

### POLYETHYLENE (PE) PLASTIC ROUND PIPE CULVERT

FILL HEIGHT TABLE AND MINIMUM CELL CLASSIFICATION NUMBER PER ASTM D 3350

SMOOTH WALL (SOLID WALL)								CORRUGATED			RIBBED						
PIPE SIZE DIAMETER INCHES	MINIMUM COVER INCHES	CELL CLASSIFICATION NUMBER 335434C						PIPE SIZE DIAMETER INCHES	MINIMUM COVER INCHES	CELL CLASS. NO. 435400C	PIPE SIZE DIAMETER INCHES	MINIMUM COVER INCHES	CELL CLASS. NO. 334433C	CELL CLASS. NO. 335434C			
		MINIMUM WALL THICKNESS (INCHES)													MAXIMUM FILL HEIGHT (FEET)	MAXIMUM FILL HEIGHT (FEET)	
		0.607	0.857	0.923	1.154	1.385	1.292									1.477	MAXIMUM FILL HEIGHT (FEET)
12	12	57						12	12	10	18	12	18	24			
18	12		52					15	12	10	24	12	22	28			
24	12			38				18	12	10	30	12	22	28			
30	12				38			24	12	10	36	12	25	31			
36	12					38		30	12	10	42	12	21	27			
42	12						27	36	12	10	48	12	21	26			
48	12						27										

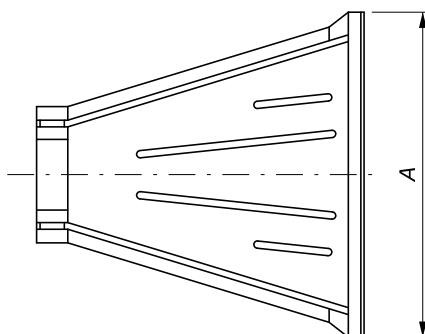
#### NOTES:

- When directed, camber pipe culverts upward from a chord through the inlet and outlet inverts an ordinate amount equal to 1% of the pipe length. Develop camber on a parabolic curve. If the midpoint elevation on the parabolic curve as designed exceeds the elevation of the inlet invert, reduce the amount of camber or increase the pipe culvert gradient.
- 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.

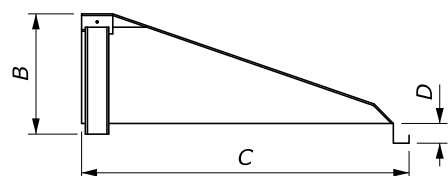
### POLYVINYL CHLORIDE (PVC) PLASTIC ROUND PIPE CULVERT

FILL HEIGHT TABLE AND MINIMUM CELL CLASSIFICATION NUMBER PER ASTM D 1784

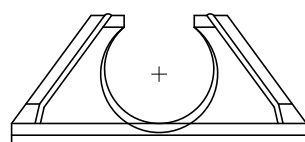
SMOOTH WALL (SOLID WALL)						RIBBED					
PIPE SIZE DIAMETER INCHES	MINIMUM COVER INCHES	CELL CLASS. NO. 12454		CELL CLASS. NO. 12364		PIPE SIZE DIAMETER INCHES	MINIMUM COVER INCHES	CELL CLASS. NO. 12454C	CELL CLASS. NO. 12364C		
		MINIMUM WALL THICKNESS (INCHES)								MAXIMUM FILL HEIGHT (FEET)	
		0.358	0.438	0.358	0.438					MAXIMUM FILL HEIGHT (FEET)	
12	12	65		69		12	12	37	26		
15	12		62		66	15	12	32	22		
						18	12	33	23		
						24	12	29	21		
						30	12	28	20		
						36	12	27	19		
						42	12	26	18		
						48	12	24	17		



TOP



SIDE



FRONT

#### END SECTION DIMENSIONS

PIPE SIZE DIAMETER INCHES	DIMENSIONS INCHES			
	A	B	C	D
12	42	14.5	33	6
15	46	24.5	45.5	6
18	54	29	55	6
24	64	37	65	6
30	88	36	63.5	6
36	88	43	66.5	6

PLASTIC PIPE END SECTION

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION EASTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL	
<b>PLASTIC PIPE CULVERT</b>	
STANDARD APPROVED FOR USE 12/1993 REVISED: 4/1994 6/2005 2/2009 3/2016 7/2020	DETAIL ET 602-5