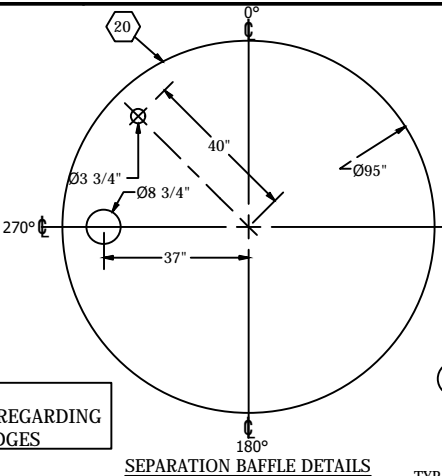
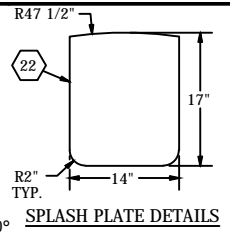


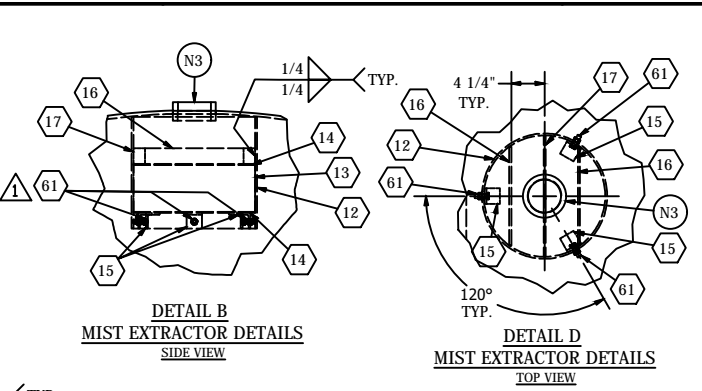
BASE RING DETAILS



SEPARATION BAFFLE DETAILS



SPLASH PLATE DETAILS

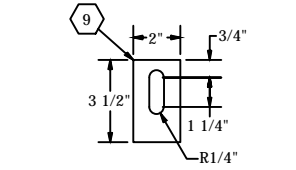


DETAIL B  
MIST EXTRACTOR DETAILS  
SIDE VIEW

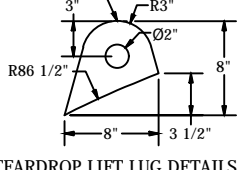
DETAIL D  
MIST EXTRACTOR DETAILS  
TOP VIEW

SECTION A-A  
INLET DIVERTER DETAIL

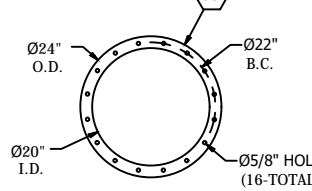
**IMPORTANT:**  
READ NOTES 6 & 7 REGARDING  
INTERNAL PARTS EDGES



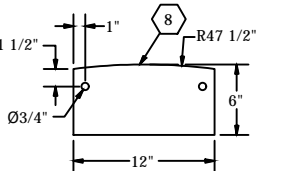
INLET DIVERTER CLIP DETAILS



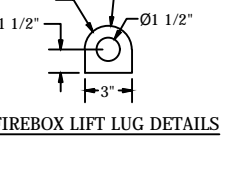
TEARDROP LIFT LUG DETAILS



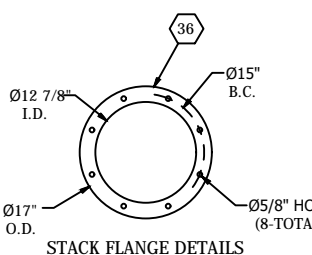
FLAME ARRESTOR FLANGE DETAILS



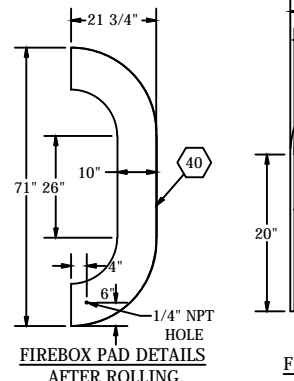
INLET DIVERTER ARM DETAILS



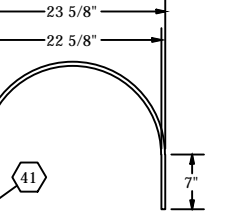
FIREBOX LIFT LUG DETAILS



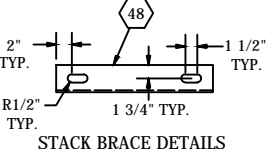
STACK FLANGE DETAILS



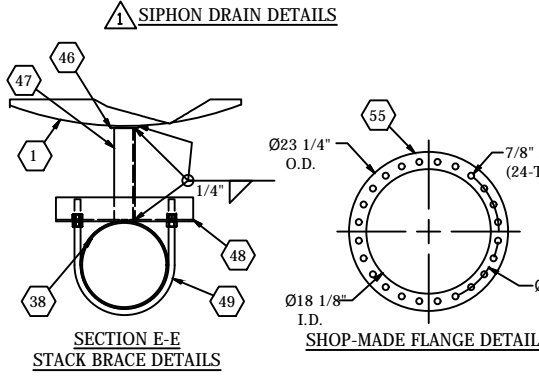
FIREBOX PAD DETAILS  
AFTER ROLLING



FIREBOX NECK DETAILS

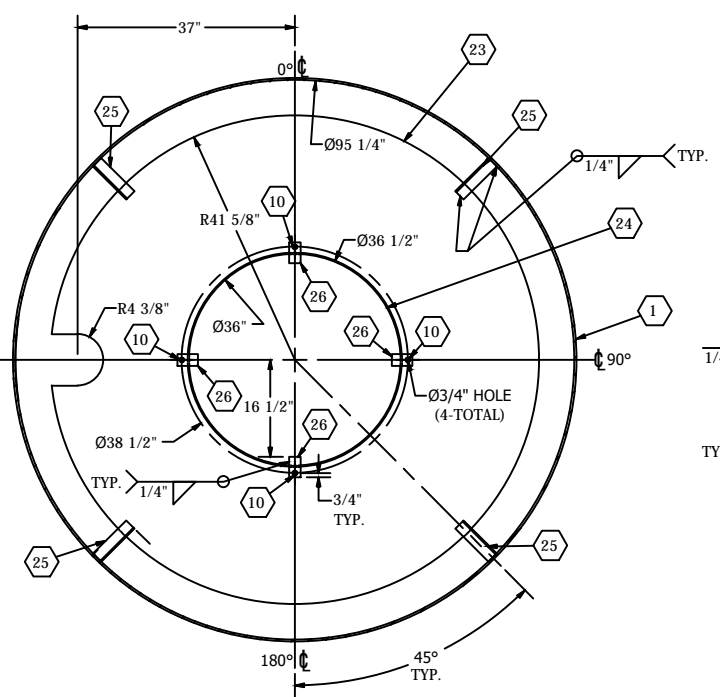


STACK BRACE DETAILS

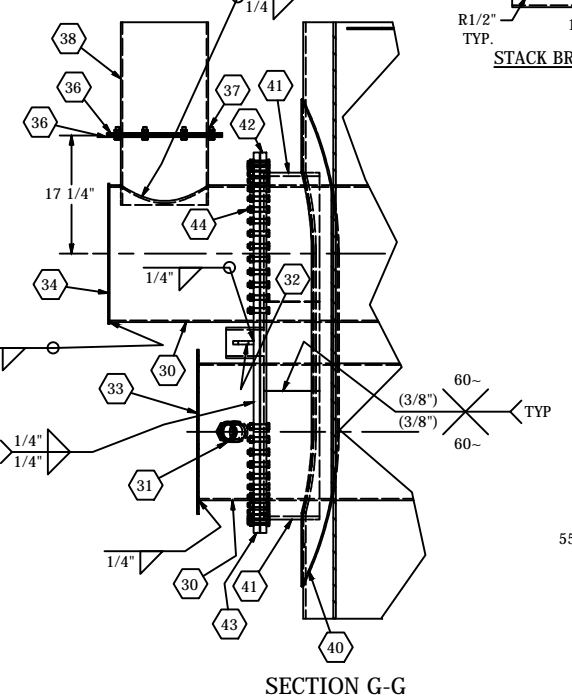


SECTION E-E  
STACK BRACE DETAILS

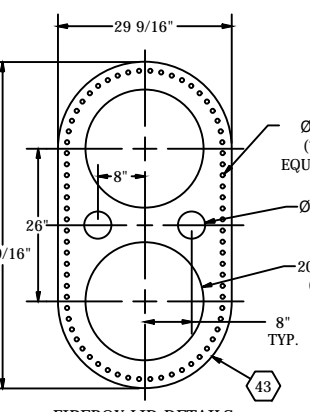
SHOP-MADE FLANGE DETAILS



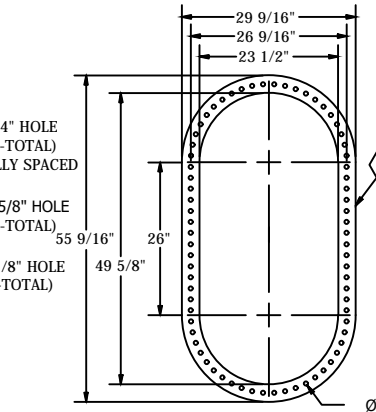
SECTION C-C  
HEAT SHIELD DETAILS



SECTION G-G



FIREBOX LID DETAILS



FIREBOX FLANGE DETAILS

**NOTE:**  
SEE DRAWING 1 OF 2 FOR NOZZLE  
SCHEDULE, DESIGN SPECS & NOTES

No.	QTY.	THK.	WIDTH	LENGTH	DESCRIPTION	MATERIAL
63	1	0.337"	----	48 3/4"	PIPE, 4" SCH. 80, PVC, SIPHON DRAIN	ASTM D 1785
62	1	----	----	----	ELBOW, PVC, 45°, SIPHON DRAIN	ASTM D 1784
61	3	----	----	1 3/4"	MACHINE BOLT, HEX NUT 1/2" x 1 3/4", & 2 - FLAT WASHERS (1 ON EACH SIDE)	316SS
60	2	0.337"	----	5 1/2"	PIPE, 4" SCH. 80, ANODE NECK (N18C & N18D), GROOVED ON OUTSIDE END	SA-106B
59	2	0.337"	----	6 1/4"	PIPE, 4" SCH. 80, ANODE NECK (N18A & N18B)	SA-106B
58	2	0.125"	----	----	GASKET, CUSTOMIZED TO MATCH SHOP-MADE FLANGE #27 (BUNA-N)	NITRILE
57	48	3/4"	----	3"	MACHINE BOLT & HEX NUT 3/4" x 1 1/2"	SA-449-1
56	2	1"	23 1/4"	23 1/4"	PLATE, 1" THICK, MW BLIND, 23 1/4" O.D., W/24 - 7/8" HOLES ON 20 1/2" B.C.	SA-516-70
55	2	1"	23 1/4"	23 1/4"	PLATE, 1" THICK, MW FLANGE, 23 1/4" O.D., 18 1/8" I.D., W/24 - 7/8" HOLES ON 20 1/2" B.C.	SA-516-70
54	2	0.750"	----	9 1/2"	PIPE, 18" SCH. 60, SEAMLESS, MANWAY NECK	SA-106B
53	1	1/4"	4"	6 1/4"	PLATE, DOWNCOMER SUPPORT	SA-36
52	1	7/8"	5"	10"	PLATE, HEAVY DUTY LIFT LUG	SA-36
51	1	1/4"	6"	12"	PLATE, LIFT LUG PAD	SA-36
50	1	----	----	----	GASKET, CUSTOMIZED TO MATCH FIREBOX FLANGE #36 (BUNA-N)	NITRILE
49	1	----	----	----	U-BOLT, FOR 12" PIPE, W/4 NUTS	ZINC PLATED
48	1	1/4"	3 1/2" x 3 1/2"	20"	ANGLE, 1/4" x 3 1/2" x 3 1/2", STACK BRACE	A36
47	1	1/4"	3" x 3"	13 1/2"	ANGLE, 1/4" x 3" x 3", STACK BRACE ARM	A36
46	1	1/4"	4"	4"	PLATE, STACK BRACE PAD	SA-36
45	1	----	----	----	GASKET, CUSTOMIZED TO MATCH FIREBOX FLANGE #42 (BUNA-N)	NITRILE
44	72	----	----	3 1/4"	MACHINE BOLT, HEX NUT 5/8" x 3 1/4"	SA-449-1
43	1	7/8"	29 9/16"	55 9/16"	PLATE, FIREBOX LID	SA-516-70
42	1	7/8"	29 9/16"	55 9/16"	PLATE, FIREBOX FLANGE	SA-516-70
41	2	1/2"	8 1/4"	63 3/8"	FIREBOX NECK, ROLL TO 22 5/8" I.D.	SA-516-70
40	2	1/4"	35 9/16"	71"	PLATE, FIREBOX PAD, ROLL TO 96" I.D.	SA-516-70
39	1	0.120"	12 3/4"	12 3/4"	FLAT EXPANDED METAL, 3/4", #9 PATTERN, STACK CAP	A36
38	1	0.250"	----	210 1/4"	PIPE, 12 7/5" O.D. x 0.2500" THICK, ERW, STACK	A53 ERW GR. B
37	8	----	----	1 3/4"	MACHINE BOLT, HEX NUT 1/2" x 1 3/4"	SA-449-1
36	2	1/4"	17"	17"	PLATE, STACK FLANGE, 17" O.D. x 12 7/8" I.D. W/8 - Ø5/8" HOLES ON 22" B.C.	SA-36
35	1	0.250"	----	10 1/4"	PIPE, 12 7/5" O.D. x 0.2500" THICK, ERW, STACK NECK	A53 ERW GR. B
34	1	1/4"	20 1/2"	20 1/2"	PLATE, FIRETUBE CAP, 20 1/2" O.D.	SA-36
33	1	1/4"	24"	24"	PLATE, FLAME ARRESTOR FLANGE, 24" O.D. x 20 I.D. W/16 - Ø5/8" HOLES ON 22" B.C.	SA-36
32	1	1/2"	3"	3"	PLATE, FIREBOX LIFT LUG	SA-516-70
31	1	----	----	----	COUPLING, 2", FULL, 3000#, W/HEX PLUG, PILOT ACCESS	SA-105
30	1	0.250"	----	231 1/4"	PIPE, 20" O.D. x 0.2500" THICK, ERW, FIRETUBE	A53 ERW GR. B
29	1	0.337"	----	19 3/4"	PIPE, 4" SCH. 80, PVC, SIPHON DRAIN, THREADED ON ONE END	ASTM D 1785
28	8	1/8"	1/2" x 1"	2"	LADDER CLIPS	SA-36
27	2	0.120"	4"	4"	FLAT EXPANDED METAL, 3/4", #9 PATTERN, SKIRT VENT COVER	A36
26	4	1/4"	2"	3 1/2"	FLATBAR, 1/4" x 2", HEAT SHIELD COVER SUPPORT	A36
25	4	1/4"	2" x 2"	8"	ANGLE, 1/4" x 2" x 2", HEAT SHIELD SUPPORT	A36
24	1	1/4"	36 1/2"	36 1/2"	PLATE, HEAT SHIELD COVER, 36 1/2" O.D.	SA-36
23	1	1/4"	83 1/4"	83 1/4"	PLATE, HEAT SHIELD DIVISION, 83 1/4" O.D. x 36 1/2" I.D.	SA-36
22	1	1/4"	14"	17"	PLATE, SPLASH PLATE	SA-36
21	1	0.322"	----	161 1/4"	PIPE, 8" SCH. 40, DOWNCOMER	SA-106B
20	1	1/4"	95"	95"	PLATE, SEPARATION BAFFLE	SA-36
19	1	1/4"	2"	6"	FLATBAR, 1/4" x 2", EQUALIZER SUPPORT	A36
18	1	0.218"	----	52 1/2"	PIPE, 3" SCH. 80, EQUALIZER	SA-106B
17	1	1/4"	2"	15 1/2"	FLATBAR, 1/4" x 2", TOP MIST EXTRACTOR SUPPORT	A36
16	2	1/4"	2"	12 1/2"	FLATBAR, 1/4" x 2", TOP MIST EXTRACTOR SUPPORT	A36
15	3	1/4"	2" x 2"	2"	ANGLE, 1/4" x 2" x 2", MIST EXTRACTOR SUPPORT	A36
14	2	0.120"	15 1/2"	15 1/2"	FLAT EXPANDED METAL, 3/4", #9 PATTERN, MIST EXTRACTOR SUPPORT	A36
13	1	----	15 1/2"	15 1/2"	WIRE MESH, 6", MIST EXTRACTOR	316SS
12	1	0.250"	----	14 1/4"	PIPE, 16" SCH. 10, MIST EXTRACTOR ENCLOSURE	A53 ERW GR. B
11	2	7/8"	8"	8"	PLATE, TEARDROP LIFT LUG FOR 96" O.D. x 38" THICK 2:1 ELLIP. HEAD	SA-516-70
10	8	----	----	1 3/4"	MACHINE BOLT, HEX NUT 5/8" x 1 3/4", & 2 - FLAT WASHERS (1 ON EACH SIDE)	316SS
9	4	1/4"	2"	3 1/2"	FLATBAR, 1/4" x 2", INLET DIVERTER CLIP	A36
8	2	1/4"	6"	12"	PLATE, INLET DIVERTER ARM	SA-36
7	1	1/4"	12"	12"	PLATE, INLET DIVERTER	SA-36
6	1	----	----	----	NAMEPLATE, NON-CODE	----
5	1	----	----	----	NAMEPLATE BRACKET	----
4	1	1/2"	103"	103"	PLATE, SKIRT BASE RING, 101 1/4" O.D. x 93 1/4" I.D. W/ 12 - 1 1/4" HOLES ON 99" B.C.	SA-36
3	1	3/8"	24 7/16"	300 7/16"	PLATE, SKIRT ROLLET AT 96" O.D.	SA-36
2	2	3/8"	----	----	PLATE, 2:1 ELLIPTICAL HEAD, 96" O.D. x 38" MIN. THICK	SA-516-70
1	2	3/8"	120"	300 7/16"	PLATE, SHELL ROLLED AT 96" O.D.	SA-36

REVISION HISTORY				
No.	DATE	DESCRIPTION	BY	CHK.
0	10/08/18	DRAWING ISSUED FOR APPROVAL	DM	
APPROVED FOR PRODUCTION				
QA MANAGER SIGNATURE _____		DATE _____		
CUSTOMER: MDC TEXAS ENERGY, LLC				
JOB NO.: N/A				
DESCRIPTION: MDC-0820-125-HT-V-NC				
SCALE: N.T.S.				
SHEET: 2 OF 2				
REVISION: 0		DATE: 10/08/18		DRAWN: DM



8'-0" O.D. x 20'-0" S/S  
Vertical Heater Treater