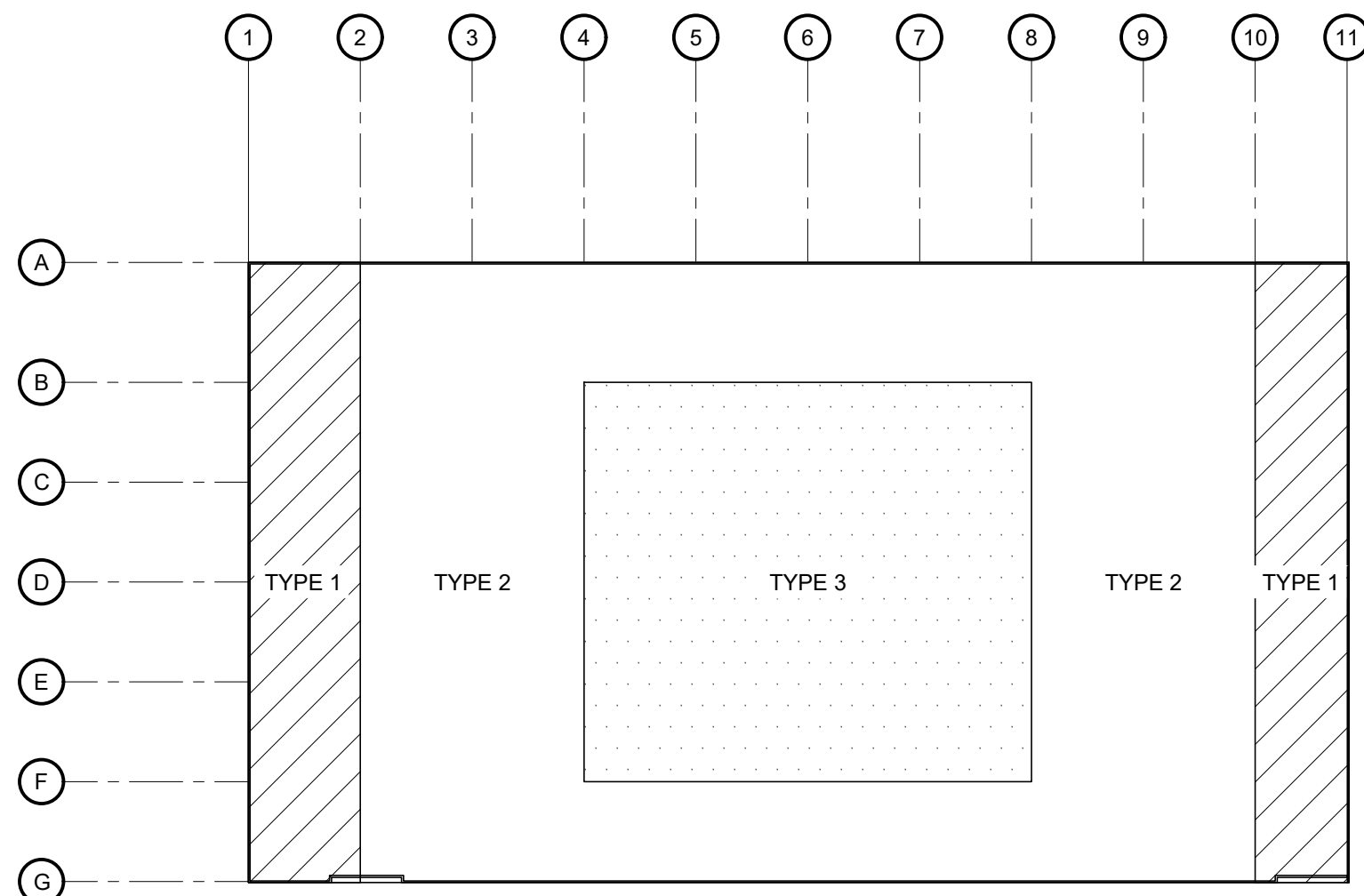


### UPLIFT DIAGRAM ON JOIST GIRDER - MWFRS

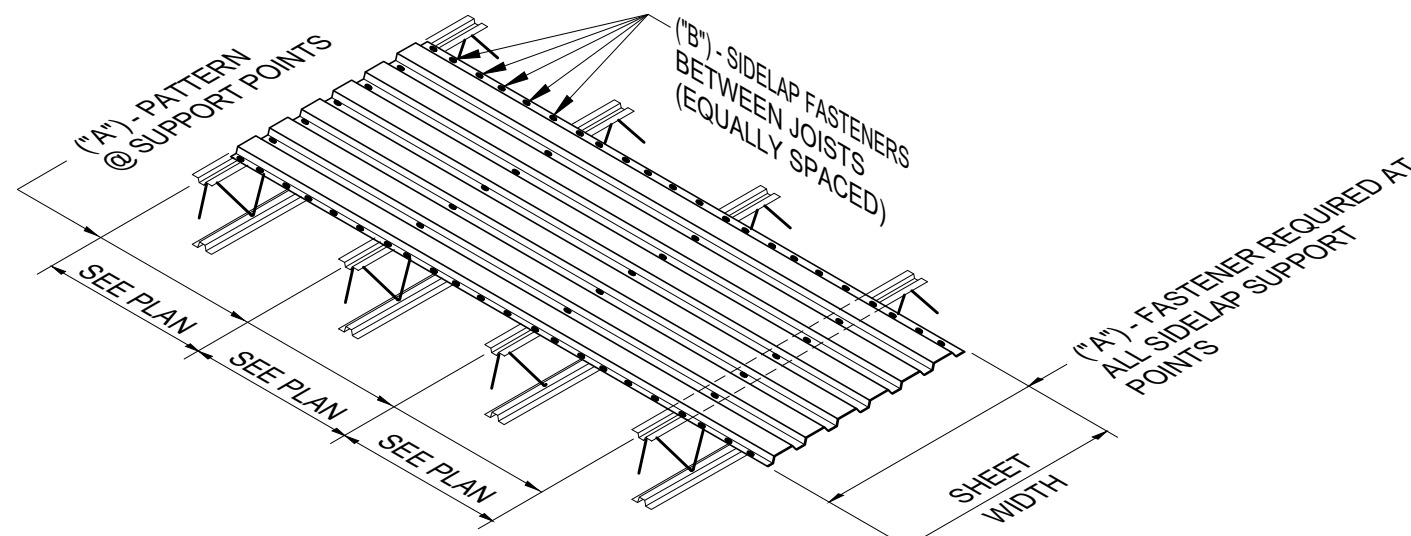
SCALE: NONE  
NOTE:  
1. LOADS INDICATED REPRESENT NET MWFRS SERVICE UPLIFT VALUES.



### ROOF DECK ATTACHMENT LAYOUT PLAN

SCALE: NONE

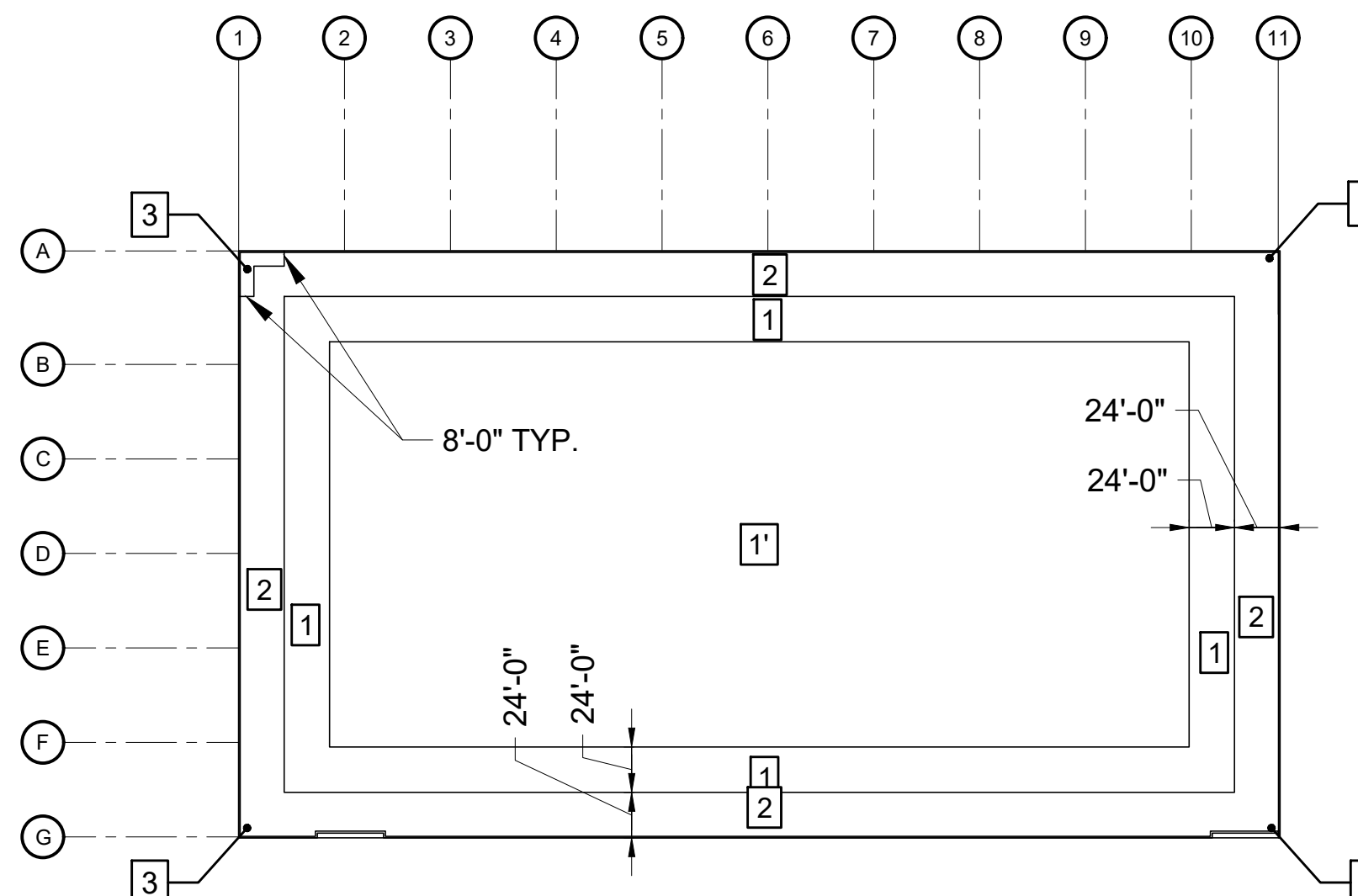
WELDED ROOF DECK ATTACHMENT FASTENER SCHEDULE		
TYPE #	FASTENERS "A" 5/8"Ø PUDDLE WELDS	FASTENERS "B" #10 TEK SCREWS
TYPE 1	36/7	5
TYPE 2	36/7	2
TYPE 3	36/5	2



### TYPICAL ROOF DECK ATTACHMENT

SCALE: NONE  
NOTES:  
1) ROOF DECK PER PLAN MIN. THREE SPAN CONDITION.  
2) FASTEN THROUGH MULTIPLE SHEETS AT ALL END AND SIDE LAPS.  
3) END LAPS SHALL OCCUR ONLY AT SUPPORT POINTS.

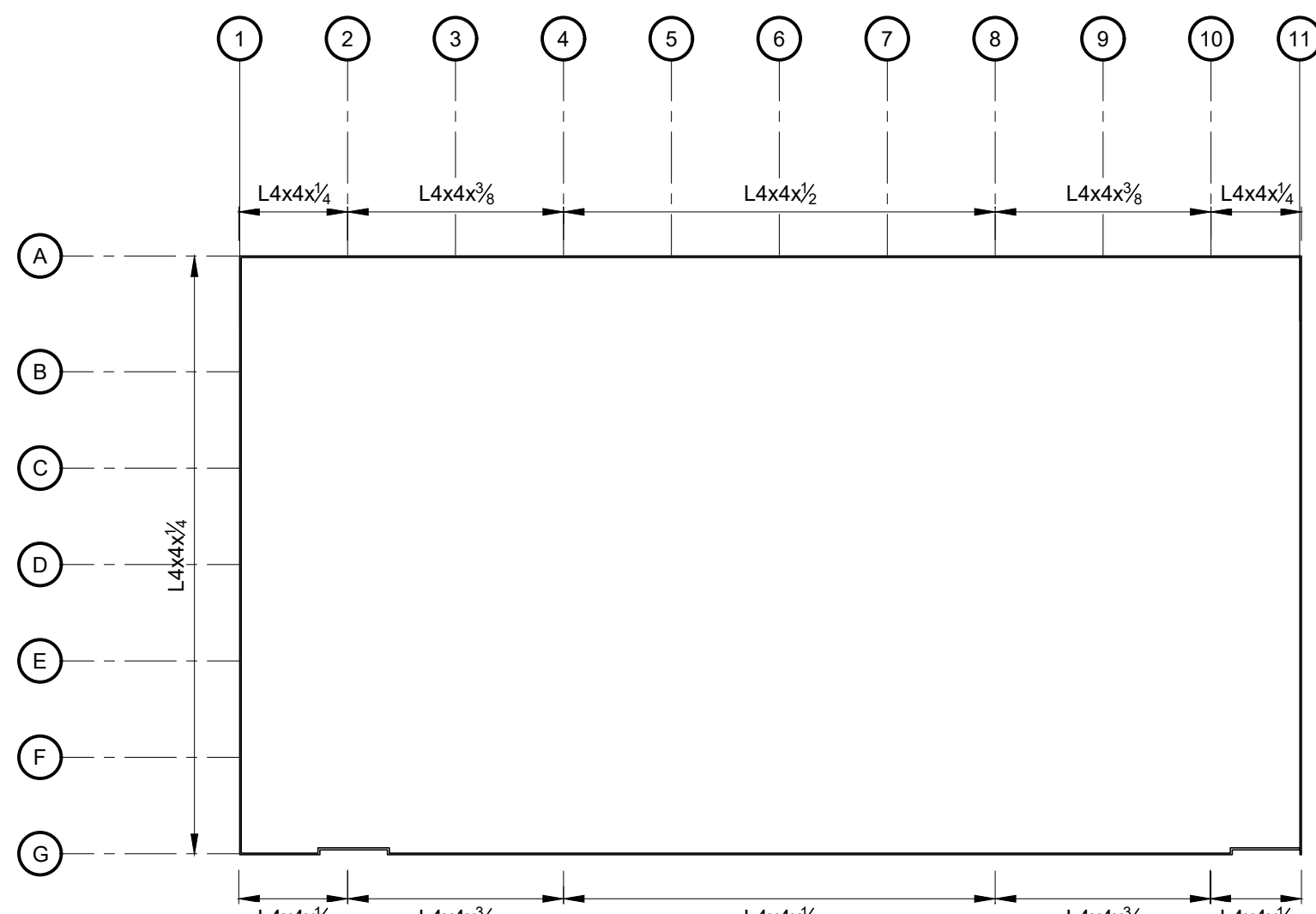
DETAIL BOOK REF.  
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### UPLIFT DIAGRAM ON JOISTS - C&C

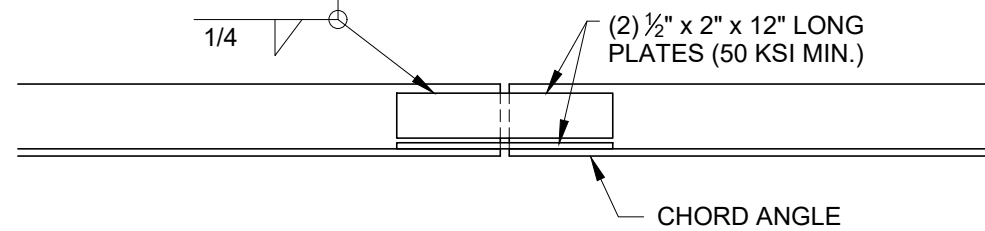
SCALE: NONE  
NOTE:  
1. LOADS INDICATED IN TABLE REPRESENT NET COMPONENTS & CLADDING SERVICE UPLIFT VALUES. VARY WITH ZONE (SEE UPLIFT DIAGRAM ON JOISTS - C&C).  
1.1. USE PRESSURE VALUE BELOW OBTAINED UTILIZING ALLOWABLE EFFECTIVE AREA AS DEFINED BY ASCE 7 CHAPTER 30 FOR JOIST UPLIFT.

COMPONENTS & CLADDING NET UPLIFT									
NET SERVICE LEVEL SURFACE PRESSURES (PSF)									
ROOF ZONE \ AREA	10 sf	20 sf	50 sf	100 sf	200 sf	350 sf	500 sf	1000 sf	1500 sf
NEGATIVE ZONE 1	-29.1	-26.9	-24.0	-21.9	-19.7	-17.9	-16.8	-16.8	-16.8
NEGATIVE ZONE 1'	-15.0	-15.0	-15.0	-15.0	-12.4	-10.2	-8.9	-6.2	-6.2
NEGATIVE ZONE 2	-39.7	-36.9	-33.1	-30.4	-27.5	-25.3	-23.8	-23.8	-23.8
NEGATIVE ZONE 3	-55.5	-49.9	-42.5	-36.9	-31.3	-26.7	-23.8	-23.8	-23.8



### DECK CHORD ANGLE ATTACHMENT PLAN

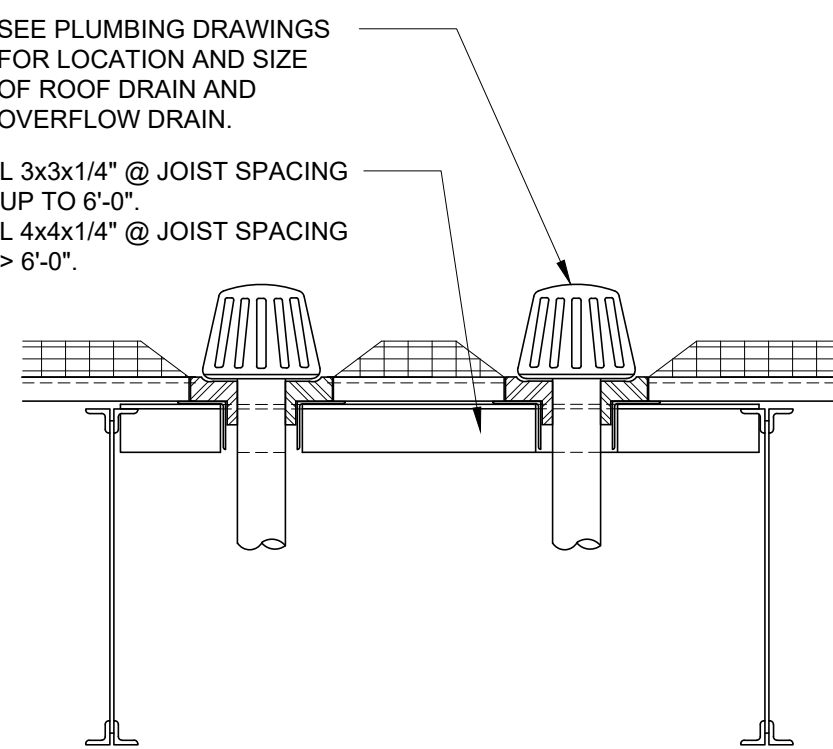
SCALE: NONE  
NOTE:  
1) ALL CHORD ANGLES TO HAVE YIELD STRENGTH OF 50 KSI MIN.



### TYPICAL DIAPHRAM CHORD SPLICE

SCALE: NONE

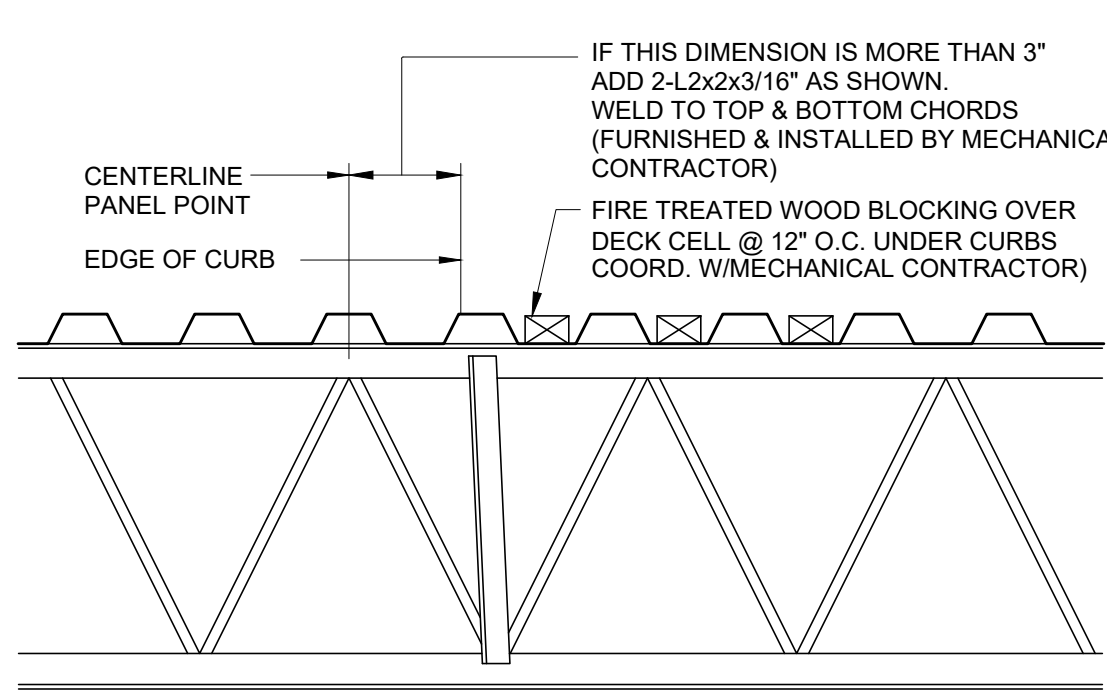
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### TYPICAL ROOF DRAIN SUPPORT

SCALE: NONE

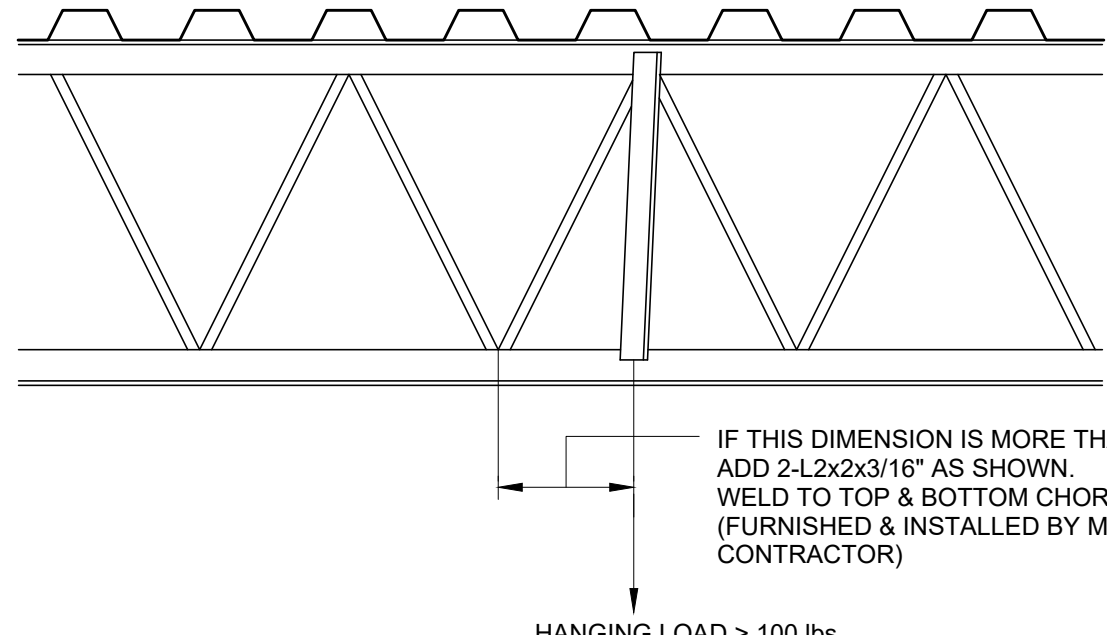
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### JOIST REINFORCEMENT AT ROOF TOP UNIT CURBS

SCALE: NONE  
NOTE: DO NOT ADD EQUIPMENT TO JOISTS SUPPORTING SPRINKLER MAINS W/OUT E.O.R. APPROVAL.

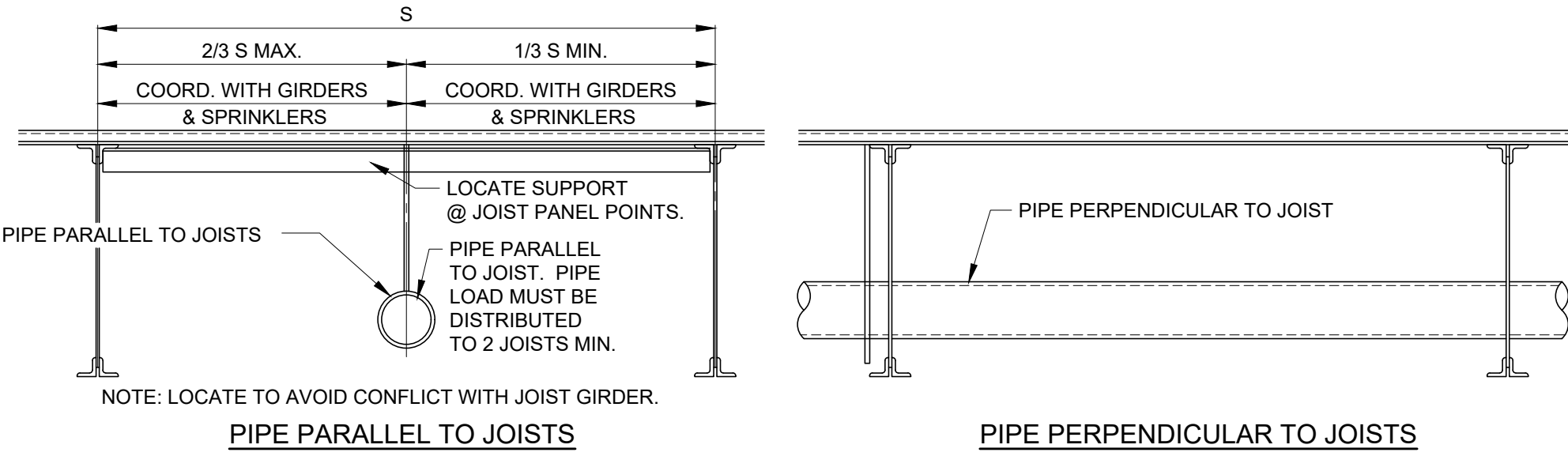
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### JOIST REINFORCEMENT AT HANGING LOADS

SCALE: NONE  
NOTE: DO NOT ADD EQUIPMENT TO JOISTS SUPPORTING SPRINKLER MAINS W/OUT E.O.R. APPROVAL.

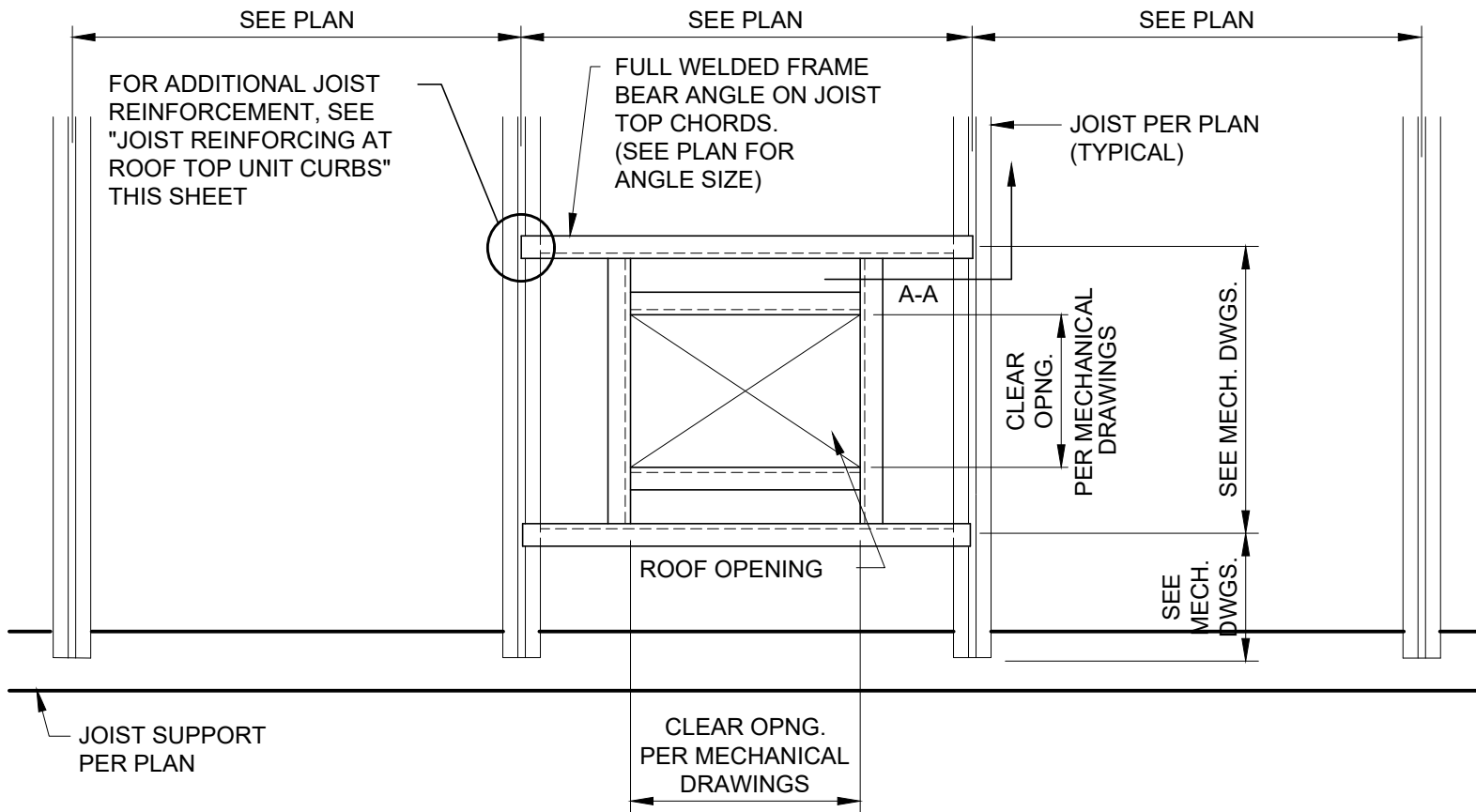
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### SPRINKLER MAIN SUPPORT DETAIL

SCALE: NO SCALE  
NOTES:  
- WHEN PARALLEL TO JOISTS 4" AND SMALLER PIPE MAY HANG FROM SINGLE JOIST, BUT MUST SPREAD OUT SO THAT THE SAME JOIST IS NOT AFFECTED BY MORE THAN ONE PIPE.  
- WHEN PARALLEL TO JOISTS 6" PIPES SHOULD BE LOCATED AS SHOWN IN SPACE BETWEEN JOISTS AND SPREAD OUT SO THAT THE SAME JOIST IS NOT AFFECTED BY MORE THAN ONE PIPE. EXCEPTION: IF PIPE LOCATIONS ARE PROVIDED DURING DESIGN LOADS CAN BE MODIFIED TO ACCOUNT FOR PIPES.  
- PIPES GANGED TOGETHER MUST BE REVIEWED BY EOR FOR SPECIFIC LOADS PRIOR TO JOIST FABRICATION.  
- DO NOT SPACE HANGERS MORE THAN 15' APART.  
- WHEN PERPENDICULAR, PIPES LARGER THAN 6"Ø SHALL BE REVIEWED BY EOR FOR SPECIFIC LOADS PRIOR TO JOIST FABRICATION.  
- DO NOT HANG WITH A BEAM CLAMP FROM BOTTOM CHORD OF JOIST OR GIRDER. BOTTOM CHORD HANGERS MUST BE CONCENTRIC, IF USED.  
- HANGERS SHALL BE LOCATED WITHIN 3" OF PANEL POINTS OR JOIST SHALL BE REINFORCED PER TYP. REINF. AT POINT LOADS TAIL.  
- DO NOT SUPPORT MAINS FROM JOISTS THAT ALSO SUPPORT MECHANICAL EQUIPMENT WITHOUT E.O.R. REVIEW.

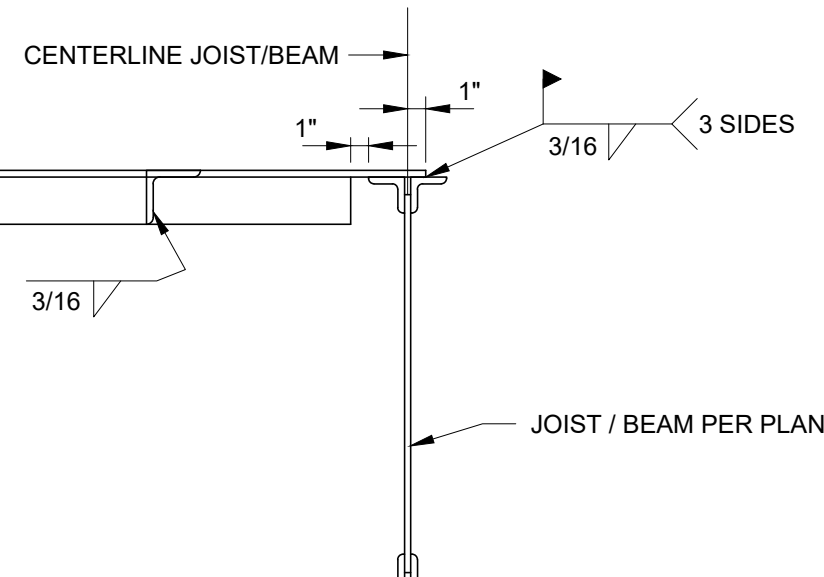
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8/24/2023



### TYPICAL ROOF OPENING

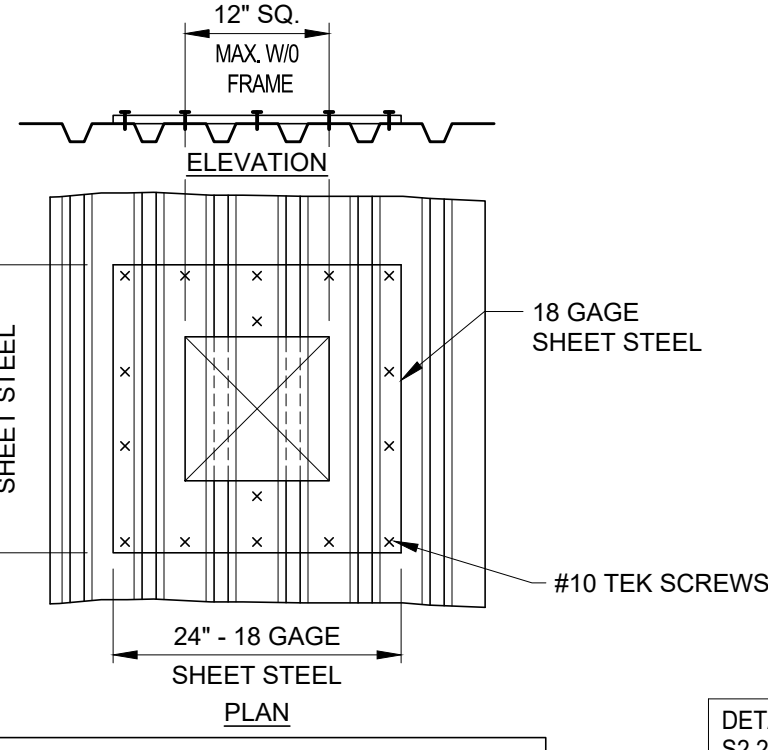
SCALE: NO SCALE  
NOTE: THE UNIT IS SUPPORTED BY THE UNIT CURB WHICH MUST BE DESIGNED TO SPAN TO SUPPORTING MEMBERS.

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### ROOF DECK OPENING ≤ 12"

SCALE: NO SCALE



NOTE: WHERE DECK OPENINGS ARE GREATER THAN 12" ON ANY SIDE PROVIDE L 4x4x1/4" FRAME @ EXHAUST FANS.

DETAIL BOOK REF.  
S2 25  
1/27/2023

DESIGNER / BUILDER

**ARCO**  
DESIGN/BUILD

44 SOUTH BROADWAY, SUITE 1003  
WHITE PLAINS, NY 10601  
P: 914.821.5535 F: 914.306.6010

**ADB**  
STRUCTURAL  
ENGINEERING

PROJECT TITLE  
**ROCKLAND  
LOGISTICS  
CENTER BLDG 2**

25 OLD MILL RD.  
SUFFERN, NY 10901

OWNER  
BROOKFIELD PROPERTIES  
1 MEADOWLANDS PLAZA, SUITE 802  
EAST RUTHERFORD, NJ 07073

ARCHITECT  
ADB / DESIGN SERVICES LLC  
44 SOUTH BROADWAY, SUITE 1003  
WHITE PLAINS, NY 10601

CIVIL ENGINEER  
DYNAMIC ENGINEERING CONSULTANTS  
1904 MAIN STREET  
LAKE COMO, NJ 07719

STRUCTURAL ENGINEER  
NATIONAL DESIGN BUILD SERVICES  
325 S. ALABAMA ST., SUITE 200  
INDIANAPOLIS, IN 46204

MECHANICAL ENGINEER  
MARYLAND HEIGHTS, MO 63146

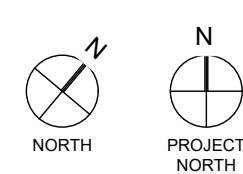
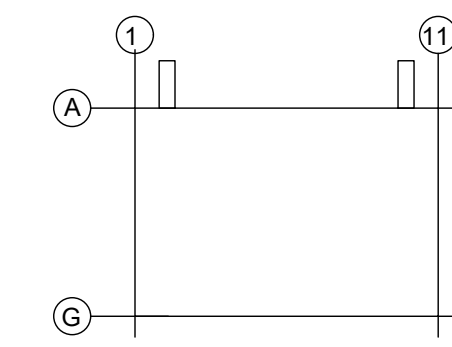
ELECTRICAL ENGINEER  
FXB ENGINEERING  
5 CHRISTY DRIVE, SUITE 307  
CHADDS FORD, PA 19317

PLUMBING ENGINEER  
MCCARTHY ENGINEERING  
2500 E HIGH STREET, SUITE 630  
POTTSTOWN, PA 19464

FIRE PROTECTION ENGINEER  
S.A. COMUNALE  
2900 NEWPARK DRIVE  
BARBERTON, OH 44203

SEAL

KEY PLAN



SUBMITTALS

NO.	DATE	DESCRIPTION
12-04-23	COORDINATION SET	
12-08-23	75% PROGRESS SET	
01-26-24	90% PROGRESS SET	
02-09-24	PERMIT SET	

PROJECT NO.  
AS397-22 NY154 / SEI-085-23

DRAWN BY  
JWC

SHEET TITLE  
**STRUCTURAL  
DETAILS**

SHEET NO.

**S4.2**