



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP – 0265-10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Siemens Industry Inc.

Manufacturer's Technical Representative: Evelyn Esteban

Mailing Address: 8 Fernwood Road, Florham Park, NJ 07932

Telephone: 973.593.6582

Email: evelyn.esteban@siemens.com

Product Information

Product Name: FC2005 and FC901

Product Type: Fire Alarm Control Panel

Product Model Number: Enclosures with various internal components per Attachment A.

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

General Description: Wall mounted fire alarm system controllers.

Mounting Description: Wall mounted – rigid

Applicant Information

Applicant Company Name: TRU Compliance, LLC

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

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

Telephone: 844.878.0200

Email: d Watkins@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: _____

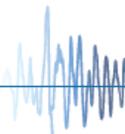
Date: 09/08/2016

Title: Executive Vice President

Company Name: TRU Compliance, LLC

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-759 (REV 12/16/15)



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: TRU Compliance, LLC

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

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

Telephone: 844.878.0200 Email: d Watkins@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): _____

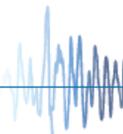
Testing Laboratory

Company Name: NTS Labs

Contact Name: Ratish Rao

Mailing Address: 1536 East Valencia Dr. Fullerton, CA 92831

Telephone: 714.879.6110 Email: ratish.rao@nts.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) = 1.87

S_{DS} (Design spectral response acceleration at short period, g) = 2.5

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) = N/A

Overall dimensions and weight (or range thereof) = See Attachment A Table 1 & Table 2.

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

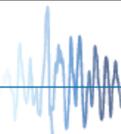
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature:  Date: 10/5/2016

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.5 z/h = 1.0

Condition of Approval (if applicable): _____



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16033



Manufacturer: Siemens Industry, Inc.		Table Description: Panel Subcomponents			TABLE #3
Model Line: FC2005 and FC901					
Building Code: CBC 2016		Seismic Certification 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	Notes	UUT
Main Board	Siemens	FCM901-U2	S54433-B100-A1 (Desigo)		1
Housing (black)	Siemens	FH901-U2	S54433-B103-A1 (Desigo)	Similar to FH901-R2	Interp.
Housing (red)	Siemens	FH901-R2	S54433-B103-A2 (Desigo)		1
Configuration Kit	Siemens	FX901-U2	S54433-S104-A1 (Desigo)		1
Configuration Cable	Siemens	FXA901-A1	S54433-K108-A1		1
Housing Trim Kit (black)	Siemens	FHA902-U1	S54433-B106-A1	Similar to FHA902-R1	Interp.
Housing Trim Kit (red)	Siemens	FHA902-R1	S54433-B106-A2		1
Battery Bracket	Siemens	FHA901-U1	S54433-B107-A1		1
City Tie Board	Siemens	FCI2020-U1	A5Q00037945		1
Power Supply Module	Siemens	FP2011-U1	500-450222		1
Main Board	Siemens	FCM901-U3	S54433-B101-A1 (Cerberus)		2
Housing (black)	Siemens	FH901-U3	S54433-B103-A3 (Cerberus)	Similar to FH901-R3	Interp.
Housing (red)	Siemens	FH901-R3	S54433-B103-A4 (Cerberus)		2
Configuration Kit	Siemens	FX901-U3	S54433-S105-A1 (Cerberus)		2
Configuration Cable	Siemens	FXA901-A1	S54433-K108-A1		2
Housing Trim Kit (black)	Siemens	FHA902-U1	S54433-B106-A1	Similar to FHA902-R1	Interp.
Housing Trim Kit (red)	Siemens	FHA902-R1	S54433-B106-A2		2
Battery Bracket	Siemens	FHA901-U1	S54433-B107-A1		2
City Tie Board	Siemens	FCI2020-U1	A5Q00037945		2
Power Supply Module	Siemens	FP2011-U1	500-450222		2
NP Series 12v 12Ah Battery	Yuasa	N/A	NP 12-12		1/2

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16033



Manufacturer:	Siemens Industry, Inc.	UUT #1
Model Line:	FC2005	
Model Number:	R2	

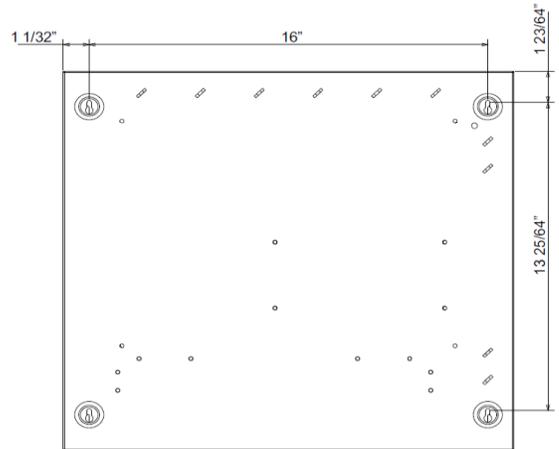
Product Construction Summary:
16 GA carbon steel NEMA Type 1 enclosure (Red) & backplane. Hinged doors with key lock.

Options/Subcomponent Summary:
FC2005 Main Board - Desigo (S54433-B100-A1) : Two 2.5 amp (24VDC) Notification Appliance Circuits (NACs), One Configurable Signaling Line Circuit (SLC), 160x64 dots LCD display. 120/240 VAC 50/60 Hz power supply module (500-450222) with 6.6 amps of system power; Polarity reversing city tie module (A5Q00037945); 12v 12Ah lead-acid battery (Yuasa NP12-12)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
41	9.3	22.4	20.9	-	-	-

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	2.5	1.0	1.5	4	3	1.67	0.67	
		-	-	-	-	-	-	-	-

Test Mounting Details:



Wall mounted - rigid with (4) grade 5 bolts.
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

TRU PROJECT NO. 16033



Manufacturer: Siemens Industry, Inc.	UUT 2
Model Line: FC901	
Model Number: R3 Serial Number: N/A	

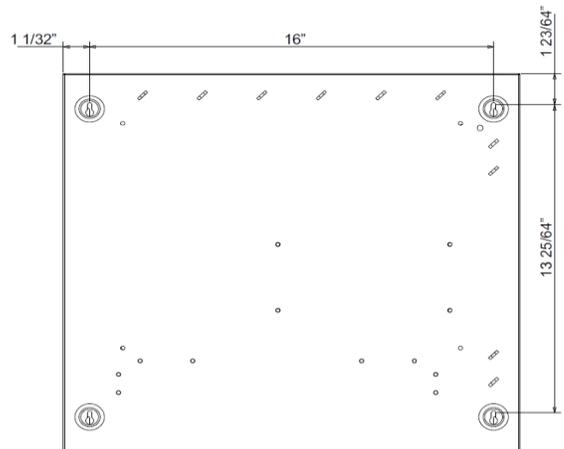
Product Construction Summary:
16 GA carbon steel NEMA Type 1 enclosure & backplane. Hinged doors with key lock.

Options/Subcomponent Summary:
FC901 Main Board - Cerberus (S54433-B101-A1); Teo 2.5 amp (24VDC) Notification Appliance Circuits (NACs), One Configurable Signaling Line Circuit (SLC), 160x164 dots LCD display. 120/240 VAC 50/60 Hz power supply module (500-450222) with 6.6 amps of system power; Polarity reversing city tie module (A5Q00037945); 12v 12Ah lead-acid battery (Yuasa NP12-12)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
41	9.3	22.4	20.9	-	-	-

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	2.5	1.0	1.5	4	3	1.67	0.67	
		-	-	-	-	-	-	-	-

Test Mounting Details:



Wall mounted - rigid with (4) grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.