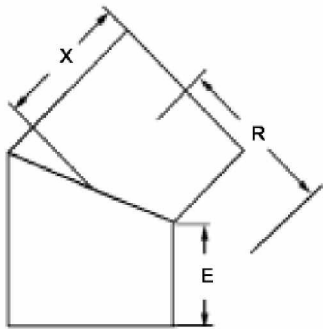




**INDEPENDENT
PIPE PRODUCTS**



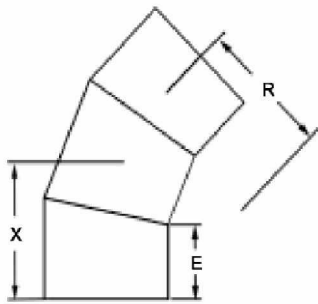
**DIPS 45°
2 Segment Elbows
Fabricated (1/16 Bend)**

(Dimensions in Inches)

| DIPS Size | R/D Ratio | R | X | E | SDR | WPR | Weight (lbs) |
|-----------|-----------|------|------|------|-----|-----|--------------|
| 4" | 1.5 | 7.2 | 7.0 | 6.0 | 9 | 160 | 5 |
| | | | | | 11 | 128 | 4 |
| | | | | | 17 | 80 | 3 |
| 6" | 1.5 | 10.4 | 7.4 | 6.0 | 9 | 160 | 10 |
| | | | | | 11 | 128 | 8 |
| | | | | | 17 | 80 | 6 |
| 8" | 1.25 | 11.3 | 8.4 | 6.5 | 9 | 160 | 17 |
| | | | | | 11 | 128 | 15 |
| | | | | | 17 | 80 | 11 |
| 10" | 1.25 | 13.9 | 8.8 | 6.5 | 9 | 160 | 27 |
| | | | | | 11 | 128 | 25 |
| | | | | | 17 | 80 | 16 |
| 12" | 1.25 | 16.5 | 10.7 | 8.0 | 9 | 160 | 46 |
| | | | | | 11 | 128 | 38 |
| | | | | | 17 | 80 | 27 |
| 14" | 1.05 | 16.1 | 11.2 | 8.0 | 9 | 160 | 64 |
| | | | | | 11 | 128 | 53 |
| | | | | | 17 | 80 | 36 |
| 16" | 1.05 | 18.3 | 11.6 | 8.0 | 9 | 160 | 86 |
| | | | | | 11 | 128 | 74 |
| | | | | | 17 | 80 | 48 |
| 18" | 1.02 | 19.9 | 12.0 | 8.0 | 9 | 160 | 109 |
| | | | | | 11 | 128 | 90 |
| | | | | | 17 | 80 | 61 |
| 20" | 1.02 | 22.0 | 12.5 | 8.0 | 9 | 160 | 139 |
| | | | | | 11 | 128 | 117 |
| | | | | | 17 | 80 | 79 |
| 24" | 1.02 | 26.3 | 13.3 | 8.0 | 9 | 160 | 207 |
| | | | | | 11 | 128 | 175 |
| | | | | | 17 | 80 | 117 |
| 30" | 1.5 | 48.0 | 16.6 | 10.0 | 11 | 128 | 336 |
| | | | | | 17 | 80 | 226 |



**INDEPENDENT
PIPE PRODUCTS**



**DIPS 45°
3 Segment Elbows
Fabricated (1/8 Bend)**

(Dimensions in Inches)

| DIPS Size | R/D Ratio | R | X | E | SDR | WPR | Weight (lbs) |
|-----------|-----------|------|------|------|-----|-----|--------------|
| 4" | 2.9 | 14.0 | 9.1 | 6.0 | 9 | 160 | 6 |
| | | | | | 11 | 128 | 4.5 |
| | | | | | 17 | 80 | 3 |
| 6" | 2.2 | 15.0 | 9.4 | 6.0 | 9 | 160 | 13 |
| | | | | | 11 | 128 | 11 |
| | | | | | 17 | 80 | 7 |
| 8" | 1.8 | 16.2 | 10.4 | 6.5 | 9 | 160 | 21 |
| | | | | | 11 | 128 | 19 |
| | | | | | 17 | 80 | 14 |
| 10" | 1.6 | 17.2 | 10.8 | 6.5 | 9 | 160 | 34 |
| | | | | | 11 | 128 | 28 |
| | | | | | 17 | 80 | 20 |
| 12" | 1.5 | 19.8 | 13.0 | 8.0 | 9 | 160 | 58 |
| | | | | | 11 | 128 | 48 |
| | | | | | 17 | 80 | 34 |
| 14" | 1.5 | 23.0 | 13.8 | 8.0 | 9 | 160 | 80 |
| | | | | | 11 | 128 | 66 |
| | | | | | 17 | 80 | 45 |
| 16" | 1.5 | 26.1 | 14.5 | 8.0 | 9 | 160 | 111 |
| | | | | | 11 | 128 | 95 |
| | | | | | 17 | 80 | 62 |
| 18" | 1.5 | 29.3 | 15.3 | 8.0 | 9 | 160 | 146 |
| | | | | | 11 | 128 | 121 |
| | | | | | 17 | 80 | 81 |
| 20" | 1.5 | 32.4 | 16.1 | 8.0 | 9 | 160 | 183 |
| | | | | | 11 | 128 | 154 |
| | | | | | 17 | 80 | 105 |
| 24" | 1.5 | 38.7 | 17.7 | 8.0 | 9 | 160 | 288 |
| | | | | | 11 | 128 | 243 |
| | | | | | 17 | 80 | 163 |
| 30" | 1.5 | 48.0 | 22.0 | 10.0 | 11 | 128 | 464 |
| | | | | | 17 | 80 | 312 |