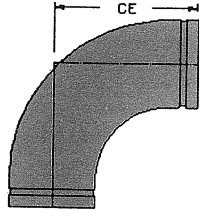
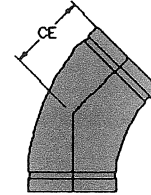


# ELBOWS - LONG RADIUS



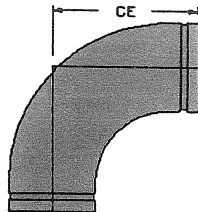
## 90 ELBOWS

NOMINAL PIPE SIZE	CENTER TO END DIMENSIONS	WEIGHT POUNDS
1 1/4	3 7/8"	1.4
1 1/2	4 1/4"	1.8
2	4 3/8"	2.65
2 1/2	5 3/4"	5.25
3	5 7/8"	7
3 1/2	7 1/4"	10
4	7 1/2"	12
5	9 1/2"	20
6	10 3/4"	30
8	15"	60
10	18"	100
12	21"	140
14	21"	180
16	24"	220
18	27"	280
20	30"	350
24	36"	480



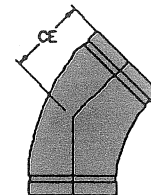
## 45 ELBOWS

NOMINAL PIPE SIZE	CENTER TO END DIMENSIONS	WEIGHT POUNDS
1 1/4	2 1/2"	1
1 1/2	2 1/2"	1.25
2	2 3/4"	1.75
2 1/2	3"	2.85
3	3 3/8"	4.5
3 1/2	3 1/2"	5.5
4	4"	7.5
5	5"	12.5
6	5 1/2"	18
8	7 1/4"	34
10	8 1/2"	56
12	10"	98
14	8 3/4"	105
16	10"	115
18	11 1/4"	145
20	12 1/2"	180
24	15"	250



## 3D 90 ELBOWS

NOMINAL PIPE SIZE	CENTER TO END DIMENSIONS	WEIGHT POUNDS
2	10"	6
2 1/2	11 1/2"	10
3	13"	15
3 1/2	14 1/2"	20
4	16"	25
5	20"	42
6	24"	65
8	32"	130
10	40"	228
12	48"	335
14	56"	430
16	64"	560
18	72"	715
20	80"	880
24	96"	1275



## 3D 45 ELBOWS

NOMINAL PIPE SIZE	CENTER TO END DIMENSIONS	WEIGHT POUNDS
2	6 1/2"	4
2 1/2	7 1/4"	7
3	7 3/4"	10
3 1/2	8 1/2"	13
4	9"	16
5	11 1/4"	27
6	13 1/2"	43
8	18"	85
10	22 1/2"	150
12	27"	220
14	31 1/2"	230
16	36"	365
18	40 1/2"	470
20	45"	550
24	53 3/4"	830