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

OFFICE USE ONLY
APPLICATION #: OPM-0406-13

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: ☒ New ☐ Renewal ☒ Update to Pre-CBC 2013 OPA Number: OPA-2617-10

Manufacturer Information

Manufacturer: ARxIUM, Inc.

Manufacturer's Technical Representative: Wally Eliuk

Mailing Address: 1400 Busch Parkway, Buffalo Grove, IL. 60089

Telephone: (204) 925-6252 Email: weliuk@arxium.com

Product Information

Product Name: MedSelect Flex Dispensing Cabinets

Product Type: Other electrical and mechanical components

Product Model Number: Varies

General Description: The MedSelect Flex dispensing cabinets provide hospitals and long-term care providers with safe and accurate means for dispensing medical supplies.

Applicant Information

Applicant Company Name: ARxIUM, Inc.

Contact Person: Wally Eliuk

Mailing Address: 1400 Busch Parkway, Buffalo Grove, IL. 60089

Telephone: (204) 925-6252 Email: weliuk@arxium.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: W. Eliuk Date: 2017-02-01

Title: Senior System Designer Company Name: ARxIUM, Inc.

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

Registered Design Professional Preparing Engineering Recommendations

Company Name: Biggs Cardosa Associates

Name: Dan Devlin California License Number: S3116

Mailing Address: 1111 Broadway Suite 1510, Oakland, CA 94607

Telephone: (510) 625-9900 ext 1136 Email: ddevlin@biggscardosa.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 1950-16

☐ Other* (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2016 (CBSC 2016) 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 2016 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 2016 & ALL PRE-2016 CODE BASED PROJECTS

Signature: Date: 08-08-2017

Print Name: William Staehlin

Title: SSE

Condition of Approval (if applicable):

Office of Statewide Health Planning and Development
Pre-approval of Manufacturer's Certification (OPM)

OPM-0406-13

Equipment Manufacturer: ARxIUM, Inc.
Equipment Type: MedSelect Flex Dispensing Cabinets

General Notes

1. This OSHPD Pre-approval of Manufacturer's Certification (OPM) is based on the CBC 2016. The demand (design forces) for use with this OPM shall be based on the CBC 2016.
2. See sheets 4, 6, and 8 for maximum seismic force parameters. Strength design (not service load design) is used.
3. Units may be installed directly adjacent to other units. Adjacent units may be configured in any listed configuration. Anchors not part of this OPM shall be checked by the SEOR per Note 3 below.
4. Expansion Anchors.
   a. Attachment shall be made with the anchors listed below and installed as described in the corresponding ICC Report. See Sheets 3, 5, and 7 for anchor types.
   b. See Sheets 3, 5, and 7 for minimum concrete slab thickness or minimum concrete thickness over metal deck.

Anchor Diameter	Concrete Type	Min f'c (psi)	Anchor Type	ICC Report	Min Nominal Embed	h_{ef}	Test Loads
3/8"	NW & Sand Lightweight	3000 3000	Simpson Strongtie Strongbolt-2	ESR-3037	1 7/8"	1 ½"	Torque 30Ft-lbs
1/2"	NW & Sand Lightweight	3000 3000	Simpson Strongtie Strongbolt-2	ESR-3037	3 7/8"	3 3/8"	Torque 60Ft-lbs

5. Special Inspection shall be provided for the expansion anchor installation per CBC Section 1910A.5.
6. Testing of Expansion Anchors shall be per CBC 1910A.5:
   a. All tests shall be performed in the presence of the Inspector of Record.
   b. After at least 24 hours have elapsed since installation, torque test at least 50% of the anchors. Report of the test results shall be submitted to OSHPD.
7. Acceptance Criteria for Testing:
   a. Torque test – the specified torque must be reached within one-half (1/2) turn of nut.
   b. If any anchor fails, test all anchors not previously tested.
8. This pre-approval covers only the support and attachments of the unit to the structure.

Responsibilities of the SEOR

1. Verify that the concrete slab which equipment is anchored to meets the requirements of the applicable ICC-ESR.
2. Verify that the anchors are an adequate distance from any slab edges or openings (see Sheet 2 of 8)
3. Verify that all new or existing anchors are an adequate distance from the anchors shown in this pre-approval, and that there is no adverse interaction where other anchors are within 18" or 6 times the effective embedment from this unit's anchors.
4. Verify that the installation is in conformance with the 2016 CBC & with the details shown in the pre-approval. Verify S_{DS} and z/h or Fp/Wp are in conformance with the limits on Sheets 4, 6, and 8. Verify that the actual equipment's weights, CG location, anchor locations, anchor details, and the material & gage of the unit where attachments are made agree with the information shown on the pre-approval documents.
5. Verify that the existing structure is adequate for all loads.

Seismic Parameters (per California Building Code 2016)

$$Horizontal\ Force = F_p = \frac{0.4 \times a_p \times S_{DS} \times W_p}{R_p/_{Ip}} \times \left(1 + 2\frac{z}{h}\right) \Omega_O$$

$a_p = 1.0$	Equipment based seismic parameters, Instrumentation and
$R_p = 2.5$	Computers per table 13.6-1 (ASCE7-10)
$I_p = 1.5$	Component importance factor
$\Omega_o = 2.0$	Seismic overstrength factor (CBC 1616A.1.23)
W_p	Total weight of units, see sheets 4, 6, and 8
S_{DS}	Geographic based seismic parameter to be verified by an engineer licensed in the State of California. See sheets 4, 6, and 8 for maximum S_{DS} value for each stacking configuration for any value of z/h.
z	Height above ground level of floor that equipment is installed on
h	Height above ground level of roof of building
$\frac{F_p}{W_p} = 0.24 S_{DS}\left(1 + 2\frac{z}{h}\right)\Omega_o$	Net seismic parameter to be verified by an engineer licensed in the State of California. See Sheets 4, 6, and 8 for maximum Fp/Wp value for each stacking configuration.

Note: per section 13.3, the effects of a concurrent vertical seismic force of $\pm 0.2 S_{DS} \times W_p$ is included in this pre-approval.

Cabinet Weights

Key to Abbreviations		(Empty)	(Max Contents)	(Full)
DM	Drawer Module	245 lbs	591 lbs	836 lbs
SCM	Supply Cabinet Module	232 lbs	373 lbs	605 lbs
CDM	Compact Drawer Module	32 lbs	236 lbs	268 lbs
UDM	Unit Dose Module	108 lbs	142 lbs	250 lbs
DT-CPU	Computer	69 lbs	-	69 lbs
DT-UI	Monitor	26 lbs	-	26 lbs
	Base Module (all configurations have base unit)	89 lbs	-	89 lbs
TM	Tower Module	574 lbs	676 lbs	1250 lbs

Stacked Cabinet Legend

AAA / BBB / CCC
Lower Unit / Middle Unit(s) / Upper Unit(s)

See Sheets 4, 6, and 8 for stacking configurations

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

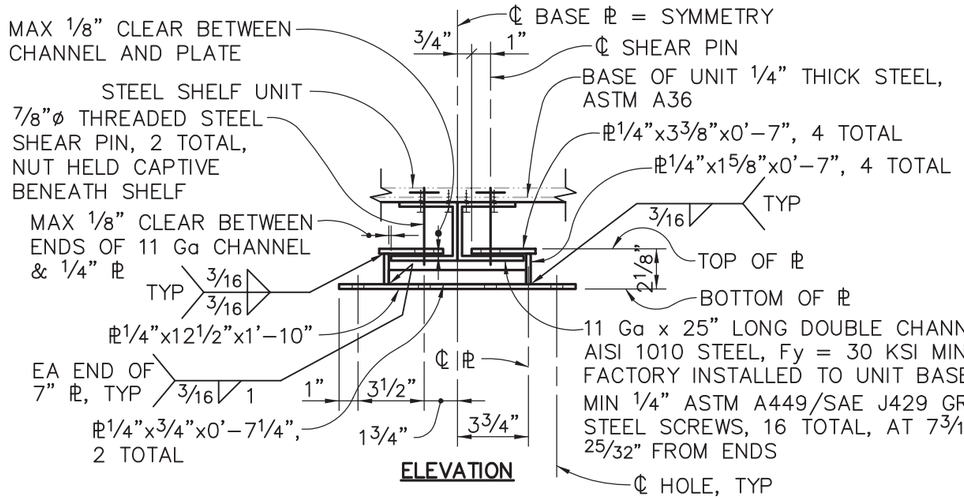
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510-625-9900
BCA

GENERAL NOTES

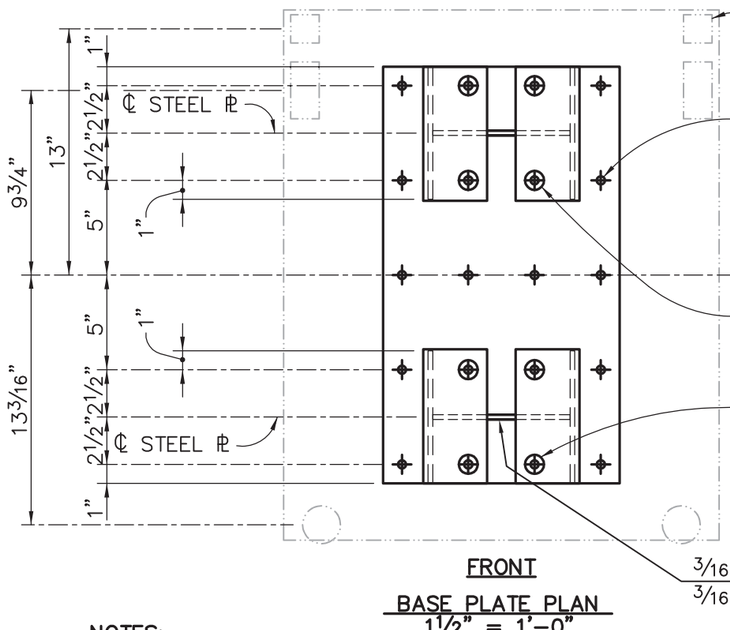
ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT	DATE: 6/23/17
DRAWN BY: RLQ	SCALE: AS SHOWN
CHECKED BY:	JOB No.: 2016195
SHEET 1 OF 8	
DRAWING No.	REV. No.
	0

(2016195S1) 2016195

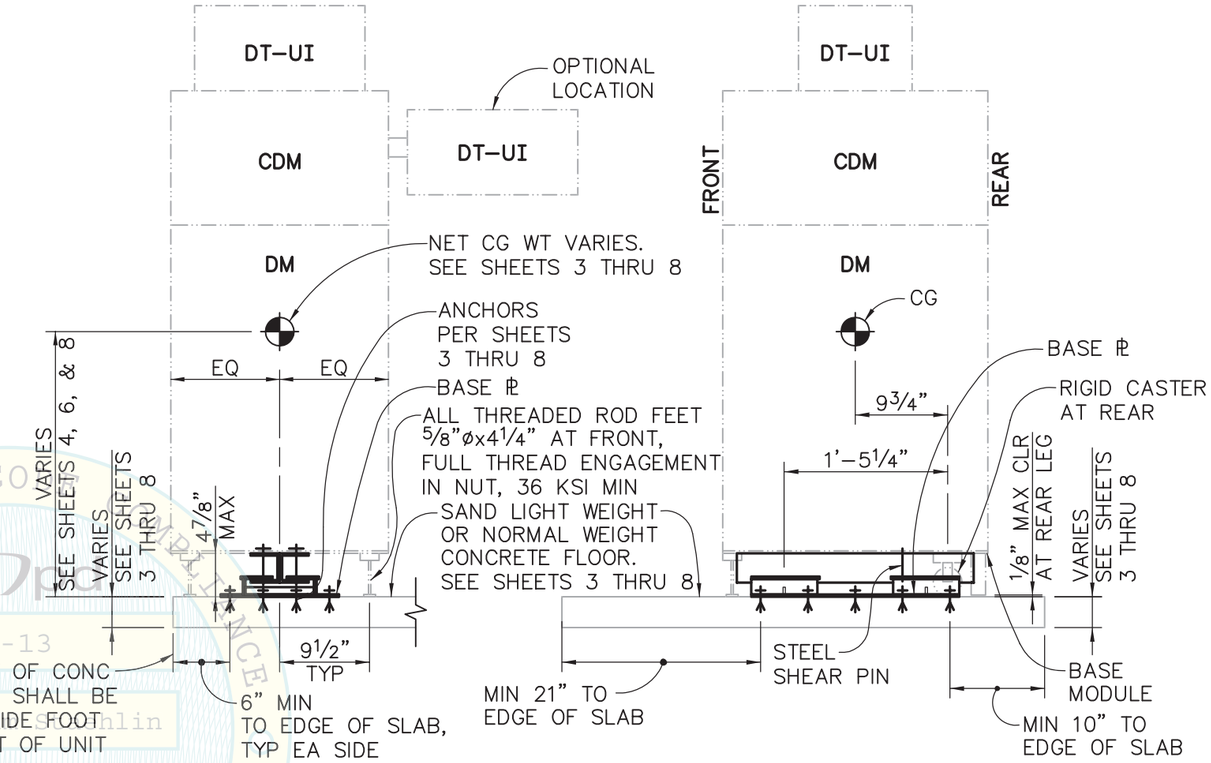


ELEVATION



FRONT

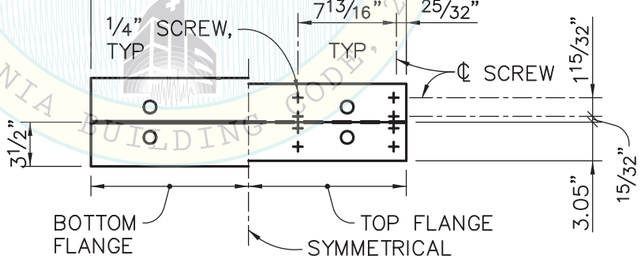
BASE PLATE PLAN
1 1/2" = 1'-0"



FRONT ELEVATION

SIDE ELEVATION

ELEVATION
3/4" = 1'-0"



DOUBLE CHANNEL PLAN
1" = 1'-0"

NOTES:

1. ALL ℙs GRADE A572, Fy = 50 KSI.
2. SCREW SHEAR PIN IN UNTIL THE TOP OF THE PIN IS LEVEL WITH TOP OF NUT.

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

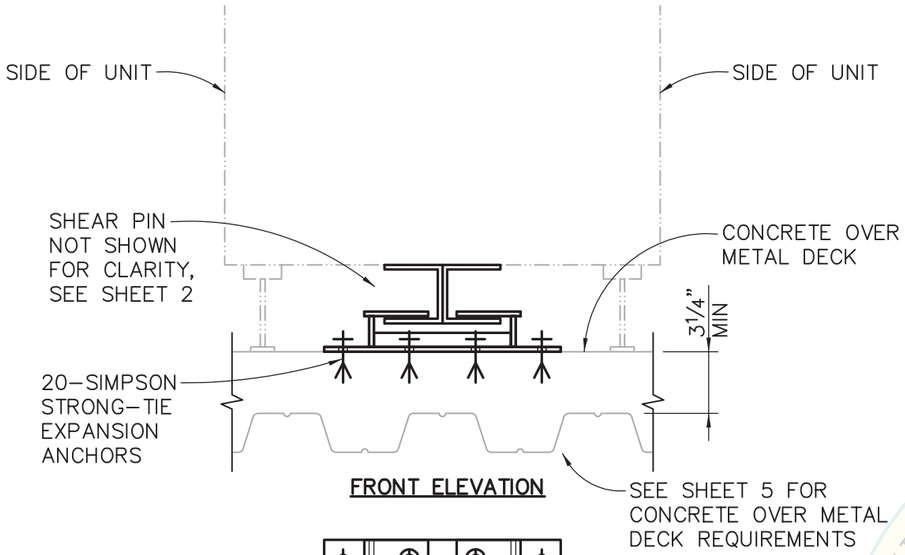
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510-625-9900

BASE PLATE DETAILS

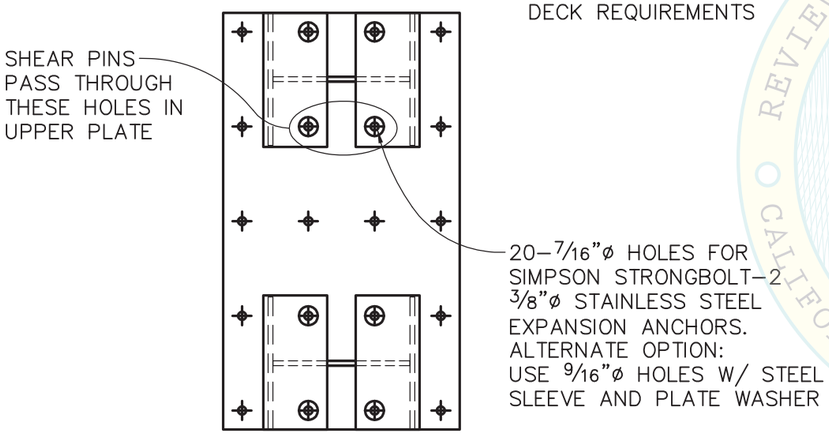
ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT		DATE: 6/23/17	
DRAWN BY: RLQ		SCALE: AS SHOWN	
CHECKED BY:		JOB No.: 2016195	
SHEET 2 OF 8			
DRAWING No.		REV. No.	
		0	

(2016195S2) 2016195

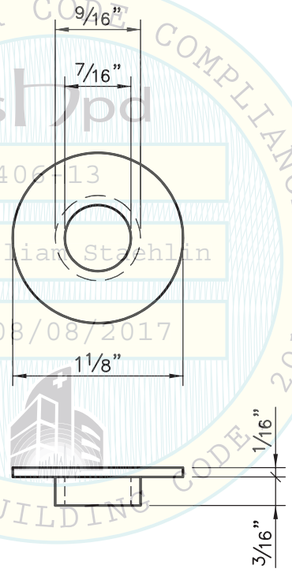


FRONT ELEVATION



FRONT

PLAN
1½" = 1'–0"



SLEEVE AND WASHER PLAN
12" = 1'–0"

OPTION 1 SUMMARY

1. MIN 3¼" CONCRETE THICKNESS.
2. ANCHORS – ⅜" DIAMETER SIMPSON STRONGBOLT–2, 20 TOTAL.
3. Z/H < = 1.0.

NOTES:

1. SEE SHEET 4 FOR ADDITIONAL NOTES AND OPTION 1 STACKING CONFIGURATIONS.
2. SEE SHEET 2 FOR CONCRETE EDGE DISTANCE.

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510–625–9900
BCA

ANCHOR LAYOUT – OPTION 1

ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE–APPROVAL
OF MANUFACTURER'S
CERTIFICATION (OPM)

DESIGNED BY: GJT	DATE: 6/23/17
DRAWN BY: RLQ	SCALE: AS SHOWN
CHECKED BY:	JOB No.: 2016195
SHEET 3 OF 8	
DRAWING No.	REV. No.
	0

(2016195S3) 2016195

Stacking Configuration - Option 1

Stacking Configuration[1]	Wp (lbs)[2]	Height of Net CG above Floor (in)	Max F_P/W_p[3]	Max S_{DS}[4] for z/h <= 1.0	Max S_{DS}[5] for z/h = 0	Anchor Max Tu (lbs)	Anchor Max Vu (lbs)
SCM	694	20.0	1.244	0.864	2.500	154	223
SCM/DT-CPU	763	22.0	1.096	0.761	2.283	163	215
SCM/DT-UI	720	21.3	1.174	0.815	2.445	160	218
SCM/DT-CPU/DT-UI	789	23.4	1.034	0.718	2.154	168	210
SCM/UDM	944	29.6	0.789	0.548	1.644	189	192
SCM/UDM/DT-CPU	1013	32.3	0.713	0.495	1.485	198	186
SCM/UDM/DT-UI	970	31.0	0.756	0.525	1.575	194	189
SCM/UDM/DT-CPU/DT-UI	1039	33.7	0.680	0.472	1.416	201	182
SCM/CDM	962	27.4	0.808	0.561	1.683	181	200
SCM/CDM/DT-CPU	1031	29.4	0.732	0.508	1.524	186	194
SCM/CDM/DT-UI	988	28.6	0.772	0.536	1.608	185	197
SCM/CDM/DT-CPU/DT-UI	1057	30.6	0.701	0.487	1.461	190	191
SCM/SCM	1299	37.1	0.533	0.370	1.110	208	178
SCM/SCM/DT-CPU	1368	39.1	0.494	0.343	1.029	212	174
SCM/SCM/DT-UI	1325	38.1	0.514	0.357	1.071	210	176
SCM/SCM/DT-CPU/DT-UI	1394	40.2	0.477	0.331	0.993	214	171
DM	925	20.5	0.945	0.656	1.968	152	225
DM/DT-CPU	994	22.1	0.857	0.595	1.785	157	219
DM/DT-UI	951	21.5	0.901	0.626	1.878	155	221
DM/DT-CPU/DT-UI	1020	23.2	0.824	0.572	1.716	162	217
DM/UDM	1175	28.1	0.667	0.463	1.389	180	202
DM/UDM/DT-CPU	1244	30.4	0.609	0.423	1.269	186	195
DM/UDM/DT-UI	1201	29.3	0.641	0.445	1.335	183	198
DM/UDM/DT-CPU/DT-UI	1270	31.6	0.586	0.407	1.221	190	192
DM/CDM	1193	26.4	0.677	0.470	1.410	172	208
DM/CDM/DT-CPU	1262	28.1	0.624	0.433	1.299	177	203
DM/CDM/DT-UI	1219	27.4	0.651	0.452	1.356	175	204
DM/CDM/DT-CPU/DT-UI	1288	29.1	0.605	0.420	1.260	181	201
DM/SCM	1530	34.8	0.477	0.331	0.993	196	188
DM/SCM/DT-CPU	1599	36.7	0.445	0.309	0.927	200	183
DM/SCM/DT-UI	1556	35.8	0.462	0.321	0.963	198	185
DM/SCM/DT-CPU/DT-UI	1625	37.7	0.432	0.300	0.900	202	181
TM	1339	35.8	0.526	0.365	1.095	202	181

NOTES:

1. SEE SHEET 1 FOR INFORMATION FOR INDIVIDUAL UNITS AND STACKING LEGEND.
2. TOTAL WEIGHT OF UNITS INCLUDING BASE.
3. THIS PRE-APPROVAL COVERS INSTALLATIONS OF EACH STACKING CONFIGURATION WITH Fp/Wp NOT EXCEEDING THE MAX Fp/Wp STATED IN THIS TABLE. SEE SHEET 1 FOR DEFINITION OF Fp.
4. MAX S_{DS} IS THE MAXIMUM S_{DS} VALUE THAT CAN BE ACCOMMODATED FOR INSTALLATIONS ON ANY FLOOR OF A BUILDING WITH ANY NUMBER OF FLOORS. IF S_{DS} EXCEEDS THIS MAX S_{DS} VALUE, Fp SHALL BE CALCULATED USING z/h TO VERIFY THAT MAX Fp IS NOT EXCEEDED.
5. MAX S_{DS} IS THE MAXIMUM S_{DS} VALUE THAT CAN BE ACCOMMODATED FOR INSTALLATIONS ON THE GROUND FLOOR OF A BUILDING ONLY (z/h $\leq$ 1.0) WITH ANY NUMBER OF FLOORS.

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

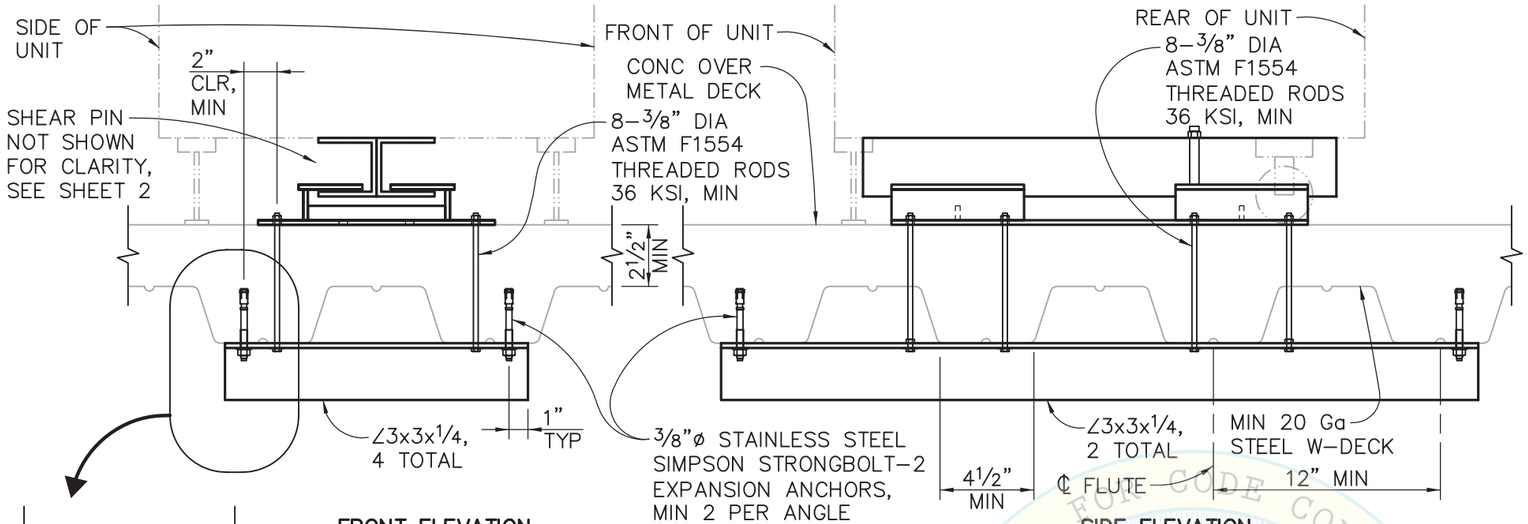
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510-625-9900
BCA

STACKING CONFIGURATION – OPTION 1

ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT	DATE: 6/23/17
DRAWN BY: RLQ	SCALE: AS SHOWN
CHECKED BY:	JOB No.: 2016195
SHEET 4 OF 8	
DRAWING No.	REV. No.
	0

(2016195S4) 2016195

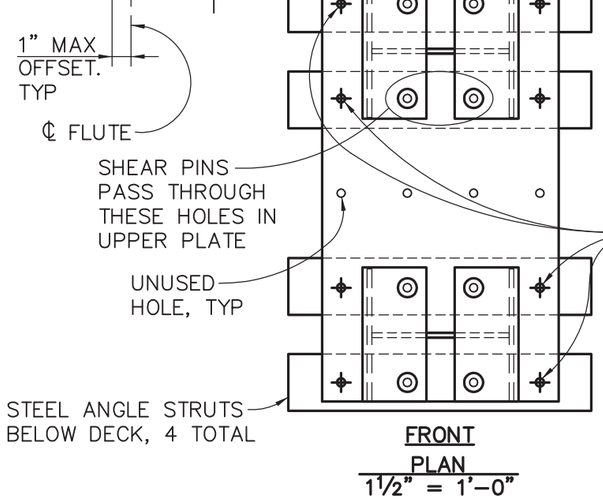


FRONT ELEVATION

(FRONT OF UNIT ORIENTED PERPENDICULAR TO DECK FLUTES)

SIDE ELEVATION

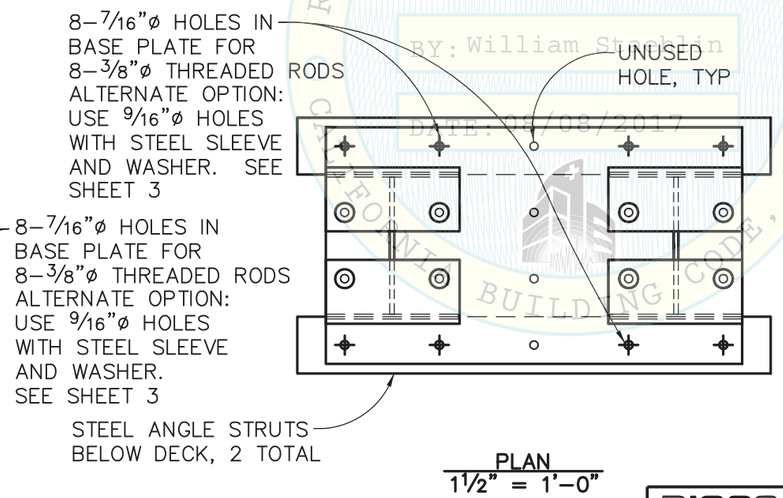
(FRONT OF UNIT ORIENTED PARALLEL TO DECK FLUTES)



FRONT

PLAN

1 1/2" = 1'–0"



PLAN

1 1/2" = 1'–0"

NOTES:

1. SEE SHEET 4 FOR ADDITIONAL NOTES.
2. SEE SHEET 6 FOR OPTION 2 STACKING CONFIGURATIONS.
3. CONCRETE OVER METAL DECK STRENGTH AND DIMENSIONS TO BE VERIFIED BY THE SEOR.
4. SEE SHEET 2 FOR CONCRETE EDGE DISTANCE.

OPTION 2 SUMMARY

1. MIN 2 1/2" CONCRETE THICKNESS
2. ANCHORS – 3/8" DIAMETER THREADED RODS, 8 TOTAL
3. Z/H < = 1.0

THROUGH BOLT NOTES:

1. THROUGH BOLT CAPACITY SHALL BE BASED ON THE LOWEST OF THE FOLLOWING:
   a. THROUGH BOLT CAPACITY (TENSION, SHEAR & BENDING) USING AISC 360–10 AND ACI 318–14
   b. ANCHOR CAPACITY ASSUMING ATTACHMENT TO BE POST–INSTALLED ANCHOR (WITH KC = 17, CONDITION B) IN ACCORDANCE WITH ACI 318–14WITH EMBEDMENT EQUAL TO THICKNESS OF CONCRETE.
   c. ANCHOR CAPACITY CONTROLLED BY BEARING IN CONCRETE. FOR BOLTS IN TOP FLUTE (& NOT AT BOTTOM FLUTE) OF COMPOSITE DECK (CONCRETE OVER METAL DECK), WHERE DEMAND IS MULTIPLIED BY Ωo. CAPACITY CAN BE IN ACCORDANCE WITH ACI 318–14 CONSIDERING FULL THICKNESS OF TOPPING SLAB WITH ($\sqrt{}$(A2/A1) = 1.5). CAPACITY = PHI x 0.85 x f'c x BOLT DIAMETER x THICKNESS OF TOPPING SLAB x ($\sqrt{}$(A2/A1) = 1.5).
2. THROUGH BOLT HOLES IN CONCRETE SHALL HAVE UP TO 1/16" OVER SIZING (HOLE SIZE = BOLT SIZE + 1/16) SPECIFIED ON THE DRAWINGS WITH TOLERANCE OF 1/16". HOLES IN CONCRETE WILL BE REQUIRED TO BE FILLED WITH EPOXY GROUT WHEN HOLE SIZE EXCEEDS BOLT SIZE BY MORE THAN 3/16" (HOLE SIZE IS > BOLT SIZE + 3/16").
   a. CATEGORY 1 SHALL BE ASSUMED FOR HOLE SIZE OF D + 1/16".
   b. CATEGORY 2 SHALL BE ASSUMED FOR HOLE SIZE OF D + 1/8".
   c. CATEGORY 3 SHALL BE ASSUMED FOR HOLE SIZE OF D + 3/16".
3. THROUGH BOLTS IN CONCRETE SHALL RECEIVE SPECIAL INSPECTION AND TESTING (THROUGH BOLTS WITH STEEL TO STEEL CONNECTION IN TENSION DO NO REQUIRE TENSION TESTING) IN ACCORDANCE WITH REQUIREMENTS FOR POST INSTALLED ANCHORS.
4. THROUGH BOLT SHALL BE TORQUED BY ? TURN OF THE NUTS AFTER THE SNUG TIGHT (THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQUIRED TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED.

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510–625–9900
BCA

ANCHOR LAYOUT – OPTION 2

ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE–APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY:	GJT	DATE:	6/23/17
DRAWN BY:	RLQ	SCALE:	AS SHOWN
CHECKED BY:		JOB No.:	2016195
SHEET	5	OF	8
DRAWING No.			REV. No.
			0

(2016195S5) 2016195

Stacking Configuration - Option 2

Stacking Configuration[1]	Wp (lbs)[2]	Height of Net CG above Floor (in)	Max F_P/W_p[3]	Max S_{DS}[4] for z/h <= 1.0	Max S_{DS}[5] for z/h = 0	Anchor Max Tu (lbs)	Anchor Max Vu (lbs)
SCM	694	20.0	2.205	1.531	2.500	1008	541
SCM/DT-CPU	763	22.0	1.907	1.324	2.500	1036	514
SCM/DT-UI	720	21.3	2.055	1.427	2.500	1028	523
SCM/DT-CPU/DT-UI	789	23.4	1.786	1.240	2.500	1055	498
SCM/UDM	944	29.6	1.308	0.908	2.500	1120	436
SCM/UDM/DT-CPU	1013	32.3	1.158	0.804	2.412	1144	415
SCM/UDM/DT-UI	970	31.0	1.237	0.859	2.500	1134	424
SCM/UDM/DT-CPU/DT-UI	1039	33.7	1.099	0.763	2.289	1156	404
SCM/CDM	962	27.4	1.349	0.937	2.500	1096	459
SCM/CDM/DT-CPU	1031	29.4	1.210	0.840	2.500	1115	441
SCM/CDM/DT-UI	988	28.6	1.282	0.890	2.500	1108	448
SCM/CDM/DT-CPU/DT-UI	1057	30.6	1.152	0.800	2.400	1126	431
SCM/SCM	1299	37.1	0.840	0.583	1.749	1175	386
SCM/SCM/DT-CPU	1368	39.1	0.772	0.536	1.608	1188	373
SCM/SCM/DT-UI	1325	38.1	0.808	0.561	1.683	1181	378
SCM/SCM/DT-CPU/DT-UI	1394	40.2	0.743	0.516	1.548	1193	366
DM	925	20.5	1.659	1.152	2.500	1008	543
DM/DT-CPU	994	22.1	1.488	1.033	2.500	1027	523
DM/DT-UI	951	21.5	1.574	1.093	2.500	1022	529
DM/DT-CPU/DT-UI	1020	23.2	1.414	0.982	2.500	1042	510
DM/UDM	1175	28.1	1.102	0.765	2.295	1095	458
DM/UDM/DT-CPU	1244	30.4	0.996	0.692	2.076	1118	438
DM/UDM/DT-UI	1201	29.3	1.053	0.731	2.193	1108	447
DM/UDM/DT-CPU/DT-UI	1270	31.6	0.953	0.662	1.986	1129	428
DM/CDM	1193	26.4	1.130	0.785	2.355	1074	477
DM/CDM/DT-CPU	1262	28.1	1.035	0.719	2.157	1093	462
DM/CDM/DT-UI	1219	27.4	1.086	0.754	2.262	1087	468
DM/CDM/DT-CPU/DT-UI	1288	29.1	0.994	0.690	2.070	1103	452
DM/SCM	1530	34.8	0.756	0.525	1.575	1149	409
DM/SCM/DT-CPU	1599	36.7	0.701	0.487	1.461	1161	396
DM/SCM/DT-UI	1556	35.8	0.732	0.508	1.524	1157	402
DM/SCM/DT-CPU/DT-UI	1625	37.7	0.680	0.472	1.416	1170	390
TM	1339	35.8	0.835	0.580	1.740	1162	395

REGISTERED PROFESSIONAL ENGINEER
DANIEL B DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

NOTE:
SEE SHEET 4 FOR NOTES.

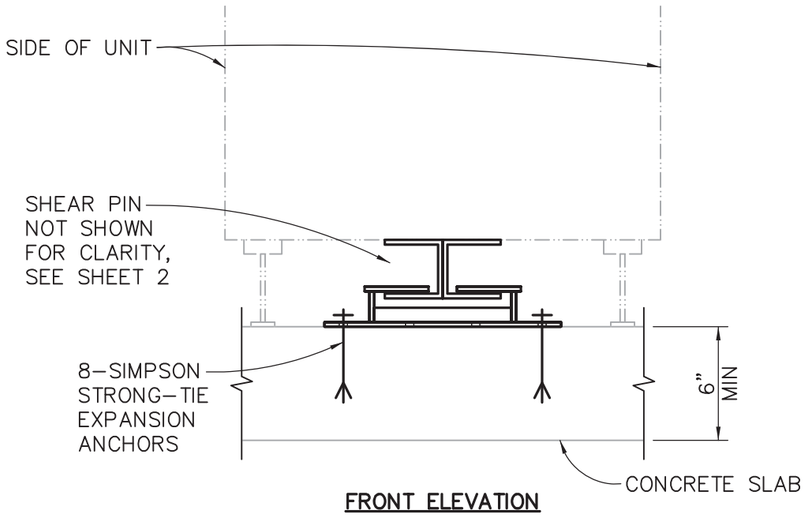
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510-625-9900
BCA

STACKING CONFIGURATION – OPTION 2

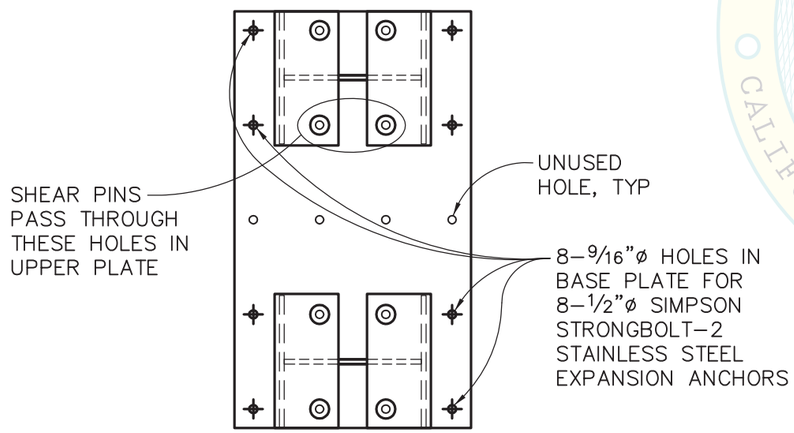
ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT	DATE: 6/23/17		
DRAWN BY: RLQ	SCALE: AS SHOWN		
CHECKED BY:	JOB No.: 2016195		
SHEET 6 OF 8			
DRAWING No.		REV. No.	
(2016195S6)		0	

2016195



FRONT ELEVATION



FRONT

PLAN

1½" = 1'–0"

NOTES:

1. SEE SHEET 4 FOR ADDITIONAL NOTES.
2. SEE SHEET 8 FOR OPTION 3 STACKING CONFIGURATION.
3. SEE SHEET 2 FOR CONCRETE EDGE DISTANCE.

OPTION 3 SUMMARY

1. MIN 6" CONCRETE THICKNESS
2. ANCHORS – ½" DIAMETER SIMPSON STRONGBOLT–2, 8 TOTAL
3. Z/H < = 1.0

REGISTERED PROFESSIONAL ENGINEER
DANIEL B. DEVLIN
No. S3116
Exp. 12/31/17
STRUCTURAL
STATE OF CALIFORNIA

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510–625–9900
BCA

ANCHOR LAYOUT – OPTION 3

ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE–APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT		DATE: 6/23/17	
DRAWN BY: RLQ		SCALE: AS SHOWN	
CHECKED BY:		JOB No.: 2016195	
SHEET 7 OF 8			
DRAWING No.		REV. No.	
(2016195S7)		0	

2016195

Stacking Configuration - Option 3

Stacking Configuration[1]	Wp (lbs)[2]	Height of Net CG above Floor (in)	Max F_P/W_p[3]	Max S_{DS}[4] for z/h <= 1.0	Max S_{DS}[5] for z/h = 0	Anchor Max Tu (lbs)	Anchor Max Vu (lbs)
SCM	694	20.0	2.187	1.519	2.500	587	782
SCM/DT-CPU	763	22.0	1.905	1.323	2.500	613	749
SCM/DT-UI	720	21.3	2.053	1.426	2.500	607	762
SCM/DT-CPU/DT-UI	789	23.4	1.786	1.240	2.500	628	726
SCM/UDM	944	29.6	1.308	0.908	2.500	678	636
SCM/UDM/DT-CPU	1013	32.3	1.158	0.804	2.412	696	604
SCM/UDM/DT-UI	970	31.0	1.237	0.859	2.500	688	618
SCM/UDM/DT-CPU/DT-UI	1039	33.7	1.099	0.763	2.289	705	588
SCM/CDM	962	27.4	1.349	0.937	2.500	660	669
SCM/CDM/DT-CPU	1031	29.4	1.210	0.840	2.500	673	643
SCM/CDM/DT-UI	988	28.6	1.282	0.890	2.500	668	653
SCM/CDM/DT-CPU/DT-UI	1057	30.6	1.152	0.800	2.400	682	628
SCM/SCM	1299	37.1	0.840	0.583	1.749	719	562
SCM/SCM/DT-CPU	1368	39.1	0.772	0.536	1.608	729	544
SCM/SCM/DT-UI	1325	38.1	0.808	0.561	1.683	724	552
SCM/SCM/DT-CPU/DT-UI	1394	40.2	0.743	0.516	1.548	733	534
DM	925	20.5	1.643	1.141	2.500	586	783
DM/DT-CPU	994	22.1	1.486	1.032	2.500	606	761
DM/DT-UI	951	21.5	1.568	1.089	2.500	601	769
DM/DT-CPU/DT-UI	1020	23.2	1.414	0.982	2.500	618	743
DM/UDM	1175	28.1	1.103	0.766	2.298	660	668
DM/UDM/DT-CPU	1244	30.4	0.996	0.692	2.076	676	639
DM/UDM/DT-UI	1201	29.3	1.053	0.731	2.193	668	652
DM/UDM/DT-CPU/DT-UI	1270	31.6	0.953	0.662	1.986	684	624
DM/CDM	1193	26.4	1.132	0.786	2.358	644	696
DM/CDM/DT-CPU	1262	28.1	1.035	0.719	2.157	657	673
DM/CDM/DT-UI	1219	27.4	1.086	0.754	2.262	652	682
DM/CDM/DT-CPU/DT-UI	1288	29.1	0.994	0.690	2.070	665	660
DM/SCM	1530	34.8	0.756	0.525	1.575	699	596
DM/SCM/DT-CPU	1599	36.7	0.701	0.487	1.461	708	578
DM/SCM/DT-UI	1556	35.8	0.732	0.508	1.524	705	587
DM/SCM/DT-CPU/DT-UI	1625	37.7	0.680	0.472	1.416	715	569
TM	1339	35.8	0.835	0.580	1.740	710	576

NOTE:
SEE SHEET 4 FOR NOTES.

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
1111 Broadway, Suite 1510
Oakland, California 94607
510-625-9900
BCA

STACKING CONFIGURATION – OPTION 3

ARxIUM
MEDSELECT FLEX DISPENSING CABINETS
OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

DESIGNED BY: GJT	DATE: 6/23/17
DRAWN BY: RLQ	SCALE: AS SHOWN
CHECKED BY:	JOB No.: 2016195
SHEET 8 OF 8	
DRAWING No.	REV. No.
	0

(2016195S8) 2016195