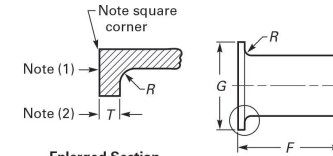


Dimensions of Lap Joint Stub Ends



Enlarged Section of Lap

Nominal Pipe Size (NPS)	Outside Diameter of Barrel		Long Pattern Length, <i>F</i> [Notes (3), (4)]	Short Pattern Length, <i>F</i> [Notes (3), (4)]	Radius of Fillet, <i>R</i> [Note (5)]	Diameter of Lap, <i>G</i> [Note (6)]
	Max.	Min.				
1/2	22.8	20.5	76	51	3	35
3/4	28.1	25.9	76	51	3	43
1	35.0	32.6	102	51	3	51
1 1/4	43.6	41.4	102	51	5	64
1 1/2	49.9	47.5	102	51	6	73
2	62.4	59.5	152	64	8	92
2 1/2	75.3	72.2	152	64	8	105
3	91.3	88.1	152	64	10	127
3 1/2	104.0	100.8	152	76	10	140
4	116.7	113.5	152	76	11	157
5	144.3	140.5	203	76	11	186
6	171.3	167.5	203	89	13	216
8	222.1	218.3	203	102	13	270
10	277.2	272.3	254	127	13	324
12	328.0	323.1	254	152	13	381
14	359.9	354.8	305	152	13	413
16	411.0	405.6	305	152	13	470
18	462.0	456.0	305	152	13	533
20	514.0	507.0	305	152	13	584
22	565.0	558.0	305	152	13	641
24	616.0	609.0	305	152	13	692

GENERAL NOTES:

- (a) All dimensions are in millimeters.
- (b) See Table 13 for tolerances.
- (c) Service conditions and joint construction often dictate stub end length requirements. Therefore, the purchaser must specify long or short pattern fitting when ordering.

NOTES:

- (1) Gasket face finish shall be in accordance with ASME B16.5 for raised face flanges.
- (2) The lap thickness, *T*, shall not be less than nominal pipe wall thickness. See Table 13 for maximum tolerance.
- (3) When short pattern stub ends are used with larger flanges in Classes 300 and 600, with most sizes in Classes 900 and higher, and when long pattern stub ends are used with larger flanges in Classes 1500 and 2500, it may be necessary to increase the length of the stub ends in order to avoid covering the weld with the flange. Such increases in length shall be a matter of agreement between the manufacturer and purchaser.
- (4) When special facings such as tongue and groove, male and female, etc., are employed, additional lap thickness must be provided and such additional thickness shall be in addition to (not included in) the basic length, *F*.
- (5) These dimensions conform to the radius established for lap joint flanges in ASME B16.5.
- (6) This dimension conforms to standard machined facings shown in ASME B16.5. The back face of the lap shall be machined to conform to the surface on which it sits. Where ring joint facings are to be applied, use dimension *K* as given in ASME B16.5.