Standard installation drawings approved by Measurement Canada (MC) for liquid measuring devices.

In response to the Downstream Petroleum Trade Sector review, Measurement Canada is publishing standard installation drawings. The standard installation drawings indicate the major metrological components of typical volumetric metering systems and the associated MC regulatory requirements. These drawings will assist service agencies and petroleum companies to better understand the MC installations requirements for volumetric measuring devices.

**Standard installation drawing list:**

- Truck Mounted Meter-pump supplied - Drawing 1
- Liquified Gas Meter-rack mounted - Drawing 2
- LPG Truck Mounted Meter - Drawing 3
- Top Loading Rack Meter with air elimination - Drawing 4
- Bottom Loading Rack Meter with air elimination - Drawing 5
- Top and Bottom Loading rack Meter with air elimination - Drawing 6
- Top and Bottom Loading rack Meter with no air elimination - Drawing 7
- Aircraft Fuelling - Truck Mounted - Drawing 8
- Aircraft Fuelling and Defuelling - Truck Mounted using two hoses - Drawing 9
- Aircraft Fuelling and Defuelling - Truck Mounted using a hydrant - Drawing 10
- Aircraft Fuelling - Truck Mounted with educator for line defuelling - Drawing 11
- Ship Mounted Meters - Drawing 12
Truck Mounted Meter - Pump Supplied

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Liquified Gas Meter – Rack Mounted

To Vapour Space

Alternative: Sensing bomb charged with LPG and isolated via valves to reflect temperature and vapour pressure changes.

Delivery Outlet Valve with Anti-drain Valve

Temp. Sensor 
Test Thermowell 
Pressure Gauge

Pump
Air Eliminator or Condensing Tank with Sensing Bomb

Strainer

Meter
Differential Back-Pressure Valve

Quick Acting Valve Required for Mechanical Systems / Automatic Valve Required for Electronic Systems

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
LPG Truck Mounted Meter

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Top Loading Rack Meter with Air Elimination

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Bottom Loading Rack Meter with Air Elimination

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Top and Bottom Loading Rack Meter with Air Elimination

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Top and Bottom Loading Rack Meter with No Air Elimination
(to be read in conjunction with bulletin V-21)

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Aircraft Fuelling – Truck Mounted

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Aircraft Fuelling and Defuelling - Truck Mounted Using Two Hoses

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Aircraft Fuelling and Defuelling - Truck Mounted Using a Hydrant

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Aircraft Fuelling - Truck Mounted with Eductor for Line Defuelling

Note: This system must not be used to defuel aircraft

Note: System illustrated represents standard requirements. Please contact the Volumetric Specialist if any deviations.
Ship Mounted Meters

Note: System illustrated represents standard requirements.
Please contact the Volumetric Specialist if any deviations.