

- For new pipe connections, provide cored opening with flexible pipe connector.
- For existing pipe connections, provide an arched opening with a diameter up to 6 inches larger than outside diameter of pipe. Install waterstop around existing pipe. Fill void between pipe and opening with non-shrink grout.
- For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- 12 inch minimum riser height above all pipe openings.

Manhole Diameter (inches)	Maximum Pipe Diameter (3) (inches) for 2 Pipes	
	At 180°	At 90°
	Separation	Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

