



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OPM-0224-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] 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 Overhead Cabinet

Product Type: Cabinet OPM-0224-13

027-1941-00; 027-1941-01; 027-1941-02; 027-1941-03; 027-1941-04; 027-1941-05; 027-1941-06; 027-1941-07; 027-1941-08; 027-1941-09; 027-1941-10; 027-1941-11; 027-1941-12; 027-1941-13; 027-1941-14; 027-1941-15; 027-1941-16; 027-1941-17; 027-1941-18; 027-1941-19; 027-1941-20; 027-1941-21; 027-1941-22; 027-1941-23; 027-1941-24; 027-1941-25; 027-1941-26; 027-1941-27; 027-1941-28; 027-1941-29; 027-1941-30; 027-1941-31; 027-1941-32; 027-1941-33; 027-1941-34; 027-1941-35; 027-1941-36; 027-1941-37;

Product Model Number: 027-1941-38; 027-1941-39

General Description: Wall 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: [Signature] Date: 4/06/2015

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:  Date: 06/17/2015

Print Name: Timothy Piland

Title: SSE

Condition of Approval (if applicable): \_\_\_\_\_

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



MIDMARK CORPORATION OVERHEAD CABINET  
UNITS 027-1941-00 THROUGH 027-1941-39

ENG/CKR: ARF DATE: 06/11/15  
JOB NO.: 15113.10 SCALE:

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SHEET NO.:  
1/5

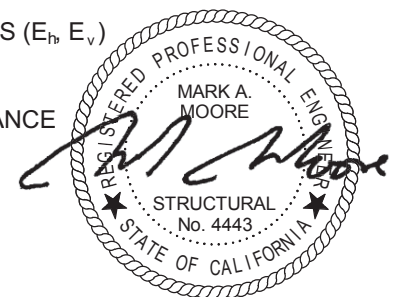
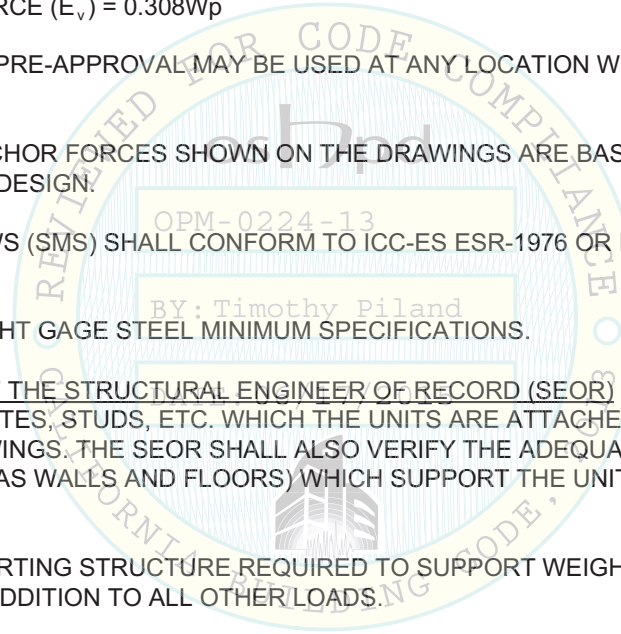
OPM-0224-13: EQUIPMENT MANUFACTURER: MIDMARK CORPORATION  
EQUIPMENT TYPE: OVERHEAD CABINETS

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 ( $E_h$ ) =  $1.109 W_p$   
VERTICAL FORCE ( $E_v$ ) =  $0.308 W_p$
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.



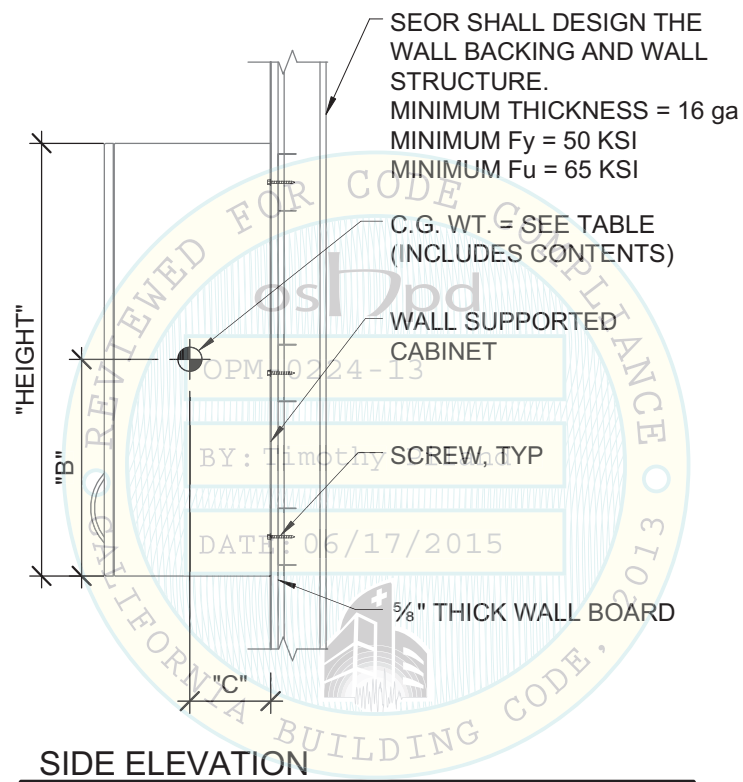
MIDMARK CORPORATION OVERHEAD CABINET  
 UNITS 027-1941-00 THROUGH 027-1941-39

ENG/CKR:	ARF	DATE:	06/11/15
JOB NO.:	15113.10	SCALE:	3/4" = 1'-0"

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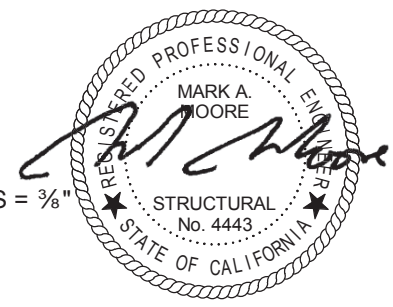
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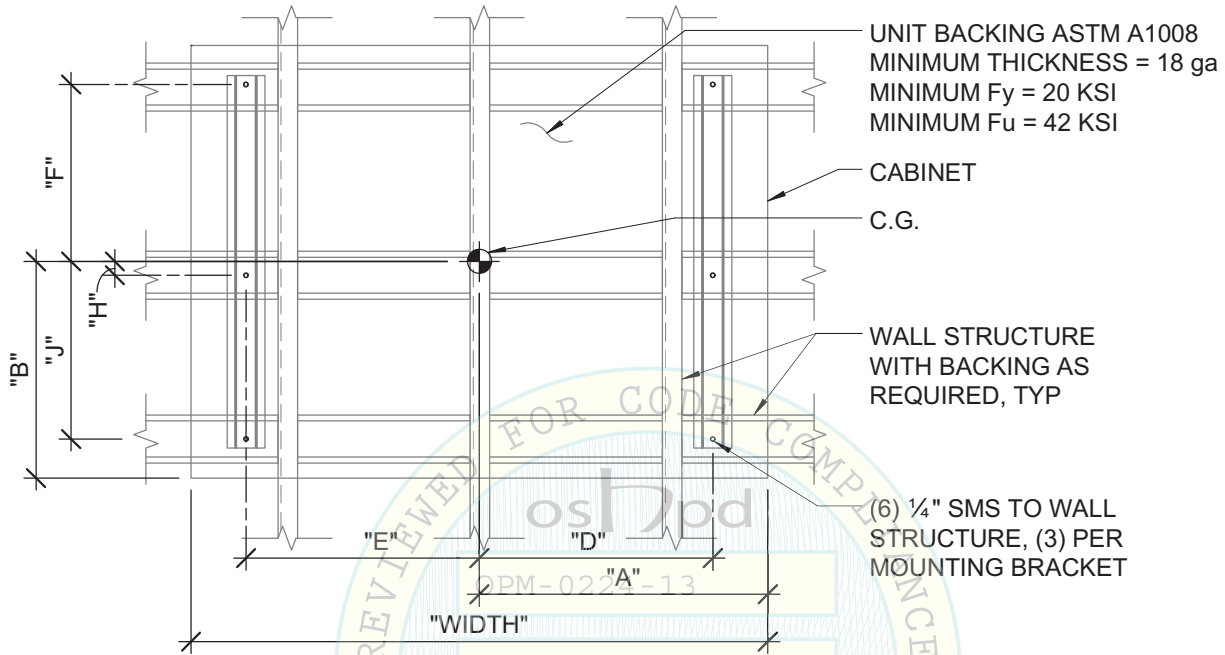
**2/5**



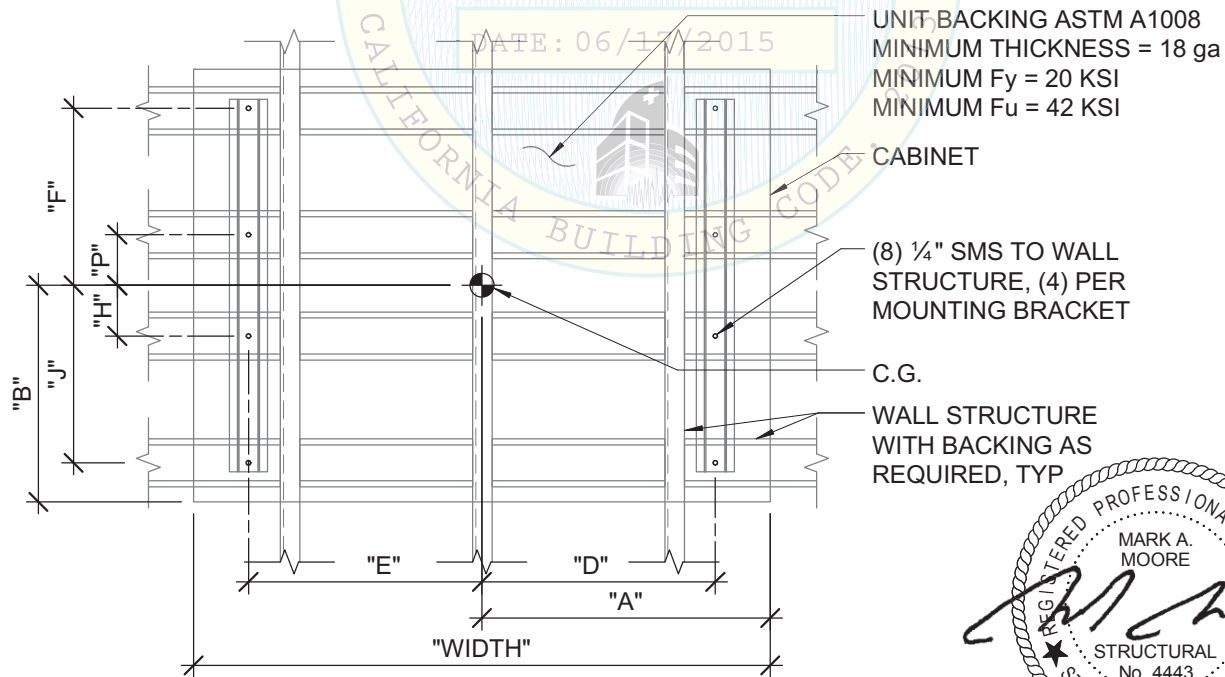
**NOTES**

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 = 3/4"; MINIMUM EDGE DISTANCE FOR SCREWS = 3/8"

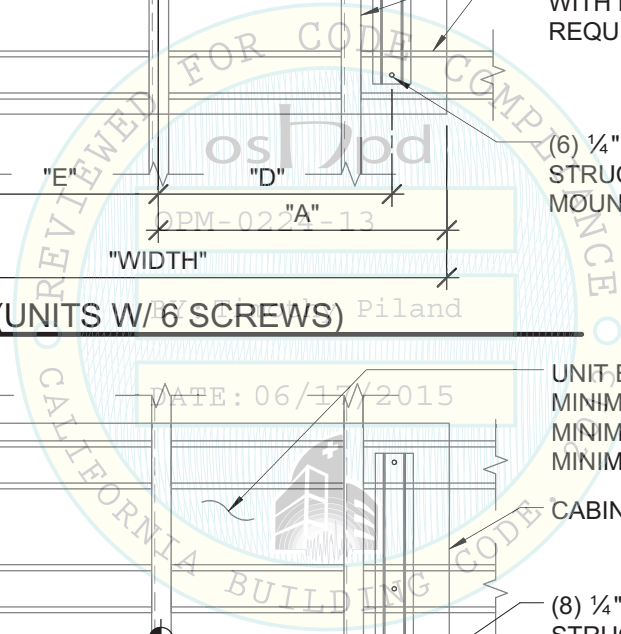




**BACK ELEVATION (UNITS W/ 6 SCREWS)**



**BACK ELEVATION (UNITS W/ 8 SCREWS)**



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SHEET NO.:  
**4/5**

Part No.	Max Operating Weight	Width (in)	Height (in)	Depth (in)	"A" (in)	"B" (in)	"C" (in)	"D" (in)	"E" (in)	"F" (in)	"H" (in)	"J" (in)	T max (lbs/screw)	V max (lbs/screw)
027-1941-00	73	12	18	13.8	5.8	9.0	6.8	1.2	1.7	5.7	1.1	5.8	97	24
027-1941-01	89	15	18	13.8	7.2	9.0	6.8	2.7	3.2	5.7	1.2	5.8	77	28
027-1941-02	103	18	18	13.8	8.7	9.0	6.8	4.1	4.7	5.7	1.2	5.8	74	32
027-1941-03	118	21	18	13.8	10.2	9.0	6.8	5.6	6.2	5.7	1.2	5.8	76	36
027-1941-04	137	24	18	13.8	12.0	9.0	6.9	7.4	7.4	5.7	1.2	5.8	84	41
027-1941-05	166	30	18	13.8	15.0	9.1	6.9	10.4	10.4	5.7	1.2	5.8	93	50
027-1941-06	196	36	18	13.8	18.0	9.1	6.8	13.4	13.4	5.7	1.2	5.8	104	59
027-1941-07	225	42	18	13.8	21.0	9.1	6.8	16.4	16.4	5.7	1.2	5.8	116	67
027-1941-08	254	48	18	13.8	24.0	9.1	6.8	19.4	19.4	5.7	1.2	5.8	128	76
027-1941-09	95	12	24	13.8	5.8	12.0	6.7	1.2	1.6	8.7	1.1	8.8	113	30
027-1941-10	115	15	24	13.8	7.3	12.0	6.7	2.7	3.1	8.7	1.2	8.8	84	35
027-1941-11	134	18	24	13.8	8.8	12.0	6.7	4.2	4.6	8.7	1.2	8.8	79	41
027-1941-12	154	21	24	13.8	10.3	12.1	6.7	5.7	6.1	8.7	1.2	8.8	79	46
027-1941-13	177	24	24	13.8	12.0	12.0	6.8	7.4	7.4	8.7	1.2	8.8	85	52
027-1941-14	216	30	24	13.8	15.0	12.0	6.8	10.4	10.4	8.7	1.2	8.8	92	64
027-1941-15	254	36	24	13.8	18.0	12.1	6.8	13.4	13.4	8.7	1.2	8.8	102	75
027-1941-16	293	42	24	13.8	21.0	12.1	6.8	16.4	16.4	8.7	1.2	8.8	112	86
027-1941-17	331	48	24	13.8	24.0	12.1	6.7	19.4	19.4	8.7	1.2	8.8	151	75
027-1941-18	116	12	30	13.8	5.8	15.0	6.7	1.3	1.6	11.7	1.2	11.8	129	36
027-1941-19	141	15	30	13.8	7.3	15.1	6.7	2.8	3.1	11.7	1.2	11.8	94	42
027-1941-20	165	18	30	13.8	8.8	15.1	6.7	4.2	4.6	11.7	1.2	11.8	86	49
027-1941-21	188	21	30	13.8	10.3	15.1	6.7	5.7	6.1	11.7	1.2	11.8	85	56
027-1941-22	216	24	30	13.8	12.0	15.1	6.8	7.4	7.4	11.7	1.2	11.8	89	63
027-1941-23	264	30	30	13.8	15.0	15.1	6.8	10.4	10.4	11.7	1.2	11.8	96	77
027-1941-24	311	36	30	13.8	18.0	15.1	6.7	13.4	13.4	11.7	1.2	11.8	105	91
027-1941-25	359	42	30	13.8	21.0	15.1	6.7	16.4	16.4	11.7	1.2	11.8	114	105
027-1941-27	138	12	36	13.8	5.9	18.0	6.7	1.3	1.6	14.7	1.1	14.8	148	42
027-1941-28	167	15	36	13.8	7.4	18.0	6.7	2.8	3.1	14.7	1.2	14.8	104	50
027-1941-29	196	18	36	13.8	8.9	18.0	6.7	4.3	4.6	14.7	1.2	14.8	94	58
027-1941-30	224	21	36	13.8	10.3	18.0	6.7	5.8	6.1	14.7	1.2	14.8	92	66
027-1941-31	256	24	36	13.8	12.0	18.0	6.7	7.4	7.4	14.7	1.2	14.8	96	75
027-1941-32	313	30	36	13.8	15.0	18.0	6.7	10.4	10.4	14.7	1.2	14.8	101	91
027-1941-33	370	36	36	13.8	18.0	18.0	6.7	13.4	13.4	14.7	1.2	14.8	110	108
027-1941-36	151	27	18	13.8	13.5	9.0	6.9	8.9	8.9	5.7	1.2	5.8	89	45
027-1941-37	196	27	24	13.8	13.5	12.0	6.8	8.9	8.9	8.7	1.2	8.8	88	58
027-1941-38	240	27	30	13.8	13.5	15.1	6.8	8.9	8.9	11.7	1.2	11.8	92	70
027-1941-39	285	27	36	13.8	13.5	18.0	6.7	8.9	8.9	14.7	1.2	14.8	98	83



MIDMARK CORPORATION OVERHEAD CABINET  
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SHEET NO.:  
**5/5**

Part No.	Max Operating Weight (lbs)	Width (in)	Height (in)	Depth (in)	"A" (in)	"B" (in)	"C" (in)	"D" (in)	"E" (in)	"F" (in)	"H" (in)	"J" (in)	"P" (in)	T max (lbs/screw)	V max (lbs/screw)
027-1941-26	407	48	30	13.8	24.0	15.1	6.7	19.4	19.4	11.7	4.2	11.8	4.8	129	88
027-1941-34	426	42	36	13.8	21.0	18.1	6.7	16.4	16.4	14.7	4.2	14.8	4.8	124	92
027-1941-35	483	48	36	13.8	24.0	18.1	6.7	19.4	19.4	14.7	4.2	14.8	4.8	140	104

