



*Quality People. Building Solutions.*

Comfort Systems USA (Arkansas), Inc.  
P.O. Box 16620  
LittleRock, AR 72231  
Phone 501-834-3320  
Fax 501-834-5416

**Date:** 4/23/2026

**Return Request:** 4/30/2026

**Project:** Hot Springs National Park – Rehabilitate Bathhouses – Maurice Bathhouse

**Supplier:** Powers of Arkansas

**Manufacturer:** Vulcan

**Submittal:** Finned Tube Radiation (RAD-1-1M, RAD-1-2M, & RAD-3-1M) - (Re-Submittal #1)

**Submittal Number:** 238200.002

**Spec Section:** 238200, 2.2

**Drawing # and Installation Location:** MP1.1 and MP1.3

**ARCHITECT**

Strata Architecture  
1701 Oak Street, Suite 100  
Kansas City, Missouri 64108  
(816)474-0900

**GENERAL CONTRACTOR**

Tepa, LLC  
2345 Grand Blvd, Suite 700  
Kansas City, Missouri 64108  
(816)708-1110

**ENGINEER**

IMEG Corp.  
1600 Baltimore Street, Suite 300  
Kansas City, Missouri 64108  
(816)842-8437

**MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc.  
9924 Landers Road  
North Little Rock, Arkansas 72117  
(501)834-3320

**Comments:**

**CSUSA PROJECT NO.**

**25-7065**

**[joe@comfortar.com](mailto:joe@comfortar.com)**

9924 Landers Road  
No. LittleRock, AR 72117



## RE-SUBMITTAL

<b>PRODUCT</b>	Terminal Heat Transfer Units
<b>MANUFACTURER</b>	Vulcan
<b>JOB NAME</b>	Maurice Bathhouse Renovation
<b>LOCATION</b>	Hot Springs, AR
<b>ENGINEER</b>	IMEG Consultants Corp
<b>CONTRACTOR</b>	Comfort Systems (USA)
<b>DATE</b>	4/23/2026
<b>SUBMITTED BY</b>	Courtney Michael

5440 Northshore Drive - North Little Rock, Arkansas 72118 - Tel: 501.374.5420 Fax: 501.370.9298

\*\*Element tube size changed from 3/4" to 1" (4.25" square, 40 fins per foot)\*\*  
\*\*UH-1M changed to size 62\*\*

# CLASSIC

## Submittal

JV4/V4-ARPM/PM2  
Classic Architectural  
Copper/Aluminum and  
Steel Elements

### Specification

**JV4 Slip Jointed Enclosure**

**ENCLOSURE:**

STYLE: Classic Pedestal Mtd.  
OUTLET: Extruded Aluminum Grille  
Pencil Proof

LENGTHS: 2'0" thru 8'0" in 6" Increments

MAT'L:  16 Ga. CRS (Std)  
 14 Ga. CRS (Opt'l)  
 16 Ga. Stainless Steel (Opt'l)\*  
 14 Ga. Stainless Steel (Opt'l)\*  
 14 Ga. Aluminum (Opt'l)  
 12 Ga. Aluminum (Opt'l)  
\*Available on "J" Style only

FINISH:  Baked Powder (Std)  
 Baked Metallic

**ACCESSORIES:**

JV4 Overlapping Type  
 V4 Underlapping Type

**ELEMENT:**

TYPE:  Cu/Al (Mechanically Expanded)

LENGTHS: 2'0" thru 12'6" in 1" Increments for 1" & 1-1/4" Cu.  
2'0" thru 8'0" in 1" Increments for 3/4" Cu

One End Flared, (Std)

TYPE:  IPS Steel (Mechanically Expanded)

LENGTHS: 2'0" Thru 12'0" in 1" Increments  
 NPT Thread both Ends (Std)  
 Beveled Ends for Field Weld

See Catalog for Working Pressures

**V4 Wiped Edge Enclosure**

**BACKPLATE:** Not Applicable

**BRACKETS:**

Pedestal Brk't w/ B.B.  
Floor Mounted

**DAMPER:**

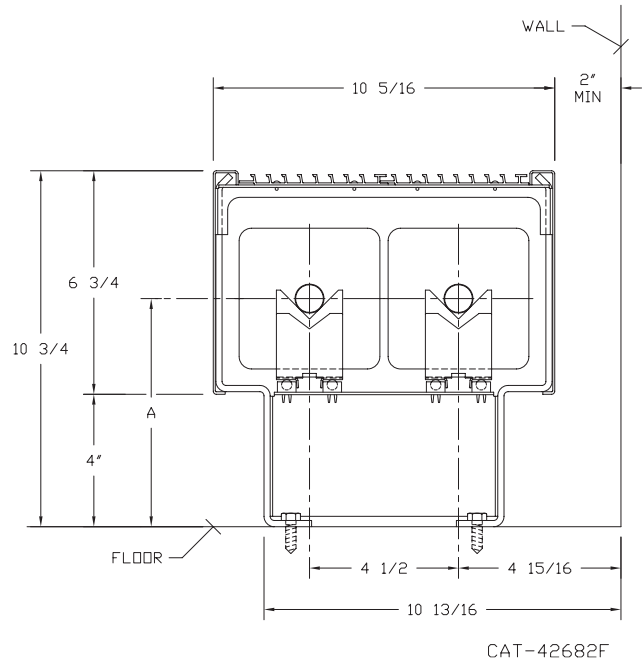
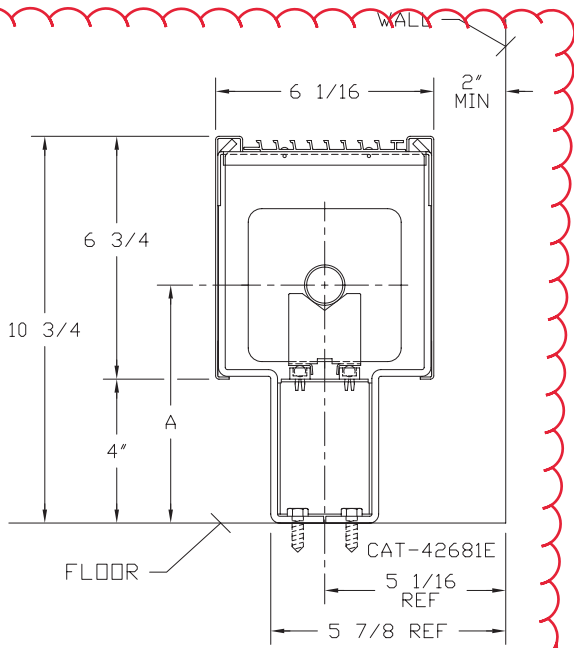
Slide Damper (Opt'l)

**\*\*Hydronic Baseboard Heaters\*\***  
RAD-1-1M (Qty 2) - 1 - 8ft section  
RAD-1-2M (Qty 2) - 2 - 8ft sections  
RAD-3-1M (Qty 2) - 3 - 6.5ft sections

**JV4-ARPM**  
**V4-ARPM**  
(JV4 Shown)

ELEMENT TUBE SIZE	FIN SIZE HEIGHT x WIDTH	CRADLE NUMBER	A
3/4 COPPER	3 5/8 x 4 1/4	2	6 7/16
3/4 COPPER	4 1/4 x 4 1/4	3A	6 13/16
1" COPPER	3 5/8 x 4 1/4	2	6 5/8
1" COPPER	4 1/4 x 4 1/4	2	6 5/8
1 1/4 COPPER	3 5/8 x 4 1/4	2	6 3/4
1 1/4 COPPER	4 1/4 x 4 1/4	2	6 3/4
1" STEEL	4 1/4 x 4 1/4	2	6 3/4
1 1/4 STEEL	4 1/4 x 4 1/4	2	6 15/16
2" STEEL	4 1/4 x 4 1/4	1	6 11/16

**JV4-ARPM2**  
**V4-ARPM2**  
(JV4 Shown)



260 North Elm St., Westfield, MA 01085  
(413) 568-9571 Fax: (413) 564-5661  
www.vulcanrad.com



PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
LOCATION: \_\_\_\_\_  
ARCHITECT: \_\_\_\_\_  
ENGINEER: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_  
PO NUMBER: \_\_\_\_\_

# STYLE JV4/V4-ARPM/PM2

## COPPER/ALUMINUM ELEMENT RATINGS

ALL RATINGS ARE BASED ON 3 FPS WATER VELOCITY, 65° EAT.

TUBE SIZE	CATALOG DESIGNATION	FIN SIZE HEIGHT X WIDTH	FIN PER FT.	FIN THICKNESS	ENCL. HEIGHT	ROWS AND CENTERS	MTG. HEIGHT	ENCL. DEPTH	STEAM RATING 215°F, 65°F E.A.T. BTU/FT/HR	HOT WATER RATINGS BTU/FT/HR AWT						
										180°	170°	160°	150°	140°	130°	120°
										0.69	0.61	0.53	0.45	.40	.33	.26
3/4"	VC3/4-433	3-5/8" x 4-1/4"	32	.020	6 3/4	1	10 3/4	6 1/16	1040	720	630	550	470	420	340	270
						2 - 4 1/2		10 5/16	2080	1440	1270	1100	940	830	690	540
3/4"	VC3/4-434	3-5/8" x 4-1/4"	40	.020	6 3/4	1	10 3/4	6 1/16	1250	860	760	660	560	500	410	330
						2 - 4 1/2		10 5/16	2490	1720	1520	1320	1120	1000	820	650
3/4"	VC3/4-435	3-5/8" x 4-1/4"	50	.020	6 3/4	1	10 3/4	6 1/16	1380	950	840	730	620	550	460	360
						2 - 4 1/2		10 5/16	2750	1900	1680	1460	1240	1100	910	720
1"	VC433	3-5/8" x 4-1/4"	32	.020	6 3/4	1	10 3/4	6 1/16	1080	750	660	570	490	430	360	280
						2 - 4 1/2		10 5/16	2170	1500	1320	1150	980	870	720	560
1"	VC434	3-5/8" x 4-1/4"	40	.020	6 3/4	1	10 3/4	6 1/16	1210	830	740	640	540	480	400	310
						2 - 4 1/2		10 5/16	2430	1680	1480	1290	1090	970	800	630
1"	VC435	3-5/8" x 4-1/4"	50	.020	6 3/4	1	10 3/4	6 1/16	1380	950	840	730	620	550	460	360
						2 - 4 1/2		10 5/16	2750	1900	1680	1460	1240	1100	910	720
1-1/4"	VC1433	3-5/8" x 4-1/4"	32	.020	6 3/4	1	10 3/4	6 1/16	1130	780	690	600	510	450	370	290
						2 - 4 1/2		10 5/16	2250	1550	1370	1190	1010	900	740	590
1-1/4"	VC1434	3-5/8" x 4-1/4"	40	.020	6 3/4	1	10 3/4	6 1/16	1240	860	760	660	560	500	410	320
						2 - 4 1/2		10 5/16	2480	1710	1510	1310	1120	990	820	640
1-1/4"	VC1435	3-5/8" x 4-1/4"	50	.020	6 3/4	1	10 3/4	6 1/16	1380	950	840	730	620	550	460	360
						2 - 4 1/2		10 5/16	2750	1900	1680	1460	1240	1100	910	720
3/4"	VC3/4-43	4-1/4" SQ.	32	.020	6 3/4	1	10 3/4	6 1/16	1150	790	700	610	520	460	380	300
						2 - 4 1/2		10 5/16	2300	1590	1400	1220	1040	920	760	600
3/4"	VC3/4-44	4-1/4" SQ.	40	.020	6 3/4	1	10 3/4	6 1/16	1380	950	840	730	620	550	460	360
						2 - 4 1/2		10 5/16	2750	1900	1680	1460	1240	1100	910	720
3/4"	VC3/4-45	4-1/4" SQ.	50	.020	6 3/4	1	10 3/4	6 1/16	1420	980	870	750	640	570	470	370
						2 - 4 1/2		10 5/16	2840	1960	1730	1510	1280	1140	940	740
1"	VC43	4-1/4" SQ.	32	.020	6 3/4	1	10 3/4	6 1/16	1150	790	700	610	520	460	380	300
						2 - 4 1/2		10 5/16	2300	1590	1400	1220	1040	920	760	600
1"	VC44	4-1/4" SQ.	40	.020	6 3/4	1	10 3/4	6 1/16	1280	880	780	680	580	510	420	330
						2 - 4 1/2		10 5/16	2560	1770	1560	1360	1150	1020	840	670
1"	VC45	4-1/4" SQ.	50	.020	6 3/4	1	10 3/4	6 1/16	1440	990	880	760	650	580	480	370
						2 - 4 1/2		10 5/16	2890	1990	1760	1530	1300	1160	950	750
1-1/4"	VC143	4-1/4" SQ.	32	.020	6 3/4	1	10 3/4	6 1/16	1200	830	730	640	540	480	400	310
						2 - 4 1/2		10 5/16	2410	1660	1470	1280	1080	960	800	630
1-1/4"	VC144	4-1/4" SQ.	40	.020	6 3/4	1	10 3/4	6 1/16	1430	990	870	760	640	570	470	370
						2 - 4 1/2		10 5/16	2860	1970	1740	1520	1290	1140	940	740
1-1/4"	VC145	4-1/4" SQ.	50	.020	6 3/4	1	10 3/4	6 1/16	1470	1010	900	780	660	590	490	380
						2 - 4 1/2		10 5/16	2940	2030	1790	1560	1320	1180	970	760

Note: Confirm temperature of air on inside of glass window at outside winter design temperature. Apply correction factor for lower entering air temperature.

## STEEL ELEMENT RATINGS\*

ALL RATINGS ARE BASED ON 3 FPS WATER VELOCITY, 65° EAT.

TUBE SIZE	CATALOG DESIGNATION	FIN SIZE HEIGHT X WIDTH	FIN PER FT.	FIN THICKNESS	ENCL. HEIGHT	ROWS AND CENTERS	MTG. HEIGHT	ENCL. DEPTH	STEAM RATING 215°F, 65°F E.A.T. BTU/FT/HR	HOT WATER RATINGS BTU/FT/HR AWT						
										180°	170°	160°	150°	140°	130°	120°
										0.69	0.61	0.53	0.45	.40	.33	.26
1"	VS43	4-1/4" SQ.	32	.032	6 3/4	1	10 3/4	6 1/16	1140	790	700	600	510	460	380	300
						2 - 4 1/2		10 5/16	2270	1570	1380	1200	1020	910	750	590
1"	VS44	4-1/4" SQ.	40	.032	6 3/4	1	10 3/4	6 1/16	1280	880	780	680	580	510	420	330
						2 - 4 1/2		10 5/16	2560	1770	1560	1360	1150	1020	840	670
1"	VS45	4-1/4" SQ.	50	.032	6 3/4	1	10 3/4	6 1/16	1360	940	830	720	610	540	450	350
						2 - 4 1/2		10 5/16	2720	1880	1660	1440	1220	1090	900	710
1-1/4"	VS143	4-1/4" SQ.	32	.032	6 3/4	1	10 3/4	6 1/16	1130	780	690	600	510	450	370	290
						2 - 4 1/2		10 5/16	2250	1550	1370	1190	1010	900	740	590
1-1/4"	VS144	4-1/4" SQ.	40	.032	6 3/4	1	10 3/4	6 1/16	1270	880	770	670	570	510	420	330
						2 - 4 1/2		10 5/16	2550	1760	1560	1350	1150	1020	840	660
1-1/4"	VS145	4-1/4" SQ.	50	.032	6 3/4	1	10 3/4	6 1/16	1330	920	810	700	600	530	440	350
						2 - 4 1/2		10 5/16	2670	1840	1630	1420	1200	1070	880	690
2"	VS242	4-1/4" SQ.	25	.032	6 3/4	1	10 3/4	6 1/16	980	680	600	520	440	390	320	250
						2 - 4 1/2		10 5/16	1960	1350	1200	1040	880	780	650	510
2"	VS243	4-1/4" SQ.	32	.032	6 3/4	1	10 3/4	6 1/16	1140	790	700	600	510	460	380	300
						2 - 4 1/2		10 5/16	2270	1570	1380	1200	1020	910	750	590

\* NPT threads furnished on steel elements. Please use domestic fittings for proper installation.

# RETURN PIPING OPTIONS WITH 3/4" & 1" COPPER TUBE ELEMENTS

