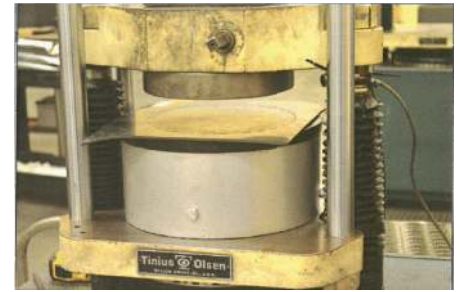


H-20 LOAD RATING EXPLAINED

WHAT IS H-20 LOADING?

There is often confusion when simply referring to H-20 Load Rating – does it mean 16,000 lbs, 20,000 lbs, or 40,000 lbs? H-20 loading is 16,000 lbs and Bingham & Taylor plastic meter lids and meter pits meet this criteria.

The American Association of State Highway Transportation Officials (AASHTO) established performance criteria for the manufacturing of gray iron castings subject to heavy traffic commonly known as H-20 or HS-20 loading. H-20 refers to a two-axle truck and HS-20 refers to a truck with more than 2 axles. The design criteria for both H-20 and HS-20 consists of truck axle loading of 32,000 lbs, or 16,000 lbs per wheel load.



Load Testing Setup

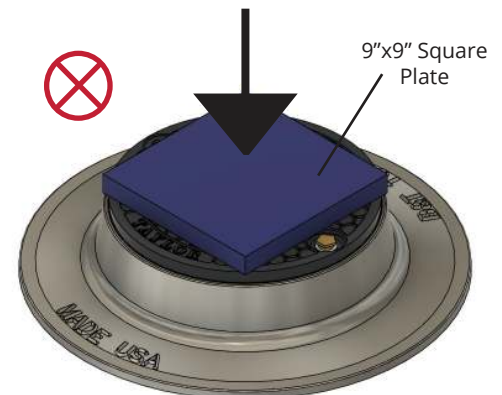
WHAT IS THE AASHTO M-306 STANDARD?

The AASHTO M-306 Standard applies to gray cast iron frames and covers that may be placed in traffic service and load bearing is a consideration. It requires a safety factor of 2.5 x the H-20 loading, which equates to a 40,000 lb proof load (2.5 x 16,000 lbs).

AASHTO M-306 TESTING SPECIFICATIONS

Although H-20 and AASHTO M-306 specifically apply to metal castings, many in the waterworks industry have used these designations and specifications when describing plastic or composite meter lids and meter pits. Here are some key testing parameters according to AASHTO M-306:

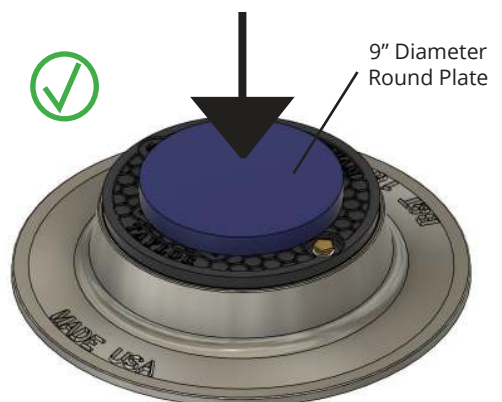
- The proof load shall be applied evenly over a 9"x9" square area at the center of the lid. For items where a 9"x9" footprint would transfer load directly to the frame, the loading footprint size shall be smaller than the corresponding frame clear opening.
- The loading footprint size shall not exceed 9" in any direction.



Lid Not Properly Tested
Load Transferred to Frame

B&T PLASTIC METER LIDS AND METER PITS

To avoid any confusion, Bingham & Taylor will always specify the proof load that our products are tested under. Our plastic meter lids and meter pits meet a proof load of 20,000 lbs and are tested with the key parameters of AASHTO M-306, including that the loading does not directly transfer to the frame. B&T uses a 9" diameter steel plate to ensure proper testing of the lid.



Lid Properly Tested
Load Fully on Lid

Our plastic meter lids and meter pits are not intended to be installed in the roadway and are suitable for pedestrian and incidental light-duty traffic.