



**16 STUD EXAMPLE**

NO OF STUDS	NOMINAL FLG SIZE (IN)	STUD NUT TIGHTENING SEQUENCE
8	4, 6, 8	1, 5, 3, 7, 2, 6, 4, 8
12	10, 12	1, 7, 4, 10, 2, 8, 5, 11, 3, 9, 6, 12
16	16	1, 9, 5, 13, 2, 10, 6, 14, 3, 11, 7, 15, 4, 12, 8, 16
20	20, 24	1, 11, 6, 16, 2, 12, 7, 17, 3, 13, 8, 18, 4, 14, 9, 19, 5, 15, 10, 20

**NOTES:**

1. STUDS AND NUTS SHALL BE CLEAN AND DRY (UNLUBRICATED).
  - A. HAND TIGHTEN ALL NUTS.
  - B. CONSECUTIVELY NUMBER THE STUDS AROUND THE FLANGE.
2. TIGHTEN STUD NUTS TO ONE-THIRD OF TARGET TORQUE IN SEQUENCE GIVEN.
3. TIGHTEN STUD NUTS TO TWO-THIRDS OF TARGET TORQUE IN SEQUENCE GIVEN.
4. TIGHTEN STUD NUTS TO FULL TARGET TORQUE IN SEQUENCE GIVEN.
5. AFTER 24 HOURS, RE-TIGHTEN STUD NUTS TO FULL TARGET TORQUE IN SEQUENCE GIVEN.
6. TORQUE WRENCHES AND WRENCHES USED FOR STUD NUT TIGHTENING SHALL BE IN GOOD CONDITION AND CERTIFIED BY AN INDEPENDENT TESTING AGENCY WITHIN 6 MONTHS OF USE.
7. SEQUENCE GIVEN FOR AWWA C207 CLASS B, D, AND E AND ANSI CLASS 150 FLANGES.

<b>DENVER WATER</b> <small>1600 West 12th Avenue • Denver, Colorado 80204          Phone (303) 628-6000 • Telecopier No. (303) 628-6851</small>	
<b>STUD NUT TIGHTENING SEQUENCE</b>	
Scale: <u>  NONE  </u>	Date: <u>  June 2014  </u>
Drawn: <u>  BGS  </u>	Ck: <u>  K ROSS  </u>
Approved: <u>  [Signature]  </u>	Dr. <u>  127  </u> No. <u>  35  </u>