## 48" Polypropylene Basin Specification

## **GENERAL**

This specification describes the 48" Polypropylene Basin for use in underground storm water applications as indicated on the contract drawings and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer.

## **MATERIALS**

The 48" Polypropylene Basin bodies shall be made from an impact modified copolymer polypropylene meeting the material requirements of <u>ASTM F2764</u>. The joint tightness shall conform to <u>ASTM D3212</u> for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals used for the polyethylene cone and pipe connections to the structure shall conform to ASTM F477.

The reducing plate, covers, grates and frames furnished for all 48" Polypropylene Basin surface drainage inlets shall be ductile iron. Ductile iron castings used shall conform to ASTM A536 grade 70-50-05 for ductile iron and shall be painted black.

## **INSTALLATION**

The maximum burial depth of the 48" (1200 mm) HP Polypropylene Basin is 15' (4.6 m) with the use of Class I compacted material as defined in ASTM D234. Excavate Polypropylene Basin location to the depth required and provide a stone base. Stone base shall be a minimum of 6" (150 mm), however a thicker base may be required. A geotechnical engineer shall be contacted to determine adequate bedding specifications. Set Polypropylene Basin in place and level structure. Connect storm pipe into Polypropylene Basin. Re-check Polypropylene Basin depth, level and position. The backfill material shall be crushed stone meeting the requirements of Class I material as defined in ASTM D2321. Bedding and backfill shall be well placed and compacted uniformly in accordance with ASTM D2321. All 48" HP Polypropylene Basins are custom made to order as specified. The maximum depth is 15' (4.6 m). Contact ADS Technical Services for burial depths greater than 15' (4.6 m) or where groundwater will be encountered. The frame and grate/cover must be fully supported by a reinforced concrete collar as designed by others. The concrete collar must extend no less than 18" (450 mm) from the edge of the frame in all directions. The collar must bear on the surrounding stone and soil backfill and not on the structure. For other installation considerations, such as migration of fines, ground water, and soft foundations, refer to ASTM D2321 guidelines.

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STANDARD DETAIL

48" POLYPROPYLENE BASIN

SPECIFICATION



4640 TRUEMAN BLVD HILLIARD, OH 43026 DRAWN BY: NMH

DATE: 01/30/23

OK'S BY:

SCALE: NTS

SHEET: 1 DF