



APPLICATION FOR PREAPPROVAL

SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

*For Office Use Only***APPLICATION NO.****OSP – 0128-10**Check whether application is: NEW RENEWAL

1.0 The Trane Company Steve Lotspaih
Manufacturer *Manufacturer's Technical Representative*
 3600 Pammel Creek Road, La Crosse, WI 54601
Mailing Address

608-787-4100

Telephoneslotspaih@trane.com*E-mail Address*

2.0 CGAM – Air Cooled Chillers Packaged Chillers
Product Name *Product Type*
 CGAM Sizes 20 Ton to 130 Ton
Product model No (List all unique product identification numbers and/or serial numbers)

General Description: These units are cataloged chillers available from 20 ton to 130 ton. They are installed on external vibration isolators at the base.

3.0 The VMC Group John Wilson, Jr.
Applicant Company Name *Contact Person*
 113 Main St, Bloomingdale NJ, 07403
Mailing Address
 973-838-1780 jwilson@thvmcgroup.com
Telephone *E-mail Address*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Signature of Applicant

11/12/2010

Date

CEO

Title

The VMC Group

Company Name



Registered Design Professional Preparing the Report

4.0 The VMC Group
Company Name

Samantha Kersting, SE S-4642
Contact Name *California License Number*

980 9th St., Sacramento, CA 95814
Mailing Address

973-838-1780 samantha.kersting@thevmcgroup.com
Telephone *E-mail Address*

California Licensed Structural Engineer Review and Acceptance of the Report

5.0 The VMC Group
Company Name

Samantha Kersting, SE S-4642
Contact Name *California License Number*

980 9th St., Sacramento, CA 95814
Mailing Address

973-838-1780 samantha.kersting@thevmcgroup.com
Telephone *E-mail Address*

Anchorage Pre-Approval

6.0 Anchorage is pre-approved
 (Separate application for anchorage pre-approval is required)

Anchorage is not Pre-approved

Certification Method

7.0 Testing in accordance with: ICC-ES AC-156 Other (Please Specify):

Analysis

Experience data

Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0 Berkeley/Don Clyde Trentec/Timothy Geers
Company Name *Contact Name*

1301 South 46th St, Richmond CA 94804; 4600 East Tech Dr., Cincinnati, OH 45245
Mailing Address

510-665-3414 / 513-528-7900 dclzde@berkeley.edu/tgeers@curtisswright.com
Telephone *E-mail:*

0/12



Approval Parameters

9.0

Design in accordance with ASCE 7-05 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 3.33g

S_{DS} (Spectral response acceleration at short period) = 1.85g

a_p (In-structure equipment or component amplification factor) = 2.5

R_p (Equipment or component response modification factor) = 2.5

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = See Attachment

Building period limits (if any) = N/A

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

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) =

S_{DS} (Spectral response acceleration at short period) =

S_1 (Spectral response acceleration at 1 second period) =

R (Response modification coefficient) = 1.0

Ω_0 (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: Yes No

10.0 List of attachments supporting the special seismic certification of equipment or components:

- Test Report
- Drawings
- Manufacturer's Catalog
- Calculations
- Others (Please Specify):

11.0 OSHPD Approval (For Office Use Only)

 Signature & Date Chris Tokas, SHFR Name & Title	11/12/2010	December 31, 2016 Approval Expiration Date
Condition of Approval (if any):	S_{DS} (g) = 1.85 z/h = 1.0 Special Seismic Certification Valid Up to	

N/A

Trane CGAM - OSHPD Pre-Approved Units										
Tonnage	Operating Weight	Length	Width	Height	UUT	Resonant Frequencies			SDS	z/h
						X-X	Y-Y	Z-Z		
20	2030	114	50	85					1.85	1.0
26	2060	114	50	85	1	2.2	1.7	3.8	1.85	1.0
30	2629	150	50	85					1.85	1.0
35	2654	150	50	85					1.85	1.0
40	3578	114	88	85					1.85	1.0
52	3666	114	88	85					1.85	1.0
60	4730	150	88	85					1.85	1.0
70	4751	150	88	85					1.85	1.0
80	5384	143	89	93					1.85	1.0
90	5746	143	89	93					1.85	1.0
100	6401	166	89	93					1.85	1.0
110	6461	166	89	93					1.85	1.0
120	6461	166	89	93	2	1.3	2.4	4.6	1.85	1.0
130	7631	202	89	93					1.85	1.0