



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

**APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0584

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Potter Signal

Manufacturer's Technical Representative: Michael Mclsaac

Mailing Address: 11790 Troy Lane North, Maple Grove, MN 55369

Telephone: (763) 428-0034

Email: michaelm@pottersignal.com

Product Information

Product Name: Electrical Control Panels on Life Safety/Critical Branch

Product Type: Fire Alarm & Security Panels

Product Model Number: See Certified Product Listing Tables

General Description: Wall mounted fire alarm control panels.

Mounting Description: Rigid, Wall Mounted

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

Contact Person: Galen Reid

Mailing Address: 5215 Hellyer Ave. Suite 210, San Jose, CA 95138

Telephone: (844) 878-0200

Email: greid@structint.com

Title: Manager, TRU Compliance





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

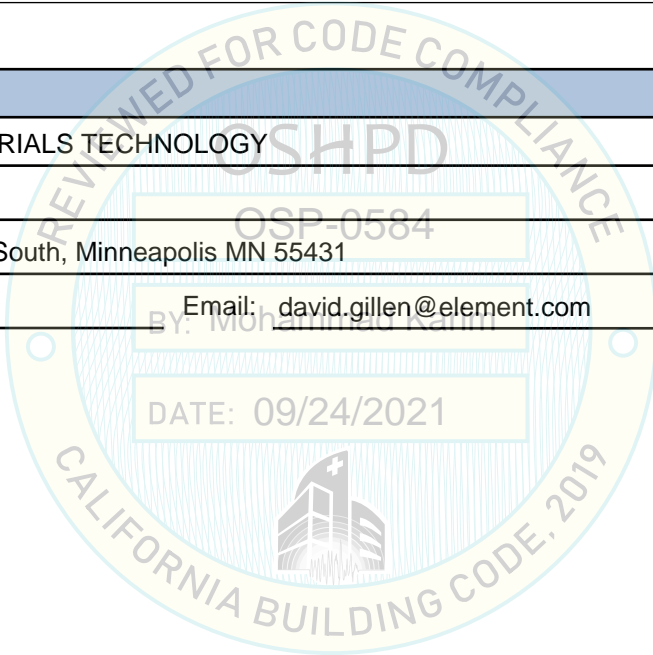
Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 95138-1025
Telephone: (415) 635-8461 Email: acoughlin@structint.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: ELEMENT MATERIALS TECHNOLOGY
Contact Person: David M. Gillen
Mailing Address: 9725 Girard Ave South, Minneapolis MN 55431
Telephone: (952) 888-7795 Email: david.gillen@element.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 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)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_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

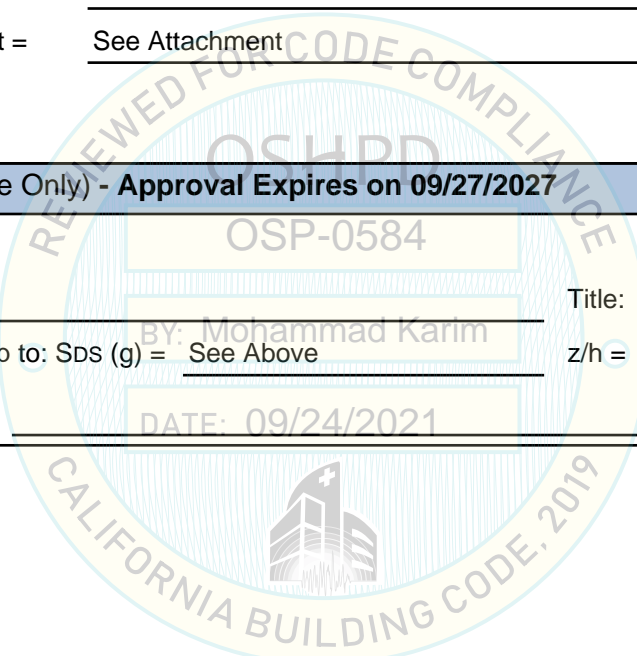
OSHPD Approval (For Office Use Only) - Approval Expires on 09/27/2027

Date: 9/24/2021

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = See Above z/h = See Above

Condition of Approval (if applicable): DATE: 09/24/2021



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2001408-CR-001-R0



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:
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:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$
 $S_{DS} = 2.5 g$ $z/h = 0.0$

Model Line	Model	Dimensions (in)			Weight (lb)	Notes	UUT
		Depth	Width	Height			
Fire Alarm Control Panels	PFC-6006	4.8	14.3	18.5	30	Same as PFC-4064	Interp.
	PFC-4064	4.8	14.3	18.5	30		5
	PFC-4410G3	4.5	14.7	18.5	28	Same as PFC-4064	Interp.
	SR-X2	4.5	14.7	18.5	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.
	IPA-100	3.9	16.0	17.0	41		1
	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.

UNIT UNDER TEST (UUT) SUMMARY SHEET

2001408-CR-001-R0



Manufacturer: Potter Signal	UUT 1
Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN	
Model Number: IPA-100 Serial Number: 70B3D51BE440	

Product Construction Summary:
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

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
41	3.9	16	17	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2019	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67
		2.5	0.0					

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 addition to the wood screw at each corner. Door secured shut with the addition of a #6 self-tapping screw.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

2001408-CR-001-R0



Manufacturer: Potter Signal	UUT 2
Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN	
Model Number: IPA-4000 Serial Number: 70B3D57A42D1	

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 Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
63	4.4	18.9	27.3	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

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.

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.

Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET



2001408-CR-001-R0

Manufacturer: Potter Signal	UUT 3
Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN	
Model Number: PSN-106 Serial Number: N/A	

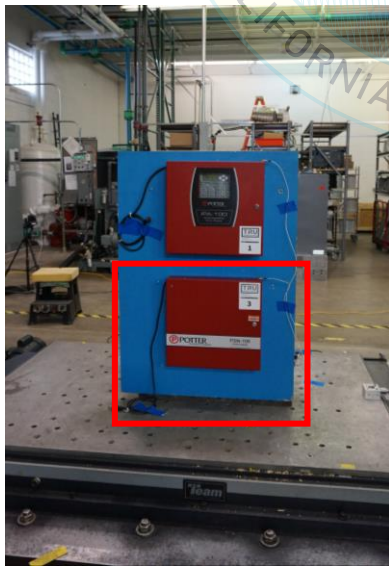
Product Construction Summary:
16 gauge cold rolled steel with removable locked door and Lexan viewing window.

Options/Subcomponent Summary:
Ultra Tech 12 V Lead Acid Battery (2), dead front

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
41	4.5	16.1	16.8	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

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

UNIT UNDER TEST (UUT) SUMMARY SHEET

2001408-CR-001-R0



Manufacturer: Potter Signal	UUT 4
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 Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
54	4.4	18.9	27.3	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2019	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67
		2.5	0.0					

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

UNIT UNDER TEST (UUT) SUMMARY SHEET

2001408-CR-001-R0



Manufacturer: Potter Signal	UUT 5
Model Line: Fire Alarm Control Panels - AFC, ARC, IPA, PSB, PFC, and PSN	
Model Number: PFC-4064 Serial Number: N/A	

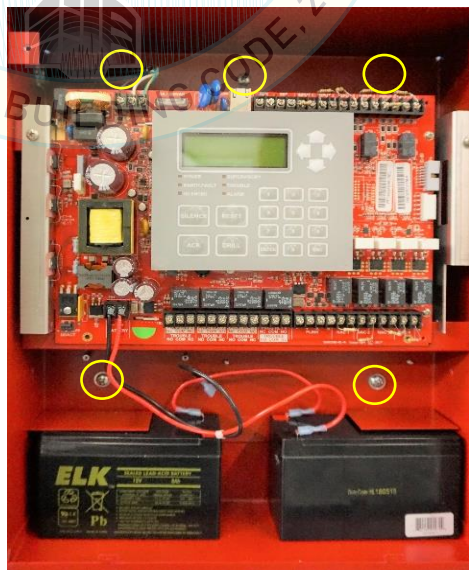
Product Construction Summary:
16 gauge cold rolled steel with removable locked door and Lexan viewing window

Options/Subcomponent Summary:
Elk 12 V Lead Acid Battery (2), dead front

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
30	4.8	18.5	14.3	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2019	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						

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 addition to the wood screw at each corner.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.