


PIPE DIA mm	BEDDING CLASS	CONFINED TRENCH				
		HEIGHT OF FILL 0.3 to 0.6m	MAXIMUM HEIGHT OF FILL FOR DEPTHS > 0.6m			
		PIPE CLASS	50-D	65-D	100-D	140-D
300	B	140-D	2.2	3.1	6.7	NL
	C	SD	1.6	2.4	4.3	10.2
375	B	140-D	2.3	3.4	8.3	NL
	C	140-D	1.7	2.5	4.9	15.5
450	B	100-D	2.5	3.6	9.5	NL
	C	140-D	1.8	2.7	5.3	22.6
525	B	100-D	2.6	3.9	10.4	NL
	C	100-D	1.9	2.8	5.6	30.7
600	B	65-D	2.7	4.0	10.8	NL
	C	100-D	2.0	2.9	5.9	30.3
675	B	50-D	2.8	4.1	11.0	NL
	C	65-D	2.0	2.9	6.0	24.6
750	B	50-D	2.8	4.2	10.8	NL
	C	65-D	2.0	3.0	6.1	19.8
825	B	50-D	2.9	4.3	10.7	NL
	C	50-D	2.1	3.0	6.2	17.7
900	B	50-D	2.7	3.7	6.6	12.5
	C	50-D	2.2	2.9	4.9	8.0
975	B	50-D	2.7	3.7	6.7	12.8
	C	50-D	2.2	2.9	4.9	8.2
1050	B	50-D	2.7	3.8	6.8	12.9
	C	50-D	2.3	2.9	5.0	8.3
1200	B	50-D	2.9	3.9	7.0	13.1
	C	50-D	2.4	3.0	5.1	8.4
1350	B	50-D	3.0	4.0	7.3	13.7
	C	50-D	2.5	3.2	5.3	8.8
1500	B	50-D	3.1	4.0	7.2	13.1
	C	50-D	2.6	3.2	5.3	8.7
1650	B	50-D	3.2	4.1	7.3	12.9
	C	50-D	2.6	3.3	5.3	8.6
1800	B	50-D	3.3	4.2	7.3	12.7
	C	50-D	2.7	3.4	5.3	8.6
1950	B	50-D	3.3	4.2	7.3	12.8
	C	50-D	2.7	3.4	5.4	8.7
2100	B	50-D	3.4	4.3	7.3	12.6
	C	50-D	2.7	3.5	5.4	8.6
2250	B	50-D	3.4	4.3	7.3	12.4
	C	50-D	2.8	3.5	5.4	8.6
2400	B	50-D	3.4	4.4	7.1	12.2
	C	50-D	2.3	3.5	5.4	8.5
2550	B	50-D	3.5	4.4	7.2	12.0
	C	50-D	2.8	3.6	5.4	8.4
2700	B	50-D	3.5	4.4	7.0	11.9
	C	50-D	2.8	3.6	5.5	8.3
3000	B	50-D	3.5	4.4	7.1	11.9
	C	50-D	2.8	3.6	5.5	8.3

LEGEND:

SD = Special Design
NL = No Limit

NOTES:

- A Height of fill is measured from the finished surface to top of pipe.
- B Minimum design height of fill over the top of pipe shall be greater than 600mm. Contact the concrete pipe supplier for special pipe designs 600mm or less.
- C For pipe-to-structure connections, the recommended minimum height of fill over the top of pipe shall be 600mm. Refer to OPSS 401.07.10 for minimum height of fill for backfilling and use of heavy equipment.
- D The excavation width is based on OPSD 802.030 and is the width of the excavation measured at the top of the pipe.
- E Strength designations are pipe Class 50-D, 65-D, 100-D, and 140-D according to CSA A257.2.
- F The table is based on backfill density of 2,243 kg/m³, truck axle loads as per CHBDC Annex A3.4.1.
- G For confined trench, the load factor used for the calculation of the variable bedding factor is:
Class B bedding=1.9, and Class C bedding=1.5.
- H For confined trench, $K_{\mu}'=0.165$. This represents a sand and gravel soil material in the trench walls, similar to Granular A or Granular B Type II as per OPSS 1010.
- I This Fill Height Table was established using assumed design parameters, and should be used for guideline purposes only. The user should verify site specific design requirements for the pipe design.
- J Conditions other than those indicated shall be calculated from first principles.
- K All dimensions are in metres unless otherwise shown.

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HEIGHT OF FILL TABLE	-----			
REINFORCED CONCRETE PIPE – CONFINED TRENCH CLASS 50-D, 65-D, 100-D, and 140-D	-----			
OPSD 807.010				