

**DRAWING / PROJECT APPROVAL**

REVISE AS NOTED AND RETURN FOR APPROVAL  
 APPROVED FOR CONSTRUCTION AS DRAWN

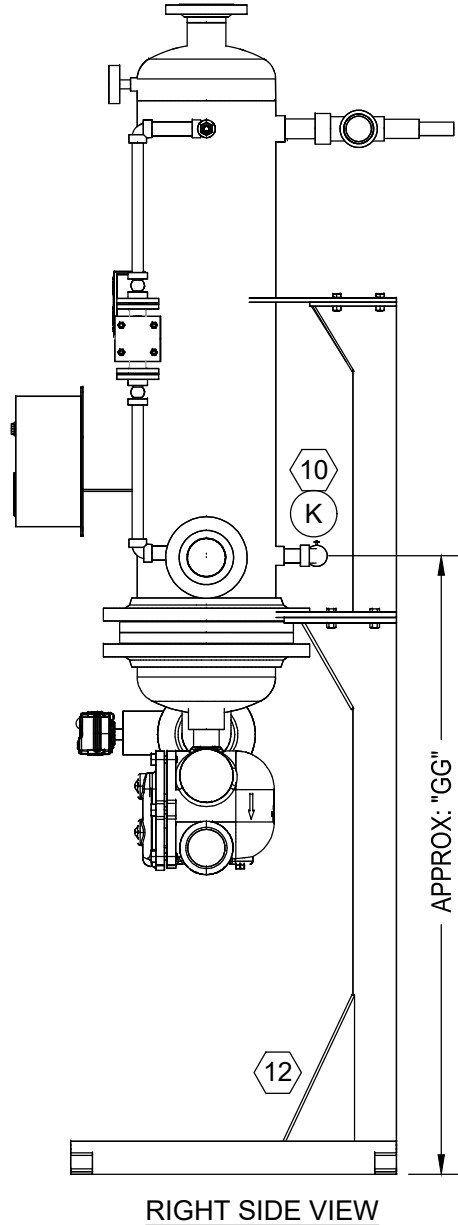
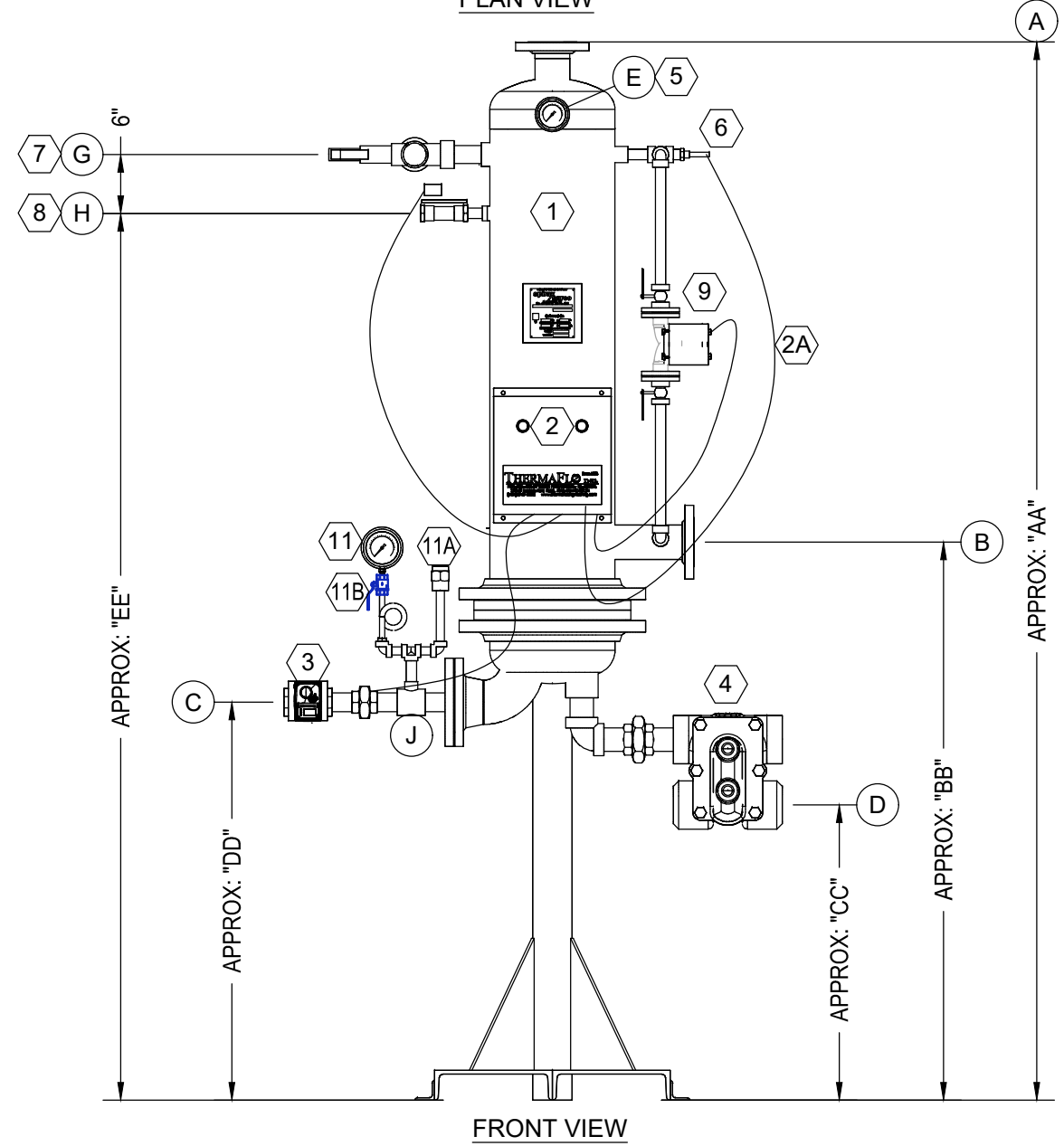
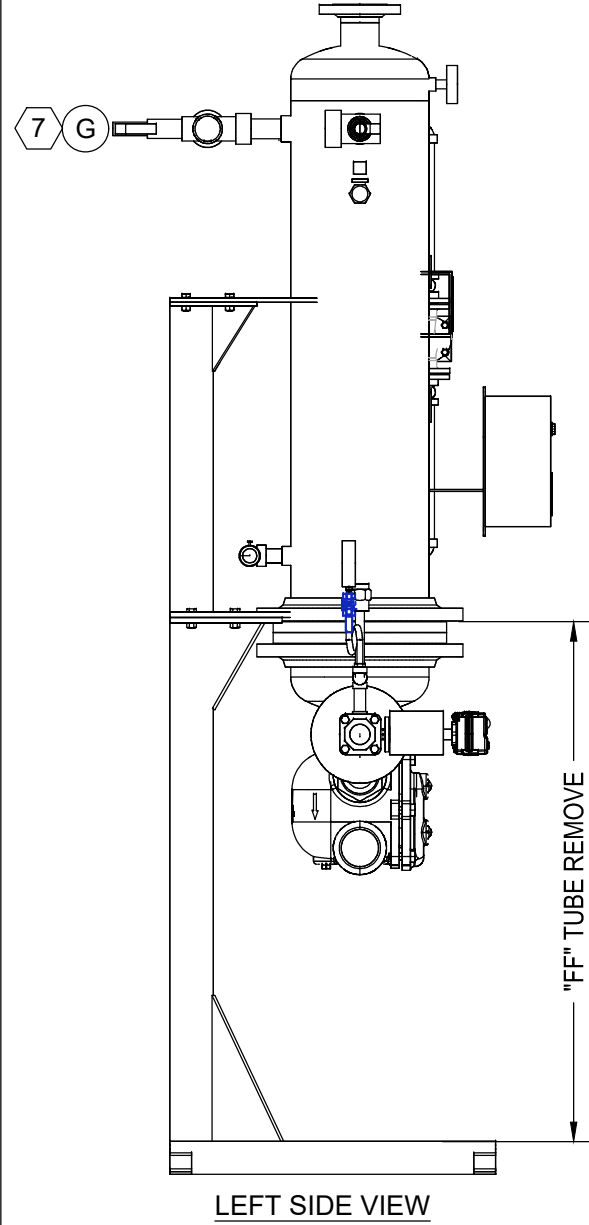
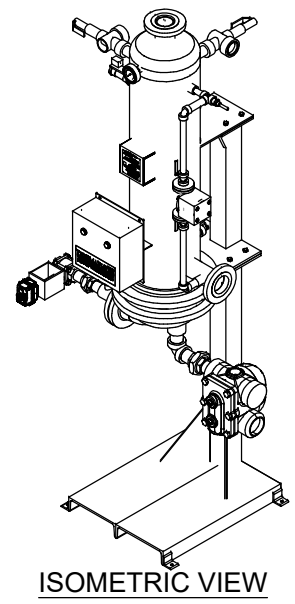
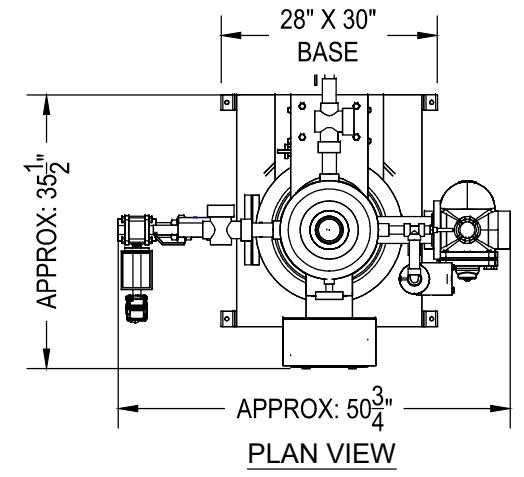
PLEASE INDICATE ABOVE, SIGN AND RETURN  
 RETURNED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

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:**
1. BLEND VALVE RECOMMENDED WITH 140F OR HIGHER SET POINT.
  2. ALL DIMENSIONS TO HAVE  $\pm 1/2$ " TOLERANCE
  3. 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.
  4. PROPERLY SIZED STRAINER WITH 100 MESH SCREEN MUST BE INSTALLED WITHIN 3FT OF THE CONTROL VALVE.
  5. PIPE NOZZLES "G", "H", AND "K" TO A SUITABLE DRAIN BY OTHERS.
  6. NOZZLES WILL NOT SUPPORT EXTERNAL LOADINGS, FIELD SUPPORT BY OTHERS.
  7. CONTROL VALVE, STEAM TRAP AND GAUGES, SHIPPED LOOSE FIELD INSTALLED BY OTHERS.
  8. STEAM SUPPLY TO THE CONTROL VALVE SHOULD BE SIZED FOR NO MORE THAN 10,000 FPS TO AVOID HIGH PRESSURE DROPS.
  9. MAIN DRIP STEAM TRAP MUST BE LOCATED DIRECTLY AT THE CONTROL VALVE INLET.
  10. CONTROL VALVE MUST BE INSTALLED, AS SHOWN, ON ITS SIDE. VALVE CONTROL ELECTRONICS ARE NOT INSULATED.

MODEL SELECTION	MODEL	"AA"	"BB"	"CC"	"DD"	"EE"	"FF"	"GG"	SHIPPING	DRY	FLOODED	SHIPPING
	1436 SINGLE WALL	85.00	44.75	19.00	29.50	64.25	36.00	44.75	4'X8'X4'	766	933	991
	1436 DOUBLE WALL	85.00	44.75	18.00	28.50	64.25	36.00	44.75	4'X8'X4'	831	998	1056



**DESIGN DATA**

<b>ASME CODE SECTION VIII, DIV. 1 STAMP UM</b>	
SHELL RATED	150 PSI @ 375F
TUBE RATED	150 PSI @ 375F
<b>CONDITION OF SERVICE AND PERFORMANCE DATA</b>	
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

**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	14"Ø X 36" 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
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	1-1/2" 18C5424150 PRESSURE & TEMP. RELIEF VALVE, SAT @ 150 PSI @ 210F, RATED @ 6,050,000 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	4	150# FLG	HOT WATER OUTLET
B	4	150# FLG	COLD WATER INLET
C		NPT	STEAM INLET
D		NPT	CONDENSATE OUTLET
E	3/4	NPT	GAUGE
G	1 1/2	NPT	RELIEF VALVE
H	3/4	NPT	DUMP SOLENOID
J	3/4	NPT	GAUGE
K	1	NPT	DRAIN

AVAILABLE WITH 36" OR SHORTER TUBE BUNDLE

**TAG:**

#	DATE	REVISION	BY

Since 1986  
**THERMAFLO INC.**  
 Manufacturers Of Steam Fired Specialty Equipment  
 2880 Fair Avenue, Newberry, SC 29108  
 (704) 940-1228 www.thermafloengineering.com

DESCRIPTION: TH750V-14" SHORT-EC800-2 STEAM FIRED WATER HEATER  
 CUSTOMER: \_\_\_\_\_ JOB # \_\_\_\_\_ QTY. \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE:	DRAWN:	PO #	PLAN #	FILE:	REV.#	PAGE:

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DIM TOL= +/- 1/2"