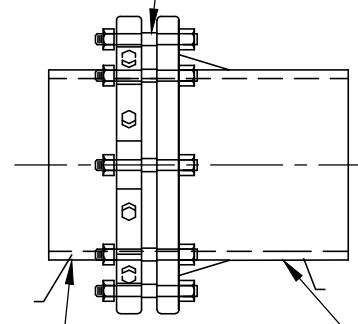
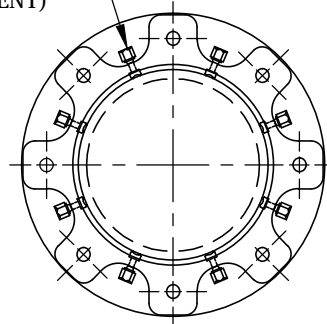


SERRATED TORQUE-LIMITING SCREWS SUFFICIENT TO HOLD WORKING AND TEST PRESSURES (EBAA IRON SERIES 2000 PV FOR PVC PIPE AND MEGALUG FOR D.I. PIPE OR APPROVED EQUIVALENT)

SUFFICIENT No./DIA. OF DUCTILE TIE BOLTS OR TIE RODS TO RESTRAIN WORKING AND TEST PRESSURES



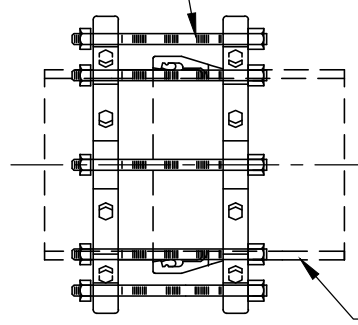
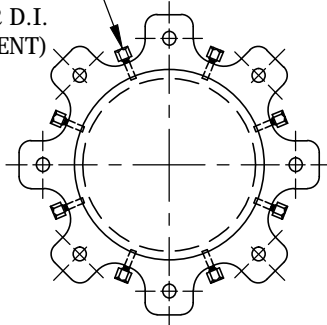
PVC OR D.I. PIPE

MECHANICAL JOINT PIPE

## RESTRAINED JOINTS ON MECHANICAL JOINT PIPE & FITTINGS

SERRATED TORQUE-LIMITING SCREWS SUFFICIENT TO HOLD WORKING AND TEST PRESSURES (EBAA IRON SERIES 2000 PV FOR PVC PIPE AND MEGALUG FOR D.I. PIPE OR APPROVED EQUIVALENT)

SUFFICIENT No./DIA. OF DUCTILE TIE BOLTS OR TIE RODS TO RESTRAIN WORKING AND TEST PRESSURES



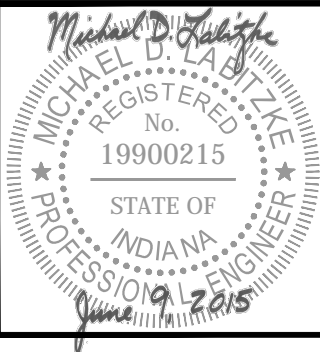
SLIP JOINT PIPE

## RESTRAINED JOINTS ON SLIP JOINT PIPE

(USING GRIPPING TYPE RETAINERS)

MINIMUM FOOTAGE OF RESTRAINED PIPE FOR VARIOUS DIAMETERS & DEGREES CAST & DUCTILE IRON ELBOWS									
COVER DIA. MAIN	DEGREE OF ELBOW					VERTICAL OFFSET 45°		BRANCH OF TEE	REDUCER (LARGE SIDE ONLY)
	11 1/4°	22 1/2°	45°	90°	UPPER BEND (3')	LOWER BEND (3')			
	6"	3'	3'	3'	3'	49'	10'	3'	3'
10"	2'	5'	10'	25'	77'	15'	9'	159'	
12"	4'	8'	16'	39'	90'	36'	119'	107'	
	5'	9'	19'	47'			163'	N/A	

File: J:\ENGINEER\AUTOCAD\Standards\Detail Drawings\Water\DW09- Restrained Joints (Mechanical Joint & Slip Joint Pipes).dwg



## RESTRAINED JOINTS (MECHANICAL JOINT AND SLIP JOINT PIPES)

Approved: 06/09/15

Adopted: 06/09/15

Figure

Approved By: Michael D. Labitzke, P.E.

Scale: N.T.S.

DW09