

TABLE 1 Nominal Dimensions and Permissible Variations for Sieve Cloth and Compliance, Inspection and Calibration Test Sieves

(1)	(2a)	(2b)	(3) ^A	(4)	(5)	(6)	(7)	(8)	(9) ^{B, C}	(10)	(11) ^{B, C}	(12)	(13)	(14)	(15)
Standard	Sieve Designation		Nominal Sieve Opening	±Y Variation for Average Opening	+X Maximum Variation for Opening	Resulting Maximum Individual Opening	Compliance Sieves		Inspection Sieves		Calibration Sieves		Typical Wire Diameter	Permissible Average Wire Diameter	
	U.S. Alternative	Supplementary Size					Sample Openings per 100 ft ²	Maximum Standard Deviation	Sample Openings per Sieve	Maximum Standard Deviation	Sample Openings per Sieve	Maximum Standard Deviation		Min	Max
mm		mm	in.	mm	mm	mm							mm		
125	5 in.		5.00	3.30	4.06	129.06	20	—	all	—	all	—	8.00	6.8	9.2
		112	4.41	2.96	3.74	115.74	20	—	all	—	all	—	8.00	6.8	9.2
106	4.24 in.		4.24	2.80	3.59	109.59	20	—	all	—	all	—	6.30	5.4	7.2
100	4 in.		4.00	2.65	3.44	103.44	20	—	all	—	all	—	6.30	5.4	7.2
90	3½ in.		3.50	2.39	3.18	93.18	20	—	all	—	all	—	6.30	5.4	7.2
		80	3.15	2.13	2.91	82.91	20	—	all	—	all	—	6.30	5.4	7.2
75	3 in.		3.00	2.00	2.78	77.78	20	—	all	—	all	—	6.30	5.4	7.2
		71	2.80	1.89	2.67	73.67	20	—	all	—	all	—	5.60	4.8	6.4
63	2½ in.		2.50	1.69	2.44	65.44	20	—	all	—	all	—	5.60	4.8	6.4
		56	2.20	1.50	2.24	58.24	20	—	all	—	all	—	5.00	4.3	5.8
53	2.12 in.		2.12	1.42	2.15	55.15	20	—	all	—	all	—	5.00	4.3	5.8
50	2 in.		2.00	1.34	2.06	52.06	20	—	all	—	all	—	5.00	4.3	5.8
45	1¾ in.		1.75	1.21	1.91	46.91	20	—	all	—	all	—	4.50	3.8	5.2
		40	1.57	1.08	1.75	41.75	20	—	all	—	all	—	4.50	3.8	5.2
37.5	1½ in.		1.50	1.01	1.67	39.17	20	1.103	all	—	all	—	4.50	3.8	5.2
		35.5	1.40	0.961	1.60	37.10	20	1.035	all	—	all	—	4.00	3.4	4.6
31.5	1¼ in.		1.25	0.855	1.47	32.97	20	0.907	all	—	all	—	4.00	3.4	4.6
		28	1.10	0.762	1.35	29.35	20	0.802	all	—	all	—	3.55	3.0	4.1
26.5	1.06 in.		1.06	0.722	1.29	27.79	20	0.758	all	—	all	—	3.55	3.0	4.1
25	1.00 in.		1.00	0.682	1.24	26.24	20	0.715	all	—	all	—	3.55	3.0	4.1
22.4	¾ in.		0.875	0.613	1.14	23.54	150	0.641	15	0.431	30	0.460	3.55	3.0	4.1
		20	0.787	0.548	1.05	21.05	150	0.575	15	0.387	30	0.413	3.15	2.7	3.6
19	¾ in.		0.750	0.522	1.01	20.01	150	0.548	15	0.368	30	0.393	3.15	2.7	3.6
		18	0.709	0.495	0.97	18.97	150	0.521	15	0.350	30	0.374	3.15	2.7	3.6
16	⅝ in.		0.625	0.441	0.89	16.89	150	0.467	15	0.314	30	0.335	3.15	2.7	3.6
		14	0.551	0.387	0.81	14.81	150	0.414	15	0.278	30	0.297	2.80	2.4	3.2
13.2	0.530 in.		0.530	0.365	0.78	13.98	150	0.393	15	0.264	30	0.282	2.80	2.4	3.2
12.5	½ in.		0.500	0.346	0.75	13.25	150	0.374	15	0.251	30	0.268	2.50	2.1	2.9
11.2	⅞ in.		0.438	0.311	0.69	11.89	150	0.340	15	0.229	30	0.244	2.50	2.1	2.9
		10	0.394	0.279	0.64	10.64	150	0.308	15	0.207	30	0.221	2.50	2.1	2.9
9.5	⅝ in.		0.375	0.265	0.61	10.11	150	0.294	15	0.198	30	0.211	2.24	1.9	2.6
		9	0.354	0.251	0.59	9.59	150	0.281	15	0.189	30	0.202	2.24	1.9	2.6
8	⅝ in.		0.312	0.224	0.54	8.54	150	0.254	15	0.171	30	0.182	2.00	1.7	2.3
		7.1	0.280	0.200	0.50	7.60	150	0.230	15	0.155	30	0.165	1.80	1.5	2.1
6.7	0.265 in.		0.265	0.189	0.48	7.18	150	0.219	15	0.147	30	0.157	1.80	1.5	2.1
6.3	¼ in.		0.250	0.178	0.46	6.76	150	0.208	15	0.140	30	0.149	1.80	1.5	2.1
5.6	No. 3½		0.223	0.159	0.42	6.02	150	0.189	15	0.127	30	0.136	1.60	1.3	1.9
		5	0.197	0.142	0.39	5.39	150	0.172	15	0.116	30	0.123	1.60	1.3	1.9
4.75	No. 4		0.187	0.135	0.37	5.12	150	0.165	15	0.111	30	0.118	1.60	1.3	1.9
		4.5	0.177	0.128	0.36	4.86	150	0.158	15	0.106	30	0.113	1.40	1.2	1.7
4	No. 5		0.157	0.114	0.33	4.33	150	0.143	15	0.096	30	0.103	1.40	1.2	1.7
		3.55	0.140	0.102	0.30	3.85	200	0.130	20	0.092	40	0.097	1.25	1.06	1.50
3.35	No. 6		0.132	0.096	0.29	3.64	200	0.125	20	0.088	40	0.093	1.25	1.06	1.50
		3.15	0.124	0.091	0.28	3.43	200	0.119	20	0.084	40	0.089	1.25	1.06	1.50
2.8	No. 7		0.110	0.081	0.26	3.06	200	0.108	20	0.076	40	0.081	1.12	0.95	1.30
		2.5	0.0984	0.073	0.24	2.74	200	0.099	20	0.070	40	0.074	1.00	0.85	1.15
2.36	No. 8		0.0937	0.069	0.23	2.59	200	0.095	20	0.067	40	0.071	1.00	0.85	1.15
		2.24	0.0882	0.065	0.22	2.46	200	0.091	20	0.064	40	0.068	0.90	0.77	1.04
2	No. 10		0.0787	0.059	0.20	2.20	250	0.083	25	0.060	50	0.064	0.90	0.77	1.04
		1.8	0.0709	0.053	0.19	1.99	250	0.077	25	0.056	50	0.059	0.80	0.68	0.92
1.7	No. 12		0.0661	0.050	0.18	1.88	250	0.074	25	0.054	50	0.057	0.80	0.68	0.92

TABLE 1 Continued

(1)	(2a)	(2b)	(3) ^A	(4)	(5)	(6)	(7)	(8)	(9) ^{B, C}	(10)	(11) ^{B, C}	(12)	(13)	(14)	(15)
Standard	Sieve Designation		Nominal Sieve Opening	±Y Variation for Average Opening	+X Maximum Variation for Opening	Resulting Maximum Individual Opening	Compliance Sieves		Inspection Sieves		Calibration Sieves		Typical Wire Diameter	Permissible Average Wire Diameter	
	U.S. Alternative	Supplementary Size					Sample Openings per 100 ft ²	Maximum Standard Deviation	Sample Openings per Sieve	Maximum Standard Deviation	Sample Openings per Sieve	Maximum Standard Deviation		Min	Max
1.4	No. 14	1.6	0.0630	0.047	0.17	1.77	250	0.070	25	0.051	50	0.054	0.80	0.68	0.92
			0.0555	0.042	0.16	1.56	400	0.064	40	0.050	80	0.052	0.71	0.60	0.82
1.18	No. 16	1.25	0.0492	0.038	0.15	1.40	400	0.058	40	0.045	80	0.047	0.63	0.54	0.72
		1.12	0.0469	0.036	0.14	1.32	400	0.056	40	0.043	80	0.045	0.63	0.54	0.72
1	No. 18	1.12	0.0441	0.034	0.14	1.26	400	0.054	40	0.042	80	0.044	0.56	0.48	0.64
			0.0394	0.030	0.13	1.13	400	0.050	40	0.039	80	0.040	0.56	0.48	0.64
		µm	in.	µm	µm	µm							mm		
850	No. 20	900	0.0354	27.6	118	1018	400	45.51	40	35.22	80	36.74	0.500	0.43	0.58
710	No. 25	800	0.0331	26.2	114	964	400	43.66	40	33.79	80	35.25	0.500	0.43	0.58
		800	0.0315	24.8	109	909	400	41.79	40	32.34	80	33.74	0.450	0.38	0.52
600	No. 30	630	0.0278	22.2	101	811	500	38.36	50	30.43	100	31.62	0.450	0.38	0.52
		630	0.0248	19.9	93	723	500	35.23	50	27.95	100	29.04	0.400	0.34	0.46
500	No. 35	560	0.0234	19.0	91	691	500	34.04	50	27.00	100	28.06	0.400	0.34	0.46
		560	0.0220	17.9	87	647	500	32.43	50	25.73	100	26.73	0.355	0.30	0.41
425	No. 40	450	0.0197	16.2	80	580	600	29.96	60	24.21	120	25.09	0.315	0.27	0.36
		450	0.0177	14.7	75	525	600	27.86	60	22.51	120	23.32	0.280	0.24	0.32
355	No. 45	400	0.0165	14.0	73	498	600	26.79	60	21.65	120	22.43	0.280	0.24	0.32
		400	0.0157	13.3	70	470	600	25.71	60	20.78	120	21.52	0.250	0.21	0.29
300	No. 50	315	0.0139	12.0	65	420	800	23.72	80	19.68	160	20.30	0.224	0.19	0.26
		315	0.0124	10.8	60	375	800	21.90	80	18.17	160	18.75	0.200	0.17	0.23
250	No. 60	280	0.0117	10.4	58	358	800	21.20	80	17.59	160	18.15	0.200	0.17	0.23
		280	0.0110	9.8	56	336	800	20.26	80	16.81	160	17.34	0.180	0.15	0.21
212	No. 70	224	0.0098	8.9	52	302	800	18.82	80	15.61	160	16.11	0.160	0.13	0.19
		224	0.0088	8.1	49	273	800	17.53	80	14.54	160	15.01	0.160	0.13	0.19
180	No. 80	200	0.0083	7.8	47	259	800	16.93	80	14.05	160	14.49	0.140	0.12	0.17
		200	0.0079	7.4	45	245	800	16.32	80	13.54	160	13.97	0.140	0.12	0.17
150	No. 100	160	0.0070	6.8	43	223	1000	15.27	100	12.91	200	13.28	0.125	0.106	0.150
		160	0.0063	6.3	40	200	1000	14.20	100	12.00	200	12.34	0.112	0.095	0.130
125	No. 120	140	0.0059	6.0	38	188	1000	13.65	100	11.53	200	11.86	0.100	0.085	0.115
		140	0.0055	5.7	37	177	1000	13.09	100	11.06	200	11.38	0.100	0.085	0.115
106	No. 140	112	0.0049	5.2	34	159	1000	12.23	100	10.33	200	10.63	0.090	0.077	0.104
		112	0.0044	4.8	32	144	1000	11.46	100	9.68	200	9.96	0.080	0.068	0.092
90	No. 170	100	0.0041	4.7	31	137	1000	11.10	100	9.38	200	9.65	0.071	0.060	0.082
		100	0.0039	4.5	30	130	1000	10.73	100	9.07	200	9.33	0.071	0.060	0.082
75	No. 200	80	0.0035	4.2	29	119	1000	10.10	100	8.53	200	8.78	0.063	0.054	0.072
		80	0.0031	3.9	27	107	1000	9.45	100	7.99	250	8.33	0.056	0.048	0.064
63	No. 230	71	0.0029	3.7	26	101	1000	9.12	100	7.70	250	8.04	0.050	0.043	0.058
		71	0.0028	3.6	25	96	1000	8.85	100	7.48	250	7.80	0.050	0.043	0.058
53	No. 270	56	0.0025	3.4	24	87	1000	8.29	100	7.01	250	7.31	0.045	0.038	0.052
		56	0.0022	3.2	22	78	1000	7.79	100	6.58	250	6.87	0.040	0.034	0.046
45	No. 325	50	0.0021	3.1	21	74	1000	7.56	100	6.39	250	6.67	0.036	0.031	0.041
		50	0.0020	3.0	21	71	1000	7.34	100	6.20	250	6.47	0.036	0.031	0.041
38	No. 400	40	0.0017	2.8	20	65	1000	6.95	100	5.87	250	6.13	0.032	0.027	0.037
		40	0.0016	2.7	19	59	1000	6.55	100	5.54	300	5.83	0.032	0.027	0.037
32	No. 450	36	0.0015	2.6	18	56	1000	6.38	100	5.39	300	5.69	0.030	0.024	0.035
		36	0.0014	2.6	18	54	1000	6.22	100	5.26	300	5.54	0.030	0.024	0.035
25	No. 500		0.0012	2.4	17	49	1000	5.87	100	4.96	300	5.23	0.028	0.023	0.033
			0.0010	2.2	15	40	1000	5.23	100	4.42	300	4.66	0.025	0.021	0.029
20	No. 635		0.0008	2.1	13	33	1000	4.73	100	4.00	300	4.22	0.020	0.017	0.023

^A Column 3—These numbers are only approximate but are in use for reference; the sieve shall be identified by the standard designation in millimetres or micrometres.

^B Columns 9 and 11—See Annex A1, which specifies that all openings will be inspected for test sieves having 15 openings or less.

^C Columns 9 and 11—These number of sample openings are based on an 8-in. diameter test sieve.