK
	TYPICAL ROOF DRAIN

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OFFICE 201  
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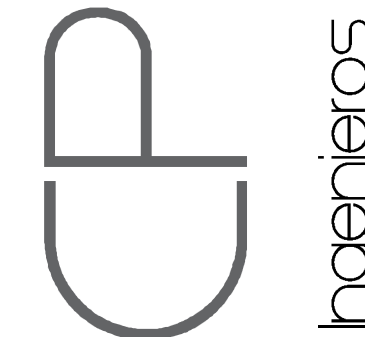
**CLIENT**  
INTERLINK CONSTRUCTION LLC.  
**DESIGN**  
CARLOS M PEREZ RIVERA, PE  
**DRAWN BY**  
CMPR  
**CHK'D BY**  
CMPR  
**DATE**  
SEPTEMBER 30, 2021

**REVISIONS**

**CERTIFIED CORRECT**



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**MIRADOR LAS CASAS APARTMENTS**  
**FULL REHABILITATION**  
**SANTURCE, PR**

**TITLE**  
BUILDINGS TYPE I TO IV  
ROOF DRAIN  
PLAN

**PAGE**  
**A-1.22**

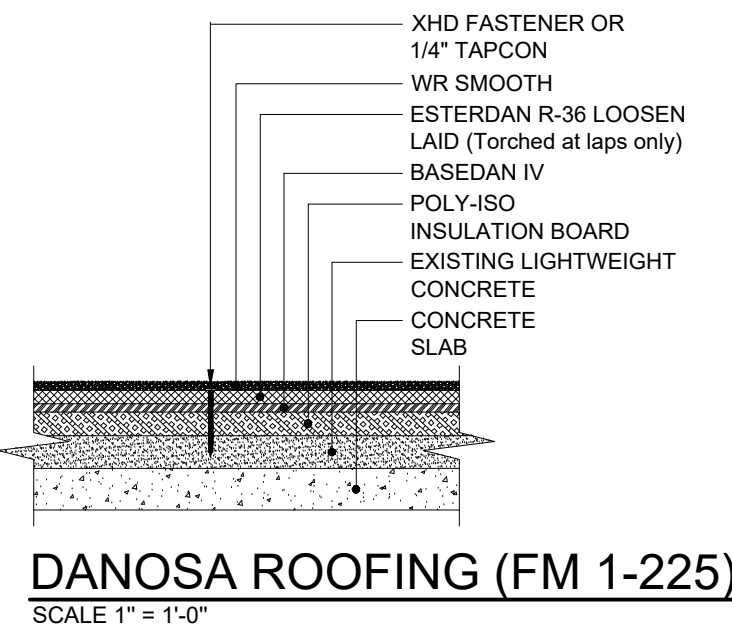
1 OF 1

Certificación: Yo, Carlos M. Pérez Rivera, Ingeniero Licenciado Num. 19137, certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con Jurisdicción. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido sin conocimiento o por negligencia, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OIGPe y otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profesional en la OIGPe.

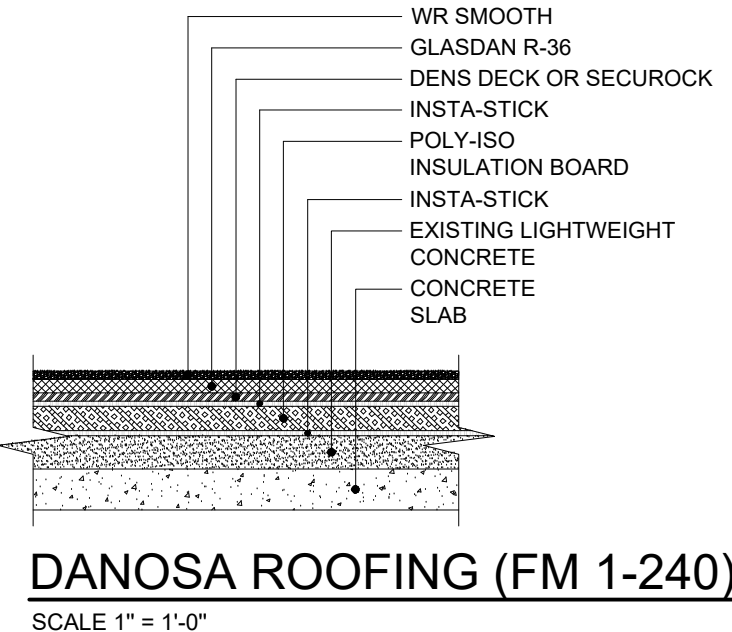


EXISTING ROOF CONDITION ASSESSMENT & RECOMMENDATIONS				
BUILDING	EXISTING SYSTEM		COMMENTS	RECOMMENDATIONS
4, 6, 7, 8, 17, 18	thermoPLASTIC MEMBRANE		THERMOPLASTIC MEMBRANE BROKEN AND DETACHED AT BUILDINGS 17 AND 18. THERMOPLASTIC MEMBRANE WITH HOLES AT BUILDINGS 4 & 6; ASSOCIATED TO OBJECT IMPACTS.	REMOVE THE THERMOPLASTIC MEMBRANE, ALL GRAVEL, FLASHING AND VERTICAL SURFACE TREATMENT. THEN APPLY ONE OF THE RECOMMENDED SYSTEMS.
	ASPHALT PLY (DANOSA)			
	ASPHALT BUILT UP ROOF			
1, 2, 3, 5, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21	thermoPLASTIC MEMBRANE		THERMOPLASTIC MEMBRANE WITH HOLES AT BUILDINGS 1, 2, 3, 5, 9, 11 & 12; ASSOCIATED TO OBJECT IMPACTS.	REMOVE THE EXISTING SYSTEMS. THEN APPLY ONE OF THE RECOMMENDED SYSTEMS.
	ASPHALT BUILT UP ROOF			

## RECOMMENDED WATERPROOFING SYSTEMS



**DANOSA ROOFING (FM 1-225)**  
SCALE: 1"=1'-0"



**DANOSA ROOFING (FM 1-240)**  
SCALE: 1"=1'-0"

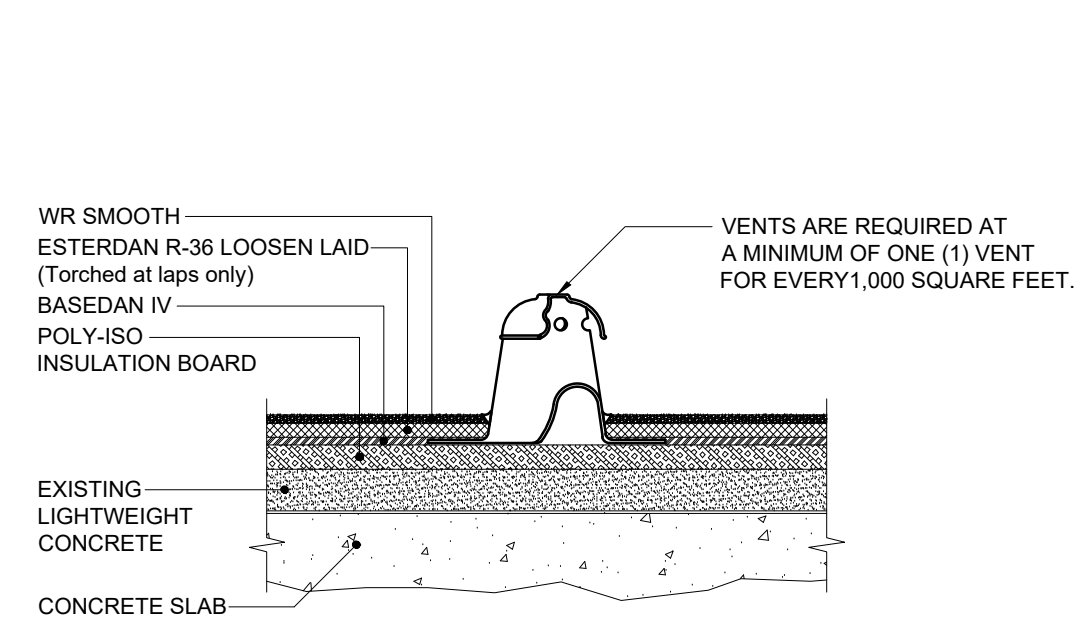
### INSTALLATION PROCEDURE

- Place Poly-iso rigid insulation boards loose laid or presscured.
- Over Poly-iso place Basedan IV and install Esterdan R-36 with XHD Fastener or 1/4" Tapcon torched laps down to the deck. Plates to be primed with Danosa Primer (ASTM D-41). Torch laps only.
- Determine direction of roof drainage and the corresponding low points of the roof. In the installation of bituminous membranes, the direction of both ends and side laps shall be such that the direction of drainage will be over the laps.
- Proceed with the installation of the top membrane WR Smooth (fully torched), heat fusing the entire surface to the lower membrane, Esterdan R-36.
- Revise the upper surface of the lapping joints with a heated rounded-nosed trowel. Precaution must be taken so that the seam of the base ply of Esterdan R-36, already adhered will lay in the middle of the width of the top layer, WR Smooth.
- Retouch seams in the WR Smooth to protect exposed asphalt during the seaming process.

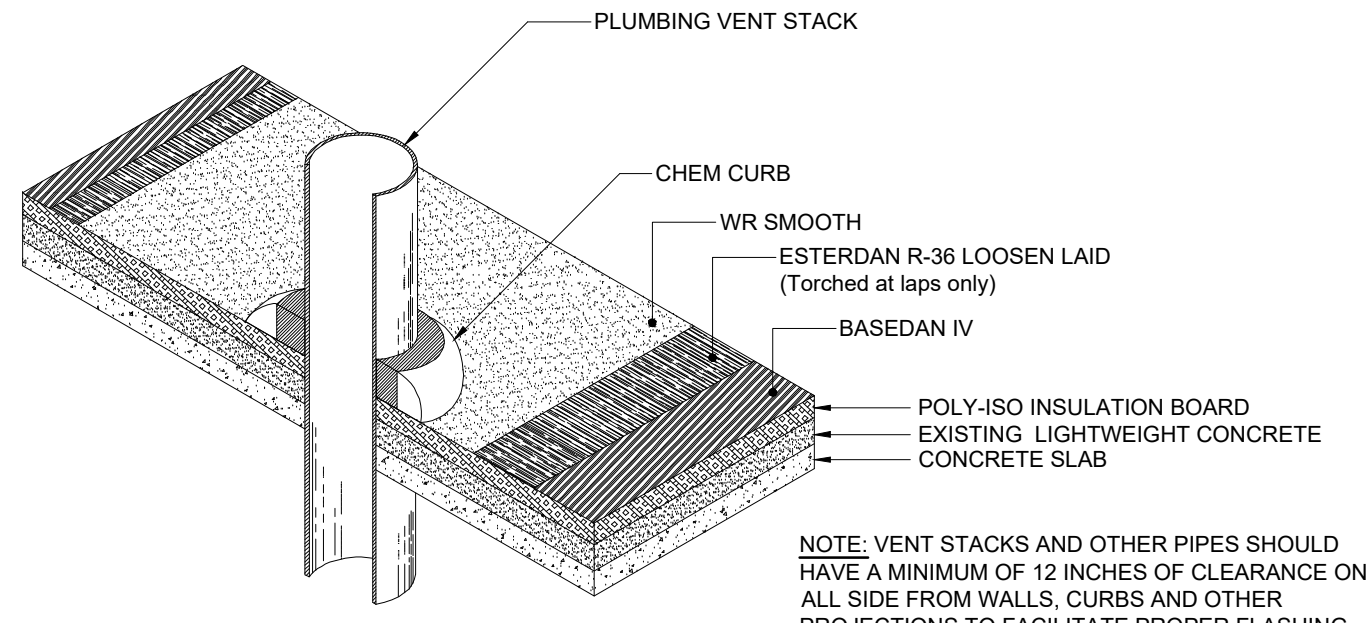
#### NOTES:

- Vents are required at a minimum of one (1) vent for every 1,000 square feet. Prior to the installation of the pressure release vent, core a hole through the roofing system down to where the vent will be placed in order to vent any moisture that may be trapped in the insulated deck.

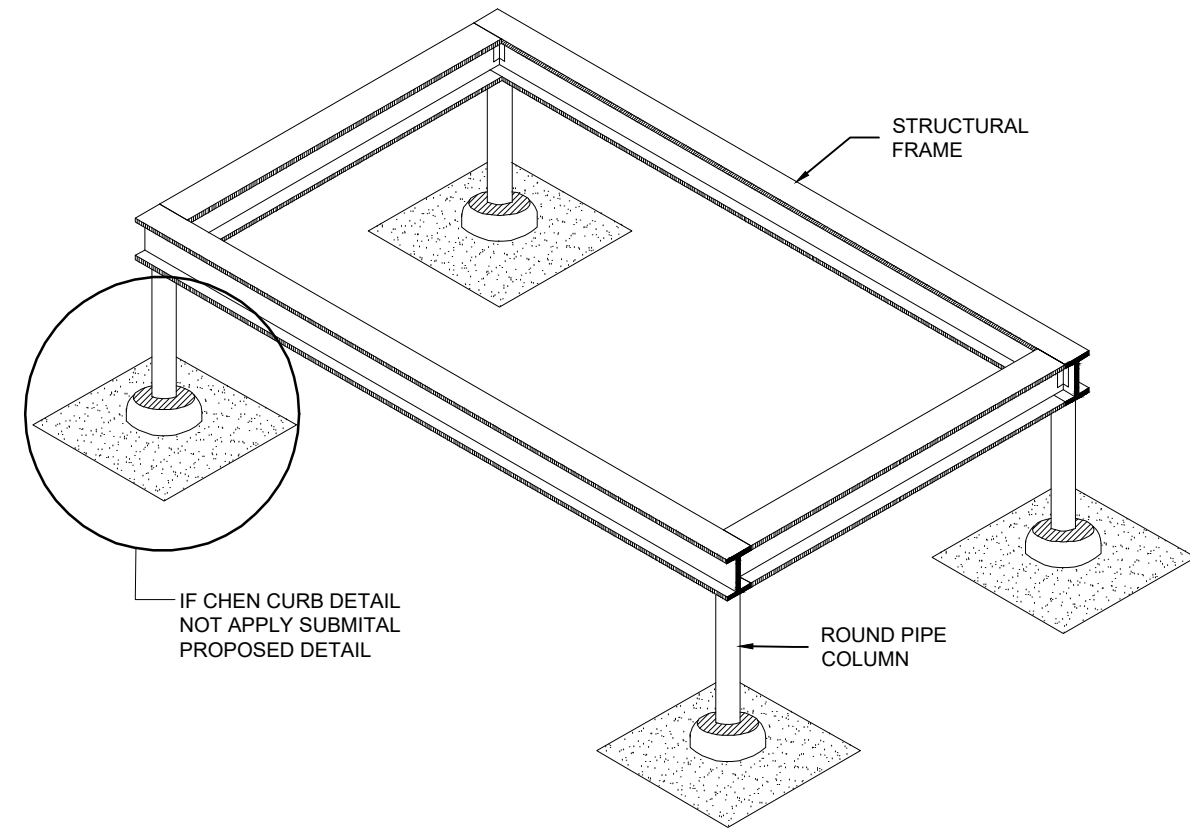
## BUILDING TYPE I TO TYPE IV TYPICAL ROOF DETAILS



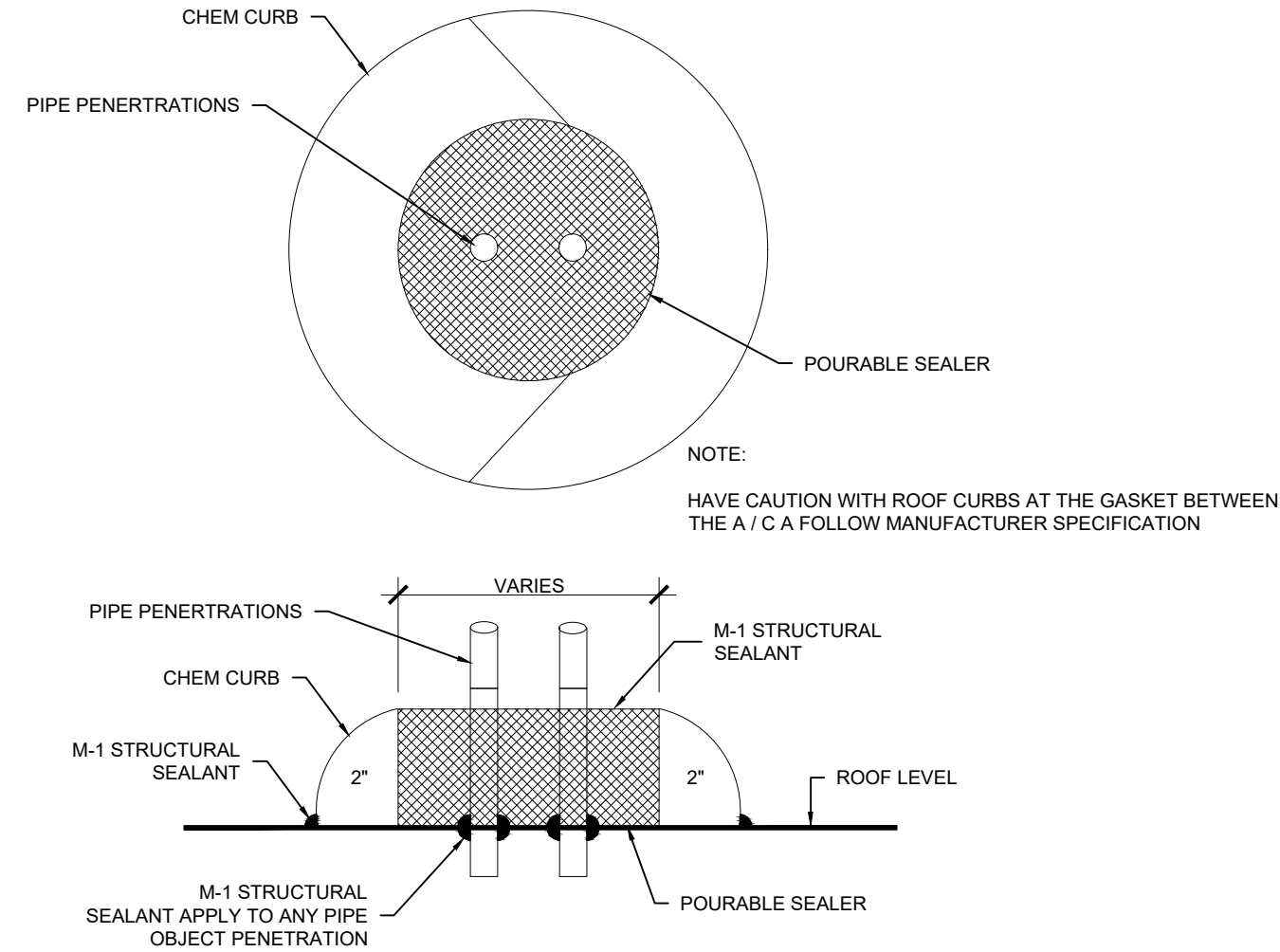
**DETALLE INTERIOR DE VENTOSA**  
SCALE: 1"=1'-0"



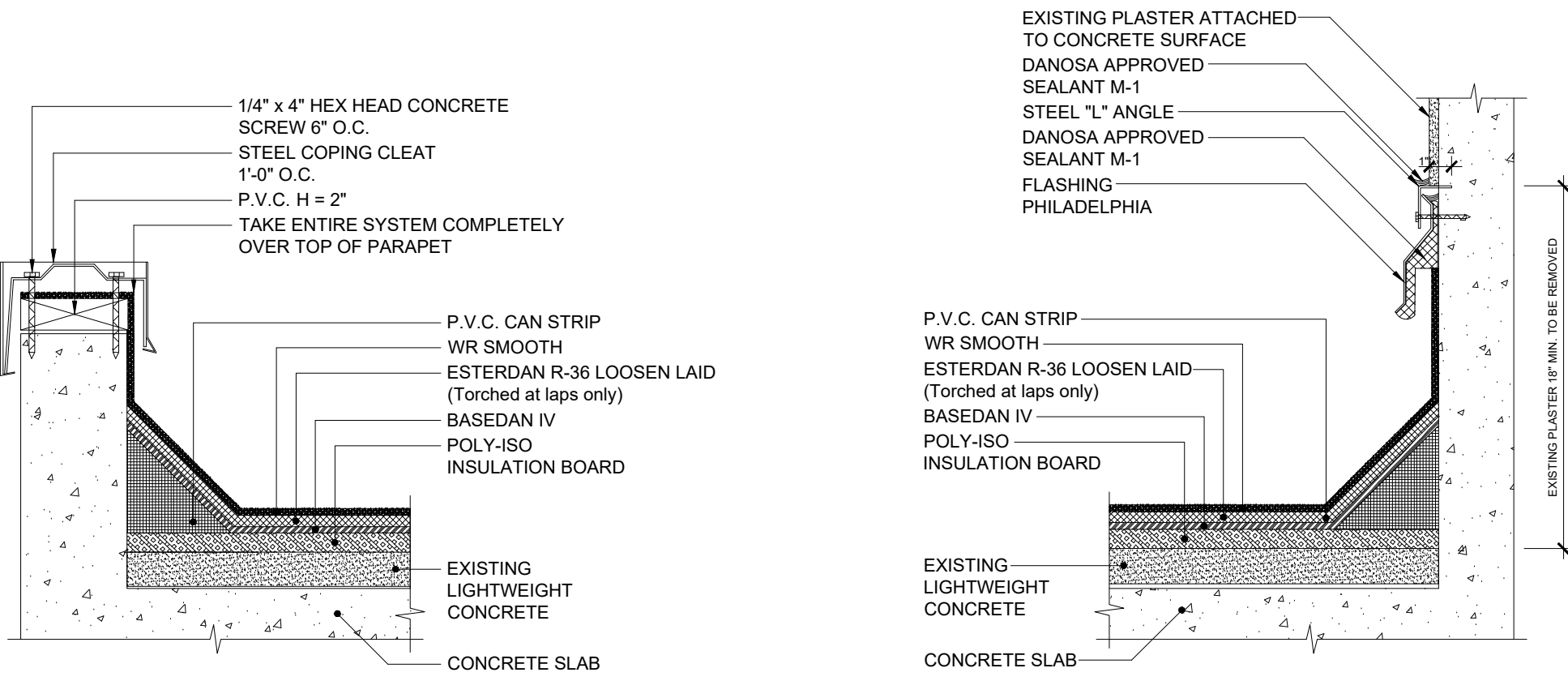
**DETALLE DE VENTILADOR**  
NOT TO SCALE



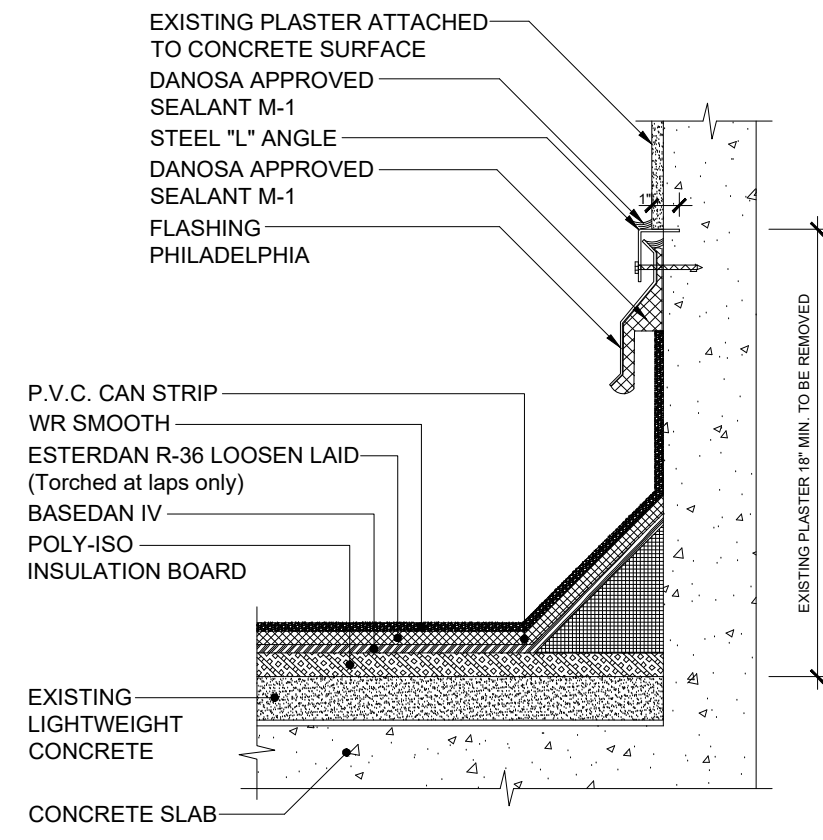
**EQUIPMENT SUPPORT STAND DETAIL**  
NOT TO SCALE



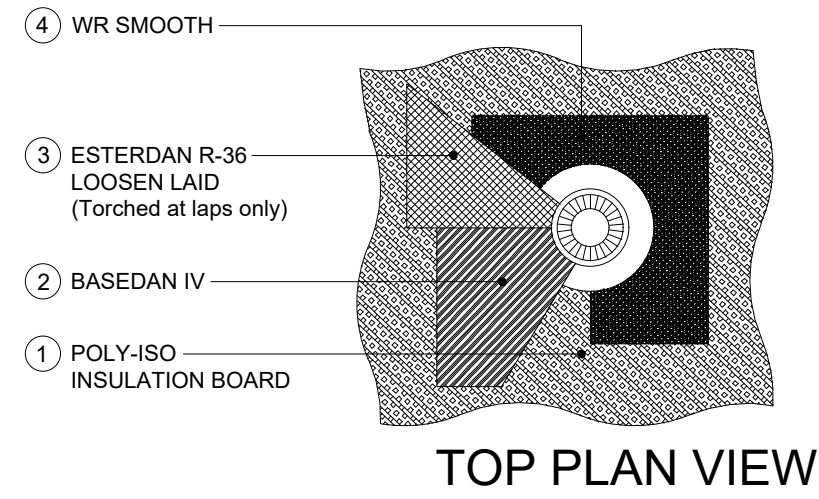
**CHEM CURB DETAIL**  
ESCALA: N.T.S.



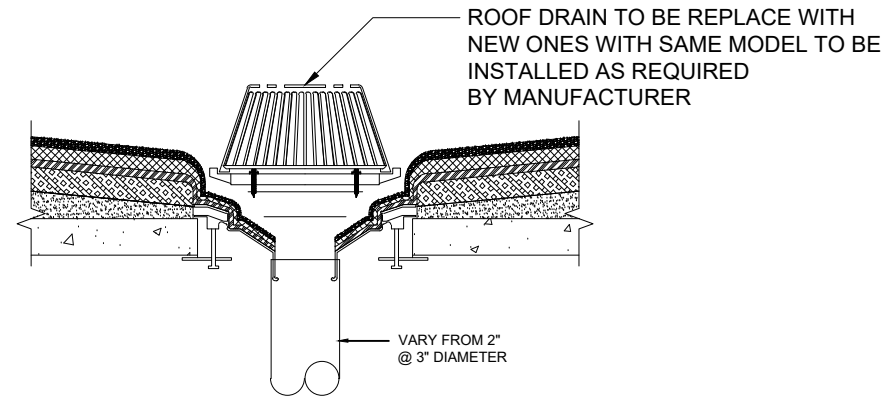
**DETALLE MK'D. "A"**  
SCALE: 1"=1'-0"



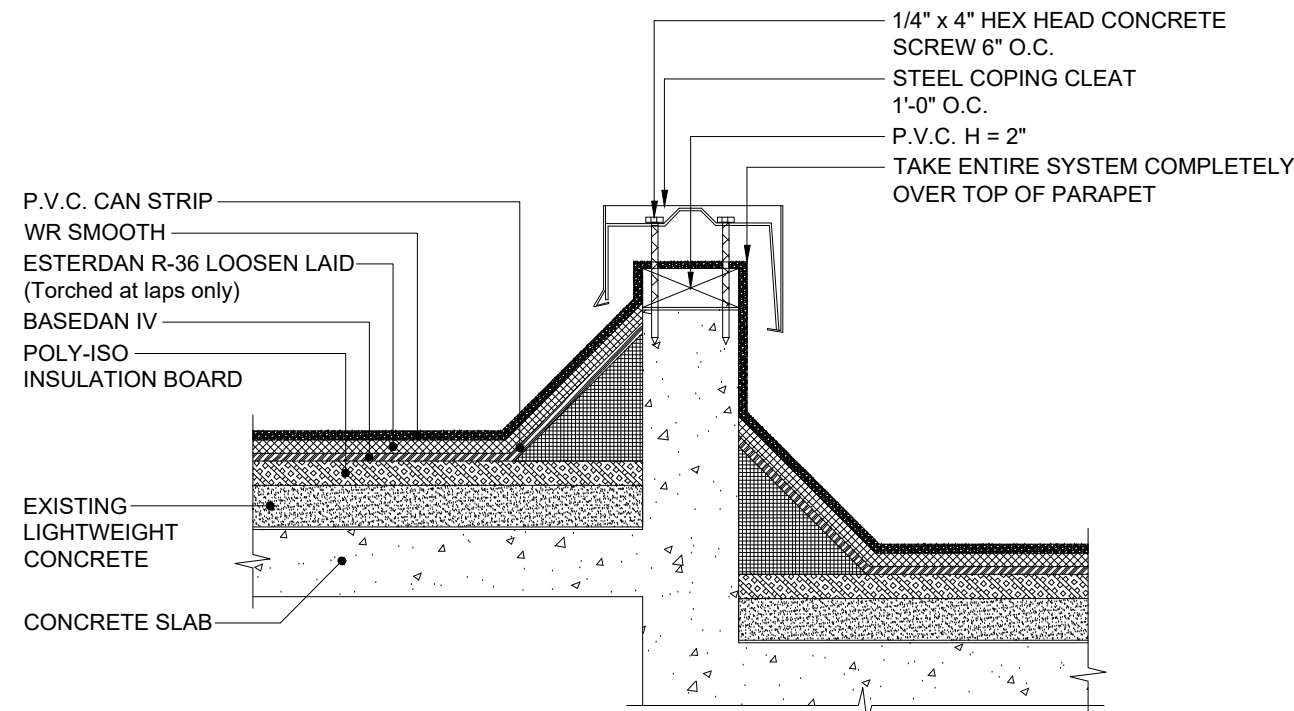
**DETALLE MK'D. "B"**  
SCALE: 1"=1'-0"



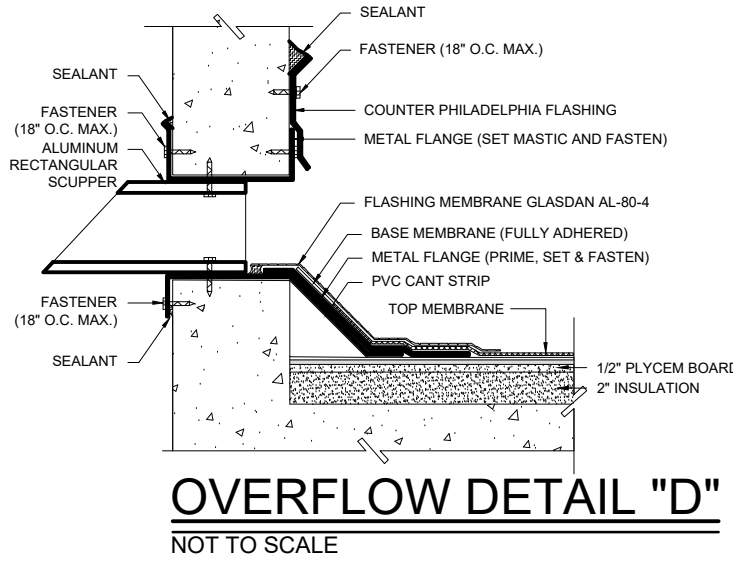
**TOP PLAN VIEW**



**TYPICAL ROOF DRAINAGE DETAIL "F"**  
SCALE: 1"=1'-0"  
NOTE: APPLY TO ALL EXISTING ROOF DRAINS WHERE OCCURS.



**DETALLE MK'D. "C"**  
SCALE: 1"=1'-0"



**OVERFLOW DETAIL "D"**  
NOT TO SCALE

**CLIENT**  
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**DESIGN**  
CARLOS M PEREZ RIVERA, PE  
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**CHECKED BY**  
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SEPTEMBER 30, 2021

#### REVISIONS

NO.	DESCRIPTION	DATE

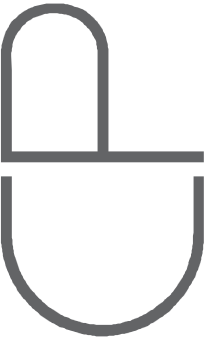
#### CERTIFIED CORRECT



Fecha de Expiración: 2023-09-19

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#### TITLE

TYPICAL ROOF  
DRAIN  
DETAILS

#### PAGE

**A-1.23**

1 of 1

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