

METROPOLITAN UTILITIES DISTRICT	Construction Standard	No: 8.2.1
	Installation of a Single Insulating Washer Flange Insulating Set	Page: 1 of 2
<u>Supersedes:</u> 7-9-18		
Effective: 8-20-24		
Prepared by: Rich Baird	<i>The latest revisions can be found at the end of this document</i>	
Approved by: James Bartels		

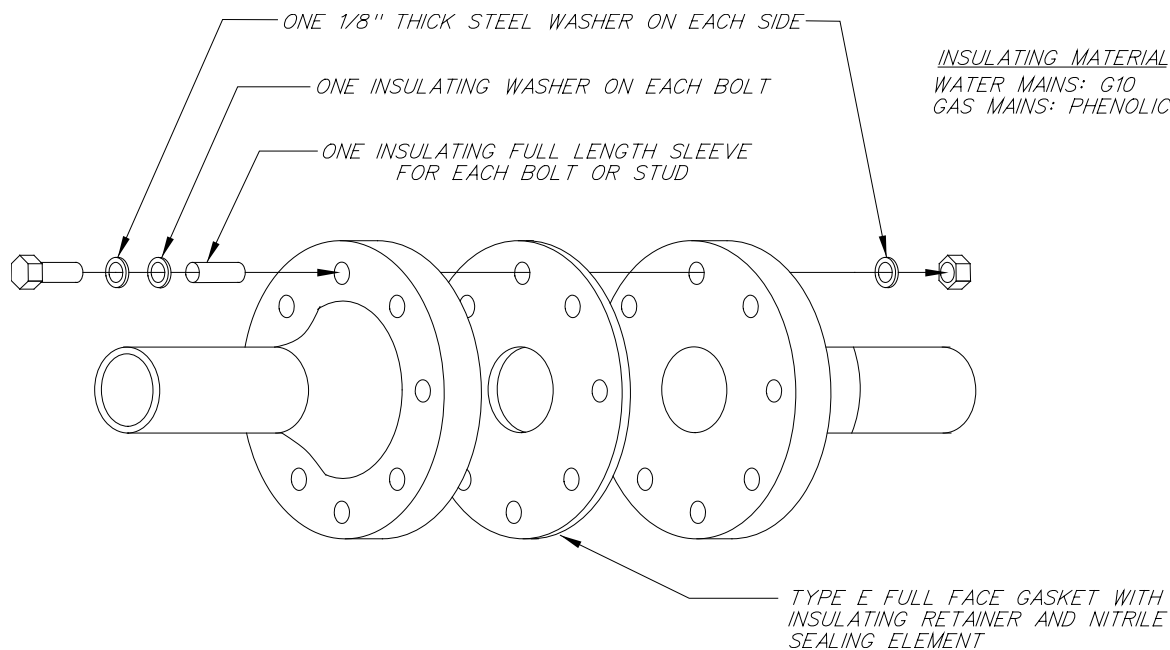


Fig. 1

FLANGE INSULATION WITH SINGLE INSULATING WASHER (Fig. 1)

USE:

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

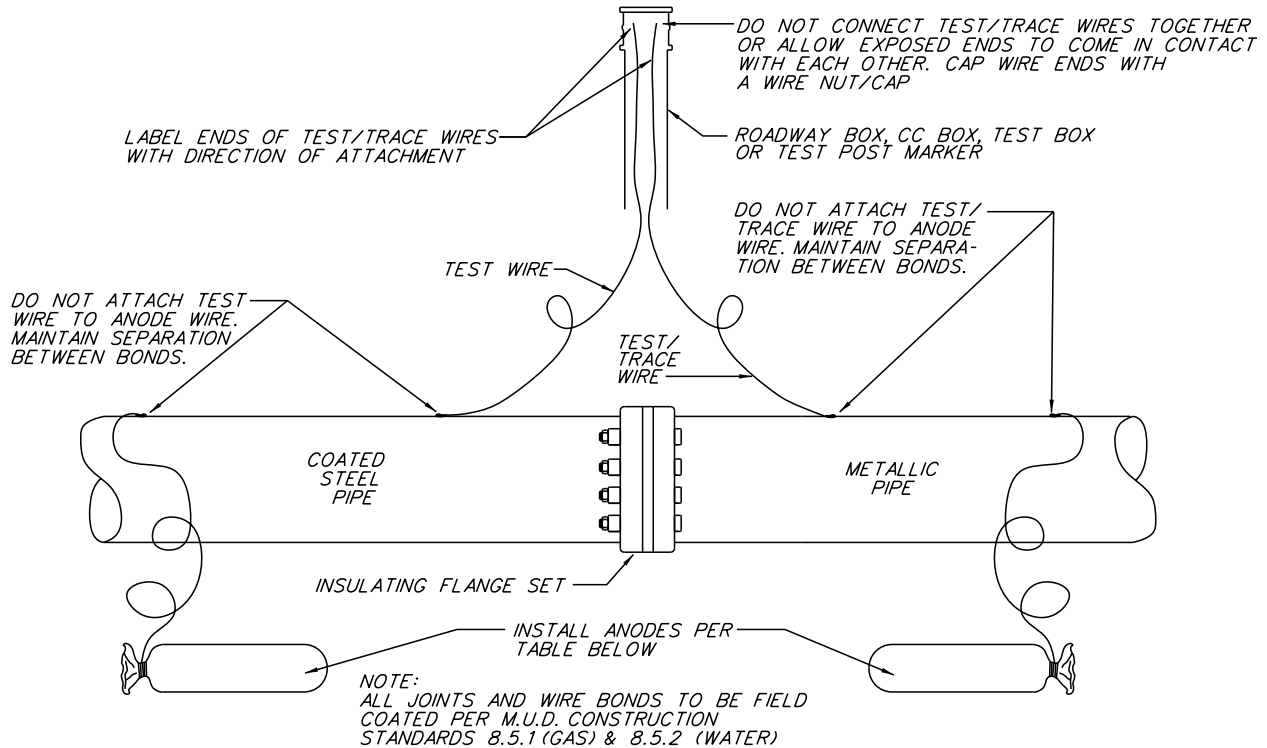
INSTALLATION:

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 washer over the sleeve up against the head of the bolt.
4. Tighten the bolts or studs alternately around the flange by holding the shank steady and tightening the nut to the necessary torque.
5. The bolt or stud shall be of sufficient length to extend through the nut a minimum of one full thread but not more than 1/2 inch.
6. Electrical insulation shall be verified as directed by the Corrosion Engineer.
7. Attach test wire to steel pipe per Construction Standard [8.3.2](#) (gas) or [8.3.3](#) (water). If ductile iron pipe is involved and trace wire is available with existing ductile iron pipe, attach

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trace wire to existing trace wire per Construction Standard [11.2.2](#). Install either a roadway box, CC box or test marker. Bring wire(s) up alongside or inside roadway box, CC box or test marker per Construction Standard [8.3.1](#). See Fig. 2.



TEST WIRE DETAIL

NO SCALE

Fig. 2

ANODES REQUIRED		
	Gas	Water
Bare Steel	32#	N/A
Cast Iron	32# w/ Cathodic Clamp if O.D. is > 12"	32# w/ Cathodic Clamp on all sizes
Coated Steel	17# if O.D. is ≤ 12" 32# if O.D. is > 12"	17# if O.D. is ≤ 12" 32# if O.D. is > 12"
Ductile Iron	None	None

Revision

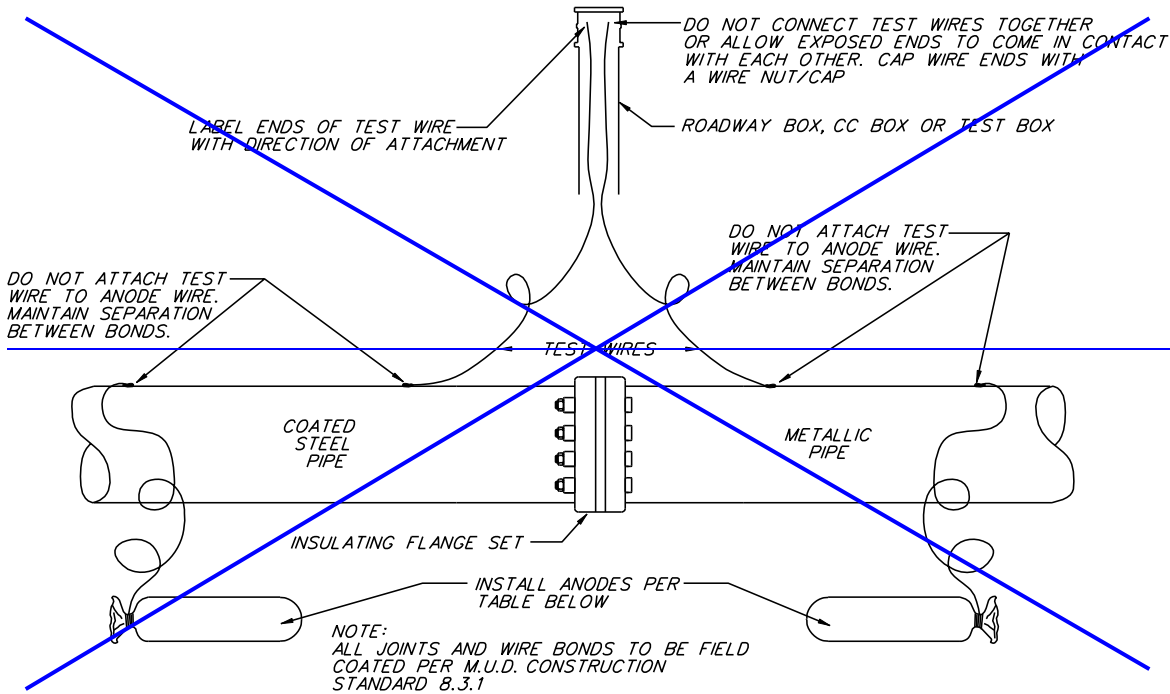
The latest revision is detailed on the following page(s).

Pages affected: **#2 & #3** _____

METROPOLITAN UTILITIES DISTRICT Prepared by: D.J. Satterfield Rich Baird Approved by: Jeff Schovane James Bartels	Construction Standard	No: 8.2.1
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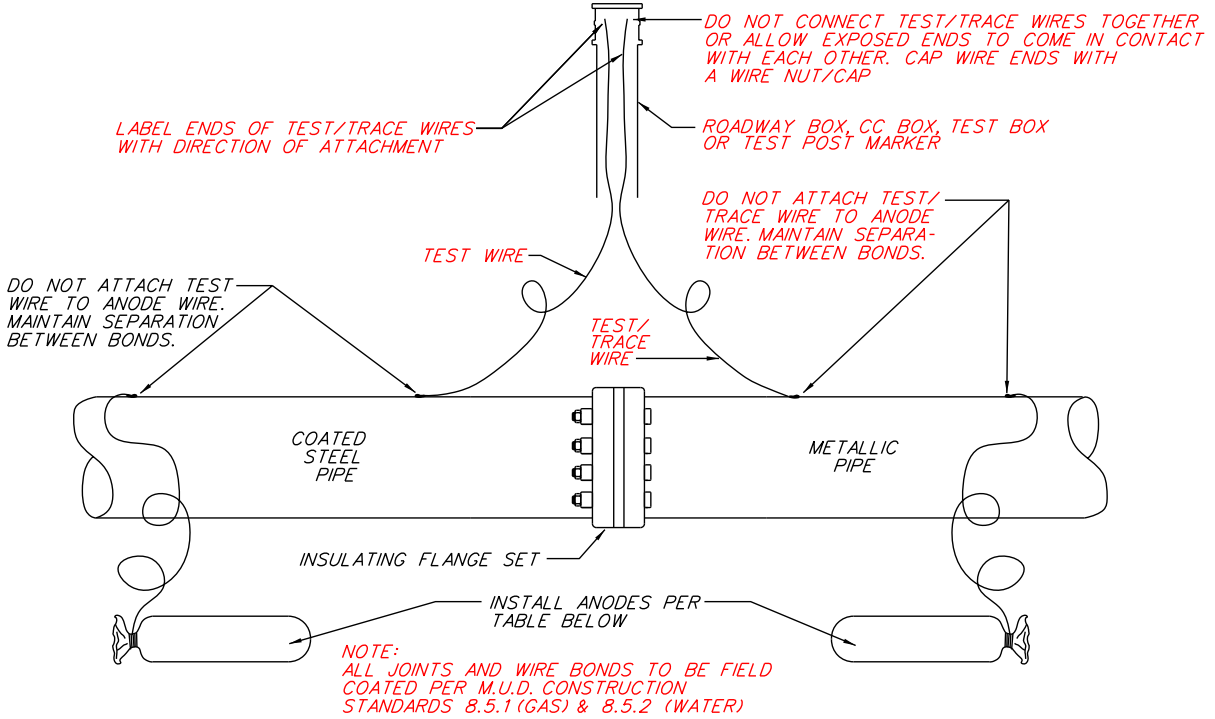
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7. Attach ~~trace~~ test wire to steel pipe per Construction Standard [8.3.2 \(gas\)](#) or [8.3.3 \(water\)](#). If ductile iron pipe is involved and trace wire is available with existing ductile iron pipe, attach test ~~trace~~ wire to existing trace wire per Construction Standard [11.2.2](#). Install either a roadway box, CC box or test marker. Bring wire(s) up alongside or inside roadway box, CC box or test marker per Construction Standard ~~11.2.2~~ [8.3.1](#). See Fig. 2.



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TEST WIRE DETAIL

NO SCALE

Fig. 2

ANODES REQUIRED		
	Gas	Water
Bare Steel	32#	N/A
Cast Iron	32# w/ Cathodic Clamp if O.D. is > 12"	32# w/ Cathodic Clamp on all sizes
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Ductile Iron	None	None

** ~~Added Text~~

*** ~~Added Drawing/Table~~