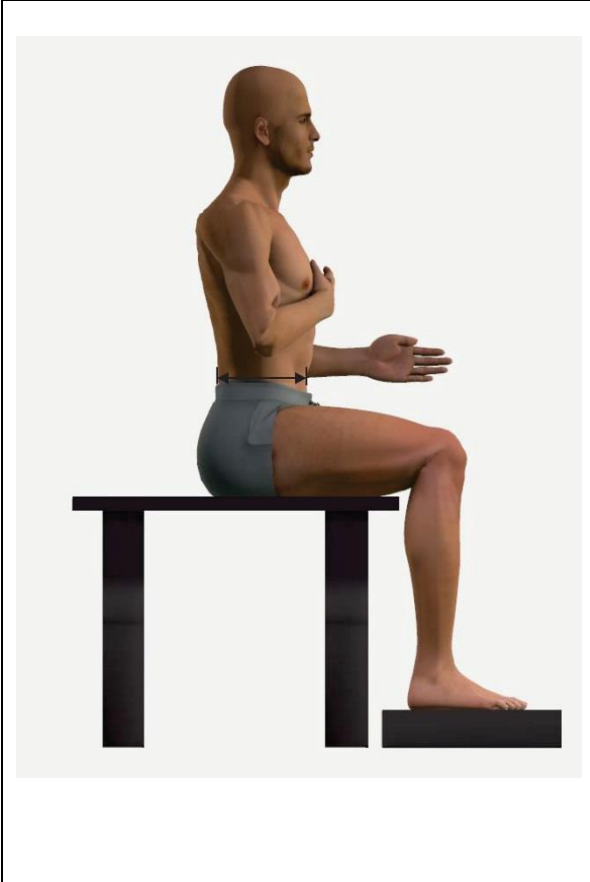


1. DIMENSION: Abdominal Depth, Sitting

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	291.13	11.46	272.51	10.73
SE Mean	2.67	0.11	4.98	0.20
STD	58.01	2.28	63.23	2.49

The horizontal distance between the anterior point of the abdomen (abdominal point anterior, sitting) and the back at the same level.

The participant sits erect looking straight ahead. The measurement is taken with a beam caliper at the maximum point of quiet respiration.



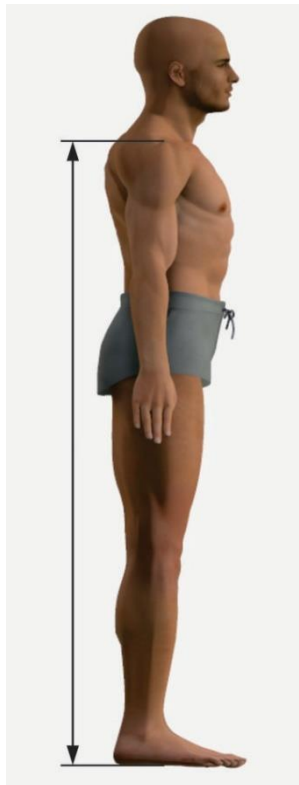
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	201.60	179.41
	2	204.81	180.58
	3	209.33	181.81
	5	212.91	189.49
	10	226.47	201.76
	20	247.81	214.76
	25	252.47	222.69
	50	281.41	266.66
	75	318.63	312.73
	80	332.90	316.73
English (in)	90	366.95	355.38
	95	396.52	391.70
	97	431.54	400.56
	98	442.72	403.42
	99	459.96	405.71
	1	7.94	7.06
	2	8.06	7.11
	3	8.24	7.16
	5	8.38	7.46
	10	8.92	7.94
20	9.76	8.46	
25	9.94	8.77	
50	11.08	10.50	
75	12.54	12.31	
80	13.11	12.47	
90	14.45	13.99	
95	15.61	15.42	
97	16.99	15.77	
98	17.43	15.88	
99	18.11	15.97	

2. DIMENSION: Acromial Height

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	1456.73	57.35	1342.76	52.86
SE Mean	3.03	0.12	5.43	0.21
STD	65.85	2.59	68.90	2.71

The vertical distance between the standing surface and the acromion landmark on the tip of the right shoulder.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



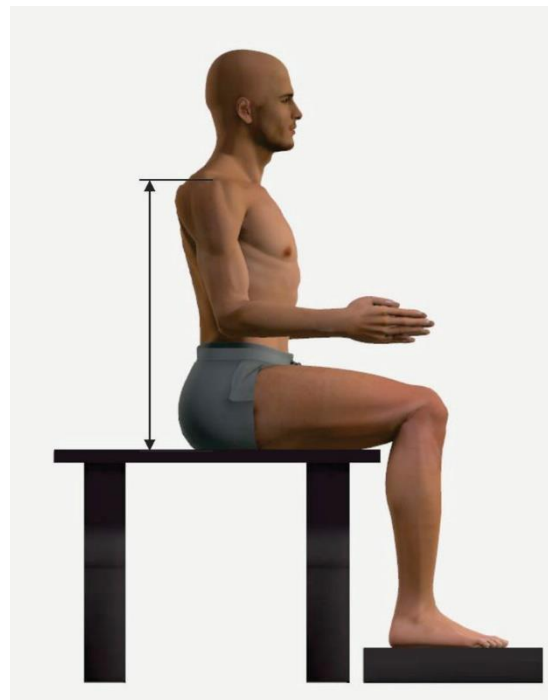
	Percentiles	MEN	WOMEN
Metric (mm)	1	1306.73	1161.51
	2	1324.81	1202.76
	3	1340.60	1208.46
	5	1356.52	1222.76
	10	1377.20	1260.57
	20	1399.72	1292.67
	25	1409.05	1301.82
	50	1455.18	1343.14
	75	1498.36	1384.10
	80	1512.44	1396.27
English (in)	90	1540.82	1420.32
	95	1558.21	1445.71
	97	1574.23	1453.13
	98	1580.93	1464.98
	99	1600.66	1474.33
	1	51.45	45.73
	2	52.16	47.35
	3	52.78	47.58
	5	53.41	48.14
	10	54.22	49.63
20	55.11	50.89	
25	55.47	51.25	
50	57.29	52.88	
75	58.99	54.49	
80	59.54	54.97	
90	60.66	55.92	
95	61.35	56.92	
97	61.98	57.21	
98	62.24	57.68	
99	63.02	58.04	

3. DIMENSION: Acromial Height, Sitting

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	611.66	24.08	572.58	22.54
SE Mean	1.53	0.06	2.42	0.10
STD	58.01	2.28	63.23	2.49

The vertical distance between a sitting surface and the acromion landmark on the tip of the right shoulder.

The participant sits erect looking straight ahead. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



	Percentiles	MEN	WOMEN
Metric (mm)	1	538.30	504.56
	2	548.31	506.46
	3	552.84	509.88
	5	561.01	519.38
	10	571.13	535.68
	20	584.27	548.59
	25	588.88	555.56
	50	611.37	571.10
	75	633.73	589.75
	80	638.20	594.06
English (in)	90	648.87	609.78
	95	660.90	618.82
	97	668.65	623.50
	98	679.19	626.67
	99	693.25	633.50
	1	21.19	19.86
	2	21.59	19.94
	3	21.77	20.07
	5	22.09	20.45
	10	22.49	21.09
20	23.00	21.60	
25	23.18	21.87	
50	24.07	22.48	
75	24.95	23.22	
80	25.13	23.39	
90	25.55	24.01	
95	26.02	24.36	
97	26.32	24.55	
98	26.74	24.67	
99	27.29	24.94	

4. DIMENSION: Arm Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	790.44	31.12	720.27	28.36
SE Mean	1.81	0.07	3.31	0.13
STD	39.25	1.55	42.01	1.65

The distance between the acromion landmark on the tip of the right shoulder and the dactylion III landmark at the tip of the middle finger.

The participant stands erect with both arms straight at sides, hands extended, and palms facing the thighs. This measurement is taken with a beam caliper.



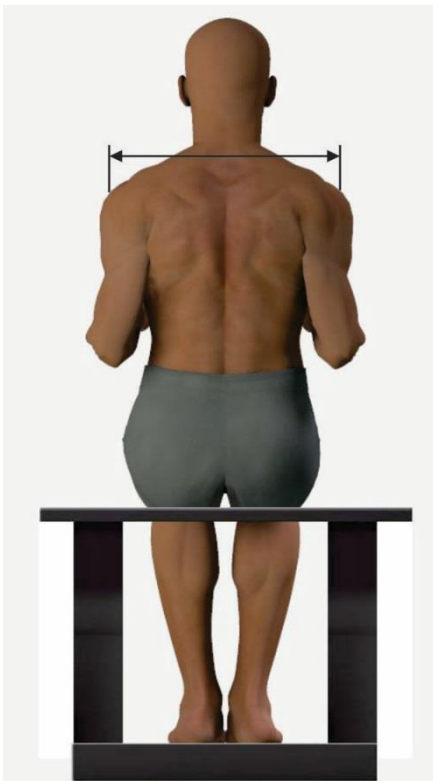
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	697.95	619.12
	2	713.31	649.93
	3	720.40	655.23
	5	727.20	662.71
	10	737.95	672.57
	20	755.45	684.73
	25	764.60	691.61
	50	789.87	721.96
	75	817.44	742.87
	80	823.00	748.77
English (in)	90	842.28	766.60
	95	853.41	782.60
	97	858.83	788.79
	98	862.94	791.22
	99	871.00	816.34
	1	27.48	24.37
	2	28.08	25.59
	3	28.36	25.80
	5	28.63	26.09
	10	29.05	26.48
20	29.74	26.96	
25	30.10	27.23	
50	31.10	28.42	
75	32.18	29.25	
80	32.40	29.48	
90	33.16	30.18	
95	33.60	30.81	
97	33.81	31.05	
98	33.97	31.15	
99	34.29	32.14	

5. DIMENSION: Biacromial Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	421.73	16.60	376.99	14.84
SE Mean	0.96	0.04	1.47	0.06
STD	20.85	0.82	18.68	0.74

The distance between the right and left acromion landmarks at the tips of the shoulders.

The participant sits erect looking straight ahead. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. This measurement is taken with a beam caliper at the maximum point of quiet respiration.



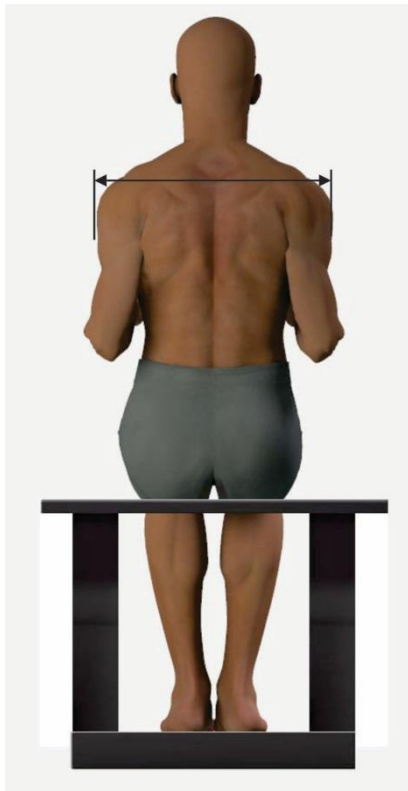
	Percentiles	MEN	WOMEN
Metric (mm)	1	372.53	334.00
	2	375.67	336.47
	3	378.77	346.30
	5	384.82	348.47
	10	395.04	354.34
	20	404.32	361.61
	25	407.66	364.86
	50	421.94	376.63
	75	434.23	387.59
	80	437.22	389.77
English (in)	90	447.04	397.41
	95	454.37	401.65
	97	459.56	406.86
	98	462.06	410.92
	99	470.94	415.33
	1	14.67	13.15
	2	14.79	13.25
	3	14.91	13.63
	5	15.15	13.72
	10	15.55	13.95
20	15.92	14.24	
25	16.05	14.36	
50	16.61	14.83	
75	17.10	15.26	
80	17.21	15.35	
90	17.60	15.65	
95	17.89	15.81	
97	18.09	16.02	
98	18.19	16.18	
99	18.54	16.35	

6. DIMENSION: Bideltoid Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	517.20	20.36	466.99	18.39
SE Mean	1.64	0.06	2.99	0.12
STD	35.54	1.40	38.00	1.50

The maximum horizontal distance between the lateral margins of the upper arms on the deltoid muscles.

The participant sits erect looking straight ahead. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. This measurement is taken with a beam caliper at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	447.17	393.63
	2	452.62	398.45
	3	455.26	407.92
	5	463.64	419.20
	10	473.47	425.38
	20	486.78	436.27
	25	491.92	439.80
	50	515.29	461.04
	75	535.06	493.34
	80	543.17	496.93
90	562.80	511.98	
95	577.74	526.84	
97	589.00	537.38	
98	592.94	552.41	
99	607.91	570.56	
English (in)			
	1	17.61	15.50
	2	17.82	15.69
	3	17.92	16.06
	5	18.25	16.50
	10	18.64	16.75
	20	19.16	17.18
	25	19.37	17.31
	50	20.29	18.15
	75	21.07	19.42
80	21.38	19.56	
90	22.16	20.16	
95	22.75	20.74	
97	23.19	21.16	
98	23.34	21.75	
99	23.93	22.46	

7. DIMENSION: Bustpoint/Thelion Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	237.75	9.36	159.80	6.29
SE Mean	1.24	0.05	2.36	0.09
STD	26.81	1.06	29.95	1.18

The distance between the left and right bustpoint landmarks on women and the center of the nipple (thelion) on men.

The participant stands erect looking straight ahead. The shoulders and upper extremities are relaxed. This measurement is taken with a beam caliper at the maximum point of quiet respiration.



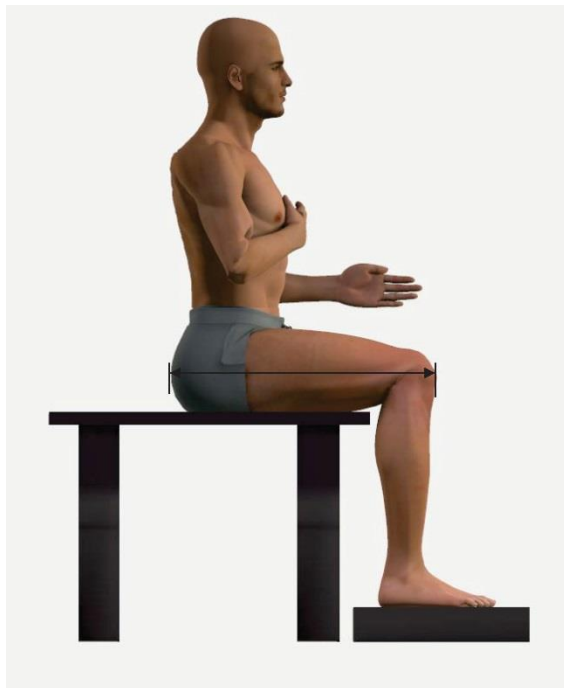
	Percentiles	MEN	WOMEN
Metric (mm)	1	183.21	108.29
	2	188.88	109.78
	3	192.32	113.63
	5	198.77	118.19
	10	206.04	125.22
	20	214.54	134.15
	25	219.66	138.15
	50	234.45	157.03
	75	253.92	179.36
	80	259.07	183.12
English (in)	90	271.95	198.59
	95	280.85	206.76
	97	288.66	210.81
	98	302.37	213.50
	99	307.98	222.47
	1	7.21	4.26
	2	7.44	4.32
	3	7.57	4.47
	5	7.83	4.65
	10	8.11	4.93
20	8.45	5.28	
25	8.65	5.44	
50	9.23	6.18	
75	10.00	7.06	
80	10.20	7.21	
90	10.71	7.82	
95	11.06	8.14	
97	11.36	8.30	
98	11.90	8.41	
99	12.13	8.76	

8. DIMENSION: Buttock-Knee Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	624.88	24.60	594.69	23.41
SE Mean	1.52	0.06	2.76	0.11
STD	32.96	1.30	35.08	1.38

The horizontal distance between the buttock plate and the anterior point of the right knee (knee point, anterior).

The participant sits erect. The thighs are parallel and the knees flexed 90 degrees with in the feet in line with the thighs. The measurement is taken with an anthropometer.



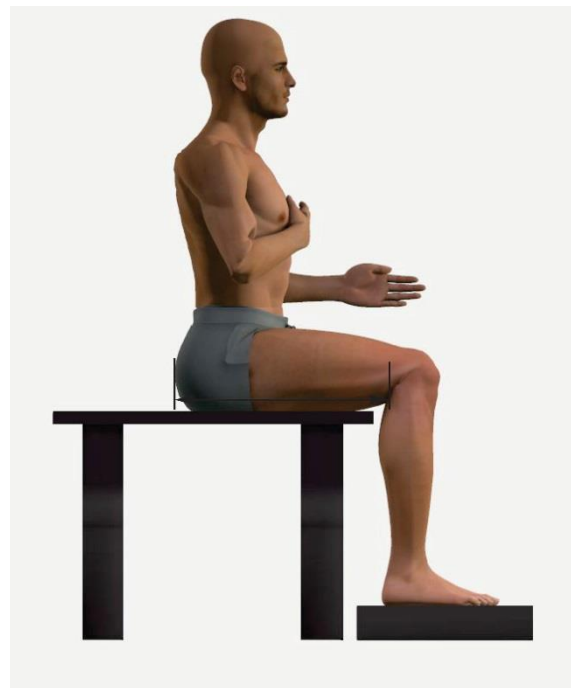
	Percentiles	MEN	WOMEN
Metric (mm)	1	556.38	522.47
	2	563.61	527.98
	3	568.60	534.14
	5	574.52	545.46
	10	581.67	553.05
	20	597.08	563.44
	25	600.92	568.72
	50	623.34	591.62
	75	645.65	617.65
	80	652.37	622.03
English (in)	90	667.18	635.83
	95	678.66	645.89
	97	683.89	655.00
	98	687.29	667.65
	99	697.04	677.25
	1	21.90	20.57
	2	22.19	20.79
	3	22.39	21.03
	5	22.62	21.47
	10	22.90	21.77
20	23.51	22.18	
25	23.66	22.39	
50	24.54	23.29	
75	25.42	24.32	
80	25.68	24.49	
90	26.27	25.03	
95	26.72	25.43	
97	26.92	25.79	
98	27.06	26.29	
99	27.44	26.66	

9. DIMENSION: Buttock-Popliteal Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	507.42	19.98	486.44	19.15
SE Mean	1.31	0.05	2.37	0.09
STD	28.47	1.12	30.12	1.19

The horizontal distance between the buttock plate and the back of the right knee (the popliteal fossa at the dorsal juncture of the calf and thigh).

The participant sits erect looking straight ahead. The thighs are parallel and the knees flexed 90 degrees with in the feet in line with the thighs. The measurement is taken with an anthropometer.



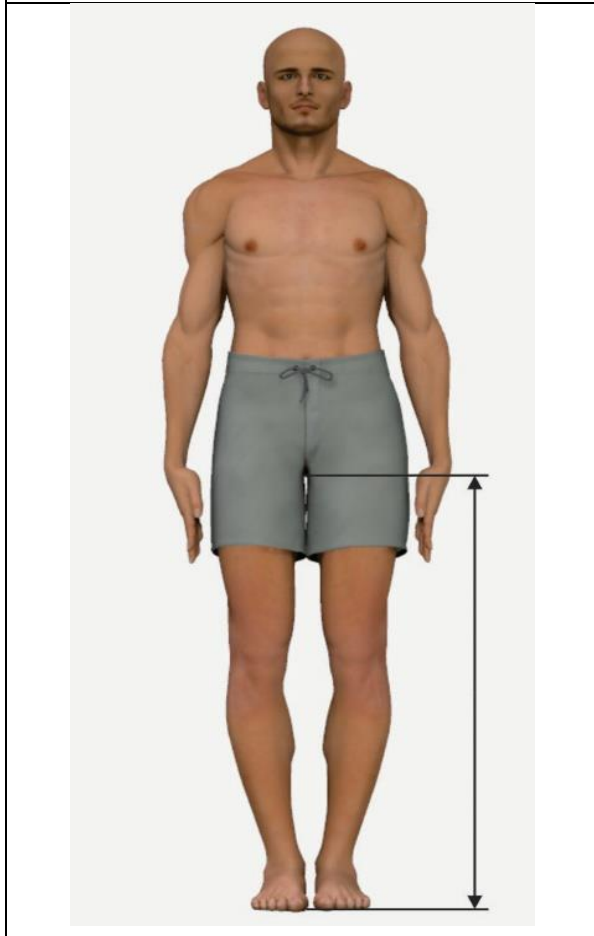
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	443.31	424.54
	2	454.87	435.21
	3	458.20	439.91
	5	463.51	441.38
	10	470.43	449.03
	20	483.51	461.15
	25	488.53	465.42
	50	506.45	486.05
	75	525.29	505.47
	80	530.16	509.74
English (in)	90	543.42	523.95
	95	553.81	530.83
	97	559.33	537.26
	98	561.40	548.12
	99	569.08	556.68
	1	17.45	16.71
	2	17.91	17.13
	3	18.04	17.32
	5	18.25	17.38
	10	18.52	17.68
20	19.04	18.16	
25	19.23	18.32	
50	19.94	19.14	
75	20.68	19.90	
80	20.87	20.07	
90	21.39	20.63	
95	21.80	20.90	
97	22.02	21.15	
98	22.10	21.58	
99	22.40	21.92	

10. DIMENSION: Crotch Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	833.27	32.81	769.88	30.31
SE Mean	2.24	0.09	4.39	0.17
STD	48.71	1.92	55.75	2.19

The vertical distance between the standing surface and the crotch.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The measurement is taken with an anthropometer.



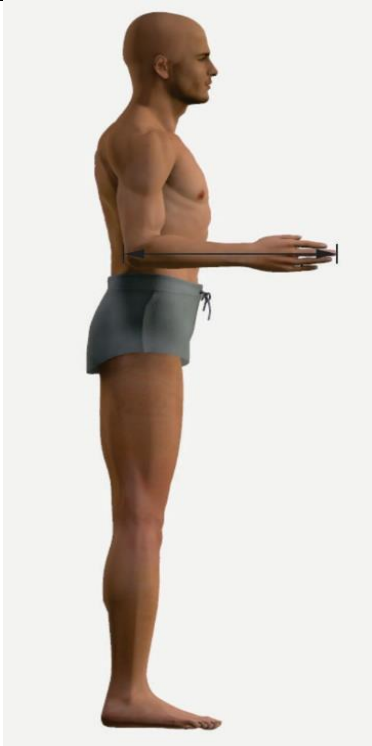
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	725.84	662.51
	2	735.04	673.51
	3	737.93	676.75
	5	750.93	691.41
	10	769.89	705.73
	20	791.42	727.78
	25	799.69	735.09
	50	832.31	774.07
	75	867.56	798.29
	80	874.71	803.59
English (in)	90	894.78	828.80
	95	910.18	859.49
	97	923.15	867.09
	98	929.83	872.22
	99	939.49	909.13
	1	28.58	26.08
	2	28.94	26.52
	3	29.05	26.64
	5	29.56	27.22
	10	30.31	27.78
20	31.16	28.65	
25	31.48	28.94	
50	32.77	30.48	
75	34.16	31.43	
80	34.44	31.64	
90	35.23	32.63	
95	35.83	33.84	
97	36.34	34.14	
98	36.61	34.34	
99	36.99	35.79	

11. DIMENSION: Elbow-Fingertip Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	483.21	19.02	436.88	17.20
SE Mean	1.04	0.04	1.94	0.08
STD	22.64	0.89	24.59	0.97

The horizontal distance between the back of the tip of the right elbow (olecranon, rear) and the tip of the right middle finger (dactylion III) when the right elbow is flexed 90 degrees.

The participant stands erect looking straight ahead. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. This measurement is taken with a beam caliper.



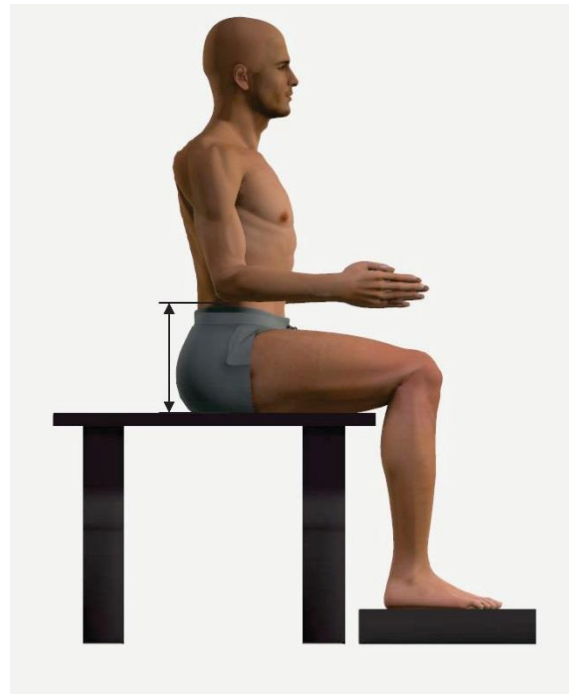
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	435.84	380.44
	2	440.60	387.59
	3	443.45	394.55
	5	445.75	403.62
	10	451.79	408.94
	20	463.08	415.21
	25	467.59	421.81
	50	483.99	436.64
	75	497.72	449.67
	80	500.40	453.35
	90	509.88	464.30
	95	519.44	472.74
	97	523.51	477.88
	98	529.61	479.61
	99	533.40	490.46
English (in)			
	1	17.16	14.98
	2	17.35	15.26
	3	17.46	15.53
	5	17.55	15.89
	10	17.79	16.10
	20	18.23	16.35
	25	18.41	16.61
	50	19.05	17.19
	75	19.60	17.70
	80	19.70	17.85
	90	20.07	18.28
	95	20.45	18.61
	97	20.61	18.81
	98	20.85	18.88
	99	21.00	19.31

12. DIMENSION: Elbow Rest Height

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	246.83	9.72	238.41	9.39
SE Mean	1.45	0.06	2.41	0.09
STD	31.39	1.24	30.60	1.20

The vertical distance between a sitting surface and the bottom of the right elbow (olecranon, bottom).

The participant sits erect looking straight ahead. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



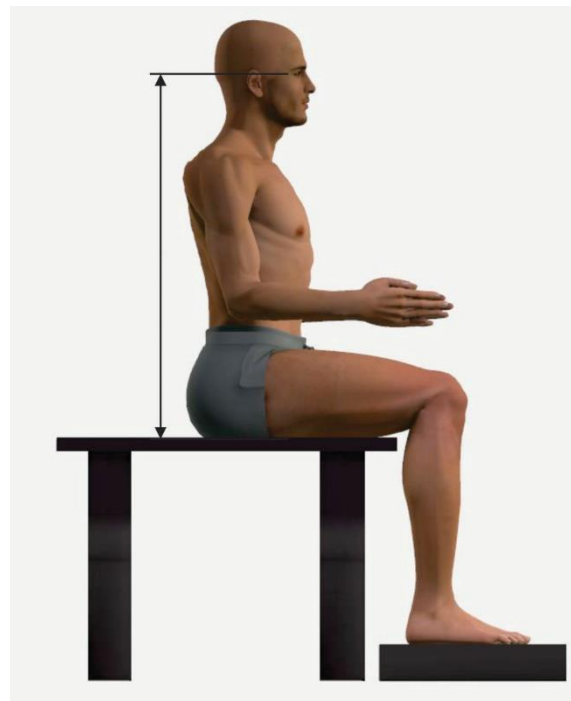
	Percentiles	MEN	WOMEN
Metric (mm)	1	176.15	160.00
	2	184.66	174.46
	3	190.53	185.19
	5	195.89	192.14
	10	208.12	207.80
	20	221.29	216.31
	25	227.26	222.36
	50	246.01	235.65
	75	268.24	254.25
	80	272.33	257.41
English (in)	90	283.15	272.90
	95	291.79	289.57
	97	295.45	292.38
	98	301.29	295.26
	99	329.28	303.40
	1	6.94	6.30
	2	7.27	6.87
	3	7.50	7.29
	5	7.71	7.56
	10	8.19	8.18
	20	8.71	8.52
	25	8.95	8.75
	50	9.69	9.28
	75	10.56	10.01
	80	10.72	10.13
	90	11.15	10.74
	95	11.49	11.40
	97	11.63	11.51
	98	11.86	11.62
99	12.96	11.94	

13. DIMENSION: Eye Height

DIMENSION: Eye Height (Sitting)	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	813.50	32.03	760.55	29.94
SE Mean	1.70	0.07	2.78	0.11
STD	36.98	1.46	35.32	1.39

The vertical distance between a sitting surface and the outer corner of the right eye (ectocanthus).

The participant sits erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The thighs are parallel and the knees flexed 90 degrees with the feet in line with the thighs. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



	Percentiles	MEN	WOMEN
Metric (mm)	1	729.32	686.03
	2	742.94	692.18
	3	747.79	695.91
	5	753.01	698.96
	10	768.04	712.41
	20	781.65	734.35
	25	787.61	740.11
	50	813.23	759.42
	75	837.21	780.51
	80	841.83	785.33
English (in)	90	858.63	802.90
	95	873.30	816.66
	97	881.08	824.49
	98	886.94	827.81
	99	895.24	834.33
	1	28.71	27.01
	2	29.25	27.25
	3	29.44	27.40
	5	29.65	27.52
	10	30.24	28.05
20	30.77	28.91	
25	31.01	29.14	
50	32.02	29.90	
75	32.96	30.73	
80	33.14	30.92	
90	33.80	31.61	
95	34.38	32.15	
97	34.69	32.46	
98	34.92	32.59	
99	35.25	32.85	

14. DIMENSION: Foot Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	102.13	4.02	94.45	3.72
SE Mean	0.28	0.01	0.51	0.02
STD	6.08	0.24	6.47	0.25

The distance between the first metatarsophalangeal-protrusion landmark and the fifth metatarsophalangeal-protrusion landmark on the right foot.

The participant stands erect looking straight ahead. The heels are together and the weight is distributed equally on both feet. This measurement is taken with a beam caliper.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	88.33	79.58
	2	89.41	81.20
	3	90.81	81.93
	5	92.23	84.32
	10	94.49	87.46
	20	96.95	89.21
	25	97.86	89.64
	50	101.22	93.95
	75	105.16	97.52
	80	105.91	98.68
English (in)	90	109.45	101.38
	95	111.98	103.13
	97	113.70	105.15
	98	114.92	106.32
	99	116.99	107.58
	1	3.48	3.13
	2	3.52	3.20
	3	3.58	3.23
	5	3.63	3.32
	10	3.72	3.44
20	3.82	3.51	
25	3.85	3.53	
50	3.98	3.70	
75	4.14	3.84	
80	4.17	3.88	
90	4.31	3.99	
95	4.41	4.06	
97	4.48	4.14	
98	4.52	4.19	
99	4.61	4.24	

15. DIMENSION: Foot Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	267.58	10.53	237.96	9.37
SE Mean	0.62	0.02	1.08	0.04
STD	13.44	0.53	13.72	0.54

The distance between the most posterior protrusion of the heel and the most anterior tip of the toes on the right foot.

The participant stands erect looking straight ahead. The heels are together and the weight is distributed equally on both feet. This measurement is taken with a beam caliper.



	Percentiles	MEN	WOMEN
Metric (mm)	1	239.07	213.00
	2	240.60	214.16
	3	242.55	214.45
	5	245.20	215.30
	10	249.48	219.27
	20	256.02	227.84
	25	257.95	230.26
	50	267.73	236.60
	75	276.32	246.04
	80	278.36	247.26
English (in)	90	283.25	254.52
	95	286.89	258.71
	97	290.72	260.69
	98	292.72	262.23
	99	295.77	265.37
	1	9.41	8.39
	2	9.47	8.43
	3	9.55	8.44
	5	9.65	8.48
	10	9.82	8.63
20	10.08	8.97	
25	10.16	9.07	
50	10.54	9.32	
75	10.88	9.69	
80	10.96	9.73	
90	11.15	10.02	
95	11.29	10.19	
97	11.45	10.26	
98	11.52	10.32	
99	11.64	10.45	

16. DIMENSION: Hand Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	89.70	3.53	78.33	3.08
SE Mean	0.21	0.01	0.30	0.01
STD	4.57	0.18	3.82	0.15

The breadth of the hand between the landmarks at metacarpal II and metacarpal V.

This measurement is taken with a sliding caliper when the participant places the right hand palm-down on a table with two distal phalanges on the fingers on a flat surface 8 mm higher than the table surface.



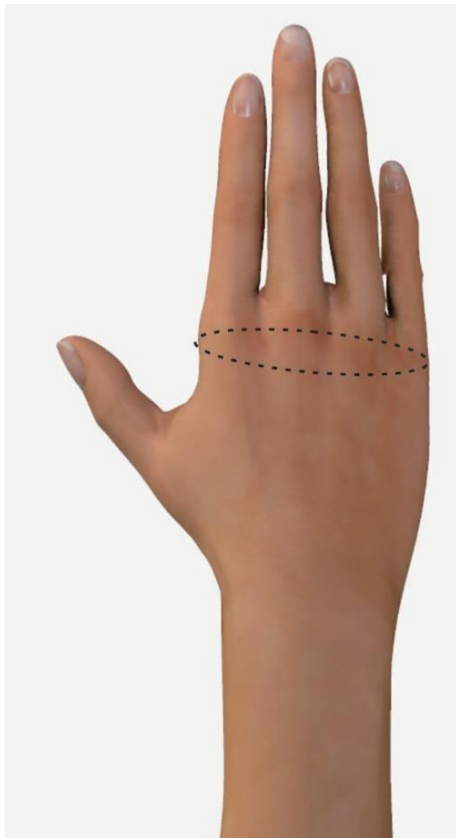
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	79.55	65.84
	2	80.41	68.67
	3	81.05	71.06
	5	82.06	71.78
	10	83.30	73.49
	20	85.38	75.12
	25	86.13	75.84
	50	89.23	77.57
	75	92.07	80.27
	80	92.89	80.78
English (in)	90	95.02	82.13
	95	96.28	83.39
	97	97.76	84.81
	98	99.17	85.88
	99	100.61	86.47
	1	3.13	2.59
	2	3.17	2.70
	3	3.19	2.80
	5	3.23	2.83
	10	3.28	2.89
20	3.36	2.96	
25	3.39	2.99	
50	3.51	3.05	
75	3.62	3.16	
80	3.66	3.18	
90	3.74	3.23	
95	3.79	3.28	
97	3.85	3.34	
98	3.90	3.38	
99	3.96	3.40	

17. DIMENSION: Hand Circumference

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	216.13	8.51	187.93	7.40
SE Mean	0.52	0.02	0.75	0.03
STD	11.22	0.44	9.50	0.37

The circumference of the right hand over the landmarks at metacarpale II and metacarpale V.

This measurement is taken with a tape when the participant places the right hand palm-down on a table with two distal phalanges on the fingers on a flat surface 8 mm higher than the table surface.



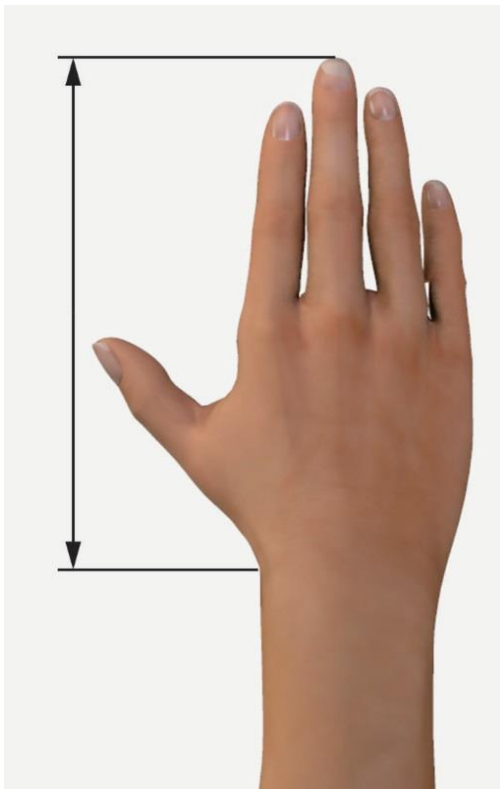
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	190.53	162.02
	2	193.13	169.84
	3	195.76	171.23
	5	198.27	172.41
	10	201.74	177.66
	20	206.48	180.48
	25	208.26	181.42
	50	215.30	187.33
	75	222.99	193.59
	80	224.51	194.94
	90	229.53	197.90
	95	233.86	201.47
	97	236.58	204.81
	98	239.17	207.57
99	243.78	208.48	
English (in)	1	7.50	6.38
	2	7.60	6.69
	3	7.71	6.74
	5	7.81	6.79
	10	7.94	6.99
	20	8.13	7.11
	25	8.20	7.14
	50	8.48	7.38
	75	8.78	7.62
	80	8.84	7.67
	90	9.04	7.79
	95	9.21	7.93
	97	9.31	8.06
	98	9.42	8.17
99	9.60	8.21	

18. DIMENSION: Hand Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	196.34	7.73	177.32	6.98
SE Mean	0.45	0.02	0.83	0.03
STD	9.77	0.38	10.53	0.41

The length of the right hand between the stylium landmark on the wrist and the tip of the middle finger (dactylion III).

This measurement is taken with a sliding caliper when the participant places the right hand palm-down on a table with two distal phalanges on the fingers on a flat surface 8 mm higher than the table surface.



	Percentiles	MEN	WOMEN
Metric (mm)	1	173.89	154.49
	2	176.63	156.17
	3	178.00	157.73
	5	180.49	160.59
	10	184.08	164.53
	20	187.52	168.78
	25	188.91	170.28
	50	195.51	176.74
	75	202.45	184.45
	80	203.69	185.30
English (in)	90	208.43	187.87
	95	210.94	192.25
	97	213.64	193.85
	98	215.58	194.31
	99	218.11	194.73
	1	6.85	6.08
	2	6.95	6.15
	3	7.01	6.21
	5	7.11	6.32
	10	7.25	6.48
20	7.38	6.65	
25	7.44	6.70	
50	7.70	6.96	
75	7.97	7.26	
80	8.02	7.30	
90	8.21	7.40	
95	8.30	7.57	
97	8.41	7.63	
98	8.49	7.65	
99	8.59	7.67	

19. DIMENSION: Head Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	154.16	6.07	145.79	5.74
SE Mean	5.53	0.22	5.16	0.20
STD	0.25	0.01	0.41	0.02

The maximum horizontal breadth of the head above the attachment of the ears.

This measurement is taken with a spreading caliper.



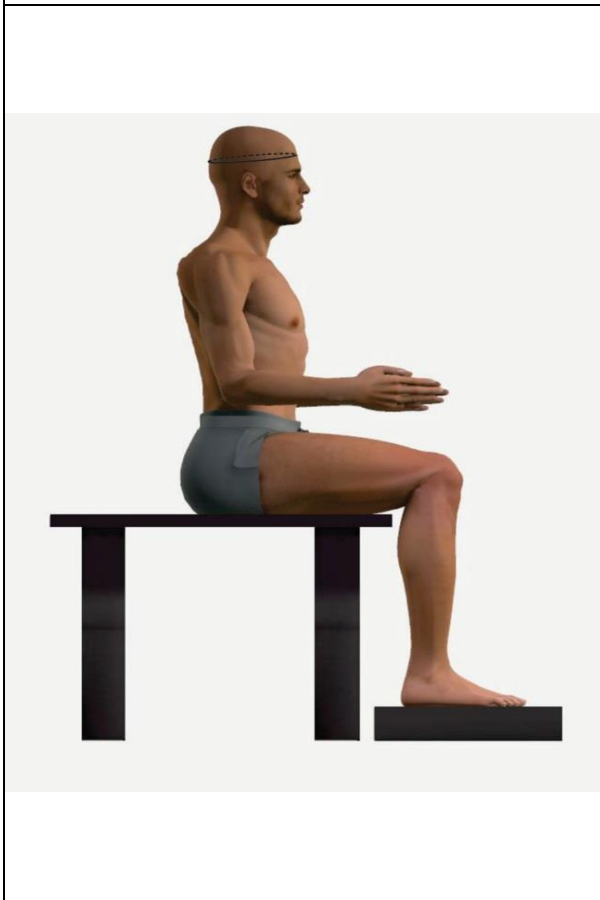
	Percentiles	MEN	WOMEN
Metric (mm)	1	141.01	135.00
	2	144.01	135.45
	3	144.53	135.91
	5	145.29	136.72
	10	146.72	138.80
	20	149.48	141.60
	25	150.19	142.30
	50	153.56	145.12
	75	156.95	148.72
	80	157.94	149.45
English (in)	90	160.39	151.38
	95	162.41	152.99
	97	163.77	153.94
	98	165.31	154.84
	99	169.31	156.65
	1	5.55	5.31
	2	5.67	5.33
	3	5.69	5.35
	5	5.72	5.38
	10	5.78	5.46
20	5.89	5.57	
25	5.91	5.60	
50	6.05	5.71	
75	6.18	5.85	
80	6.22	5.88	
90	6.31	5.96	
95	6.39	6.02	
97	6.45	6.06	
98	6.51	6.10	
99	6.67	6.17	

20. DIMENSION: Head Circumference

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	580.48	22.85	551.32	21.71
SE Mean	0.79	0.03	1.18	0.05
STD	17.14	0.67	14.97	0.59

The maximum circumference of the head above the attachment of the ears to the head above the ridges of the eyebrows and around the back of the head.

This measurement is taken with a tape.



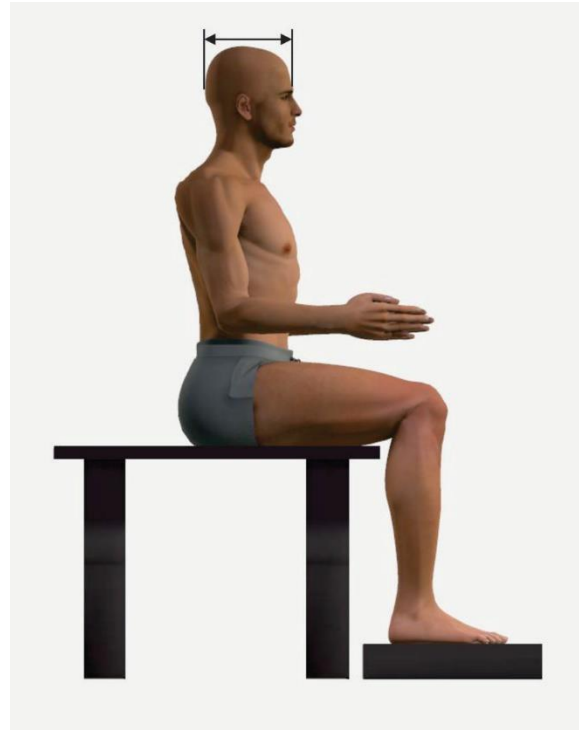
	Percentiles	MEN	WOMEN
Metric (mm)	1	538.90	519.05
	2	546.33	523.72
	3	549.24	524.89
	5	553.69	527.45
	10	559.85	534.17
	20	566.51	539.11
	25	569.18	539.86
	50	579.37	549.90
	75	590.52	558.90
	80	593.29	560.52
English (in)	90	603.04	568.20
	95	608.21	575.71
	97	610.75	581.88
	98	613.11	584.42
	99	620.94	589.37
	1	21.22	20.44
	2	21.51	20.62
	3	21.62	20.66
	5	21.80	20.77
	10	22.04	21.03
20	22.30	21.22	
25	22.41	21.25	
50	22.81	21.65	
75	23.25	22.00	
80	23.36	22.07	
90	23.74	22.37	
95	23.95	22.67	
97	24.05	22.91	
98	24.14	23.01	
99	24.45	23.20	

21. DIMENSION: Head Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	201.46	7.93	189.54	7.46
SE Mean	0.32	0.01	0.47	0.02
STD	6.91	0.27	6.01	0.24

The distance from the glabella landmark between the brow-ridges to the posterior point on the back of the head.

This measurement is taken with a spreading caliper.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	185.17	173.87
	2	187.69	176.25
	3	188.43	178.16
	5	190.05	180.01
	10	192.27	181.55
	20	194.87	184.65
	25	196.19	185.55
	50	201.06	189.15
	75	205.50	192.13
	80	206.27	193.71
	90	209.64	196.58
	95	211.53	198.35
	97	212.70	200.15
	98	213.94	200.69
	99	216.36	204.03
English (in)			
	1	7.29	6.85
	2	7.39	6.94
	3	7.42	7.01
	5	7.48	7.09
	10	7.57	7.15
	20	7.67	7.27
	25	7.72	7.31
	50	7.92	7.45
	75	8.09	7.56
	80	8.12	7.63
	90	8.25	7.74
	95	8.33	7.81
	97	8.37	7.88
	98	8.42	7.90
	99	8.52	8.03

22. DIMENSION: Hip Breadth (Sitting)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	362.95	14.29	380.31	14.97
SE Mean	1.30	0.05	3.52	0.14
STD	28.13	1.11	44.61	1.76

The maximum distance between the lateral points of the hips or thighs (whichever is greater).

The participant sits erect with feet and knees together. The measurement is made with a beam caliper.



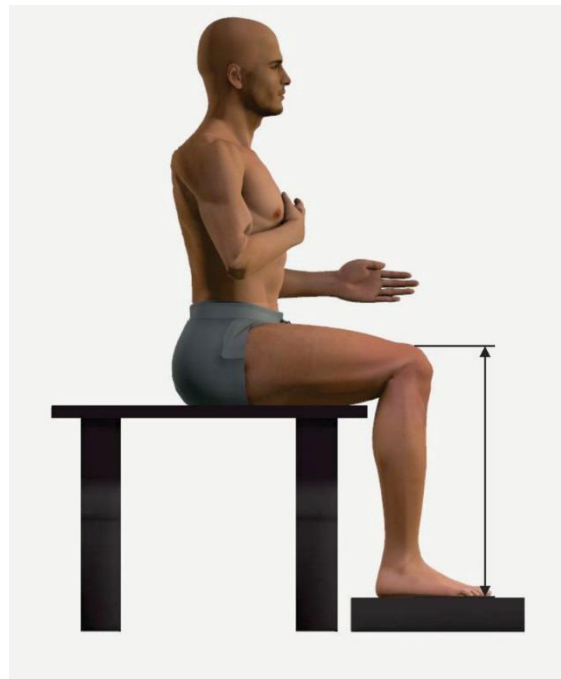
	Percentiles	MEN	WOMEN
Metric (mm)	1	308.64	309.26
	2	314.39	317.99
	3	317.05	319.96
	5	323.56	326.12
	10	332.73	332.79
	20	342.48	344.79
	25	345.77	348.98
	50	357.86	367.99
	75	375.02	403.38
	80	381.19	419.59
English (in)	90	397.60	443.73
	95	414.44	458.61
	97	430.45	465.93
	98	440.51	470.16
	99	454.57	471.58
	1	12.15	12.18
	2	12.38	12.52
	3	12.48	12.60
	5	12.74	12.84
	10	13.10	13.10
20	13.48	13.57	
25	13.61	13.74	
50	14.09	14.49	
75	14.76	15.88	
80	15.01	16.52	
90	15.65	17.47	
95	16.32	18.06	
97	16.95	18.34	
98	17.34	18.51	
99	17.90	18.57	

23. DIMENSION: Knee Height (Sitting)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	571.02	22.48	520.10	20.48
SE Mean	1.39	0.05	2.49	0.10
STD	30.13	1.19	31.55	1.24

The vertical distance between the footrest surface and the suprapatella landmark at the top of the right knee.

The participant sits with the thighs parallel, the knees flexed 90 degrees, and the feet in line with the thighs. This measurement is taken with an anthropometer.



	Percentiles	MEN	WOMEN
Metric (mm)	1	504.29	445.75
	2	507.41	459.46
	3	513.09	465.76
	5	523.31	472.45
	10	534.03	482.34
	20	545.54	494.24
	25	549.97	501.08
	50	568.80	520.42
	75	593.00	537.65
	80	597.75	543.92
English (in)	90	608.17	553.10
	95	618.61	567.80
	97	624.55	574.44
	98	628.30	578.67
	99	633.99	589.92
	1	19.85	17.55
	2	19.98	18.09
	3	20.20	18.34
	5	20.60	18.60
	10	21.02	18.99
20	21.48	19.46	
25	21.65	19.73	
50	22.39	20.49	
75	23.35	21.17	
80	23.53	21.41	
90	23.94	21.78	
95	24.35	22.35	
97	24.59	22.62	
98	24.74	22.78	
99	24.96	23.23	

24. DIMENSION: Lateral Malleolus Height

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	72.68	2.86	66.35	2.61
SE Mean	0.27	0.01	0.46	0.02
STD	5.96	0.23	5.77	0.23

The vertical distance between a standing surface and the lateral malleolus landmark on the outside of the right ankle.

The heels are together with weight distributed equally on both feet. The measurement is taken with a modified sliding caliper.



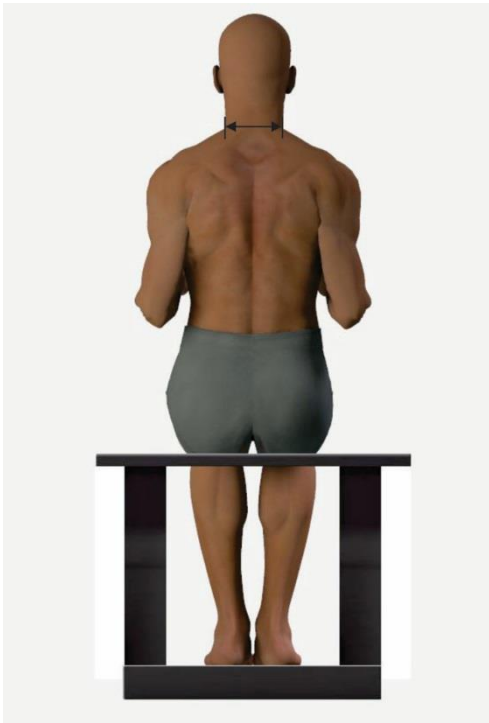
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	59.80	54.00
	2	60.79	54.50
	3	62.08	55.29
	5	62.76	56.45
	10	64.73	58.49
	20	67.06	61.37
	25	67.83	62.50
	50	72.16	66.03
	75	76.42	69.50
	80	77.44	70.34
	90	80.19	72.45
English (in)	95	82.11	73.79
	97	82.80	75.40
	98	83.70	76.38
	99	85.01	77.37
	1	2.35	2.13
	2	2.39	2.15
	3	2.44	2.18
	5	2.47	2.22
	10	2.55	2.30
	20	2.64	2.42
25	2.67	2.46	
50	2.84	2.60	
75	3.01	2.74	
80	3.05	2.77	
90	3.16	2.85	
95	3.23	2.90	
97	3.26	2.97	
98	3.30	3.01	
99	3.35	3.05	

25. DIMENSION: Neck Breadth

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	148.71	5.85	131.08	5.16
SE Mean	0.50	0.02	0.84	0.03
STD	10.78	0.42	10.63	0.42

The distance between the left and right lateral points at the base of the neck.

The participant sits erect looking straight ahead. This measurement is taken with a beam caliper.



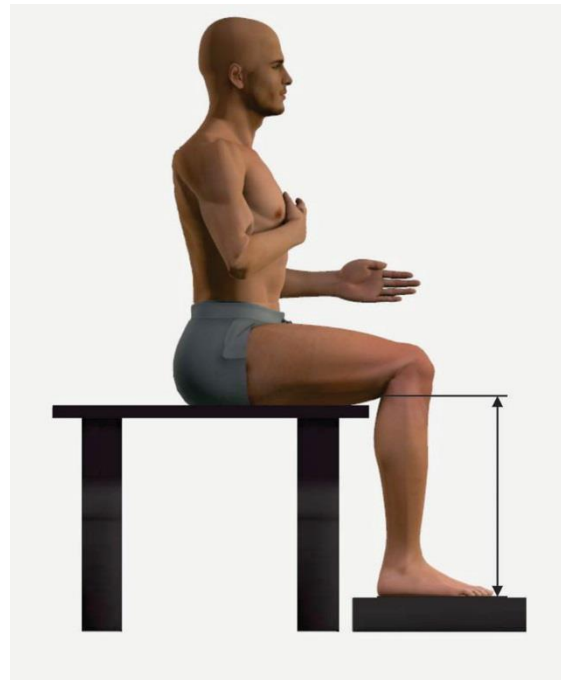
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	125.16	109.83
	2	127.13	113.70
	3	129.37	115.15
	5	131.68	116.72
	10	135.20	119.02
	20	139.16	122.31
	25	140.90	123.54
	50	147.63	129.77
	75	155.90	136.53
	80	157.32	139.10
	90	162.05	143.77
	95	165.55	148.10
	97	168.49	149.44
	98	169.63	150.61
	99	172.45	152.68
English (in)			
	1	4.93	4.32
	2	5.01	4.48
	3	5.09	4.53
	5	5.18	4.60
	10	5.32	4.69
	20	5.48	4.82
	25	5.55	4.86
	50	5.81	5.11
	75	6.14	5.38
	80	6.19	5.48
	90	6.38	5.66
	95	6.52	5.83
	97	6.63	5.88
	98	6.68	5.93
	99	6.79	6.01

26. DIMENSION: Popliteal Height

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	432.33	17.02	389.29	15.33
SE Mean	1.22	0.05	2.39	0.09
STD	26.38	1.04	30.30	1.19

The vertical distance from a footrest surface to the back of the right knee (the popliteal fossa at the dorsal juncture of the right calf and thigh).

The participant sits erect looking straight ahead. The thighs are parallel and the knees flexed 90 degrees with in the feet in line with the thighs. The measurement is taken with an anthropometer



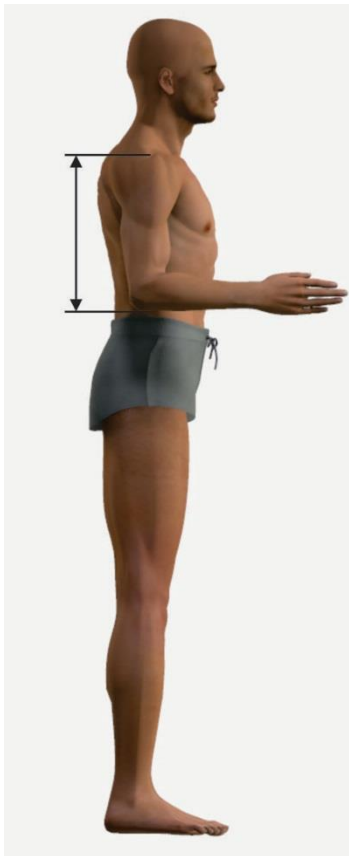
	Percentiles	MEN	WOMEN
Metric (mm)	1	375.60	312.55
	2	379.29	332.28
	3	383.01	338.59
	5	390.54	346.16
	10	399.67	353.55
	20	409.21	367.27
	25	413.14	371.96
	50	430.00	389.20
	75	450.81	402.20
	80	454.73	407.34
	90	467.20	430.20
English (in)	95	473.87	438.46
	97	479.34	440.96
	98	481.87	447.55
	99	490.85	456.34
	1	14.79	12.31
	2	14.93	13.08
	3	15.08	13.33
	5	15.38	13.63
	10	15.74	13.92
	20	16.11	14.46
25	16.27	14.64	
50	16.93	15.32	
75	17.75	15.83	
80	17.90	16.04	
90	18.39	16.94	
95	18.66	17.26	
97	18.87	17.36	
98	18.97	17.62	
99	19.32	17.97	

27. DIMENSION: Shoulder-Elbow Length

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	367.73	14.48	337.56	13.29
SE Mean	0.92	0.04	1.77	0.07
STD	19.88	0.78	22.48	0.89

The distance between the acromion landmark on the tip of the right shoulder and the bottom of the right elbow (olecranon, bottom).

The participant stands with the right arm hanging at the side and the elbow flexed 90 degrees. The hand is straight and the palm faces inward. This measurement is taken with a beam caliper parallel to the long axis of the right upper arm.



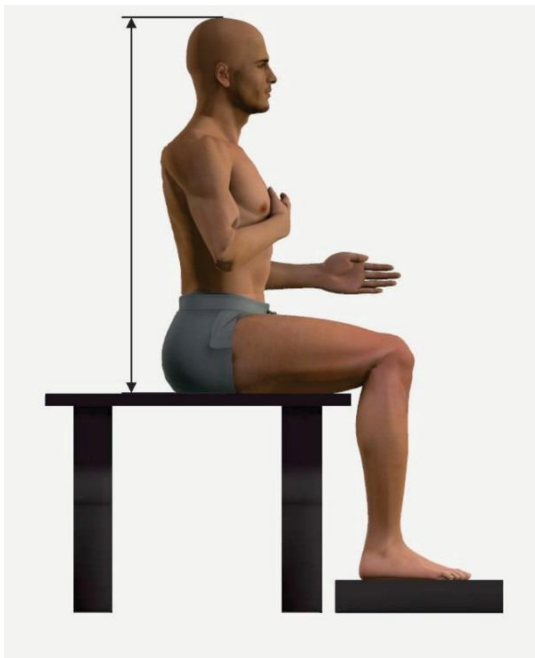
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	320.03	282.09
	2	325.64	289.19
	3	329.66	301.67
	5	337.36	304.55
	10	341.05	312.39
	20	349.39	318.99
	25	353.19	324.42
	50	367.79	337.17
	75	380.15	350.43
	80	383.29	353.85
	90	393.13	362.60
	95	398.88	369.91
	97	402.35	373.98
	98	403.85	376.66
English (in)	99	408.29	385.22
	1	12.60	11.11
	2	12.82	11.39
	3	12.98	11.88
	5	13.28	11.99
	10	13.43	12.30
	20	13.76	12.56
	25	13.91	12.77
	50	14.48	13.27
	75	14.97	13.80
	80	15.09	13.93
90	15.48	14.28	
95	15.70	14.56	
97	15.84	14.72	
98	15.90	14.83	
99	16.07	15.17	

28. DIMENSION: Sitting Height

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	929.40	36.59	872.59	34.35
SE Mean	1.74	0.07	2.87	0.11
STD	37.66	1.48	36.36	1.43

The vertical distance between the sitting surface and the top of the head.

The participant sits erect with the head in the Frankfort plane. The shoulders and upper extremities are relaxed and the forearms and hands are extended forward horizontally with the palms facing each other. The thighs are parallel and the knees flexed 90 degrees with the feet in line with the thighs. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



	Percentiles	MEN	WOMEN
Metric (mm)	1	846.44	789.97
	2	858.33	802.77
	3	862.59	808.09
	5	867.88	811.87
	10	881.47	822.90
	20	898.79	845.46
	25	904.18	851.72
	50	928.06	869.81
	75	953.58	894.51
	80	959.18	900.18
English (in)	90	974.97	913.00
	95	988.56	933.93
	97	996.96	938.76
	98	1003.56	942.05
	99	1010.48	945.93
	1	33.32	31.10
	2	33.79	31.61
	3	33.96	31.81
	5	34.17	31.96
	10	34.70	32.40
20	35.39	33.29	
25	35.60	33.53	
50	36.54	34.24	
75	37.54	35.22	
80	37.76	35.44	
90	38.38	35.94	
95	38.92	36.77	
97	39.25	36.96	
98	39.51	37.09	
99	39.78	37.24	

29. DIMENSION: Stature (Standing Height)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	1775.42	69.90	1642.60	64.67
SE Mean	3.23	0.13	5.85	0.23
STD	70.04	2.76	74.20	2.92

The vertical distance between the standing surface and the top of the head.

The participant stands erect with the head in the Frankfort plane. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	1619.02	1442.54
	2	1635.76	1497.37
	3	1652.04	1506.26
	5	1667.19	1519.78
	10	1690.64	1552.69
	20	1713.52	1586.28
	25	1726.62	1596.58
	50	1772.69	1641.68
	75	1824.36	1683.49
	80	1834.78	1699.84
English (in)	90	1867.96	1731.98
	95	1881.81	1751.65
	97	1894.26	1786.25
	98	1903.85	1788.99
	99	1920.73	1793.17
	1	63.74	56.79
	2	64.40	58.95
	3	65.04	59.30
	5	65.64	59.83
	10	66.56	61.13
20	67.46	62.45	
25	67.98	62.86	
50	69.79	64.63	
75	71.83	66.28	
80	72.24	66.92	
90	73.54	68.19	
95	74.09	68.96	
97	74.58	70.32	
98	74.95	70.43	
99	75.62	70.60	

30. DIMENSION: Thigh Circumference (Standing)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	649.21	25.56	639.30	25.17
SE Mean	3.25	0.13	6.48	0.26
STD	70.50	2.78	82.23	3.24

The circumference of the right thigh at its juncture with the buttock.

The participant stands erect with the weight distributed equally on both feet. The legs are spread apart just enough so that the thighs do not touch. The measurement is made with a tape perpendicular to the long axis of the thigh.



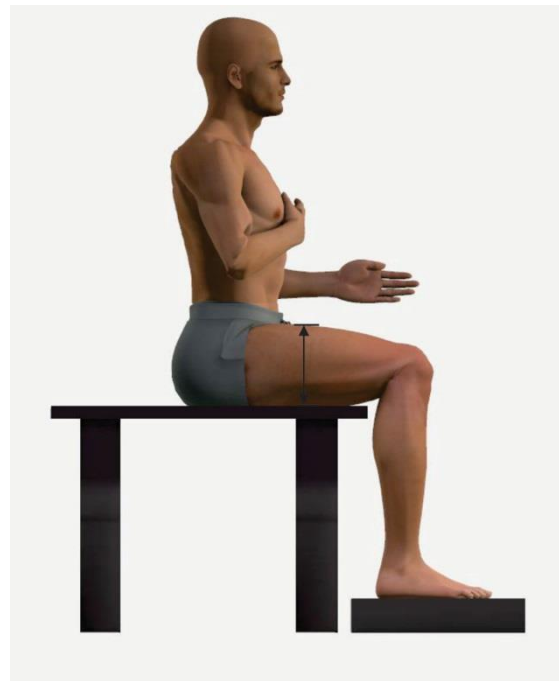
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	505.36	490.94
	2	520.44	505.67
	3	532.31	521.72
	5	546.73	535.08
	10	567.58	548.00
	20	593.80	577.53
	25	604.49	588.84
	50	641.12	620.51
	75	682.91	691.47
	80	698.65	708.14
90	737.65	737.27	
95	777.15	791.06	
97	806.01	808.49	
98	821.67	812.22	
99	838.38	827.91	
English (in)			
	1	19.90	19.33
	2	20.49	19.91
	3	20.96	20.54
	5	21.52	21.07
	10	22.35	21.57
	20	23.38	22.74
	25	23.80	23.18
	50	25.24	24.43
	75	26.89	27.22
80	27.51	27.88	
90	29.04	29.03	
95	30.60	31.14	
97	31.73	31.83	
98	32.35	31.98	
99	33.01	32.59	

31. DIMENSION: Thigh Clearance (Sitting)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	178.65	7.03	169.98	6.69
SE Mean	0.92	0.04	1.88	0.07
STD	19.88	0.78	23.79	0.94

The vertical distance between the sitting surface and the highest point on the top of the right thigh (thigh point, top).

The participant sits erect with thighs parallel and the knees flexed 90 degrees, and the feet in line with the thighs. The measurement is taken with an anthropometer.



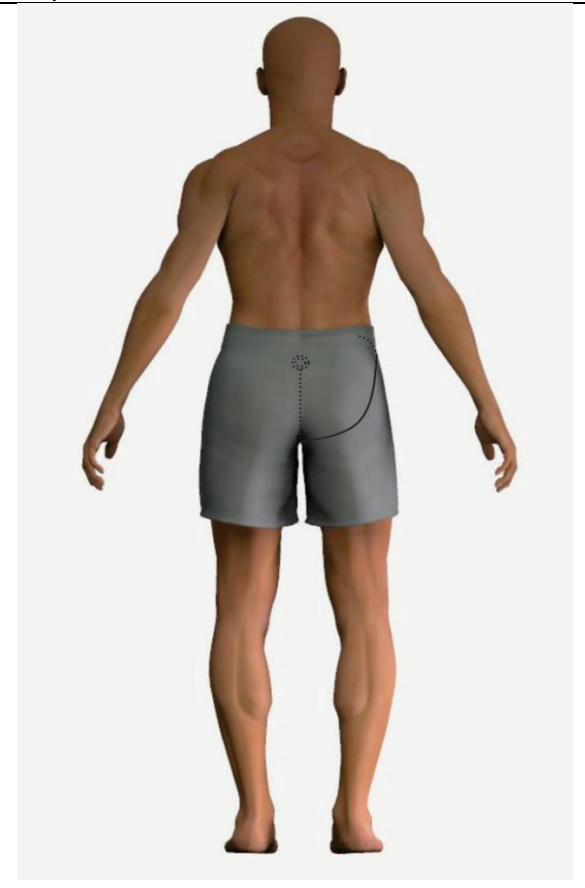
	Percentiles	MEN	WOMEN
Metric (mm)	1	129.68	130.79
	2	136.13	131.95
	3	140.69	135.15
	5	147.12	137.11
	10	155.09	143.46
	20	163.05	148.94
	25	166.26	152.64
	50	176.45	166.75
	75	190.20	182.58
	80	194.71	186.52
English (in)	90	202.78	201.21
	95	210.83	212.82
	97	214.50	217.34
	98	221.48	219.22
	99	225.32	222.68
	1	5.11	5.15
	2	5.36	5.19
	3	5.54	5.32
	5	5.79	5.40
	10	6.11	5.65
20	6.42	5.86	
25	6.55	6.01	
50	6.95	6.57	
75	7.49	7.19	
80	7.67	7.34	
90	7.98	7.92	
95	8.30	8.38	
97	8.44	8.56	
98	8.72	8.63	
99	8.87	8.77	

32. DIMENSION: Thigh Strap Length Back

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	784.53	30.89	736.60	29.00
SE Mean	2.73	0.11	5.38	0.21
STD	59.24	2.33	68.24	2.69

The distance from the anterior superior iliac spine (right) landmark, down the gluteal furrow point, across the crotch, to the central release buckle (CRB) point.

The participant stands erect with the weight distributed equally on both feet. The legs are spread apart just enough so that the thighs do not touch. The measurement is made with a tape at the maximum of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	656.90	588.00
	2	673.12	620.31
	3	683.09	628.59
	5	699.49	634.64
	10	718.66	662.69
	20	735.27	682.66
	25	744.67	694.64
	50	778.73	728.05
	75	818.88	776.57
	80	831.06	785.70
English (in)	90	856.45	831.53
	95	882.24	850.47
	97	895.69	857.73
	98	914.33	873.31
	99	950.54	888.98
	1	25.86	23.15
	2	26.50	24.42
	3	26.89	24.75
	5	27.54	24.99
	10	28.29	26.09
20	28.95	26.88	
25	29.32	27.35	
50	30.66	28.66	
75	32.24	30.57	
80	32.72	30.93	
90	33.72	32.74	
95	34.73	33.48	
97	35.26	33.77	
98	36.00	34.38	
99	37.42	35.00	

33. DIMENSION: Thigh Strap Length Front

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	165.36	6.51	165.72	6.52
SE Mean	1.69	0.07	3.31	0.13
STD	36.70	1.45	41.95	1.65

The distance from anterior superior iliac spine (right) landmark to the central release buckle (CRB) point.

The participant stands erect looking straight ahead. The legs are spread apart just enough so that the thighs do not touch. The shoulders and upper extremities are relaxed. This measurement is taken with a tape at the maximum point of quiet respiration.



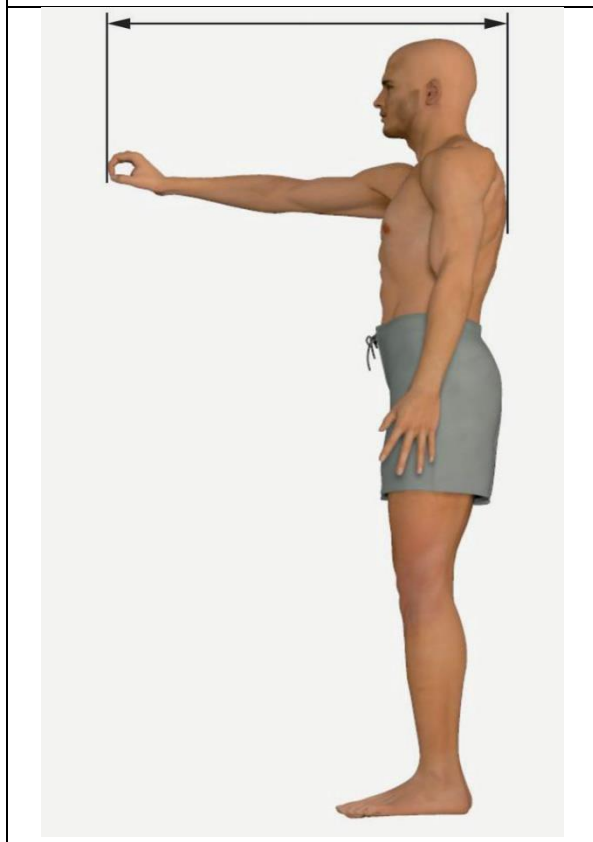
		MEN	WOMEN
	Percentiles		
Metric (mm)	1	117.07	106.83
	2	120.20	111.24
	3	122.45	115.70
	5	124.78	121.20
	10	131.34	126.39
	20	137.64	134.40
	25	140.31	136.67
	50	155.98	156.38
	75	178.83	187.60
	80	188.05	193.95
English (in)	90	213.29	206.53
	95	235.62	243.60
	97	246.91	251.63
	98	268.75	265.11
	99	294.09	294.11
	1	4.61	4.21
	2	4.73	4.38
	3	4.82	4.56
	5	4.91	4.77
	10	5.17	4.98
20	5.42	5.29	
25	5.52	5.38	
50	6.14	6.16	
75	7.04	7.39	
80	7.40	7.64	
90	8.40	8.13	
95	9.28	9.59	
97	9.72	9.91	
98	10.58	10.44	
99	11.58	11.58	

34. DIMENSION: Thumb-Tip Reach

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	824.23	32.45	754.39	29.70
SE Mean	2.01	0.08	3.22	0.13
STD	43.71	1.72	40.92	1.61

The distance between the surface of the back and the tip of the right thumb.

The participant stands in a corner with feet together and heels 20 cm from the back wall. The buttock and shoulder are against the wall while the right arm is raised horizontally forward with the elbows straight, the thumbs on top, and the fingers curled out of the way. The measurement is read from a wall scale.



	Percentiles	MEN	WOMEN
Metric (mm)	1	729.22	659.67
	2	739.24	676.68
	3	745.94	688.12
	5	753.86	694.27
	10	768.78	703.74
	20	788.48	722.61
	25	796.62	726.94
	50	822.27	749.68
	75	849.83	776.79
	80	859.74	787.77
English (in)	90	877.91	806.87
	95	893.98	824.45
	97	906.53	831.48
	98	908.94	831.90
	99	922.29	840.33
	1	28.71	25.97
	2	29.10	26.64
	3	29.37	27.09
	5	29.68	27.33
	10	30.27	27.71
20	31.04	28.45	
25	31.36	28.62	
50	32.37	29.52	
75	33.46	30.58	
80	33.85	31.01	
90	34.56	31.77	
95	35.20	32.46	
97	35.69	32.74	
98	35.79	32.75	
99	36.31	33.08	

35. DIMENSION: Torso Strap Length, Back

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	516.28	20.33	471.06	18.55
SE Mean	1.53	0.06	2.57	0.10
STD	33.11	1.30	32.61	1.28

The distance between cervicale to posterior superior iliac crest on the right.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with a tape at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	427.89	395.57
	2	444.36	399.35
	3	453.80	402.10
	5	461.19	412.03
	10	474.87	428.46
	20	492.19	443.70
	25	496.84	451.60
	50	515.39	476.75
	75	533.68	493.46
	80	539.37	495.76
90	556.74	507.24	
95	567.93	512.89	
97	573.59	516.25	
98	580.82	521.11	
99	592.08	523.39	
English (in)			
	1	16.85	15.57
	2	17.49	15.72
	3	17.87	15.83
	5	18.16	16.22
	10	18.70	16.87
	20	19.38	17.47
	25	19.56	17.78
	50	20.29	18.77
	75	21.01	19.43
80	21.24	19.52	
90	21.92	19.97	
95	22.36	20.19	
97	22.58	20.32	
98	22.87	20.52	
99	23.31	20.61	

36. DIMENSION: Torso Strap Length, Front

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	1376.45	54.19	1279.46	50.37
SE Mean	4.53	0.18	7.71	0.30
STD	98.39	3.87	97.79	3.85

The distance from the center release buckle (CRB) across the back of the neck, and back to the CRB.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with a tape at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	1213.07	1065.00
	2	1226.05	1110.34
	3	1231.01	1136.12
	5	1241.57	1162.41
	10	1269.94	1181.51
	20	1300.08	1203.20
	25	1314.11	1210.77
	50	1359.18	1265.08
	75	1425.03	1340.87
	80	1446.03	1355.29
English (in)	90	1503.54	1410.74
	95	1544.17	1448.92
	97	1607.89	1462.76
	98	1635.84	1495.17
	99	1673.61	1517.30
	1	47.76	41.93
	2	48.27	43.71
	3	48.47	44.73
	5	48.88	45.76
	10	50.00	46.52
20	51.18	47.37	
25	51.74	47.67	
50	53.51	49.81	
75	56.10	52.79	
80	56.93	53.36	
90	59.19	55.54	
95	60.79	57.04	
97	63.30	57.59	
98	64.40	58.86	
99	65.89	59.74	

37. DIMENSION: Waist Circumference Natural Indentation

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	989.62	38.96	866.73	34.12
SE Mean	6.50	0.26	11.35	0.45
STD	141.13	5.56	143.99	5.67

The horizontal circumference of the waist at the level of its natural indentation.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with a tape at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	744.71	639.91
	2	757.54	650.14
	3	767.97	659.20
	5	790.34	669.21
	10	825.90	701.76
	20	876.21	743.75
	25	898.16	759.26
	50	971.68	849.14
	75	1063.33	944.36
	80	1092.33	974.98
English (in)	90	1176.17	1067.37
	95	1249.84	1120.37
	97	1292.48	1144.72
	98	1336.58	1162.21
	99	1411.95	1190.17
	1	29.32	25.19
	2	29.82	25.60
	3	30.24	25.95
	5	31.12	26.35
	10	32.52	27.63
20	34.50	29.28	
25	35.36	29.89	
50	38.26	33.43	
75	41.86	37.18	
80	43.01	38.38	
90	46.31	42.02	
95	49.21	44.11	
97	50.89	45.07	
98	52.62	45.76	
99	55.59	46.86	

38. DIMENSION: Waist Circumference Omphalion (Standing)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	1029.39	40.53	975.41	38.40
SE Mean	6.91	0.27	13.59	0.54
STD	150.04	5.91	172.46	6.79

The horizontal circumference at the level of navel.

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with a tape at the maximum point of quiet respiration.



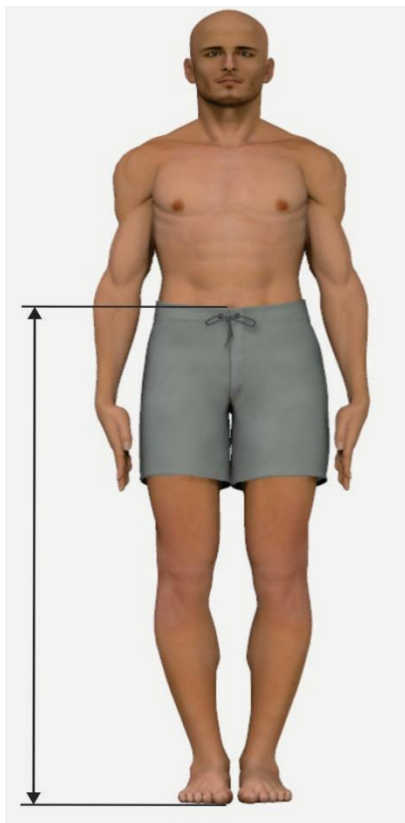
	Percentiles	MEN	WOMEN
Metric (mm)	1	776.87	707.07
	2	788.04	716.84
	3	800.43	728.47
	5	820.36	740.41
	10	857.55	768.81
	20	911.45	824.00
	25	928.64	849.73
	50	1006.03	964.12
	75	1103.49	1076.79
	80	1136.77	1116.24
English (in)	90	1229.43	1183.09
	95	1315.43	1284.40
	97	1372.43	1298.54
	98	1402.02	1343.75
	99	1453.97	1444.11
	1	30.59	27.84
	2	31.03	28.22
	3	31.51	28.68
	5	32.30	29.15
	10	33.76	30.27
20	35.88	32.44	
25	36.56	33.45	
50	39.61	37.96	
75	43.44	42.39	
80	44.75	43.95	
90	48.40	46.58	
95	51.79	50.57	
97	54.03	51.12	
98	55.20	52.90	
99	57.24	56.85	

39. DIMENSION: Waist Height Standing, Omphalion

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (mm)	English (in)	Metric (mm)	English (in)
Mean	1055.91	41.57	970.47	38.21
SE Mean	2.62	0.10	5.35	0.21
STD	56.76	2.23	67.90	2.67

The vertical distance between a standing surface and the center of the navel (omphalion).

The participant stands erect looking straight ahead. The heels are together with weight distributed equally on both feet. The shoulders and upper extremities are relaxed. This measurement is taken with an anthropometer at the maximum point of quiet respiration.



		MEN	WOMEN
	Percentiles		
Metric (mm)	1	931.83	804.36
	2	941.68	825.33
	3	956.40	854.43
	5	970.07	870.76
	10	987.40	898.24
	20	1006.68	915.36
	25	1014.04	929.01
	50	1051.68	971.19
	75	1094.95	1004.14
	80	1107.33	1013.81
English (in)	90	1133.25	1052.49
	95	1147.96	1074.66
	97	1159.97	1079.46
	98	1165.40	1101.18
	99	1178.95	1103.50
	1	36.69	31.67
	2	37.07	32.49
	3	37.65	33.64
	5	38.19	34.28
	10	38.87	35.36
20	39.63	36.04	
25	39.92	36.58	
50	41.40	38.24	
75	43.11	39.53	
80	43.60	39.91	
90	44.62	41.44	
95	45.20	42.31	
97	45.67	42.50	
98	45.88	43.35	
99	46.42	43.44	

40. DIMENSION: Weight (Standing)

	MEN		WOMEN	
Sample Size	471		161	
Weighted Size	471		161	
	Metric (kg)	English (lbs)	Metric (kg)	English (lbs)
Mean	96.02	211.68	77.73	171.36
SE Mean	0.93	2.06	1.52	3.35
STD	20.25	44.65	19.27	42.49

Body weight of a participant.

The participant stands on the platform of a scale.



		MEN	WOMEN
	Percentiles		
Metric (kg)	1	64.12	46.23
	2	65.32	50.05
	3	66.22	53.92
	5	68.23	55.40
	10	73.62	58.36
	20	79.91	62.69
	25	82.60	64.17
	50	93.08	73.33
	75	105.45	89.04
	80	109.48	92.26
	90	124.27	101.86
	95	134.42	111.38
	97	139.27	119.73
	98	144.18	121.17
	99	153.61	126.90
English (lbs)			
	1	141.36	101.93
	2	144.00	110.35
	3	146.00	118.88
	5	150.41	122.14
	10	162.31	128.66
	20	176.18	138.20
	25	182.11	141.48
	50	205.20	161.66
	75	232.47	196.30
	80	241.35	203.39
	90	273.96	224.56
	95	296.34	245.56
	97	307.04	263.96
	98	317.86	267.14
	99	338.66	279.77