



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0456 – 10

**OSHPD Special Seismic Certification Preapproval (OSP)**

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: Falcon Electric, Inc.

Manufacturer's Technical Representative: David Benporat

Mailing Address: 5116 Azusa Canyon Rd., Irwindale, CA 91706

Telephone: 626.962.7770

Email: [David.benporat@falconups.com](mailto:David.benporat@falconups.com)

**Product Information**

Product Name: Falcon UPS

Product Type: Uninterruptible Power Supply

Product Model Number: SG2K-1TG

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

General Description: 2K Tower UPS in a carbon steel enclosure.

Mounting Description: Rigid base mounted.

**Applicant Information**

Applicant Company Name: TRU Compliance, LLC – A Tobolski Watkins Affiliate


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

Mailing Address: 960 SW Disk Drive, Suite 104, Bend, OR 97702

Telephone: 844.878.0200

Email: [mtobolski@trucompliance.com](mailto:mtobolski@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.

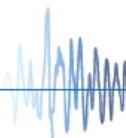
Signature of Applicant: 

Date: 02/04/2016

Title: President & CEO

Company Name: TRU Compliance, LLC

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





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

Company Name: TRU Compliance, LLC – A Tobolski Watkins Affiliate

Name: Derek J. Manwill, S.E. California License Number: S6266

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844.878.0200 Email: [dmanwill@trucompliance.com](mailto:dmanwill@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): \_\_\_\_\_

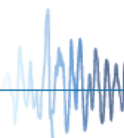
**Testing Laboratory**

Company Name: NTS – Fullerton

Contact Name: Don Bennet

Mailing Address: 1536 E Valencia Dr., Fullerton, CA 92831

Telephone: 714.879.6110 Email: [don.bennett@nts.com](mailto:don.bennett@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 ( $F_p/W_p$ ) = 1.44

$S_{DS}$  (Design spectral response acceleration at short period, g) = 2.00 @ z/h = 1; 3.20 @ z/h = 0

$a_p$  (In-structure equipment or component amplification factor) = 1.0

$R_p$  (Equipment or component response modification factor) = 2.5

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

z/h (Height factor ratio) = 1 @  $S_{DS}$  = 2.00g; 0 @  $S_{DS}$  = 3.20g

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) = \_\_\_\_\_

$\Omega_0$  (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

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

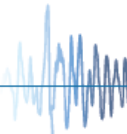
Signature:  Date: 2/25/16

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to :  $S_{DS}$  (g) = See Above z/h = See Above

Condition of Approval (if applicable): Certification is limited to units which are identical to the configured tested units.

\_\_\_\_\_  
\_\_\_\_\_





# UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 15048



<i>Manufacturer:</i> Falcon Electric, Inc.	<b>UUT 1</b>
<i>Model Line:</i> SG	
<i>Model Number:</i> SG2K-1TG <i>Serial Number:</i> 1506009012	

*Product Construction Summary:*  
Carbon steel enclosure.

*Options/Subcomponent Summary:*  
No certified options or accessories.

### *UUT Properties*

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
70	17.9	7.6	12.7	>33.3	30.7	>33.3

### *UUT Highest Passed Seismic Run Information*

Building Code	Test Criteria	S <sub>DS</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2016	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.53	0.53
		3.2	0.0	1.5	3.20	1.28	2.13	0.85

*Test Mounting Details:*



Rigid base mounted to shake table with Falcon Seismic Kit Version #2 and (2) 1/2" grade 8 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. 15048



<i>Manufacturer:</i> Falcon Electric, Inc.	<b>UUT 2</b>
<i>Model Line:</i> SG	
<i>Model Number:</i> SG2K-1TG <i>Serial Number:</i> 1412038026	

*Product Construction Summary:*  
Carbon steel enclosure.

*Options/Subcomponent Summary:*  
No certified options or accessories.

*UUT Properties*

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
70	17.9	7.6	12.7	>33.3	33.3	>33.3

*UUT Highest Passed Seismic Run Information*

Building Code	Test Criteria	S <sub>DS</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2016	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.53	0.53
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*Test Mounting Details:*



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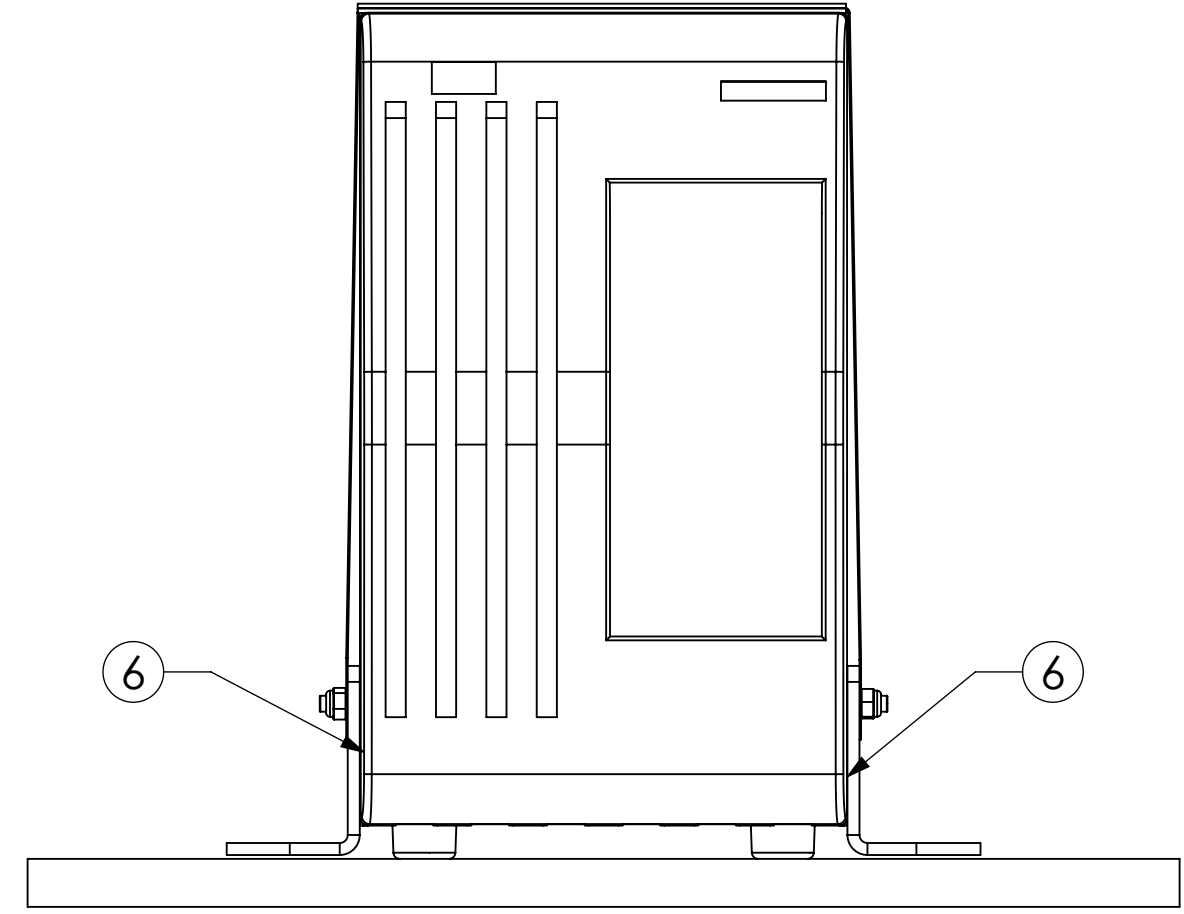
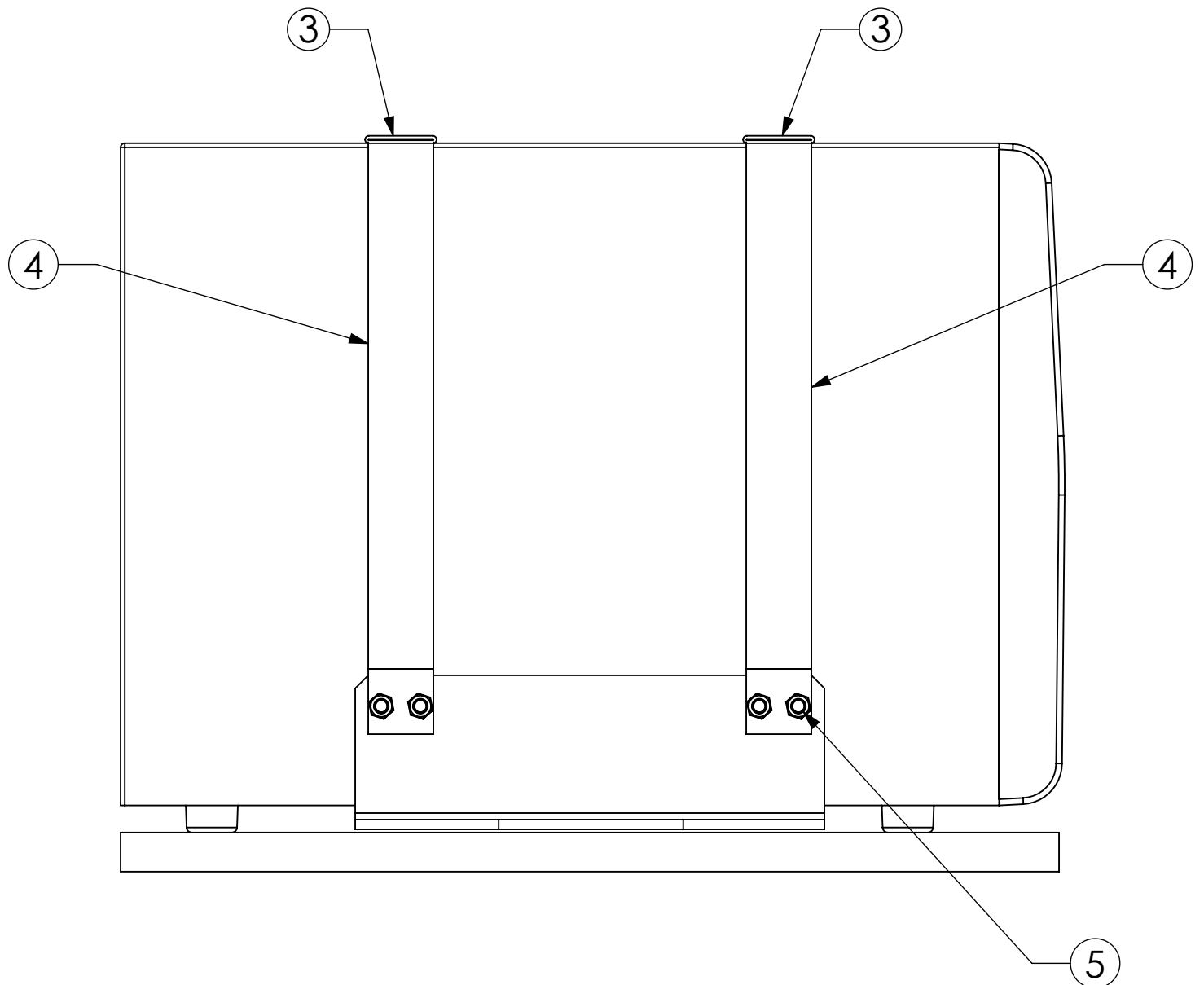
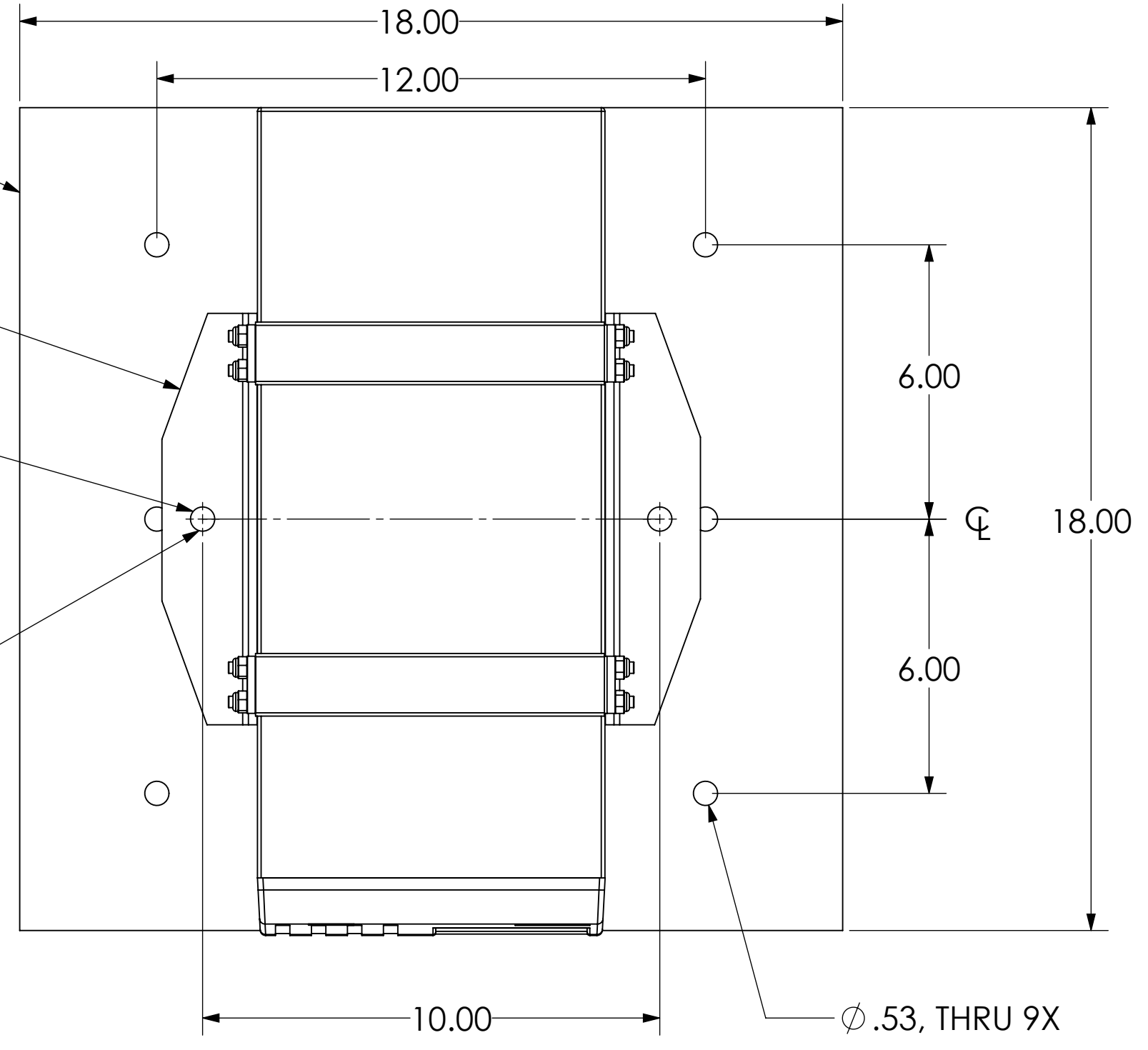
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED

**FOR REFERENCE ONLY**

1. ADAPTER PLATE. 18" X 18" X 3/4" 6061 ALUMINUM.
2. ANGLE PLATE 7 GAUGE 1008 COLD ROLLED STEEL, 2X. WITH 1/4-20 STAINLESS STEEL STUDS 4X.  $\phi$ .53 MOUNTING HOLE.
3. FIBER GLASS RE-ENFORCED TUBING. .06 WALL THICKNESS, 2X.
4. FIXING STRAPS. 24 GAUGE STAINLESS STEEL, TYPE 304. 1.25" X .024 THICK. 2X
5. 1/4-20 HEX NUT, STAINLESS STEEL, NYLOCK., 8X
6. NOMEX 2 1/2" X 9" X .01 THICK, 2X. BETWEEN THE ANGLES AND THE UNIT. SCRATCH PREVENTION.

TAPPED 1/2"-20, 2X IN ADAPTER PLATE

1/2-20 X 3/4", GRADE 8 BOLTS, 2X FOR FIXING ANGLE PLATES TO THE ADAPTER PLATE. NOT SHOWN



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ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	QTY REQD
PARTS LIST				
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		APPROVALS		
TOLERANCES ARE:		DATE		
FRACTIONS .02 .XX	ANGLES 1°	MANAGEMENT		
DECIMALS .03		DRAWN		
ALL ANGLES ARE 90° UNLESS OTHERWISE SPECIFIED		CHECKED		
MATERIAL		RESP ENG		
FINISH		MFG ENG		
DO NOT SCALE DRAWING		QUAL ENG		

**FALCON ELECTRIC INC.**  
 5116 AZUSA CANYON RD. IRVINDALE, CA.

**SEISMIC KIT VERSION #2**