

# OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0438
OSHPD Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Potter Signal (Formerly Harrington Signal)	
Manufacturer's Technical Representative: Michael McIsaac	
Mailing Address: 1170 Troy Lane North, Maple Grove, MN 53693	
Telephone: (763) 420-0034 Email: michaelm@po	ottersignal.com
Product Information	MD
Product Name: Electrical Control Panels on Life Safety/Critical Branch	F
Product Type: Fire Alarm & Security Panels	- C
Product Model Number: EVAX and Mass Notification Panels	
General Description: EVAX by Potter Fire alarm control panels, voice	evacuation systems and accessories.
Mounting Description: Rigid, Wall Mounted	
Tested Seismic Enhancements: None DATE: 08/31/2021	
C C	200
Applicant Information	
Applicant Company Name: Structural Integrity Associates, Inc. dba TRU	Compliance
Contact Person: Katie Braman	
Mailing Address: 5215 Hellyer Ave., San Jose, CA 94608	
Telephone: (844) 878-0200 Email: kbraman@strue	uctint.com
Title: Program Manager	

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

OSP-0438

OSHPD



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

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: Andrew Coughlin   California License Number: S6082
Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 95138-1025
Telephone: (415) 635-8461 Email: acoughlin@structint.com
Certification Method
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):
FORCODECO
Testing Laboratory
Company Name: UL LLC
Contact Person: Chris Rose
Mailing Address: 12 Laboratory Drive, Research Triangle NC 27709-3995
Telephone: (919) 549-1713 Email: christopher.s.rose@us.ul.com
DATE: 08/31/2021
CZ (* S
CRITE ORNIA BUILDING CODE 200
A BUILDING

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

#### Seismic Parameters

Design Basis of Equipmen	nt or Components	s (Fp/Wp) = <u>1.88</u>								
SDS (Design spectra	al response accel	eration at short period, g) = $2.5$								
ap (Amplification fac	ctor) =	2.5								
Rp (Response modi	fication factor) =	6.0								
Ωo (System overstre	ength factor) =	2.0	2.0							
Ip (Importance facto	or) =	1.5								
z/h (Height ratio fac	tor) =	1 and 0								
Natural frequencies	(Hz) =	See Attachment								
Overall dimensions	and weight =	See Attachment CODE								
		EDFORTECONS								
		Nº OCHDD	4							
OSHPD Approval (For	Office Use Only	Approval Expires on 12/31/20	252							
Date: 8/31/2021	R	OSP-0438	)m							
Name: Mohammad Alia	ari		Title:	Senior Structural Engineer						
Special Seismic Certificati	on Valid U <mark>p to: S</mark> i	$DS(g) = \frac{2.5}{2.5}$	z/h =	See Above						
Condition of Approval (if a	pplicable):	DATE: 08/31/2021								
	Cr	RNIA BUILDING CODE	6102							

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## SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX



## 2001099-CR-001-R1

Manufacturer: Model Line:	EVAX by Potter (Former EVAX and Mass Notifica		TABL	E 1				
Certified Product Cons								
16 gauge cold rolled ca 0.080" extruded alumir								
Certified Options Sum	mary:							
Mounting Configuration	on:	- FC	RCO	DECO	14			
Wall mounted - rigid		EV						
Note: Installed mounting co	nfiguration must be o <mark>f similar</mark>	configuratio	on and Identi	cal strength a	and stiffness	to those tes	ted.	
Building Code: CBC 20.	19	(	Certificatio	430		2.5 g z, 2.5 g z,	/h=1.0 /h=0.0	∋= <b>1.5</b>
Model Line	Model	Din Depth	mensions	(in) Height	Weight		Notes	UUT⁴
	HAVE-25 Voice System			10.2.8133	26	0		10
-	EVAX-25 <sup>1</sup>	4	14.5	18	26			Interp.
	EVAX-50 <sup>1</sup>	DATE:	08/31/	2021	30			Interp.
	EVAX-100 <sup>1,2</sup>	00	4		42.9	\$/		Interp.
	HAVE-100M Mass Notification		U		42.9			11
	EVAX-150 <sup>1</sup>	RNIA 4		DINGC	42.9	Same components as EVAX- 100 Same components as EVAX- 100		Interp.
EVAX/HMX Voice and Mass	EVAX-200 <sup>1,2</sup>	4	14.5	27	42.9			Interp.
Notification Panels	HMX-MP				36.2	FNV-MP	3	Interp.
	HAVED-MP16/P Master Panel				36.2	FNV-MP	3	12
	HMX-DP				32.4	FNV-DP <sup>3</sup>		Interp.
	HAVED-DPS25/P Distributor Panel	6	26	42	32.4	FNV-DP <sup>3</sup>		13
	EVX-RM	3	8	10	6.6			Interp.
	M-RM8 Remote Microphone	3	8	10	6.6			14
<sup>1</sup> Identical expander (E)	module is also qualified	l. See Sub	componer	nt Matrix.				
<sup>2</sup> Identical mass notifica	ation (M) module is also	qualified.	See Subco	mponent l	Matrix.			
<sup>3</sup> Alternated product na	me is Hochiki. Compone	ents are id	entical oth	ier than br	anding.			
<sup>4</sup> Tested unit were HAVE	Product Line which are	indentical	to EVAX P				lg.	

TRU Compliance, by Structural Integrity Associates, Inc. 844-TRU-0200 | info@trucompliance.com

## SPECIAL SEISMIC CERTIFICATION **CERTIFIED SUBCOMPONENT MATRIX**

#### 2001099-CR-001-R1





Manufacturer:	EVAX by Potter (Formerly		/FNV Series	TABLE 2	
Model Line: Building Code: CBC 20	EVAX and Mass Notification	on Panels Seismic Certificat	$S_{DS} = 2.5 g z/h = 1.0$	I <sub>P</sub> = 1.5	
Bununny Couc. CDC 20		Scisinic certificat	$S_{DS} = 2.5 g z/h = 0.0$		
Component Type	Manufacturer	Model	Description	Notes	5 UUT
Transformer	Evax Systems	TRE	Power Transformer		11,12 13
Voice Amplifiers		EVX-25 <sup>1</sup>	25 Watt Module, digital message repeater, paging mic	FNV-25E <sup>2</sup>	10
		EVX-50 <sup>1</sup> BY: N	50 Watt Module, digital message repeater, paging mic	FNV-50E <sup>2</sup> Same as EVX-100M (dep	populated)
	Evax Systems	EVX-100 <sup>1</sup> DATE	100 Watt Module, digital message repeater, paging mic	FNV-100E <sup>2</sup> Same as EVX-100M (dep	populated)
		EVX-25E <sup>1</sup>	25 Watt Expander Module		13
		EVX-50E <sup>1</sup>	50 Watt Expander Module	Same as EVX-100M (dep	populated) Interp
		EVX-100E <sup>1</sup>	100 Watt Expander Module	Same as EVX-100M (dep	populated) Interp
		EVX-100M <sup>1</sup>	Mass notification module		11
		EVX-CAB <sup>1</sup>	EVAX-25, EVAX-50, & EVAX-100 cabinet		10
Enclosures	Evax Systems	EVX-CAB2 <sup>1</sup>	EVAX-150, 200, 100M, 200M, HMX-MP and HMX-DP cabinet		11,12,1
		EVX-CABRM <sup>1</sup>	EVX-RM8, RM16, EVX-RM cabinet		14
	Even Containe	MX-FH <sup>1</sup>	Fireman's handset	FNV-FH <sup>2</sup>	12
Optional Components	Evax Systems —	MX-PWR <sup>1</sup>	Power Supply	FNV-PWR <sup>2</sup>	12
Notes:	· ·				
<sup>1</sup> Model prefix EVX is ide	entical to M and MX is iden	tical to HAVE other than bra	nding.		

<sup>2</sup>Alternated product name is Hochiki. Components are identical other than branding/part number.

## SPECIAL SEISMIC CERTIFICATION **CERTIFIED SUBCOMPONENT MATRIX**

#### 2001099-CR-001-R1





Manufacturer:	EVAX by Potter (Formerly	Harrington Signal	<b>Table Description:</b> EF Series & EVAX/HI Subcomponents	MX/FNV Series	TABLE 2	
Model Line:	EVAX and Mass Notification	on Panels				
Building Code: CBC 20	019	Seismic Certific	cation Limits: $S_{DS} = 2.5 g z/h = 1.0$ $S_{DS} = 2.5 g z/h = 0.0$	$I_{P} = 1.5$		
Component Type	Manufacturer	Model	Description	Note	es UUT	
		MX-MFP <sup>1</sup>	Master Fire Phone Interface	FNV-MFP <sup>2</sup>	12	
		MX-DCC <sup>1</sup>	Data communication control card	FNV-DCC <sup>2</sup>	12,13	
		MX-SSC <sup>1</sup>	Switch Scan Card	FNV-SSC <sup>2</sup>	12	
		MX-MMC <sup>1</sup>	Microphone Master Control Card	FNV-MMC <sup>2</sup>	12	
		MX-II <sup>1</sup> RV	Input Interface Aliaari FNV-II <sup>2</sup>		12	
		MX-SLC <sup>1</sup>	Switch/LED Card FNV-SLC <sup>2</sup>		12	
		MX-MFH <sup>1</sup>	Master Fire Phone Handset Card	FNV-MFH <sup>2</sup>	12	
		MX-MBR <sup>1</sup> DA	Motherboard Card	FNV-MBR <sup>2</sup>	13	
		MX-AMI <sup>1</sup>	Audio/Module Interface	FNV-AMI <sup>2</sup>	13	
Optional Components	Evax Systems	MX-FPI <sup>1</sup>	Fire Phone Interface	FNV-FPI <sup>2</sup>	13	
		MX-MBK <sup>1</sup>	Mother Board Relays	FNV-MBK <sup>2</sup>	13	
		MX-ASC <sup>1</sup>	Audio System Control Card	FNV-ASC <sup>2</sup>	12	
		MX-ISO <sup>1</sup>	Isolator RS232	FNV-ISO <sup>2</sup>	Interp.	
		MX-LLC <sup>1</sup>	LED Lamp Card		Interp.	
		MX-BRK <sup>1</sup>	Break-out card (Contains no circuitry)		Interp.	
		MX-FO <sup>1</sup>	Fiber optic transceiver		Interp.	
		MX-BA <sup>1</sup>	Backup amplifier switching relay	FNV-BA <sup>2</sup>	Interp.	
		MX-OI <sup>1</sup>	Output interface	FNV-OI <sup>2</sup>	Interp.	
		MX-XO <sup>1</sup>	Extended output interface	FNV-XO <sup>2</sup>	Interp.	

<sup>2</sup>Alternated product name is Hochiki. Components are identical other than branding/part number.

## **SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX**

#### 2001099-CR-001-R1





Manufacturer:	EVAX by Potter (Formerly	Harrington Signal	Table Description: EF Series & EVAX Subcomponents	/HMX/FNV Series	TABLE 2		
Model Line:	EVAX and Mass Notification	on Panels					
Building Code: CBC 20	19	Seismic Certificat	$S_{DS} = 2.5 g z/h = 1.0$ tion Limits: $S_{DS} = 2.5 g z/h = 0.0$	<i>I<sub>P</sub></i> = 1.5			
Component Type	Manufacturer	Model	Description	No	otes	UUT	
		MX-XI <sup>1</sup>	Extended input interface	FNV-XI <sup>2</sup>		Interp.	
		EVX-SC <sup>1</sup>	Supervisory Card			Interp.	
			OSP-0438 Microphone			10,11, 12,14	
		EVX-BAB <sup>1</sup> BV-	Backup Module Aliaari			Interp.	
Optional Components	Evax Systems —	EVX-ZM <sup>1</sup>	Zone Module			11	
		EVX-SL8 <sup>1</sup>	Switch Card			11	
		EVX-IL81	Input Card			11	
		EVX-OL8 <sup>1</sup>	Output Card			11	
		EVX-RM8 <sup>1</sup>	Remote Microphone Card			14	
		10p					
		· r N					
			BUILDING				
Nataa							
Notes:			anding				
		tical to HAVE other than bra	-				
Alternated product ha	ime is nochiki. Componen	ts are identical other than b	pranoing/part number.				





## 2001099-CR-001-R1

UUT	Unit Description <sup>1</sup> Report Number Testing Lab		Testing Laboratory	S <sub>DS</sub>	z/h	I <sub>P</sub>
10	HAVE-25 Voice System (EVAX-25)	R10542782	UL LLC	2.5 2.5	1.0 0	1.5
11	HAVE-100M Mass Notification (EVAX-100)	R10542782	UL LLC	2.5 2.5	1.0 0	1.5
12	HAVED-MP16/P Master Panel (HMX-MP)	R10542782	UL LLC	2.5 2.5	1.0 0	1.5
13	HAVED-DPS25/P Distributor Panel (HMX-DP)	R10542782 DE C	ULLLC	2.5 2.5	1.0 0	1.5
14	M-RM8 Remote Microphone (EVX-RM)	R10542782	ULILC	2.5 2.5	1.0 0	1.5
	REU	OSP-0438	CF.			
		By: Mohammad Ali	aari			
O C	0	DATE: 08/21/2021				
	CP	DATE: 00/31/2021	612			
			OF. 2			
		ORNIA BUILDING	COL			





## 2001099-CR-001-R1

Manufacturer:	EVAX by P	otter (Formerly Hai	rrington Sigi	nal)					UT 1	0
Model Line:	EVAX and	Mass Notification P	anels					0		.0
Model Number:	HAVE-25 V	oice System			Serial Nı	ımber:	N/A	•		
Product Constru	ction Summary:									
16 gauge cold ro	lled carbon stee									
	nponent Summar									
	0	voice amplifier and	d transforme	er						
Unit identical to	EVAX-25.									
			CORCO	DDEC						
		.ED	FORCO		MS					
		N								
				operties		Y1		_	<i></i> ,	
Weight		Dimension (in		0/38	Lowest Natural					
( <b>lb</b> ) 26	Depth 4	WidthO Height14.518							<b>/ertical</b> N/A	
26	4	14.5			Information					
Buildi	ng Code	Test Crit		S <sub>DS</sub> (g)	z/h		Δ	A <sub>RIG-H</sub> (g)	Δ(σ)	Δ(σ)
	-			2.5	1.0					
CBC	2019		C <u>15</u> 6 08/3	1/2021 2.5	0.0	1.5	4.0	3.0	1.67	0.67
Test Mounting D	etails:	CALIFORN			CODE	6102	<u> </u>			<u> </u>
					•	E		:	T	
					1	$\sum$		)		

Rigid wall mounted with 5 x 1/4" Lag Screws

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.



### 2001099-CR-001-R1

Manufacturer:	EVAX by Potter (Formerly Harrington Sig	nal)	<b>UUT 11</b>
Model Line:	EVAX and Mass Notification Panels		
Model Number:	HAVE-100M Mass Notification	Serial Number: N/A	
Product Construc	tion Summary:		
16 gauge cold roll	ed carbon steel		
<b>Options/Subcomp</b>	oonent Summary:		
M-CAB2 enclosure	containing M-100M voice amplifier, M-SL8 swi	itch card, M-ZM zone module, M-IL8 inj	put card, and M-OL8 output
card			
Unit identical to E	VAX-100		
	NED FOR C	ODE COMP	
	UUT Pr	operties	
Weight	Dimension (in)	Lowest Natural	Frequency (Hz)

Weight		Dimension (in)	Lowest Natural Frequency (Hz)								
(lb)	Depth	Width	OSHei	OSHeight 38		Front-Back		Side	Vertical		
42.9	4	14.5 27		///////N	N/A N/		/A	N/A			
	UUT Highest Passed Seismic Run Information										
Build	Building Code O Test Criteria S <sub>DS</sub> (g				z/h	I <sub>P</sub> O	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)	
CB	CBC 2019			2,5	1.0	1.5	4.0	3.0	1.67	0.67	
CB	C 2019	ICC-ES AC1	E-10 00/ 3	2.5	0.0	1.5	4.0	5.0	1.07	0.07	

#### Test Mounting Details:







NCE

Rigid wall mounted with 5 x 1/4" Lag Screws Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

#### 2001099-CR-001-R1





Manufacturer:		ottor (Formorily Horri	naton Cia	n ol)							
Monulacturer: Model Line:	-	otter (Formerly Harri		lidl)				U	UT 1	.2	
		Mass Notification Par	nels						_		
Model Number:		P16/P Master Panel			Serial Nu	mber:	N/A				
Product Constru	-										
16 gauge cold rol	lled carbon steel										
Options/Subcom	=	-	•	с					F 466		
	-	/E-MFP master fire ph									
•		an card, HAVE-PWR p		-	•						
door.	ter control card,	HAVE-SLC switch/LEI				nre prio	ne nanuse	et card m	ounted to	othe	
uoor. Unit identical to			OR CO	ODEA							
		CO F	ORCO	ODEC	M						
		NE									
			UUT Pr	operties		Z					
Weight		Dimension (in)				Lowes	t Natural	Frequen	cy (Hz)	/ (Hz)	
(lb)	Depth	Width	OSHeight 38		Front-Back		Side-Side		Vertical		
36.2	4	14.5	2	27	N/	A	N	/A	N/A		
		UUT Highest	Passed Se	eismic Run	Informat	ion			•		
Buildi	ng Code	Test Criter	ria	S <sub>DS</sub> (g)	z/h	I <sub>P</sub> O	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)	
CPC	2019	ICC-ES AC1		2,5	1.0	1.5	4.0	3.0	1.67	0.67	
CDC	. 2019	ICC-EDACE	<u>50</u> 00/3	2.5	0.0	1.5	4.0	5.0	1.07	0.07	
Test Mounting D	etails:	S		+		2		•			
						$\mathcal{V}$					
					E.		-				
		RAI			COV			10			
		10 million (100 million)	BUI	DING		-	* * .				
		20				H	A manage				
		and the second				I					
		1951		- m		-	1		Q.L.		
and the second second	and the second se	at er	The last	- 177	1258	-					
and the second second	A STREET, STRE	A CONTRACTOR OF THE OWNER					1	ALC: NO			

Rigid wall mounted with 5 x 1/4" Lag Screws Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

OSP-0438

EVAX by Potter (Formerly Harrington Signal)

**EVAX and Mass Notification Panels** 

HAVED-DPS25/P Distributor Panel



N/A

Serial Number:

Rigid wall mounted with 5 x 1/4" Lag Screws Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

#### OSP-0438

Options/Subcom	nonant Summa	<i>4</i> 176								
M-CAB2 enclosur	e containing HA\ card, HAVE-AMI a e	/E-MBR mother boa udio module interf	ace card, H	AVE-DCC da	ita comr	nunicatio				
		. ENED	FOR C	operties	Mp	7.				
Weight (lb)	Dimension (in)				Lowest Natural Frequency (Hz)					
	Depth	<b>Width</b>	OSR	OSHeight 38		Front-Back		Side-Side		Vertical
32.4	6	26		42	N/A		N/A		N/A	
		UUT Highe	st Passed S	eismic Run	Informa	ntion			-	
Building Code		O Test Criteria		S <sub>DS</sub> (g)	z/h	I <sub>P</sub> O	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
				2.5	1.0					

**Product Construction Summary:** 16 gauge cold rolled carbon steel

2001099-CR-001-R1

Manufacturer:

Model Number:

Model Line:

1.0 2.5 ICC-ES AC156 ()8/ CBC 2019 3.0 1.67 1.5 4.0 2.5 0.0 Test Mounting Details: FORNIA BUILT 

**UUT 13** 

0.67







## 2001099-CR-001-R1

Manufacturer: EVAX by Potter (Formerly Harrington Signal)									Л		
Model Line:		EVAX and Mass Notification Panels						U	UT 1	.4	
Model Number:	M-RM8 Rei					Serial Number: N/A					
Product Construct	tion Summary:										
16 gauge cold rolle	ed carbon steel										
Options/Subcomp		-									
M-CABRM enclosu Unit identical to E	-	-RM8 remote microp	hone con	nected to H	AVE-100	М					
Unit identical to E											
			OP C	ODE							
		NEDE	ORC		OMP						
UUT Properties						T					
Weight								t Natural Frequen			
( <b>lb</b> ) 6.6	Jepth 3			eight 38 10	Front-Back		Side-Side N/A		Vertical N/A		
0.0	5	UUT Highes						/^	IN,	/ ~	
Building Code		Test Crite		S <sub>DS</sub> (g)	z/h	I.P.C	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g	
CBC 2019		ICC-ESAC156 08		2.5	1.0	1.5	4.0	3.0	1.67	0.67	
Test Mounting De		DATE		2.5	0.0	/a/					
				LDING	CODE	EVX.RMS					
Rigid wall mounte Jnit maintained s		.ag Screws ty and remained fur	ctional pe	er manufact		uirement	after shal	ke table t	est		