

| APPLICATION FOR OSHPD SPECIAL SEISMIC | OFFICE | USE ONLY |
|--|-----------------------|-----------------------|
| CERTIFICATION PREAPPROVAL (OSP) | APPLICATION #: | OSP – 0233-10 |
| OSHPD Special Seismic Certification Preapproval (OSP) | | |
| Type: 🗌 New 🛛 Renewal | | |
| Manufacturer Information | | |
| Manufacturer: Hochiki America Corporation | | |
| Manufacturer's Technical Representative: Bill Denney | | |
| Mailing Address: _ 7051 Village Drive, Suite 100, Buena Park, CA 9062 | :1 | |
| Telephone: <u>559.490.7972</u> Email: bdenn | ey@hochiki.com | |
| Product Information | | |
| Product Name: FireNET Alarm Control Panels | | |
| Product Type: Fire Alarm Control Panel | | |
| Product Model Number: See Attachment 1 | | |
| (List all unique product identification numbers and/or part numbers) | | |
| General Description: Analog addressable fire alarm control panels | and battery cabinets. | |
| Mounting Description: Rigid wall mounted. | | |
| | | |
| Applicant Information | | |
| Applicant Company Name: <u>Manwill Engineering LLC</u> | | |
| Contact Person: Derek Manwill, SE | | |
| Mailing Address: PO Box 1194, Bend, OR 97709 | | |
| | @manwillSE.com | |
| I hereby agree to reimburse the Office of Statewide Health accordance with the California Administrative Code, 2016. | | opment review fees in |
| Signature of Applicant: | Date | : 3/15/2017 |
| Title: President Company Name: Manw | ill Engineering LLC | |
| | , hu | OSHPD |
| "Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs" STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY | <u></u> | 05110 |
| OSH-FD-759 (REV 12/16/15) | L ALL MALL | Page 1 of 3 |

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



| California Licensed Structural Engineer Responsible for the Engineering and Test Report(s) |
|--|
| Company Name: Manwill Engineering LLC |
| Name: Derek Manwill, SE California License Number: S6266 |
| Mailing Address: PO Box 1194, Bend, OR 97709 |
| Telephone: 541.241.2102 Email: derek@manwillSE.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 (NTS) |
| Contact Name: Ratish Rao |
| Mailing Address: 1536 East Valencia Drive, Fullerton, CA 92831 |

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

Email: ratish.rao@nts.com



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Telephone: 714.879.6110

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 (Fp/Wp) = <u>1.88</u> |
| 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) = <u>6.0</u> |
| Ω_0 (System overstrength factor) = 2.0 |
| I_p (Importance factor) = 1.5 |
| z/h (Height factor ratio) = _1 |
| Equipment or Component Natural Frequencies (Hz) = <u>N/A (wall mounted)</u> |
| Overall dimensions and weight (or range thereof) = See Attachments 1 & 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): Attachments 1 & 2 |
| OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022 |
| Signature: Date: 3/15/2017 |
| · |
| |
| Special Seismic Certification Valid Up to : $S_{DS}(g) = 2.5$ $z/h = 1.0$ |
| Condition of Approval (if applicable): |
| |
| |
| "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) Page 3 of 3 |

HOCHIKI AMERICA CORPORATION

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 1

DOCUMENT NO.: 17021CR1.0

| MANUFACTURER: HOCHIKI AMERICA CORPORATION | | | | | | | | | | | |
|---|------------|------------|------------|------------|------------------|------------------|----------------------------------|----------------------|--|--|--|
| PRODUCT | FAMILY: | FireNET | ALARM CO | | NELS & BA | TTERY ENCL | OSURE | | | | |
| MODEL NU | | | DII | MENSIONS | (in) | MAX. WT. | DESCRIPTION / NOTES | DACIC | | | |
| NODEL NU | JINIDER | | DEPTH | WIDTH | HEIGHT | (lb) | DESCRIPTION / NOTES | BASIS | | | |
| FireNET Ana | log Addres | sable Fire | Alarm Cont | rol Panels | | | | | | | |
| FN-4127N | | | 5.0 | 14.5 | 24.0 | 29 | | UUT 1 | | | |
| FN-4127-DD | WN | | 5.0 | 14.5 | 24.0 | 28 | | UUT 2 | | | |
| Plus-1127 | | | 3.5 | 14.5 | 19.0 | 20 | | UUT 3 | | | |
| FN-ACC | | | 5.8 | 17.8 | 14.9 | 62 | UUT 4 weighed 27-lb | UUT 4,5 | | | |
| MOUNTING: | Rigid wall | mounted. | | | | SEISMIC LEVEL | S_{DS} = 2.5g for z/h = 1 | I _P = 1.5 | | | |
| NOTES: | Options/S | | | | ely identifies s | subcomponents | except for FN-ACC. FN-ACC can ha | ve a range of | | | |

TABLE 2 - SUBCOMPONENTS

| MANUFAC | TURER: HOCHIKI AMERICA CORPORATION | | | | | | | | | | |
|--------------|--|--------------|---------------|---------------|----------------|---------------------|--|----------------------|--|--|--|
| PRODUCT | ODUCT FAMILY: FireNET ALARM CONTROL PANELS & BATTERY ENCLOSURE | | | | | | | | | | |
| MODEL NU | | | DI | MENSIONS | (in) | MAX. WT. | DESCRIPTION / NOTES | DACIC | | | |
| MODEL NO | | | DEPTH | WIDTH | HEIGHT | (lb) | DESCRIPTION / NOTES | BASIS | | | |
| MK Battery - | 12V Batte | ries | | | | | | | | | |
| ES7-12 | | | 5.9 | 2.6 | 3.7 | 5.3 | | UUT 4 | | | |
| ES9-12 | | | 5.9 | 2.6 | 3.7 | 5.9 | | INTERP | | | |
| ES10-12 | | | 5.9 | 2.6 | 4.4 | 7.3 | | INTERP | | | |
| ES12-12 | | | 5.9 | 3.9 | 3.7 | 9.0 | | INTERP | | | |
| ES14-12 | | | 5.9 | 3.9 | 3.7 | 9.4 | | INTERP | | | |
| ES17-12 | | | 7.1 | 3.0 | 6.6 | 13 | | INTERP | | | |
| ES20-12 | | | 7.1 | 3.0 | 6.6 | 13 | | INTERP | | | |
| ES26-12 | | | 6.5 | 6.9 | 4.9 | 21 | | INTERP | | | |
| ES33-12 | | | 7.8 | 5.2 | 6.3 | 23 | | UUT 5 | | | |
| MOUNTING: | Mounted | within unit. | | | | SEISMIC LEVEL(S) | $S_{DS} = 2.5g \text{ for } z/h = 1$ | I _P = 1.5 | | | |
| NOTES: | Product | Constructio | n/Options: Mo | odel number u | uniquely ident | ifies manufactu | irer, materials and configuration of sub | components. | | | |



HOCHIKI AMERICA CORPORATION

ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 1

DOCUMENT NO.: 17021CR1.0

| | | | | | | | | - | | | |
|---------------------|-------------------------------------|--|---|--------------------|---------|----------------------|---|---------|--|--|--|
| MANUFA | CTURER: | HOCHIKI | AMERICA CO | RPORAT | ION | | | | | | |
| MODEL N | NUMBER: | FireNET F | N-4127N | | | | | | | | |
| UNIT FUI | NCTION: | Alarm Con | trol Panel | | | | | | | | |
| SERIAL I | NUMBER: | N/A | | | | | | | | | |
| DI | MENSIONS (| (in) | WEIGHT | RES. | . FREQ | . (Hz) | | | | | |
| DEPTH | WIDTH | HEIGHT | (lb) | F-B | S-S | V | | | | | |
| 5.0 | 14.5 | 24.0 | 29 | N/A | N/A | N/A | | | | | |
| BUILDIN | G CODE | TEST C | RITERIA | LAB I | REPOR | T NO. | | | | | |
| 2016 | 2016 CBC ICC-ES AC156 | | | | S 113-2 | 355 | | | | | |
| S _{DS} (g) | z/h | A _{FLX-H} (g) | A _{RIG-H} (g) | A _{FLX-V} | (g) A | _{RIG-V} (g) | | | | | |
| 2.5 | 1 | 4.00 | 3.00 | 1.68 | | 0.68 | | A ROSER | | | |
| Unit was fu | Ill of operating ntegrity and re | OR, I _P = 1.5 content durin mained functi | • | | | | r | | | | |
| MOUNTI | NG: | Rigid wall ı | Rigid wall mounted using (4) #10 screws. | | | | | | | | |
| CONSTD | UCTION: | Carbon steel enclosure | | | | | | | | | |
| CONSTR | | | Model number uniquely identifies subcomponents. | | | | | | | | |
| | PONENTS: | Model num | ber uniquely | dentifies : | subcom | oonents. | | | | | |

UUT 2

| MANUFA | CTURER: | HOCHIKI | AMERICA CO | RPORAT | TION | | | | | | | | |
|---------------------|------------------|---|--|--------------------|---------|----------------------|---|----------|------|-----|-------------------------|------|------|
| MODEL N | NUMBER: | FireNET F | N-4127-DDWI | N | | | | | | | | | - |
| UNIT FUI | NCTION: | Alarm Con | trol Panel | | | | | | | - | - | - | |
| SERIAL I | NUMBER: | N/A | | | | | - | | 10 | . 1 | - | | |
| DI | MENSIONS | (in) | WEIGHT | RES | 6. FREQ | . (Hz) | 1 | 22 | | | | | |
| DEPTH | WIDTH | HEIGHT | (lb) | F-B | | | | E | | | E row | 5 | - |
| 5.0 | 14.5 | 24.0 | 28 | N/A | N/A | N/A | | | | | | - | |
| BUILDIN | G CODE | TEST C | RITERIA | LAB | REPOR | T NO. | | 10 | | 1 | Conception of the later | | |
| 2016 | 2016 CBC ICC-E | | ICC-ES AC156 NT | | | | | | | | 0.47 10 100 | | 60 |
| S _{DS} (g) | z/h | A _{FLX-H} (g) | A _{RIG-H} (g) | A _{FLX-V} | (g) A | _{RIG-V} (g) | | | 1000 | - | | aj (| 12 5 |
| 2.5 | 1 | 4.00 | 3.00 | 1.68 | 3 | 0.68 | | | - | R | 1 | Re | -0 D |
| Unit was fu | Ill of operating | OR, I_P = 1.5 content durin emained functi | • | | | | | | | b | | 2 | o |
| MOUNTI | NG: | Rigid wall ı | Rigid wall mounted using (4) #10 screws. | | | | | | | | | | |
| CONSTR | UCTION: | Carbon ste | Carbon steel enclosure | | | | | | | | | | |
| SUBCON | IPONENTS: | Model num | iber uniquely i | dentifies | subcom | oonents. | | | | | | | |
| TESTING | NOTES: | N/A | | | | | | | | | | | |
| | | | | | | | | | | | | | |



HOCHIKI AMERICA CORPORATION

ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 3

DOCUMENT NO.: 17021CR1.0

| MANUFA | CTURER: | HOCHIKI AMERICA CORPORATION | | | | | | | |
|---------------------|------------------|---|---|--------------------|----------|------------------------|--|--|--|
| MODEL N | UMBER: | FireNET P | FireNET Plus-1127 | | | | | | |
| UNIT FUN | ICTION: | Alarm Con | trol Panel | | | | | | |
| SERIAL N | NUMBER: | N/A | A | | | | | | |
| DIN | IENSIONS | (in) | WEIGHT | RES. FREQ. (Hz) | | | | | |
| DEPTH | WIDTH | HEIGHT | (lb) | F-B S-S V | | | | | |
| 3.5 | 14.5 | 19.0 | 20 | N/A | N/A | N/A | | | |
| BUILDIN | G CODE | TEST C | RITERIA | LAB | REPO | rt no. | | | |
| 2016 | CBC | ICC-ES | AC156 | NT | FS 113-: | 2355 | | | |
| S _{DS} (g) | z/h | A _{FLX-H} (g) | A _{RIG-H} (g) | A _{FLX-V} | (g) A | A _{RIG-V} (g) | | | |
| 2.5 | 1 | 4.00 | 3.00 | 1.68 | 3 | 0.68 | | | |
| Unit was ful | Ill of operating | OR, I _P = 1.5 g content durin emained functi | - | | | | | | |
| MOUNTIN | NG: | Rigid wall ı | Rigid wall mounted using (4) #10 screws. | | | | | | |
| CONSTRU | UCTION: | Carbon ste | Carbon steel enclosure | | | | | | |
| | | | Model number uniquely identifies subcomponent | | | | | | |
| SUBCOM | PONENTS: | Model num | Model number uniquely identifies subcomponent | | | | | | |

UUT 4

| MANUFA | CTURER: | HOCHIKI | AMERICA CO | RPORAT | TION | | | / | | | | | | | | | |
|---------------------|----------------------------------|---|------------------------|--------------------|---------|------------------------|----------|-----------------------------------|--|-------|---|---|-----|--|--|--|--|
| MODEL I | ODEL NUMBER: FN-ACC | | | | | | | | | - | - | | | | | | |
| UNIT FU | NCTION: | Alarm Batt | ery Panel | | | | | | | | | | 9 | | | | |
| SERIAL I | NUMBER: | N/A | | | | | | | | | | | | | | | |
| DII | MENSIONS | (in) | WEIGHT | RES | 6. FRE | Q. (Hz) | . (| | | | | | | | | | |
| DEPTH | WIDTH | HEIGHT | (lb) | F-B | | | \smile | - | | | | 1 | 22 | | | | |
| 5.8 | 17.8 | 14.9 | 27 | N/A | N/A | N/A | | | | | | | | | | | |
| BUILDIN | IG CODE | TEST C | RITERIA | LAB | REPO | RT NO. | | | | | | | 100 | | | | |
| 2016 | CBC | ICC-ES | AC156 | N | TS 113- | 2355 | | | | 100 | | | | | | | |
| S _{DS} (g) | z/h | A _{FLX-H} (g) | A _{RIG-H} (g) | A _{FLX-V} | (g) / | A _{RIG-V} (g) | | | | | | | | | | | |
| 2.5 | 1 | 4.00 | 3.00 | 1.68 | 3 | 0.68 | | 4 | | - the | 2 | - | - | | | | |
| Unit was fu | ull of operating ntegrity and re | OR, I_P = 1.5 g content durin emained functi | | | | | | E | | | | | • | | | | |
| MOUNTI | NG: | Rigid wall r | mounted using | g (4) #10 | screws | • | | | | | | | | | | | |
| CONSTR | UCTION: | Carbon ste | el enclosure | | | | | | | | | | | | | | |
| SUBCON | PONENTS: | MK Battery | / - battery (two | 5 ES7-12 |) | | | MK Battery - battery (two ES7-12) | | | | | | | | | |
| | | N/A | | | | | | | | | | | | | | | |



HOCHIKI AMERICA CORPORATION

ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 5

DOCUMENT NO.: 17021CR1.0

| MANUFA | CTURER: | HOCHIKI | AMERICA CO | RPORAT | ION | | |
|---------------------|----------------------------------|---|----------------------------------|--------------------|---------|----------------------|--|
| MODEL N | NUMBER: | FN-ACC | | | | | |
| UNIT FUN | NCTION: | Alarm Batt | ery Panel | | | | |
| SERIAL N | NUMBER: | N/A | | | | | |
| DIN | MENSIONS | (in) | WEIGHT | RES | . FREC | Q. (Hz) | |
| DEPTH | WIDTH | HEIGHT | (lb) | F-B S-S V | | | |
| 5.8 | 17.8 | 14.9 | 62 | N/A | N/A | N/A | |
| BUILDIN | G CODE | TEST C | RITERIA | LAB | REPO | RT NO. | |
| 2016 | CBC | ICC-ES | AC156 | NT | S 113-2 | 2355 | |
| S _{DS} (g) | z/h | A _{FLX-H} (g) | A _{RIG-H} (g) | A _{FLX-V} | (g) A | _{RIG-V} (g) | |
| 2.5 | 1 | 4.00 | 3.00 | 1.68 | ; | 0.68 | |
| Unit was fu | Ill of operating ntegrity and re | OR, I _P = 1.5 g content durin emained functi | • | | | | |
| MOUNTIN | NG: | Rigid wall ı | mounted using | g (4) #10 : | | | |
| CONSTR | UCTION: | Carbon ste | el enclosure | | | | |
| SUBCOM | IPONENTS: | MK Battery | battery (two |) ES33-12 | 2) | | |
| TESTING | NOTES: | N/A | | | | | |