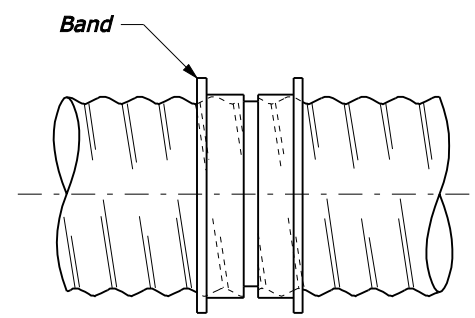


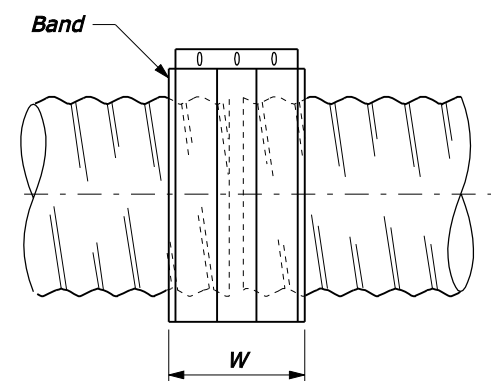
| <b>COUPLING BANDS FOR METAL PIPE CULVERT <sup>1/</sup></b> |                          |                            |  |  |                                     |
|--|--------------------------|----------------------------|--|--|-------------------------------------|
| CORRUGATION SIZE <sup>2/</sup>                             | ROUND PIPE DIAMETER      | PIPE ARCH SPAN x RISE      | MINIMUM BAND WIDTH                     |  |                                     |
|  |                          |                            | ANNULAR CORRUGATED BANDS <sup>3/</sup> | HELICALLY CORRUGATED BANDS <sup>4/</sup> | SEMI-CORRUGATED BANDS <sup>5/</sup> |
| 38 x 6.5   | underdrain <sup>6/</sup> | -                          | 265                                    | 180                                      | 265                                 |
|  | 300 to 900               | 430 x 330 to 1060 x 740    | 180                                    | 300                                      |                                     |
| 68 x 13  | 1050 to 1800             | 1240 x 840 to 2100 x 1450  | 265                                    | 300                                      |                                     |
|  | 1950 to 2100             | -                          | 265                                    | 300                                      | 265                                 |
| 75 x 25  | 900 to 1800              | 1520 x 1170 to 2050 x 1500 | 300                                    | 350                                      | 265                                 |
|  | 1950 to 3600             | 2200 x 1620 to 3600 x 2320 | 300                                    | 350                                      | 265                                 |
| 125 x 25   | 900 to 1800              | 1520 x 1170 to 2050 x 1500 | 500                                    | 560                                      |                                     |
|  | 1950 to 3600             | 2200 x 1620 to 3600 x 2320 | 500                                    | 560                                      |                                     |

- <sup>1/</sup> Fabricate annular, helical and semi-corrugated type coupling bands from the same metal as the connecting pipe. Provide coupling bands not more than 3 nominal sheet thicknesses thinner than the thickness of the pipe to be connected, and no thinner than 1.32 mm for steel or 1.2 mm for aluminum. Fasten coupling bands with the following diameter of bolt:  
M10 for 450 round culvert (530 x 380 pipe arch) or less  
M12 for 525 round culvert (610 x 460 pipe arch) or more
- <sup>2/</sup> For helically corrugated pipe with rerolled ends, the nominal corrugations size refers to the dimension of the end corrugation in the pipe.
- <sup>3/</sup> Use annular corrugated bands with pipes having annular corrugations or with helical pipe having rerolled end to form annular corrugations. A 265 mm band is acceptable on pipe ends rerolled with 68 x 13 corrugations. A 300 mm band is acceptable on pipe ends rerolled with 75 x 25 pipe corrugations.
- <sup>4/</sup> Use helical corrugated bands with pipes having helically corrugated ends.
- <sup>5/</sup> The minimum band widths shown for 75 x 25 and 125 x 25 corrugated sizes apply to 68 x 13 corrugations on rerolled pipe ends.
- <sup>6/</sup> Smooth sleeve-type couplers and flat bands may be used for pipe diameters of 300 or less. Use a matching metal having a nominal thickness of not less than 1.02 mm for steel, or 0.91 mm for aluminum, or a plastic with an equivalent strength to metal.



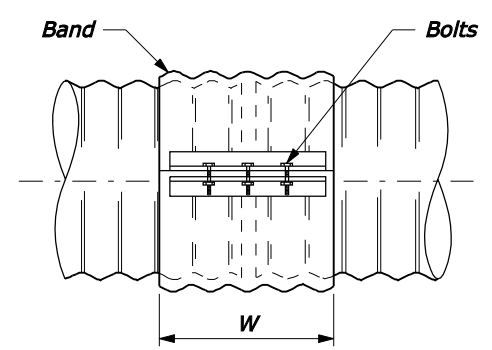
**SLEEVE JOINT**  
Smoother sleeve with center stop.  
Stab type joint

**SMOOTH SLEEVE BAND**

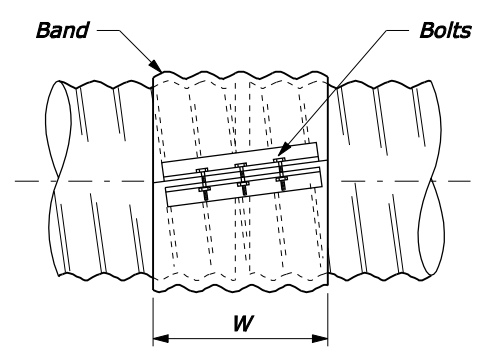


**FLAT BAND**

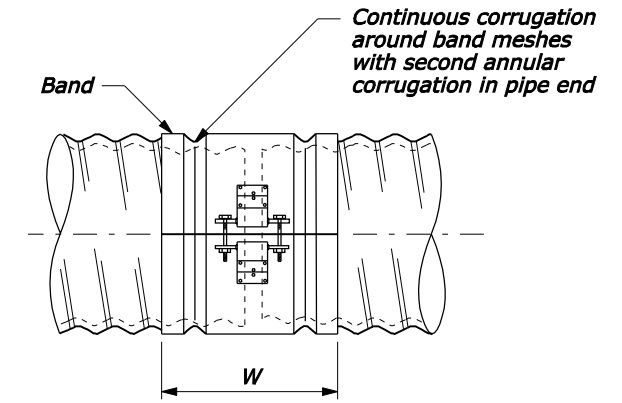
- NOTE:**
- Watertight pipe joints are not required unless specified in the Special Contract Requirements.
  - Other types of coupling bands or fastening devices that comply with the joint performance criteria of AASHTO Standard specifications for Highway Bridges, Division II Section 26 may be used.
  - Dimensions without units are millimeters.



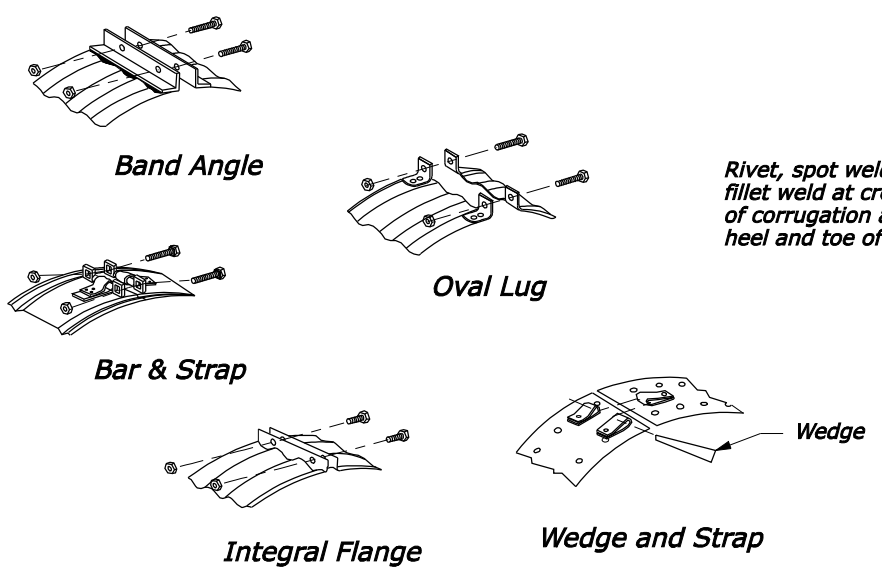
**SIDE VIEW**



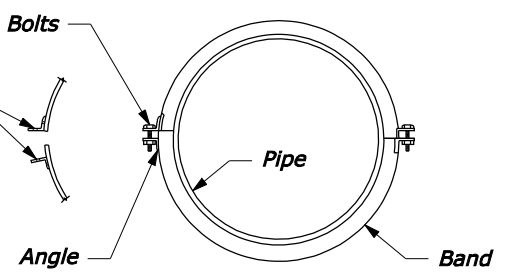
**SIDE VIEW**



**SIDE VIEW**



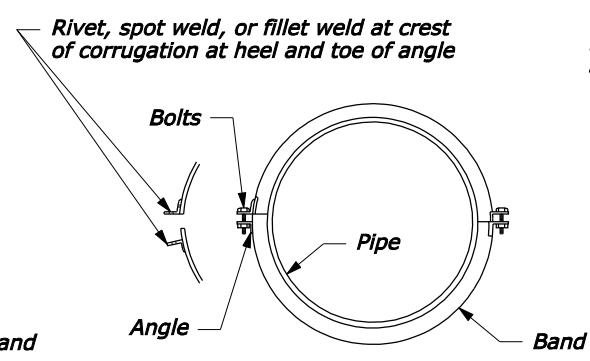
**STANDARD BAND CONNECTIONS**



**END VIEW**

Second angle connection optional to 1050 diameter, required above 1050 diameter

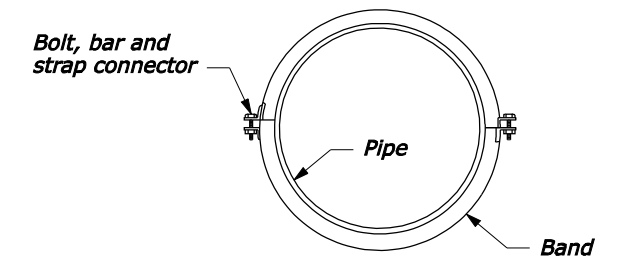
**ANNULAR BAND**



**END VIEW**

Second angle connection optional to 1050 diameter, required above 1050 diameter

**HELICAL BAND**



**END VIEW**

**SEMI-CORRUGATED BAND**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY  
METRIC STANDARD

**METAL PIPE CULVERT  
COUPLING BAND**

STANDARD APPROVED FOR USE 3/1996  
REVISED: 8/1997 6/2005

STANDARD  
**M602-2**

NO SCALE