



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD PREAPPROVAL
OF MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY
APPLICATION #: OPM-0275-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [] Renewal [] Update to Pre-CBC 2013 OPA Number:

Manufacturer Information

Manufacturer: Haworth® Inc
Manufacturer's Technical Representative: Ross Koning
Mailing Address: One Haworth Center, Holland, MI 49423-9576
Telephone: 616-393-3707 Email: DRoss.koning@haworth.com

Product Information

Product Name: Wall Mount® Adaptable Overhead Storage
Product Type: Wall mounted storage cabinet
Product Model Number: Configurations for 14" deep by 16" high by 24" through 72" long
General Description: Overhead Wall Mounted Storage Cabinets

Applicant Information

Applicant Company Name: Haworth® Inc
Contact Person: Ross Koning
Mailing Address: One Haworth Center, Holland, MI 49423-9576
Telephone: 616-393-3707 Email: Ross.koning@haworth.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: [Signature] Date: 11/19/2015
Title: Supervisor Sales Engineering Company Name: Haworth® Inc

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

Registered Design Professional Preparing Engineering Recommendations

Company Name: CYS Structural Engineers, Inc.

Name: Dieter T. Siebald California License Number: S4346

Mailing Address: 2495 Natomas Park Drive, Sacramento, CA 95833

Telephone: 916-920-2020 Email: dieters@cyseng.com

OSHPD Special Seismic Certification Preapproval (OSP)

- Special Seismic Certification is preapproved under OSP-
(Separate application for OSP is required)
- Special Seismic Certification is not preapproved

Certification Method(s)

- Testing in accordance with: ICC-ES AC156 FM 1950-10
- Other* (Please Specify): _____

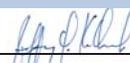
*Use of criteria other than those adopted by the California Building Standards Code, 2013 (CBSC 2013) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2013 may be used when approved by OSHPD prior to testing.

- Analysis
- Experience Data
- Combination of Testing, Analysis, and/or Experience Data (Please Specify): _____

List of Attachments Supporting the Manufacturer's Certification

- Test Report Drawings Calculations Manufacturer's Catalog
- Other(s) (Please Specify): _____

OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2013 ONLY

Signature:  Date: 02/25/2016

Print Name: Jeffrey Kikumoto

Title: SSE

Condition of Approval (if applicable): _____

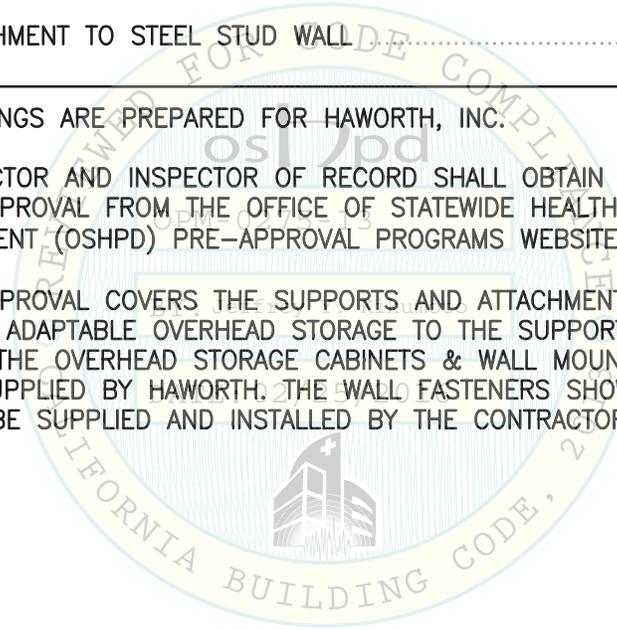
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- NOTES:**
1. THESE DRAWINGS ARE PREPARED FOR HAWORTH, INC.
 2. THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT (OSHPD) PRE-APPROVAL PROGRAMS WEBSITE.
 3. THIS PRE-APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF THE WALL MOUNT ADAPTABLE OVERHEAD STORAGE TO THE SUPPORTING STRUCTURE. THE OVERHEAD STORAGE CABINETS & WALL MOUNTING LOAD BARS ARE SUPPLIED BY HAWORTH. THE WALL FASTENERS SHOWN IN THIS OPM SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.



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CYS STRUCTURAL ENGINEERS, INC.

2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833

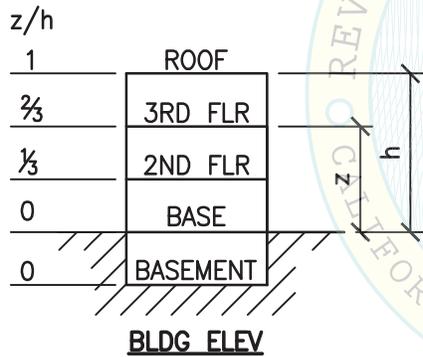
TEL (916) 920-2020
www.cyseng.com

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GENERAL NOTES:

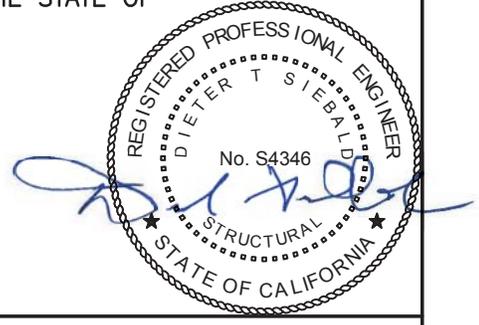
1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2013. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2013.
2. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SEOR) FOR A SITE SPECIFIC PROJECT TO VERIFY:
 - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE (METAL STUDS, ETC.) TO RESIST THE FORCES & WEIGHT SPECIFIED FOR EACH COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS & THEIR ATTACHMENTS AS REQUIRED.
 - B. THE WALL FASTENERS ARE LOCATED AT A STUD WALL OF MINIMUM SPECIFIED MATERIAL & GAUGE AS NOTED ON PAGE 6.
 - C. THE INSTALLATION IS IN CONFORMANCE WITH THE CBC 2013 & WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL.
 - D. THE COMPONENT'S ACTUAL WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ATTACHMENT LOCATIONS, & THE DETAILS, MATERIAL & GAUGE OF THE COMPONENT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN IN THE PRE-APPROVAL.
 - E. THE SHEET METAL SCREWS (SMS) ARE IN COMPLIANCE WITH "SSMA" STANDARDS, ARE ICC APPROVED, & HAVE MINIMUM LOAD CAPACITIES PER OPD-0001-13.
3. ALL COLD-FORMED STEEL SHALL CONFORM TO THE FOLLOWING, UNO.
ASTM A653 STRUCTURAL QUALITY, GRADE 33 (18 GA) OR GRADE 50 (16 GA & HEAVIER)
4. TWO (2) CASES OF ATTACHMENT ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:



OPM-0275-13
 BY: Jeffrey V. Kikumoto
 DATE: 02/25/2016

CASE 1: SUPPORT & ATTACHMENT LOCATED AT ANY LEVEL
IN A BUILDING ($z/h \leq 1.0$).

5. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA WHERE S_{ps} IS LESS THAN OR EQUAL TO 2.50.



SHEET TITLE: GENERAL NOTES

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	2495 NATOMAS PARK DRIVE, SUITE 650	TEL (916) 920-2020	Date: 2/24/2016
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ABBREVIATIONS:

ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	F_p	HORIZONTAL SEISMIC FORCE PER ASCE 7-10 SEISMIC FORCE REQUIREMENTS	OC	ON CENTER
ASD	ALLOWABLE STRESS DESIGN			PCF	POUNDS PER CUBIC FOOT
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	F_y	SPECIFIED MINIMUM YIELD STRESS OF STEEL	PG(S)	PAGE(S)
BLDG	BUILDING	GA	GAUGE	P_L	PLATE
BLW	BELOW	GWB	GYPSUM WALLBOARD	REQ	REQUIRED
BOTT	BOTTOM	ICC	INTERNATIONAL CODE COUNCIL	SEOR	STRUCTURAL ENGINEER OF RECORD
CBC	CALIFORNIA BUILDING CODE	IN (")	INCH	SMS	SHEET METAL SCREW
CG	CENTER OF GRAVITY	KSI	KIPS PER SQUARE INCH	STL	STEEL
\bar{C}	CENTERLINE	LBS	POUNDS	THK	THICK/THICKNESS
COORD	COORDINATE	LRFD	LOAD AND RESISTANCE FACTOR DESIGN	T_{max}	MAXIMUM TENSION REACTION
CRS	COLD-ROLLED STEEL	MAX	MAXIMUM	TYP	TYPICAL
DIA (ϕ)	DIAMETER	MFR	MANUFACTURER	T&B	TOP & BOTTOM
EA	EACH	MIN	MINIMUM	V_{max}	MAXIMUM SHEAR REACTION
ELEV	ELEVATION	NO. (#)	NUMBER OR POUNDS	W/	WITH
ES	EA SIDE	NTS	NOT TO SCALE	W_p	OPERATING WEIGHT
EQ	EQUAL			WT	WEIGHT
FLR	FLOOR				
FT (")	FOOT/FEET				

SYSTEM OVERVIEW & DESIGN CRITERIA

1. THE WALL MOUNT ADAPTABLE OVERHEAD STORAGE IS AN OVERHEAD CABINET 14" DEEP, 16" HIGH & 24" TO 72" WIDE (AVAILABLE IN 6" INCREMENTS). THE OPERATING WT FOR THE CABINET IS BASED ON COMPONENT WT (5 PCF) PLUS WT OF MEDIA AS FOLLOWS:
PAPER MEDIA: 33 PCF PER TOTAL STORAGE VOLUME OF THE CABINET (14" DEEP x 12" HIGH)
2. ATTACHMENT DESIGN IS PER 2013 CBC AT ASD LEVEL FORCES.

CABINETS & OTHER RIGID COMPONENTS W/ LIMITED DEFORMABILITY ELEMENTS & ATTACHMENTS PER TABLE 13.5-1 OF ASCE 7-10 SUPPLEMENT #1:

$\alpha_p = 1.0$ $R_p = 2.5$ $I_p = 1.5$

W_p AS NOTED ON DRAWINGS SHOWN ON PG 5.

ANY LOCATION IN THE BLDG WHERE $z/h \leq 1$

CASE 1: $S_{DS} = 2.50$ $F_p = 1.80 W_p$

ASD GOVERNING LOAD COMBINATION

$(1.0 + 0.7 \cdot 0.2 S_{DS}) D + 0.7 F_p$



SHEET TITLE: ABBREVIATIONS
SYSTEM OVERVIEW & DESIGN CRITERIA



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OVERHEAD CABINET ATTACHMENT SCHEDULE

CABINET WIDTH (IN)		24	30	36	42	48	54	60	66	72
MAX CG WT, W_p (LBS) *		89	111	133	156	178	200	222	244	266
NO. OF SMS PER STUD AT LOAD BAR		2- #12			3- #12					
STUDS SPACED 12" OC										
MIN NO. OF STUDS FOR ATTACHMENT		2	2	3	3	4	4	4	5	6
MAX ASD FORCES PER SCREW (LBS)	T_{max}	47	59	41	39	32	36	40	34	30
	V_{max}	35	44	35	29	24	27	30	27	24
STUDS SPACED 16" OC										
MIN NO. OF STUDS FOR ATTACHMENT		2	2	3	3	3	4	4	4	4
MAX ASD FORCES PER SCREW (LBS)	T_{max}	42	52	62	35	40	45	37	40	44
	V_{max}	35	44	53	29	33	37	30	34	37
STUDS SPACED 24" OC										
MIN NO. OF STUDS FOR ATTACHMENT		N/A	2	2	2	2	3	3	3	3
MAX ASD FORCES PER SCREW (LBS)	T_{max}	-	50	60	51	59	43	47	52	57
	V_{max}	-	44	53	43	49	37	41	45	49

* INCLUDES CABINET WT + CONTENT

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SHEET TITLE: OVERHEAD CABINET ATTACHMENT SCHEDULE



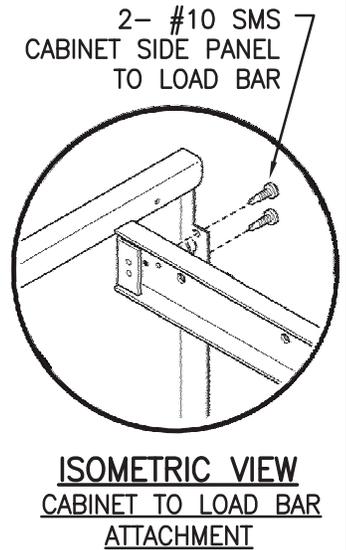
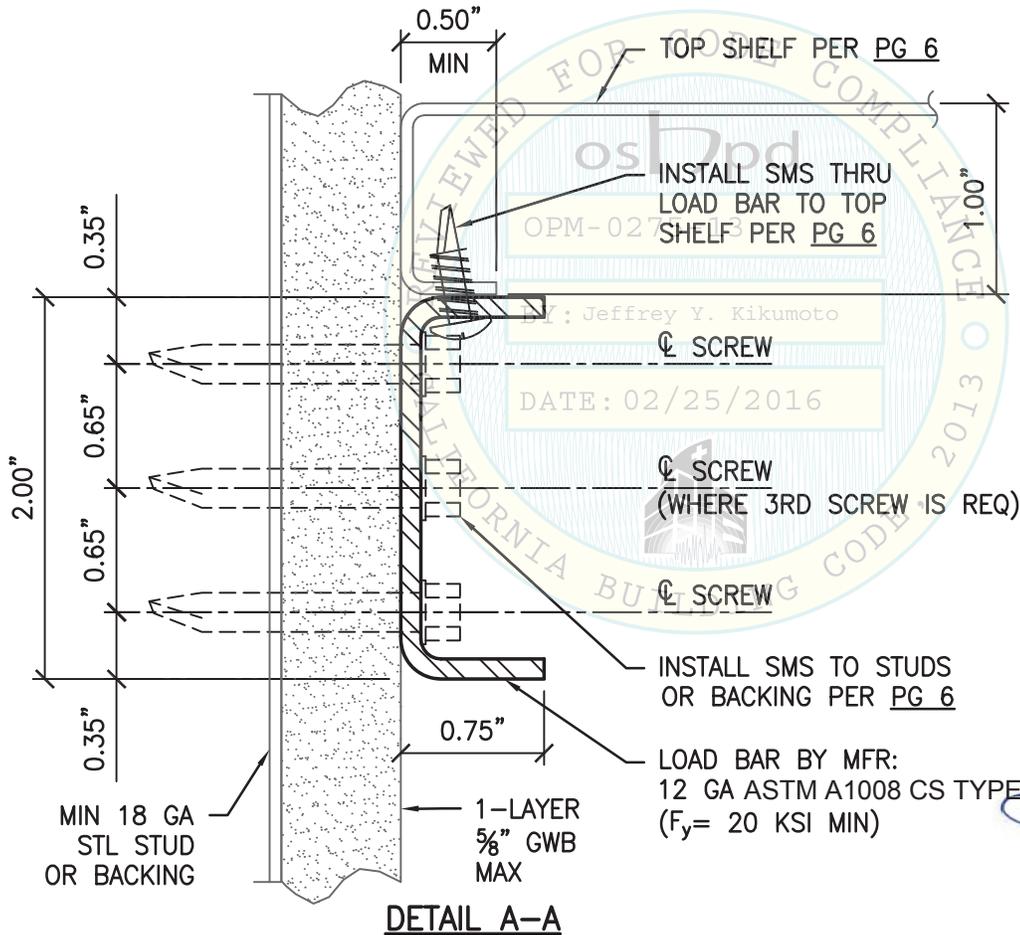
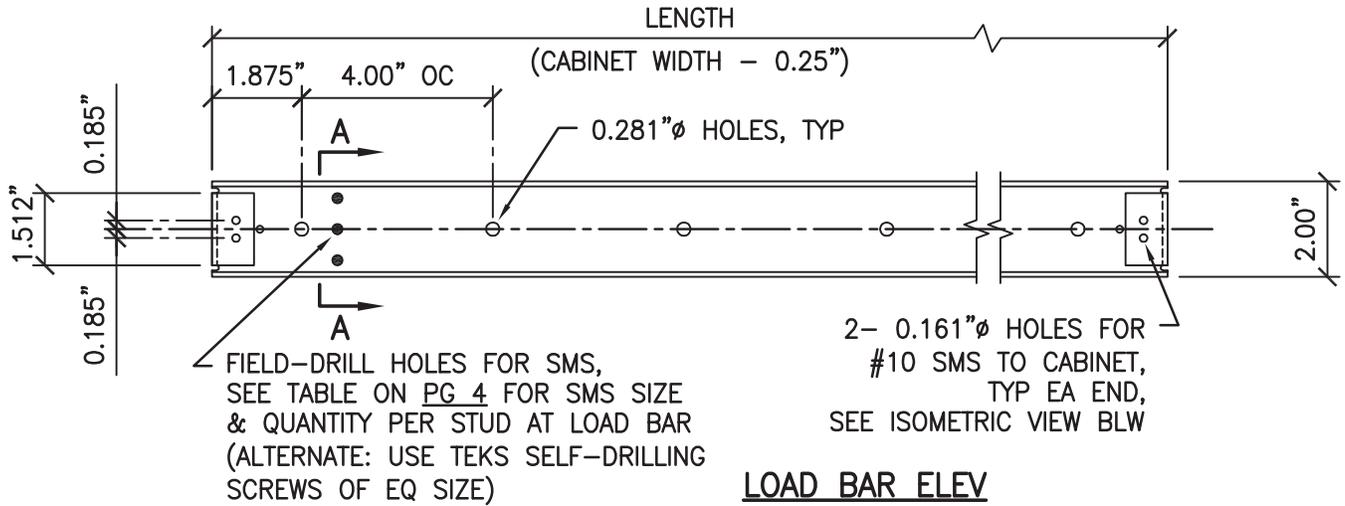
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SHEET TITLE: LOAD BAR DETAIL



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