

DRI-STOR SCOPE CABINETS

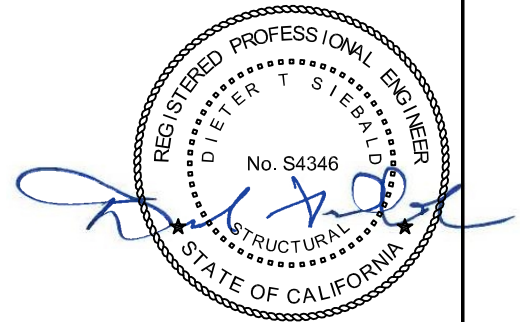


DRI-STOR SCOPE CABINETS OPM-0525-13

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NOTES:

1. THESE DRAWINGS ARE PREPARED FOR LOGIQUIP, LLC, GALESBURG, MICHIGAN..
2. THE CONTRACTOR & THE INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OSHPD WEBSITE.
3. THIS PRE-APPROVAL COVERS THE ATTACHMENTS & SUPPORT OF THE CABINETS TO THE SUPPORTING STRUCTURE. THE CABINETS & BRACKETS ARE SUPPLIED BY THE MANUFACTURER. THE SCREWS & BACKING SHOWN IN THIS OPM SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR.



SHEET TITLE: TABLE OF CONTENTS



CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

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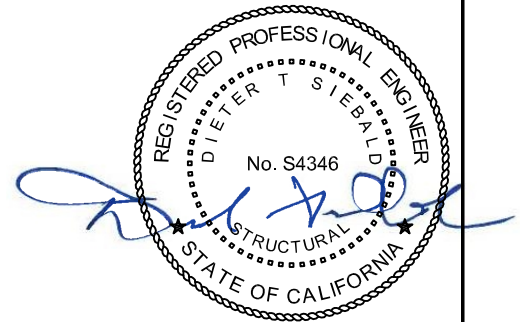
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DRI-STOR SCOPE CABINETS



GENERAL NOTES:

1. THIS OSHPD PRE-APPROVAL OF MFR'S CERTIFICATION (OPM) IS BASED ON THE CBC 2016. THE DEMAND (DESIGN FORCES) FOR USE W/ THIS OPM SHALL BE BASED ON THE CBC 2016.
2. THIS OPM PROVIDES SUPPORTS & ATTACHMENT DESIGN & INFORMATION FOR INCORPORATION INTO A CONSTRUCTION DOCUMENT SUBMITTAL TO BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL APPROPRIATELY LICENSED TO DO SO IN THE STATE OF CALIFORNIA & WHOM SHALL FURNISH THE SUBMITTAL TO THE CODE-ENFORCEMENT OFFICIAL FOR APPROVAL & PERMITTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. IT IS THE RESPONSIBILITY OF THE SEOR FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR THE COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
 - B. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE 2016 CBC & W/ THE DTLs SHOWN IN THIS PRE-APPROVAL.
 - C. THAT THE SCOPE CABINET WT, CG LOCATION & ATTACHMENT HT TO THE MTL STUD WALL FRAMING AGREE W/ THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
 - D. THAT THE PROJECT SPECIFIC VALUES OF S_{DS} & z/h RESULT IN SEISMIC FORCES (E_h , E_v) THAT DO NOT EXCEED THE VALUES IN THE DTLs.
4. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA. WHERE S_{DS} IS LESS THAN OR EQ TO 2.50.
5. COORDINATE THE MOUNTING ANCHOR LAYOUT W/ THE COMPONENT IN THE FIELD.
6. CONTRACTOR SHALL FURNISH & INSTALL THE MTL STUD WALL FRAMING AS SPECIFIED BY THE SEOR IN ACCORDANCE W/ THESE PRE-APPROVAL DOCUMENTS. CONTRACTOR SHALL ALSO INSTALL THE CABINET'S MOUNTING HARDWARE TO THE MTL STUD WALL FRAMING AS WELL AS THE CABINET ITSELF.
7. DRAWING SCALES ARE NOT PROVIDED. DO NOT SCALE OFF OF THESE DRAWINGS. THE INTENT OF THESE DRAWINGS IS TO SHOW HOW TO ATTACH THE SPECIFIED CABINET TO THE WALL STRUCTURE. THE REPRESENTATIONS OF THE EQUIP ARE ONLY INTENDED TO SHOW THE COORDINATION W/ THE ATTACHMENTS.
8. CYS STRUCTURAL ENGINEERS, INC. IS NOT THE SEOR AS IT RELATES TO VERIFICATION OF SITE CONDITIONS & REQ OBSERVATIONS PER CHAPTER 17/17A OF THE CBC, UNLESS CYS STRUCTURAL ENGINEERS, INC. IS LISTED AS THE SEOR ON THE APPROVED CONSTRUCTION DOCUMENTS.



SHEET TITLE: GENERAL NOTES



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DRI-STOR SCOPE CABINETS



SYSTEM OVERVIEW & DESIGN CRITERIA

1. THE INSTALLATION OF THE SCOPE CABINETS ARE COVERED BY THIS OPM. THE SUPPORT BRACKET IS CONNECTED TO THE (E) STRUCTURE.
2. SUPPORT & ATTACHMENT DESIGN IS PER 2016 CBC AT LRFD LEVEL FORCES.

CABINETS

PERMANENT FLR SUPPORTED STORAGE CABINETS OVER 6'-0" TALL, INCLUDING CONTENTS PER TABLE 13.5-1 OF ASCE 7-10 SUPPLEMENT #1

$$z/h \leq 1.0$$

$$S_{DS} = 2.5$$

$$I_p = 1.5$$

$$C_p = 1.0$$

$$R_p = 2.5$$

W_p AS NOTED ON DRAWINGS

SEISMIC LOADS (LRFD)

$$F_p = 1.800 W_p$$

$$F_v = 0.500 W_p$$

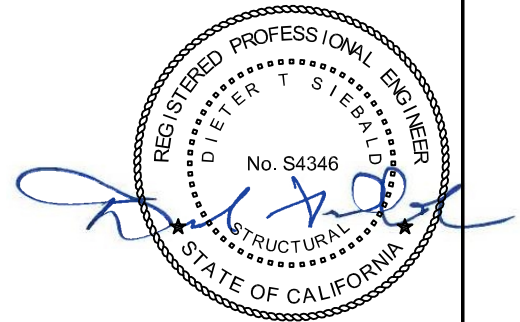
LOAD COMBINATIONS

$$1.2D+1.6L$$

$$(1.2+0.2S_{DS})D+1.0E+L$$

LOAD COMBINATIONS WERE RUN FOR 100% OF HORIZ FORCE IN ONE DIRECTION & 30% OF THE HORIZ FORCE IN THE PERP DIRECTION.

3. THIS PRE-APPROVAL MAY ONLY BE USED AT GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA WHERE S_{DS} IS LESS THAN OR EQ TO THE VALUES NOTED ABV.



SHEET TITLE: SYSTEM OVERVIEW & DESIGN CRITERIA



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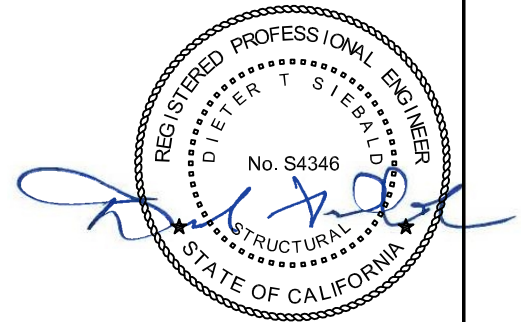
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DRI-STOR SCOPE CABINETS



ABBREVIATIONS:

A	VERTICAL DISTANCE BETWEEN BRACKETS	NTS	NOT TO SCALE
ABV	ABOVE	NWC	NORMAL WEIGHT CONCRETE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	NO.(#)	NUMBER OR POUND(S)
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	OP	OPERATING
BTW	BETWEEN	OPM	OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
CBC	CALIFORNIA BUILDING CODE	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
CG	CENTER OF GRAVITY	PCF	POUNDS PER CUBIC FOOT
Ⓢ	CENTERLINE	PERP	PERPENDICULAR
CONN	CONNECTION	PG	PAGE
D	CABINET DEPTH	Ⓢ	PLATE
DIA (∅)	DIAMETER	PT	POINT
DIM	DIMENSION	QTY	QUANTITY
DTL	DETAIL	REQ	REQUIRED
(E)	EXISTING CONDITION	SEOR	STRUCTURAL ENGINEER OF RECORD
EA	EACH	SMS	SHEET METAL SCREW
ELEV	ELEVATION	SPCG	SPACING
EQ	EQUAL	SS	STAINLESS STEEL
EQUIP	EQUIPMENT	T	TENSION
ES	EACH SIDE	T&B	TOP & BOTTOM
Ey	CG ECCENTRICITY	THK	THICK OR THICKNESS
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE	THRD	THREAD OR THREADED
FLR	FLOOR	T _u	TENSION REACTION DUE TO SEISMIC FORCES AT LRFD
F _p	HORIZONTAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS	TYP	TYPICAL
F _u	SPECIFIED ULTIMATE STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM ULTIMATE STRESS OF STEEL, KSI	UNO	UNLESS NOTED OTHERWISE
F _v	VERTICAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS	V	SHEAR
F _y	SPECIFIED YIELD STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM YIELD STRESS OF STEEL, KSI	V _{max}	MAXIMUM SHEAR DUE TO SEISMIC FORCE
GA	GAUGE	V _u	SHEAR REACTION DUE TO SEISMIC FORCES AT LRFD
GWB	GYPSON WALL BOARD	W	CABINET WIDTH
H	CABINET HEIGHT	W/	WITH
H _{CG}	HEIGHT TO CG	W _p	COMPONENT OPERATING-WEIGHT
HORIZ	HORIZONTAL	WT	WEIGHT
HT	HEIGHT		
ICC	INTERNATIONAL CODE COUNCIL		
IN (")	INCH		
KSI	KIPS PER SQUARE INCH		
LBS	POUNDS		
LRFD	LOAD & RESISTANCE FACTOR DESIGN		
MAX	MAXIMUM		
MFR	MANUFACTURER		
MIN	MINIMUM		
MTL	METAL		



SHEET TITLE: ABBREVIATIONS



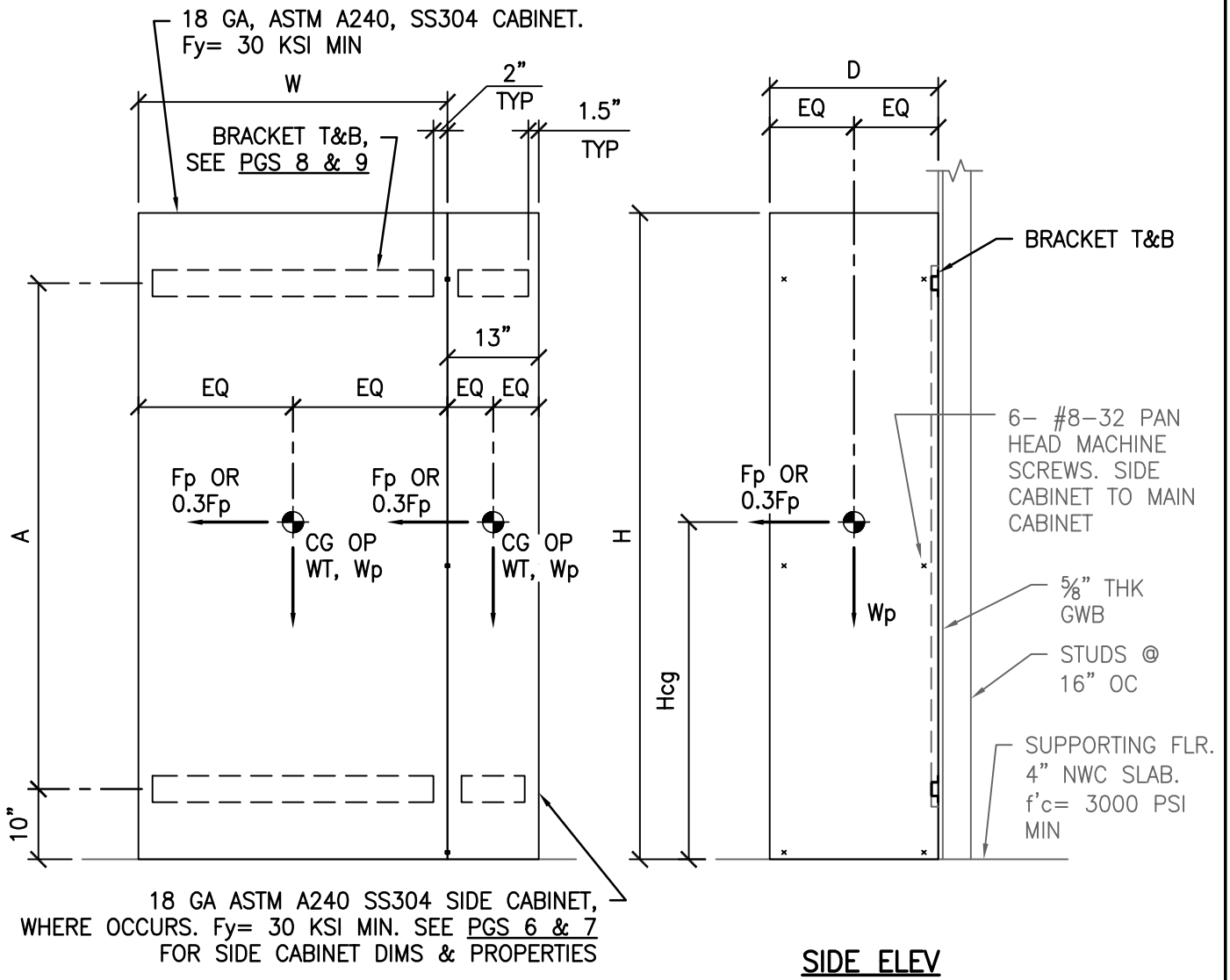
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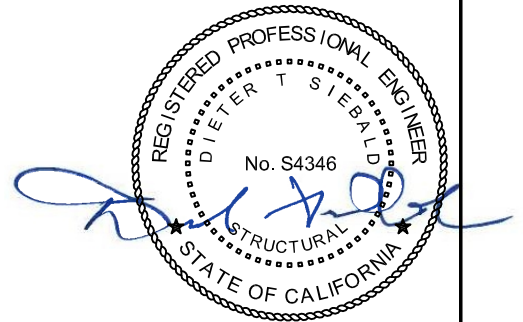
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DRI-STOR SCOPE CABINETS



FRONT ELEV

SIDE ELEV



SHEET TITLE: SCOPE CABINET ELEVATIONS



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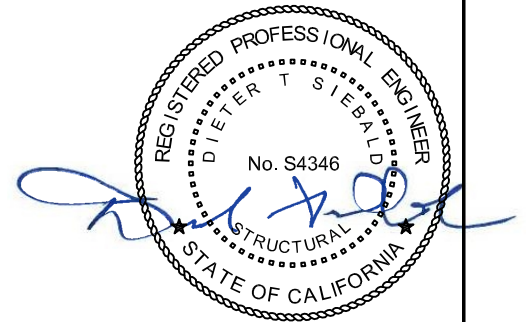
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DRI-STOR SCOPE CABINETS



SCOPE CABINET DIMENSIONS & PROPERTIES

ID #	MODEL #	D (IN)	W (IN)	H (IN)	A (IN)	Wp ⁽¹⁾ (LBS)	Fp (LBS)	Hcg (IN)	CABINET TO BRACKET				BRACKET TO BACKING			
									# SCREWS PER BRACKET		100% X-DIR. FORCES GOVERN (@ LRFD)		# SCREWS PER BRACKET		100% X-DIR. FORCES GOVERN (@ LRFD)	
									TOTAL	SIDE	T _u (LBS)	V _u (LBS)	TOTAL	SIDE	T _u (LBS)	V _u (LBS)
1	43290SCLG-6	24	24	92	62	256	461	52	4	2	140	78	8	4	70	39
2	43290SCRG-6	24	24	92	62	256	461	52	4	2	140	78	8	4	70	39
3	43490SCHG-10	24	30	92	62	466	839	52	6	2	183	95	10	4	95	57
4	43590SCHG-16	24	36	92	62	359	646	52	6	2	141	73	10	4	73	44
5	43690SCHG-20	24	44	92	62	408	734	52	8	2	102	62	12	4	54	41
6	43590SCLG-6PS*	24	24	92	70	266	479	52	4	2	129	72	8	4	65	36
7	43590SCRG-6PS*	24	24	92	70	266	479	52	4	2	129	72	8	4	65	36
8	43690SCHG-10PS*	24	30	92	70	337	607	52	6	2	117	61	10	4	61	36
9	43790SCHG16PS*	24	36	92	70	384	691	52	6	2	110	69	8	4	60	52
10	43890SCHG-20PS*	24	44	92	70	443	797	52	8	2	98	60	8	4	58	60
11	43590SCLG-6PSD*	24	24	92	70	268	482	52	4	2	130	72	8	4	65	36
12	43590SCRG-6PSD*	24	24	92	70	268	482	52	4	2	130	72	8	4	65	36
13	43690SCHG-10PSD*	24	30	92	70	361	650	52	6	2	126	65	10	4	65	39
14	43790SCHG-16PSD*	24	36	92	70	409	736	52	6	2	117	74	8	4	64	55
15	43890SCHG-20PSD*	24	44	92	70	472	850	52	8	2	104	64	8	4	62	64
16	43490SCHG-10PT	24	30	92	62	471	848	52	6	2	185	96	10	4	96	57
17	43590SCHG-16PT	24	36	92	62	534	961	52	6	2	172	109	10	4	89	65
18	43690SCHG-20PT	24	44	92	62	620	1116	52	8	2	154	95	12	4	82	63
19	43490SCHG-10PTD	24	30	92	62	486	875	52	6	2	191	99	10	4	99	59
20	43590SCHG-16PTD	24	36	92	62	548	986	52	6	2	177	111	10	4	92	67
21	43690SCHG-20PTD	24	44	92	62	634	1141	52	8	2	158	97	12	4	84	64
22	42380SCLG-6PT	18	27	87	57	463	833	49.5	6	2	166	96	10	4	86	58
23	42380SCRG-6PT	18	27	87	57	463	833	49.5	6	2	166	96	10	4	86	58
24	42580SCHG-10PT	18	36	87	57	522	940	49.5	6	2	137	109	10	4	72	65



SHEET TITLE: SCOPE CABINET
DIMENSIONS & PROPERTIES

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DRI-STOR SCOPE CABINETS

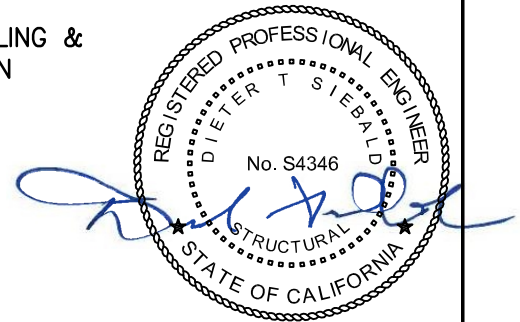


SCOPE CABINET DIMENSIONS & PROPERTIES (CONTINUED)

ID #	MODEL #	D (IN)	W (IN)	H (IN)	A (IN)	Wp ⁽¹⁾ (LBS)	Fp (LBS)	Hcg (IN)	CABINET TO BRACKET				BRACKET TO BACKING			
									# SCREWS PER BRACKET		100% X-DIR. FORCES GOVERN (@ LRFD)		# SCREWS PER BRACKET		100% X-DIR. FORCES GOVERN (@ LRFD)	
									TOTAL	SIDE	T _u (LBS)	V _u (LBS)	TOTAL	SIDE	T _u (LBS)	V _u (LBS)
25	42380SCLG-6PTD	18	27	87	57	487	877	49.5	6	2	174	101	10	4	90	61
26	42380SCRG-6PTD	18	27	87	57	487	877	49.5	6	2	174	101	10	4	90	61
27	42580SCHG-10PTD	18	36	87	57	546	983	49.5	6	2	144	114	10	4	75	68
28	42380SCLG-3T	18	27	87	57	463	833	49.5	6	2	166	96	10	4	86	58
29	42380SCRG-3T	18	27	87	57	463	833	49.5	6	2	166	96	10	4	86	58
30	42580SCHG-5T	18	36	87	57	522	940	49.5	6	2	137	109	10	4	72	65
31	42280SCLG-5	18	24	87	57	479	862	49.5	4	2	213	149	8	4	106	75
32	42590SCHG-16PTD	20	36	95	65	465	837	53	6	2	127	92	10	4	66	55
33	42690SCHG-20PTD	20	44	95	65	519	934	51	8	2	104	74	12	4	56	49
34	42490SCHG-10PTD	20	30	95	65	408	734	52	6	2	132	79	10	4	68	47
35	42490SCHG-10PT	20	30	95	65	404	727	53	6	2	133	80	10	4	69	48
36	42590SCHG-16PT	20	36	95	65	460	828	51	6	2	119	87	10	4	62	52
37	42690SCHG-20PT	20	44	95	65	513	923	52	8	2	105	75	12	4	56	50
38	Side Cabinet	24	13	92	70	212	382	0	4	2	213	57	8	4	107	29

NOTES:

1. COMPONENT OP WT, Wp, INCLUDES 20 PSF LIVE LOAD FOR OTHER MEDIA PER 2016 CBC, TABLE 1607.1, FOOTNOTE "n". TABULATED Wp DOES NOT INCLUDE 13" SIDE CABINET.
2. SCREWS SHALL BE INSTALLED W/ 1" MIN GRIP LENGTH TO STUD. PROVIDE 3/4" MIN EDGE DISTANCE TO BRACKET R_e & 3/4" MIN SPCG BTW SCREWS. INSTALL IN ACCORDANCE W/ THE APPROVED ICC ESR-2196 REPORT.
3. CABINETS MARKED W/ AN "*" AT THE END OF THE MODEL # INCLUDE A 13" WIDE SIDE CABINET. SEE PG 5 FOR ELEV. THE TABULATED WIDTH "W", WEIGHT "Wp", LATERAL LOAD "Fp", SCREW QUANTITY, & SCREW LOADS DO NOT INCLUDE THE 13" SIDE CABINET.
4. FOR 13" SIDE CABINET, WEIGHT & SCREW FORCES SHOWN ARE A MAX. CELLS MARKED W/ "-" MATCH THE CABINET TO WHICH IT IS ATTACHED.
5. CAPACITY OF SMS SCREWS TO BRACKET IS BASED ON HILTI SELF-DRILLING & SELF-PIERCING #12-14 SCREWS PER ESR-2196. SCREWS SHALL BE IN ACCORDANCE W/ ESR-2196, ESR-1976 OR ESR-1271.



SHEET TITLE: SCOPE CABINET
DIMENSIONS & PROPERTIES (CONTINUED)

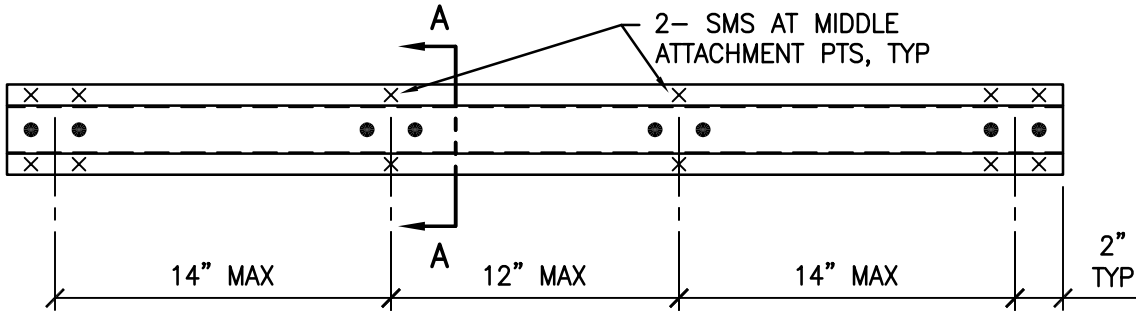
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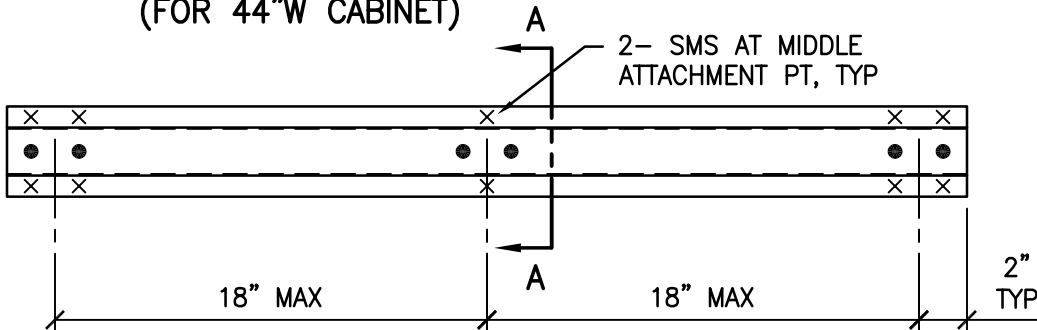
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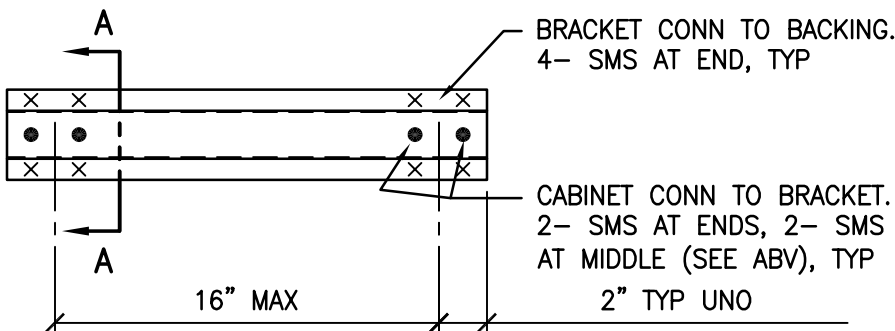
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CONNE PATTERN
(FOR 44"W CABINET)



CONN PATTERN
(FOR 27", 30" & 36"W CABINETS)

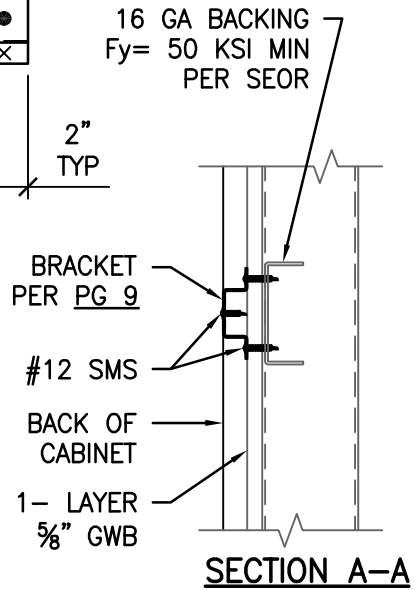


CONN PATTERN
(13" & 24"W CABINETS)

LEGEND:

- #12-14 SMS. CABINET TO BRACKET
- × #12-24 SMS. BRACKET TO BACKING

NOTE:
SEE TABLE, PGS 6 & 7 FOR SCREW QTY.



SHEET TITLE: SCOPE CABINET
CONNECTION DETAILS



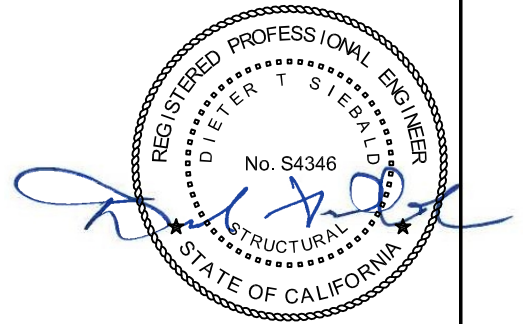
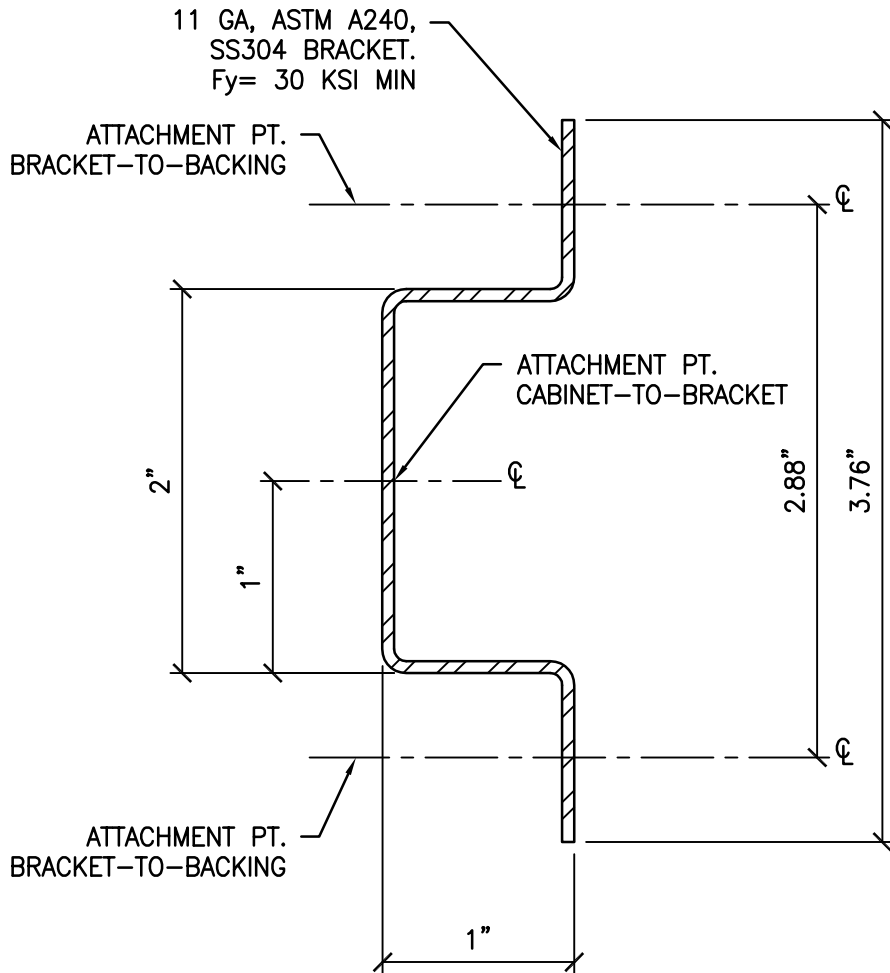
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SHEET TITLE: BRACKET DETAIL



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