

DRAWING / PROJECT APPROVAL

☐ ISSUED FOR APPROVAL DATE: \_\_\_\_\_ BY: \_\_\_\_\_

☐ REVISE AS NOTED AND RETURN FOR APPROVAL

☐ APPROVED FOR CONSTRUCTION AS DRAWN

PLEASE INDICATE ABOVE, SIGN AND RETURN

RETURNED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

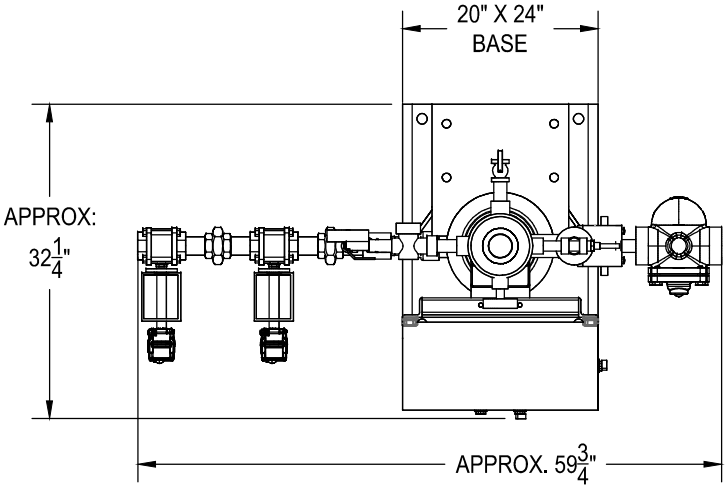
It is the sole responsibility of the purchaser to assure that this drawing fully complies with any / all specifications and conditions of service when approving for construction. Approval for construction is an agreement that this system, as presented in this drawing fully complies.

Material procurement and construction will NOT begin until we receive your final drawing approved for construction without pending changes. Quoted delivery lead times are based from the end of the drawing approval process. If you require procurement to begin prior to drawing approval, make commitments and arrangements with your sales person.

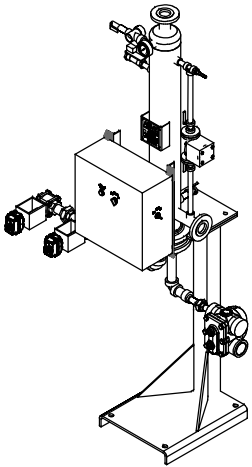
- GENERAL NOTES:
- 100% FACTORY TESTED BEFORE SHIPMENT
  - SINGLE SEATED SEGMENTED V CONTROL VALVE FOR DEAD TIGHT SHUTOFF ON NO LOAD CONDITIONS. 300:1 TURNDOWN
  - 316L STAINLESS STEEL SHELL CONSTRUCTION
  - FULL SELF TUNING PID DIGITAL CONTROLS
  - DOUBLE SAFETY SOLENOID SAFETY HIGH LIMIT SYSTEM FAIL SAFE TEMPERATURE CONTROLLER AND CONTROL VALVE
  - MOUNTING FRAME INCLUDED
- INSTALLATION NOTES:
- BLEND VALVE RECOMMENDED WITH 140F OR HIGHER SET POINT.
  - ALL DIMENSIONS TO HAVE  $\pm\frac{1}{2}$ " TOLERANCE
  - WHEN USING A FLOAT & THERMOSTATIC STEAM TRAP, THE CONDENSATE MUST DRAIN BY GRAVITY TO A VENTED RECEIVER. NO CONDENSATE LIFT OR BACK PRESSURE ALLOWED FROM TRAP OUTLET.
  - PROPERLY SIZED STRAINER WITH 100 MESH SCREEN MUST BE INSTALLED WITHIN 3FT OF THE CONTROL VALVE.
  - PIPE NOZZLES "G", "H", AND "K" TO A SUITABLE DRAIN BY OTHERS.
  - NOZZLES WILL NOT SUPPORT EXTERNAL LOADINGS. FIELD SUPPORT BY OTHERS.
  - CONTROL VALVE, STEAM TRAP AND GAUGES, SHIPPED LOOSE FIELD INSTALLED BY OTHERS.
  - STEAM SUPPLY TO THE CONTROL VALVE SHOULD BE SIZED FOR NO MORE THAN 10,000 FPM TO AVOID HIGH PRESSURE DROPS.
  - MAIN DRIP STEAM TRAP MUST BE LOCATED DIRECTLY AT THE CONTROL VALVE INLET.
  - CONTROL VALVE MUST BE INSTALLED, AS SHOWN, ON IT'S SIDE. VALVE CONTROL ELECTRONICS ARE NOT INSULATED.

MODEL	STANDARD DIMENSIONS									STANDARD WEIGHTS (LBS)		
SELECTION	MODEL	"AA"	"BB"	"CC"	"DD"	"EE"	"FF"	"GG"	SHIPPING	DRY	FLOODED	SHIPPING
	648 SINGLE WALL	106.75	56.75	40.94	32.19	90.25	48.00	56.75	4'X10'X4'	495	560	720
	648 DOUBLE WALL	106.75	56.75	40.19	31.44	90.25	48.00	56.75	4'X10'X4'	555	620	780

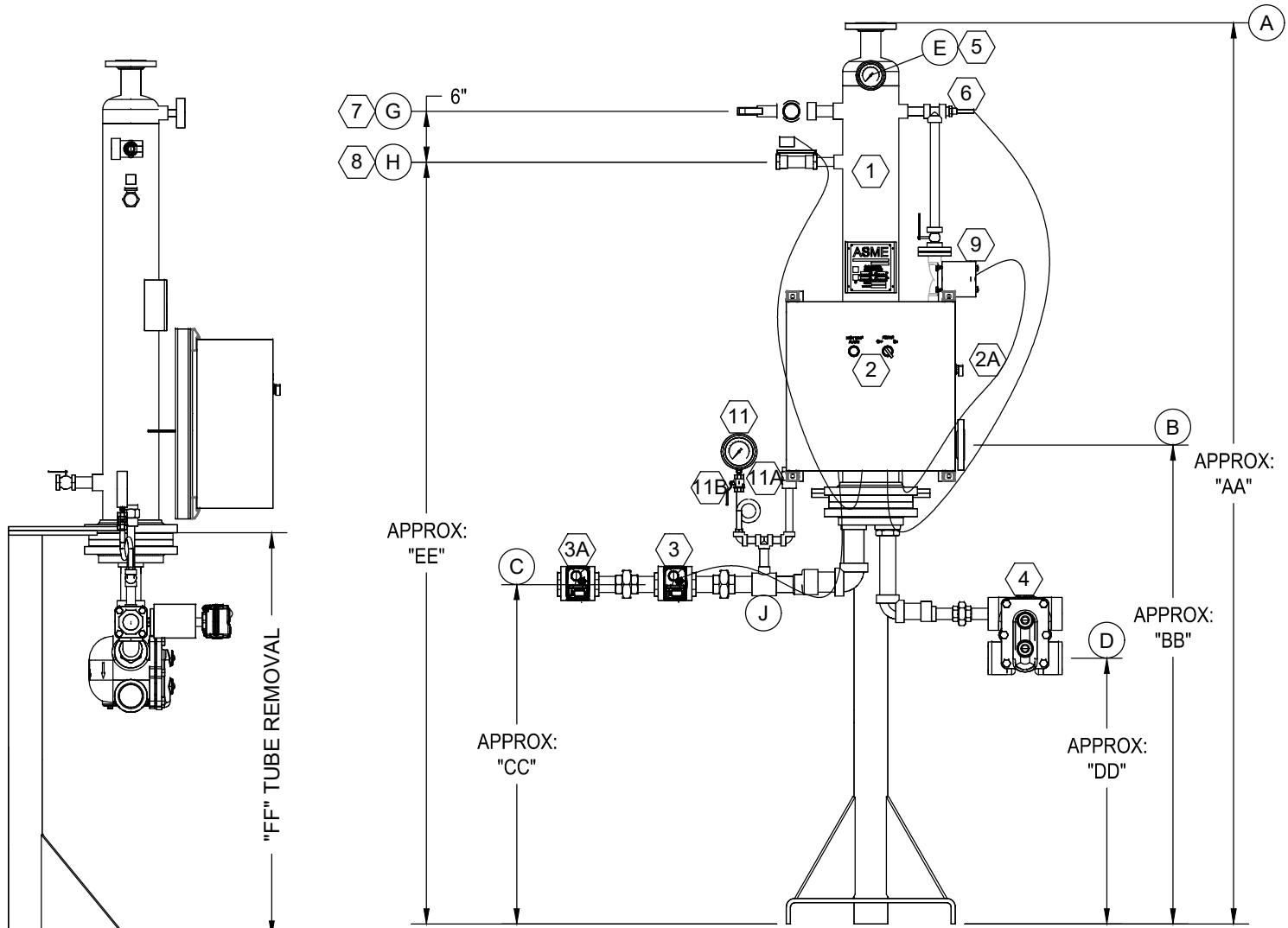
DO NOT SUBJECT EQUIPMENT TO FREEZING TEMPERATURES OR OUTDOOR CONDITIONS



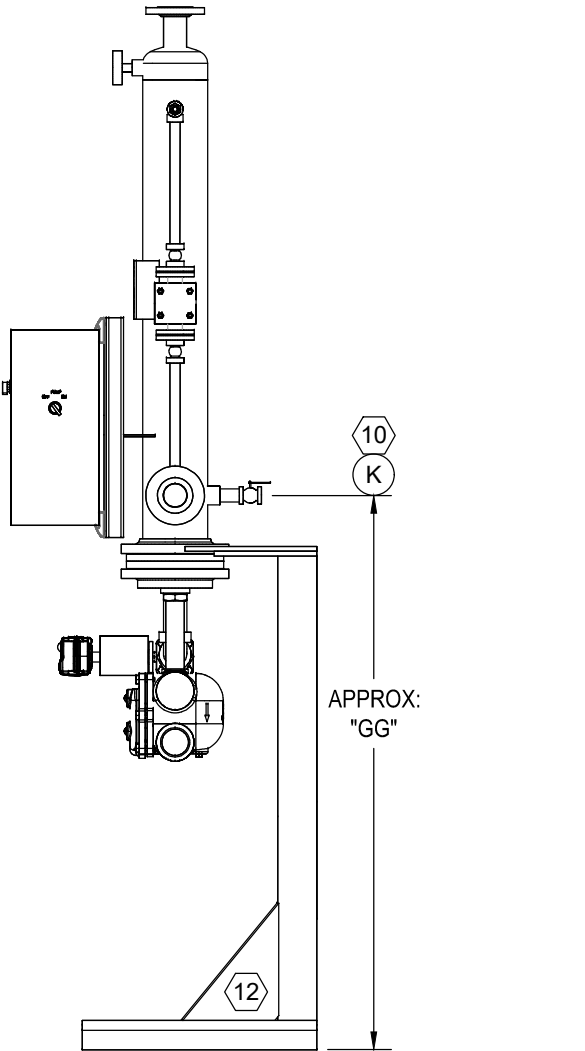
PLAN VIEW



ISOMETRIC VIEW



FRONT VIEW



RIGHT SIDE VIEW

DIM TOL= +/- 1/2"

DESIGN DATA			
ASME CODE SECTION VIII, DIV. 1 STAMP UM			
SHELL RATED	150 PSI @ 375F		
TUBE RATED	150 PSI @ 375F		
CONDITION OF SERVICE AND PERFORMANCE DATA			
FLOW RATE (gpm)	GPM		
INLET TEMPERATURE (Deg. F)	°F		
OUTLET TEMPERATURE (Deg. F)	°F		
INLET STEAM PRESSURE (PSI)	PSIG		
STEAM CAPACITY REQ. (LBS/HR)	LBS/HR		
SEE QUOTE			
MATERIALS of CONSTRUCTION			
SHELL	316L STAINLESS STEEL		
TUBES			
TUBESHEET (OUTER)(DOUBLE WALL ONLY)			
TUBESHEET (INNER)			
STEAM HEAD	CAST IRON		
BILL of MATERIALS			
ITEM	SIZE SELECTION	DESCRIPTION	
1	BUNDLE	6"ø X 48" SHELL (ASME CODE STAMPED), 1 1/2" OF GLASS INSULATION & VINYL JACKET	
2		THERMAFLO ELECTRONIC CONTROLLER, UL LISTED, PID ELEC. TEMP. CONTROL, W/ SAFETY SHUTDOWN AND OPERATION INDICATOR LIGHTS	
2A	STANDARD	1/2" UL LIQUIDTIGHT FLEXIBLE STEEL CONDUIT, TYPE LFMC	
3		THERMAFLO JVV-VBALL STEAM CONTROL VALVE, STAINLESS, W/FAIL SAFE ACTUATOR	
3A		THERMAFLO BVV-VBALL STEAM SAFETY SHUTDOWN VALVE, STAINLESS, W/FAIL SAFE ACTUATOR	
4		THERMAFLO FLOAT AND THERMOSTATIC STEAM TRAP	
5	STANDARD	TEMPERATURE GAUGE, 0-250F, SS WELL	
6	STANDARD	1/2" RTD, 4-20ma OUTPUT FROM CONTROLLER	
7	STANDARD	1" 18C5225150 PRESSURE & TEMP. RELIEF VALVE, SET @ 150 PSI @ 210F, RATED @ 3,625,000 BTU.	
8	STANDARD	3/4" HIGH-TEMP. DUMP SOLENOID	
9	STANDARD	3/4" SHELL RE-CIRCULATION PUMP	
10	STANDARD	1" THERMAFLO 3700 BALL VALVE, FULL PORT, STAINLESS STEEL	
11	STANDARD	4.5" DIAL PRESSURE GAUGE 0-30 PSIG W/ SYPHON	
11A	STANDARD	3/4" THERMAFLO VACUUM BREAKER	
11B	STANDARD	1/4" THERMAFLO 3700 BALL VALVE, FULL PORT, STAINLESS STEEL	
12	STANDARD	THERMAFLO CARBON STEEL STAND	
NOZZLES & CONNECTIONS			
ITEM	SIZE (IN)	TYPE	SERVICE
A	2	FLG	HOT WATER OUTLET
B	2	FLG	COLD WATER INLET
C		NPT	STEAM INLET
D		NPT	CONDENSATE OUTLET
E	3/4	NPT	GAUGE
G	1	NPT	RELIEF VALVE
H	3/4	NPT	DUMP SOLENOID
J	3/4	NPT	GAUGE
K	1	NPT	DRAIN

TAG:

#	DATE	REVISION	BY
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Since 1986

THERMAFLO

INC.

Manufacturers Of Steam Fired Specialty Equipment

2880 Fair Avenue, Newberry, SC 29108

(704) 940-1228    [www.thermafloengineering.com](http://www.thermafloengineering.com)

DESCRIPTION:  
TH750V-6"-EC800-2 STEAM FIRED DOMESTIC WATER HEATER

CUSTOMER:	JOB #	QTY.	DATE: 06-01-19
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SCALE:	DRAWN: RSP	PO #	PLAN #	FILE: SAME	REV.# 0	PAGE: 1 OF 1
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