

MINIMUM THICKNESS-STRUCTURAL PLATE STEEL PIPE ARCHES 6" x 2" CORRUGATIONS

SPAN	PIPE ARCH DIMENSION			MINIMUM SHEET THICKNESS REQUIRED (INCHES)	MAXIMUM ALLOWABLE COVER HEIGHT (m)	
	MAXIMUM RISE "B" (INCHES)	AREA (SQ. FT.)	Rc (INCHES)		MAXIMUM CORNER PRESSURE	
					4000 LBS./SQ. FT.	6000 LBS./SQ. FT. ★
13'-3"	9'-4"	97	31	12	12	18 ✕
13'-6"	9'-6"	102	31	12	12	17 ✕
14'-0"	9'-8"	105	31	12	12	17 ✕
14'-2"	9'-10"	109	31	12	12	16 ✕
14'-5"	10'-0"	114	31	12	11	16 ✕
14'-11"	10'-2"	118	31	12	11	16 ✕
15'-4"	10'-4"	123	31	12	11	15 ✕
15'-7"	10'-6"	127	31	12	11	15 ✕
15'-10"	10'-8"	132	31	12	10	14 ✕
16'-3"	10'-10"	137	31	12	10	14 ✕
16'-6"	11'-0"	142	31	12	10	14 ✕
17'-0"	11'-2"	146	31	12	10	14 ✕
17'-2"	11'-4"	151	31	12	10	13 ✕
17'-5"	11'-6"	157	31	12	9	13 ✕
17'-11"	11'-8"	161	31	12	9	13 ✕
18'-1"	11'-10"	167	31	12	9	13 ✕
18'-7"	12'-0"	172	31	12	9	12 ✕
18'-9"	12'-2"	177	31	12	9	12 ✕
19'-3"	12'-4"	182	31	10	8	13
19'-6"	12'-6"	188	31	10	8	13
19'-8"	12'-8"	194	31	10	8	13
19'-11"	12'-10"	200	31	10	8	12
20'-5"	13'-0"	205	31	10	8	12
20'-7"	13'-2"	211	31	10	8	12

★ When design height of cover falls within this category, foundation and backfill must be approved by the Engineer.

Cover heights indicated in table are for finished construction.

The allowable cover tables shown are based on a soil modulus of 700 PSI. All other design criteria are in accordance with the AASHTO Specifications and VDOT Modifications for Soil Corrugated Metal Structure Interaction Systems.

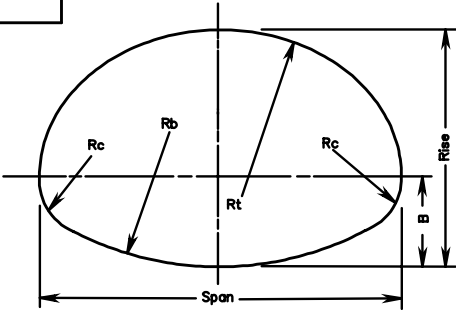
Structural Plate Pipe-Arch dimensions are to inside of crest and are subject to manufacturing tolerances.

Minimum finished height of cover shall be $\frac{\text{Span}}{8}$ or 1'-0", whichever is greater.

To protect pipe during construction minimum height of cover prior to allowing construction traffic to cross installation shall be $\frac{\text{Span}}{2}$.

This cover shall extend the full length of the pipe arch. The approach fill ramp is to extend a minimum of $(10)(\text{Height} + \frac{\text{Span}}{2})$ on each side of the structure, or to the intersection with a cut.

✕ Maximum cover heights shown may be increased by a maximum of 1 foot if a sheet thickness greater than 12 Gauge is used.



SPECIFICATION REFERENCE
232 302

**STRUCTURAL PLATE STEEL PIPE ARCH
HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD**