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 Opening, in. (see c below)	Permissible Variation of Average Opening from the Standard Sieve Designation	Opening Dimension or Not More Than 5% of the Openings	Maximum Individual Opening	Nominal Wire Diameter (mm) see a below
Standard (b)	Alternative					
(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 – 8″ (203.2 mm) Diameter

Dimensions: Half Height = 1″ Depth to Cloth Full Height = 2″ 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.	Full Ht.	Price	Half Ht.	Full Ht.	Price	Half Ht.	Full Ht.	Price
5″				5″BS8H	5″BS8F		5″SS8H	5″SS8F	
4.24″				4.24″BS8H	4.24″BS8F		4.24″SS8H	4.24″SS8F	
4″				4″BS8H	4″BS8F		4″SS8H	4″SS8F	
3-1/2″				3-1/2″BS8H	3-1/2″BS8F		3-1/2″SS8H	3-1/2″SS8F	
3″				3″BS8H	3″BS8F		3″SS8H	3″SS8F	
2-1/2″				2-1/2″BS8H	2-1/2″BS8F		2-1/2″SS8H	2-1/2″SS8F	
2.12″				2.12″BS8H	2.12″BS8F		2.12″SS8H	2.12″SS8F	
2″				2″BS8H	2″BS8F		2″SS8H	2″SS8F	
1-3/4″				1-3/4″BS8H	1-3/4″BS8F		1-3/4″SS8H	1-3/4″SS8F	
1-1/2″				1-1/2″BS8H	1-1/2″BS8F		1-1/2″SS8H	1-1/2″SS8F	
1-1/4″				1-1/4″BS8H	1-1/4″BS8F		1-1/4″SS8H	1-1/4″SS8F	
1.06″				1.06″BS8H	1.06″BS8F		1.06″SS8H	1.06″SS8F	
1.00″				1.00″BS8H	1.00″BS8F		1.00″SS8H	1.00″SS8F	
7/8″				7/8″BS8H	7/8″BS8F		7/8″SS8H	7/8″SS8F	
3/4″				3/4″BS8H	3/4″BS8F		3/4″SS8H	3/4″SS8F	
5/8″				5/8″BS8H	5/8″BS8F		5/8″SS8H	5/8″SS8F	
.530″				.530″BS8H	.530″BS8F		.530″SS8H	.530″SS8F	
1/2″				1/2″BS8H	1/2″BS8F		1/2″SS8H	1/2″SS8F	
7/16″				7/16″BS8H	7/16″BS8F		7/16″SS8H	7/16″SS8F	
3/8″				3/8″BS8H	3/8″BS8F		3/8″SS8H	3/8″SS8F	
5/16″				5/16″BS8H	5/16″BS8F		5/16″SS8H	5/16″SS8F	
.265″				.265″BS8H	.265″BS8F		.265″SS8H	.265″SS8F	
1/4″				1/4″BS8H	1/4″BS8F		1/4″SS8H	1/4″SS8F	
#3.5				#3.5BS8H	#3.5BS8F		#3.5SS8H	#3.5SS8F	
#4				4BS8H	4BS8F		4SS8H	4SS8F	
#5				5BS8H	5BS8F		5SS8H	5SS8F	
#6				6BS8H	6BS8F		6SS8H	6SS8F	
1/8″ ✶				1/8″BS8H	1/8″BS8F		1/8″SS8H	1/8″SS8F	
#7				7BS8H	7BS8F		7SS8H	7SS8F	
#8	8BB8H	8BB8F		8BS8H	8BS8F		8SS8H	8SS8F	
#10	10BB8H	10BB8F		10BS8H	10BS8F		10SS8H	10SS8F	
#12	12BB8H	12BB8F		12BS8H	12BS8F		12SS8H	12SS8F	
#14	14BB8H	14BB8F		14BS8H	14BS8F		14SS8H	14SS8F	
#16	16BB8H	16BB8F		16BS8H	16BS8F		16SS8H	16SS8F	
#18	18BB8H	18BB8F		18BS8H	18BS8F		18SS8H	18SS8F	
#20	20BB8H	20BB8F		20BS8H	20BS8F		20SS8H	20SS8F	
#25	25BB8H	25BB8F		25BS8H	25BS8F		25SS8H	25SS8F	
#30	30BB8H	30BB8F		30BS8H	30BS8F		30SS8H	30SS8F	
#35	35BB8H	35BB8F		35BS8H	35BS8F		35SS8H	35SS8F	
#40	40BB8H	40BB8F		40BS8H	40BS8F		40SS8H	40SS8F	
#45	45BB8H	45BB8F		45BS8H	45BS8F		45SS8H	45SS8F	
#50	50BB8H	50BB8F		50BS8H	50BS8F		50SS8H	50SS8F	
#60	60BB8H	60BB8F		60BS8H	60BS8F		60SS8H	60SS8F	
#70	70BB8H	70BB8F		70BS8H	70BS8F		70SS8H	70SS8F	
#80	80BB8H	80BB8F		80BS8H	80BS8F		80SS8H	80SS8F	
#100	100BB8H	100BB8F		100BS8H	100BS8F		100SS8H	100SS8F	
#120	120BB8H	120BB8F		120BS8H	120BS8F		120SS8H	120SS8F	
#140	140BB8H	140BB8F		140BS8H	140BS8F		140SS8H	140SS8F	
#170	170BB8H	170BB8F		170BS8H	170BS8F		170SS8H	170SS8F	
#200	200BB8H	200BB8F		200BS8H	200BS8F		200SS8H	200SS8F	
#230	230BB8H	230BB8F		230BS8H	230BS8F		230SS8H	230SS8F	
#270	270BB8H	270BB8F		270BS8H	270BS8F		270SS8H	270SS8F	
#325	325BB8H	325BB8F		325BS8H	325BS8F		325SS8H	325SS8F	
#400	400BB8H	400BB8F		400BS8H	400BS8F		400SS8H	400SS8F	
#450				450BS8H	450BS8F		450SS8H	450SS8F	
#500				500BS8H	500BS8F		500SS8H	500SS8F	
#635				635BS8H	635BS8F		635SS8H	635SS8F	

✶ 1/8″ Currently not part of the ASTM E 11 Specifications.

Part Number	Brass Pans & Covers	Price	Part Number	Stainless Steel Pans & Covers	Price
PB8F	Pan 8″ Full Height		PS8F	Pan 8″ Full Height	
PB8FX	Pan 8″ Full Height with Extended Rim		PS8FX	Pan 8″ Full Height with Extended Rim	
PB8H	Pan 8″ Half Height		PS8H	Pan 8″ Half Height	
PB8HX	Pan 8″ Half Height with Extended Rim		PS8HX	Pan 8″ Half Height with Extended Rim	
CB8	Cover 8″ without Lifting Ring		CS8	Cover 8″ without Lifting Ring	
CB8W/R	Cover 8″ with Lifting Ring		CS8W/R	Cover 8″ with Lifting Ring	