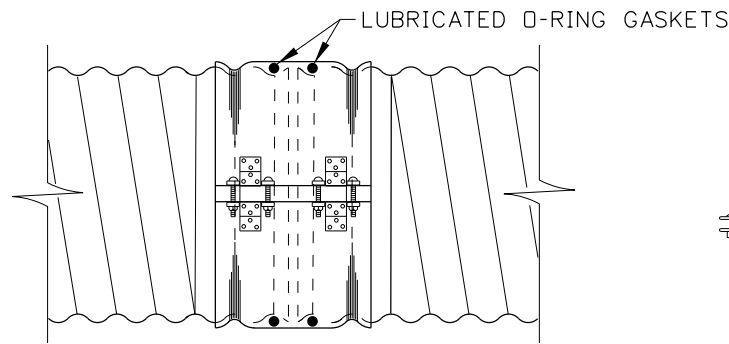
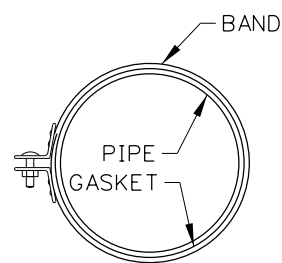


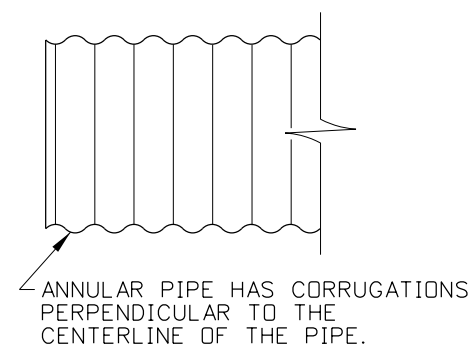
TYPES 1-A & 2-A
ANNULAR COUPLING BAND



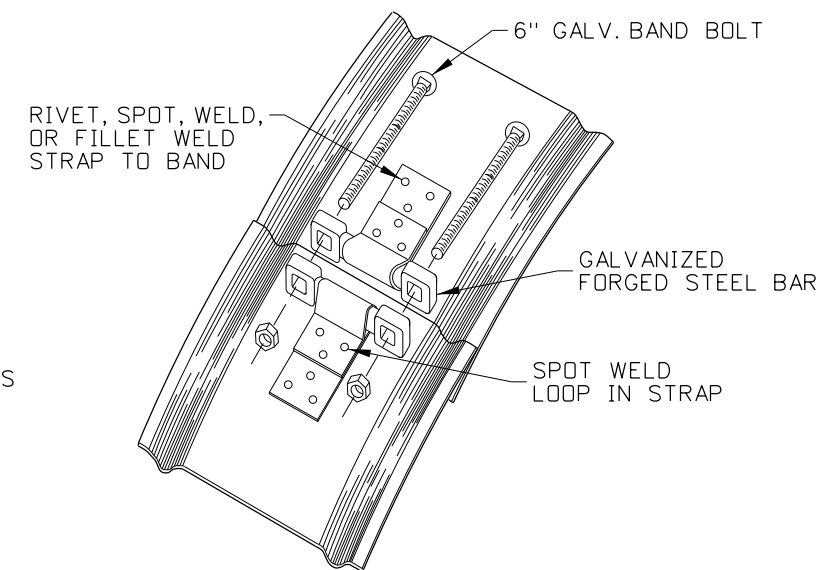
DOUBLE BAR AND STRAP-TYPE 3
HUGGER COUPLING BAND



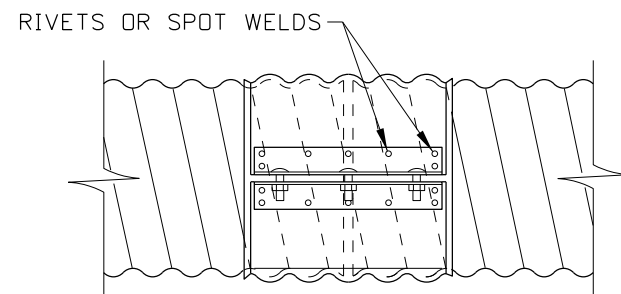
TYPE 1
SINGLE PIECE BAND



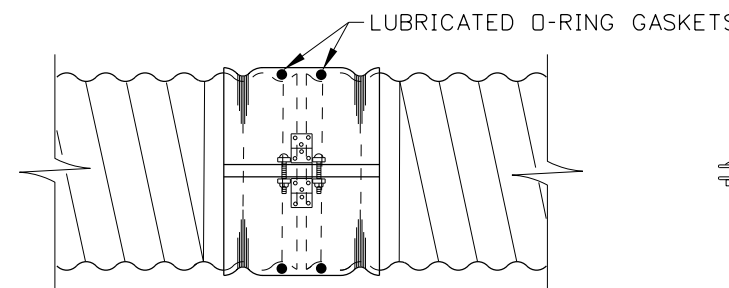
ANNULAR CMP



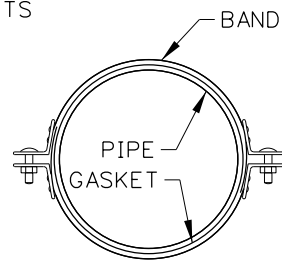
BAND TYPE 3
BAR & STRAP COUPLING
(SINGLE STRAP)



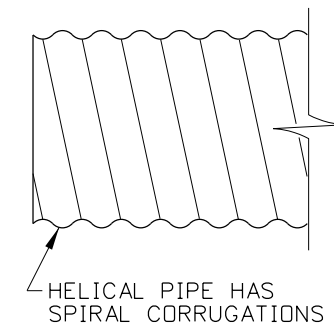
TYPES 1-B & 2-B
HELICAL COUPLING BAND



SINGLE BAR AND STRAP-TYPE 3
HUGGERL COUPLING BAND



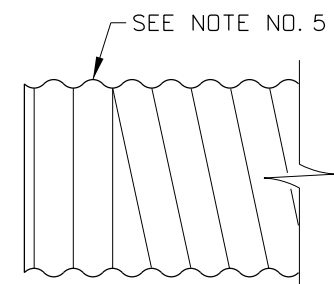
TYPE 2
TWO PIECE BAND



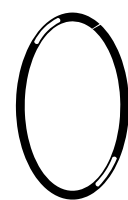
HELICAL CMP

NOTES

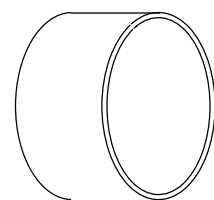
1. THE REFORMED ENDS OF HELICAL CORRUGATED METAL PIPE MADE TO ACCEPT ANNULAR COUPLING BANDS SHALL BE UNIFORM AND SMOOTH IN APPEARANCE. PIPE WITH IRREGULAR REFORMED ENDS ARE NOT ACCEPTABLE.
2. SLEEVE AND STRIP GASKETS FOR COUPLING BANDS TYPE 1-A AND 1-B SHALL EXCEED THE WIDTH OF THE BAND BY A MINIMUM OF 1/4" ON BOTH EDGES. THE GASKETS SHALL FIT SNUGLY AROUND THE PIPES PRIOR TO INSTALLATION OF THE BAND.
3. ALL WELDS AND/OR EXPOSED FERROUS METAL ON COUPLING BANDS AND BAND CONNECTING HARDWARE SHALL BE REPAIRED IN ACCORDANCE WITH AASHTO M 36.
4. STEEL BAND THICKNESS SHALL BE AT LEAST 1/2 THE THICKNESS OR GAUGE OF THE PIPE. ALUMINUM BANDS SHALL BE THE SAME THICKNESS AS THE PIPE.
5. THE JOINTS FOR SIPHONS AND SEWERS SHALL BE WATERTIGHT AND PRESSURE TESTED PRIOR TO ACCEPTANCE, AS REQUIRED IN THE STANDARD SPECIFICATIONS.
6. TO PREVENT GALVANIC ACTION WHEN BANDS AND PIPES ARE OF AN UNLIKE METAL, THE BANDS SHALL BE ASPHALT COATED.
7. GASKET MATERIALS ARE NOT TO BE ALTERED, SEWN, OR PATCHED. THE USE OF SEALANTS AND/OR LUBRICANTS WITH BAND GASKETS MUST BE AS THE MANUFACTURER SPECIFIES. THE QUALITY AND CHEMICAL COMPOSITION OF SEALANTS AND LUBRICANTS WILL BE AS THE MANUFACTURER REQUIRES. CONTACT THE MANUFACTURER FOR DETAILS.
8. SPOT WELDED OR FILLET WELDED STRAPS ON BANDS SHALL BE OF EQUAL STRENGTH TO RIVETED STRAPS.
9. ALL RECOMMENDATIONS IN THE PIPE COUPLING BAND TABLE ARE TO BE CONSIDERED MINIMAL.
10. NOT TO SCALE.



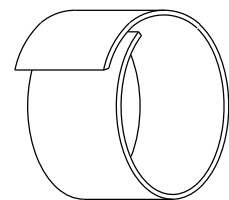
REFORMED HELICAL CMP



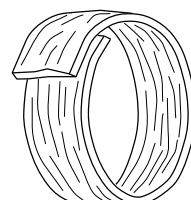
O-RING GASKET



SLEEVE GASKET



STRIP GASKET



MASTIC SEALANT GASKET

STANDARD CORRUGATED STEEL PIPE GASKET TYPES

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-76		6	03-05	MSM			
2	02-77							
3	09-93	MSM						
4	12-95	MSM						
5	06-02	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: d4a_0305.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO



ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

STANDARD DRAWING
WATERTIGHT COUPLING BANDS FOR CORRUGATED METAL PIPES
REQUIRES SHEET 2 OF 2

English
STANDARD DRAWING NO.
D-4-A
SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: MILDRD L. MILLER
DATE ORIGINAL SIGNED: MARCH 4, 2005

PIPE COUPLING BAND TABLE						PIPE CORRUGATION STYLE			SIPHON	* CULVERT	IRRIGATION	SEWER	UNDERDRAIN
COUPLING TYPE	CORRUGATIONS	PIPE SIZE	COUPLING WIDTH	COUPLING BOLTS (NO.) DIA.	GASKET TYPE	ANNULAR PIPE	REFORMED HELICAL	HELICAL PIPE					
TYPE 1-A ANNULAR COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(3) 3/8"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(3) 1/2"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(3) 1/2"	SLEEVE	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(5) 5/8"	SLEEVE	X	X		X	X		X	
TYPE 1-B HELICAL COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(3) 3/8"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(3) 1/2"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(3) 1/2"	SLEEVE OR STRIP			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(5) 5/8"	SLEEVE OR STRIP			X	X	X		X	
TYPE 2-A ANNULAR COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(6) 1/2"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(8) 1/2"	SLEEVE, STRIP OR MASTIC	X	X		X	X	X	X	
TYPE 2-B HELICAL COUPLING BAND	1/2" x 1/4" & 2 3/8" x 1/2"	6"-10"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	12"-15"	7" (1 PIECE)	(4) 3/8"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	18"-24"	12" (1 PIECE)	(6) 1/2"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
	2 3/8" x 1/2" & 3" x 1"	30"-42"	24" (1 PIECE)	(8) 1/2"	SLEEVE, STRIP OR MASTIC			X	X	X		X	
TYPE 3 HUGGER COUPLING BAND	2 3/8" x 1/2" & 3" x 1"	12"-48" (GALV.)	7 1/2" (STRAP)	(2) 6" x 1/2"	O-RING	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	54"-96" (GALV.)	10 1/2" (2 STRAP)	(4) 6" x 5/8"	O-RING	X	X		X	X	X	X	
	2 3/8" x 1/2" & 3" x 1"	102"-144" (GALV.)	12" (3 STRAP)	(6) 6" x 7/8"	O-RING	X	X		X	X	X	X	

* WATERTIGHT BANDS ARE NOT REQUIRED ON CULVERT INSTALLATIONS UNLESS SPECIFIED BY THE PLANS OR SPECIAL PROVISIONS

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
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 CHIEF ENGINEER

STANDARD DRAWING
**WATERTIGHT COUPLING
 BANDS FOR CORRUGATED
 METAL PIPES**
 REQUIRES SHEET 1 OF 2

English
 STANDARD DRAWING NO.
D-4-A
 SHEET 2 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

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