



## MHD18

### 18"(457mm) ID Trench Forming System with Uncoated High Intake Gate STANDARD SPECIFICATION

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#### System ID#: TR18-18.502F.GB-G25E

Manufactured by ABT, Inc., 259 Murdock Road, Troutman, NC - (800)438-6057

[www.abtdrains.com](http://www.abtdrains.com)

#### System Components:

**Forms – F18GR:** Pre-manufactured trench forms using recyclable non - CFC EPS foams. Forms to be round bottom, pre-sloped or non-sloped. Form segments are 18" (457 mm) wide. Trench width created to be within 1/16" (1.58mm) of specified. Invert slope per application requirement as noted on plans. Non-sloping sections must have written approval by engineer prior to installation. Form work to be anchored against floatation to the earth without penetrating the subgrade using steel no-float legs and an anchor slab pour. Means to assure constant rail spacing and grate seat dimension must be provided. Non-petroleum-based form release is to be used for smooth interior walls and easy form removal.

**Grating - 18.502F.GB:** Uncoated ductile iron high intake slotted grates. Grates to have a 1.08 FT<sup>2</sup>/LFt (0.33 m<sup>2</sup>/Lm) open area. Grates shall pass a proof load of 100,000 lbs per FAA Spec. AC 150/5320-6. Additionally, grates shall pass a proof load of 1,235 psi applied to 9-inch-wide x 9-inch-long load contact area per AASHTO M-306 test method. Grates must be flush with top of rails. Covers are non-rigidly retained at each grate corner with a zinc plated 0.38" x 0.9" ductile iron lock bar. Cover retention and location performance shall not degrade with service loads or thermal cycles.

**Frames / Rails - GD2E:** Black polymer coated 2.00" x 2.00" x 0.188" (50.8 mm x 50.8 mm x 4.8 mm) steel rails furnished with standard headed concrete anchors conforming to or exceeding American Concrete Institute's specifications. Rails to provide a minimum of 1.25 square inches concrete bearing area per inch of trench length on each side. Auxiliary frames are to be used as noted on plans to facilitate radii, intersections, grade changes and expansion, control & construction joints. Load bars are to be installed as noted on the plans to reinforce rails where unsupported by concrete.

#### Quality Assurance:

**Submittals:** A Certificate of Compliance in conformance with the provisions of these Standard Specifications shall be furnished to the Engineer. Grates shall be tested by an independent test laboratory.

**Post Construction Inspection:** Form work is to be fully removed, without exception, to allow for inspection and if needed repair of any voids and or concrete consolidation issues below the frame, trench walls and invert. Grate and grate retainer inspection shall be performed to ensure that all grates and retainers are installed and are properly seated in place.

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