

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

PIPE ARCH DIMENSION				MINIMUM SHEET THICKNESS REQUIRED	MAXIMUM ALLOWABLE COVER HEIGHT (FT.)	
NOMINAL SIZE		AREA (SQ. FT.)	Rc (INCHES)		MAXIMUM CORNER PRESSURE	
SPAN	RISE				4000 LBS./SQ. FT.	✱ 6000 LBS./SQ. FT.
		6'-1"	4'-7"		22	18
6'-4"	4'-9"	24	18	12	15	23
6'-9"	4'-11"	26	18	12	14	22
7'-0"	5'-1"	28	18	12	14	21
7'-3"	5'-3"	31	18	12	13	20
7'-8"	5'-5"	33	18	12	12	19
7'-11"	5'-7"	35	18	12	12	18
8'-2"	5'-9"	38	18	12	12	18
8'-7"	5'-11"	40	18	12	11	17
8'-10"	6'-1"	43	18	12	11	16
9'-4"	6'-3"	46	18	12	10	16
9'-6"	6'-5"	49	18	12	10	15
9'-9"	6'-7"	52	18	12	10	15
10'-3"	6'-9"	55	18	12	9	14
10'-8"	6'-11"	58	18	12	9	14
10'-11"	7'-1"	61	18	12	9	13
11'-5"	7'-3"	64	18	12	8	13
11'-7"	7'-5"	67	18	12	8	12
11'-10"	7'-7"	71	18	12	8	12
12'-4"	7'-9"	74	18	12	8	12
12'-6"	7'-11"	78	18	12	8	12
12'-8"	8'-1"	81	18	12	7	11
12'-10"	8'-4"	85	18	12	7	11
13'-5"	8'-5"	89	18	12	7	11
13'-11"	8'-7"	93	18	12	7	10
14'-1"	8'-9"	97	18	12	7	10
14'-3"	8'-11"	101	18	12	6	10
14'-10"	9'-1"	105	18	12	6	10
15'-4"	9'-3"	109	18	12	6	9
15'-6"	9'-5"	113	18	12	6	9
15'-8"	9'-7"	118	18	12	6	9
15'-10"	9'-10"	122	18	12	6	9
16'-5"	9'-11"	126	18	12	6	9
16'-7"	10'-1"	131	18	12	6	9

NOTES

✱ 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.

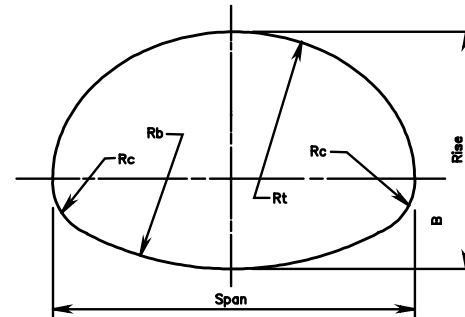
The allowable cover tables shown are based on a soil modulus of 700 PSI. All other design criteria are in accordance with the AASHTO Specifications and VDOT Modifications for Soil Corrugated Metal Structure Interaction Systems.

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

Minimum finished height of cover shall be $\frac{1}{8}$ Span 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.



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

SPECIFICATION REFERENCE

232
302