



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0139-10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: H.R. Kirkland Co., Inc.

Manufacturer's Technical Representative: Tricia Kirkland

Mailing Address: 4935 Allison Street, #13, Arvada, CO 80002

Telephone: 800.247.2303 Email: tricia@hrkirkland.com

Product Information

Product Name: Graphic Annunciator Panels

Product Type: Graphic Annunciator Panels

Product Model Number: See Attachment A

(List all unique product identification numbers and/or part numbers)

General Description: Fire alarm annunciator panels with graphic display, switches, and LEDs.

Mounting Description: Rigidly mounted to wall

Applicant Information

Applicant Company Name: TRU Compliance, LLC

Contact Person: Derrick A. Watkins, S.E.

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844.878.0200 Email: dwatkins@trucompliance.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:  Date: 11/28/2016

Title: Executive Vice President Company Name: TRU Compliance, LLC

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





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

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

Company Name: TRU Compliance, LLC

Name: Derrick A. Watkins, S.E. California License Number: S5257

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844.878.0200 Email: dwatkins@trucompliance.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM- _____
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156
- Other (Please Specify): _____

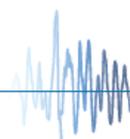
Testing Laboratory

Company Name: ANCO Engineers, Inc.

Contact Name: Paul Ibanez

Mailing Address: 1965-A 33rd Street, Boulder, CO 80301

Telephone: 303.443.7580 x239 Email: paul@ancoengineers.com





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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 1.7

S_{DS} (Design spectral response acceleration at short period, g) = 2.28

a_p (In-structure equipment or component amplification factor) = 2.5

R_p (Equipment or component response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = See Attachment A

Overall dimensions and weight (or range thereof) = See Attachment A

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) = _____

S_{DS} (Design spectral response acceleration at short period, g) = _____

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = _____

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

Tank(s) designed in accordance with ASME BPVC, 2015: Yes No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): Attachment A

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

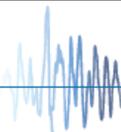
Signature:  Date: 12/28/2016

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.28 z/h = 1.0

Condition of Approval (if applicable): _____

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



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16052-CR-001, rev. 0



Manufacturer: H.R. Kirkland Co., Inc.	Table Description: Electrical Components	TABLE 2
Model Line: Graphic Annunciator Panels		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.28 g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Switches	C&K Rotary	ES1054	Switch	UUT1: qty (3); UUT2: qty (2); UUT: qty (3)	1,2,3
	Chicago Lock	ES1004	Switch		1,2,3
	SQ	ES4001	Switch		1,2,3
		ES4000	Switch	UUT1: qty (3); UUT2: qty (2); UUT: qty (3)	1,2,3
		ES3003	Switch		1,2,3
	Toggles	ES2001	Switch	UUT1: qty (4); UUT2: qty (4); UUT: qty (4)	1,2,3
	C&K Key	ES1061	Switch		1,2,3
LEDs	King Bright	5mm Super Bright	Standard LED Red/Green/Yellow/White	UUT1: qty (34); UUT2: qty (26); UUT: qty (34)	1,2,3
Relays	Panasonic	ER1007	Lamptest Relay		1,2,3
		ER1012	Lamptest Relay		1,2,3
Drivers	EST	3-ANNCPU	Driver		1,2,3
		3-EVPWRA	Driver		1,2,3
		3-EVDVRA	Driver		1,2,3
	Simplex Grinnell	4100-7401	Driver		1,2
		4100-7402	Driver		1,2
		4100-7403	Driver		1,2
	Notifier	LDM-32	Driver		1,2,3
		LDM-E32	Driver		1,2,3
		SCS-8L	Driver		1,2,3
		SCE-8L	Driver		1,2,3
	Siemens	XLS-OCM-16	Driver		1,2,3
		XLS-SIM-16	Driver		1,2,3
	Hardwired	EP-1012-8	Driver		1,2,3

TRU Compliance, LLC - A Tobolski Watkins Affiliate
844.TRU.0200 | info@trucompliance.com

UNIT UNDER TEST (UUT) SUMMARY SHEET

16052-CR-001, rev. 0



Manufacturer: H.R. Kirkland Co., Inc.	UUT 1
Model Line: Graphic Annunciator Panels	
Model Number: RSF-GR-GP4 Serial Number: N/A	

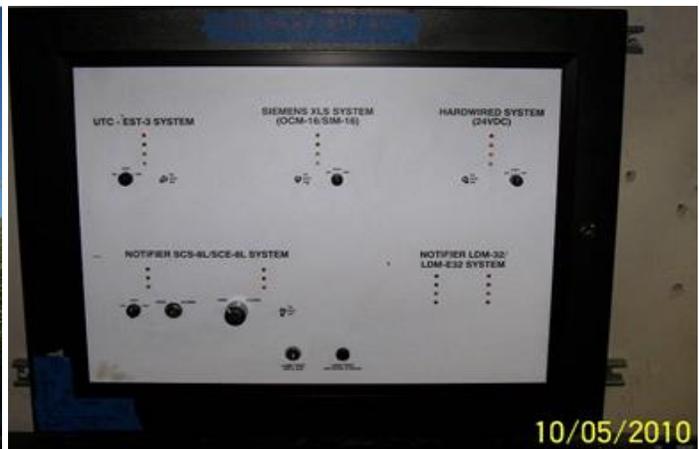
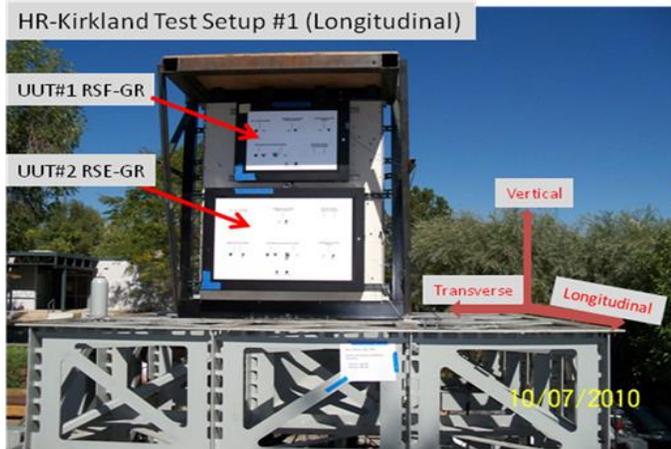
Product Construction Summary:
Annunciator Back box with frame door (hinged on short side) and GP-4 graphic annunciator panel installed in door frame.

Options/Subcomponent Summary:
See Table 2 for a complete listing of included subcomponents.

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
94.5	5	41.6	30	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 2016	ICC-ES AC156	2.28	1.0	1.5	3.65	2.74	2.43	1.82	

Test Mounting Details:



Rigid wall mounted using (4) 1/4" bolts into spring nuts in strut channel.
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



16052-CR-001, rev. 0

Manufacturer: H.R. Kirkland Co., Inc.	UUT 2
Model Line: Graphic Annunciator Panels	
Model Number: RSE-GR-GP4 Serial Number: N/A	

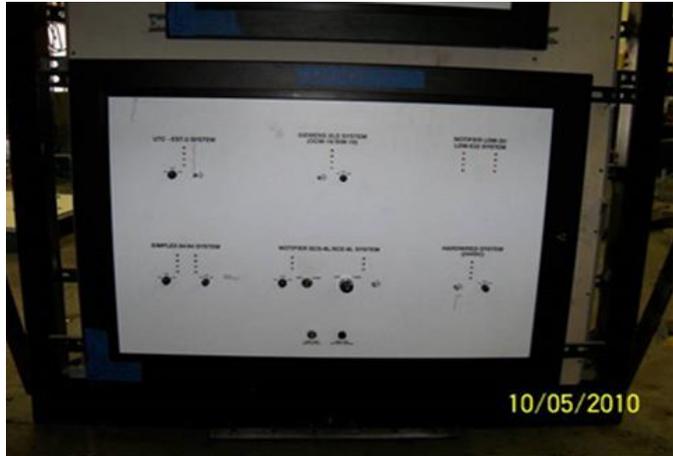
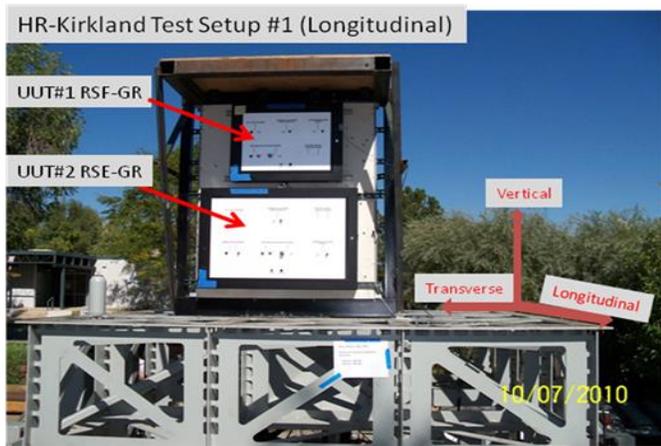
Product Construction Summary:
Annunciator Back box with frame door (hinged on short side) and GP-4 graphic annunciator panel installed in door frame.

Options/Subcomponent Summary:
See Table 2 for a complete listing of included subcomponents.

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
53	5	30	24	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 2016	ICC-ES AC156	2.28	1.0	1.5	3.65	2.74	2.43	1.82	

Test Mounting Details:



Rigid wall mounted using (4) 1/4" bolts into spring nuts in strut channel.
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

16052-CR-001, rev. 0



Manufacturer: H.R. Kirkland Co., Inc.	UUT 3
Model Line: Graphic Annunciator Panels	
Model Number: RSG-GR-GP4 Serial Number: N/A	

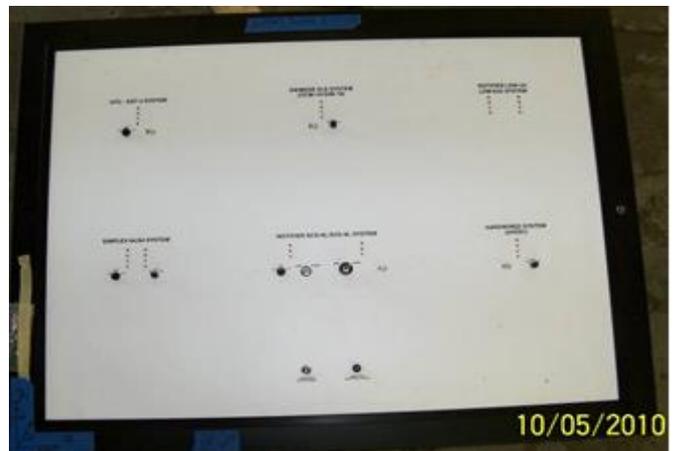
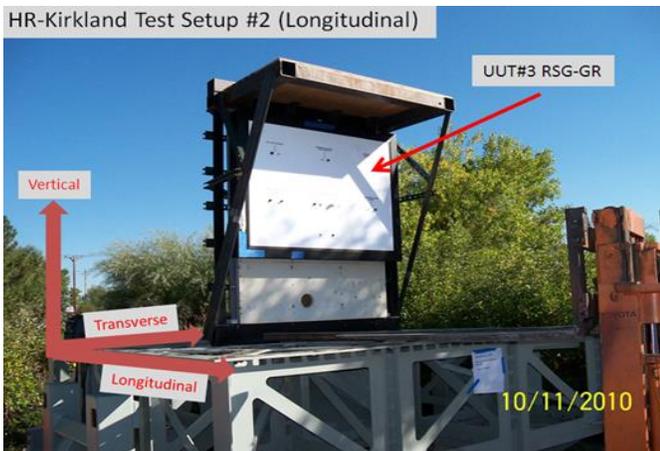
Product Construction Summary:
Annunciator Back box with frame door (hinged on short side) and GP-4 graphic annunciator panel installed in door frame.

Options/Subcomponent Summary:
See Table 2 for a complete listing of included subcomponents.

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
165.5	5	53	41	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 2016	ICC-ES AC156	2.28	1.0	1.5	3.65	2.74	2.43	1.82	

Test Mounting Details:



Rigid wall mounted using (4) 1/4" bolts into spring nuts in strut channel.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.