

Materials Specification – 29 for MECHANICAL JOINT RESTRAINT

1. GENERAL:

All mechanical joint restraints shall be incorporated in the design of a follower gland. The gland shall be manufactured of ductile iron conforming to ASTM A 536. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to AWWA C111 and C153.

2. DESCRIPTION:

The restraint mechanism shall consist of numerous individually activated gripping surfaces to maximize restraint capability. The gripping surfaces shall be wedges designed to spread the bearing surfaces on the pipe. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuating of restraining devices. When the nut is sheared off, a standard hex nut shall remain.

3. PRESSURE:

The mechanical joint restraint device for ductile iron pipe shall have a working pressure of at least 250 psi with a minimum safety factor of 2.

The mechanical joint restraint device for PVC shall have a working pressure of at least 150 psi with a minimum safety factor of 2:1.

4. ACCEPTABLE MANUFACTURERS:

For Ductile Iron Pipe:

Romal Rom Grip		(4" – 36")
EBAA Iron, Inc.	Megalug 1100 series	(4" - 36")
Uni-Flange	Series 1400	(4" – 36")
Star Grip	Series 3000	(4" – 36")
Sigma – One Lok		(4" – 12")

For PVC Pipe:

EBAA Iron, Inc.	Megalug 2000 PV series	(4" - 12")
Sigma One Lok		(4" - 12")
Star		

For Bell – Spigot Device

Ductile Iron Pipe		
Mega Lug	Series 1700	
U.S. Pipe Field Lok Gasket		
Ebba Iron Tru-dual	Series 1500 TD	
American Fastgrip Gasket		(4" - 16")

PVC Pipe

Mega Lug	Series 1500	
Ebba Iron Tru-dual	Series 1500 TD	
Star	Series 1100	(4" – 24")
Romagrip Restraint		

For DI Pipe (Hydrants and Valves)
Mueller Aquagrip Restraint Device

Material Specification – 29
Mechanical Joint Restraint