



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

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

OFFICE USE ONLY

APPLICATION #: **OSP – 0286-10**

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Kidde-Fenwal, Inc.

Manufacturer's Technical Representative: Terry Garland

Mailing Address: 400 Main Street, Ashland, MA 01721, USA

Telephone: (508) 231-2676

Email: Terrill.Garland@fs.utc.com

Product Information

Product Name: FenwalNET 8000-ML, Kidde ARIES NETLink, Chemetron MICRO MLX, Kidde ARIES-MLX Multi-Loop Intelligent Control (MLIC)

Product Type: Intelligent Fire Alarm-Suppression Control

Product Model Number: See Certified Product Table attached

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

General Description: Rigid wall-mounted multi-loop, intelligent, suppression-focused control units.

Mounting Description: Rigidly wall mounted

Applicant Information

Applicant Company Name: Kidde-Fenwal, Inc.

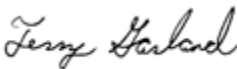
Contact Person: Terry Garland

Mailing Address: 400 Main Street, Ashland, MA 01721, USA

Telephone: (508) 231-2676

Email: Terrill.Garland@fs.utc.com

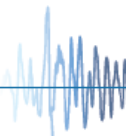
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: 

Date: 12/12/2016

Title: Manager, D&A Project Development Company Name: Kidde-Fenwal, Inc.

"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: Forell/Elsesser Engineers, Inc.

Name: Marco Scanu, SE California License Number: S4454

Mailing Address: 160 Pine St., 6th Flr., San Francisco, CA 94111

Telephone: (415) 837-0700 Email: m.scanu@forell.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): _____

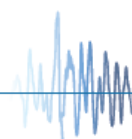
Testing Laboratory

Company Name: National Technical Systems, Inc.

Contact Name: Jonathan Mendoza

Mailing Address: 533 Main Street, Acton, MA 01720

Telephone: (978) 263-9515 Email: jmendoza@nts.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) = 2.19

S_{DS} (Design spectral response acceleration at short period, g) = 2.92

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, UUT Summary Sheets

Overall dimensions and weight (or range thereof) = See attachment, Certified Products Table

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): Certified Products Table, Certified Subcomponents Table, UUT Summary Sheets

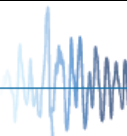
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature:  Date: 2/8/2017

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.92 z/h = 1.0

Condition of Approval (if applicable): _____



Kidde-Fenwal, Inc. - Multi-Loop Intelligent Control (MLIC)

I. Certified Product Table

Enclosures ¹	Width ⁵	Depth ⁵	Height ⁵	Minimum Weight ³	Maximum Weight ³	Construction Material ⁴	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemetron MICRO MLX Part #	Kidde ARIES-MLX Part #	Testing Status		
2-Tier Enclosures													
2-Tier Control Unit	14.6in	6.1in	22.8in	10.2 kg	22.5 lbs	22.9 kg	50.4 lbs	16 GA CRS, NEMA 1	74-800200-001	76-800200-001	70101708	76-800200-901	Interpolated
2-Tier Control Unit with Dead Panel	14.6in	6.1in	22.8in	12.2 kg	26.8 lbs	24.9 kg	54.7 lbs	16 GA CRS, NEMA 1	74-800201-001	76-800201-001	70101712	N/A	Interpolated
2-Tier Control Unit with LAM & Dead Panel	14.6in	6.1in	22.8in	12.0 kg	26.4 lbs	24.7 kg	54.3 lbs	16 GA CRS, NEMA 1	74-800201-002	76-800201-002	70101711	N/A	UUT-1
2-Tier Expansion Enclosure	14.6in	6.1in	22.8in	10.0 kg	21.9 lbs	22.9 kg	50.4 lbs	16 GA CRS, NEMA 1	74-800200-003	76-800200-003	70101716	76-800200-903	Interpolated
3-Tier Enclosures													
3-Tier Control Unit	14.6in	6.1in	31.8in	12.8 kg	28.2 lbs	28.2 kg	62.0 lbs	16 GA CRS, NEMA 1	74-800100-001	76-800100-001	70101707	76-800100-901	Interpolated
3-Tier Control Unit with Dead Panel	14.6in	6.1in	31.8in	15.7 kg	34.6 lbs	31.7 kg	69.8 lbs	16 GA CRS, NEMA 1	74-800101-001	76-800101-001	70101710	N/A	UUT-2
3-Tier Control Unit with LAM & Dead Panel	14.6in	6.1in	31.8in	15.6 kg	34.8 lbs	30.9 kg	68.02 lbs	16 GA CRS, NEMA 1	74-800101-002	76-800101-002	70101709	N/A	Interpolated
3-Tier Expansion Enclosure	14.6in	6.1in	31.8in	12.6 kg	27.7 lbs	28.2 kg	62.1 lbs	16 GA CRS, NEMA 1	74-800100-003	76-800100-003	70101715	76-800100-903	Interpolated
3-Tier Control Unit w LAM & Dead Panel & 8 Expansion Modules	14.6in	6.1in	31.8in	N/A	N/A	20.7 kg	45.6 lbs	16 GA CRS, NEMA 1	74-800101-002 w/ 8 Exp Mods	76-800101-002 w/ 8 Exp Mods	70101709 w/ 8 Exp Mods	N/A	UUT-3
Large Capacity Battery Enclosure	20.2in	8.4in	12.2in	N/A	N/A	32.1 kg	70.7 lbs	16 GA CRS, NEMA 1	74-600000-514	76-100010-001	70101386	76-100010-001	UUT-4

Notes:

1. Enclosure supplied by Precision Engineering
2. All units can be either surface or flush wall mounted
3. Weight includes internal components
4. CRS=Cold Rolled Carbon Steel
5. Outside dimensions including covers

Kidde-Fenwal, Inc. - Multi-Loop Intelligent Control (MLIC)
II. Certified Subcomponents Table

Internal Components	Manufacturer	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemetron MICRO MLX Part #	Kidde ARIES-MLX Part #	Testing Status
Main Circuit Board/Display Control Module (DCM)	Kidde Fenwal	74-800020-001	76-800020-001	70101729	76-800020-901	UUT-1, UUT-2, UUT-3
Power Supply/Chargers ¹	Mean Well	74-800030-002	76-800030-002	70150181	76-800030-002	UUT-1, UUT-2, UUT-3
	Ating Power Supply	74-800030-002	76-800030-002	70150181	76-800030-002	UUT-1, UUT-2, UUT-3
Power Management Unit Board ¹	Kidde Fenwal	74-800030-004	76-800030-004	70150183	76-800030-004	UUT-1, UUT-2, UUT-3
Add-On Power Supply/PMU ¹	Mean Well	74-800030-003	76-800030-003	70150184	76-800030-003	UUT-2
	Ating Power Supply	74-800030-003	76-800030-003	70150184	76-800030-003	UUT-2
Expansion Card Cage	Kidde Fenwal	74-800010-001	76-800010-001	70101720	76-800010-001	UUT-3
SLC Expansion Card	Kidde Fenwal	74-800011-001	76-800011-001	70150255	76-800011-001	UUT-3
Relay Expansion Card	Kidde Fenwal	74-800012-001	76-800012-001	70150256	76-800012-001	UUT-3
R-NAC Expansion Card	Kidde Fenwal	74-800013-001	76-800013-001	70150257	76-800013-001	UUT-3
NIC Expansion Card	Kidde Fenwal	74-800014-001	76-800014-001	70150258	76-800014-001	UUT-3
DACT Expansion Card	Kidde Fenwal	74-800015-001	76-800015-001	70150260	76-800015-001	UUT-3
City-Tie Expansion Card	Kidde Fenwal	74-800016-001	76-800016-001	70150261	76-800016-001	UUT-3
ICM Expansion Card	Lantronix	74-800017-001	76-800017-001	70101787	76-800017-001	UUT-3
IIM Expansion Card w/Modem	Conexant	89-300014-001	N/A	N/A	N/A	UUT-3
IIM Expansion Card w/o Modem	Kidde Fenwal	89-300015-001	N/A	N/A	N/A	Interpolated
LED Annunciator Module (LAM)	Kidde Fenwal	74-800020-003	76-800020-003	70101762	76-800020-003	UUT-3
Batteries 17Ahr	PowerSonic	06-115915-046	06-115915-046	70100321	06-115915-046	UUT-2
Batteries 35Ahr	PowerSonic	89-100052-001	89-100052-001	70101732	89-100052-001	UUT-4
Battery Tray	Kidde Fenwal	74-800030-006	76-800030-006	70101733	76-800030-006	UUT-2
2-T Dead Panel	Kidde Fenwal	74-800201-005	76-800201-005	70101727	76-800201-005	UUT-1
3-T Dead Panel	Kidde Fenwal	74-800101-005	76-800101-005	70101726	76-800101-005	UUT-2
Seismic Conversion Kit (battery hold-down strap, PSU retention screw) - Control Unit	Kidde Fenwal	74-800000-009	76-800000-009	20100246	76-800000-009	UUT-2, UUT-3
Seismic Conversion Kit (battery hold-down brackets) - Battery Enclosure	Kidde Fenwal	74-800000-010	76-800000-010	20100247	76-800000-010	UUT-4

Notes:

1. The Add-On Power Supply contains 1 Power Mgmt Unit Bd (PMU), plus 1 or 2 Power Supply/Chargers

OSP APPLICATION
 Kidde-Fenwal, Inc. – Multi-Loop Intelligent Control
 III. UUT Summary Sheets

Date: 1/8/2017

UUT-1 (Smallest Unit)

2-Tier Control Unit with LAM & Dead Panel
 16 Ga Cold Rolled Carbon Steel
 14.38"W x 5.38"D x 22.5"H, 27.2 lbs

Wall mounted with (7) ¼"-20 Grade 2 bolts



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.92	1.0	1.5	4.67	3.50	1.96	0.78
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
n/a	n/a	n/a						

Internal Components	Manufacturer	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemtron MICRO MLX Part #	Kidde ARIES- MLX Part #
Main Circuit Board/Display Control Module (DCM)	Kidde Fenwal	74-800020-001	76-800020-001	70101729	74-800020-901
Power Supply/Chargers	Mean Well	74-800030-002	76-800030-002	70150181	74-800030-002
	Ating Power Supply	74-800030-002	76-800030-002	70150181	74-800030-002
Power Management Unit Board	Kidde Fenwal	74-800030-004	74-800030-004	70150183	74-800030-004
2-T Dead Panel	Kidde Fenwal	74-800201-005	76-800201-005	70101727	74-800201-005

III. UUT Summary Sheets

UUT-2 (Largest Unit)

3-Tier Control Unit with Dead Panel

16 Ga Cold Rolled Carbon Steel

14.38"W x 5.38"D x 31.5"H, 70 lbs

Wall mounted with (7) ¼"-20 Grade 2 bolts



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.92	1.0	1.5	4.67	3.50	1.96	0.78
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
n/a	n/a	n/a						

Internal Components	Manufacturer	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemetr on MICRO MLX Part #	Kidde ARIES- MLX Part #
Main Circuit Board/Display Control Module (DCM)	Kidde Fenwal	74-800020-001	76-800020-001	70101729	76-800020-001
Power Supply/Chargers	Mean Well	74-800030-002	76-800030-002	70150181	76-800030-002
	Ating Power Supply	74-800030-002	76-800030-002	70150181	76-800030-002
Power Management Unit Board	Kidde Fenwal	74-800030-004	74-800030-004	70150183	76-800030-004
Add-On Power Supply/PMU	Mean Well	74-800030-003	76-800030-003	70150184	76-800030-003
	Ating Power Supply	74-800030-003	76-800030-003	70150184	76-800030-003
Battery Tray	Kidde Fenwal	74-800030-006	76-800030-006	70101733	76-800030-006
17 AHr Batteries	PowerSonic	06-115915-046	06-115915-046	70100321	06-115915-046
3-T Dead Panel	Kidde Fenwal	74-800101-005	76-800101-005	70101726	76-800101-005
Seismic Conversion Kit (battery hold-down strap, PSU retention screw)	Kidde Fenwal	74-800000-009	76-800000-009	20100246	76-800000-009

OSP APPLICATION
 Kidde-Fenwal, Inc. – Multi-Loop Intelligent Control
 III. UUT Summary Sheets

Date: 1/8/2017

UUT-3 (Intermediate Unit)

3-Tier Control Unit

16 Ga Cold Rolled Carbon Steel

14.38"W x 5.38"D x 31.5"H, 46 lbs

Wall mounted with (7) ¼"-20 Grade 2 bolts



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.92	1.0	1.5	4.67	3.50	1.96	0.78
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
n/a	n/a	n/a						

Internal Components	Manufacturer	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemetron MICRO MLX Part #	Kidde ARIES- MLX Part #
Main Circuit Board/Display Control Module (DCM)	Kidde Fenwal	74-800020-001	76-800020-001	70101729	76-800020-901
Power Supply/Chargers	Mean Well	74-800030-002	76-800030-002	70150181	76-800030-002
	Ating Power Supply	74-800030-002	76-800030-002	70150181	76-800030-002
Power Management Unit Board	Kidde Fenwal	74-800030-004	74-800030-004	70150183	76-800030-004
Expansion Card cage	Kidde Fenwal	74-800010-001	76-800010-001	70101720	76-800010-001
SLC Expansion Card	Kidde Fenwal	74-800011-001	76-800011-001	70150255	76-800011-001
Relay Expansion Card	Kidde Fenwal	74-800012-001	76-800012-001	70150256	76-800012-001
R-NAC Expansion Card	Kidde Fenwal	74-800013-001	76-800013-001	70150257	76-800013-001
NIC Expansion Card	Kidde Fenwal	74-800014-001	76-800014-001	70150258	76-800014-001
DACT Expansion Card	Kidde Fenwal	74-800015-001	76-800015-001	70150260	76-800015-001
City-Tie Expansion Card	Kidde Fenwal	74-800016-001	76-800016-001	70150261	76-800016-001
ICM Expansion card	Lantronix	74-800017-001	76-800017-001	70101787	76-800017-001
IIM Expansion Card w/Modem	Conexant	89-300014-001	N/A	N/A	N/A
LED Annunciator Module (LAM)	Kidde Fenwal	74-800020-003	76-800020-003	70101762	76-800020-003
3-T Dead Panel	Kidde Fenwal	74-800101-005	76-800101-005	70101726	76-800101-005
Seismic Conversion Kit (battery hold-down strap, PSU retention screw)	Kidde Fenwal	74-800000-009	76-800000-009	20100246	76-800000-009

III. UUT Summary Sheets

UUT-4 (Battery Enclosure Unit)

Large Capacity Battery Enclosure
 16 Ga Cold Rolled Carbon Steel
 20"W x 8.5"D x 12"H, 67 lbs

Wall mounted with (5) 3/8"-16 Grade 2 bolts



Building Code	Test Criteria	S _{Ds} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.92	1.0	1.5	4.67	3.50	1.96	0.78
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
n/a	n/a	n/a						

Internal Components	Manufacturer	FenwalNET 8000-ML Part #	Kidde ARIES NETLink Part #	Chemetron MICRO MLX Part #	Kidde ARIES- MLX Part #
35 AHr Battery	PowerSonic	89-100052-001	89-100052-001	70101732	89-100052-001
Seismic Conversion Kit (battery hold-down Bracket)	Kidde Fenwal	74-800000-010	76-800000-010	20100247	76-800000-010