APPLICATION FOR HCAI SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0001

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Baltimore Aircoil Company, Inc.

Manufacturer's Technical Representative: Linfeng Chen

Mailing Address: 7600 Dorsey Run Rd., Jessup, MD 20794

Telephone: (410) 799-6481 Email: lchen@baltimoreaircoil.com

Product Information

Product Name: PT2 Open Cooling Tower

Product Model Number(s): See attached

Product Category: Cooling Towers

Product Sub-Category: NA

General Description: Evaporative cooling towers with upgraded seismic structural bracing. Seismic enhancements made to the test units required to address the anomalies observed during the tests shall be incorporated into the production units.

Mounting Description: Base Mounted Rigid and Spring Vibration Isolated -

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: VMC

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg Street, Suite 109, Sparks, NV 89431

Telephone: (775) 358-5085 Email: kelly.laplace@thevmcgroup.com

Title: Vice President of Sales: Test and Measurement Division

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

Company Name: THE VMC GROUP

Name: Kenneth Tarlow California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com

Certification Method

☐ GR-63-Core ☒ ICC-ES AC156 ☐ IEEE 344 ☐ IEEE 693 ☐ NEBS 3

☐ Other (Please Specify):

Testing Laboratory

Company Name: U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER, CONSTRUCTION ENGINEERING RESEARCH LABORATORY (CERL)

Contact Person: James Wilcoski

Mailing Address: 2902 Newmark Dr., Champaign IL 61822-1076

Telephone: (217) 373-4565 Email: james.wilcoski@usace.army.mil

Company Name: UNIVERSITY OF NEVADA, RENO (UNR)

Contact Person: Patrick LaPlace

Mailing Address: 1664 N. Virginia Street, Reno NV 89557

Telephone: (775) 784-6937 Email: plaplace@unr.edu

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 2.91 for rigid, 4.37 for isolated

S_{DS} (Design spectral response acceleration at short period, g) = 1.94

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 3.0 for rigid, 2.0 for isolated

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) **- Approval Expires on 03/25/2031**

Date: 3/25/2025

Name: Timothy Piland Title: Senior Structural Engineer

Special Seismic Certification Valid Up to: S_{DS} (g) = 1.94 z/h = 1

Condition of Approval (if applicable):

Special Seismic Certification
Table 1 - Certified Components

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PC2-50-0406-7.5/S	1	N/A	6'-0"	4'-0"	17'-9 3/4"	2,693	4,199	UUT D (a,b)
PT2-0412A-2J1/S	1	149	12’-0”	4’-0”	11’-1"	3,520	5,950	Interpolated
PT2-0709A-1H1/S	1	125	9’-0"	7’-4"	11’-5”	3,490	6,250	
PT2-0709A-1H2/S	2	253	18’-1"	7’-4"	12’-5”	7,100	12,610	
PT2-0709A-1H3/S	3	385	27’-2"	7’-4"	13’-5”	11,230	19,500	
PT2-0709A-1J1/S	1	143	9’-0"	7’-4"	11’-5”	3,490	6,250	
PT2-0709A-1J2/S	2	289	18’-1"	7’-4"	12’-5”	7,100	12,610	
PT2-0709A-1J3/S	3	439	27’-2"	7’-4"	13’-5”	11,230	19,500	
PT2-0709A-1K1/S	1	157	9’-0"	7’-4"	11’-5”	3,490	6,250	
PT2-0709A-1K2/S	2	316	18’-1"	7’-4"	12’-5”	7,100	12,610	
PT2-0709A-1K3/S	3	481	27’-2"	7’-4"	13’-5”	11,230	19,500	
PT2-0709A-2H1/S	1	141	9’-0”	7’-4"	12’-5”	3,780	6,540	
PT2-0709A-2H2/S	2	284	18’-1"	7’-4"	13’-5”	7,680	13,190	
PT2-0709A-2H3/S	3	430	27’-2"	7’-4"	14’-5”	11,720	19,990	
PT2-0709A-2J1/S	1	160	9’-0”	7’-4"	12’-5”	3,780	6,540	
PT2-0709A-2J2/S	2	323	18’-1"	7’-4"	13’-5”	7,680	13,190	
PT2-0709A-2J3/S	3	489	27’-2"	7’-4"	14’-5”	11,720	19,990	
PT2-0709A-2L1/S	1	199	9’-0”	7’-4"	12’-5”	3,780	6,540	
PT2-0709A-2L2/S	2	400	18’-1"	7’-4"	13’-5”	7,680	13,190	
PT2-0709A-2L3/S	3	606	27’-2"	7’-4"	14’-5”	11,720	19,990	
PT2-0709A-3J1/S	1	170	9’-0”	7’-4"	13’-5”	4,170	6,930	
PT2-0709A-3J2/S	2	341	18’-1"	7’-4"	14’-5”	8,470	13,980	
PT2-0709A-3J3/S	3	517	27’-2"	7’-4"	15’-5”	13,270	21,540	
PT2-0709A-3K1/S	1	185	9’-0”	7’-4"	13’-5”	4,170	6,930	
PT2-0709A-3K2/S	2	373	18’-1"	7’-4"	14’-5”	8,470	13,980	
PT2-0709A-3K3/S	3	565	27’-2"	7’-4"	15’-5”	13,270	21,540	
PT2-0709A-3L1/S	1	210	9’-0”	7’-4"	13’-5”	4,170	6,930	
PT2-0709A-3L2/S	2	423	18’-1"	7’-4"	14’-5”	8,470	13,980	
PT2-0709A-3L3/S	3	640	27’-2"	7’-4"	15’-5”	13,270	21,540	
PT2-0809A-1J1/S	1	153	9’-0"	8'-6"	11’-7"	3,840	6,920	
PT2-0809A-1J2/S	2	308	18’-1"	8'-6"	12’-7"	7,880	14,030	

Notes:

1. Base models listed are for standard fan option. Actual unit model number may include a suffix "Q" designating low sound fan option (e.g., PT2-0709A-1H1/QS) or a suffix "WQ" designating whisper quiet fan option (e.g., PT2-0709A-1H1/WQS).
2. Actual unit model number may include a suffix "X" designating non-Cooling Technology Institute (CTI) certified (e.g., PT2-0709A-1H1/SX).
3. The PC2 model listed is the smallest unit in the counterflow product family, which includes the PT2 open cooling tower line, the PC2 evaporative condenser line, and the PF2 closed circuit fluid cooler line. The PC2 and PF2 units are identical in construction.
4. Each cell of multi-cell units is a structurally independent cooling tower.
5. Weights are base unit weights. Actual weights may include accessory weight adds for the certified accessories and options listed in Table 13.
6. Operating weights at overflow water level. UUT test weight at operating water level.
7. Nominal tonnage represents 3 USGPM of water from 95°F to 85°F at a 78°F entering wet-bulb temperature.
8. UUT F configured with maximum air inlet height to account for multi-cell configurations.

Continued on the next page

Special Seismic Certification
Table 2 - Certified Components (cont.)

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-0809A-1J3/S	3	468	27’-2"	8'-6"	13’-7"	11,950	21,180	
PT2-0809A-1K1/S	1	168	9’-0"	8'-6"	11’-7"	3,840	6,920	
PT2-0809A-1K2/S	2	338	18’-1"	8'-6"	12’-7"	7,880	14,030	
PT2-0809A-1K3/S	3	514	27’-2"	8'-6"	13’-7"	11,950	21,180	
PT2-0809A-2J1/S	1	173	9’-0"	8'-6"	12’-7"	4,140	7,220	
PT2-0809A-2J2/S	2	348	18’-1"	8'-6"	13’-7"	8,420	14,570	
PT2-0809A-2J3/S	3	527	27’-2"	8'-6"	14’-7"	12,850	22,080	
PT2-0809A-2K1/S	1	189	9’-0"	8'-6"	12’-7"	4,140	7,220	
PT2-0809A-2K2/S	2	381	18’-1"	8'-6"	13’-7"	8,420	14,570	
PT2-0809A-2K3/S	3	578	27’-2"	8'-6"	14’-7"	12,850	22,080	
PT2-0809A-2L1/S	1	215	9’-0"	8'-6"	12’-7"	4,140	7,220	
PT2-0809A-2L2/S	2	433	18’-1"	8'-6"	13’-7"	8,420	14,570	
PT2-0809A-2L3/S	3	656	27’-2"	8'-6"	14’-7"	12,850	22,080	
PT2-0809A-3K1/S	1	202	9’-0”	8'-6"	13’-7"	4,470	7,550	
PT2-0809A-3K2/S	2	406	18’-1"	8'-6"	14’-7"	9,080	15,230	
PT2-0809A-3K3/S	3	615	27’-2"	8'-6"	15’-7"	14,220	23,450	
PT2-0809A-3L1/S	1	229	9’-0”	8'-6"	13’-7"	4,470	7,550	
PT2-0809A-3L2/S	2	460	18’-1"	8'-6"	14’-7"	9,080	15,230	
PT2-0809A-3L3/S	3	697	27’-2"	8'-6"	15’-7"	14,220	23,450	
PT2-0809A-3M1/S	1	250	9’-0”	8'-6"	13’-7"	4,470	7,550	
PT2-0809A-3M2/S	2	503	18’-1"	8'-6"	14’-7"	9,080	15,230	
PT2-0809A-3M3/S	3	761	27’-2"	8'-6"	15’-7"	14,220	23,450	
PT2-0812A-1L1/S	1	242	12’-0"	8'-6"	11’-8"	4,750	8,880	Interpolated
PT2-0812A-1L2/S	2	490	24’-1"	8'-6"	12’-8"	9,680	17,950	
PT2-0812A-1L3/S	3	746	36’-2"	8'-6"	13’-8"	14,790	27,190	
PT2-0812A-1M1/S	1	265	12’-0"	8'-6"	11’-8"	4,750	8,880	
PT2-0812A-1M2/S	2	536	24’-1"	8'-6"	12’-8"	9,680	17,950	
PT2-0812A-1M3/S	3	816	36’-2"	8'-6"	13’-8"	14,790	27,190	
PT2-0812A-2L1/S	1	269	12’-0"	8'-6"	12’-8"	5,070	9,200	
PT2-0812A-2L2/S	2	543	24’-1"	8'-6"	13’-8"	10,320	18,590	
PT2-0812A-2L3/S	3	824	36’-2"	8'-6"	14’-8"	15,750	28,150	
PT2-0812A-2M1/S	1	294	12’-0"	8'-6"	12’-8"	5,070	9,200	
PT2-0812A-2M2/S	2	593	24’-1"	8'-6"	13’-8"	10,320	18,590	
PT2-0812A-2M3/S	3	900	36’-2"	8'-6"	14’-8"	15,750	28,150	
PT2-0812A-2N1/S	1	315	12’-0"	8'-6"	12’-8"	5,070	9,200	
PT2-0812A-2N2/S	2	635	24’-1"	8'-6"	13’-8"	10,320	18,590	
PT2-0812A-2N3/S	3	963	36’-2"	8'-6"	14’-8"	15,750	28,150	
PT2-0812A-3L1/S	1	284	12’-0”	8'-6"	13’-8"	5,390	9,520	
PT2-0812A-3L2/S	2	571	24’-1"	8'-6"	14’-8"	10,960	19,230	
PT2-0812A-3L3/S	3	865	36’-2"	8'-6"	15’-8"	17,460	29,860	
PT2-0812A-3M1/S	1	310	12’-0”	8'-6"	13’-8"	5,390	9,520	
PT2-0812A-3M2/S	2	624	24’-1"	8'-6"	14’-8"	10,960	19,230	
PT2-0812A-3M3/S	3	945	36’-2"	8'-6"	15’-8"	17,460	29,860	
PT2-0812A-3N1/S	1	331	12’-0”	8'-6"	13’-8"	5,390	9,520	

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Special Seismic Certification
Table 3 - Certified Components (cont.)

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-0812A-3N2/S	2	667	24’-1"	8'-6"	14’-8"	10,960	19,230	
PT2-0812A-3N3/S	3	1,010	36’-2"	8'-6"	15’-8"	17,460	29,860	
PT2-0812A-3O1/S	1	350	12’-0”	8'-6"	13’-8"	5,390	9,520	
PT2-0812A-3O2/S	2	704	24’-1"	8'-6"	14’-8"	10,960	19,230	
PT2-0812A-3O3/S	3	1,066	36’-2"	8'-6"	15’-8"	17,460	29,860	
PT2-1009A-1J1/S	1	179	9’-0”	9’-10”	13’-1"	4,330	7,770	
PT2-1009A-1J2/S	2	359	18’-1”	9’-10”	14’-1"	8,820	15,710	
PT2-1009A-1J3/S	3	546	27’-2”	9’-10”	15’-1"	13,470	23,800	
PT2-1009A-1J4/S	4	724	18’-1”	19’-9”	16’-1"	18,610	32,390	
PT2-1009A-1K1/S	1	196	9’-0”	9’-10”	13’-1"	4,330	7,770	
PT2-1009A-1K2/S	2	393	18’-1”	9’-10”	14’-1"	8,820	15,710	
PT2-1009A-1K3/S	3	598	27’-2”	9’-10”	15’-1"	13,470	23,800	
PT2-1009A-1K4/S	4	793	18’-1”	19’-9”	16’-1"	18,610	32,390	
PT2-1009A-1L1/S	1	223	9’-0”	9’-10”	13’-1"	4,330	7,770	
PT2-1009A-1L2/S	2	446	18’-1”	9’-10”	14’-1"	8,820	15,710	
PT2-1009A-1L3/S	3	679	27’-2”	9’-10”	15’-1"	13,470	23,800	
PT2-1009A-1L4/S	4	901	18’-1”	19’-9”	16’-1"	18,610	32,390	
PT2-1009A-2J1/S	1	198	9’-0”	9’-10”	14’-1"	4,640	8,080	
PT2-1009A-2J2/S	2	396	18’-1”	9’-10”	15’-1"	9,440	16,330	
PT2-1009A-2J3/S	3	601	27’-2”	9’-10”	16’-1"	14,400	24,730	
PT2-1009A-2J4/S	4	799	18’-1”	19’-9”	17’-1"	19,860	33,640	
PT2-1009A-2K1/S	1	217	9’-0”	9’-10”	14’-1"	4,640	8,080	Interpolated
PT2-1009A-2K2/S	2	434	18’-1”	9’-10”	15’-1"	9,440	16,330	
PT2-1009A-2K3/S	3	658	27’-2”	9’-10”	16’-1"	14,400	24,730	
PT2-1009A-2K4/S	4	874	18’-1”	19’-9”	17’-1"	19,860	33,640	
PT2-1009A-2L1/S	1	246	9’-0”	9’-10”	14’-1"	4,640	8,080	
PT2-1009A-2L2/S	2	492	18’-1”	9’-10”	15’-1"	9,440	16,330	
PT2-1009A-2L3/S	3	746	27’-2”	9’-10”	16’-1"	14,400	24,730	
PT2-1009A-2L4/S	4	991	18’-1”	19’-9”	17’-1"	19,860	33,640	
PT2-1009A-2M1/S	1	268	9’-0”	9’-10”	14’-1"	4,640	8,080	
PT2-1009A-2M2/S	2	537	18’-1”	9’-10”	15’-1"	9,440	16,330	
PT2-1009A-2M3/S	3	814	27’-2”	9’-10”	16’-1"	14,400	24,730	
PT2-1009A-2M4/S	4	1,082	18’-1”	19’-9”	17’-1"	19,860	33,640	
PT2-1009A-3K1/S	1	228	9’-0”	9’-10”	15’-1"	5,230	8,670	
PT2-1009A-3K2/S	2	456	18’-1”	9’-10”	16’-1"	10,120	17,010	
PT2-1009A-3K3/S	3	690	27’-2”	9’-10”	17’-1"	15,800	26,130	
PT2-1009A-3K4/S	4	918	18’-1”	19’-9”	18’-1"	21,720	35,500	
PT2-1009A-3L1/S	1	258	9’-0”	9’-10”	15’-1"	5,230	8,670	
PT2-1009A-3L2/S	2	516	18’-1”	9’-10”	16’-1"	10,120	17,010	
PT2-1009A-3L3/S	3	782	27’-2”	9’-10”	17’-1"	15,800	26,130	
PT2-1009A-3L4/S	4	1,039	18’-1”	19’-9”	18’-1"	21,720	35,500	
PT2-1009A-3M1/S	1	282	9’-0”	9’-10”	15’-1"	5,230	8,670	
PT2-1009A-3M2/S	2	563	18’-1”	9’-10”	16’-1"	10,120	17,010	
PT2-1009A-3M3/S	3	852	27’-2”	9’-10”	17’-1"	15,800	26,130	

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Special Seismic Certification
Table 4 - Certified Components (cont.)

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-1009A-3M4/S	4	1,133	18’-1”	19’-9”	18’-1"	21,720	35,500	
PT2-1009A-3N1/S	1	301	9’-0”	9’-10”	15’-1"	5,230	8,670	
PT2-1009A-3N2/S	2	602	18’-1”	9’-10”	16’-1"	10,120	17,010	
PT2-1009A-3N3/S	3	911	27’-2”	9’-10”	17’-1"	15,800	26,130	
PT2-1009A-3N4/S	4	1,211	18’-1”	19’-9”	18’-1"	21,720	35,500	
PT2-1012A-1L1/S	1	266	12’-0”	9’-10”	13’-5"	6,210	10,800	
PT2-1012A-1L2/S	2	535	24’-1”	9’-10”	14’-4"	11,830	21,020	
PT2-1012A-1L3/S	3	813	36’-2”	9’-10”	15’-4"	18,070	31,850	
PT2-1012A-1L4/S	4	1,071	24’-1”	19’-9”	16’-4"	24,780	43,150	
PT2-1012A-1M1/S	1	292	12’-0”	9’-10”	13’-5"	6,210	10,800	
PT2-1012A-1M2/S	2	586	24’-1”	9’-10”	14’-4"	11,830	21,020	
PT2-1012A-1M3/S	3	890	36’-2”	9’-10”	15’-4"	18,070	31,850	
PT2-1012A-1M4/S	4	1,173	24’-1”	19’-9”	16’-4"	24,780	43,150	
PT2-1012A-2L1/S	1	297	12’-0”	9’-10”	14’-4"	6,210	10,800	
PT2-1012A-2L2/S	2	597	24’-1”	9’-10”	15’-4"	12,640	21,830	
PT2-1012A-2L3/S	3	905	36’-2”	9’-10”	16’-4"	19,270	33,050	
PT2-1012A-2L4/S	4	1,195	24’-1”	19’-9”	17’-4"	26,560	44,930	
PT2-1012A-2M1/S	1	325	12’-0”	9’-10”	14’-4"	6,210	10,800	
PT2-1012A-2M2/S	2	653	24’-1”	9’-10”	15’-4"	12,640	21,830	
PT2-1012A-2M3/S	3	990	36’-2”	9’-10”	16’-4"	19,270	33,050	
PT2-1012A-2M4/S	4	1,307	24’-1”	19’-9”	17’-4"	26,560	44,930	
PT2-1012A-2N1/S	1	348	12’-0”	9’-10”	14’-4"	6,210	10,800	Interpolated
PT2-1012A-2N2/S	2	700	24’-1”	9’-10”	15’-4"	12,640	21,830	
PT2-1012A-2N3/S	3	1,060	36’-2”	9’-10”	16’-4"	19,270	33,050	
PT2-1012A-2N4/S	4	1,400	24’-1”	19’-9”	17’-4"	26,560	44,930	
PT2-1012A-2O1/S	1	368	12’-0”	9’-10”	14’-4"	6,210	10,800	
PT2-1012A-2O2/S	2	740	24’-1”	9’-10”	15’-4"	12,640	21,830	
PT2-1012A-2O3/S	3	1,120	36’-2”	9’-10”	16’-4"	19,270	33,050	
PT2-1012A-2O4/S	4	1,481	24’-1”	19’-9”	17’-4"	26,560	44,930	
PT2-1012A-3L1/S	1	315	12’-0”	9’-10”	15’-5"	6,620	11,210	
PT2-1012A-3L2/S	2	632	24’-1”	9’-10”	16’-4"	13,440	22,630	
PT2-1012A-3L3/S	3	956	36’-2”	9’-10”	17’-4"	20,970	34,750	
PT2-1012A-3L4/S	4	1,265	24’-1”	19’-9”	18’-4"	28,820	47,190	
PT2-1012A-3M1/S	1	344	12’-0”	9’-10”	15’-5"	6,620	11,210	
PT2-1012A-3M2/S	2	691	24’-1”	9’-10”	16’-4"	13,440	22,630	
PT2-1012A-3M3/S	3	1,045	36’-2”	9’-10”	17’-4"	20,970	34,750	
PT2-1012A-3M4/S	4	1,383	24’-1”	19’-9”	18’-4"	28,820	47,190	
PT2-1012A-3N1/S	1	368	12’-0”	9’-10”	15’-5"	6,620	11,210	
PT2-1012A-3N2/S	2	740	24’-1”	9’-10”	16’-4"	13,440	22,630	
PT2-1012A-3N3/S	3	1,118	36’-2”	9’-10”	17’-4"	20,970	34,750	
PT2-1012A-3N4/S	4	1,480	24’-1”	19’-9”	18’-4"	28,820	47,190	
PT2-1012A-3O1/S	1	389	12’-0”	9’-10”	15’-5"	6,620	11,210	
PT2-1012A-3O2/S	2	781	24’-1”	9’-10”	16’-4"	13,440	22,630	
PT2-1012A-3O3/S	3	1,182	36’-2”	9’-10”	17’-4"	20,970	34,750	

Continued on the next page

Special Seismic Certification
Table 5 - Certified Components (cont.)

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-1012A-3O4/S	4	1,564	24'-1"	19'-9"	18'-4"	28,820	47,190	Interpolated
PT2-1212A-1L1/S	1	307	12'-0"	11'-10"	13'-11"	6,560	11,800	
PT2-1212A-1L2/S	2	614	24'-1"	11'-10"	14'-11"	13,260	23,730	
PT2-1212A-1L3/S	3	930	36'-2"	11'-10"	15'-11"	20,120	35,830	
PT2-1212A-1L4/S	4	1,227	24'-1"	23'-9"	16'-11"	26,970	47,910	
PT2-1212A-1M1/S	1	337	12'-0"	11'-10"	13'-11"	6,560	11,800	
PT2-1212A-1M2/S	2	672	24'-1"	11'-10"	14'-11"	13,260	23,730	
PT2-1212A-1M3/S	3	1,018	36'-2"	11'-10"	15'-11"	20,120	35,830	
PT2-1212A-1M4/S	4	1,344	24'-1"	23'-9"	16'-11"	26,970	47,910	
PT2-1212A-1N1/S	1	361	12'-0"	11'-10"	13'-11"	6,560	11,800	
PT2-1212A-1N2/S	2	721	24'-1"	11'-10"	14'-11"	13,260	23,730	
PT2-1212A-1N3/S	3	1,092	36'-2"	11'-10"	15'-11"	20,120	35,830	
PT2-1212A-1N4/S	4	1,441	24'-1"	23'-9"	16'-11"	26,970	47,910	
PT2-1212A-2L1/S	1	349	12'-0"	11'-10"	14'-11"	7,110	12,350	
PT2-1212A-2L2/S	2	697	24'-1"	11'-10"	15'-11"	14,370	24,840	
PT2-1212A-2L3/S	3	1,054	36'-2"	11'-10"	16'-11"	21,780	37,490	
PT2-1212A-2L4/S	4	1,394	24'-1"	23'-9"	17'-11"	29,190	50,130	
PT2-1212A-2M1/S	1	382	12'-0"	11'-10"	14'-11"	7,110	12,350	
PT2-1212A-2M2/S	2	762	24'-1"	11'-10"	15'-11"	14,370	24,840	
PT2-1212A-2M3/S	3	1,153	36'-2"	11'-10"	16'-11"	21,780	37,490	
PT2-1212A-2M4/S	4	1,525	24'-1"	23'-9"	17'-11"	29,190	50,130	
PT2-1212A-2N1/S	1	409	12'-0"	11'-10"	14'-11"	7,110	12,350	
PT2-1212A-2N2/S	2	817	24'-1"	11'-10"	15'-11"	14,370	24,840	
PT2-1212A-2N3/S	3	1,234	36'-2"	11'-10"	16'-11"	21,780	37,490	
PT2-1212A-2N4/S	4	1,633	24'-1"	23'-9"	17'-11"	29,190	50,130	
PT2-1212A-2O1/S	1	432	12'-0"	11'-10"	14'-11"	7,110	12,350	
PT2-1212A-2O2/S	2	863	24'-1"	11'-10"	15'-11"	14,370	24,840	
PT2-1212A-2O3/S	3	1,305	36'-2"	11'-10"	16'-11"	21,780	37,490	
PT2-1212A-2O4/S	4	1,726	24'-1"	23'-9"	17'-11"	29,190	50,130	
PT2-1212A-3L1/S	1	373	12'-0"	11'-10"	15'-11"	7,660	12,900	
PT2-1212A-3L2/S	2	746	24'-1"	11'-10"	16'-11"	15,480	25,950	
PT2-1212A-3L3/S	3	1,126	36'-2"	11'-10"	17'-11"	23,440	39,150	
PT2-1212A-3L4/S	4	1,492	24'-1"	23'-9"	18'-11"	31,400	52,340	
PT2-1212A-3M1/S	1	408	12'-0"	11'-10"	15'-11"	7,660	12,900	
PT2-1212A-3M2/S	2	815	24'-1"	11'-10"	16'-11"	15,480	25,950	
PT2-1212A-3M3/S	3	1,230	36'-2"	11'-10"	17'-11"	23,440	39,150	
PT2-1212A-3M4/S	4	1,630	24'-1"	23'-9"	18'-11"	31,400	52,340	
PT2-1212A-3N1/S	1	437	12'-0"	11'-10"	15'-11"	7,660	12,900	
PT2-1212A-3N2/S	2	872	24'-1"	11'-10"	16'-11"	15,480	25,950	
PT2-1212A-3N3/S	3	1,317	36'-2"	11'-10"	17'-11"	23,440	39,150	
PT2-1212A-3N4/S	4	1,744	24'-1"	23'-9"	18'-11"	31,400	52,340	
PT2-1212A-3O1/S	1	461	12'-0"	11'-10"	15'-11"	7,660	12,900	
PT2-1212A-3O2/S	2	921	24'-1"	11'-10"	16'-11"	15,480	25,950	
PT2-1212A-3O3/S	3	1,391	36'-2"	11'-10"	17'-11"	23,440	39,150	

Continued on the next page

Special Seismic Certification
Table 6 - Certified Components (cont.)

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-1212A-3O4/S	4	1,843	24'-1"	23'-9"	18'-11"	31,400	52,340	
PT2-1212A-3P1/S	1	502	12'-0"	11'-10"	15'-11"	7,660	12,900	
PT2-1212A-3P2/S	2	1,004	24'-1"	11'-10"	16'-11"	15,480	25,950	
PT2-1212A-3P3/S	3	1,515	36'-2"	11'-10"	17'-11"	23,440	39,150	
PT2-1212A-3P4/S	4	2,007	24'-1"	23'-9"	18'-11"	31,400	52,340	
PT2-1218A-1K1/S	1	355	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1K2/S	2	713	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1K3/S	3	1,072	54'-2"	11'-10"	16'-3"	31,310	59,470	
PT2-1218A-1K4/S	4	1,400	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1KT/S	2	711	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-1L1/S	1	404	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1L2/S	2	811	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1L3/S	3	1,218	54'-2"	11'-10"	16'-3"	31,310	59,470	
PT2-1218A-1L4/S	4	1,591	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1LT/S	2	808	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-1M1/S	1	442	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1M2/S	2	887	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1M3/S	3	1,334	54'-2"	11'-10"	16'-3"	31,310	59,470	
PT2-1218A-1M4/S	4	1,742	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1MT/S	2	884	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-1N1/S	1	474	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1N2/S	2	952	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1N3/S	3	1,431	54'-2"	11'-10"	16'-3"	31,310	59,470	Interpolated
PT2-1218A-1N4/S	4	1,869	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1NT/S	2	949	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-1O1/S	1	502	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1O2/S	2	1,008	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1O3/S	3	1,515	54'-2"	11'-10"	16'-3"	31,310	59,470	
PT2-1218A-1O4/S	4	1,979	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1OT/S	2	1,005	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-1P1/S	1	550	18'-1"	11'-10"	14'-9"	10,250	19,640	
PT2-1218A-1P2/S	2	1,104	36'-1"	11'-10"	15'-9"	20,740	39,510	
PT2-1218A-1P3/S	3	1,659	54'-2"	11'-10"	16'-3"	31,310	59,470	
PT2-1218A-1P4/S	4	2,167	36'-1"	23'-9"	17'-3"	42,230	79,780	
PT2-1218A-1PT/S	2	1,100	18'-1"	23'-9"	16'-3"	20,870	39,640	
PT2-1218A-2K1/S	1	402	18'-1"	11'-10"	15'-9"	10,920	20,310	
PT2-1218A-2K2/S	2	805	36'-1"	11'-10"	16'-9"	22,090	40,860	
PT2-1218A-2K3/S	3	1,209	54'-2"	11'-10"	17'-3"	33,330	61,490	
PT2-1218A-2K4/S	4	1,587	36'-1"	23'-9"	18'-3"	44,930	82,480	
PT2-1218A-2KT/S	2	803	18'-1"	23'-9"	17'-3"	22,220	40,990	
PT2-1218A-2L1/S	1	456	18'-1"	11'-10"	15'-9"	10,920	20,310	
PT2-1218A-2L2/S	2	914	36'-1"	11'-10"	16'-9"	22,090	40,860	
PT2-1218A-2L3/S	3	1,374	54'-2"	11'-10"	17'-3"	33,330	61,490	
PT2-1218A-2L4/S	4	1,803	36'-1"	23'-9"	18'-3"	44,930	82,480	

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Special Seismic Certification
Table 7 - Certified Components (cont.)

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-1218A-2LT/S	2	912	18’-1”	23’-9”	17’-3”	22,220	40,990	Interpolated
PT2-1218A-2M1/S	1	500	18’-1”	11’-10”	15’-9”	10,920	20,310	
PT2-1218A-2M2/S	2	1,001	36’-1”	11’-10”	16’-9”	22,090	40,860	
PT2-1218A-2M3/S	3	1,504	54’-2”	11’-10”	17’-3”	33,330	61,490	
PT2-1218A-2M4/S	4	1,974	36’-1”	23’-9”	18’-3”	44,930	82,480	
PT2-1218A-2MT/S	2	999	18’-1”	23’-9”	17’-3”	22,220	40,990	
PT2-1218A-2N1/S	1	536	18’-1”	11’-10”	15’-9”	10,920	20,310	
PT2-1218A-2N2/S	2	1,074	36’-1”	11’-10”	16’-9”	22,090	40,860	
PT2-1218A-2N3/S	3	1,613	54’-2”	11’-10”	17’-3”	33,330	61,490	
PT2-1218A-2N4/S	4	2,117	36’-1”	23’-9”	18’-3”	44,930	82,480	
PT2-1218A-2NT/S	2	1,072	18’-1”	23’-9”	17’-3”	22,220	40,990	
PT2-1218A-2O1/S	1	568	18’-1”	11’-10”	15’-9”	10,920	20,310	
PT2-1218A-2O2/S	2	1,137	36’-1”	11’-10”	16’-9”	22,090	40,860	
PT2-1218A-2O3/S	3	1,709	54’-2”	11’-10”	17’-3”	33,330	61,490	
PT2-1218A-2O4/S	4	2,243	36’-1”	23’-9”	18’-3”	44,930	82,480	
PT2-1218A-2OT/S	2	1,135	18’-1”	23’-9”	17’-3”	22,220	40,990	
PT2-1218A-2P1/S	1	622	18’-1”	11’-10”	15’-9”	10,920	20,310	
PT2-1218A-2P2/S	2	1,245	36’-1”	11’-10”	16’-9”	22,090	40,860	
PT2-1218A-2P3/S	3	1,871	54’-2”	11’-10”	17’-3”	33,330	61,490	
PT2-1218A-2P4/S	4	2,455	36’-1”	23’-9”	18’-3”	44,930	82,480	
PT2-1218A-2PT/S	2	1,243	18’-1”	23’-9”	17’-3”	22,220	40,990	
PT2-1218A-2Q1/S	1	667	18’-1”	11’-10”	15’-9”	10,920	20,310	
PT2-1218A-2Q2/S	2	1,336	36’-1”	11’-10”	16’-9”	22,090	40,860	
PT2-1218A-2Q3/S	3	2,007	54’-2”	11’-10”	17’-3”	33,330	61,490	
PT2-1218A-2Q4/S	4	2,634	36’-1”	23’-9”	18’-3”	44,930	82,480	
PT2-1218A-2QT/S	2	1,333	18’-1”	23’-9”	17’-3”	22,220	40,990	
PT2-1218A-3K1/S	1	427	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3K2/S	2	854	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3K3/S	3	1,283	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3K4/S	4	1,687	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3KT/S	2	852	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3L1/S	1	485	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3L2/S	2	971	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3L3/S	3	1,458	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3L4/S	4	1,917	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3LT/S	2	969	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3M1/S	1	531	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3M2/S	2	1,063	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3M3/S	3	1,596	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3M4/S	4	2,099	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3MT/S	2	1,060	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3N1/S	1	569	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3N2/S	2	1,140	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3N3/S	3	1,712	54’-2”	11’-10”	18’-3”	34,170	62,330	

Continued on the next page

Special Seismic Certification
Table 8 - Certified Components (cont.)

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	Number of Cells[4]	Nominal Tonnage[7]	Dimensions [in.]			Shipping Weight [lb.][5]	Operating Weight [lb.][5,6]	Unit[8]
			Length	Width	Height			
PT2-1218A-3N4/S	4	2,252	36’-1”	23’-9”	19’-3”	46,040	83,590	Interpolated
PT2-1218A-3NT/S	2	1,138	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3O1/S	1	603	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3O2/S	2	1,207	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3O3/S	3	1,813	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3O4/S	4	2,385	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3OT/S	2	1,205	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3P1/S	1	660	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3P2/S	2	1,322	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3P3/S	3	1,986	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3P4/S	4	2,611	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3PT/S	2	1,319	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3Q1/S	1	708	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3Q2/S	2	1,418	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3Q3/S	3	2,130	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3Q4/S	4	2,801	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3QT/S	2	1,415	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3R1/S	1	750	18’-1”	11’-10”	16’-9”	11,200	20,590	
PT2-1218A-3R2/S	2	1,502	36’-1”	11’-10”	17’-9”	22,650	41,420	
PT2-1218A-3R3/S	3	2,256	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3R4/S	4	2,967	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3RT/S	2	1,499	18’-1”	23’-9”	18’-3”	22,780	41,550	
PT2-1218A-3S1/S	1	787	18’-1”	11’-10”	16’-9”	11,200	20,590	UUT F(a,b)
PT2-1218A-3S2/S	2	1,577	36’-1”	11’-10”	17’-9”	22,650	41,420	Extrapolated
PT2-1218A-3S3/S	3	2,368	54’-2”	11’-10”	18’-3”	34,170	62,330	
PT2-1218A-3S4/S	4	3,115	36’-1”	23’-9”	19’-3”	46,040	83,590	
PT2-1218A-3ST/S	2	1,574	18’-1”	23’-9”	18’-3”	22,780	41,550	

Special Seismic Certification
Table 9 - Certified Materials of Contruction

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number[1,2,3]	MOC of Structural Elements	MOC of Cold Water Basin	Unit
EVERTOUGH™ Construction	Galvanized Steel	Galvanized Steel	UUT D(a,b)
Galvanized Steel	Galvanized Steel	Galvanized Steel	interpolated
Galvanized Steel with TriArmor® Cold Water Basin	Galvanized Steel	Galvanized Steel	
Galvanized Steel with Stainless Steel Cold Water Basin	Galvanized Steel	Galvanized Steel	
Stainless Steel with TriArmor® Cold Water Basin	Galvanized Steel	Galvanized Steel	
Stainless Steel	Galvanized Steel	Galvanized Steel	UUT F(a,b)

Notes:

1. TriArmor® is a coating system. Base material is Galvanized Steel.
2. EVERTOUGH™ Construction includes TriArmor® Cold Water Basin.
3. Structural elements and cold water basins listed are manufactured by Baltimore Aircoil.

Special Seismic Certification
Table 10 - Certified Water Inlet and PT2 Water Outlet Configurations

DCL Project Number: 11654-2501

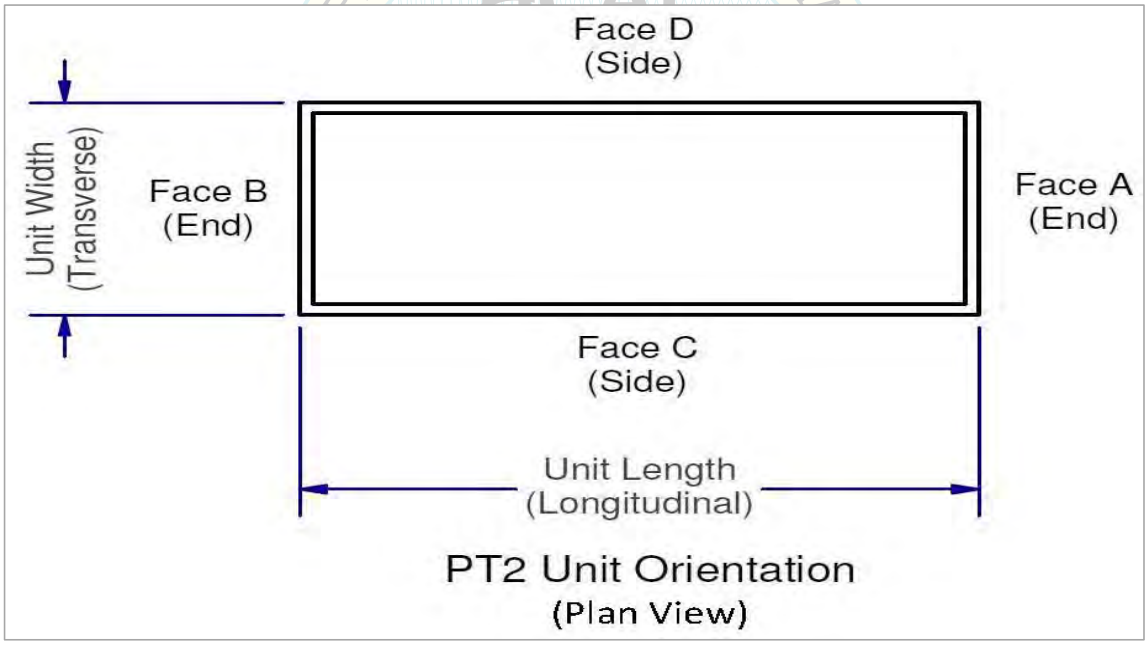
Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Water Inlet Connection Option	Unit
Face A Inlet	Extrapolated
Face B Inlet	
Face C Inlet	UUT F(a,b)
Face D Inlet	Extrapolated
Water Outlet Connection Option	**Unit**
End Face A or B Location, Pump Suction	UUT F(a,b)
Bottom Location, Pump Suction	Extrapolated
Bottom Location, Remote Sump	
Side Face C Location, Pump Suction	



Special Seismic Certification
Table 11 - Certified Water Equalizer and PT2 Water Bypass Configurations

DCL Project Number: 11654-2501

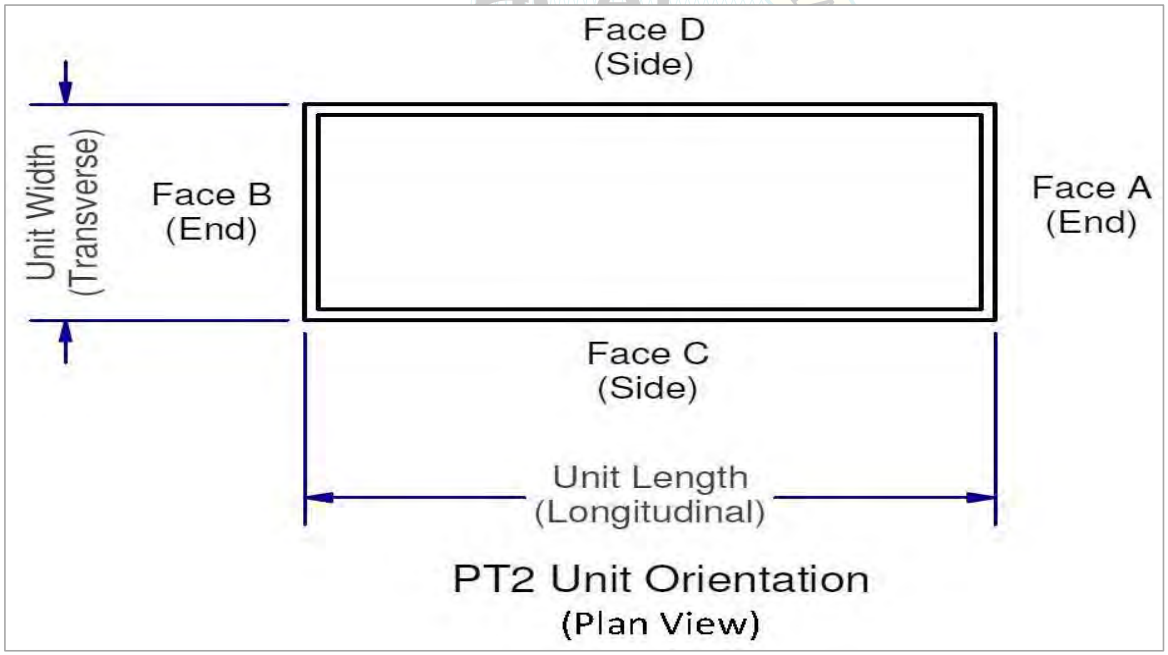
Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Equalizer Connection Option	Unit
Face A Equalizer	Extrapolated
Face B Equalizer	UUT F(a,b)
Face C Equalizer	Extrapolated
Face D Equalizer	
Bypass Connection Option	**Unit**
Face A Bypass	Extrapolated
Face B Bypass	
Face C Bypass	UUT F(a,b)
Bottom Bypass	Extrapolated



Special Seismic Certification
Table 12 - Certified Subcomponents

DCL Project Number: 11654-2501

Product Line: PT2 Open Cooling Tower

Subcomponent Type	Drive Type	HP	Voltage	Manufacturer	Material[2]	Approximate Weight [lb.]	Unit
Fan Motor	Direct	7.5	Motor voltage may be 200, 230, 230/460[1], 460, 575	Nidec	Cast Iron	100	UUT D(a,b)
	Belt	5				70	UUT G(a,b)
		7.5				100	Interpolated
		10				110	
		15				180	
		20				200	UUT F(a,b)
		25				340	Interpolated
		30				390	
		35				530	
		40				530	
		50				590	
		60				750	UUT H1(a,b)
		5		WEG		70	UUT G(a,b)
		7.5				100	Interpolated
		10				110	
		15				180	
		20				200	
		25				340	
		30				390	
		35				530	UUT F(a,b)
		40				530	Interpolated
		50				590	
		60				750	UUT H2(a,b)

Subcomponent Type	Diameter [in.]	Number of Blades	Manufacturer	Material	Approximate Weight [lb.]	Unit
Fan Motor	42	3	Multi-Wing	Glass Fiber Reinforced Plastic	9	Extrapolated
	42	5			13	UUT D(a,b)
	42	6			32	Interpolated
	84	3			74	
	84	5			107	
	92	8			150	UUT G(a,b)
	84	6	Cofimco	Aluminum	158	UUT G(a,b)
	92	4			123	Interpolated
	92	5			207	
	92	6			240	
	92	7			172	
	108	4			198	
	108	5			238	
	108	6			278	
	132	5			332	
	132	6			389	
	132	7			587	UUT H1(a,b), UUT H2(a,b)
	84	3	Howden	Glass Fiber Reinforced Plastic	142	UUT F(a,b)
	92	3			183	UUT F(a,b)
	108	3			250	Extrapolated

Note:

1. Tested motors were 230/460V dual voltage rating.
2. Fan cowl (housing) material of construction follows the structural element material of construction (galvanized and stainless steel).

Special Seismic Certification

Table 13 - Certified Options and Accessories

DCL Project Number: 11654-2501

Product Line: PT2 Open Cooling Tower

Option or Accessory	Unit
Access Door Face C	UUT G(a,b)
Access Door Face D	UUT F(a,b)
Inclined Aluminum Ladder	UUT F(a,b)
10 1/2" Fan Cylinder Extension	Interpolated
1'- 9" Fan Cylinder Extension	UUT F(a,b)
Stainless Steel Fan Guard	UUT F(a,b)
Vibration Cutout Switches	UUT F(a,b)
Mechanical Makeup[1]	UUT D(a,b)
Electric Water Level Control (EWLC) with Solenoid Valve	UUT F(a,b)
Penn F63 Float Switches	UUT F(a,b)
Stainless Steel Outlet Strainer	UUT F(a,b)
Motor Shaft Grounding Ring	UUT F(a,b)
Stainless Steel Fan Shaft	UUT F(a,b)

Note:

1. Mechanical Makeup consists of large-diameter polystyrene-filled float, adjustable linkage, and make-up valve.

Special Seismic Certification
Table 14 - Tested Units

DCL Project Number: 11654-2501

Manufacturer: Baltimore Aircoil Company, Inc

Product Line: PT2 Open Cooling Tower

Mounting: Rigid and Isolated Base Mount

Certified Seismic Levels: Sds 1.94g z/h=1.0

Model Number	Mounting Configuration	Dimensions [in.]			Weight [lb.]	Unit
		Length	Width	Height		
PC2-50-0406-7.5/S	Rigid base	6'-0"	4'-0"	17'-9 3/4"	4,199	UUT D(a)
PC2-50-0406-7.5/S	Isolated Base	6'-0"	4'-0"	17'-9 3/4"	4,199	UUT D(b)
PT2-1218A-3S1/S	Rigid base	18'-1"	11'-10"	16'-9"	20,590	UUT F(a)
PT2-1218A-3S1/S	Isolated Base	18'-1"	11'-10"	16'-9"	20,590	UUT F(b)
PT2 Open Cooling Tower (Two Fan Mechanical Section)	Rigid base	17' -11 1/2"	11'-10"	5' -0"	3,400	UUT G(a)
	Isolated Base	17' -11 1/2"	11'-10"	5' -0"	3,400	UUT G(b)
PT2 Open Cooling Tower (Single Fan Mechanical Section)	Rigid base	17' -11 1/2"	11'-10"	5' -0"	3,520	UUT H1(a)
	Isolated Base	17' -11 1/2"	11'-10"	5' -0"	3,520	UUT H1(b)
PT2 Open Cooling Tower (Single Fan Mechanical Section)	Rigid base	17' -11 1/2"	11'-10"	5' -0"	3,520	UUT H2(a)
	Isolated Base	17' -11 1/2"	11'-10"	5' -0"	3,520	UUT H2(b)

UUT D(a)

Unit Under Test Summary Sheet

Test Report: UB-SEESL-2010-12

Manufacturer: Baltimore Aircoil Company

Product Line: PC2 Evaporative Cooler

Model Number: PC2-50-0406-7.5/S

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

Nidec direct drive 7.5 HP motor, Multi-Wing 42in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
4,199	48.0	71.8	118.9	8.1	12.6	26.9

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.34	1.0	1.5	3.74	2.81	1.56	0.62

Unit Mounting Description:

UUT D(a) was rigid base mounted to the shake table interface fixture with (4) 3/4'' diameter, grade 5, bolts. Bolts were spaced at approximately 70'' in length and 46'' in width on center.

UUT D(b)

Unit Under Test Summary Sheet

Test Report: UB-SEESL-2010-12

Manufacturer: Baltimore Aircoil Company

Product Line: PC2 Evaporative Cooler

Model Number: PC2-50-0406-7.5/S

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

Nidec direct drive 7.5 HP motor, Multi-Wing 42in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
4,199	48.0	71.8	118.9	1.1	1.9	5.6

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	1.94	1.0	1.5	3.10	2.33	1.29	0.52

Unit Mounting Description:

UUT D(b) was isolated base mounted to the shake table interface fixture with (4) Mason Industries Inc. SLFADA200 isolators housing each with (2) SLF-C2 springs. Isolators were spaced at approximately 70'' in length and 46'' in width on center. The unit base was mounted to the isolator with a single 3/4'' diameter, grade 8 bolt and the isolator base was mounted to the test fixture with (2) 3/4'' diameter, grade 8, bolts each.

UUT F(a)

Unit Under Test Summary Sheet

Test Report: UB-SEESL-2010-12

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2-1218A-3S1/WQS

Product Construction Summary: Stainless Steel Frame

Options / Component Summary:

Nidec 20HP and WEG 35HP belt drive motor, Howden 84in and 92in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
22,173	107.8	94.3	118.8	6.3	3.5	8.5

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT F(a) was rigid base mounted to the shake table interface fixture with (8) 3/4'' diameter, grade 5, bolts. Bolts were spaced at approximately 53'' in length and 93'' in width on center.

UUT F(b)

Unit Under Test Summary Sheet

Test Report: UB-SEESL-2010-12

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2-1218A-3S1/WQS

Product Construction Summary: Stainless Steel Frame

Options / Component Summary:

Nidec 20HP and WEG 35HP belt drive motor, Howden 84in and 92in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
22,173	107.8	94.3	118.8	2.0	1.3	0.5

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT F(b) was isolated base mounted to the shake table interface fixture with (8) Mason Industries Inc. SLFADA350 isolator housings each with (2) SLF-109 springs. Isolators were spaced at approximately 53'' in length and 93'' in width on center. The unit base was mounted to the isolator with a single 5/8'' diameter, grade 8 bolt and the isolator base was mounted to the test fixture with (4) 5/8'' diameter, grade 8, bolts each.

UUT G(a)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Two Fan Mechanical Section)

Product Construction Summary: Galvanized Steel

Options / Component Summary:

Nidec and WEG belt drive 5HP motor, Cofimco 84in and Multi-Wing 92in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,400	215.5	142.0	60.0	9.3	15.5	12.0

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT G(a) was rigid base mounted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center.

UUT G(b)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Two Fan Mechanical Section)

Product Construction Summary: Galvanized Steel

Options / Component Summary:

Nidec and WEG belt drive 5HP motor, Cofimco 84in and Multi-Wing 92in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,400	215.5	142.0	60.0	4.0	4.0	11.0

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT G(b) was isolated base mounted. The unit was bolted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center. The interface fixture was mounted to (4) Mason Industries Inc. SLFADA350-104 isolators on the corners and (2) SLFADA350-106 isolators in the middle. The interface fixture base was mounted to the isolator with a single 5/8'' diameter, grade 8 bolt and the isolator base was mounted to the test fixture with (8) 5/8'' diameter, grade 8, bolts each.

UUT H1(a)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Single Fan Mechanical Section)

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

Nidec 60HP belt drive motor, Cofimco 132in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,520	215.5	142.0	60.0	20.3	12.8	19.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT H1(a) was rigid base mounted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center.

UUT H1(b)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Single Fan Mechanical Section)

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

Nidec 60HP belt drive motor, Cofimco 132in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,520	215.5	142.0	60.0	3.8	4.8	6.8

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT H1(b) was isolated base mounted. The unit was bolted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center. The interface fixture was mounted to (4) Mason Industries Inc. SLFADA350-104 isolators on the corners and (2) SLFADA350-106 isolators in the middle. The interface fixture base was mounted to the isolator with a single 5/8'' diameter, grade 8 bolt and the isolator base was mounted to the test fixture with (8) 5/8'' diameter, grade 8, bolts each.

UUT H2(a)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Single Fan Mechanical Section)

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

WEG 60HP belt drive motor, Cofimco 132in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,520	215.5	142.0	60.0	20.0	13.3	10.8

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT H2(a) was rigid base mounted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center.

UUT H2(b)

Unit Under Test Summary Sheet

Test Report: 10521-1202 DCL Test Report

Manufacturer: Baltimore Aircoil Company

Product Line: PT2 Open Cooling Tower

Model Number: PT2 Open Cooling Tower (Single Fan Mechanical Section)

Product Construction Summary: Galvanized Steel Frame

Options / Component Summary:

WEG 60HP belt drive motor, Cofimco 132in diameter fan

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
3,520	215.5	142.0	60.0	3.5	5.8	7.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:

UUT H2(b) was isolated base mounted. The unit was bolted to the shake table interface fixture with (116) 5/16'' diameter, grade 2, bolts. Bolts were spaced at approximately 6'' in length and 5'' in width on center. The interface fixture was mounted to (4) Mason Industries Inc. SLFADA350-104 isolators on the corners and (2) SLFADA350-106 isolators in the middle. The interface fixture base was mounted to the isolator with a single 5/8'' diameter, grade 8 bolt and the isolator base was mounted to the test fixture with (8) 5/8'' diameter, grade 8, bolts each.