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

OFFICE USE ONLY
APPLICATION #: OPM-0220-13

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 Tall Cabinet

Product Type: Cabinet

Product Model Number: 027-1947-00 through 027-1947-35;

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: M. Moore. Date: 4/06/2015

Title: Executive Principal Company Name: ZFA Structural Engineers

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: Date: 05/21/2015

Print Name: Timothy Piland

Title: SSE

Condition of Approval (if applicable):

MIDMARK CORPORATION TALL CABINET UNITS 027-1947-00 THROUGH 027-1947-35	ENG/CKR: ARF	DATE: 05/19/15
	JOB NO.: 15113.50	SCALE:

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SHEET NO.: 1/5

OPM-0220-13: EQUIPMENT MANUFACTURER: MIDMARK CORPORATION
EQUIPMENT TYPE: TALL 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 ≤ 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 TALL CABINET UNITS 027-1947-00 THROUGH 027-1947-35	ENG/CKR: ARF	DATE: 05/19/15
	JOB NO.: 15113.50	SCALE: 3/8" = 1'-0"

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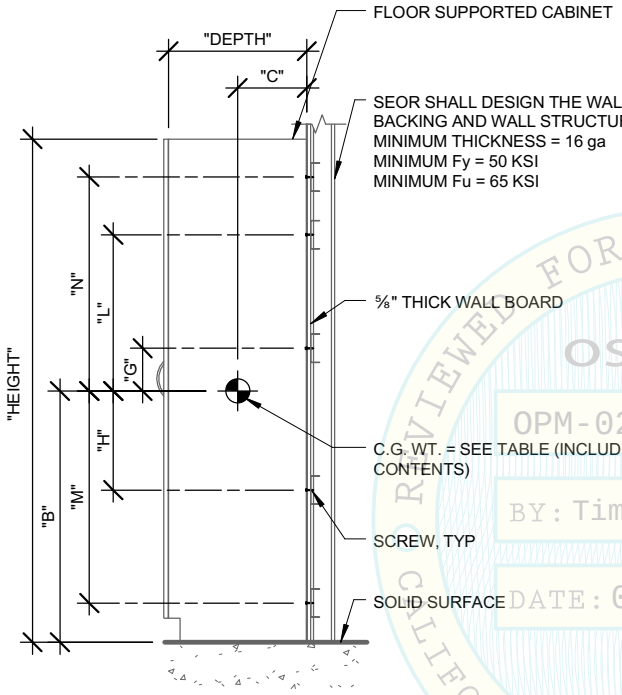
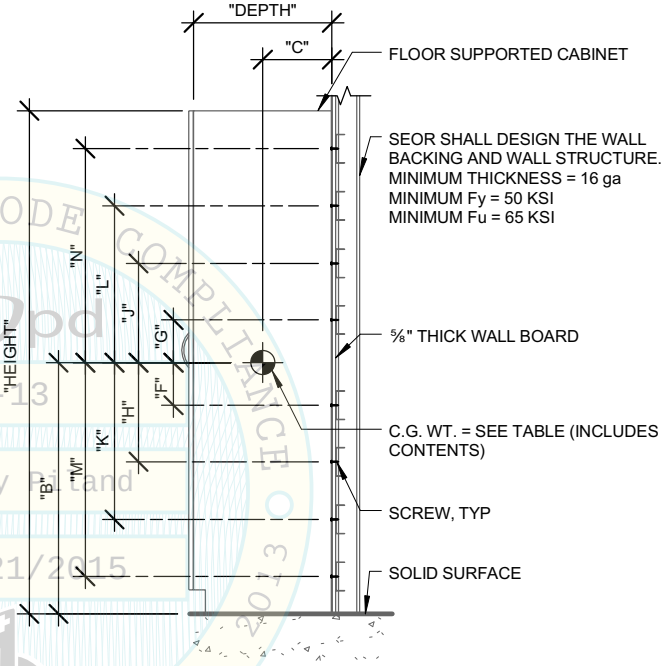
SHEET NO.: 2/5



SIDE ELEVATION (UNITS W/ 10 SCREWS)



SIDE ELEVATION (UNITS W/ 16 SCREWS)

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 4 AND 5.
4. MINIMUM SCREW SPACING = ¾"; MINIMUM EDGE DISTANCE FOR SCREWS = ⅜"

REGISTERED PROFESSIONAL ENGINEER
MARK A. MOORE
STRUCTURAL
No. 4443
STATE OF CALIFORNIA

MIDMARK CORPORATION TALL CABINET UNITS 027-1947-00 THROUGH 027-1947-35	ENG/CKR: ARF	DATE: 05/19/15
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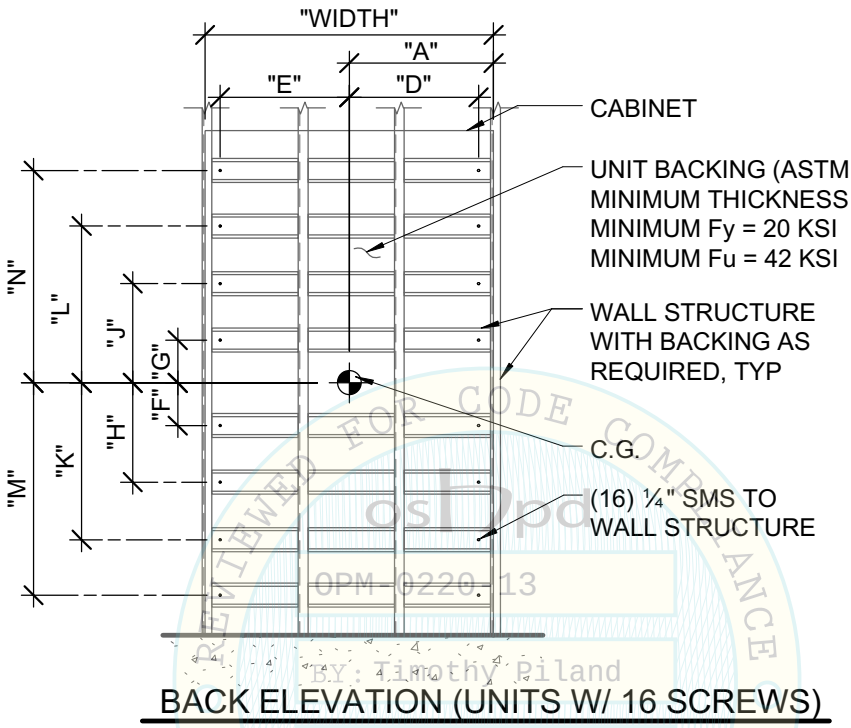
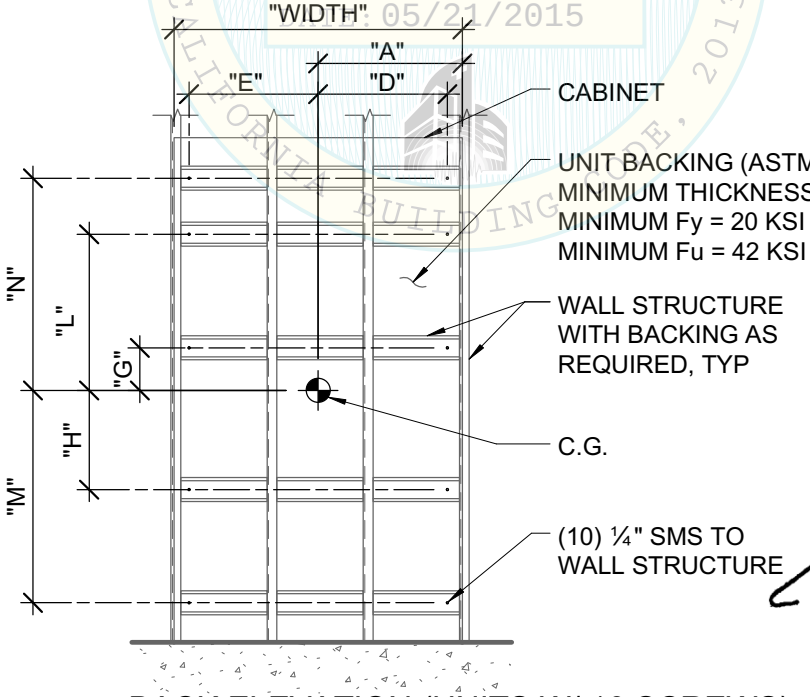
SHEET NO.: 3/5



BACK ELEVATION (UNITS W/ 16 SCREWS)



BACK ELEVATION (UNITS W/ 10 SCREWS)

MIDMARK CORPORATION TALL CABINET UNITS 027-1947-00 THROUGH 027-1947-35	ENG/CKR: ARF	DATE: 05/19/15
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SHEET NO.: 4/5

Unit Name	Max Operating Weight (lbs)	WIDTH (in)	HEIGHT (in)	DEPTH (in)	"A" (in)	"B" (in)	"C" (in)	"D" (in)	"E" (in)	"G" (in)	"H" (in)	"L" (in)	"M" (in)	"N" (in)	T max (lbs/screw)	V max (lbs/screw)
027-1947-00	297	12.0	72.0	17.8	6.1	36.1	8.2	3.6	3.4	8.4	10.4	27.4	29.3	32.1	87	33
027-1947-01	359	15.0	72.0	17.8	7.6	36.0	8.1	5.1	4.9	8.4	10.4	27.4	29.3	32.1	77	40
027-1947-02	422	18.0	72.0	17.8	9.1	36.0	8.1	6.6	6.4	8.4	10.4	27.4	29.3	32.1	72	47
027-1947-03	483	21.0	72.0	17.8	10.7	36.0	8.0	8.1	7.9	8.4	10.4	27.4	29.3	32.1	70	54
027-1947-04	544	24.0	72.0	17.8	12.2	36.0	8.0	9.7	9.3	8.4	10.4	27.4	29.3	32.1	76	60
027-1947-05	674	30.0	72.0	17.8	15.0	36.0	8.1	12.5	12.5	8.4	10.4	27.4	29.3	32.1	89	75
027-1947-06	796	36.0	72.0	17.8	18.0	36.0	8.0	15.5	15.5	8.4	10.4	27.4	29.3	32.1	102	88
027-1947-07	918	42.0	72.0	17.8	21.0	36.0	8.0	18.5	18.5	8.4	10.4	27.4	29.3	32.1	115	102
027-1947-09	396	12.0	72.0	23.8	6.1	36.3	11.2	3.6	3.4	8.4	10.4	27.4	29.3	32.1	153	44
027-1947-10	479	15.0	72.0	23.8	7.6	36.2	11.0	5.1	4.9	8.4	10.4	27.4	29.3	32.1	133	53
027-1947-11	562	18.0	72.0	23.8	9.1	36.1	11.0	6.6	6.4	8.4	10.4	27.4	29.3	32.1	124	62
027-1947-12	644	21.0	72.0	23.8	10.6	36.1	10.9	8.1	7.9	8.4	10.4	27.4	29.3	32.1	119	71
027-1947-13	726	24.0	72.0	23.8	12.1	36.1	10.9	9.6	9.4	8.4	10.4	27.4	29.3	32.1	116	80
027-1947-14	898	30.0	72.0	23.8	15.0	36.2	11.0	12.5	12.5	8.4	10.4	27.4	29.3	32.1	126	100
027-1947-18	343	12.0	84.0	17.8	6.1	41.9	8.1	3.6	3.4	7.1	16.5	26.1	35.3	35.6	100	38
027-1947-19	416	15.0	84.0	17.8	7.6	41.9	8.1	5.1	4.9	7.1	16.5	26.1	35.3	35.6	88	46
027-1947-20	488	18.0	84.0	17.8	9.1	41.8	8.0	6.6	6.4	7.1	16.5	26.1	35.3	35.6	83	54
027-1947-21	559	21.0	84.0	17.8	10.6	41.8	8.0	8.1	7.9	7.1	16.5	26.1	35.3	35.6	81	62
027-1947-22	630	24.0	84.0	17.8	12.1	41.8	8.0	9.6	9.4	7.1	16.5	26.1	35.3	35.6	87	70
027-1947-23	779	30.0	84.0	17.8	15.0	41.9	8.0	12.5	12.5	7.1	16.5	26.1	35.3	35.6	103	86
027-1947-24	921	36.0	84.0	17.8	18.0	41.9	7.9	15.5	15.5	7.1	16.5	26.1	35.3	35.6	118	102
027-1947-27	459	12.0	84.0	23.8	6.1	42.2	11.1	3.6	3.4	7.1	16.5	26.1	35.3	35.6	177	51
027-1947-28	556	15.0	84.0	23.8	7.6	42.1	11.0	5.1	4.9	7.1	16.5	26.1	35.3	35.6	154	62
027-1947-29	653	18.0	84.0	23.8	9.1	42.0	11.0	6.6	6.4	7.1	16.5	26.1	35.3	35.6	144	72
027-1947-30	748	21.0	84.0	23.8	10.6	42.1	10.9	8.1	7.9	7.1	16.5	26.1	35.3	35.6	138	83
027-1947-31	844	24.0	84.0	23.8	12.1	42.1	10.9	9.6	9.4	7.1	16.5	26.1	35.3	35.6	135	94

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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)	"K" (in)	"L" (in)	"M" (in)	"N" (in)	T max (lbs/screw)	V max (lbs/screw)
027-1947-08	1040	48.0	72.0	17.8	24.0	36.0	7.9	21.5	21.5	1.0	8.4	10.4	17.9	20.0	27.4	29.3	32.1	80	72
027-1947-15	1062	36.0	72.0	23.8	18.0	36.2	10.9	15.5	15.5	1.1	8.4	10.4	17.7	20.1	27.4	29.3	32.1	89	74
027-1947-16	1223	42.0	72.0	23.8	21.0	36.3	10.9	18.5	18.5	1.2	8.4	10.4	17.6	20.2	27.4	29.3	32.1	100	85
027-1947-17	1386	48.0	72.0	23.8	24.0	36.3	10.8	21.5	21.5	1.2	8.4	10.4	17.6	20.2	27.4	29.3	32.1	111	96
027-1947-25	1062	42.0	84.0	17.8	21.0	41.9	7.9	18.5	18.5	6.9	7.1	16.5	16.7	25.9	26.1	35.3	35.6	83	74
027-1947-26	1204	48.0	84.0	17.8	24.0	41.9	7.9	21.5	21.5	6.9	7.1	16.5	16.7	25.9	26.1	35.3	35.6	93	83
027-1947-32	1043	30.0	84.0	23.8	15.0	42.1	10.9	12.5	12.5	7.1	7.1	16.5	16.5	26.1	26.1	35.3	35.6	91	72
027-1947-33	1234	36.0	84.0	23.8	18.0	42.1	10.9	15.5	15.5	7.1	7.1	16.5	16.5	26.1	26.1	35.3	35.6	103	86
027-1947-34	1425	42.0	84.0	23.8	21.0	42.1	10.8	18.5	18.5	7.1	7.1	16.5	16.5	26.1	26.1	35.3	35.6	116	99
027-1947-35	1617	48.0	84.0	23.8	24.0	42.1	10.8	21.5	21.5	7.1	7.1	16.5	16.5	26.1	26.1	35.3	35.6	129	112