



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0112-10

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: MXL Fire Protection System

Product Type: Building Fire Protection System

Product Model Number: MME-3 & MLE-6 enclosures with various internal components per Attachment A.
(List all unique product identification numbers and/or part numbers)

General Description: Wall mounted microprocessor based fire protection system.

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

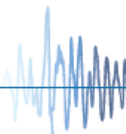
Telephone: 844.878.0200 Email: d Watkins@trucompliance.com

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"





**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): _____

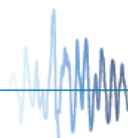
Testing Laboratory

Company Name: Trentec

Contact Name: Marie Nemier

Mailing Address: 4600 East Tech Drive, Cincinnati, OH 45245

Telephone: 513.528.7900 Email: mnemier@curtisswright.com





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

Seismic Parameters

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

Design Basis of Equipment or Components (F_p/W_p) = 1.5

S_{DS} (Design spectral response acceleration at short period, g) = 2.0

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

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

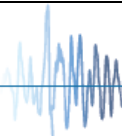
Signature:  Date: 9/15/2016

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.0 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

TRU PROJECT NO. 16032



Manufacturer:		Siemens Industry, Inc.		Table Description: Panel Subcomponents		TABLE 2	
Model Line:		MXL Fire Protection System					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$ $S_{DS} = 2.0 g$ $z/h = 0.0$				$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT		
Audio Control Module	Siemens	ACM-1			3		
Analog Loop Driver	Siemens	ALD-2I			3		
Amplifier Supervision and Backup Card	Siemens	ASC-1		Similar to ACM-1/MMM-1/VSM-1	Interp.		
Amplifier and Riser Supervisory Card	Siemens	ASC-2		Similar to ACM-1/MMM-1/VSM-1	Interp.		
CXL/MXL Interface Module	Siemens	CMI-300		Similar to CRM-4	Interp.		
Programmable Relay Module	Siemens	CRM-4			3		
Notification Appliance Circuit Module	Siemens	CSM-4			3		
Conventional Zone Module	Siemens	CZM-4			3		
Digital Message Card	Siemens	DMC-1		Similar to ACM-1/MMM-1/VSM-1	Interp.		
Optional Cardcage Mounting Plate	Siemens	MBR-3MP		Similar to MBR-MP	Interp.		
Module Mounting Plate	Siemens	MBR-MP			3/4		
Digital Alarm Communicator Transmitter	Siemens	MDACT			4		
Blank Metal Door Inserts	Siemens	MDB-1			4		
Metal Louver Vent Door Inserts	Siemens	MDG-1			4		
Clear Lens	Siemens	MDL-1		Similar to MDG-1	Interp.		
Upper or Middle Dead Front Panel	Siemens	MHD-1		Similar to MHD-3	Interp.		
Lower Dead Front Panel	Siemens	MHD-2		Similar to MHD-3	Interp.		
Middle, DF w/Switch Openings	Siemens	MHD-3			3		
Middle Dead Front Plate w/Printer Cutout	Siemens	MHD-4		Similar to MHD-3	Interp.		
BTM. DF w/SW Openings MSE-2/MBR	Siemens	MHD-5		Similar to MHD-3	Interp.		
Input Driver Module	Siemens	MID-16			3		
Main Keyboard 2 Line	Siemens	MKB-2			3		
Main Keyboard 9 Line	Siemens	MKB-5		Similar to MKB-2	Interp.		
MXL Main Board	Siemens	MMB-2		Similar to MMB-3	Interp.		
Main Motherboard	Siemens	MMB-3			3		

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 16032



Manufacturer: Siemens Industry, Inc.	Table Description: Panel Subcomponents	TABLE 2
Model Line: MXL Fire Protection System		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$
 $S_{DS} = 2.0 g$ $z/h = 0.0$

Component Type	Manufacturer	Model	Description	Notes	UUT
Microphone Master Module	Siemens	MMM-1			3
Output Driver Module	Siemens	MOD-16			3
Network I/O Interface	Siemens	MOI-7			3
Network Option Module Card Cage	Siemens	MOM-2		Similar to MOM-4	Interp.
Expansion Card Cage 4-Slot	Siemens	MOM-4			4
Main Power Supply 12A	Siemens	MPS-12			3
Main Power Supply 6A	Siemens	MPS-6			4
Communication Module	Siemens	NET-4		Similar to NET-7	Interp.
Style 7 Communication Module	Siemens	NET-7			4
Network Interface Module	Siemens	NIM-1W			3
Output Control Card	Siemens	OCC-1			4
Peripheral Interface Module	Siemens	PIM-1			3
Aux 5V Power Supply	Siemens	PS-5A			3
Power Supply Remote	Siemens	PSR-1			4
Audio Control Riser Module	Siemens	RCM-1		Similar to MMB-3	Interp.
Repeater Module	Siemens	REP-1			4
Terminal Block Module	Siemens	TBM-2		Similar to ACM-1/MMM-1/VSM-1	Interp.
Telephone Master Module	Siemens	TMM-1			3
Thermal Strip Printer	Siemens	TSP-40A			3
Fan Control Module	Siemens	VFM-1		Similar to VSM-1 & VLM-1	Interp.
LED Module	Siemens	VLM-1			3
Switch Blank	Siemens	VS-1			3
Switch & LED Module	Siemens	VSM-1			3
Zone Card	Siemens	ZC1-8B		Similar to ACM-1/MMM-1/VSM-1	Interp.
Zone Card	Siemens	ZC2-4AB		Similar to ACM-1/MMM-1/VSM-1	Interp.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16032



Manufacturer: Siemens Industry, Inc.	UUT 3
Model Line: MXL Fire Protection System	
Model Number: MLE-6 Serial Number: N/A	

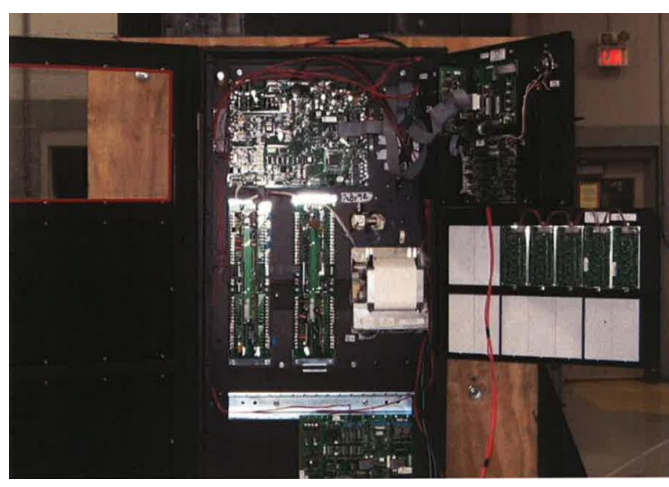
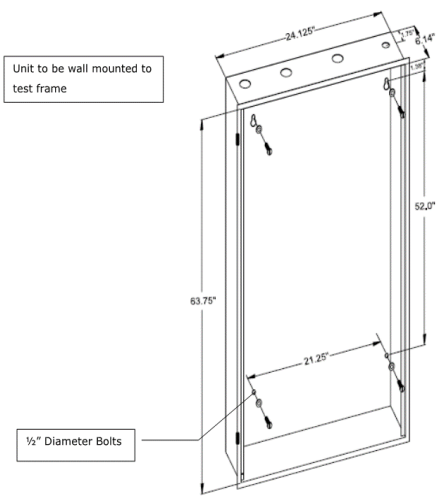
Product Construction Summary:
16ga. carbon steel large-size enclosure consisting of a backbox and front door.

Options/Subcomponent Summary:
Audio Control Module (ACM-1), Analog Loop Driver (ALD-2I), Programmable Relay Module (CRM-4), Notification Appliance Circuit Module (CSM-4), Conventional Zone Module (CZM-4), Module Mounting Plate (MBR-MP), Input Driver Module (MID-16), Main Keyboard 2 Line (MKB-2), Main Motherboard (MMB-3), Microphone Master Module (MMM-1), Output Driver Module (MOD-16), Network I/O Interface (MOI-7), Main Power Supply 12A (MPS-12), Network Interface Module (NIM-1W), Peripheral Interface Module (PIM-1), Aux 5V Power Supply (PS-5A), Telephone Master Module (TMM-1), Thermal Strip Printer (TSP-40A), LED Module (VLM-1), Switch Blank (VSB-1), Switch & LED Module (VSM-1)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
280	6.14	24.13	63.75	-	-	-

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	2.0	1.0	1.5	3.20	2.40	1.33	0.53	
		-	-	-	-	-	-	-	-

Test Mounting Details:



Wall mounted - rigid using (4) 1/2" diameter bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16032



Manufacturer: Siemens Industry, Inc.	UUT 4
Model Line: MXL Fire Protection System	
Model Number: MME-3 Serial Number: N/A	

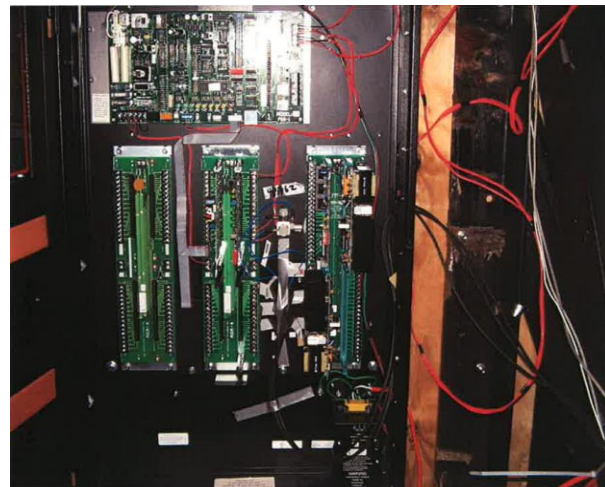
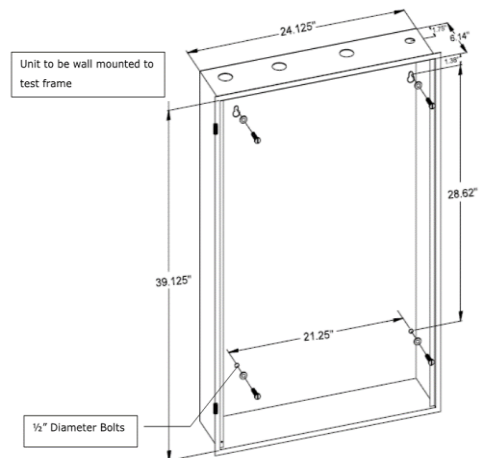
Product Construction Summary:
16ga carbon steel medium-size enclosure consisting of a backbox and front door.

Options/Subcomponent Summary:
Module Mounting Plate (MBR-MP), Digital Alarm Communicator Transmitter (MDACT), Blank Metal Door Inserts (MDB-1), Metal Louver Vent Door Inserts (MDG-1), Expansion Card Cage 4-Slot (MOM-4), Main Power Supply 6A (MPS-6), Style 7 Communication Module (NET-7), Output Control Card (OCC-1), Power Supply Remote (PSR-1), Repeater Module (REP-1)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
190	6.14	24.13	39.13	-	-	-

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	2.0	1.0	1.5	3.20	2.40	1.33	0.53
		-	-	-	-	-	-	-

Test Mounting Details:



Wall mounted - rigid using (4) 1/2" diameter bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.