

U.S.A. STANDARD SIEVES ASTM SPECIFICATION E-11

Nominal Dimensions, Permissible Variations for Wirecloth of Standard Test Sieves (U.S.A.) Standard Series

Sieve Designation		Nominal Sieve	Permissible	Opening	Maximum	Nominal Wire
Standard (b)	Alternative	Opening, in. (see c below)	Variation of Average Opening from the Standard Sieve Designation	Dimension or Not More Than 5% of the Openings	Individual Opening	Diameter (mm) see a below
(1)	(2)	(3)	(4)	(5)	(6)	(7)
125 mm	5"	5	±3.70 mm	130.0 mm	130.9 mm	8.00
106 mm	4.24"	4.24	±3.20 mm	110.2 mm	111.1 mm	6.30
100 mm (d)	4"	4	±3.00 mm	104.0 mm	104.8 mm	6.30
90 mm	3 1/2"	3.5	±2.70 mm	93.6 mm	94.4 mm	6.30
75 mm	3"	3	±2.20 mm	78.1 mm	78.7 mm	6.30
63 mm	2 1/2"	2.5	±1.90 mm	65.6 mm	66.2 mm	5.60
53 mm	2.12"	2.12	±1.60 mm	55.2 mm	55.7 mm	5.00
50 mm (d)	2"	2	±1.50 mm	52.1 mm	52.6 mm	5.00
45 mm	1 3/4"	1.75	±1.40 mm	46.9 mm	47.4 mm	4.50
37.5 mm	1 1/2"	1.5	±1.10 mm	39.1 mm	39.5 mm	4.50
31.5 mm	1 1/4"	1.25	±1.00 mm	32.9 mm	33.2 mm	4.00
26.5 mm	1.06"	1.06	±.800 mm	27.7 mm	28.0 mm	3.55
25.0 mm	1.00"	1	±.800 mm	26.1 mm	26.4 mm	3.55
22.4 mm	7/8"	0.875	±.700 mm	23.4 mm	23.7 mm	3.55
19.0 mm	3/4"	0.750	±.600 mm	19.9 mm	20.1 mm	3.15
16.0 mm	5/8"	0.625	±.500 mm	16.7 mm	17.0 mm	3.15
13.2 mm	.530"	0.530	±.410 mm	13.83 mm	14.05 mm	2.80
12.5 mm (d)	1/2"	0.500	±.390 mm	13.10 mm	13.31 mm	2.50
11.2 mm	7/16"	0.438	±.350 mm	11.75 mm	11.94 mm	2.50
9.5 mm	3/8"	0.375	±.300 mm	9.97 mm	10.16 mm	2.24
8.0 mm	5/16"	0.312	±.250 mm	8.41 mm	8.58 mm	2.00
6.7 mm	.265"	0.265	±.210 mm	7.05 mm	7.20 mm	1.80
6.3 mm (d)	1/4"	0.250	±.200 mm	6.64 mm	6.78 mm	1.80
5.6 mm	NO. 3 1/2(e)	0.223	±.180 mm	5.90 mm	6.04 mm	1.60
4.75 mm	NO. 4	0.187	±.150 mm	5.02 mm	5.14 mm	1.60
4.0 mm	NO. 5	0.157	±.130 mm	4.23 mm	4.35 mm	1.40
3.35 mm	NO. 6	0.132	±.110 mm	3.55 mm	3.66 mm	1.25
2.8 mm	NO. 7	0.110	±.095 mm	2.975 mm	3.070 mm	1.12
2.36 mm	NO. 8	0.0937	±.080 mm	2.515 mm	2.600 mm	1.00
2.0 mm	NO. 10	0.0787	±.070 mm	2.135 mm	2.215 mm	.900
1.7 mm	NO. 12	0.0661	±.060 mm	1.820 mm	1.890 mm	.800
1.4 mm	NO. 14	0.0555	±.050 mm	1.505 mm	1.565 mm	.710
1.18 mm	NO. 16	0.0469	±.045 mm	1.270 mm	1.330 mm	.630
1.0 mm	NO. 18	0.0394	±.040 mm	1.080 mm	1.135 mm	.560
850 µm (f)	NO. 20	0.0331	±35 µm	925 µm	970 µm	.500
710 µm	NO. 25	0.0278	±30 µm	775 µm	815 µm	.450
600 µm	NO. 30	0.0234	±25 µm	660 µm	695 µm	.400
500 µm	NO. 35	0.0197	±20 µm	550 µm	585 µm	.315

425 µm	NO. 40	0.0165	±19 µm	471 µm	502 µm	.280
355 µm	NO. 45	0.0139	±16 µm	396 µm	425 µm	.224
300 µm	NO. 50	0.0117	±14 µm	337 µm	363 µm	.200
250 µm	NO. 60	0.0098	±12 µm	283 µm	306 µm	.160
212 µm	NO. 70	0.0083	±10 µm	242 µm	263 µm	.140
180 µm	NO. 80	0.0070	±9 µm	207 µm	227 µm	.125
150 µm	NO. 100	0.0059	±8 µm	174 µm	192 µm	.100
125 µm	NO. 120	0.0049	±7 µm	147 µm	163 µm	.090
106 µm	NO. 140	0.0041	±6 µm	126 µm	141 µm	.071
90 µm	NO. 170	0.0035	±5 µm	108 µm	122 µm	.063
75 µm	NO. 200	0.0029	±5 µm	91 µm	103 µm	.050
63 µm	NO. 230	0.0025	±4 µm	77 µm	89 µm	.045
53 µm	NO. 270	0.0021	±4 µm	66 µm	76 µm	.036
45 µm	NO. 325	0.0017	±3 µm	57 µm	66 µm	.032
38 µm	NO. 400	0.0015	±3 µm	48 µm	57 µm	.030
32 µm	NO. 450	0.0012	±3 µm	42 µm	50 µm	.028
25 µm (d)	NO. 500	0.0010	±3 µm	34 µm	41 µm	.025
20 µm (d)	NO. 635	0.0008	±3 µm	29 µm	35 µm	.020

a) The average diameter of the wires in the x and y direction, taken separately, of any wire cloth shall not deviate from the nominal values by more than ±15%.

b) These standard designations correspond to the values for test sieve openings recommended by the International Organization for Standardization (ISO) Geneva, Switzerland, except where noted.

c) Only approximately equivalent to the metric values in column 1.

d) These sieves are not in the standard series but they have been included because they are in common usage.

e) These numbers (3 1/2 to 635) are the approximate number of openings per linear inch, but it is preferred that the sieve be identified by the standard designation in millimeters or micrometers.

f) 1,000 µm=1 mm

U.S. Standard Test Sieves – 12" (304.8 mm) Diameter

Dimensions: **Half Height = 1-5/8" Depth to Cloth** **Intermediate Height = 2" Depth to Cloth** **Full Height = 3-1/4" Depth to Cloth**

U.S. Standard Mesh Size	Brass Frame / Brass Wire Cloth				Brass Frame / Stainless Steel Wire Cloth				Stainless Steel Frame / Stainless Steel Wire Cloth			
	Half Ht.	Int. Ht.	Full Ht.	Price	Half Ht.	Int. Ht.	Full Ht.	Price	Half Ht.	Int. Ht.	Full Ht.	Price
5"					5"BS12H	5"BS12I	5"BS12F		5"SS12H	5"SS12I	5"SS12F	
4.24"					4.24"BS12H	4.24"BS12I	4.24"BS12F		4.24"SS12H	4.24"SS12I	4.24"SS12F	
4"					4"BS12H	4"BS12I	4"BS12F		4"SS12H	4"SS12I	4"SS12F	
3-1/2"					3-1/2"BS12H	3-1/2"BS12I	3-1/2"BS12F		3-1/2"SS12H	3-1/2"SS12I	3-1/2"SS12F	
3"					3"BS12H	3"BS12I	3"BS12F		3"SS12H	3"SS12I	3"SS12F	
2-1/2"					2-1/2"BS12H	2-1/2"BS12I	2-1/2"BS12F		2-1/2"SS12H	2-1/2"SS12I	2-1/2"SS12F	
2.12"					2.12"BS12H	2.12"BS12I	2.12"BS12F		2.12"SS12H	2.12"SS12I	2.12"SS12F	
2"					2"BS12H	2"BS12I	2"BS12F		2"SS12H	2"SS12I	2"SS12F	
1-3/4"					1-3/4"BS12H	1-3/4"BS12I	1-3/4"BS12F		1-3/4"SS12H	1-3/4"SS12I	1-3/4"SS12F	
1-1/2"					1-1/2"BS12H	1-1/2"BS12I	1-1/2"BS12F		1-1/2"SS12H	1-1/2"SS12I	1-1/2"SS12F	
1-1/4"					1-1/4"BS12H	1-1/4"BS12I	1-1/4"BS12F		1-1/4"SS12H	1-1/4"SS12I	1-1/4"SS12F	
1.06"					1.06"BS12H	1.06"BS12I	1.06"BS12F		1.06"SS12H	1.06"SS12I	1.06"SS12F	
1.00"					1.00"BS12H	1.00"BS12I	1.00"BS12F		1.00"SS12H	1.00"SS12I	1.00"SS12F	
7/8"					7/8"BS12H	7/8"BS12I	7/8"BS12F		7/8"SS12H	7/8"SS12I	7/8"SS12F	
3/4"					3/4"BS12H	3/4"BS12I	3/4"BS12F		3/4"SS12H	3/4"SS12I	3/4"SS12F	
5/8"					5/8"BS12H	5/8"BS12I	5/8"BS12F		5/8"SS12H	5/8"SS12I	5/8"SS12F	
.530"					.530"BS12H	.530"BS12I	.530"BS12F		.530"SS12H	.530"SS12I	.530"SS12F	
1/2"					1/2"BS12H	1/2"BS12I	1/2"BS12F		1/2"SS12H	1/2"SS12I	1/2"SS12F	
7/16"					7/16"BS12H	7/16"BS12I	7/16"BS12F		7/16"SS12H	7/16"SS12I	7/16"SS12F	
3/8"					3/8"BS12H	3/8"BS12I	3/8"BS12F		3/8"SS12H	3/8"SS12I	3/8"SS12F	
5/16"					5/16"BS12H	5/16"BS12I	5/16"BS12F		5/16"SS12H	5/16"SS12I	5/16"SS12F	
.265"					.265"BS12H	.265"BS12I	.265"BS12F		.265"SS12H	.265"SS12I	.265"SS12F	
1/4"					1/4"BS12H	1/4"BS12I	1/4"BS12F		1/4"SS12H	1/4"SS12I	1/4"SS12F	
#3.5					#3.5BS12H	#3.5BS12I	#3.5BS12F		#3.5SS12H	#3.5SS12I	#3.5SS12F	
#4					4BS12H	4BS12I	4BS12F		4SS12H	4SS12I	4SS12F	
#5					5BS12H	5BS12I	5BS12F		5SS12H	5SS12I	5SS12F	
#6					6BS12H	6BS12I	6BS12F		6SS12H	6SS12I	6SS12F	
1/8" *					1/8"BS12H	1/8"BS12I	1/8"BS12F		1/8"SS12H	1/8"SS12I	1/8"SS12F	
#7					7BS12H	7BS12I	7BS12F		7SS12H	7SS12I	7SS12F	
#8	8BB12H	8BB12I	8BB12F		8BS12H	8BS12I	8BS12F		8SS12H	8SS12I	8SS12F	
#10	10BB12H	10BB12I	10BB12F		10BS12H	10BS12I	10BS12F		10SS12H	10SS12I	10SS12F	
#12	12BB12H	12BB12I	12BB12F		12BS12H	12BS12I	12BS12F		12SS12H	12SS12I	12SS12F	
#14	14BB12H	14BB12I	14BB12F		14BS12H	14BS12I	14BS12F		14SS12H	14SS12I	14SS12F	
#16	16BB12H	16BB12I	16BB12F		16BS12H	16BS12I	16BS12F		16SS12H	16SS12I	16SS12F	
#18	18BB12H	18BB12I	18BB12F		18BS12H	18BS12I	18BS12F		18SS12H	18SS12I	18SS12F	
#20	20BB12H	20BB12I	20BB12F		20BS12H	20BS12I	20BS12F		20SS12H	20SS12I	20SS12F	
#25	25BB12H	25BB12I	25BB12F		25BS12H	25BS12I	25BS12F		25SS12H	25SS12I	25SS12F	
#30	30BB12H	30BB12I	30BB12F		30BS12H	30BS12I	30BS12F		30SS12H	30SS12I	30SS12F	
#35	35BB12H	35BB12I	35BB12F		35BS12H	35BS12I	35BS12F		35SS12H	35SS12I	35SS12F	
#40	40BB12H	40BB12I	40BB12F		40BS12H	40BS12I	40BS12F		40SS12H	40SS12I	40SS12F	
#45	45BB12H	45BB12I	45BB12F		45BS12H	45BS12I	45BS12F		45SS12H	45SS12I	45SS12F	
#50	50BB12H	50BB12I	50BB12F		50BS12H	50BS12I	50BS12F		50SS12H	50SS12I	50SS12F	
#60	60BB12H	60BB12I	60BB12F		60BS12H	60BS12I	60BS12F		60SS12H	60SS12I	60SS12F	
#70	70BB12H	70BB12I	70BB12F		70BS12H	70BS12I	70BS12F		70SS12H	70SS12I	70SS12F	
#80	80BB12H	80BB12I	80BB12F		80BS12H	80BS12I	80BS12F		80SS12H	80SS12I	80SS12F	
#100	100BB12H	100BB12I	100BB12F		100BS12H	100BS12I	100BS12F		100SS12H	100SS12I	100SS12F	
#120	120BB12H	120BB12I	120BB12F		120BS12H	120BS12I	120BS12F		120SS12H	120SS12I	120SS12F	
#140	140BB12H	140BB12I	140BB12F		140BS12H	140BS12I	140BS12F		140SS12H	140SS12I	140SS12F	
#170	170BB12H	170BB12I	170BB12F		170BS12H	170BS12I	170BS12F		170SS12H	170SS12I	170SS12F	
#200	200BB12H	200BB12I	200BB12F		200BS12H	200BS12I	200BS12F		200SS12H	200SS12I	200SS12F	
#230	230BB12H	230BB12I	230BB12F		230BS12H	230BS12I	230BS12F		230SS12H	230SS12I	230SS12F	
#270	270BB12H	270BB12I	270BB12F		270BS12H	270BS12I	270BS12F		270SS12H	270SS12I	270SS12F	
#325	325BB12H	325BB12I	325BB12F		325BS12H	325BS12I	325BS12F		325SS12H	325SS12I	325SS12F	
#400	400BB12H	400BB12I	400BB12F		400BS12H	400BS12I	400BS12F		400SS12H	400SS12I	400SS12F	
#450					450BS12H	450BS12I	450BS12F		450SS12H	450SS12I	450SS12F	
#500					500BS12H	500BS12I	500BS12F		500SS12H	500SS12I	500SS12F	
#635					635BS12H	635BS12I	635BS12F		635SS12H	635SS12I	635SS12F	

* 1/8" Currently not part of the ASTM E 11 Specifications.

Part Number	Brass Pans & Covers	Price	Part Number	Stainless Steel Pans & Covers	Price
PB12H	Pan 12" Half Height		PS12H	Pan 12" Half Height	
PB12HX	Pan 12" Half Height with Extended Rim		PS12HX	Pan 12" Half Height with Extended Rim	
PB12IX	Pan 12" Intermediate Height with Extended Rim		PS12IX	Pan 12" Intermediate Height with Extended Rim	
PB12F	Pan 12" Full Height		PS12F	Pan 12" Full Height	
PB12FX	Pan 12" Full Height with Extended Rim		PS12FX	Pan 12" Full Height with Extended Rim	
CB12	Cover 12" without Lifting Ring		CS12	Cover 12" without Lifting Ring	
CB12W/R	Cover 12" with Lifting Ring		CS12W/R	Cover 12" with Lifting Ring	