1. **SCOPE**

This specification covers meter boxes for 5/8", 3/4", 1", 1-1/2" and 2" meters.

2. **GENERAL REQUIREMENTS**

For non-traffic bearing locations, the meter box assembly for 5/8" through 1" meters shall be made from 100% high-quality recycling plastic. The meter box and lid shall be black and constructed out of modified polyethylene material for maximum durability and corrosion resistance. The black material is for maximum UV protection. The black material shall be uniform throughout the meter box and lid for maximum longevity and not have a foaming agent that creates air pockets within the plastic wall. The body and lid shall withstand 20,500 lbs loading in a non-deliberate and incidental traffic.

For traffic bearing locations, the meter box assembly for 5/8" through 2" meters shall consist of a cast-iron rectangular box and a steel checkered plate rectangular cover with raised lug pattern in accordance with the attached San Antonio Water System Drawing listed below:

<table>
<thead>
<tr>
<th>Meter Size</th>
<th>San Antonio Water System Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; thru 2&quot;</td>
<td>DA-11-01</td>
</tr>
</tbody>
</table>

3. **SPECIFIC REQUIREMENTS**

**Plastic Lid**

Plastic lid shall have the following:

a) “Water Meter” and “SAWS” molded into the lid.

b) Seat securely and evenly inside the meter box and shall not overlap the top edge of the meter box.

c) “Overlap” securely and evenly on the existing SAWS cast iron meter box with like dimensions.
SPECIFICATIONS FOR WATER METER BOXES
(5/8", 3/4", 1", 1-1/2" AND 2" Meters)

REVISED DECEMBER 2011

d) A diamond pattern for skid resistance and an AMR Slide Mount molded into the lid on the underneath side and off center for placement of an AMR transponder to help in the protection of the radio antenna.

e) A brass worn gear lock that will secure to existing SAWS cast iron meter box of like dimensions and secure to the plastic meter box. See specification drawing.

f) A molded receptacle for placement of SAWS key.

g) One (1) piece of ½” rebar secured in lid. See specification drawing.

Plastic Body

Plastic body shall have the following:

a) A crush resistant ribbing along the outside of the box.

b) A flange around the top opening to help prevent setting and aide in the adjustment to grade.

c) Designed to accommodate all plastic lids.

Cast Iron Rectangular Box for Traffic Bearing Locations

Cast Iron Body shall have the following:

a) Ultimate tensile strength of 25,000 psi and shall not be brittle.

b) “As cast” clean smooth surface and be free from internal porosity; castings that are made smooth by grinding will not be considered.

c) Be dipped in a coal tar at a temperature of 350 degrees and the metal shall be at a temperature of 300 degrees prior to dipping. The casting shall be dipped and cured independently and the coating shall have ceased to be "tacky" within 72 hours after dipping.
d) The steel checkered plate rectangular cover shall be hot dip galvanized after fabrication.

4. QUALITY ASSURANCE

If on receipt of meter box(s) or lid(s) they are found to be non-compliant, the manufacturer shall replace the defective box(s) or lid(s) with a replacement that meets the San Antonio Water System’s specifications, at no charge to San Antonio Water System. Any visible defect or failure to meet the quality standards herein will be ground for rejecting the entire order.

Product that is non-compliant will be returned to the manufacturer, freight collect and the manufacturer will replace the defective product, freight prepaid within thirty (30) days from receipt of the defective product.

Approved Plastic Meter Box and Lid Manufacturer:

<table>
<thead>
<tr>
<th>Manufacturers</th>
<th>Model Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFW Plastics Inc.</td>
<td>D-1218-RWSBSM (Complete box)</td>
</tr>
<tr>
<td></td>
<td>D-1218-RWSBSM-Lid</td>
</tr>
<tr>
<td></td>
<td>D-1218-Body</td>
</tr>
</tbody>
</table>

Previous Specification
MAY 1992
DECEMBER 2006
FEBRUARY 2000
DECEMBER 2007
DECEMBER 2011
San Antonio Water System Material Standard Specifications

**PLAN**

- Steel checker plate with raised lug pattern
- 2-1" x 1" x 1/8" angle steel (23 3/4" long) welded all around to the underside of 3/8" plate (do not weld ends of 1" x 1" x 1/8" angle plates)
- 2-2" x 2" x 1/4" angle steel (22" long) welded all around to the underside of 3/8" plate

**NOTE:** ±1/8" Flattness Tolerance
Lid Sealing Surface shall be machined.

**END**

**SECTION A**

**SIDE**

The meter box assembly shall consist of a cast iron rectangle meter box and a steel rectangular cover.

- ±0.025 Cast Tolerance
- Lid Sealing Surface shall be machined.
- Lid edges must be free of dripings which prevent proper fitting of cover in box.

Rectangular Meter Box
5/8", 3/4", 1" and 1 1/2" meters in all locations.

Property of
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

**METER BOX ASSEMBLY**
FOR 5/8", 3/4", 1" METERS

Approved: JANUARY 1985
Revised: APRIL 2001

DA-011-01 SHEET 1 OF 3
San Antonio Water System Material Standard Specifications

NOTE: ±.125 Flatness Tolerance
Lid seating surface shall be machined.

Steel checkered plate with raised lug pattern

2 1/8"

5/8" R

14 7/8"

5/8" R

2 - 1" x 1" x 1/8" angle steel (23.3/4" long) welded all around to the underside of 3/8" plate (do not trim ends of 1" x 1/8 angle plate)

2 - 2" x 2" x 1/4" angle steel (22" long) welded all around to the underside of 3/8" plate

TRIM BOTTOM ENDS OF 2" x 2" x 1/4" ANGLE STEEL AT 45° ANGLE

SIDE ELEVATION

END ELEVATION

PROPERTY OF
SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS

LID FOR
#2 CAST IRON METER BOX

APPROVED
JANUARY 1966

REVISED
FEBRUARY 2000

DA-011-01

SHEET 2 OF 3