



East Brunswick Sewerage Authority

Precast Reinforced Concrete Manhole Checklist

- ___ American manufactured.
- ___ Wet cast (monolithic).
- ___ Minimum compressive strength of 4000 psi (27 Mpa).
- ___ Capable of withstanding HS-20 loading conditions.
- ___ All manhole sections comply with ASTM C-478, last revision.
- ___ Complies with ASCE Manual of Engineering Practice No. 60 Standards.
- ___ Maximum adsorption of the concrete does not exceed 9.00% of the dry weight (in accordance with ASTM C-478, Method A).
- ___ Base and first section monolithically cast with minimum wall circumferential reinforcement of 0.12 in.² per vertical foot for inside diameters up to and including 54 inches and 0.17 in.² per vertical foot for larger sizes.
- ___ Minimum base steel reinforcement of 0.13 in.²/horizontal foot both directions.
- ___ Reinforcement in accordance with ASTM A-185 and C-478, last revision.
- ___ All exterior surfaces (including base) sealed with two coats of an acceptable waterproofing tar, asphalt or polyplastic alloy (minimum 4 mils).
- ___ Pipe to manhole, flexible seal cast integrally in manhole wall.
- ___ Pipe to manhole seal – 10° maximum directional deflection.
- ___ Pipe to manhole seal in accordance with ASTM rubber gasket specs C-923.
- ___ Preformed rubber gasket joint seals meeting ASTM C-443, ASTM C-990 or Federal Spec SS-S-210-A
- ___ Preformed rubber gasket joint seals meets/exceeds test requirements of ASTM C-425.
- ___ Precast monolithically poured concrete flow channels and bench walls to ¾ pipe section.
- ___ The minimum depth of flow is equal to ½ the diameter of the pipe to which it connects. The channel must be graded to give a smooth, uninterrupted flow through the manhole.
- ___ Bench walls are pitched a minimum of one inch per foot (82 mm per meter) from the inside periphery of the manhole to the edge of the flow channel for draining purposes.
- ___ Manhole rungs vertically aligned and spaced at a maximum distance of 12" apart.
- ___ Aluminum manhole rung extruded alloy 6061-T6 with plastic step insert (cast into manhole wall) or polypropylene plastic manhole rung including ½" grade diameter 60 steel center (epoxy coated) with plastic step insert cast into manhole wall.
- ___ Manhole step dimensions meet requirements of OSHA standards.