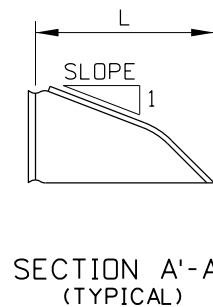
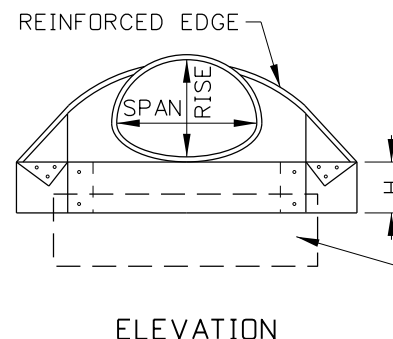
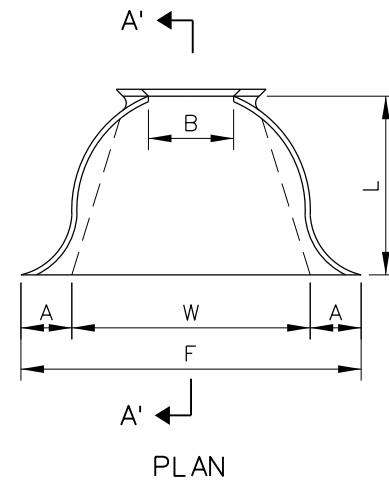


APRON FOR ROUND METAL PIPE  
(GALVANIZED STEEL)



APRON FOR METAL ARCH PIPE  
(GALVANIZED STEEL)

DIMENSIONS TABLE									
PIPE DIA.	THICK-NESS (1000'S)	ALL DIMENSIONS ARE IN INCHES						APPROX. SLOPE	BODY
		A (MIN.)	B	H (MIN.)	F (MIN.)	L ±2"	W (MAX.)		
12	0.064	5	7	6	22	21	24	2 1/2:1	1 PC.
15	0.064	7	8	6	28	26	30	2 1/2:1	1 PC.
18	0.064	7	10	6	34	31	36	2 1/2:1	1 PC.
21	0.064	8	12	6	40	36	42	2 1/2:1	1 PC.
24	0.064	9	13	6	46	41	48	2 1/2:1	1 PC.
30	0.079	13	16	8	55	51	60	2 1/2:1	1 PC.
36	0.079	11	19	9	70	60	72	2 1/2:1	2 PC.
42	0.109	15	25	10	82	69	84	2 1/2:1	2 PC.
48	0.109	17	29	12	88	78	90	2 1/2:1	2 PC.
54	0.109	17	33	12	100	84	102	2:1	2 PC.
60	0.109	17	36	12	112	87	114	2 1/2:1	3 PC.
66	0.109	17	39	12	118	87	120	2 1/2:1	3 PC.
72	0.109	17	44	12	120	87	126	2 1/2:1	3 PC.
78	0.109	17	48	12	130	87	132	2 1/2:1	3 PC.
84	0.109	17	52	12	136	87	138	2 1/2:1	3 PC.

DIMENSIONS TABLE										
PIPE-ARCH		THICK-NESS (1000'S)	ALL DIMENSIONS ARE IN INCHES						APPROX. SLOPE	BODY
SPAN IN.	RISE IN.		A (MIN.)	B	H (MIN.)	F (MIN.)	L ±2"	W (MAX.)		
17	13	0.064	5	9	6	28	20	50	2 1/2:1	1 PC.
21	15	0.064	6	11	6	34	24	58	2 1/2:1	1 PC.
24	18	0.064	7	12	6	40	28	63	2 1/2:1	1 PC.
28	20	0.064	7	16	6	46	32	70	2 1/2:1	1 PC.
35	24	0.079	9	16	6	58	39	85	2 1/2:1	1 PC.
42	29	0.079	11	18	8	73	46	104	2 1/2:1	1 PC.
49	33	0.109	12	21	9	82	53	117	2 1/2:1	2 PC.
57	38	0.109	16	26	10	88	62	130	2 1/2:1	2 PC.
64	43	0.109	17	30	12	100	79	142	2 1/4:1	2 PC.
71	47	0.109	17	36	12	112	77	156	2 1/4:1	2 PC.
77	52	0.109	17	36	12	124	77	167	2:1	3 PC.
83	57	0.109	17	44	12	130	77	179	2:1	3 PC.

NOTES

- ALL 3-PIECE BODIES (APRONS WITH PIPE DIA. 60 IN. & LARGER) TO HAVE 0.109 IN. SIDES AND 0.138 IN. CENTER PANELS. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS.
- THE REINFORCED EDGES OF GALVANIZED STEEL APRONS, FOR ROUND METAL PIPE SIZES 60 IN. THROUGH 84 IN. AND FOR ARCH METAL PIPE SIZES 77x62 IN. THROUGH 83x57 IN., ARE TO BE SUPPLEMENTED BY GALVANIZED STIFFENER ANGLES. THE ANGLES ARE TO BE ATTACHED BY GALVANIZED BOLTS AND NUTS.
- ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON ARCH PIPE SIZES 77x52 IN. THROUGH 83x57 IN.
- A GALVANIZED TOE PLATE IS AVAILABLE AS AN ACCESSORY. WHEN SPECIFIED IT SHALL BE THE SAME GAGE AS THE APRON.
- THE APRON SHALL BE CONNECTED TO PIPE BY USING EITHER CONNECTING BANDS, RODS, OR STRAPS.
- NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: MILDRED L. MILLER  
DATE ORIGINAL SIGNED: MARCH 4, 2005

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	09-64		6	06-84			
2	06-68		7	07-92	MSM		
3	04-70		8	11-01	MSM		
4	10-76		9	03-05	MSM		
5	07-78						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY  
CADD FILE NAME: 608-1\_0305.dgn  
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT  
BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS  
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)  
ORIGINAL SIGNED BY: STEVEN HUTCHINSON  
CHIEF ENGINEER

STANDARD DRAWING  
GALVANIZED STEEL APRONS FOR PIPE CULVERTS

English  
STANDARD DRAWING NO. 608-1  
SHEET 1 OF 1