



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

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

OFFICE USE ONLY

APPLICATION #: OPM-0201-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: New Renewal Update to Pre-CBC 2013 OPA Number: _____

Manufacturer Information

Manufacturer: MIDMARK CORPORATION

Manufacturer's Technical Representative: Joe Martin

Mailing Address: 60 Vista Drive, Versailles, OH 45380

Telephone: 1-800-MIDMARK, ext. 8446 Email: JMartin@midmark.com

Product Information

Product Name: Midmark Corporation Base Cabinet

Product Type: Cabinet

027-1946-00; 027-1946-01; 027-1946-02; 027-1946-03; 027-1946-04; 027-1946-05; 027-1946-06; 027-1946-07; 027-1946-08; 027-1946-09; 027-1946-10; 027-1946-11; 027-1946-12; 027-1946-13; 027-1946-14; 027-1946-15; 027-1946-16; 027-1946-17; 027-1946-18; 027-1946-19; 027-1946-20; 027-1946-21; 027-1946-22; 027-1946-23; 027-1946-24; 027-1946-25; 027-1946-26; 027-1946-27; 027-1946-28; 027-1946-29; 027-1946-30; 027-1946-31; 027-1946-32; 027-1946-33; 027-1946-34; 027-1946-35; 027-1946-36; 027-1946-37; 027-1946-38; 027-1946-39; 027-1946-40; 027-1946-41; 027-1946-42; 027-1946-43; 027-1946-44; 027-1946-45; 027-1946-46; 027-1946-47; 027-1946-48; 027-1946-49; 027-1946-50; 027-1946-51; 027-1946-52; 027-

Product Model Number: 1946-53

General Description: Floor supported cabinet

Applicant Information

Applicant Company Name: ZFA Structural Engineers

Contact Person: Mark Moore

Mailing Address: 100 Bush Street, Suite 1850, San Francisco, CA, 94104

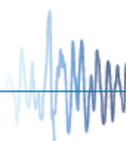
Telephone: 415-243-4091 Email: markm@zfa.com

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:  Date: 3/26/2015

Title: Executive Principal Company Name: ZFA Structural Engineers

"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: ZFA Structural Engineers

Name: Mark Moore California License Number: 4443

Mailing Address: 100 Bush Street, Suite 1850, San Francisco, 94104

Telephone: 415-243-4091 Email: markm@zfa.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: Timothy Piland Date: 05/28/2015
Print Name: Timothy Piland
Title: SSE
Condition of Approval (if applicable):



MIDMARK CORPORATION BASE CABINET
UNITS 027-1946-00 THROUGH 027-1946-53

ENG/CKR: ARF DATE: 04/24/15
JOB NO.: 15113.30 SCALE:

ZFA STRUCTURAL ENGINEERS
100 bush street suite 1850 | san francisco ca 94104 | 415.243.4091 | www.zfa.com

SHEET NO.:
1/4

OPM-0201-13: EQUIPMENT MANUFACTURER: MIDMARK CORPORATION
EQUIPMENT TYPE: BASE CABINETS

GENERAL NOTES

1. THIS OSHPD PREAPPROVAL 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. FORCES PER ASCE 7-10 SECTION 13.3.1, EQUATIONS 13.3-1, 13.3-2, 13.3-3, WHERE $S_{DS} = 2.20$, $a_p = 1.0$, $I_p = 1.5$ & $R_p = 2.5$, $z/h \leq 1.0$. A FACTOR OF 0.7 IS APPLIED TO CALCULATE ASD LOADS.
HORIZONTAL FORCE (E_h) = 1.109 Wp
VERTICAL FORCE (E_v) = 0.308Wp
 3. THE DETAILS IN THIS PRE-APPROVAL MAY BE USED AT ANY LOCATION WITH AN S_{DS} OF 2.20g OR LESS.
 4. ALL SEISMIC AND ANCHOR FORCES SHOWN ON THE DRAWINGS ARE BASED ON ALLOWABLE STRESS DESIGN.
 5. SHEET METAL SCREWS (SMS) SHALL CONFORM TO ICC-ES ESR-1976 OR ICC-ES ESR-2196.
 6. SEE SHEET 2 FOR LIGHT GAGE STEEL MINIMUM SPECIFICATIONS.
- RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD (SEOR)
7. DESIGN BACKING PLATES, STUDS, ETC. WHICH THE UNITS ARE ATTACHED TO AS NOTED ON THE DRAWINGS. THE SEOR SHALL ALSO VERIFY THE ADEQUACY OF THE STRUCTURES (SUCH AS WALLS AND FLOORS) WHICH SUPPORT THE UNITS FOR ALL LOADS.
 8. PROVIDE ANY SUPPORTING STRUCTURE REQUIRED TO SUPPORT WEIGHTS AND FORCES SHOWN, IN ADDITION TO ALL OTHER LOADS.
 9. VERIFY THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2013 CBC AND WITH THE DETAILS SHOWN IN THIS DOCUMENT. VERIFY THAT THE ACTUAL EQUIPMENT'S WEIGHT, CG LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.
 10. VERIFY THAT THE COMBINATION OF S_{DS} & z/h RESULT IN SEISMIC FORCES (E_h , E_v) THAT ARE NOT GREATER THAN THE VALUES IN THE GENERAL NOTES.
 11. VERIFY THAT THE ATTACHMENTS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY END OR EDGE OF METAL STUD.



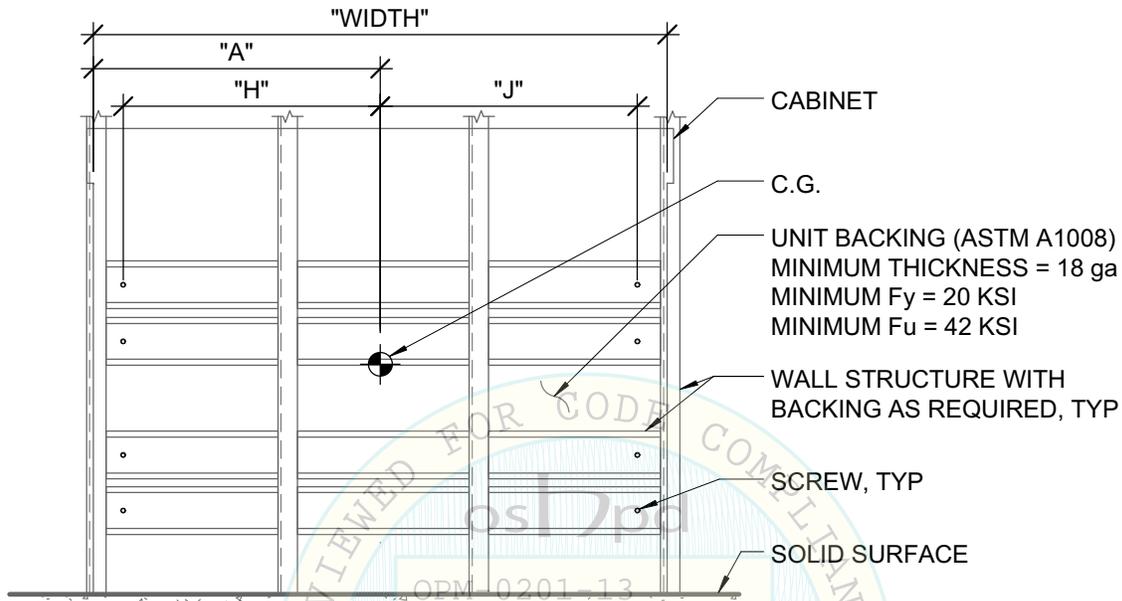
MIDMARK CORPORATION BASE CABINET
 UNITS 027-1946-00 THROUGH 027-1946-53

ENG/CKR:	ARF	DATE:	04/24/15
JOB NO.:	15113.30	SCALE:	3/4" = 1'-0"

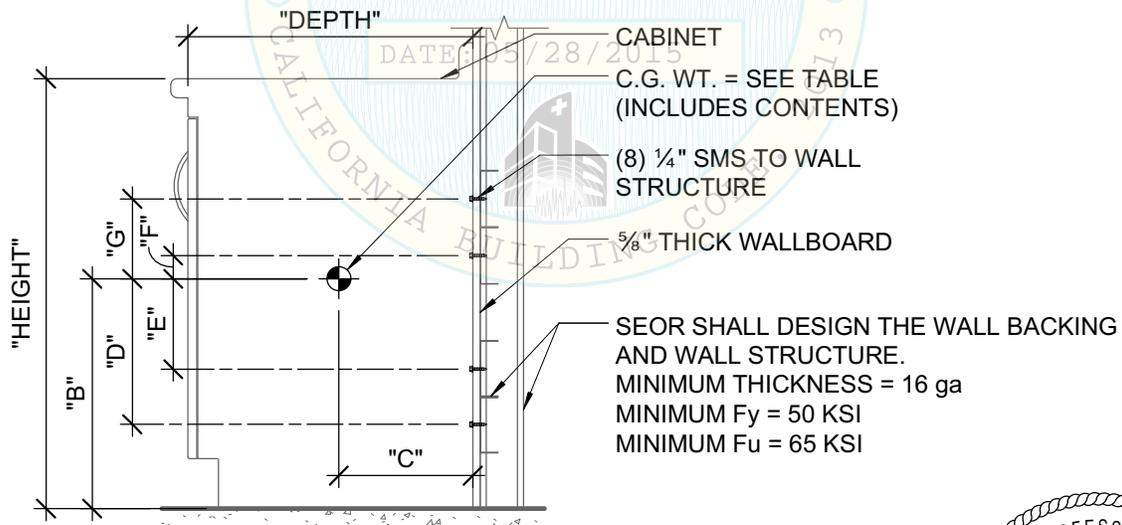
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SHEET NO.:

2/4



BACK ELEVATION



SIDE ELEVATION

NOTES

1. CENTER OF GRAVITY (C.G.) WEIGHT IS A MAXIMUM. THIS PRE-APPROVAL ENCOMPASSES ALL WEIGHTS UP TO THE MAXIMUM WEIGHT SHOWN.
2. FOR GENERAL NOTES, SEE SHEET 1.
3. FOR GEOMETRY, WEIGHT, AND ANCHOR FORCES, SEE SHEETS 3 AND 4.
4. MINIMUM SCREW SPACING = 3/4"; MINIMUM EDGE DISTANCE FOR SCREWS = 3/8"



MIDMARK CORPORATION BASE CABINET
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SHEET NO.:
3/4

Unit Name	Max Operating Weight (lbs)	WIDTH (in)	HEIGHT (in)	DEPTH (in)	"A" (in)	"B" (in)	"C" (in)	"D" (in)	"E" (in)	"F" (in)	"G" (in)	"H" (in)	"I" (in)	"J" (in)	T max (lbs/screw)	V max (lbs/screw)
027 - 1946 - 00	124	12.0	30.3	17.8	5.9	16.2	8.7	9.1	4.4	0.3	4.9	3.6	3.4	3.4	50	17
027 - 1946 - 01	149	15.0	30.3	17.8	7.4	16.1	8.7	9.0	4.4	0.4	5.0	5.1	4.9	4.9	43	21
027 - 1946 - 02	173	18.0	30.3	17.8	8.9	16.1	8.6	9.1	4.4	0.3	4.9	6.6	6.4	4.0	40	24
027 - 1946 - 03	197	21.0	30.3	17.8	10.3	16.2	8.6	9.1	4.4	0.3	4.9	8.2	7.8	3.8	38	27
027 - 1946 - 04	220	24.0	30.3	17.8	11.8	16.2	8.6	9.1	4.4	0.3	4.9	9.7	9.3	3.9	39	31
027 - 1946 - 05	272	30.0	30.3	17.8	15.0	16.2	8.6	9.1	4.4	0.3	4.9	12.5	12.5	4.5	45	38
027 - 1946 - 06	320	36.0	30.3	17.8	18.0	16.2	8.6	9.1	4.5	0.3	4.9	15.5	15.5	5.2	44	44
027 - 1946 - 07	367	42.0	30.3	17.8	21.0	16.2	8.6	9.1	4.5	0.3	4.9	18.5	18.5	5.8	51	51
027 - 1946 - 08	415	48.0	30.3	17.8	24.0	16.2	8.5	9.1	4.5	0.3	4.9	21.5	21.5	6.4	58	58
027 - 1946 - 09	135	12.0	33.6	17.8	5.9	17.7	8.7	10.7	6.0	1.3	3.3	3.6	3.4	5.4	19	19
027 - 1946 - 10	162	15.0	33.6	17.8	7.4	17.7	8.6	10.6	6.0	1.2	3.4	5.1	4.9	4.6	22	22
027 - 1946 - 11	189	18.0	33.6	17.8	8.9	17.7	8.5	10.6	6.0	1.2	3.3	6.6	6.4	4.3	26	26
027 - 1946 - 12	214	21.0	33.6	17.8	10.4	17.8	8.5	10.7	6.0	1.3	3.3	8.1	7.9	4.1	30	30
027 - 1946 - 13	241	24.0	33.6	17.8	11.9	17.8	8.5	10.7	6.0	1.3	3.3	9.6	9.4	4.2	33	33
027 - 1946 - 14	296	30.0	33.6	17.8	15.0	17.8	8.6	10.7	6.0	1.3	3.3	12.5	12.5	5.0	41	41
027 - 1946 - 15	349	36.0	33.6	17.8	18.0	17.8	8.5	10.7	6.0	1.3	3.3	15.5	15.5	5.6	48	48
027 - 1946 - 16	401	42.0	33.6	17.8	21.0	17.8	8.5	10.7	6.0	1.3	3.3	18.5	18.5	6.3	56	56
027 - 1946 - 17	453	48.0	33.6	17.8	24.0	17.8	8.5	10.7	6.1	1.3	3.3	21.5	21.5	7.0	63	63
027 - 1946 - 18	148	12.0	36.1	17.8	5.9	19.0	8.5	12.0	7.3	2.2	7.0	3.6	3.4	5.7	21	21
027 - 1946 - 19	177	15.0	36.1	17.8	7.4	19.0	8.4	11.9	7.3	2.2	7.0	5.1	4.9	5.0	25	25
027 - 1946 - 20	207	18.0	36.1	17.8	8.9	19.0	8.3	11.9	7.3	2.2	7.0	6.6	6.4	4.6	29	29
027 - 1946 - 21	235	21.0	36.1	17.8	10.4	19.0	8.3	12.0	7.3	2.2	6.9	8.1	7.9	4.4	33	33
027 - 1946 - 22	264	24.0	36.1	17.8	11.9	19.0	8.3	12.0	7.3	2.2	6.9	9.6	9.4	4.6	37	37
027 - 1946 - 23	325	30.0	36.1	17.8	15.0	19.1	8.3	12.0	7.3	2.2	6.9	12.5	12.5	5.4	45	45
027 - 1946 - 24	382	36.0	36.1	17.8	18.0	19.1	8.3	12.0	7.3	2.2	6.9	15.5	15.5	6.1	53	53
027 - 1946 - 25	440	42.0	36.1	17.8	21.0	19.1	8.2	12.0	7.3	2.2	6.9	18.5	18.5	6.9	61	61
027 - 1946 - 26	497	48.0	36.1	17.8	24.0	19.1	8.2	12.0	7.3	2.2	6.9	21.5	21.5	7.7	69	69
027 - 1946 - 27	162	12.0	30.3	23.8	5.9	16.3	11.8	9.3	4.6	0.1	4.7	3.6	3.4	8.4	22	22
027 - 1946 - 28	194	15.0	30.3	23.8	7.4	16.3	11.7	9.2	4.6	0.2	4.8	5.1	4.9	7.2	27	27
027 - 1946 - 29	225	18.0	30.3	23.8	8.9	16.3	11.6	9.3	4.6	0.1	4.7	6.6	6.4	6.6	31	31
027 - 1946 - 30	256	21.0	30.3	23.8	10.4	16.4	11.6	9.3	4.6	0.1	4.7	8.1	7.9	6.3	35	35



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SHEET NO.: 4/4

Unit Name	Max Operating Weight (lbs)	WIDTH (in)	HEIGHT (in)	DEPTH (in)	"A" (in)	"B" (in)	"C" (in)	"D" (in)	"E" (in)	"F" (in)	"G" (in)	"H" (in)	"J" (in)	T max (lbs/screw)	V max (lbs/screw)
027 - 1946 - 31	288	24.0	30.3	23.8	11.9	16.4	11.6	9.3	4.6	0.1	4.7	9.6	9.4	61	40
027 - 1946 - 32	354	30.0	30.3	23.8	15.0	16.4	11.7	9.3	4.7	0.1	4.7	12.5	12.5	63	49
027 - 1946 - 33	417	36.0	30.3	23.8	18.0	16.4	11.6	9.3	4.7	0.1	4.7	15.5	15.5	71	58
027 - 1946 - 34	479	42.0	30.3	23.8	21.0	16.4	11.6	9.3	4.7	0.1	4.7	18.5	18.5	79	66
027 - 1946 - 35	542	48.0	30.3	23.8	24.0	16.4	11.6	9.3	4.7	0.1	4.6	21.5	21.5	87	75
027 - 1946 - 36	176	12.0	33.6	23.8	5.9	17.9	11.7	10.9	6.2	1.5	3.1	3.6	3.4	91	24
027 - 1946 - 37	211	15.0	33.6	23.8	7.4	17.9	11.6	10.8	6.2	1.4	3.2	5.1	4.9	78	29
027 - 1946 - 38	246	18.0	33.6	23.8	8.9	17.9	11.6	10.8	6.2	1.4	3.1	6.6	6.4	72	34
027 - 1946 - 39	280	21.0	33.6	23.8	10.4	18.0	11.5	10.9	6.2	1.5	3.1	8.1	7.9	68	39
027 - 1946 - 40	314	24.0	33.6	23.8	11.9	18.0	11.5	10.9	6.2	1.5	3.1	9.6	9.4	66	44
027 - 1946 - 41	386	30.0	33.6	23.8	15.0	18.0	11.6	10.9	6.3	1.5	3.1	12.5	12.5	68	54
027 - 1946 - 42	455	36.0	33.6	23.8	18.0	18.0	11.5	10.9	6.3	1.5	3.1	15.5	15.5	77	63
027 - 1946 - 43	523	42.0	33.6	23.8	21.0	18.0	11.5	10.9	6.3	1.5	3.1	18.5	18.5	86	73
027 - 1946 - 44	592	48.0	33.6	23.8	24.0	18.0	11.5	10.9	6.3	1.5	3.1	21.5	21.5	95	82
027 - 1946 - 45	195	12.0	36.1	23.8	5.9	19.2	11.4	12.1	7.5	2.0	6.8	3.6	3.4	99	27
027 - 1946 - 46	234	15.0	36.1	23.8	7.4	19.2	11.4	12.1	7.5	2.0	6.8	5.1	4.9	85	32
027 - 1946 - 47	272	18.0	36.1	23.8	8.9	19.2	11.3	12.1	7.5	2.0	6.8	6.6	6.4	78	38
027 - 1946 - 48	310	21.0	36.1	23.8	10.4	19.3	11.3	12.2	7.5	2.0	6.7	8.1	7.9	74	43
027 - 1946 - 49	348	24.0	36.1	23.8	11.9	19.3	11.2	12.2	7.5	2.0	6.7	9.6	9.4	72	48
027 - 1946 - 50	428	30.0	36.1	23.8	15.0	19.3	11.3	12.2	7.6	2.0	6.7	12.5	12.5	75	59
027 - 1946 - 51	504	36.0	36.1	23.8	18.0	19.3	11.3	12.2	7.6	1.9	6.7	15.5	15.5	85	70
027 - 1946 - 52	581	42.0	36.1	23.8	21.0	19.3	11.2	12.2	7.6	1.9	6.7	18.5	18.5	95	80
027 - 1946 - 53	657	48.0	36.1	23.8	24.0	19.3	11.2	12.2	7.6	1.9	6.7	21.5	21.5	105	91

