

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

APPLICATION FOR OSHPD SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0584
OSHPD Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Potter Signal	
Manufacturer's Technical Representative: Michael McIsaac	
Mailing Address: 11790 Troy Lane North, Maple Grove, MN 55369	
Telephone: (763) 428-0034 Email: michaelm@potte	rsignal.com
EOR CODE CO	
Product Information	10,
Product Name: Electrical Control Panels on Life Safety/Critical Branch	T.
Product Type: Fire Alarm & Security Panels	
Product Model Number: See Certified Product Listing Tables	<del></del>
General Description: Wall mounted fire alarm control panels and Karin	n
Mounting Description: Rigid, Wall Mounted	
Tested Seismic Enhancements: Seismic enhancements made to the test anomalies during the tests shall be incor	units and/or modifications required to address porated into the production units.
Applicant Information	
	204.
Applicant Company Name: TRU Compliance, by Structural Integrity Associa	tes, Inc.
Contact Person: Galen Reid	
Mailing Address: 5215 Hellyer Ave. Suite 210, San Jose, CA 95138	

Email: greid@structint.com





Telephone: (844) 878-0200

Title: Manager, TRU Compliance



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California Licensed Structural Engi	neer Responsible for the Engineering and Test Report(s)
Company Name: STRUCTURAL INTEGR	ITY 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
Other (Please Specify):	
	EOR CODE CO.
Testing Laboratory	JED MA,
Company Name: ELEMENT MATERIALS	TECHNOLOGY
Contact Person: David M. Gillen	000 0504
Mailing Address: 9725 Girard Ave South,	Minneapolis MN 55431
Telephone: (952) 888-7795	Email: david.gillen@element.com
	DATE: 09/24/2021









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Design Basis of Equipment or Components (Fp/Wp) = 1.5 (SDS = 2.0); 1.13 (SDS = 2.5)

SDS (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1); 2.5 (z/h = 0)

ap (Amplification factor) = 2.5

 $R_p$  (Response modification factor) = 6.0

 $\Omega_0$  (System overstrength factor) = 2.0

 $I_p$  (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

### OSHPD Approval (For Office Use Only) - Approval Expires on 09/27/2027

Date: 9/24/2021

Name: Mohammad Karim

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Special Seismic Certification Valid Up to: Sps (g) = See Above

Condition of Approval (if applicable):

Title: Supervisor, Health Facilities

See Above

z/h =







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### **SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX**





Manufacturer: Potter Signal **TABLE 1** Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

**Certified Product Construction Summary:** 

16 gauge cold rolled carbon steel with removable locked door with or without Lexan viewing window. Fire Control Panels PSB and PSN have similar panel construction. Fire Control Panels IPA, ARC, AFC and PFC are similar to the PSN and PSB but with the addition of a Lexan viewing window.

#### **Certified Options Summary:**

Ultra Tech or Elk 12V Battery

### **Mounting Configuration:**

Mounting Configuration:

Wall mounted - rigid

Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

**Building Code: CBC 2019** 

Seismic Certification Limits:

 $S_{DS} = 2.0 g z/h = 1.0$  $S_{DS} = 2.5 g z/h = 0.0$ 

I<sub>P</sub>= 1.5

Model Line	Model	Dir	nensions	(in),84	Weight	Notes	UUT
Model Line	Model	Depth	Width	Height	(lb)	Notes	001
	PFC-6 <mark>006</mark>	4.8	14.3	18.5	30	Same as PFC-4064	Interp.
	PFC-4 <mark>0</mark> 64	B4.8	14.3	18.5	30		5
	PFC-44 <mark>10G3</mark>	4.5	14.7	18.5	28	Same as PFC-4064	Interp.
	SR-X2	D4.5TE:	019/224	/218.51	28	Same as PFC-4064	Interp.
	JFS-C2	4.5	14.7	18.5	28	Same as PFC-4064	Interp.
	VFR-500	4.5	14.7	18.5	28	Same as PFC-4064	Interp.
	AFC-50	3.9	16.0	17.0	41	Same as IPA-100	Interp.
	AFC-100	3.9	16.0	17.0	41	Same as IPA-100	Interp.
	ARC-100	3.9	16.0	17.0	41	Same as IPA-100	Interp.
	IPA-60	3.9	16.0	17.0	41	Same as IPA-100	Interp.
Fire Alarm Control	IPA-100	3.9	16.0	17.0	41		1
Panels	AFC-1000	4.4	18.9	27.3	63	Same as IPA-4000	Interp.
	IPA-4000	4.4	18.9	27.3	63		2
	PSB-10	3.5	16.1	16.8	41	Same as PSN-106	Interp.
	PSN-64	3.5	16.1	16.8	41	Same as PSN-106	Interp.
	PE-6SN	3.5	16.1	16.8	41	Same as PSN-106 (Branding)	Interp.
	PE-10SN	3.5	16.1	16.8	41	Same as PSN-106 (Branding)	Interp.
	PSN-106 Black	3.5	16.1	16.8	41	Same as PSN-106 (Color)	Interp.
	PSN-106	4.5	16.1	16.8	41		3
	JFS-PS1000	4.4	18.9	27.3	54	Same as PSN-1000E	Interp.
	AE-14	4.4	18.9	27.3	54	Same as PSN-1000E (Branding)	Interp.
	PSN-1000E	4.4	18.9	27.3	54		4

Notes: UUT 1 required a seismic upgrade to prevent the door from opening. This seismic upgrade is also required to be installed on interpolated models based on this test (AFC-50, AFC-100, ARC-100, & IPA-60). Details can be found in the UUT 1 summary sheet on page 7.

## SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

### 2001408-CR-001-R0



Manufacturer:Potter SignalTable Description:BatteriesModel Line:Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSNTABLE 2

Building Code: CBC 2019 Seismic Certification Limits:  $S_{DS} = 2.0 \text{ g}$  z/h = 1.0  $I_P = 1.5$ 

		ocionine (	ceremeati	on Linnes.	$S_{DS} = 2.5 g z/h = 0.0$	1 <sub>p</sub> - 1.3	
Model	Di	mension (	(in)			Notes	UUT
Model	Depth	Width	Height	(lb)	Material	Notes	001
IM-12180	3.1	7.1	6.6	10.8	Lead Acid	12V, 18Ah	1,2,3,4
12V8AH	2.6	5.9	3.7	5.2		12V, 8Ah	5
		1411					
		12/		0SP-	0584 ///m		
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	Model IM-12180	Model         Di           Depth         3.1	Model         Dimension (           Depth         Width           IM-12180         3.1         7.1           12V8AH         2.6         5.9	Dimension (in)     Depth   Width   Height	Dimension (in)   Weight	Dimension (in)   Weight   Material     Material   Material     Material     Material     Material     Material     Material     Material   Material     Material	Notes   S Dimension (in)   Weight   Material   Notes





Manufacturer: Model Line:	Potter Signal Fire Alarm Control I	Panels - AFC, ARC, IPA, PSB, PFC	C. and PSN			
UUT	Unit Description	Report Number	Testing Laboratory	S <sub>DS</sub>	z/h	I <sub>P</sub>
1	IPA-100	58139-1 Rev.1	Element Materials Technology	2.0	1 0	1.5
2	IPA-4000	58139-1 Rev.1	Element Materials Technology	2.0	1 0	1.5
3	PSN-106	58139-1 Rev.1	Element Materials Technology	2.0	1 0	1.5
4	PSN-1000E	58139-1 Rev.1 E C	Element Materials Technology	2.0 2.5	1 0	1.5
5	PFC-4064	58139-1 Rev.1	Element Materials Technology	2.0 2.5	1 0	1.5
	RE	OSP-0584	CE			
		BY: Mohammad Ka	www.mim			
	0					
	Ç	DATE: 09/24/2021	/6/			
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		NIA BUILDING	COL			
Notes:			ı		<u>I</u>	<u> </u>

### 2001408-CR-001-R0



**UUT 1** 

**Manufacturer:** Potter Signal

**Model Line:** Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

Serial Number: 70B3D51BE440

**Product Construction Summary:** 

Model Number:

16 gauge cold rolled steel with removable locked door with Lexan viewing window

#### **Options/Subcomponent Summary:**

Ultra Tech 12 V Lead Acid Battery (2), dead front

IPA-100

			$\sim$ c $_{\perp}$								
			UUT Pro	perties		Y					
Weight Dimension (in)					Lowest Natural Frequency (Hz)						
(lb)	Depth	Width	OSHei	ght 84 Front-Back		ront-Back Side-Side		-Side	Vertical		
41	3.9	16	7	N/A		N/A		N/A			
		UUT Highest	Passed Se	ismic Run	Informa	tion					
Build	ing Code	Test Crite	ria	S <sub>DS</sub> (g)	z/h	I <sub>P</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)	
CDC	CBC 2019 ICC		C FSWS1FS 00/04/2		1.0	1.5	2.20			0.67	
CBC	. 2019	ICC-ES ACI	ICC-ES/AC156 () 9/2		0.0	1.5	3.20	2.40	1.67	0.67	

#### **Test Mounting Details:**





#6 self-tapping screw

Unit rigid mounted to wall fixture with five (5) 1/4"x 3/4" wood screws. Washers were used in additon to the wood screw at each corner. Door secured shut with the addition of a #6 self-tapping screw.

### 2001408-CR-001-R0



**UUT 2** 

**Manufacturer:** Potter Signal

Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

Serial Number: 70B3D57A42D1

**Product Construction Summary:** 

Model Number:

16 gauge cold rolled steel with removable locked door and Lexan viewing window

Options/Subcomponent Summary:

Ultra Tech 12 V Lead Acid Battery (2), dead front

IPA-4000

			UUT Pro	perties		Z.						
Weight Dimension (in)					Lowest Natural Frequency (Hz)							
(lb)	Depth	Width	OSHe	OSHeight 84		-Back	Side-Side		Vertical			
63	4.4	18.9	2	27.3		MMMM N/A		N/A		N/A		
		UUT Highe	st Passed Se	ismic Run	Informa	tion						
Buildi	uilding Code Test Crite		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)		
CBC 2019		ICC ESM	ICC ECARCIEC OO/O		1.0	1 -	3.20	2.40	1.67	0.67		
CBC	2019	ICC-ES/AC156 () 9/2		2.5	0.0	1.5	3.20	2.40	1.67	0.67		

#### **Test Mounting Details:**





Unit rigid mounted to wall fixture with five (5) 1/4"x 3/4" wood screws. Washers were used in addition to the wood screw at each corner.

### 2001408-CR-001-R0



**UUT 3** 

**Manufacturer:** Potter Signal

Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

Model Number: PSN-106 Serial Number: N/A

**Product Construction Summary:** 

16 gauge cold rolled steel with removable locked door and Lexan viewing window.

#### **Options/Subcomponent Summary:**

Ultra Tech 12 V Lead Acid Battery (2), dead front

			UUT Pro	operties		7				
Weight		Dimension (in	<b>)</b>			Lowes	t Natural	Frequen	cy (Hz)	
(lb)	Depth	Width	lidth OSHeight 84		Front	Front-Back		-Side	Ver	tical
41	4.5	16.1 16.8		M/A/N/A		N/A		N/A		
		UUT Highe	st Passed Se	eismic Run	Informa	tion				
Buildi	ing Code	Test Crit	Test Criteria		z/h	I <sub>P</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CDC	CBC 2019		ICC-ES/AC156 09/2		1.0	1, -	2.20	2.40	1.67	0.67
CBC					0.0	1.5	3.20			

#### **Test Mounting Details:**





Unit rigid mounted to wall fixture with five (5) 1/4"x 3/4" wood screws. Washers were used in additon to the wood screw at each corner.

### 2001408-CR-001-R0



**UUT 4** 

**Manufacturer:** Potter Signal

**Model Line:** Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

Model Number: PSN-1000E Serial Number: N/A

**Product Construction Summary:** 

16 gauge cold rolled steel with removable locked door

Options/Subcomponent Summary:

Ultra Tech 12 V Lead Acid Battery (2)

			UUT Pr	operties		7				
Weight		Dimension (in	)		Lowest Natural Frequency (Hz)					
(lb)	Depth	Width	OSHe	OSHeight 84		Front-Back		Side-Side		tical
54	4.4	18.9	18.9 27.3		N/A		N/A		N/A	
		UUT Highe	st Passed S	eismic Run	Informa	tion				
Buildi	ing Code	Test Crit	Test Criteria		z/h	I <sub>P</sub>	A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CDC	CBC 2019		ICC-ES/AC156 09/2		1.0	1 -				0.67
CBC					0.0	1.5	3.20	2.40	1.67	

#### **Test Mounting Details:**



Unit rigid mounted to wall fixture with five (5) 1/4"x 3/4" wood screws. Washers were used in additon to the wood screw at each corner.

### 2001408-CR-001-R0



UUT 5

**Manufacturer:** Potter Signal

**Model Line:** Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN

Model Number: PFC-4064 Serial Number: N/A

**Product Construction Summary:** 

16 gauge cold rolled steel with removable locked door and Lexan viewing window

Options/Subcomponent Summary:

Elk 12 V Lead Acid Battery (2), dead front

			UUT Pr	operties		T					
Weight Dimension (in)					Lowest Natural Frequency (Hz)						
(lb)	Depth	Width	th OSHeight 84		Front	-Back	Side-Side		Vertical		
30	4.8	18.5	14.3		N/A		N/A		N/A		
		UUT Highe	st Passed S	eismic Run	Informa	tion					
Buildi	ng Code	Test Crit	Test Criteria		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	CBC 2019		ICC ECMCIEC OO/O		1.0	1, -	3.20	2.40	1.67	0.67	
CBC	2019	ICC-ES/A	ICC-ES/AC156 09/2		0.0	1.5	3.20	2.40	1.67	0.67	

### **Test Mounting Details:**





1/4" x 3/4" wood screw with washer

Unit rigid mounted to wall fixture with five (5) 1/4"x 3/4" wood screws. Washers were used in additon to the wood screw at each corner.