INTERMOUNTAIN® GAS COMPANY
A Subsidiary of MDU Resources Group, Inc.

**Engineering Design Requirements for Meter Protection Assembly (Snow Shield)**

Intermountain Gas Company is committed to the safety of our customers. The location of the meter is an important safety issue. There are several options to keep the meter protected, see the options at the Intermountain Gas website: www. Intgas.com/snow. The option of constructing a free standing snow shield is one of those options. The snow shield is designed to protect the meter from accumulations of snow and falling ice. IGC will not activate the service until the meter is properly protected.

Once the design is complete, IGC requires a Professional Engineer stamped drawing of the design prior to meter activation. The design can be provided electronically or hard copy to Intermountain Gas. For further information, call 1-800-548-3679.

The snow shield design shall be of sound design and shall conform to the following minimum requirements:

1. The dimensions require the meter set to be protected, while not restricting access:
   - 1.1. The meter will not be greater than 25" from wall.
   - 1.2. 28" of overhang (from the edge of building out over meter).
   - 1.3. 12" minimum clearance above the meter.
   - 1.4. The width to cover the meter set while allowing adequate clearance on each side of the meter to allow for meter maintenance.
     - 1.4.1. Minimum dimensions are small set (25"), medium set (30") and large set (40").
   - 1.5. Larger commercial meters and remote meter locations (meters greater than 25" from dwelling) may require special dimensions. For further information on natural gas meter assembly, call 1-800-548-3679.

2. Designed to withstand a falling object:
   - 2.1. With a weight of 22lbs.
   - 2.2. Cylindrical in shape with a height of 8.5 inches and a diameter of 10 inches.
   - 2.3. A final velocity, prior to impact, of 42.8 ft./s. – based on maximum roof height of 30 feet above meter.
   - 2.4. The object is falling at angle of 90 degrees from the horizontal plane.
   - 2.5. The falling object is a point load.
   - 2.6. The object point load shall be applied to centroid of the surface(s) or member(s) of the natural gas meter protection assembly design that provides impact protection for the natural gas meter.

3. The snow shield shall:
   - 3.1. Not deform or otherwise fail, due to the falling object, to the point that the snow shield structure or falling object come into contact with the natural gas meter assembly.
   - 3.2. Not allow the accumulation of natural gas equal to or greater than the Lower Explosive Limit of 5% by volume of air.
   - 3.3. Not completely enclose the natural gas meter assembly.
   - 3.4. Not be attached, by any means, to the natural gas meter assembly.
   - 3.5. Be free standing and weather resistant (e.g. painted, galvanized, etc.).