METROPOLITAN	Construction Standard	No:	8.2.2
UTILITIES DISTRICT	Installation of a Double Insulating Washer Flange Insulating Set	Page:	1 of 2
Prepared by: DJ Satterfield		Supersedes:	11-4-13
Approved by: Jeff Schovanec		Effective:	7-9-18

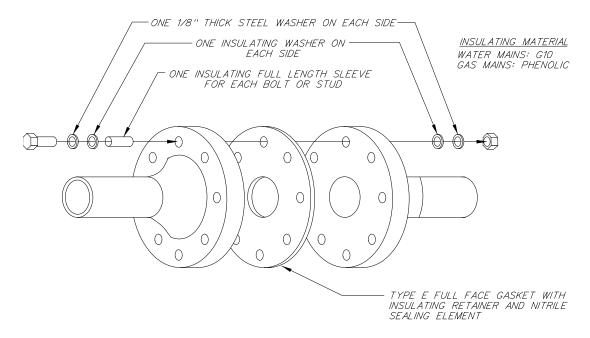


Fig. 1

FLANGE INSULATION WITH DOUBLE INSULATING WASHERS (Fig. 1)

USE:

Flange insulating sets shall only be installed at locations specified by M.U.D. Engineering.

INSTALLATION:

- 1. Clean and inspect pipe flange faces and gasket.
- 2. Install the gasket and align the flanges and gasket so the bolts or studs will be centered.
- 3. Slip the insulating sleeve over the bolt or stud. Slide the steel and fiber washers over the sleeve up against the head of the bolt.
- 4. Insert the stud or bolt with both insulating washers against the flange followed by the steel washer and nut.
- 5. Tighten the bolts or studs alternately around the flange by holding the shank steady and tightening the nut to the necessary torque.
- 6. The bolt or stud shall be of sufficient length to extend through the nut a minimum of one full thread but not more than $\frac{1}{2}$ ".
- 7. Electrical insulation shall be verified as directed by the Corrosion Engineer.

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8. If ductile iron pipe is involved and trace wire is available with existing ductile iron pipe, attach trace wire to existing trace wire per Construction Standard 11.2.2. Install either a roadway box, CC box or test marker. Bring wire up alongside or inside roadway box, CC box or test marker per Construction Standard 11.2.2. See Fig. 2.

CONCRETE DUCTILE IRON PIPE

DOUBLE INSULATING FLANGE SET

Fig. 2

** Added Text

**

*** Added Drawing