


**2²/₃" x 1/2" CORRUGATED ALUMINUM ALLOY PIPE-ARCH (RIVETED OR LOCK SEAM)
HEIGHT OF COVER LIMITS (ft.)**

CORNER RADIUS (in.)	SPAN (in.)	RISE (in.)	AREA (sft)	THICKNESS (in.)									
				0.060		0.075		0.105		0.135		0.164	
				MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
3/3 ¹ / ₂	17	13	1.1	1.5	13.7	1.5	13.7	1.5	13.7				
3/4 ¹ / ₈	21	15	1.6	1.6	13.0	1.6	13.0	1.6	13.0				
3/4 ¹ / ₄	24	18	2.2	1.5	13.5	1.5	13.5	1.5	13.5				
3/5 ¹ / ₂	28	20	2.9	1.6	13.0	1.6	13.0	1.6	13.0	1.6	13.0		
3/6 ¹ / ₈	35	24	4.5			1.6	13.0	1.6	13.0	1.6	13.0		
3 ¹ / ₂ / 8 ¹ / ₄	42	29	6.5			1.6	13.0	1.6	13.0	1.6	13.0		
4/9 ¹ / ₈	49	33	8.9			1.6	13.0	1.6	13.0	1.6	13.0		
5/11	57	38	11.6					1.6	12.8	1.6	12.8	1.6	12.8
6/12 ³ / ₈	64	43	14.7							1.6	12.8	1.6	12.8
7/13 ³ / ₄	71	47	18.1									1.6	12.9

NOTE:

- 1. The tabulated cover depths shall be measured from the bottom of the asphalt or concrete pavement to the top of the pipe.
- 2. Dual entries in the "Corner Radius" column, such as 3/3¹/₂, represent the following:
 3 - minimum corner radius allowed by AASHTO M 196.
 3¹/₂ - corner radius typically available.
- 3. The tabulated cover heights reflect pipe-arches with typically available corner radii. If a pipe-arch with corner radii other than what is typically available is to be used, a specific design shall be performed to verify structural adequacy.

INDIANA DEPARTMENT OF TRANSPORTATION
PIPE HEIGHT OF COVER LIMITS
 JANUARY 1998
 STANDARD DRAWING NO. E 715-PHCL-03

	DETAILS PLACED IN THIS FORMAT 11-15-99
	/s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE ORIGINALLY APPROVED 1-02-98

DESIGN STANDARDS ENGINEER