

PC-1

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET		MINIMUM SHEET THICKNESS FOR FINISHED CONSTRUCTION WITH LESS THAN 1 FT. COVER INCHES (GAUGE)	MINIMUM SHEET THICKNESS FOR FINISHED CONSTRUCTION WITH LESS THAN 1 FT. COVER INCHES (GAUGE)
		0.064 (16)	0.079 (14)		
12	0.8	18	95	100	0.064 (16)
15	1.2	18	57	78	0.064 (16)
18	1.8	18	40	52	0.064 (16)
21	2.4	18	31	39	0.064 (16)
24	3.1	17	26	32	0.064 (16)
27	4.0	17	24	27	0.064 (16)
30	4.9	17	22	24	0.064 (16)
36	7.1	16	20	21	0.064 (16)
42	9.6	16	18	19	0.064 (16)
48	12.6	16	18	18	0.064 (16)
54	16.0	16	18	18	0.064 (16)
60	19.6	16	18	18	0.064 (16)
66	23.8	16	18	18	0.064 (16)
72	28.3	16	18	17	0.064 (16)

NOTES:

- COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- TO PROTECT PIPE DURING CONSTRUCTION MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE A PRIOR TO ALLOWING CONSTRUCTION OF 20 DIAMETERS ON EACH SIDE OF THE PIPE OR TO THE INTERSECTION WITH A CUT.
- STANDARD MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES EXCEPT THOSE UNDER ENTRANCES SHALL BE 20" OR 1/2 DIAMETER, WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AN ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 10" OR 1/4 DIAMETER, WHICHEVER IS GREATER, SHALL BE MAINTAINED. FINISHED HEIGHT OF COVER FOR PIPES UNDER ENTRANCES SHALL BE 20" OR 1/2 DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS LESS THAN OR EQUAL TO 18" FOR 12" OR 14" DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS GREATER THAN 18".
- SEE STANDARD FB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.
- THE MAXIMUM HEIGHT OF COVER SHOWN IN THE TABLES IS BASED ON A SOIL MODULUS OF 700 PSL. ALL OTHER DESIGN CRITERIA ARE IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUATED METAL STRUCTURE INTERSECTION SYSTEMS.
- 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20".

PIPE DIAMETER	MINIMUM COVER HEIGHT DURING CONSTRUCTION (SEE NOTE 2)
12" TO 24"	18"
30" AND OVER	EQUAL TO DIAMETER

SHEET 13 OF 18

ALUMINUM SPIRAL RIB PIPE
 HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 7/05
 107.17

SPECIFICATION REFERENCE
 232
 302

PC-1

STEEL SPIRAL RIB PIPE 3/4" WIDE x 3/4" DEEP RIBS SPACED @ 7/2"

PIPE DIAMETER INCHES	AREA SQ. FT.	MAXIMUM HEIGHT OF COVER IN FEET		MINIMUM SHEET THICKNESS FOR FINISHED CONSTRUCTION WITH LESS THAN 1 FT. COVER INCHES (GAUGE)	MINIMUM SHEET THICKNESS FOR FINISHED CONSTRUCTION WITH LESS THAN 1 FT. COVER INCHES (GAUGE)
		0.064 (16)	0.079 (14)		
12	0.8	18	95	100	0.064 (16)
15	1.2	18	57	78	0.064 (16)
18	1.8	18	40	52	0.064 (16)
21	2.4	18	31	39	0.064 (16)
24	3.1	17	26	32	0.064 (16)
27	4.0	17	24	27	0.064 (16)
30	4.9	17	22	24	0.064 (16)
36	7.1	16	20	21	0.064 (16)
42	9.6	16	18	19	0.064 (16)
48	12.6	16	18	18	0.064 (16)
54	16.0	16	18	18	0.064 (16)
60	19.6	16	18	18	0.064 (16)
66	23.8	16	18	18	0.064 (16)
72	28.3	16	18	18	0.064 (16)
84	38.6	16	18	18	0.064 (16)

NOTES:

- COVER HEIGHTS INDICATED IN TABLES ARE FOR FINISHED CONSTRUCTION.
- TO PROTECT PIPE DURING CONSTRUCTION MINIMUM HEIGHT OF COVER TO BE IN ACCORDANCE WITH TABLE A PRIOR TO ALLOWING CONSTRUCTION TRAFFIC TO CROSS OR TO THE INTERSECTION WITH THE PIPE. THE APPROACH FILL IS TO EXTEND A MINIMUM OF 15 DIAMETERS ON EACH SIDE OF THE PIPE OR TO THE INTERSECTION WITH THE CUT.
- MINIMUM FINISHED HEIGHT OF COVER FOR ALL PIPES EXCEPT THOSE UNDER ENTRANCES SHALL BE 20" OR 1/2 DIAMETER, WHICHEVER IS GREATER. IN CASES IN WHICH THESE COVER HEIGHTS CANNOT BE ACHIEVED, AN ABSOLUTE MINIMUM FINISHED COVER HEIGHT OF 10" OR 1/4 DIAMETER, WHICHEVER IS GREATER, SHALL BE MAINTAINED. FINISHED HEIGHT OF COVER FOR PIPES UNDER ENTRANCES SHALL BE 20" OR 1/2 DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS LESS THAN OR EQUAL TO 24" AND 12" OR 1/4 DIAMETER, WHICHEVER IS GREATER, FOR PIPE DIAMETERS GREATER THAN 24". WHERE POLYMER COATED PIPES WILL BE USED AND THE SURFACE OVER THE TOP OF THE PIPE WILL BE ASPHALT, CLASS I BACKFILL MATERIAL IS TO BE PLACED UP TO A MINIMUM OF 6" ABOVE THE TOP OF THE PIPE.
- SEE STANDARD FB-1 FOR PIPE BEDDING AND BACKFILL REQUIREMENTS.
- 16 GAUGE PIPE LIMITED TO THOSE LOCATIONS WHERE PIPE DIAMETER PLUS COVER IS LESS THAN 20".
- THE MAXIMUM HEIGHT OF COVER SHOWN IN THE TABLES IS BASED ON A SOIL MODULUS OF 700 PSL. ALL OTHER DESIGN CRITERIA ARE IN ACCORDANCE WITH THE AASHTO SPECIFICATIONS AND VDOT MODIFICATIONS FOR SOIL CORRUATED METAL STRUCTURE INTERSECTION SYSTEMS.
- A MAXIMUM HEIGHT OF COVER TABLE FOR STEEL SPIRAL RIB WITH 3/4" WIDE x 1" DEEP RIBS SPACED AT 1 1/2" IS AVAILABLE UPON REQUEST.

PIPE DIAMETER	MINIMUM COVER HEIGHT DURING CONSTRUCTION (SEE NOTE 4)
12" TO 30"	18"
36" AND ABOVE	1/2 DIAMETER

SHEET 14 OF 18

STEEL SPIRAL RIB PIPE
 HEIGHT OF COVER TABLE FOR H-20 LIVE LOAD

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV. 7/05
 107.18

SPECIFICATION REFERENCE
 232
 302

NEW 7/05
 SPECIAL DESIGN SECTION
 DRAWING NO. A 166_7

PLAN NO.	PROJECT	FILE NO.	SHEET NO.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.				