



**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

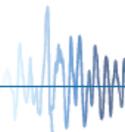
Telephone: 844.878.0200 Email: d Watkins@trucompliance.com

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"





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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





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**Seismic Parameters**

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

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

$S_{DS}$  (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

$\Omega_0$  (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) = \_\_\_\_\_

$\Omega_0$  (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



<b>Manufacturer:</b> Siemens Industry, Inc.		<b>Table Description:</b> Panel Subcomponents			<b>TABLE 2</b>
<b>Model Line:</b> MXL Fire Protection System					
<b>Building Code:</b> CBC 2016		<b>Seismic Certification Limits:</b> $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$ $S_{DS} = 2.0 g$ $z/h = 0.0$			
<b>Component Type</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Description</b>	<b>Notes</b>	<b>UUT</b>
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

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



<b>Manufacturer:</b> Siemens Industry, Inc.	<b>UUT 3</b>
<b>Model Line:</b> MXL Fire Protection System	
<b>Model Number:</b> MLE-6 <span style="float: right;"><b>Serial Number:</b> N/A</span>	

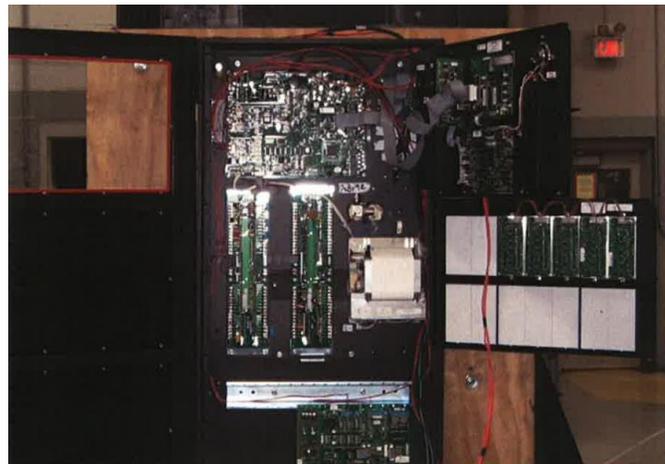
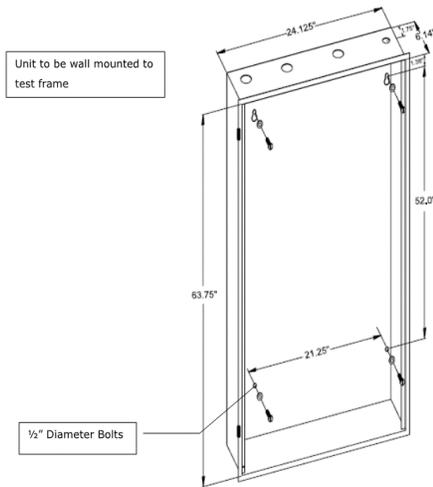
**Product Construction Summary:**  
16ga. carbon steel large-size enclosure consisting of a backbox and front door.

**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 <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)	
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



<b>Manufacturer:</b> Siemens Industry, Inc.	<b>UUT 4</b>
<b>Model Line:</b> MXL Fire Protection System	
<b>Model Number:</b> MME-3 <span style="float: right;"><b>Serial Number:</b> N/A</span>	

**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)

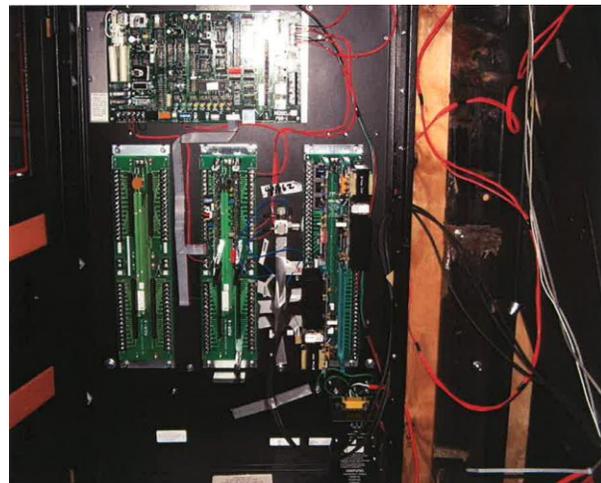
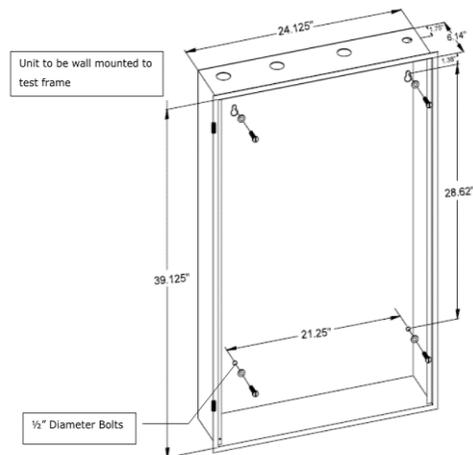
### UUT Properties

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 <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)
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.