



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

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

OFFICE USE ONLY

APPLICATION #: **OSP – 0425 – 10**

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Tyco Security Products, Inc.

Manufacturer's Technical Representative: Tom Naughton

Mailing Address: 6 Technology Park Drive, Westford, MA 01886

Telephone: (978) 577-4231

Email: tnaughton@tycoint.com

Product Information

Product Name: Tyco iSTAR Controllers

Product Type: iSTAR Controllers

Product Model Number: Various (See Attachment)

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

General Description: iSTAR Pro and iSTAR Ultra (8 and 16 Reader Controllers)

Mounting Description: Rigid Wall Mounted

Applicant Information

Applicant Company Name: Tobolski Watkins Engineering, Inc.

Contact Person: Matthew J. Tobolski, Ph.D., S.E.

Mailing Address: 9246 Lightwave Avenue, San Diego, CA 92123

Telephone: (858) 381-5843

Email: mtobolski@tobolskiwatkins.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: 

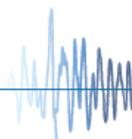
Date: 2/27/2015

Title: President & CEO

Company Name: Tobolski Watkins Engineering, Inc.

"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 10/21/14)



OSHPD

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FACILITIES DEVELOPMENT DIVISION**

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: Tobolski Watkins Engineering, Inc.

Name: Matthew J. Tobolski, Ph.D., S.E. California License Number: S5648

Mailing Address: 9246 Lightwave Avenue, San Diego, CA 92123

Telephone: (858) 381-5843 Email: mtobolski@tobolskiwatkins.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: Michael Rowe

Mailing Address: 1146 Massachusetts Avenue, Boxborough, MA 01719

Telephone: (978) 266-1001 Email: Michael.Rowe@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) = 1.88

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) = 2.5

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = See Attachment

Overall dimensions and weight (or range thereof) = See Attachment

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, 2010: Yes No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): Attachments

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2019

Signature:  Date: April 1, 2015

Print Name: Timothy J. Piland Title: SSE

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.50 z/h = 1

Condition of Approval (if applicable): _____





UUT - 1

**UNIT UNDER TEST (UUT)
Summary Sheet**

TWEI Project No.: 2014-0860-CO-001

Manufacturer: Tyco Security Products, Inc.

Model Line: Tyco iSTAR Controllers

Model Number: STAR016W-64A **Serial Number:**

Product Construction Summary:
Enclosure made of carbon steel 16ga with locked door and tamper.

Options/Subcomponent Summary:
General controller module: STARGC-64MBA (Qt. 1). Access Control Module: STAR-ACM8-WA (Qt. 2). Power Supply: STAR-PS input 100 VAC to 240VAC, output 12VDC. Enclosure: STAR-CAN (Qt. 1)

Rigid wall mounted.

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
23.3	4.0	16.5	24.25	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	ICC-ES AC156	2.5	1	1.5	4.00	3.00	1.67	0.67

Test Mounting Details:



Unit mounted to test fixture using (4) 1/4" Grade 2 bolts with washers.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.



UUT - 2

**UNIT UNDER TEST (UUT)
Summary Sheet**

TWEI Project No.: 2014-0860-CO-001

Manufacturer: Tyco Security Products, Inc.

Model Line: Tyco iSTAR Controllers

Model Number: USTAR016 **Serial Number:**

Product Construction Summary:
Enclosure made of carbon steel 16ga with locked door and tamper.

Options/Subcomponent Summary:
General controller module: USTAR-GCM (Qt. 1). Access Control Module: STAR-ACM (Qt. 2). Enclosure: USTAR-CAN (Qt. 1)

Rigid wall mounted.

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
27.3	5.0	22.25	25.25	N/A	N/A	N/A

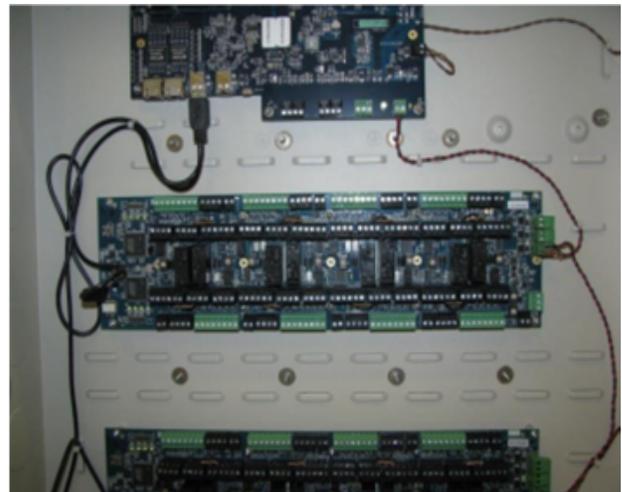
UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	ICC-ES AC156	2.5	1	1.5	4.00	3.00	1.67	0.67

Test Mounting Details:



UUT-2



Unit mounted to test fixture using (6) 1/4" Grade 2 bolts with washers.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.