

WELDING ENDS

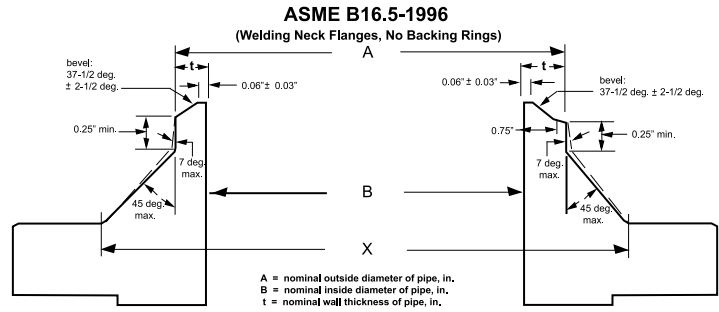


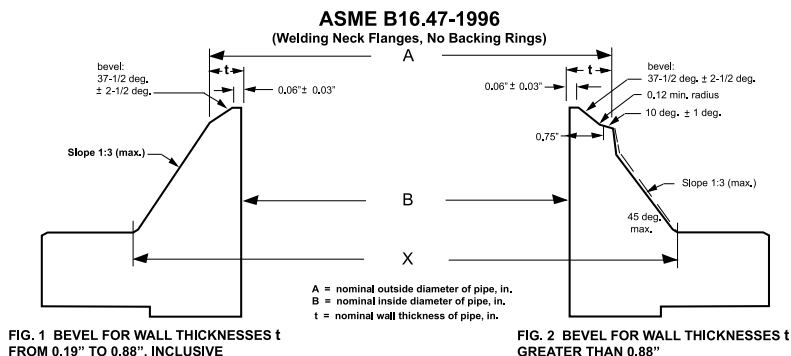
FIG. 8 BEVEL FOR WALL THICKNESSES t FROM 0.19" TO 0.88", INCLUSIVE

FIG. 9 BEVEL FOR WALL THICKNESSES t GREATER THAN 0.88"

- NOTES:**
1. See paras. 6.7, 6.8 and 7.4 of B16.5-1996 for details and tolerances.
 2. See Figs. 10 and 11 of B16.5-1996 for additional details of welding ends.
 3. When the thickness of the hub at the bevel is greater than that of the pipe to which the flange is joined and the additional thickness is provided on the outside diameter, a taper weld having a slope not exceeding 1 to 3 may be employed or, alternatively, the greater outside diameter may be tapered, at the same maximum slope or less, from a point on the welding bevel equal to the outside diameter of the mating pipe. Similarly, when the greater thickness is provided on the inside of the flange, it shall be taper-bored from the welding end at a slope not exceeding 1 to 3. When flanges covered by this standard are intended for services with light wall, higher strength pipe, the thickness of the hub at the bevel may be greater than that of the pipe to which the flanges are joined. Under these conditions a single taper hub may be provided and the outside diameter of the hub at the base (dimension X) may also be modified. The additional thickness may be provided on either inside or outside or partially on each side, but the total additional thickness shall not exceed one-half times the nominal wall thickness of intended mating pipe. See Figs. 12, 13, and 14 of ASME B 16.5-1996.

| Nominal Pipe Size | Coastal Flange NOMINAL INSIDE DIAMETERS) | | | | | | | | | | | | | |
|-------------------|--|-------------|-------------|-------------|---------------|-------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|-----------|
| | O.D. Inches | Schedule 10 | Schedule 20 | Schedule 30 | Standard Wall | Schedule 40 | Schedule 60 | Extra Strong | Schedule 80 | Schedule 100 | Schedule 120 | Schedule 140 | Schedule 160 | XX Strong |
| 1/2 | 0.840 | .674 | ----- | ----- | .622 | .622 | ----- | .546 | .546 | ----- | ----- | ----- | .464 | .252 |
| 3/4 | 1.050 | .884 | ----- | ----- | .824 | .824 | ----- | .742 | .742 | ----- | ----- | ----- | .612 | .434 |
| 1 | 1.315 | 1.097 | ----- | ----- | 1.049 | 1.049 | ----- | .957 | .957 | ----- | ----- | ----- | .815 | .599 |
| 1 1/4 | 1.660 | 1.442 | ----- | ----- | 1.380 | 1.380 | ----- | 1.278 | 1.278 | ----- | ----- | ----- | 1.160 | .896 |
| 1 1/2 | 1.900 | 1.682 | ----- | ----- | 1.610 | 1.610 | ----- | 1.500 | 1.500 | ----- | ----- | ----- | 1.338 | 1.100 |
| 2 | 2.375 | 2.157 | ----- | ----- | 2.067 | 2.067 | ----- | 1.939 | 1.939 | ----- | ----- | ----- | 1.687 | 1.503 |
| 2 1/2 | 2.875 | 2.635 | ----- | ----- | 2.469 | 2.469 | ----- | 2.323 | 2.323 | ----- | ----- | ----- | 2.125 | 1.771 |
| 3 | 3.500 | 3.260 | ----- | ----- | 3.068 | 3.068 | ----- | 2.900 | 2.900 | ----- | ----- | ----- | 2.624 | 2.300 |
| 3 1/2 | 4.000 | 3.760 | ----- | ----- | 3.548 | 3.548 | ----- | 3.364 | 3.364 | ----- | ----- | ----- | ----- | 2.728 |
| 4 | 4.500 | 4.260 | ----- | ----- | 4.026 | 4.026 | ----- | 3.826 | 3.826 | ----- | 3.624 | ----- | 3.438 | 3.152 |
| 5 | 5.563 | 5.295 | ----- | ----- | 5.047 | 5.047 | ----- | 4.813 | 4.813 | ----- | 4.563 | ----- | 4.313 | 4.063 |
| 6 | 6.625 | 6.357 | ----- | ----- | 6.065 | 6.065 | ----- | 5.761 | 5.761 | ----- | 5.501 | ----- | 5.187 | 4.897 |
| 8 | 8.625 | 8.329 | 8.125 | 8.071 | 7.981 | 7.981 | 7.813 | 7.625 | 7.625 | 7.437 | 7.187 | 7.001 | 6.813 | 6.875 |
| 10 | 10.750 | 10.420 | 10.250 | 10.136 | 10.020 | 10.020 | 9.750 | 9.750 | 9.562 | 9.312 | 9.062 | 8.750 | 8.500 | 8.750 |
| 12 | 12.750 | 12.390 | 12.250 | 12.090 | 12.000 | 11.938 | 11.626 | 11.750 | 11.374 | 11.062 | 10.750 | 10.500 | 10.126 | 10.750 |
| 14 | 14.000 | 13.500 | 13.376 | 13.250 | 13.250 | 13.124 | 12.812 | 13.000 | 12.500 | 12.124 | 11.812 | 11.500 | 11.188 | ----- |
| 16 | 16.000 | 15.500 | 15.376 | 15.250 | 15.250 | 15.000 | 14.688 | 15.000 | 14.312 | 13.938 | 13.562 | 13.124 | 12.812 | ----- |
| 18 | 18.000 | 17.500 | 17.376 | 17.124 | 17.250 | 16.876 | 16.500 | 17.000 | 16.124 | 15.688 | 15.250 | 14.876 | 14.438 | ----- |
| 20 | 20.000 | 19.500 | 19.250 | 19.000 | 19.250 | 18.812 | 18.376 | 19.000 | 17.938 | 17.438 | 17.000 | 16.500 | 16.062 | ----- |
| 22 | 22.000 | 21.500 | ----- | ----- | 21.250 | ----- | ----- | 21.000 | ----- | ----- | ----- | ----- | ----- | ----- |
| 24 | 24.000 | 23.500 | 23.250 | 22.876 | 23.250 | 22.624 | 22.062 | 23.000 | 21.562 | 20.938 | 20.376 | 19.876 | 19.312 | ----- |

WELDING ENDS



- NOTES:
- See paras. 6.4, 7.4 of B16.47-1996 for details and tolerances.
 - See Figs. 10 of B16.47-1996 for additional details of welding ends.
 - When the thickness of the hub at the bevel is greater than that of the pipe to which the flange is joined and the additional thickness is provided on the outside diameter, a taper weld having a slope not exceeding 1 to 3 may be employed or, alternatively, the greater outside diameter may be tapered, at the same maximum slope or less, from a point on the welding bevel equal to the outside diameter of the mating pipe. Similarly, when the greater thickness is provided on the inside of the flange, it shall be taper-bored from the welding end at a slope not exceeding 1 to 3. When flanges covered by this standard are intended for services with light wall, higher strength pipe, the thickness of the hub at the bevel may be greater than that of the pipe to which the flanges are joined. Under these conditions a single taper hub may be provided and the outside diameter of the hub at the base (dimension X) may also be modified. The additional thickness may be provided on either inside or outside or partially on each side, but the total additional thickness shall not exceed one-half times the nominal wall thickness of intended mating pipe. See Figs. 5, 6, and 7 of ASME B 16.47-1996.

Welding Neck Flange Bores

| Nominal Pipe Size | Coastal Flange INSIDE DIAMETERS) | | | | | | | | | | | | | | | | | |
|-------------------|----------------------------------|------------|--------|-------------|---------|--------|-------------|-----------|---------|-------------|---------|---------|--------------|--------------|--------------|--------------|-----------|--|
| | O.D. Inches | Schedule 5 | True 5 | Schedule 10 | True 10 | Sch 20 | Schedule 30 | Std. Bore | True 40 | Schedule 60 | XH Bore | True 80 | Schedule 100 | Schedule 120 | Schedule 140 | Schedule 160 | XX Strong | |
| 26 | 26.000 | | | | 25.376 | 25.000 | | 25.250 | | | 25.000 | | | | | | | |
| 28 | 28.000 | | | | 27.376 | 27.000 | 26.750 | 27.250 | | | | | | | | | | |
| 30 | 30.000 | 29.500 | | 29.376 | 29.376 | 29.000 | 28.750 | 29.250 | | | 29.000 | | | | | | | |
| 32 | 32.000 | | | | 31.376 | 31.000 | 30.750 | 31.250 | | | 31.000 | | | | | | | |
| 34 | 34.000 | | | | 33.376 | 33.000 | 32.750 | 33.250 | | | 33.000 | | | | | | | |
| 36 | 36.000 | | | | 35.376 | 35.000 | 34.750 | 35.250 | | | 35.000 | | | | | | | |
| 38 | 38.000 | | | | | | | 37.250 | | | 37.000 | | | | | | | |
| 40 | 40.000 | | | | | | | 39.250 | | | 39.000 | | | | | | | |
| 42 | 42.000 | | | | | | | 41.250 | | | 41.000 | | | | | | | |
| 44 | 44.000 | | | | | | | 43.250 | | | | | | | | | | |
| 46 | 46.000 | | | | | | | 45.250 | | | | | | | | | | |
| 48 | 48.000 | | | | | | | 47.250 | | | 47.000 | | | | | | | |
| 50 | 50.000 | | | | | | | 49.250 | | | | | | | | | | |
| 52 | 52.000 | | | | | | | 51.250 | | | | | | | | | | |
| 54 | 54.000 | | | | | | | 53.250 | | | 53.000 | | | | | | | |
| 56 | 56.000 | | | | | | | 55.250 | | | | | | | | | | |
| 58 | 58.000 | | | | | | | 57.250 | | | | | | | | | | |
| 60 | 60.000 | | | | | | | 59.250 | | | 59.000 | | | | | | | |