



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: 7/27/2026

Return Request: 8/3/2026

Project: Hot Springs National Park – Rehabilitate Bathhouses – Buckstaff Bathhouse

Supplier: Boone & Boone

Manufacturer: Bell & Gossett

Submittal: Heat Exchangers for HVAC (HX-1) (Re-Submittal #1)

Submittal Number: 235700.001

Spec Section: 235700

Drawing # and Installation Location: M4-1

ARCHITECT

Kenneth Hahn Architects, Inc.

1343 S. 75th Street

Omaha, Nebraska 68124

(402)391-2111

GENERAL CONTRACTOR

Tepa, LLC

2345 Grand Blvd, Suite 700

Kansas City, Missouri 64108

(816)708-1110

ENGINEER

Alvine Engineering

1201 Cass Street

Omaha, Nebraska 68102

(402)346-7007

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.

9924 Landers Road

North Little Rock, Arkansas 72117

(501)834-3320

Comments:

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CSUSA PROJECT NO.

25-7065

joe@comfortar.com

9924 Landers Road
No. LittleRock, AR 72117

Date: 7/27/2026

To: Tepa Construction Solutions – Chris Glotzbach

From: Comfort Systems USA (Arkansas), Inc. – Joe Loomis

Re: Submittal # 23 57 00-1.3A – Heat Exchanger Product Data (Buckstaff Bathhouse)

To Whom It May Concern:

Bell & Gossett has added some comments for the Buckstaff Heat Exchanger (HX-1) re-submittal #1. Please see below...

1. The specified thermal water heat exchange was inadvertently listed with the incorrect pressure drop on the warm and cool side of the heat exchanger schedule. The pressure drop should have read 10 ft., hd. versus 15 ft. hd. Revise and resubmit with a pressure drop of 10 ft. hd. maximum on both the warm and cool sides of the heat exchanger.

- **We have changed the allowable pressure drop to 10'. Please review the revised submittal data sheet and drawing attached.**

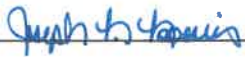
2. The submitted thermal water heat exchanger as submitted is being provided as a single-pass with 23-channels which requires 47-plates. The specified heat exchanger was selected as a 2-pass heat exchanger requiring only 10-channels. Please revise and resubmit to match the heat exchanger specified.

- **Per Bell & Gossett, a 2-Pass AP20 is not a realistic choice due to the pressure drop criteria stated. The pressure drop would be over 45 psi (104 ft) on both the hot and cold side.**

3. The submitted thermal water heat exchanger as submitted is being provided with NPT threaded connections while the specified heat exchanger was specified with flanged connections

- **Steel 150# ANSI flanged connections have been added. Please review the revised submittal data sheet and drawing attached. This change will increase delivery from 6 weeks to 12 weeks.**

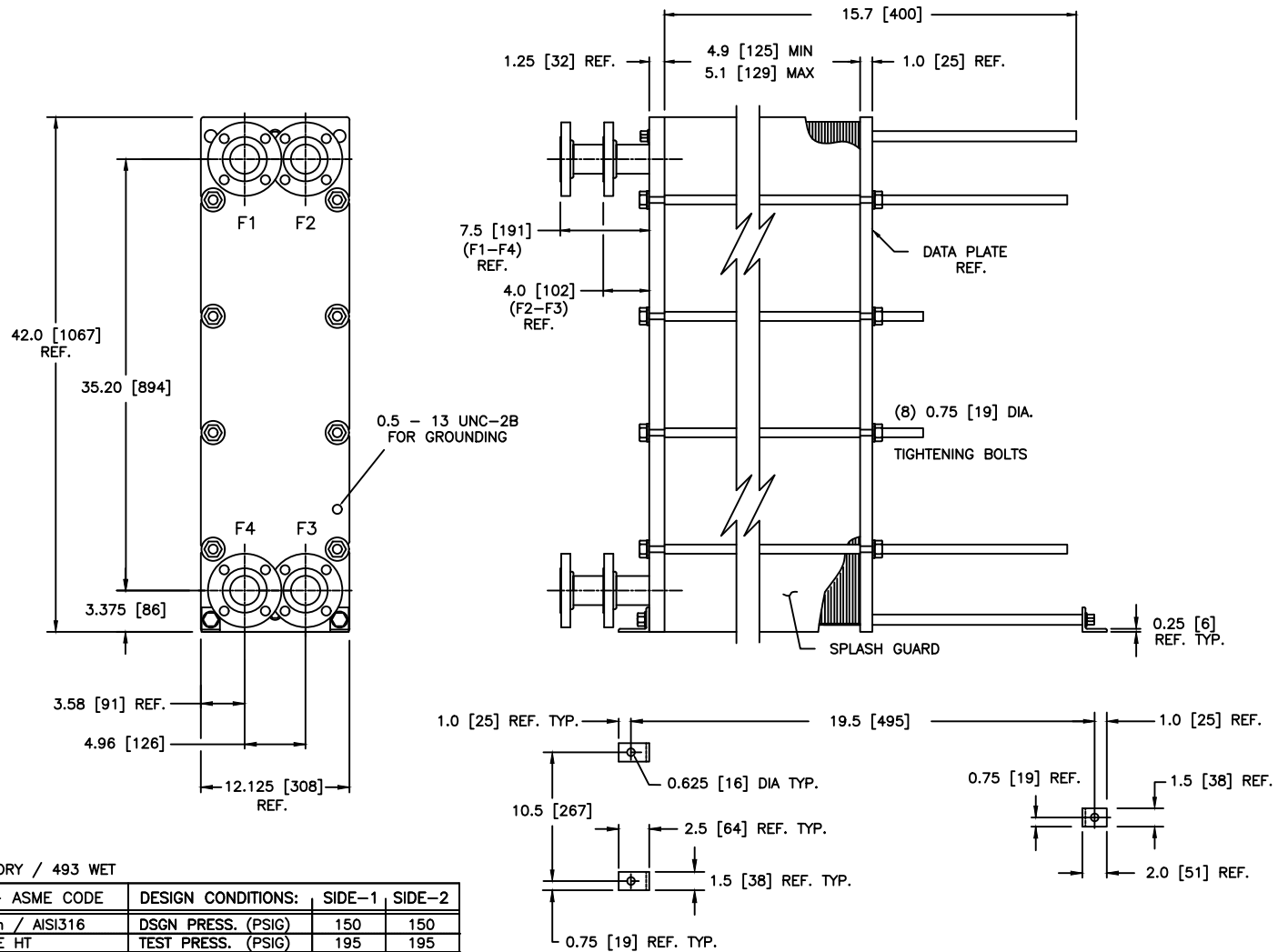
Thank you,



Joe Loomis, Project Manager

REV NO.	REVISION NOTE	REV BY	REV DATE

NOTE(s): 1. Dimensions shown in inches (in.)



EST. WEIGHT (LBS): 452 DRY / 493 WET

UNIT CONSTRUCTION - ASME CODE	DESIGN CONDITIONS:	SIDE-1	SIDE-2
THERMAL PLATES: 0.5mm / AISI316	DSGN PRESS. (PSIG)	150	150
GASKET TYPE: NITRILE HT	TEST PRESS. (PSIG)	195	195
PLATE MIXTURE: TL	DSGN TEMP. (°F)	284	284
MIX (SIDE 1): 1 * 21	MIN. TEMP. (°F)	32	32
MIX (SIDE 2): 1 * 21			
PLATE QUANTITY: 43 / 49 MAX	PORT IDENTIFICATION	CONNECTION - TYPE AND DESCRIPTION	
CARRY BAR LGTH: 400mm	F1	SIDE-1 IN	
CARRY BAR MTL: SS	F4	SIDE-1 OUT	
TIE BOLTS: STEEL (ZINC PLATED)	F3	SIDE-2 IN	
SPLASH GUARD: ALUMINUM	F2	SIDE-2 OUT	

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MADE: ITT 07/23/26
CHK: HT 07/23/26

Bell & Gossett
Buffalo, NY 14227 USA

MODEL AP20

2025-1-15-7:18 -00

ORDER NO.

REV.

Bell & Gossett GPX™

Gasketed Plate Heat Exchanger Specification Sheet

175 Standard Parkway
Cheektowaga, New York 14227
1-888-488-4404
www.xylem.com/bellgossett

Customer Hot Springs National Park
Inquiry Number 2025-1-15-7:18

Date Thursday, July 23, 2026
Item Number

Performance of One Unit: AP20 PN: BY5444

Units Connected in Parallel: 1

Fluid Name	Water	Water
Total Flow	25.00 GPM	25.00 GPM
Inlet Temperature	135.00 °F	105.00 °F
Outlet Temperature	110.00 °F	129.97 °F
Operating Pressure	0.00 PSIG	0.00 PSIG
Pressure Drop, Allow./Calc	10.00/3.33 ftH2O	10.00/3.34 ftH2O
Density	61.62 lb/ft3	61.70 lb/ft3
Viscosity	0.57 cp	0.60 cp
Specific Heat	1.00 Btu/lbm,°F	1.00 Btu/lbm,°F
Thermal Conductivity	0.37 Btu/ft,h,°F	0.37 Btu/ft,h,°F
Specified Fouling Factor	0.00010 hr,ft2,°F/Btu	0.00010 hr,ft2,°F/Bt
Total Heat Exchanged	309,237.60 Btu/h	
LMTD	5.02 °F	
Overall Heat Transfer Coefficient, Clean/Dirty	780.76/675.31 Btu/hr,ft2,°F	
Overall Heat Transfer Coefficient, Service	664.83 Btu/hr,ft2,°F	
Effective Surface Area	92.68 ft2	
Excess Surface	1.56 %	

Construction

Number of Passes * Channels	1 * 21	1 * 21
Total Number of Plates	43	
Pressure, Design/Test	150/195(PSIG)	150/195(PSIG)
Design Temperature, min/max	32/284(°F)	32/284(°F)
Internal Volume	0.33(ft3)	0.33(ft3)
Inlet Connection(Location)	F1, steel 150# ansi flange 2.00 "	F3, steel 150# ansi flange 2.00 "
Outlet Connection(Location)	F4, steel 150# ansi flange 2.00 "	F2, steel 150# ansi flange 2.00 "

Plate Material	316
Plate Thickness	0.50 mm
Plate Mix	TL
Gasket Material	NITRILE HT
Empty/Flooded Weight	452 / 493 lb
Frame Size / Max. Frame Capacity	15.75 inch / 49 plates
Overall L X W X H	15.75 X 12.12 X 42.00 inch
'A' Min/Max	4.9 / 5.1 inch
Approvals	ASME Sect VIII Div 1 w/U stamp.
Notes	This heat exchanger is certified by the AHRI Liquid to Liquid heat exchangers certification program based on AHRI Standard 400. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third party verified. Certified units may be found in the AHRI directory at www.ahridirectory.org .

Note: Customer to verify fluid/material compatibility.
Performance evaluation is dependent on customers' ability to provide sufficiently accurate measurements.

