



1032 Model with Captive Hinge Specification

General

This specification is applicable for ductile iron hinged construction castings where either a solid cover or grate can be utilized and the cover or grate can be made captive to the frame. The cover or grate shall be able to be made captive to the frame before, during or after installation. Castings shall be 1032 Model or approved equal. Approved equal must meet the requirements of this specification.

Material

Manufacturer shall certify that the ductile iron conforms to ASTM A536 grade 70-50-05 or 80-55-06. Castings must contain a minimum of 85% recycled content.

Markings

All products shall have the product name or series number (example: 1032), country of origin, specific part number, production date, material information, and the manufacturer's identification or name (EJ) permanently cast on the product. The top of manhole covers shall have the country of origin and manufacturer's identification. Bottom of the casting shall have the product name or series number, part number, production date (example: mm/dd/yy) for tracking purposes, and material quality (such as ASTM A536) to verify the materials used. When a grate is supplied it shall be provided with permanently engraved lettering of "Dump No Waste, Drains to Waterways". Castings without proper markings shall be rejected.

Product Specifics

This product shall be designed so that the cover or grate can be made captive to the frame before, during or after installation. Covers shall be provided with a non-slip texture. The hinge shall be designed with an integral safety catch which holds the cover at 90 degrees until released. Covers shall come with a MPIC lifting option, which allows for ease of opening. Covers or grates shall be supplied with a glued in EPDM gasket to reduce noise. Castings shall be suitable for HS-25 traffic loading and shall have passed an 80,000 pound proof load test as outlined in AASHTO M306. Castings shall be of uniform quality, free from sand holes, gas holes, cracks, shrinkage and other surface defects. Castings shall be reasonably well cleaned by shot blasting. Runners, risers, fins and other cast-on pieces shall be removed from the castings and such areas shall be ground smooth. As-cast dimensions may vary within accepted foundry tolerances as outlined in the Iron Castings Handbook published by the American Foundrymen's Society, Inc. Nominally, casting dimensional tolerances shall be +/- 1/16 inch per foot. Castings shall be furnished uncoated.

Product Options

If desired, the product shall be provided as locked with either a bolt or with a cam. An optional cover can be provided that will allow for wireless monitoring.

Certification/Standards Compliance

ASTM A536	Material
AASHTO M306	Product Performance/Quality
ISO 9001:2008	Quality Assurance

Quality Assurance

System of manufacturing quality assurance must conform to the requirements of ISO 9001:2008 and be certified by a third party. Producing foundry must be an approved supplier to XXXX State Department of Transportation.