

Quality People. Building Solutions.

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

Date: 12/1/2022
Return Request: 12/11/2022
Project: New Dormitories – Bldg. 6
Supplier: Powers of Arkansas
Manufacturer: Raywall
Submittal: Unit Heater
Submittal Number: 23 82 39-01
Drawing # and Installation: Mechanical Drawings

ARCHITECT

Stocks Mann Architects
401 W. Capitol, Suite 402
Little Rock, AR 72201
501-370-9207

ENGINEER

Bernhard TME
1 Allied Drive #2600, Building 2
Little Rock, AR 72202
501-666-6776

GENERAL CONTRACTOR

Alessi Keyes Construction
10623 Maumelle Blvd.
N. Little Rock, AR 72113
501-225-6699

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

CSUSA PROJECT NO.

22-102

jon@comfortar.com

ALESSI KEYES CONSTRUCTION
REVIEWED FOR GENERAL COMPLIANCE
WITH CONTRACT DOCUMENTS
Charley Dawson 12/27/2022



IOM

PRODUCT	Electric Heaters
MANUFACTURER	Raywall
JOB NAME	Booneville HDC Building #6
LOCATION	Booneville, AR
ENGINEER	Bernhard TME, LLC
CONTRACTOR	Comfort Systems
DATE	8/2/2023
SUBMITTED BY	Courtney Michael

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

3320 SERIES

1. LOCATION OF HEATER:

- A. Heater is mounted on the wall near ceiling or floor, air flow down.

CAUTION: Do not obstruct the front grille of the heater with curtains, furniture, etc., since the proper operation of the heater requires a free flow intake and exhaust of air.

- B. Minimum mounting height is 8" above finished floor.
 C. For surface mounting use adapter AFAA/3320EX33.
 D. For semi-recessed mounting, use adaptor AFAA-2/3320EX16.

2. BEFORE MOUNTING:

- A. Insure that the supply voltage matches voltage rating on the label of the heater.
 B. Turn off electrical power to heater circuit.

3. MOUNTING INSTRUCTIONS:

- A. Disassemble heater by removing 7 screws "C" as shown in Figure 1 and 2.
 B. Flush mounting, see Fig. 1.
 Place rough-in box "A" between studs at desired height: secure to studs through holes "M". The flanges on the rough-in box must rest on the surface of the finished wall; if the box is installed prior to the application of the finished wall, allowance must be made for the wall thickness.
 C. Surface mounting, See Fig. 1.
 Insert rough-in box "A" into surface adapter "E". Secure the heater rough-in box to wall at desired height through holes "X". Be sure that the rough in box is centered in surface adapter. For surface mounting, bring wiring through bottom knockout "K" only.
 D. Semi-recessed mounting: Secure rough-in box so that the long flanges extend away from the finished wall equal to the depth of the adaptor. Bring service in through top or bottom knockout "K".
 E. Place assembly "B" into rough-in box "A". Secure with six screws "C".

4. WIRING INSTRUCTIONS REF: WD1, WD2, WD3, WD4, WD5, WD6

- A. Bring service leads through knockout "K" on top or bottom of rough-in box for flush or semi-recessed mounting, bottom knockout "K" only for surface mounting. When wiring from the bottom, install wire through cover "G" by removing screw "H".
 B. Attach service leads to two black leads on 208-240 volt models and to black and white leads on 120-277 volt models, attach ground lead to green wire with approved connectors. Comply with all national and local codes.
 C. Attach wiring compartment cover "D" to assembly with screw "C".

5. FINAL STEPS:

- A. Clean all construction dirt and debris from inside heater.
 B. Attach front grille "F" with four screws "L".
 C. Place grille frame over tabs on top of grille, snap bottom in place. For added security install screw "Q" into bottom of frame.

6. OPERATING INSTRUCTIONS:

- A. Turn on power at the circuit breaker panel.
 B. Thermostat adjustment is made by inserting a small blade screw driver through grille opening into slot in stem. Turn thermostat adjustment stem fully clockwise, this will energize the heating element and after a short delay, the fan should energize, causing warm air discharge from bottom of the grille.
 C. After the desired temperature is reached, turn thermostat stem counter clockwise until a click is heard from the thermostat.
 D. Models with double-pole thermostats: Turn thermostat adjustment stem fully counter-clockwise, this will de-energize the heating element and fan.

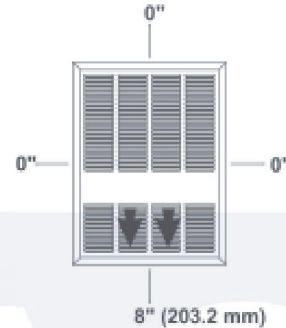
INSTALLATION INSTRUCTIONS



TPI Corporation
 P.O. Box 4973
 Johnson City, TN
 37602-4973

America's Comfort Conditioning Company

Wall Installation



7. CLEANING AND MAINTENANCE INSTRUCTIONS:

- A. At the beginning of each heating season, disconnect electrical power at circuit breaker panel. Remove front grille.
 B. Use the narrow (crevice) suction attachment of the vacuum cleaner to remove dust and lint from heater and heating element.
 C. Lubricate the motor with SAE No. 10 oil. Two (2) oil spouts are located on front and back of motor.
 D. Reinstall front grille with previously removed screws. Restore power to the heater.

FIG. 1 FLUSH MOUNT

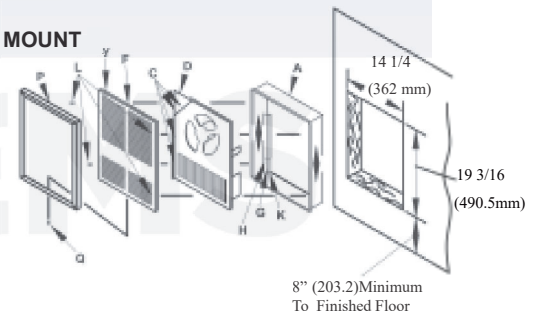
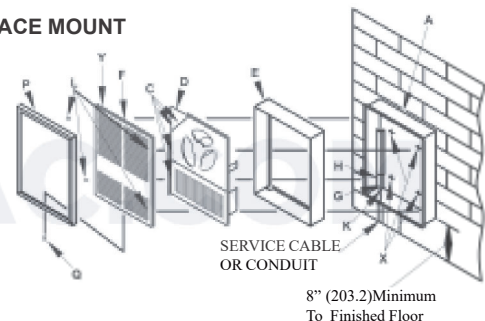


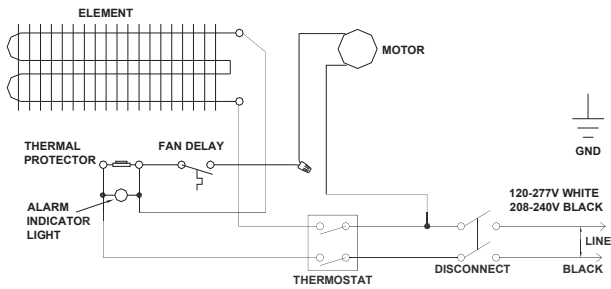
FIG. 2 SURFACE MOUNT



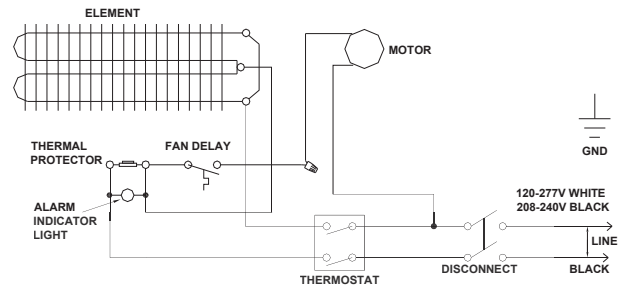
Note: This heater employs a visual alarm (light) to warn that parts of the heater are getting excessively hot. If the alarm illuminates, immediately disconnect power from heater and inspect for any objects on or adjacent to the heater that may cause high temperatures. DO NOT OPERATE HEATER WITH THE ALARM (LIGHT) ILLUMINATED.

IMPORTANT: OWNER SHOULD RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

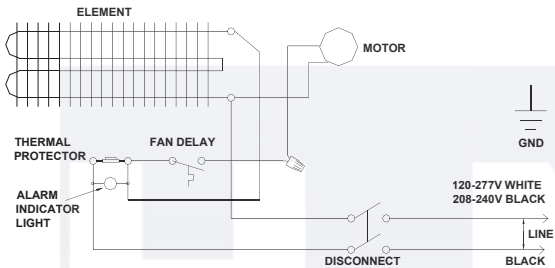
3320 SERIES



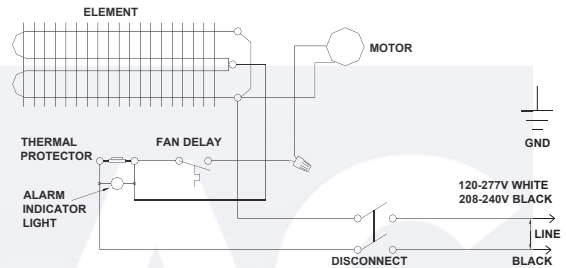
WD-1



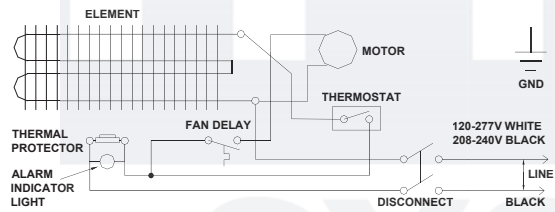
WD-5



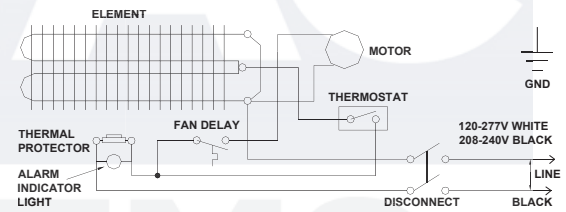
WD-2



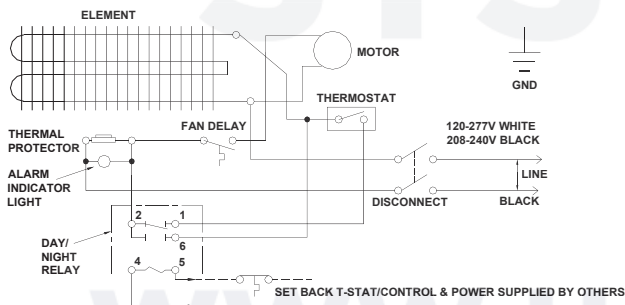
WD-6



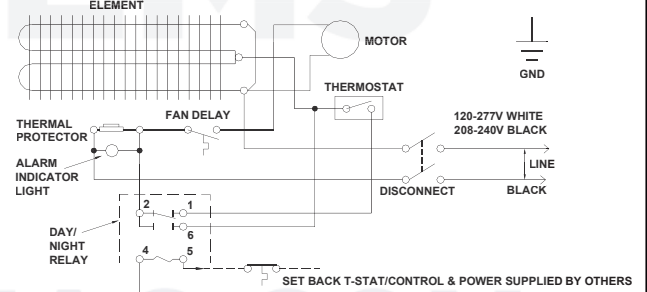
WD-3



WD-7



WD-4



WD-8

WD #	MODEL #	OPTIONS
WD-1 WD-2 WD-3 WD-4	All models except E3321, HF3325 & HF3326	3320 with Disconnect and Double Pole Thermostat 3320 with Disconnect 3320 with Disconnect and Single Pole Thermostat 3320 with Disconnect, Single Pole Thermostat and Day/Night Relay
WD-5 WD-6 WD-7 WD-8	E3321, HF3325 & HF3326	3320 with Disconnect and Double Pole Thermostat 3320 with Disconnect 3320 with Disconnect and Single pole Thermostat 3320 with Disconnect, Single Pole Thermostat and Day/Night Relay

Form 9822
ECO # 1-5800

IMPORTANT- OWNER SHOULD RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Transmittal

PROJECT: New Dormitories - Phase 2, Bldg. 6
Booneville Human Development Center
Booneville, Arkansas

SMA PROJECT NO: 2002B

DATE: January 20, 2023

TO: Alessi Keyes Construction
10623 Maumelle Blvd.
North Little Rock, AR 72113

If enclosures are not as noted, please
inform us immediately.

If checked below, please:

ATTN: Charley Dawson

Acknowledge receipt of enclosures.

Return enclosures to us.

WE TRANSMIT:

Herewith

Under separate cover

VIA:

Courier

Mail

E-mail

Overnight delivery

Fax

Other

FOR YOUR:

Approval/Action

Information

Use as requested

Review & comment

Use

Other

THE FOLLOWING:

Drawings

Specifications

Digital Files - PDF

Submittals

Proposal Request

Digital Files - Other

Change Order

Samples

Other

COPIES	DATE	REV. NO.	DESCRIPTION	ACTION CODE
1	1/20/2023		Unit Heaters	A

ACTION A. No action required

C. For signature and return to this office

E. See REMARKS below

CODE B. Action indicated on item transmitted

D. For signature and forwarding as noted below under REMARKS

REMARKS

COPIES TO:

(with enclosures)

Rex Morris, Morris AE

By: Randy Stocks

Submittal Comment Sheet

To: Randy Stocks, Stocks-Mann Architects
From: Matthew Wendel, BTME
Date: January 20, 2023
Project: Booneville HDC Building #6
Project #: 01-20-0003
Ref: 23 82 39 Unit Heater Submittal
Submitted By: Alessi Keyes Construction

APPROVED	<input type="checkbox"/>
REJECTED	<input type="checkbox"/>
REVISE AND RESUBMIT	<input type="checkbox"/>
REFER TO SUBMITTAL COMMENT SHEET	<input checked="" type="checkbox"/>

This review performed by Bernhard TME, LLC, is only for general conformance with the design concept of the project and general compliance with the information provided in the Contract Documents. Corrections or comments made on the submittal and/or shop drawings during this review do not relieve the Contractor from compliance with the requirements of the plans, specifications, and other contract documents. Approval of a specific item shall not indicate an approval of an assembly of which the item is a component. Contractor is responsible for the following: all quantities; configuration of components; dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work with that of all other trades; and, for performing all work in a safe and satisfactory manner.

Bernhard TME
Engineering

DATE: 01/20/23 BY: M. Wendel

Below find our response for the submittal received on Tuesday, December 27, 2022.

1. Unit Heaters EH-601 through EH-605

APPROVED

- End of Submittal Comments -

THIS REVIEW PERFORMED BY BERNHARD TME, LLC, IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. CORRECTIONS OR COMMENTS MADE ON THE SUBMITTAL AND/OR SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS. APPROVAL OF A SPECIFIC ITEM SHALL NOT INDICATE AN APPROVAL OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING: ALL QUANTITIES; CONFIGURATION OF COMPONENTS; DIMENSIONS TO BE CONFIRMED AND CORRELATED AT THE JOBSITE; INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESS OR TO THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION; COORDINATION OF THE WORK WITH THAT OF ALL OTHER TRADES; AND, FOR PERFORMING ALL WORK IN A SAFE AND SATISFACTORY MANNER.



SUBMITTAL SHEET

Alessi Keyes Construction Co.
AKC-505 - Booneville HDC New Dorm

Project: AKC-505
Booneville HDC New Dorm

Spec Section Num: 23 82 39
Submittal: 23.16
Revision: 0
Package: HVAC
Date: 1/3/2023 UTC

Submittal Title: Unit Heaters
Submittal Detail:
Response Due By: 1/11/2023 UTC

Contractor:
Charley Dawson
Alessi-Keyes Construction Co.

Contractor's Stamp

Architect:
Trey Tassin
Stocks-Mann Architects

Architect's Stamp

Response:
Comment:

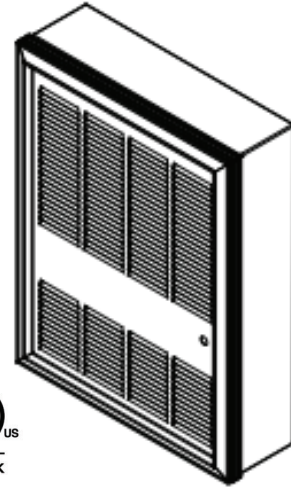


SUBMITTAL

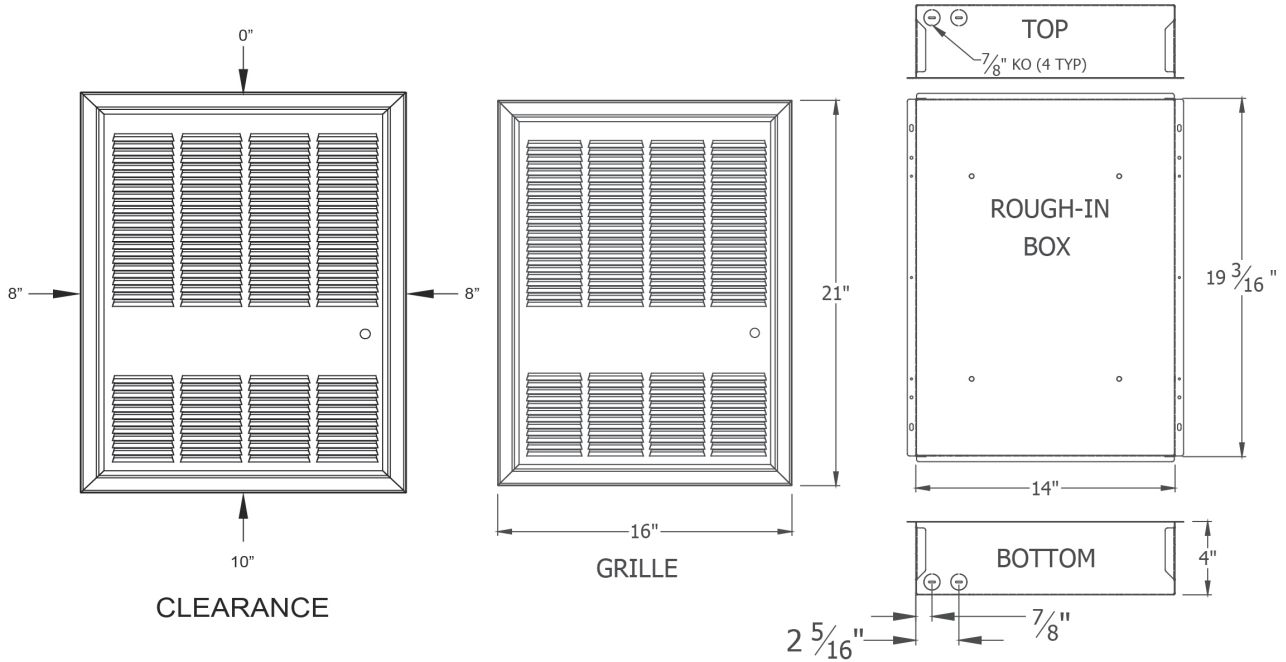
PRODUCT	Electric Heaters
MANUFACTURER	Raywall
JOB NAME	Booneville HDC Building #6
LOCATION	Booneville, AR
ENGINEER	Bernhard TME, LLC
CONTRACTOR	Comfort Systems
DATE	11/21/2022
SUBMITTED BY	Courtney Michael

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

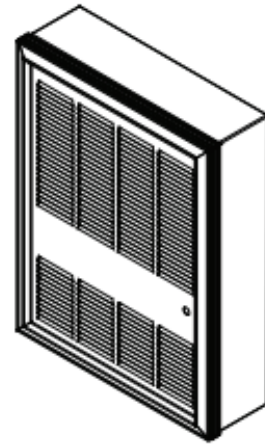
SALES ORDER NO.		QUOTE	7GLWD
CUSTOMER		DATE:	11/19/2022
PROJECT	New Job		
SALES REP			
ENGINEER			
CONTRACTOR			
SUBMITTED BY	Powersar		
APPROVED BY			
APPROVED BY			



SUBMITTAL DATA SHEET										
QTY	MODEL	TAG	WATTAGE	VOLTS	PHASE	AMPS	CFM	DISCONNECT	THERMOSTAT	OPTIONS
5	AFA107D		750	120	1	6.25	175	Yes	Single Pole Tstat	3320EX33
NOTES/SPECIAL INSTRUCTIONS:										



- Heavy 18 gauge steel construction (16 gauge grille optional)
- Powder coated paint finish
- Steel block fin element
- All units equipped with automatic over-heat limit protection
- Vane axial fan blade produces 175 CFM
- Dual wattage and voltage units available for 208/240 volts
- Surface Mounting Frame (shown) available for non-recessed applications
- Factory installed Tamper-Proof Thermostats, Fan Delay, and Disconnect included



MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	BTUs	VOLTS	AMPS	WT. (LBS)	
IN-BUILT SINGLE POLE TAMPERPROOF THERMOSTAT(0° - 110° TEMPERATURE RANGE) FOR DOUBLE POLE THERMOSTAT REPLACE "T" IN MODEL WITH "T2" - Add \$50							
03820502	AFA107D	750	2560	120	6.25	26	
03819902	AFA110D	1000	3413		8.3		
03808802	AFA115D	1500	5120		12.5		
03809302	AFA840D	4000	13800	208	19.2		
03810202	AFA848D	4800	16560		23		
03809402	AFA215D	1500 / 1125	5120 / 3840	240 / 208	6.2 / 5.4		27
03809502	AFA220D	2000 / 1500	6284 / 5120		8.3 / 7.2		
03809602	AFA230D	3000 / 2250	10350 / 7763		240 / 208	12.5 / 10.8	29
03809702	AFA240D	4000 / 3000	13800 / 10350			16.7 / 14.4	
03810302	AFA248D	4800	16560	240	20	29	
03809802	AFA715D	1500	5120	277	4.1		
03809902	AFA720D	2000	6284		7.2		
03810002	AFA730D	3000	10350		10.8		
03810102	AFA740D	4000	13800		14.4		
03810402	AFA780D	4800	16560		17.3		
03980702	AFA840D-3*	4000	13800	208	11.11	30	
03980802	AFA240D-3*	4800	16560		13.33		
03980902	AFA848D-3*	4000	13800	240	9.64		
03981002	AFA248D-3*	4800	16560		11.57		

* Indicates 3-Phase models. All other models are 1-Phase.

Accessories

MFG CATALOG NUMBER	MFG MODEL NUMBER	DESCRIPTION	TYPE	WT. (LBS)
03778502	BOX AFA	Additional Rough-in Box	Field Installed	3
03784502	AFAEX33	4" Surface Mounting Frame		1
03829302	AFAEX16	2" semi recess extender		1
-----	Suffix - HD	16 Gauge Steel Heavy Duty Grill	Factory Installed	2

Product Specifications

Furnish and install Heavy-Duty Forced Air wall heaters, where specified. The heaters shall be constructed of a heavy 18 gauge steel housing with an extruded Aluminum frame. The rough-in dimensions are 14 1/8" Wide x 19 1/2" High x 4" Deep. The units shall be available in ratings from 750 to 4800 Watts at 240, 208, and 277 Volts. The heaters shall have a low-speed 600 RPM, 4-pole motor which drives a vane axial blower to deliver a quiet 175 CFM of down flow air. The heating element shall be of the sealed tubular type with large, parallel steel fins for quick heat transfer. Unit shall have as a standard, a thermal overload cut-off for added safety, fan delay switch and builtin tamper proof thermostat which shall be calibrated to provide a range of 0°F. to 110°F. and manual disconnect switch. Optional accessories shall include a surface and semi-recess mounting adapter. All heaters shall be listed by ETL. The heating element shall be supplied with a manufacturers 1-year limited warranty

Unit Heaters

Alessi Keyes Construction Co.

AKC-505 - Booneville HDC New Dorm



Comments

Unit Heaters

Alessi Keyes Construction Co.

AKC-505 - Booneville HDC New Dorm



History

**JANUARY 3,
2023 UTC**

Trey Tassin (Stocks-Mann Architects) - VIEWED
3:22 PM UTC

**DECEMBER 27,
2022 UTC**

Charley Dawson (Alessi-Keyes Construction Co.) - IN REVIEW
6:10 PM UTC

Charley Dawson (Alessi-Keyes Construction Co.) - MODIFIED
6:10 PM UTC

Due from Approver:

Old:

New: 1/11/23 UTC

Due Date:

Old:

New: 1/11/23 UTC

In Review Date:

Old:

New: 12/27/22 UTC

Updated On:

Old: 12/27/22 at 6:08:39 PM UTC

New: 12/27/22 at 6:10:48 PM UTC

CC Participants:

Old:

New: Bernhard TME Project, Randy Stocks

Additional Approvers:

Old:

New: Garrett Thompson

Assigned From:

Old: Matthew Aldridge

New: Charley Dawson

Assigned To:

Old: Charley Dawson

New: Trey Tassin

Approver:

Old:

New: Trey Tassin

Charley Dawson (Alessi-Keyes Construction Co.) - UPLOADED
FileName: 23 82 39 - Unit Heaters.pdf

6:10 PM UTC

Charley Dawson (Alessi-Keyes Construction Co.) - SUBMITTED
6:08 PM UTC

Charley Dawson (Alessi-Keyes Construction Co.) - MODIFIED
6:08 PM UTC

Submitted Date:

Old:

New: 12/27/22 UTC

Updated On:

Unit Heaters

Alessi Keyes Construction Co.

AKC-505 - Booneville HDC New Dorm



Old: 12/27/22 at 6:08:23 PM UTC

New: 12/27/22 at 6:08:39 PM UTC

Assigned From:

Old: Charley Dawson

New: Matthew Aldridge

Assigned To:

Old: Matthew Aldridge

New: Charley Dawson

Charley Dawson (Alessi-Keyes Construction Co.) - ISSUED

6:08 PM UTC

Charley Dawson (Alessi-Keyes Construction Co.) - MODIFIED

6:08 PM UTC

Issued Date:

Old:

New: 12/27/22 UTC

Updated By:

Old:

New: Charley Dawson (Alessi-Keyes Construction Co.)

Updated On:

Old:

New: 12/27/22 at 6:08:23 PM UTC

Assigned From:

Old:

New: Charley Dawson

Assigned To:

Old:

New: Matthew Aldridge

Charley Dawson (Alessi-Keyes Construction Co.) - VIEWED

6:08 PM UTC

Charley Dawson (Alessi-Keyes Construction Co.) - CREATED

5:42 PM UTC