

HORIZONTAL INSTALLATION



EQUIVALENT ROUND SIZE (IN.)	SPAN X RISE (IN.)	MAX. HEIGHT OF COVER IN FEET	
		1 - 13	14 - 21
		HE - III	HE - I V
18	23 x 14		
24	30 x 19		
27	34 x 22		
30	38 x 24		
33	42 x 27		
36	45 x 29	METHOD "A" BEDDING	METHOD "A" BEDDING
39	49 x 32		
42	53 x 34		
48	60 x 38		
54	68 x 43		
60	76 x 48		
66	83 x 53		
72	91 x 58		
78	98 x 63		
84	106 x 68		

VERTICAL INSTALLATION



SPAN X RISE (IN.)	MAX. HEIGHT OF COVER IN FEET		
	1 - 13	14 - 21	22 - 29
	VE - III	VE - I V	VE - V
29 x 45	METHOD "A" BEDDING	METHOD "A" BEDDING	METHOD "A" BEDDING
32 x 49			
34 x 53			
38 x 60			
43 x 68			
48 x 76			
53 x 83			
58 x 91			
63 x 98			
68 x 106			

ELLIPTICAL CONCRETE PIPE COVER TABLES FOR H-20 LIVE LOAD

NOTES:

- Cover heights indicated in the Tables are for finished construction.
- To protect pipe during construction, ensure the minimum heights of cover prior to allowing construction traffic to cross installation are 1/2 of the span or 3 feet, whichever is greater. Extend cover the full length of the pipe. Extend the approach fill ramp to a minimum of 10 times the span plus 3 feet on each side of the pipe or to the intersection with a cut.
- Standard minimum finished height of cover for all pipes is 1/2 of the span or 2 feet, whichever is greater. In cases in which these cover heights cannot be achieved, an absolute minimum finished cover height of 12 inches will be allowed only if all possible means to obtain the standard height have been exhausted. Ensure minimum finished height of cover for pipes under entrances and median crossovers is 9 inches.
- For flexible pavement and aggregate surface roadways, measure minimum cover from the top of the pipe culvert to the bottom of the roadway subgrade. For rigid pavement measure minimum cover from the top of the pipe culvert to the top of the pavement. For all roadway surface types, measure maximum fill height from the top of the pipe culvert to the top of the pavement.

NO SCALE

ADOPTED FROM:
VIRGINIA DEPARTMENT OF TRANSPORTATION
STANDARD PC-1, PAGE 107.06

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION OFFICE OF FEDERAL LANDS HIGHWAY	
EFLHD DETAIL	
ELLIPTICAL CONCRETE PIPE	
DETAIL APPROVED FOR USE APPROVED: MAY 2011 REVISED: SEPTEMBER 2020	DETAIL E602-08