

## APPENDIX D—STEEL REINFORCEMENT INFORMATION

### CODE COMMENTARY

**Appendix D.1.1** As an aid to users of the ACI Building Code, information on sizes, areas, and weights of various steel reinforcement is presented.

#### ASTM STANDARD REINFORCING BARS

Bar size, no.	Nominal diameter, in.	Nominal area, in. <sup>2</sup>	Nominal weight, lb/ft
3	0.375	0.11	0.376
4	0.500	0.20	0.668
5	0.625	0.31	1.043
6	0.750	0.44	1.502
7	0.875	0.60	2.044
8	1.000	0.79	2.670
9	1.128	1.00	3.400
10	1.270	1.27	4.303
11	1.410	1.56	5.313
14	1.693	2.25	7.65
18	2.257	4.00	13.60

#### ASTM STANDARD PRESTRESSING STRANDS, WIRES, AND BARS

Type*	Nominal diameter, in.	Nominal area, in. <sup>2</sup>	Nominal weight, lb/ft
Seven-wire strand (Grade 250)	1/4 (0.250)	0.036	0.122
	5/16 (0.313)	0.058	0.197
	3/8 (0.375)	0.080	0.272
	7/16 (0.438)	0.108	0.367
	1/2 (0.500)	0.144	0.490
	(0.600)	0.216	0.737
Seven-wire strand (Grade 270)	3/8 (0.375)	0.085	0.290
	7/16 (0.438)	0.115	0.390
	1/2 (0.500)	0.153	0.520
	(0.520)	0.167	0.570
	(0.563)	0.192	0.650
	(0.600)	0.217	0.740
Prestressing wire	(0.620)	0.231	0.780
	(0.700)	0.294	1.000
	0.192	0.029	0.098
	0.196	0.030	0.102
Prestressing bars (Type I, plain)	0.250	0.049	0.170
	0.276	0.060	0.204
	3/4	0.44	1.50
	7/8	0.60	2.04
	1	0.78	2.67
	1-1/8	0.99	3.38
Prestressing bars (Type II, deformed)	1-1/4	1.23	4.17
	1-3/8	1.48	5.05
	5/8	0.28	0.98
	3/4	0.42	1.49
	1	0.85	3.01
	1-1/4	1.25	4.39
	1-3/8	1.58	5.56
	1-3/4	2.58	9.10
	2-1/2	5.16	18.20
	3	6.85	24.09

\*Availability of some strand, wire, and bar sizes should be investigated in advance.