

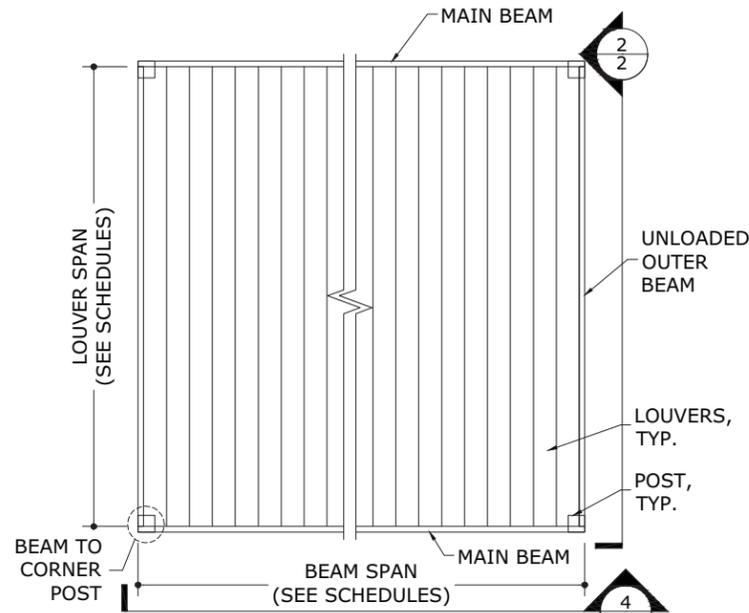
SUNDANCE LOUVERED ROOFS, LLC

ALUMINUM LOUVERED ROOF MASTER PLAN SHEET

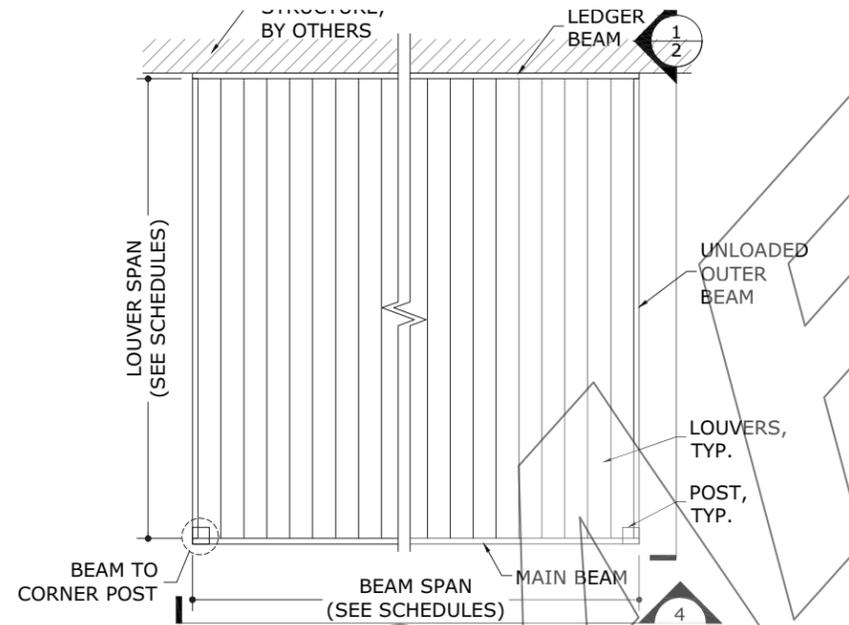
ANY LOUVERED ROOF SYSTEM COMPONENTS/DETAILS NOT LISTED HEREIN SHALL BE PER MANUFACTURER'S RECOMMENDATIONS

NOTE: SINGLE-BAY AND DOUBLE-BAY PLAN VIEWS ARE SHOWN ON THIS PAGE. FOR MULTI-BAY OPTIONS, SEE PAGE 3.

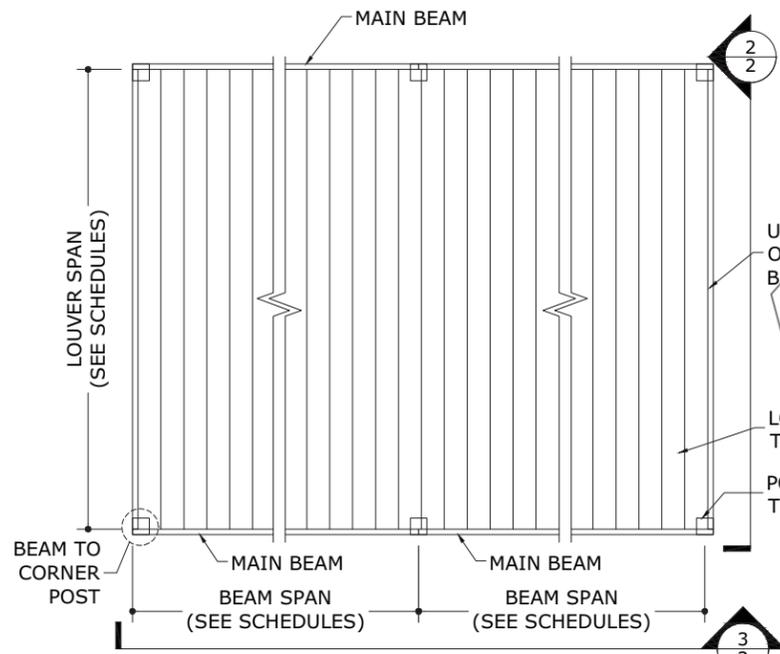
SEE SHEET 8 FOR OVERHANG OPTIONS



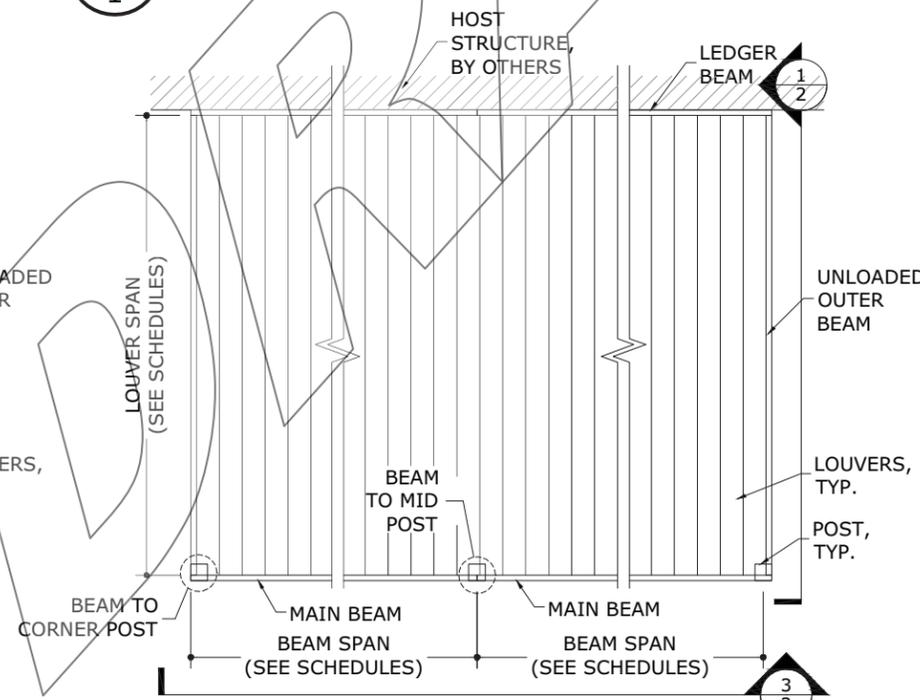
1 FREESTANDING (4 POSTS)
1 N.T.S. PLAN



2 HOST ATTACHED (2 POSTS)
1 N.T.S. PLAN



3 FREESTANDING (6 POSTS)
1 N.T.S. PLAN



4 HOST ATTACHED (3 POSTS)
1 N.T.S. PLAN

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- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR $C_d=1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
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- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF, INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA. THIS ADDITIONAL ROOF LOAD CRITERIA SHALL BE PROPERLY ANALYZED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT.
- LOUVER SYSTEM HINGES AND OPERABILITY ARE OUTSIDE THE SCOPE OF THIS CERTIFICATION.
- LINEAR INTERPOLATION FOR MEMBER SPANS MAY BE USED FOR ALL LOUVER AND BEAM SCHEDULES.
- ALL FASTENERS TO BE #14 OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
- FOR ALUMINUM MEMBERS ALL ANCHORS SHALL BE SPACED WITH $2 \times$ DIAMETER END DISTANCE AND $2.5 \times$ DIAMETER MIN. SPACING TO ADJACENT ANCHORS, UNLESS NOTED OTHERWISE.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE AS NOTED HEREIN.
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ALL ALUMINUM SHALL BE 6063-T6 ALLOY AND TEMPER UNLESS NOTED OTHERWISE.
- ALL CONCRETE AND EPOXY TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS.
- STEEL REINFORCEMENT: ALL REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO CURRENT REQUIREMENTS OF ASTM A615, GRADE 60 (U.N.O.), FREE FROM OIL, LOOSE SCALE AND LOOSE RUST; AND BENT, LAPPED, PLACED, SUPPORTED AND FASTENED ACCORDING TO THE "ACI DETAILING MANUAL" AND ACI 318. ALL STEEL SHALL BE SECURELY HELD IN PLACE DURING POURING OF CONCRETE. IF REQUIRED, ADDITIONAL BARS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.
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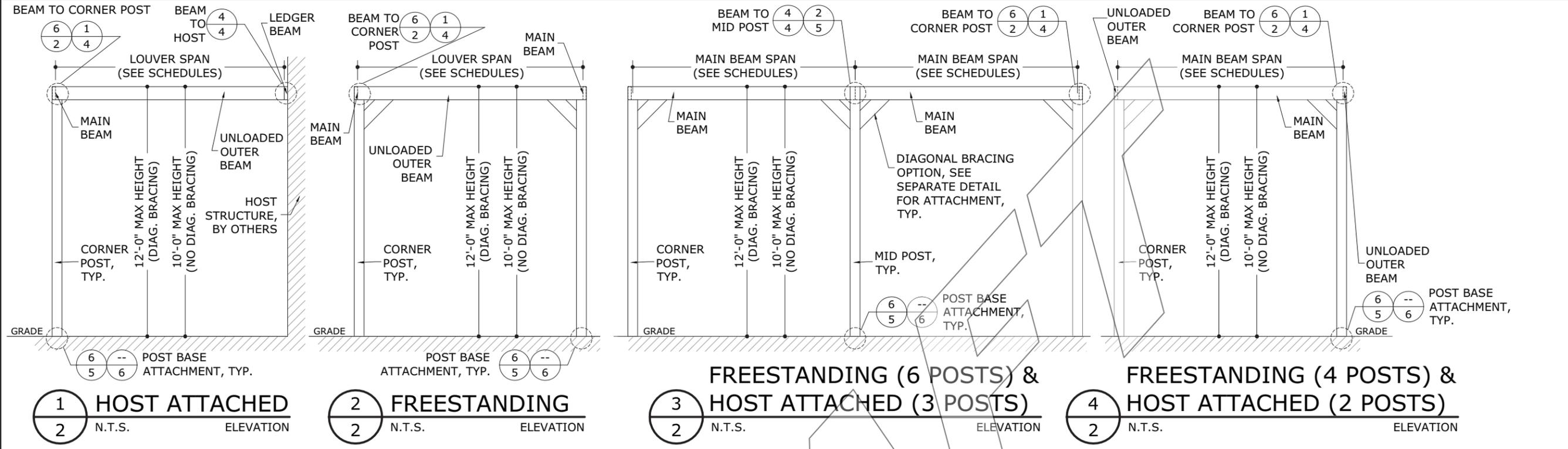
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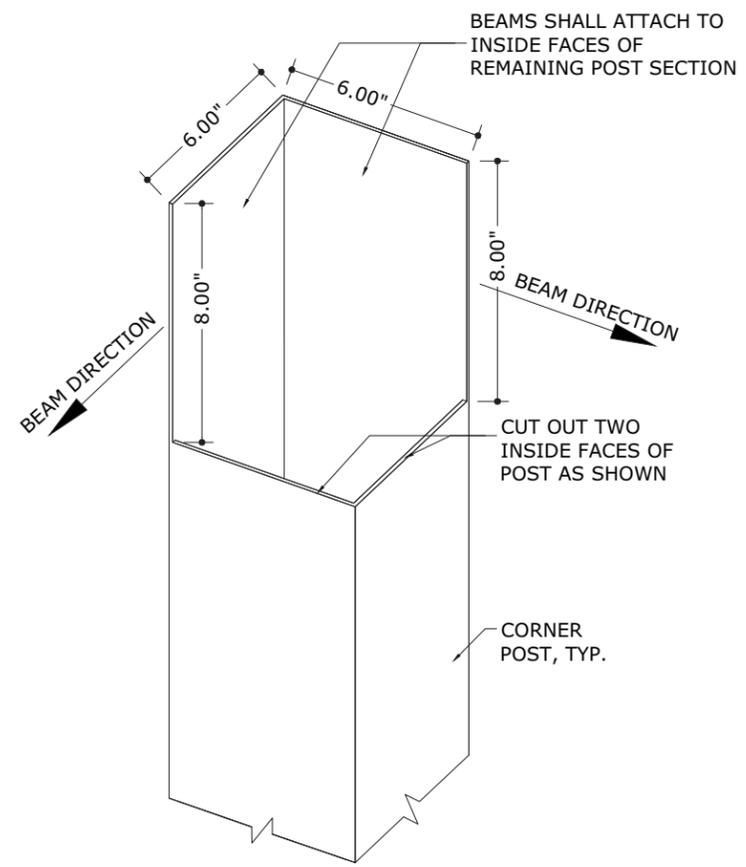


1 HOST ATTACHED
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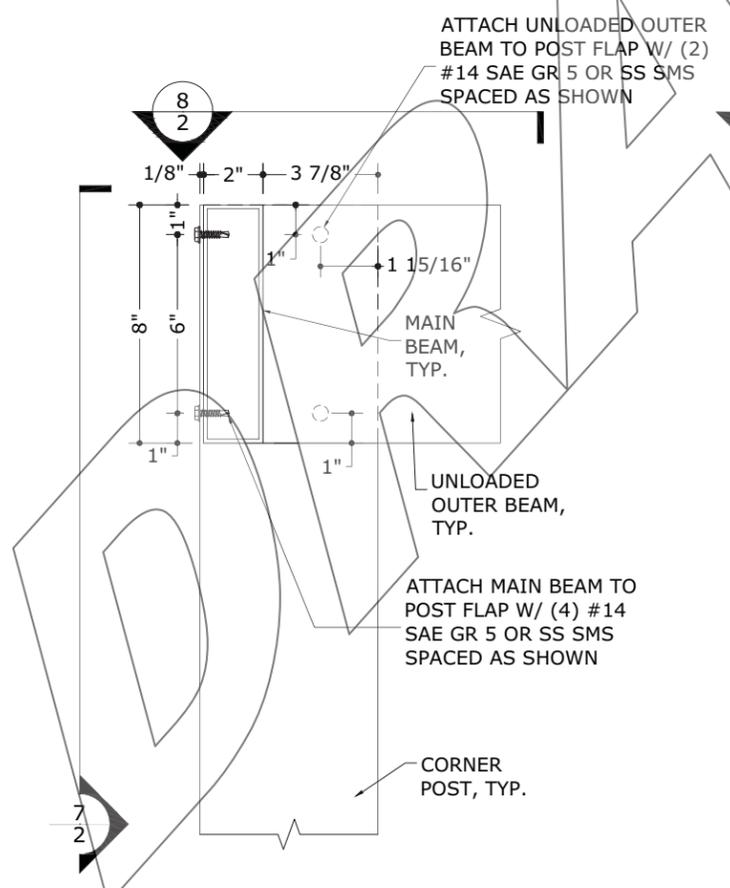
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2 N.T.S. ELEVATION

3 FREESTANDING (6 POSTS) & HOST ATTACHED (3 POSTS)
2 N.T.S. ELEVATION

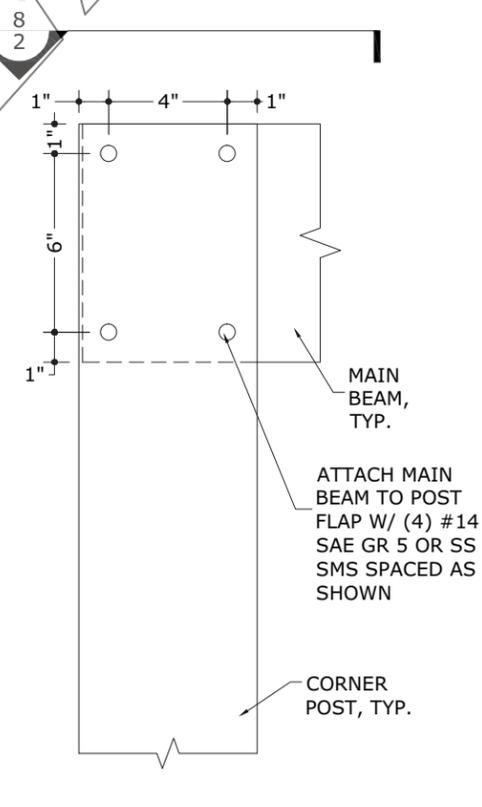
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2 N.T.S. ELEVATION



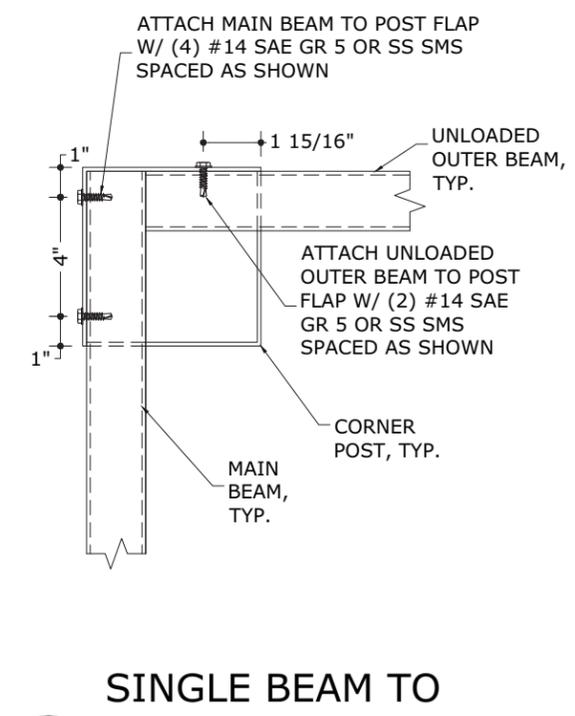
5 CORNER POST CUT OUT
2 N.T.S. ISOMETRIC



6 SINGLE BEAM TO CORNER POST
2 N.T.S. SECTION



7 SINGLE BEAM TO CORNER POST
2 N.T.S. SECTION



8 SINGLE BEAM TO CORNER POST
2 N.T.S. SECTION

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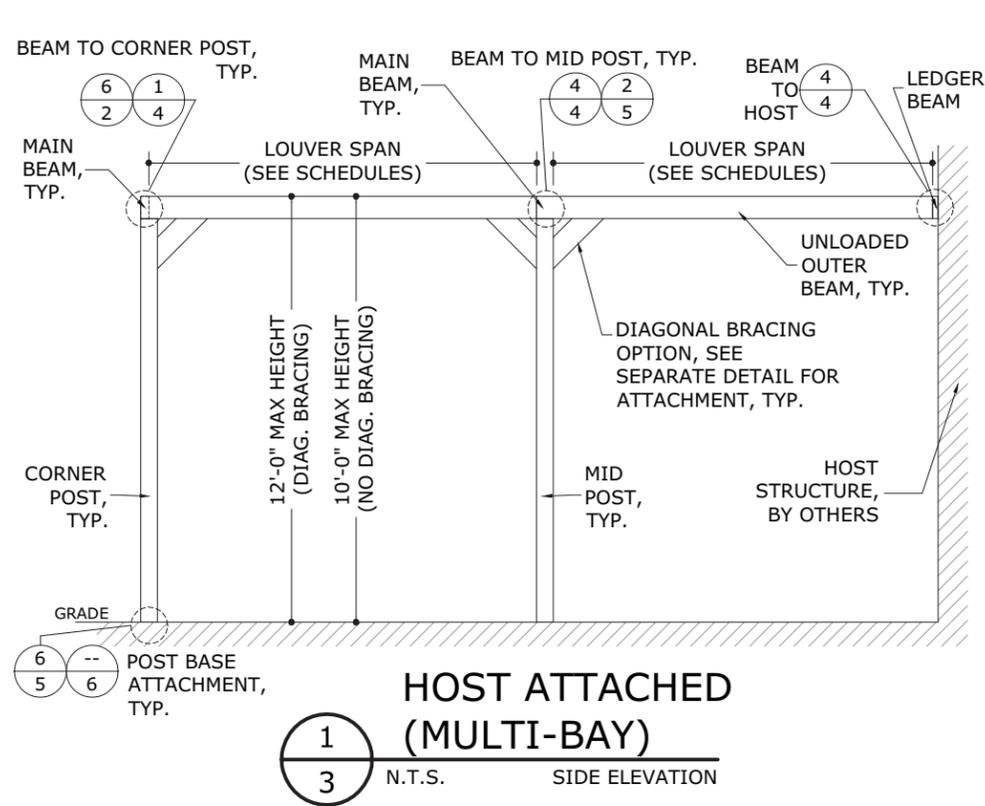
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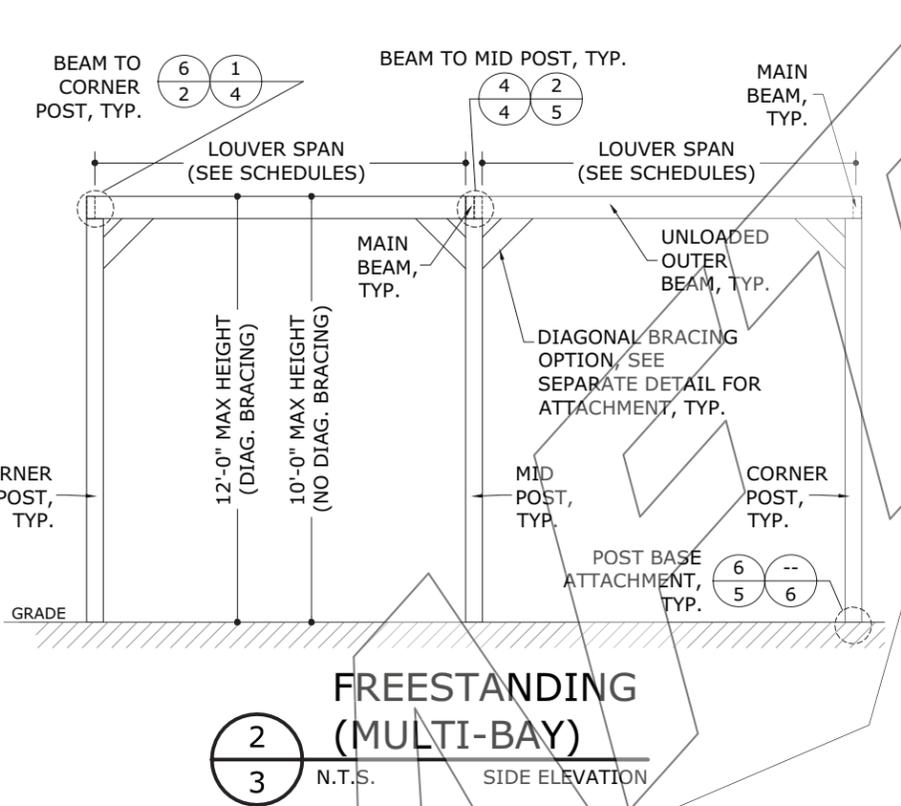
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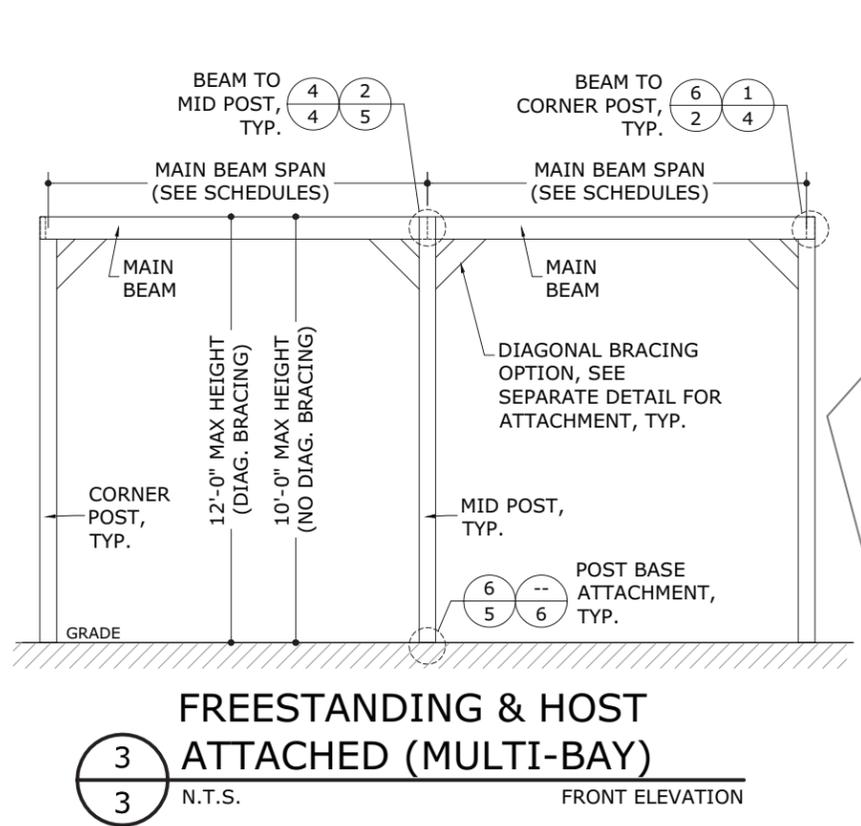
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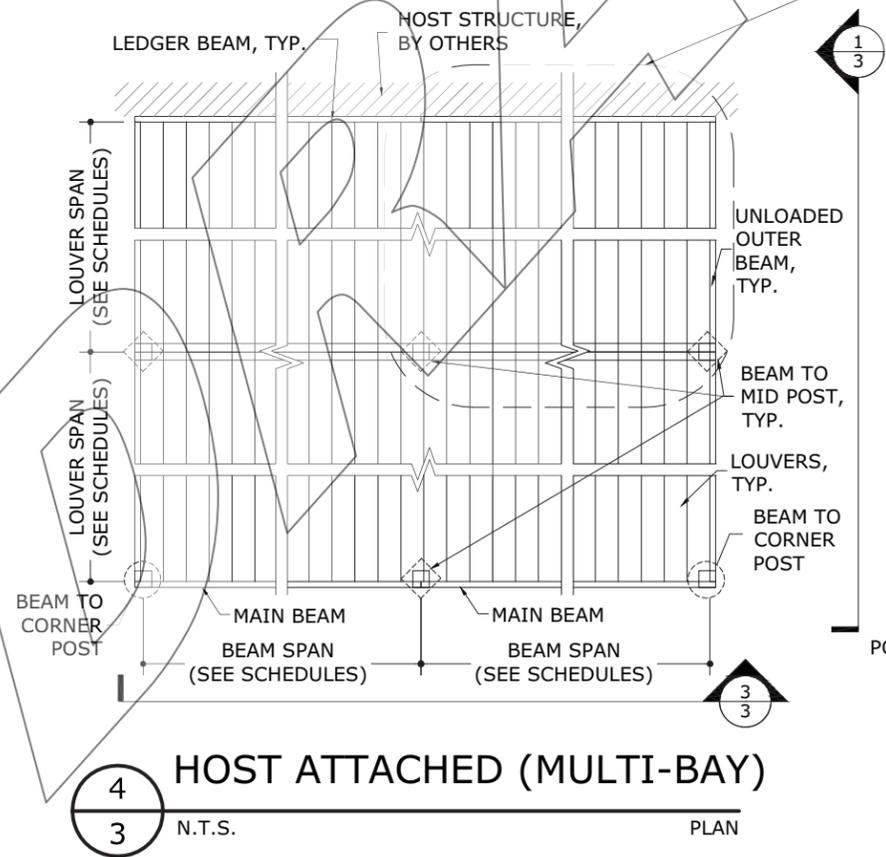
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3 N.T.S. SIDE ELEVATION



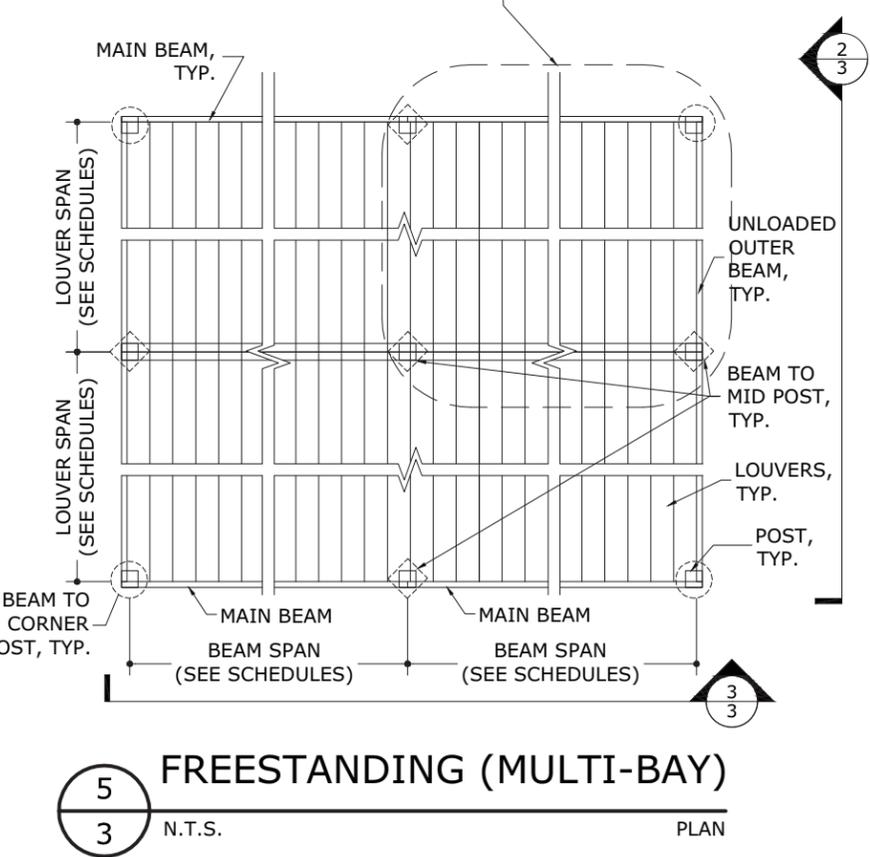
2
3 N.T.S. SIDE ELEVATION



3
3 N.T.S. FRONT ELEVATION



4
3 N.T.S. PLAN



5
3 N.T.S. PLAN

MULTI-BAY DIRECTIVE

A BAY IS DEFINED IN THIS DOCUMENT AS THE RECTANGULAR REGION BETWEEN (4) NEIGHBORING POSTS OR (2) POSTS AND A SIDE SUPPORTED BY THE HOST STRUCTURE (BY OTHERS). SEE CIRCLED REGIONS BELOW.

THE DETAILS ON THE PREVIOUS PAGES DEPICT SINGLE-BAY AND DOUBLE-BAY SCENARIOS. THE DETAILS ON THIS PAGE DEPICT MULTI-BAY SCENARIOS ORGANIZED INTO A 2 x 2 MATRIX.

OTHER MULTI-BAY SCENARIOS ARE ALLOWED UP TO A MAXIMUM OF (4) BAYS, SUBJECT TO ALL LIMITATIONS AND SPECIFICATIONS STATED HEREIN. PLEASE CONTACT THIS OFFICE FOR ADDITIONAL CLARIFICATIONS AND/OR CONFIGURATIONS.

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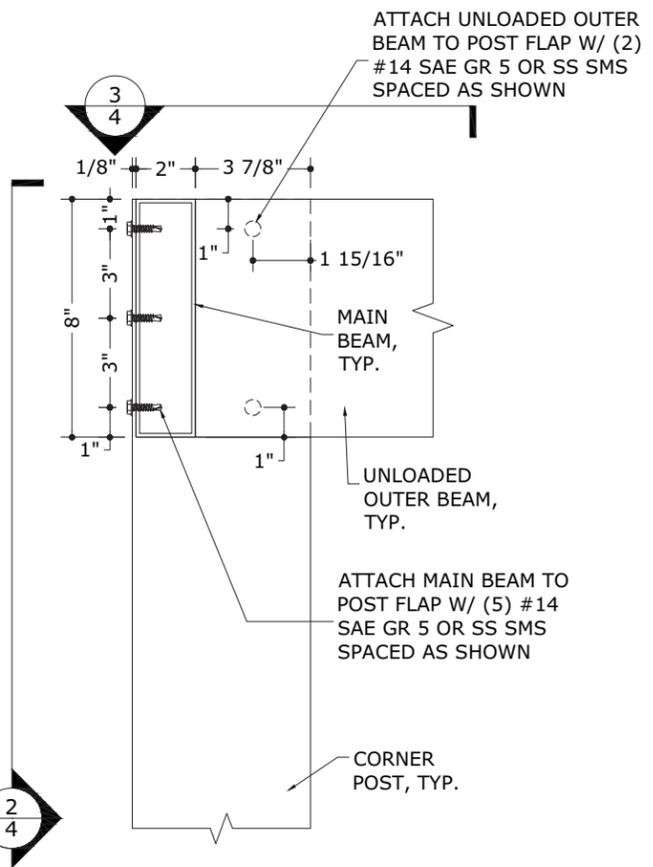
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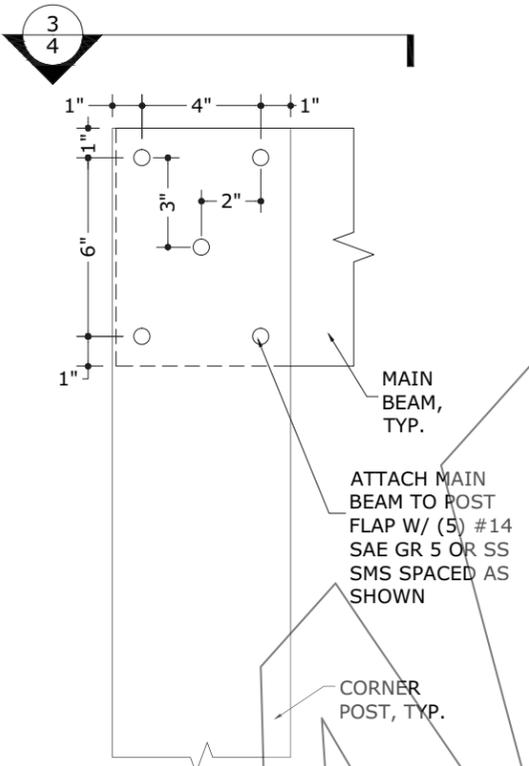
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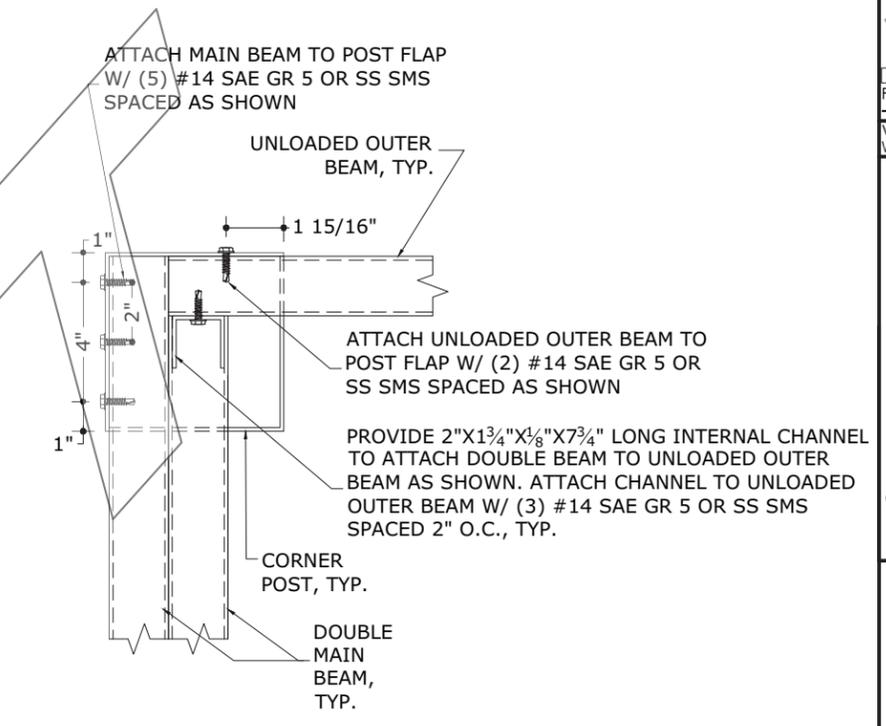
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4 N.T.S. SECTION

DOUBLE BEAM TO CORNER POST



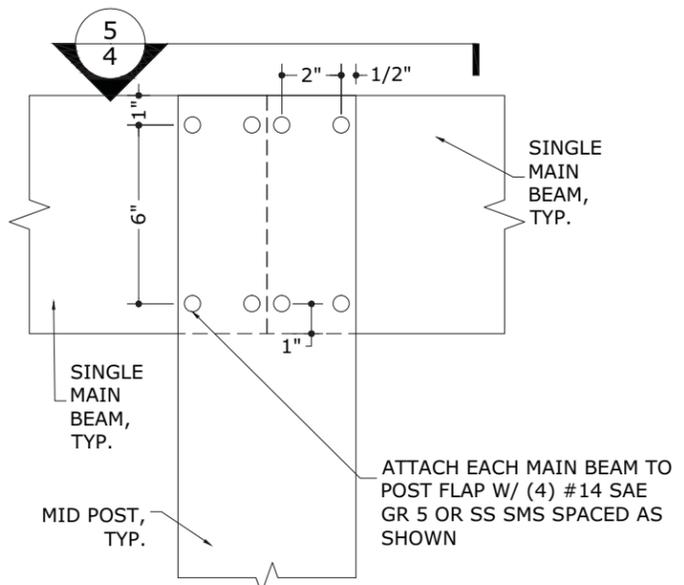
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DOUBLE BEAM TO CORNER POST



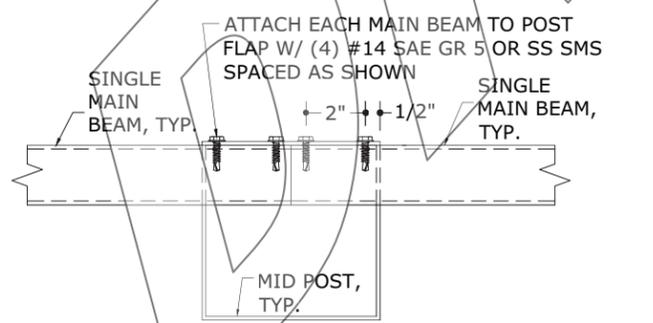
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4 N.T.S. SECTION

DOUBLE BEAM TO CORNER POST



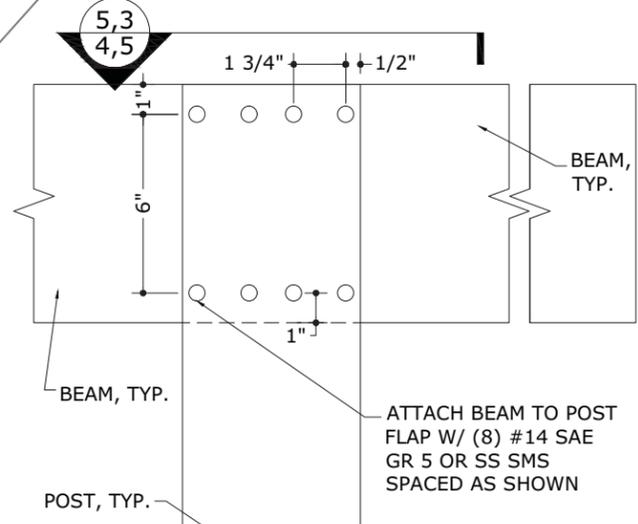
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4 N.T.S. SECTION

SINGLE BEAM TO MID POST



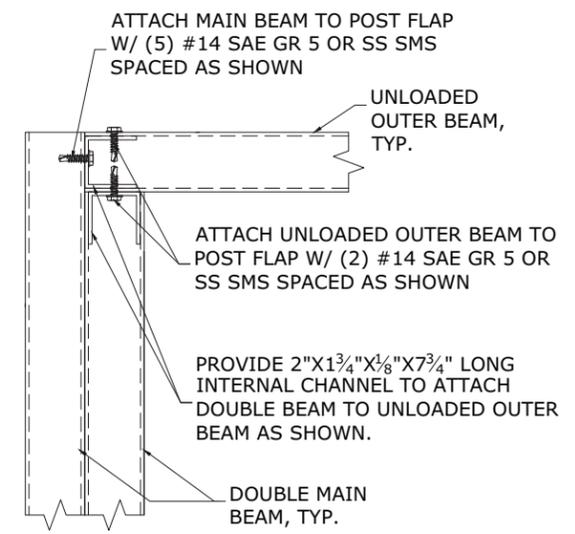
5
4 N.T.S. SECTION

SINGLE BEAM TO MID POST



6
4 N.T.S. SECTION

SINGLE/DOUBLE BEAM TO POST (FOR OVERHANG ONLY)



7
4 N.T.S. SECTION

BEAM TO BEAM ATTACHMENT (FOR OVERHANG ONLY)

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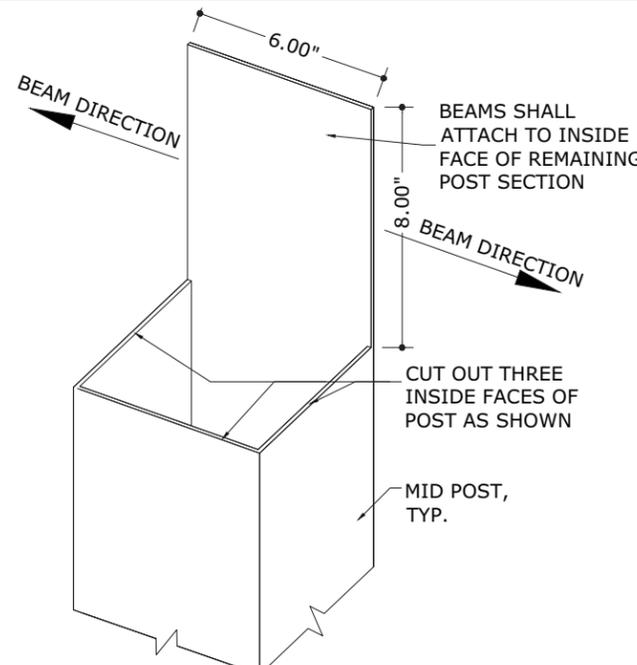
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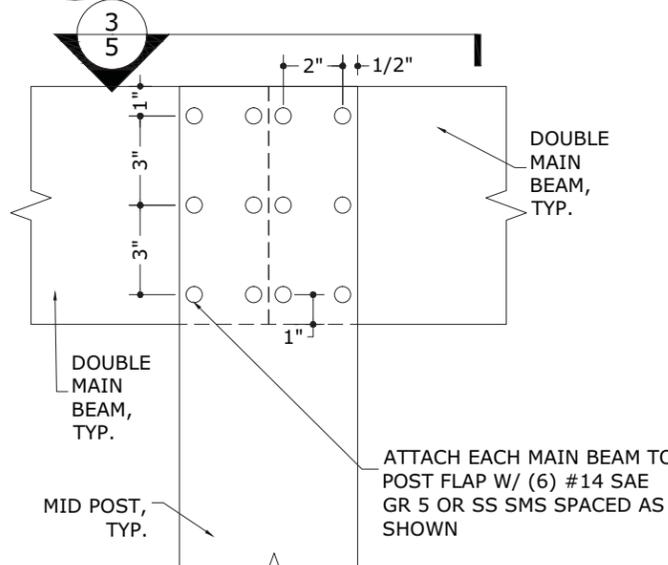
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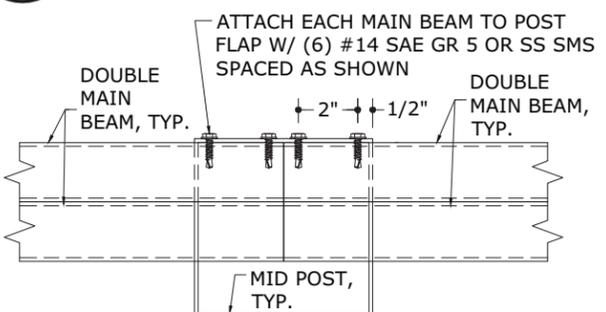
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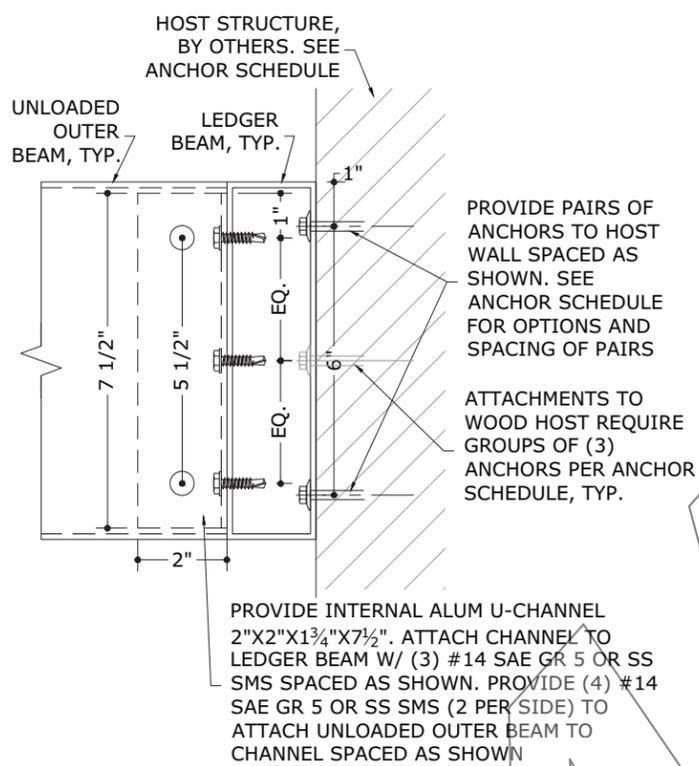
1 MID POST CUT OUT
5 N.T.S. ISOMETRIC



2 DOUBLE BEAM TO MID POST
5 N.T.S. SECTION



3 DOUBLE BEAM TO MID POST
5 N.T.S. SECTION



4 BEAM TO LEDGER BEAM
5 N.T.S. SECTION

ANCHOR SCHEDULE:

TO HOLLOW CONCRETE BLOCK (ASTM C-90):

- 1/4" ITW TAPCON (OR EQUIV.) W/ 1 1/4" MIN. EMBEDMENT, 4" MIN. EDGE DISTANCE. SPACE PAIRS AT 10" O.C AND 5" FROM ENDS

TO WOOD HOST STRUCTURE (G=0.55 MIN.):

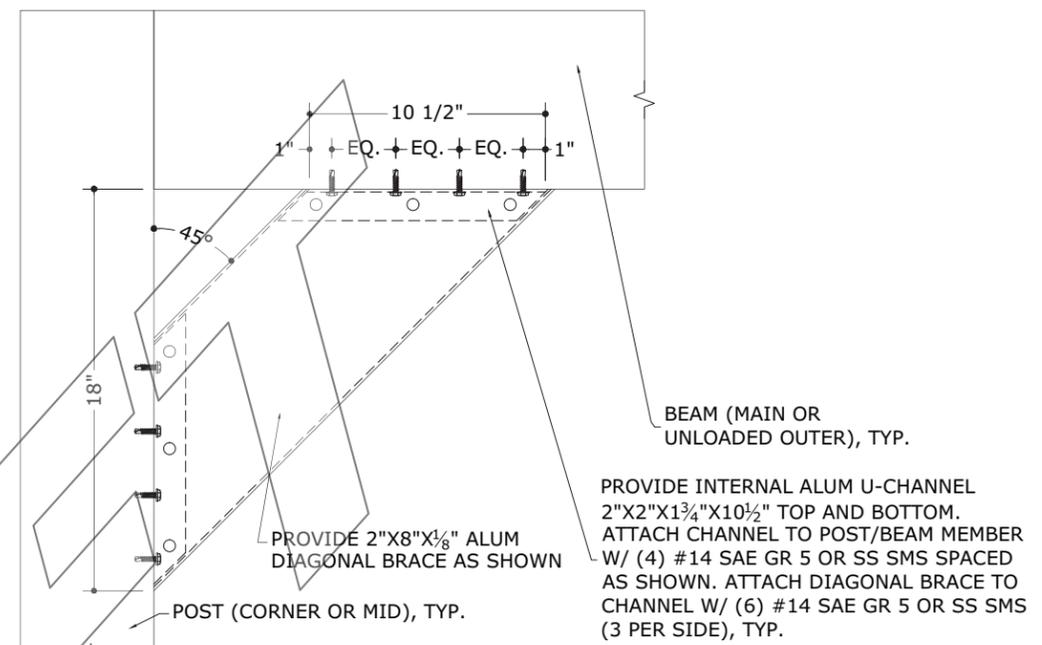
- 5/16" LAG SCREWS W/ 2" MIN. THREAD PENETRATION, 3/4" MIN. EDGE DISTANCE. SPACE GROUPS OF (3) AT 16" O.C. AND 6" MIN. FROM ENDS

TO CONCRETE (3000 PSI MIN.):

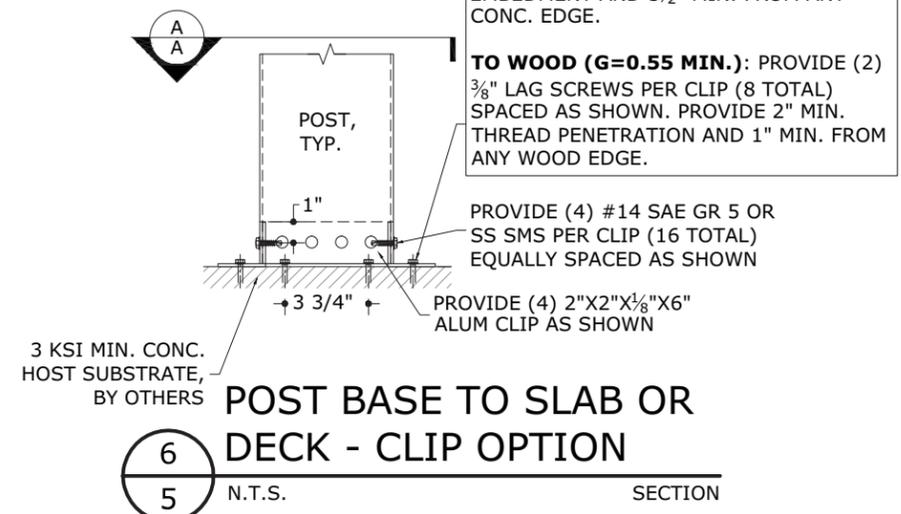
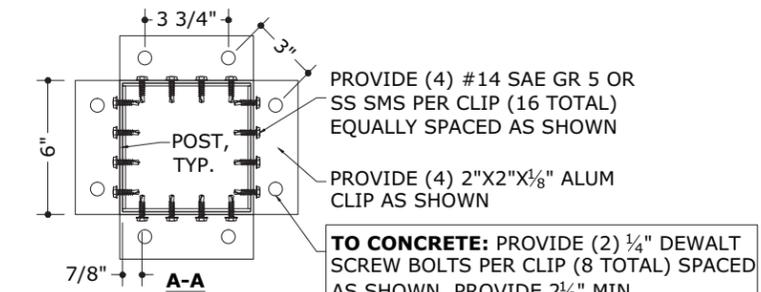
- 1/4" ITW TAPCON (OR EQUIV.) W/ 1 3/4" MIN. EMBEDMENT, 2 1/2" MIN. EDGE DISTANCE. SPACE PAIRS AT 16" O.C. AND 6" MIN. FROM ENDS

ANCHOR NOTES:

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
2. WOOD HOST STRUCTURE SHALL BE G=0.42 OR GREATER DENSITY, AND SHALL NOT BE DIRECTLY EXPOSED TO WEATHERING ELEMENTS.
3. MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
4. ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
5. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.



5 DIAGONAL BRACE OPTION
5 N.T.S. SECTION



6 POST BASE TO SLAB OR DECK - CLIP OPTION
5 N.T.S. SECTION

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POST BASE ATTACHMENT - FOOTER OPTION

6
SEE DETAILS ON THIS PAGE

FOOTER SCHEDULE

TABLE 1: FOOTING ALLOWABLE UPLIFT

ALLOWABLE UPLIFT FOR AVERAGE ON-CENTER COLUMN SPACING, LB (SEE CALCULATIONS ON THIS PAGE)

FOOTING TYPE	UPLIFT PER FOOTER
PAD H	479
PAD I	1619
PAD J	2999

TABLE 1 DESIGN NOTES

- F.S. AGAINST UPLIFT OF 1.67 HAS BEEN APPLIED TO ALL LOADS.
- TABLES CAN ALSO BE USED WITH INTERMEDIATE CARRY BEAM. USE TOTAL ROOF SPAN WHEN SOLVING FOR INTERMEDIATE FOOTING & SPAN FROM CARRY BEAM TO END OF ENCLOSURE FOR OUTER FOOTING.
- AT 2000PSF SOIL BEARING PRESSURE, GRAVITY DOES NOT GOVERN IN ANY CASE. ENSURE PROPER COMPACTION & EMBEDMENT FOR FROST & HEAVE REQUIREMENTS.

SITE SPECIFIC ENGINEERING REQUIRED FOR ANY VALUES, SIZES, CONCRETE TYPES, OR SOIL BEARING PRESSURES NOT COINCIDING WITH LIMITS OF CORRESPONDING MASTER PLAN SHEETS AND THIS MASTER PLAN.

FOOTER SCHEDULE NOTES:

- FOOTERS SHALL BE 3000 PSI MINIMUM CONCRETE, BEARING ON SOIL WITH A MINIMUM BEARING CAPACITY OF 2000 PSF AS VERIFIED BY OTHERS.
- IN LIEU OF THE FOOTERS DETAILED HEREIN, POSTS MAY BE ANCHORED TO EXISTING CONCRETE SLABS DESIGNED AND VERIFIED BY OTHERS TO SUPPORT THE CANOPY SYSTEM AS DETAILED HEREIN.
- FOOTERS SHALL HAVE THE MINIMUM REINFORCEMENT INDICATED IN THE FOOTER REINFORCEMENT DETAIL.
- THESE SCHEDULES PROVIDE ONLY THE REQUIRED FOOTER SIZES, BEAM SPANS AND PURLIN SPANS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE SPANS NOTED IN THEIR RESPECTIVE DESIGN SCHEDULES.
- ALL REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO CURRENT REQUIREMENTS OF ASTM A615, GRADE 60 (U.O.N.), FREE FROM OIL, LOOSE SCALE AND LOOSE RUST AND BENT, LAPPED, PLACED, SUPPORTED AND FASTENED ACCORDING TO THE "ACI DETAILING MANUAL" (SP-66) AND THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).
- MINIMUM REINFORCING STEEL CLEAR COVERAGE SHALL BE AS FOLLOWS. (PER ACI 318)
 - FOOTING: TOP, SIDES, BOTTOM = 1 1/2" MIN. INSTALLED ON A SMOOTH LEVEL SURFACES ONLY. MAINTAIN 3" IF NOT IN SMOOTH FORM.
- ALLOW 3 DAYS CURE TIME BEFORE INSTALLING ANCHORS INTO CONCRETE.**
- ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS". CONCRETE HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000PSI AT 28 DAYS. A CERTIFICATE OF MANUFACTURER'S MIX AND STRENGTH IS TO BE PROVIDED TO THE INSPECTOR UPON REQUEST. NO WATER TO BE ADDED AFTER TRUCK LEAVES PLANT WITHOUT APPROVAL OF ENGINEER OR PLANT ENGINEER. PLANT CONTROL IS REQUIRED. MAXIMUM MIX TIME AT POINT OF DEPOSIT IS 90 MINUTES.
- THESE TABLES REPRESENT EMPIRICAL UPLIFT CALCULATIONS FOR FOOTING SIZES BASED ON STANDARD WEIGHT (150PCF) CONCRETE. THEY NEGLECT THE BENEFIT OF SKIN FRICTION AND OTHER BENEFICIAL SURCHARGE LOADING. NO WARRANTY, EXPRESSED OR IMPLIED, IS CONTAINED HEREIN AS TO ANY INFORMATION OTHER THAN THAT WHICH IS PUBLISHED HEREIN.

SINGLE BEAM:

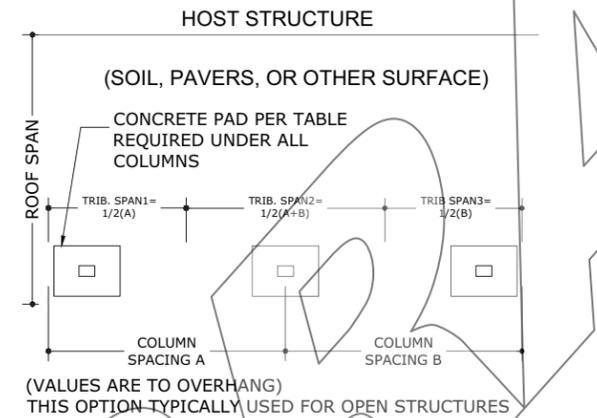
POST TYPE	DESIGN PRESSURE (UPLIFT)	UPLIFT PER FOOTER
MID	16 psf	2560 lb
	18 psf	2880 lb
	20 psf	3200 lb
	25 psf	4000 lb
	30 psf	4800 lb
CORNER	16 psf	1280 lb
	18 psf	1440 lb
	20 psf	1600 lb
	25 psf	2000 lb
	30 psf	2400 lb

DOUBLE BEAM:

POST TYPE	DESIGN PRESSURE (UPLIFT)	UPLIFT PER FOOTER
MID	16 psf	3072 lb
	18 psf	3456 lb
	20 psf	3840 lb
	25 psf	4800 lb
	30 psf	5760 lb
CORNER	16 psf	1536 lb
	18 psf	1728 lb
	20 psf	1920 lb
	25 psf	2400 lb
	30 psf	2880 lb

NOTE: UPLIFT PER FOOTER FORCES SHOWN ABOVE INCLUDE A 50% REDUCTION IN TOTAL FORCE TO ACCOUNT FOR LOUVER SURFACE AREA EXPOSED TO WIND WHEN IN THE FULLY OPENED POSITION. TO UTILIZE THESE VALUES, LOUVERS SHALL BE FULLY OPENED BEFORE ANY NAMED STORM OR SIMILAR HIGH-WIND EVENT. IF NOT, THE UPLIFT PER FOOTER FORCES SHOWN ABOVE SHALL BE DOUBLED BEFORE USE.

PAD FOOTING LAYOUT / DETAILS

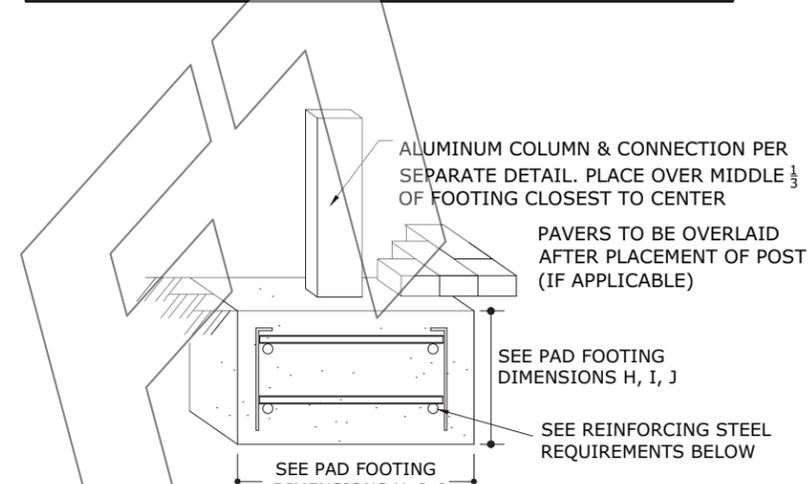


FOR ADDITIONAL FOOTING OPTIONS:

VISIT ECALC.IO/FOOTING
FOR ENGINEER-CERTIFIED ORIGINALS, HELPFUL TOOLS & RESOURCES & SITE-SPECIFIC ORDERING

VISIT ENGINEERINGEXPRESS.COM/STORE FOR MORE MANUFACTURER MASTER PLANS TO USE WITH THIS DOCUMENT

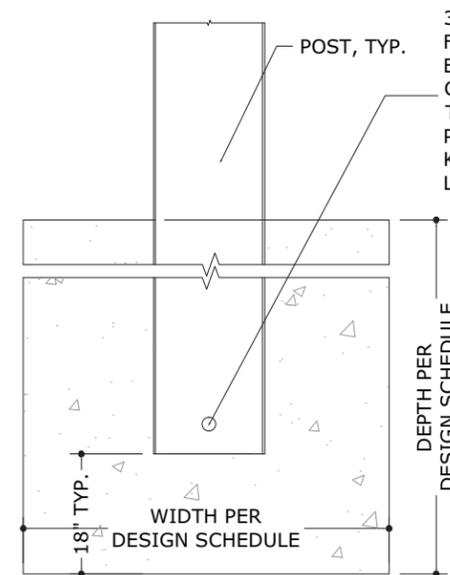
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PAD FOOTING DESIGNATIONS H, I, J

DESIGNATION	DIMENSIONS:	HORIZONTAL STEEL:	VERTICAL STEEL:	VOLUME, CUFT
H	24" X 24" X 16" DEEP	(2) #5 BARS EACH WAY T & B	(4) #3 STIRRUPS	5.33
I	36" X 36" X 24" DEEP	(3) #5 BARS EACH WAY T & B	(6) #3 STIRRUPS	18.00
J	40" X 40" X 36" DEEP	(4) #5 BARS EACH WAY T & B	(8) #3 VERTICAL STIRRUPS	33.33

NOTE: SIMILAR EQUIVALENT FOOTING SIZES MAY BE USED PROVIDED CUFT, ACI STEEL PLACEMENT, & FOOTING DEPTHS ARE AS SPECIFIED/FOLLOWED & FROST DEPTH IS MET. TOP OF FOOTINGS SHALL BE AT GRADE OR BELOW



1 POST EMBED DETAIL

6 NTS ELEVATION

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(801) 991-0010

HOST ATTACHED AND FREESTANDING ALUMINUM LOUVER MPS

INTERNATIONAL BUILDING CODE

REMARKS	DRWN	CHKD	DATE
INIT ISSUE (AS 18-5654)	IRWN	TSB	09/24/18
2018 IBC UPDATE	EPR	RWN	05/11/20
ADD FOOTER NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

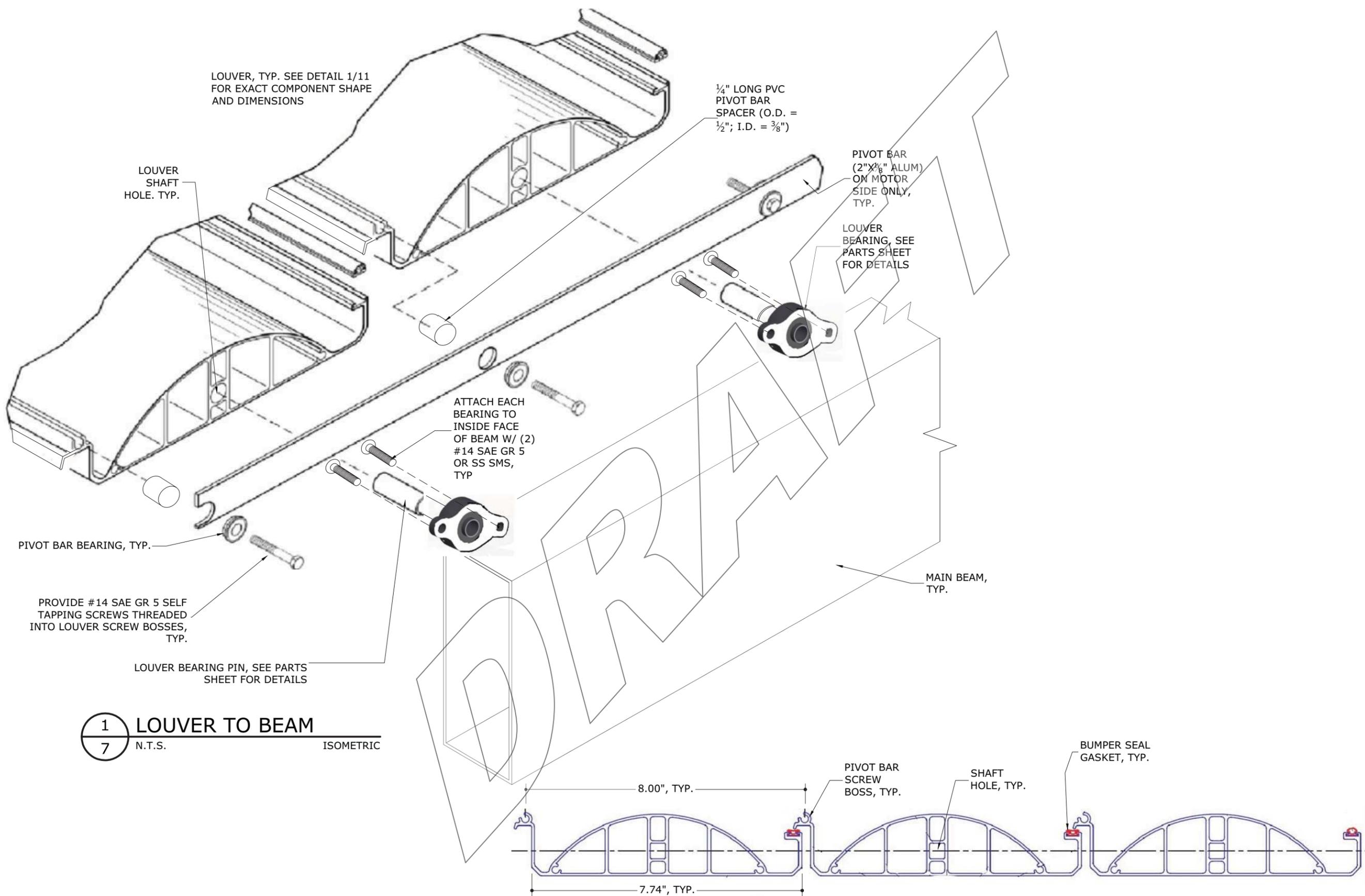
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1 LOUVER TO BEAM
 7 N.T.S. ISOMETRIC

NOTE: LOUVER DRIP EDGE NOT SHOWN IN THIS DETAIL. SEE DETAIL 1/11.

2 LOUVERS (CLOSED POSITION)
 7 N.T.S. ISOMETRIC

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2018 IBC UPDATE	EPR	RWN	05/11/20
ADD-FOOTER NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

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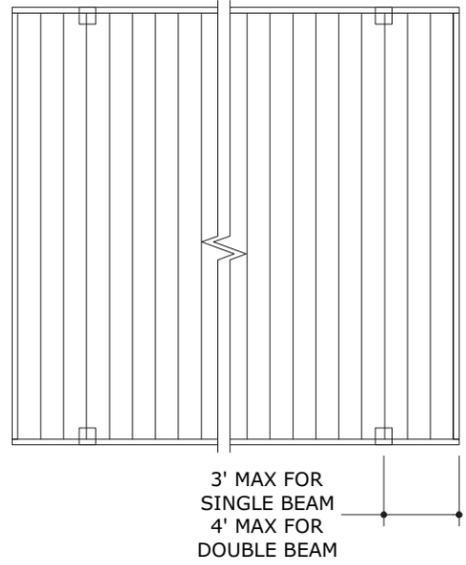
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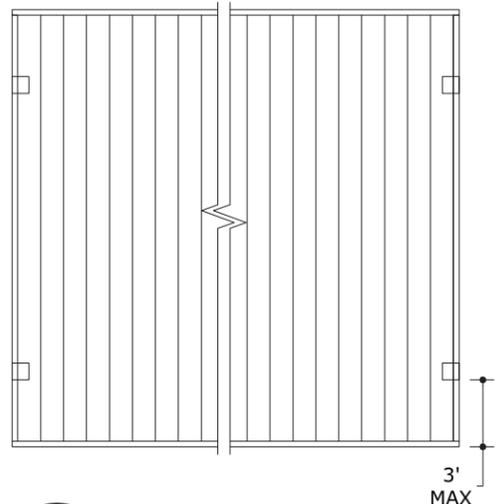
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OVERHANG OPTIONS

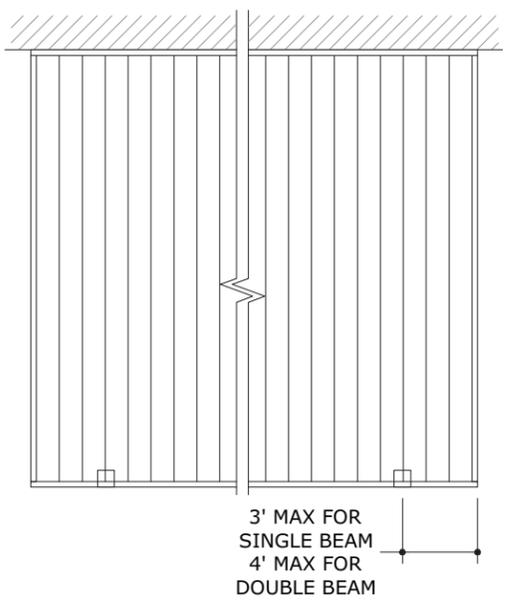
(SEE SHEETS 4 AND 5 FOR BEAM TO POST ATTACHMENT DETAILS)



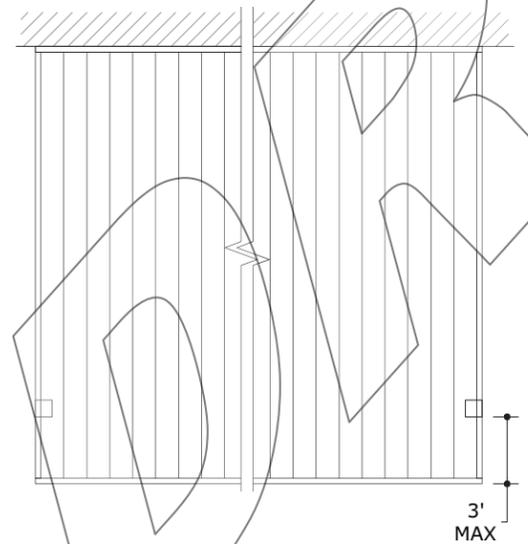
1 **FREESTANDING**
 8 N.T.S. PLAN



3 **FREESTANDING**
 8 N.T.S. PLAN



2 **HOST ATTACHED**
 8 N.T.S. PLAN



4 **HOST ATTACHED**
 8 N.T.S. PLAN

LOUVER SPAN SCHEDULE

DESIGN PRESSURE	ALLOWABLE LOUVER SPAN		
	L/60 DEFLECTION LIMIT	L/80 DEFLECTION LIMIT	L/180 DEFLECTION LIMIT
20 PSF	192.0"	192.0"	155.1"
25 PSF	192.0"	188.7"	144.0"
30 PSF	192.0"	177.6"	135.5"
35 PSF	185.7"	168.7"	128.7"
40 PSF	177.6"	161.3"	123.1"
45 PSF	170.7"	155.1"	118.4"
50 PSF	163.3"	149.8"	114.3"
55 PSF	155.7"	145.1"	110.7"
60 PSF	149.0"	141.0"	107.6"

LOUVER SPAN SCHEDULE NOTES:

- DEFLECTION REQUIREMENT SHALL BE DETERMINED BASED ON THE INTERNATIONAL BUILDING CODE ALONG WITH ANY LOCAL JURISDICTION REQUIREMENTS.

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2018 IBC UPDATE	EPR	RWN	05/11/20
ADD-FOOTER, NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

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MAIN BEAM SPAN SCHEDULE (SINGLE) END BEAM

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 20 PSF	96"	240.00"
	108"	240.00"
	120"	240.00"
	132"	240.00"
	144"	240.00"
	156"	231.75"
	168"	223.32"
	180"	215.75"
± 25 PSF	96"	240.00"
	108"	240.00"
	120"	236.34"
	132"	225.34"
	144"	215.75"
	156"	207.29"
	168"	199.75"
	180"	192.97"
± 30 PSF	96"	240.00"
	108"	227.42"
	120"	215.75"
	132"	205.71"
	144"	196.95"
	156"	189.23"
	168"	182.34"
	180"	176.16"
192"	170.57"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 35 PSF	96"	223.32"
	108"	210.55"
	120"	199.75"
	132"	190.45"
	144"	182.34"
	156"	175.19"
	168"	168.82"
	180"	163.09"
± 40 PSF	96"	208.90"
	108"	196.95"
	120"	186.84"
	132"	178.15"
	144"	170.57"
	156"	163.87"
	168"	157.91"
	180"	152.56"
± 45 PSF	96"	196.95"
	108"	185.69"
	120"	176.16"
	132"	167.96"
	144"	160.81"
	156"	154.50"
	168"	148.88"
	180"	143.83"
192"	139.27"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 50 PSF	96"	186.84"
	108"	176.16"
	120"	167.12"
	132"	159.34"
	144"	152.56"
	156"	146.57"
	168"	141.24"
	180"	136.45"
± 55 PSF	96"	178.15"
	108"	167.96"
	120"	159.34"
	132"	151.93"
	144"	145.46"
	156"	139.75"
	168"	134.67"
	180"	130.10"
± 60 PSF	96"	170.57"
	108"	160.81"
	120"	152.56"
	132"	145.46"
	144"	139.27"
	156"	133.80"
	168"	128.94"
	180"	124.56"
192"	120.61"	

MAIN BEAM SPAN SCHEDULE (SINGLE) INTERIOR BEAM

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 20 PSF	96"	208.90"
	108"	196.95"
	120"	186.84"
	132"	178.15"
	144"	170.57"
	156"	163.87"
	168"	157.91"
	180"	152.56"
± 25 PSF	96"	186.84"
	108"	176.16"
	120"	167.12"
	132"	159.34"
	144"	152.56"
	156"	146.57"
	168"	141.24"
	180"	136.45"
± 30 PSF	96"	170.57"
	108"	160.81"
	120"	152.56"
	132"	145.46"
	144"	139.27"
	156"	133.80"
	168"	128.94"
	180"	124.56"
192"	120.61"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 35 PSF	96"	157.91"
	108"	148.88"
	120"	141.24"
	132"	134.67"
	144"	128.94"
	156"	123.88"
	168"	119.37"
	180"	115.32"
± 40 PSF	96"	147.71"
	108"	139.27"
	120"	132.12"
	132"	125.97"
	144"	120.61"
	156"	115.88"
	168"	111.66"
	180"	107.87"
± 45 PSF	96"	139.27"
	108"	131.30"
	120"	124.56"
	132"	118.77"
	144"	113.71"
	156"	109.25"
	168"	105.28"
	180"	101.71"
192"	98.48"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 50 PSF	96"	132.12"
	108"	124.56"
	120"	118.17"
	132"	112.67"
	144"	107.87"
	156"	103.64"
	168"	99.87"
	180"	96.49"
± 55 PSF	96"	125.97"
	108"	118.77"
	120"	112.67"
	132"	107.43"
	144"	102.85"
	156"	98.82"
	168"	95.22"
	180"	92.00"
± 60 PSF	96"	120.61"
	108"	113.71"
	120"	107.87"
	132"	102.85"
	144"	98.48"
	156"	94.61"
	168"	91.17"
	180"	88.08"
192"	85.28"	

MAIN BEAM SPAN SCHEDULE (SINGLE) NOTES:

1. A MAIN BEAM SHALL BE CONSIDERED AN INTERIOR BEAM IF THERE ARE LOUVERS ON BOTH SIDES OF THE BEAM (BEYOND THE ALLOWED OVERHANG ON SHEET 8). OTHERWISE, THE BEAM IS CONSIDERED AN END BEAM.
2. DEFLECTION LIMIT OF L/90 USED FOR DETERMINATION OF ALLOWABLE BEAM SPANS PER THE INTERNATIONAL BUILDING CODE.

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ADD-FOOTER NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

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MAIN BEAM SPAN SCHEDULE (DOUBLE) END BEAM

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 20 PSF	96"	288.00"
	108"	288.00"
	120"	288.00"
	132"	288.00"
	144"	288.00"
	156"	288.00"
	168"	288.00"
	180"	288.00"
± 25 PSF	96"	288.00"
	108"	288.00"
	120"	288.00"
	132"	288.00"
	144"	288.00"
	156"	288.00"
	168"	282.48"
	180"	272.90"
± 30 PSF	96"	288.00"
	108"	288.00"
	120"	288.00"
	132"	288.00"
	144"	278.53"
	156"	267.60"
	168"	257.87"
	180"	249.13"
192"	241.22"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 35 PSF	96"	288.00"
	108"	288.00"
	120"	282.48"
	132"	269.34"
	144"	257.87"
	156"	247.75"
	168"	238.74"
	180"	230.65"
± 40 PSF	96"	288.00"
	108"	278.53"
	120"	264.24"
	132"	251.94"
	144"	241.22"
	156"	231.75"
	168"	223.32"
	180"	215.75"
± 45 PSF	96"	278.53"
	108"	262.60"
	120"	249.13"
	132"	237.53"
	144"	227.42"
	156"	218.50"
	168"	210.55"
	180"	203.41"
192"	196.95"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 50 PSF	96"	264.24"
	108"	249.13"
	120"	236.34"
	132"	225.34"
	144"	215.75"
	156"	207.29"
	168"	199.75"
	180"	192.97"
± 55 PSF	96"	251.94"
	108"	237.53"
	120"	225.34"
	132"	214.86"
	144"	205.71"
	156"	197.64"
	168"	190.45"
	180"	183.99"
± 60 PSF	96"	241.22"
	108"	227.42"
	120"	215.75"
	132"	205.71"
	144"	196.95"
	156"	189.23"
	168"	182.34"
	180"	176.16"
192"	170.57"	

MAIN BEAM SPAN SCHEDULE (DOUBLE) INTERIOR BEAM

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 20 PSF	96"	288.00"
	108"	278.53"
	120"	264.24"
	132"	251.94"
	144"	241.22"
	156"	231.75"
	168"	223.32"
	180"	215.75"
± 25 PSF	96"	264.24"
	108"	249.13"
	120"	236.34"
	132"	225.34"
	144"	215.75"
	156"	207.29"
	168"	199.75"
	180"	192.97"
± 30 PSF	96"	241.22"
	108"	227.42"
	120"	215.75"
	132"	205.71"
	144"	196.95"
	156"	189.23"
	168"	182.34"
	180"	176.16"
192"	170.57"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 35 PSF	96"	223.32"
	108"	210.55"
	120"	199.75"
	132"	190.45"
	144"	182.34"
	156"	175.19"
	168"	168.82"
	180"	163.09"
± 40 PSF	96"	208.90"
	108"	196.95"
	120"	186.84"
	132"	178.15"
	144"	170.57"
	156"	163.87"
	168"	157.91"
	180"	152.56"
± 45 PSF	96"	196.95"
	108"	185.69"
	120"	176.16"
	132"	167.96"
	144"	160.81"
	156"	154.50"
	168"	148.88"
	180"	143.83"
192"	139.27"	

DESIGN PRESSURE	LOUVER SPAN	ALLOWABLE BEAM SPAN
± 50 PSF	96"	186.84"
	108"	176.16"
	120"	167.12"
	132"	159.34"
	144"	152.56"
	156"	146.57"
	168"	141.24"
	180"	136.45"
± 55 PSF	96"	178.15"
	108"	167.96"
	120"	159.34"
	132"	151.93"
	144"	145.46"
	156"	139.75"
	168"	134.67"
	180"	130.10"
± 60 PSF	96"	170.57"
	108"	160.81"
	120"	152.56"
	132"	145.46"
	144"	139.27"
	156"	133.80"
	168"	128.94"
	180"	124.56"
192"	120.61"	

MAIN BEAM SPAN SCHEDULE (DOUBLE) NOTES:

1. A MAIN BEAM SHALL BE CONSIDERED AN INTERIOR BEAM IF THERE ARE LOUVERS ON BOTH SIDES OF THE BEAM (BEYOND THE ALLOWED OVERHANG ON SHEET 8). OTHERWISE, THE BEAM IS CONSIDERED AN END BEAM.
2. DEFLECTION LIMIT OF L/90 USED FOR DETERMINATION OF ALLOWABLE BEAM SPANS PER THE INTERNATIONAL BUILDING CODE.

PHOTOCOPIES NOT
TO BE USED

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PE# : SEE SEAL BLOCK
07/24/2020
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2462 E. 6600 S.
OGDEN, UT 84405
(801) 991-0010
HOST ATTACHED AND FREESTANDING ALUMINUM LOUVER MPS
INTERNATIONAL BUILDING CODE

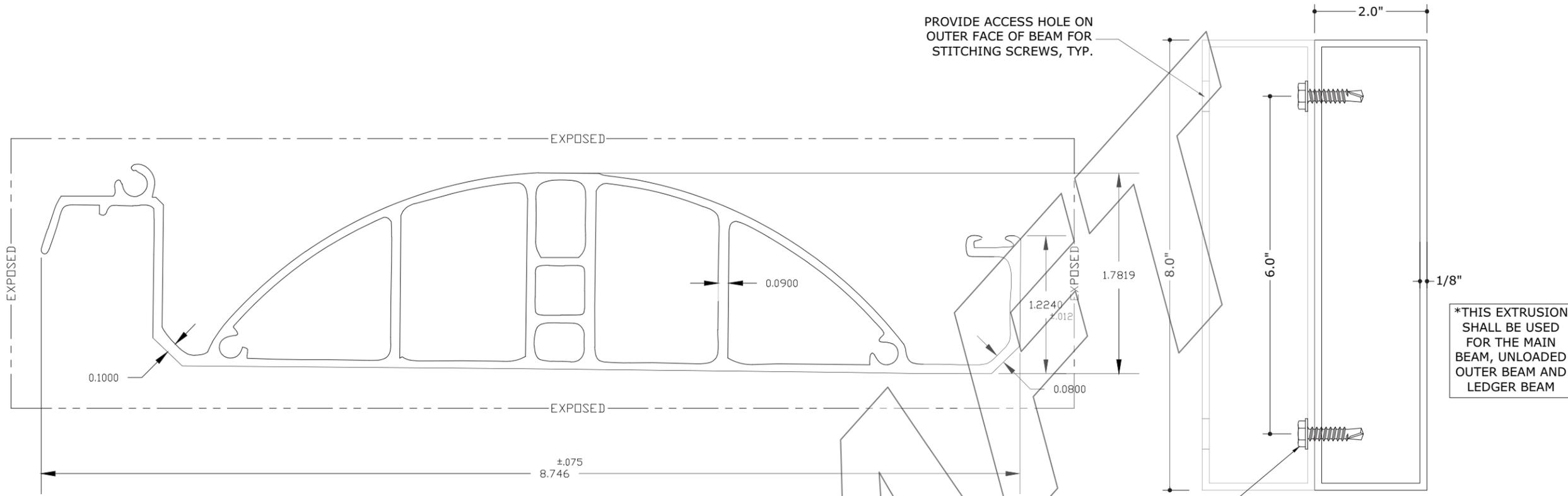
REMARKS	DRWN	CHKD	DATE
INIT ISSUE (AS 18-5654)	IRWN	TSB	09/24/18
2018 IBC UPDATE	EPR	RWN	05/11/20
ADD-FOOTER NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

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C:\Users\eric\Engineering Express\Production - Documents\Projects\20-25436 Aluminum Louvered Roof\WP\20-25436 Louvered Roof MPS (IBC).dwg
 07/24/2020 - 9:32am eric



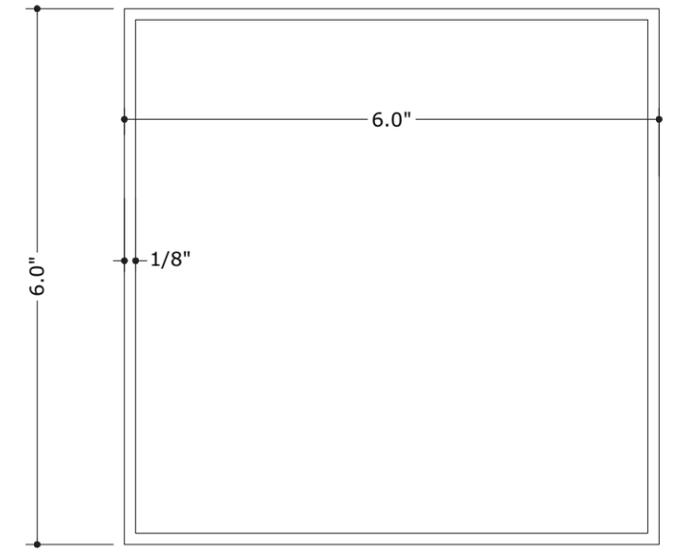
*THIS EXTRUSION SHALL BE USED FOR THE MAIN BEAM, UNLOADED OUTER BEAM AND LEDGER BEAM

1 LOUVER
 N.T.S. 6063-T6 ALUM

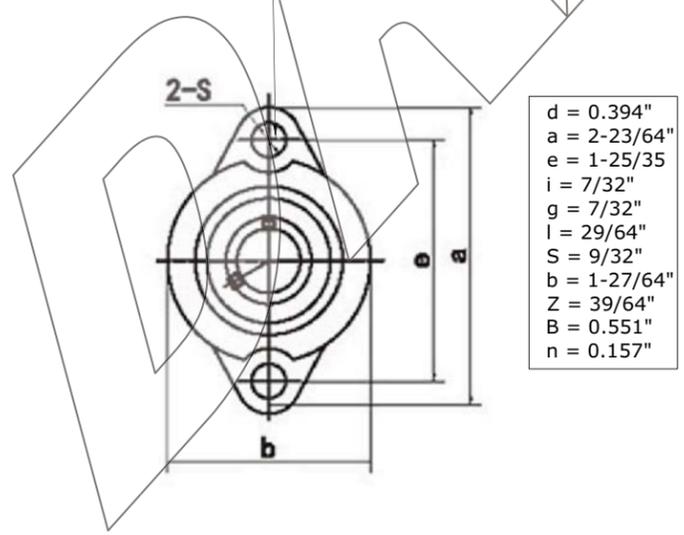
2 BEAM
 N.T.S. 6063-T6 ALUM

FOR DOUBLE BEAM APPLICATIONS, STITCH BEAMS TOGETHER WITH PAIRS OF #14 SAE GR 5 OR SS SMS AS SHOWN. SPACE PAIRS AT 16" O.C. AND 6" FROM ENDS, TYP.

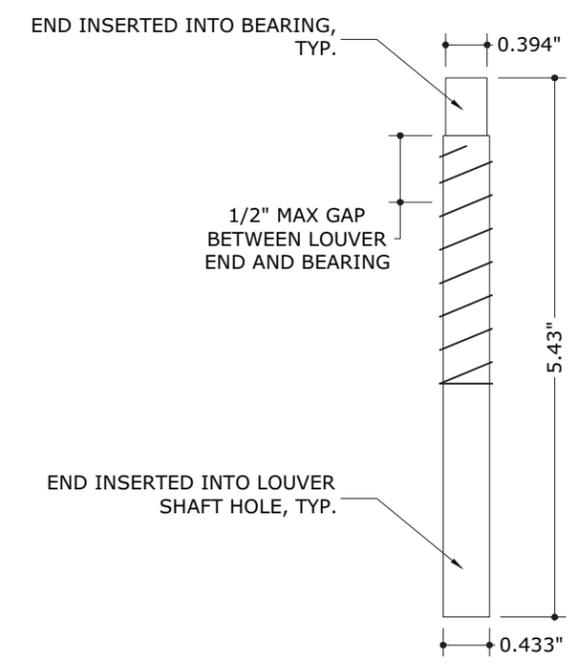
PROVIDE (2) #14 SAE GR 5 OR SS SMS INTO MAIN BEAM, TYP.



3 POST (CORNER & MID)
 N.T.S. 6063-T6 ALUM



4 LOUVER BEARING
 N.T.S. STAINLESS STEEL



5 LOUVER PIN
 N.T.S. 6061-T6 ALUM

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INTERNATIONAL BUILDING CODE

HOST ATTACHED AND FREESTANDING ALUMINUM LOUVER MPS

REMARKS	DRWN	CHKD	DATE
INIT ISSUE (AS 18-5654)	IRWN	TSB	08/24/18
2018 IBC UPDATE	EPR	RWN	05/11/20
ADD-FOOTER NO DRAG BRACE OPTIONS	EPR	RWN	7/22/20

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