



## Standard Tables of Body Measurements for Women Aged 55 and Older (All Figure Types)<sup>1</sup>

This standard is issued under the fixed designation D 5586; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### INTRODUCTION

These tables were developed from original research conducted by Reich and Goldsberry<sup>2</sup> at the University of Arizona in 1993. The study included 6786 subjects represented geographically by 38 states. Subjects were measured in 58 body locations, 45 of which duplicated measurements published by the U.S. Department of Commerce as PS 42-70<sup>3</sup> based on research conducted in 1942 by O'Brien and Shelton<sup>4</sup> including 1970 revisions. The 13 additional measurements provided in the 1993 technical report further depict physiological changes that occur in the older female figure. The PS 42-70 data, represented by only 2 % of older women, continues to be used as a baseline for measurements and proportions for all adult women in the domestic sizing system. These tables reflect the proportions and maturity patterns of women aged 55 and older, not currently represented in adult female figure types and size categories of the domestic sizing system now in use. Further description of this market segment and consumer sizing issues are outlined by Goldsberry.<sup>5</sup>

### 1. Scope

1.1 These tables list body measurements of adult women age 55 and over. The body measurements tables can be used as a baseline in designing apparel for adult women in this age group, taking into account such factors as fabric type, desired ease of body movement, styling, and fit.

1.2 Measurement tables correspond to the figure types and numerical size designations in the PS 42-70 database. Until body measurements of all adult women are updated, companies will have to analyze the older customer's differences by body measurements and proportions instead of hang tag numbers, and adapt them to currently marketed sizes and figure types. Companies especially affected are those who are today using

smaller numbered hang tag designations, who offer mainly S, M, and L sizes, or who have adjusted their charts from the PS 42-70 database to reflect the specific body measurements of their 1990's customer.

1.3 The values stated in either acceptable SI units or inch-pound units shall be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other, without combining values in any way.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

D 123 Terminology Relating to Textiles<sup>6</sup>

D 5219 Terminology Relating to a Body dimension for Apparel Sizing<sup>7</sup>

#### 2.2 ISO Standards:<sup>8</sup>

ISO 3635-1981 Size Designation of Clothes, Definition and Body Measurement Procedures

ISO 8559 Garment Construction and Anthropometric Surveys—Body Dimensions

### 3. Terminology

3.1 *Definitions*—For definitions of terms relating to body measurements refer to Terminology D 5219. For definitions of

<sup>1</sup> These tables are under the jurisdiction of ASTM Committee D-13 on Textiles and are the direct responsibility of Subcommittee D13.55 on Body Measurements for Apparel Sizing.

Current edition approved Sept. 10, 1995. Published December 1995. Originally published as D 5586 – 94. Last previous edition D 5586 – 94.

<sup>2</sup> Reich, N., and Goldsberry, E., *Development of Body Measurement Tables for Women 55 and Older and the Relationship to Ready-to-Wear Garment Size*, ISR-06, PCN: 33-000006-18, ASTM Institute for Standards Research, Philadelphia, PA, 1993.

<sup>3</sup> U.S. Department of Commerce, *Voluntary Product Standard: Body Measurements for the Sizing of Women's Patterns and Apparel*, NIST No. PS 42-70, U.S. Government Printing Office, Washington, DC, 1971.

<sup>4</sup> O'Brien, R., and Shelton, W. C., *Women's Measurements for Garment and Pattern Construction*, Miscellaneous Publication No. 454, U.S. Department of Agriculture, 1941.

<sup>5</sup> Goldsberry, E., *Women 55 and Older: How Well is the Domestic Apparel Sizing System Addressing Their Needs?* ISR-08, PCN: 33-000008-18, ASTM Institute for Standards Research, Philadelphia, PA, 1993.

<sup>6</sup> *Annual Book of ASTM Standards*, Vol 07.01.

<sup>7</sup> *Annual Book of ASTM Standards*, Vol 07.02.

<sup>8</sup> Available from American National Standards Institute, 11 West 42nd St., 13th Floor, New York, NY 10036.

other textile terms, refer to Terminology D 123.

#### **4. Significance and Use**

4.1 The use of the body measurement information given in Tables 1-7 will assist manufacturers in developing patterns and garments consistent with the current anthropometric character-

istics of the older adult female population. This practice should in turn reduce or minimize current consumer confusion and dissatisfaction related to apparel sizing. (Also refer to ISO 3635-1981 and 8559.)

**TABLE 1 Women 55+ of Junior Figure Type**

SIZE, NUMBER OF SUBJECTS

LOCATION	J3 N= 14	J5 N=21	J7 N=56	J9 N=115	J11 N=202	J13 N=271	J15 N=90	J17 N=95
<b>GIRTH MEASUREMENTS IN CENTIMETERS</b>								
Bust	75.79	79.83	82.59	85.35	88.95	92.81	94.70	98.93
Bust,Arc	39.75	43.67	44.15	45.74	47.83	50.05	51.61	53.58
Waist	66.54	69.29	71.65	74.31	77.32	81.41	83.69	87.99
Waist Arc	34.61	37.07	38.41	39.47	41.02	43.55	45.04	47.35
Abdominal Extension	83.18	85.19	87.91	90.53	94.28	97.16	100.88	103.56
Abdominal Arc	43.18	44.79	45.80	47.30	49.27	51.56	53.32	55.04
Hip	86.86	89.36	92.44	93.51	96.97	99.55	102.88	104.71
Hip Arc Back	44.07	45.24	46.85	47.22	48.99	49.85	51.63	51.97
Sitting Spread	89.39	93.93	96.47	98.15	101.94	104.77	108.52	110.45
Midneck	31.46	31.40	31.77	32.20	32.75	33.59	33.88	34.75
Neck Base **	36.88	38.07	39.21	38.35	38.92	39.79	40.63	40.85
Armscye	38.57	40.55	40.21	41.45	42.41	43.45	44.67	46.14
Upper arm	24.86	25.79	27.22	28.06	29.40	30.45	31.39	32.40
Elbow	23.64	24.74	24.74	25.44	26.05	27.01	27.51	27.94
Wrist	14.54	15.12	15.09	15.40	15.56	15.96	16.22	16.41
Thigh,Max	48.64	50.41	53.58	53.62	56.17	57.52	60.33	60.24
Thigh,Mid	43.68	44.19	47.25	47.72	49.45	50.44	52.60	52.68
Knee	33.11	34.14	35.03	35.11	36.22	37.11	38.26	39.41
Calf	29.21	31.52	32.75	32.31	33.69	34.55	36.15	36.26
Ankle	21.71	22.43	22.94	22.99	23.29	23.87	24.14	24.16
Vertical Trunk	142.11	144.93	146.63	147.83	150.75	153.65	156.73	159.57
Total Crotch Length	66.43	67.10	69.09	70.13	71.27	73.31	75.00	76.33
<b>VERTICAL MEASUREMENTS IN CENTIMETERS</b>								
Height	154.96	156.86	157.56	158.75	159.90	161.06	162.16	164.73
Cervical Height	134.89	136.93	137.62	138.88	140.03	141.71	143.01	144.98
Waist Height Back	96.18	98.02	98.40	99.21	99.98	101.03	102.17	103.61
Abdominal Height	88.57	91.00	91.71	91.90	92.52	93.57	94.35	95.61
Waist to Hip Hgt.	17.29	17.48	17.83	17.91	17.57	18.14	18.65	19.32
Hip Height	80.93	82.17	83.00	83.53	84.12	84.75	84.93	86.36
Inseam	70.50	72.57	72.47	72.72	73.24	73.47	73.86	74.84
Knee Height	42.04	42.93	42.67	43.14	43.62	43.92	44.12	45.13
Ankle Height	5.79	6.93	6.14	6.35	6.44	6.52	6.56	6.76
Waist Length, Front	32.00	32.57	33.30	33.26	34.01	34.62	35.06	35.83
Cervical to CF Waist	47.50	47.52	48.74	48.95	50.37	51.12	51.62	53.22
Waist Length, Back	38.71	38.91	39.07	39.68	40.09	40.61	40.93	41.37
<b>WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS</b>								
Cross back shoulder**	37.18	37.14	37.96	38.27	38.93	39.81	39.73	40.87
Back Width	35.57	35.86	36.06	36.35	36.89	38.32	39.32	39.30
Chest Width	33.97	35.55	35.05	35.12	35.92	36.32	37.03	37.72
Shoulder Length	12.36	12.76	12.87	12.84	12.92	13.19	13.24	13.40
Shoulder slope *	21.61	22.57	21.04	22.54	22.08	21.95	21.31	21.18
Shoulder to wrist	56.14	56.83	56.66	57.51	58.23	58.81	58.95	60.26
Shoulder to elbow	32.68	32.79	32.40	33.24	33.59	33.96	33.94	34.62
Underarm to wrist	42.14	41.91	42.58	42.45	42.60	43.34	43.61	43.69
Bust point to BP	16.54	17.55	17.97	18.20	18.65	19.36	19.74	20.61
Neck to bust point	26.93	27.10	26.92	27.47	28.28	28.88	28.86	29.98
Armscye depth	16.11	17.67	17.71	17.92	18.00	18.50	18.78	19.35
Armscye to waist	19.00	18.38	18.08	18.53	18.70	18.92	19.31	19.03
Weight (kgs)	43.09	46.92	50.87	52.47	57.21	61.64	66.20	75.35

\*Shoulder slope figures indicated as "degrees of slope."

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 1 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION	J3 N=14	J5 N=21	J7 N=68	J9 N=115	J11 N=202	J13 N=271	J15 N=90	J17 N=95
<b>GIRTH MEASUREMENTS IN INCHES</b>								
Bust	29.84	31.43	32.52	33.60	35.02	36.54	37.28	38.95
Bust,Arc	15.65	17.19	17.38	18.01	18.83	19.70	20.32	21.1
Waist	26.20	27.28	28.21	29.26	30.44	32.05	32.95	34.64
Waist Arc	13.62	14.59	15.12	15.54	16.15	17.15	17.73	18.64
Abdominal Extension	32.75	33.54	34.61	35.64	37.12	38.25	39.72	40.77
Abdominal Arc	17.00	17.63	18.03	18.62	19.40	20.30	20.99	21.67
Hip	34.20	35.18	36.39	36.81	38.18	39.19	40.50	41.22
Hip Arc Back	17.35	17.81	18.44	18.59	19.29	19.63	20.33	20.46
Sitting Spread	35.19	36.98	37.98	38.64	40.13	41.25	42.73	43.49
Midneck	12.39	12.36	12.51	12.68	12.89	13.22	13.34	13.68
Neck Base **	14.52	14.99	15.44	15.10	15.32	15.66	16.00	16.08
Armhole	15.19	15.96	15.83	16.32	16.70	17.11	17.59	18.16
Upper arm	9.79	10.15	10.72	11.05	11.57	11.99	12.36	12.76
Elbow	9.31	9.74	9.74	10.02	10.25	10.63	10.83	11
Wrist	5.72	5.95	5.94	6.06	6.13	6.28	6.38	6.46
Thigh,Max	19.15	19.84	21.09	21.11	22.11	22.64	23.75	23.72
Thigh,Mid	17.20	17.40	18.60	18.79	19.47	19.86	20.71	20.74
Knee	13.03	13.44	13.79	13.82	14.26	14.61	15.06	15.51
Calf	11.50	12.41	12.89	12.72	13.26	13.60	14.23	14.27
Ankle	8.55	8.83	9.03	9.05	9.17	9.40	9.51	9.51
Vertical Trunk	55.95	57.06	57.73	58.20	59.35	60.49	61.71	62.82
Total Crotch Length	26.15	26.42	27.20	27.61	28.06	28.86	29.53	30.05
<b>VERTICAL MEASUREMENTS IN INCHES</b>								
Height	61.01	61.75	62.03	62.50	62.95	63.41	63.84	64.85
Cervical Height	53.11	53.91	54.18	54.68	55.13	55.79	56.30	57.08
Waist Height Back	37.87	38.59	38.74	39.06	39.36	39.78	40.22	40.79
Abdominal Height	34.87	35.83	36.11	36.18	36.43	36.84	37.15	37.64
Waist to Hip Hgt.	6.81	6.88	7.02	7.05	6.92	7.14	7.34	7.61
Hip Height	31.86	32.35	32.68	32.89	33.12	33.36	33.44	34
Inseam	27.76	28.57	28.53	28.63	28.84	28.92	29.08	29.47
Knee Height	16.55	16.90	16.80	16.98	17.17	17.29	17.37	17.77
Ankle Height	2.28	2.73	2.42	2.50	2.53	2.57	2.58	2.66
Waist Length, Front	12.60	12.82	13.11	13.09	13.39	13.63	13.80	14.11
Cervical to CF Waist	18.70	18.71	19.19	19.27	19.83	20.13	20.32	20.95
Waist Length, Back	15.24	15.32	15.38	15.62	15.78	15.99	16.12	16.29
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>								
Cross back shoulder **	14.64	14.62	14.95	15.07	15.33	15.67	15.64	16.09
Back Width	14.00	14.12	14.20	14.31	14.52	15.09	15.48	15.47
Chest Width	13.37	14.00	13.80	13.83	14.14	14.30	14.58	14.85
Shoulder Length	4.86	5.02	5.07	5.06	5.09	5.19	5.21	5.27
Shoulder slope *	21.61	22.57	21.04	22.54	22.08	21.95	21.31	21.18
Shoulder to wrist	22.10	22.38	22.31	22.64	22.93	23.15	23.21	23.72
Shoulder to elbow	12.87	12.91	12.76	13.09	13.23	13.37	13.36	13.63
Underarm to wrist	16.59	16.50	16.76	16.71	16.77	17.06	17.17	17.2
Bust point to BP	6.51	6.91	7.08	7.17	7.34	7.62	7.77	8.11
Neck to bust point	10.60	10.67	10.60	10.82	11.13	11.37	11.36	11.8
Armhole depth	6.34	6.96	6.97	7.05	7.09	7.28	7.39	7.62
Armhole to waist	7.48	7.24	7.12	7.30	7.36	7.45	7.60	7.49
Weight (lbs)	95.00	103.43	112.14	115.68	126.13	135.89	145.93	155.1

\*Shoulder slope figures indicated as "degrees of slope."

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

**TABLE 2 Women 55+ of Junior Petite Figure Type**

SIZE, NUMBER OF SUBJECTS

LOCATION	JP3 N=7	JP5 N=22	JP7 N=37	JP9 N=73	JP11 N=142	JP13 N=98	JP15 N=67
<b>GIRTH MEASUREMENTS IN INCHES</b>							
Bust	33.58	33.25	33.83	35.42	35.93	37.66	37.29
Bust,Arc	18.25	17.64	18.21	18.91	19.35	20.16	20.12
Waist	29.61	29.52	29.61	31.29	31.61	33.49	33.21
Waist Arc	15.64	15.26	15.67	16.61	16.75	17.97	17.93
Abdominal Extension	35.41	35.11	35.43	37.14	37.60	39.29	39.79
Abdominal Arc	18.50	19.17	18.59	19.47	19.70	20.81	21.14
Hip	36.05	35.99	36.09	37.50	37.90	39.50	40.53
Hip Arc Back	18.25	18.27	18.07	18.90	19.29	19.90	20.36
Sitting Spread	37.91	38.13	37.90	39.85	40.09	42.03	42.81
Midneck	12.85	12.71	12.54	13.00	13.06	13.43	13.49
Neck Base **	14.79	15.52	14.84	15.29	15.42	15.86	15.86
Armhole	16.76	15.86	16.08	16.43	16.49	17.16	17.40
Upper arm	11.02	10.38	10.82	11.42	11.69	12.29	12.46
Elbow	9.70	9.65	9.88	10.10	10.13	10.60	10.65
Wrist	5.96	5.84	5.83	6.03	6.12	6.24	6.35
Thigh,Max	20.64	19.93	20.36	21.11	21.75	22.58	23.52
Thigh,Mid	17.86	17.90	17.68	18.54	19.12	19.84	21.01
Knee	13.08	13.79	13.58	13.91	14.03	14.61	15.10
Calf	12.35	12.51	12.36	12.88	13.11	13.65	14.10
Ankle	8.63	8.57	8.79	8.92	8.92	9.14	9.44
Vertical Trunk	56.24	55.98	56.46	57.26	58.06	59.26	60.10
Total Crotch Length	27.06	26.81	26.78	27.62	27.91	28.61	29.38
<b>VERTICAL MEASUREMENTS IN INCHES</b>							
Height	56.75	57.16	58.03	58.33	59.12	59.51	60.52
Cervical Height	50.39	50.76	50.97	51.66	52.17	52.46	53.70
Waist Height Back	35.94	36.04	36.08	36.62	37.10	37.28	38.34
Abdominal Height	33.01	33.30	33.26	33.49	34.01	34.22	35.28
Waist to Hip Hgt.	6.92	7.30	6.76	7.09	6.99	7.16	7.20
Hip Height	29.22	29.72	30.05	30.09	30.78	30.68	31.69
Inseam	25.56	26.08	26.36	26.14	26.65	26.74	27.57
Knee Height	16.14	15.66	15.51	15.82	16.10	16.08	16.47
Ankle Height	2.31	2.40	2.31	2.39	2.49	2.44	2.46
Waist Length,Front	11.90	11.78	12.26	12.49	12.70	13.13	13.14
Cervical to CF Waist	18.31	18.50	18.72	18.84	19.15	19.75	19.64
Waist Length,Back	14.45	14.72	14.89	15.10	15.08	15.18	15.38
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>							
Cross back shoulder**	14.57	14.35	14.59	14.88	15.21	15.40	15.35
Back Width	13.33	14.15	14.09	14.48	14.83	15.12	15.38
Chest Width	13.75	13.23	13.48	13.66	14.03	14.36	14.55
Shoulder Length	4.89	4.63	4.87	4.91	5.02	5.07	4.92
Shoulder slope *	22.71	24.02	20.62	20.98	22.23	22.26	22.04
Shoulder to wrist	21.43	21.70	21.34	21.72	21.85	22.06	22.52
Shoulder to elbow	12.20	12.73	12.31	12.39	12.54	12.65	12.89
Underarm to wrist	15.27	16.36	15.68	15.70	16.21	16.04	16.56
Bust point to BP	7.11	7.22	7.19	7.45	7.57	7.83	7.74
Neck to bust point	10.66	10.88	10.81	11.10	11.22	11.46	11.37
Armhole depth	7.11	6.75	6.72	6.98	6.93	7.10	7.27
Armhole to waist	6.16	6.61	6.70	6.64	6.91	7.03	7.16
Weight (lbs)	107.71	105.75	108.47	118.06	122.19	133.90	140.37

\* Shoulder slope figures indicated as "degrees of slope."

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hangtag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 2 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION	JP3 N=7	JP5 N=22	JP7 N=37	JP9 N=73	JP11 N=142	JP13 N=98	JP15 N=67
<b>GIRTH MEASUREMENTS IN CENTIMETERS</b>							
Bust	85.29	84.46	85.93	89.96	91.26	95.67	94.72
Bust,Arc	46.36	44.80	46.26	48.03	49.14	51.20	51.11
Waist	75.21	74.98	75.20	79.49	80.29	85.06	84.37
Waist Arc	39.71	38.77	39.80	42.18	42.56	45.65	45.55
Abdominal Extension	89.93	89.18	90.00	94.34	95.51	99.79	101.06
Abdominal Arc	47.00	48.68	47.23	49.47	50.03	52.85	53.69
Hip	91.57	91.41	91.68	95.24	96.26	100.34	102.96
Hip Arc Back	46.36	46.41	45.91	48.00	48.99	50.55	51.72
Sitting Spread	96.29	96.84	96.26	101.21	101.82	106.75	108.74
Midneck	32.64	32.30	31.85	33.03	33.18	34.11	34.25
Neck Base **	37.57	39.43	37.70	38.85	39.17	40.29	40.28
Armscye	42.57	40.30	40.85	41.73	41.89	43.58	44.19
Upper arm	28.00	26.36	27.49	29.01	29.70	31.22	31.64
Elbow	24.64	24.50	25.10	25.66	25.74	26.92	27.06
Wrist	15.14	14.84	14.81	15.32	15.54	15.84	16.13
Thigh,Max	52.43	50.61	51.70	53.62	55.25	57.36	59.74
Thigh,Mid	45.36	45.46	44.92	47.09	48.55	50.40	53.36
Knee	33.21	35.02	34.49	35.32	35.63	37.10	38.36
Calf	31.36	31.77	31.41	32.71	33.30	34.67	35.81
Ankle	21.93	21.77	22.34	22.66	22.67	23.22	23.99
Vertical Trunk	142.86	142.18	143.42	145.43	147.48	150.52	152.66
Total Crotch Length	68.73	68.09	68.01	70.15	70.88	72.67	74.63
<b>VERTICAL MEASUREMENTS IN CENTIMETERS</b>							
Height	144.14	145.18	147.39	148.16	150.18	151.16	153.73
Cervical Height	128.00	128.93	129.46	131.23	132.52	133.25	136.40
Waist Height Back	91.29	91.55	91.64	93.03	94.22	94.68	97.40
Abdominal Height	83.86	84.59	84.49	85.07	86.38	86.91	89.60
Waist to Hip Hgt.	17.57	18.55	17.18	18.02	17.75	18.18	18.29
Hip Height	74.21	75.48	76.32	76.44	78.18	77.92	80.49
Inseam	64.93	66.25	66.95	66.40	67.70	67.92	70.03
Knee Height	41.00	39.77	39.41	40.17	40.89	40.83	41.83
Ankle Height	5.86	6.09	5.87	6.08	6.31	6.20	6.25
Waist Length,Front	30.21	29.93	31.15	31.72	32.25	33.34	33.37
Cervical to CF Waist	46.50	47.00	47.54	47.86	48.65	50.15	49.87
Waist Length,Back	36.71	37.39	37.82	38.34	38.30	38.55	39.06
<b>WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS</b>							
Cross back shoulder**	37.07	36.46	37.05	37.80	38.63	39.12	38.99
Back Width	33.86	35.93	35.80	36.78	37.66	38.42	39.06
Chest Width	34.93	33.61	34.23	34.69	35.65	36.48	36.95
Shoulder Length	12.43	11.75	12.37	12.47	12.74	12.87	12.49
Shoulder slope *	22.71	24.02	20.62	20.99	22.23	22.25	22.04
Shoulder to wrist	54.43	55.11	54.20	55.18	55.50	56.04	57.19
Shoulder to elbow	31.00	32.34	31.27	31.46	31.86	32.13	32.73
Underarm to wrist	38.79	41.55	39.82	39.88	41.17	40.73	42.06
Bust point to BP	18.07	18.34	18.26	18.93	19.24	19.90	19.66
Neck to bust point	27.07	27.64	27.45	28.19	28.50	29.11	28.88
Armscye depth	18.07	17.14	17.08	17.74	17.59	18.05	18.47
Armscye to waist	15.64	16.80	17.01	16.86	17.56	17.84	18.19
Weight (kg)	48.86	48.43	49.20	53.56	55.43	60.74	63.67

\* Shoulder slope figures indicated as "degrees of slope."

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hangtag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

**TABLE 3 Women 55+ of Miss Petite Figure Type**

SIZE, NUMBER OF SUBJECTS

LOCATION	MP8 N=18	MP10 N=69	MP12 N=128	MP14 N=222	MP16 N=302	MP18 N=370
<b>GIRTH MEASUREMENTS IN INCHES</b>						
Bust	31.45	32.79	34.36	35.74	37.57	39.56
Bust,Arc	16.60	17.53	18.39	19.21	20.26	21.37
Waist	27.55	28.77	29.89	31.18	32.98	35.19
Waist Arc	15.29	15.14	15.76	16.58	17.68	18.92
Abdominal Extension	33.57	34.91	36.34	37.53	39.16	41.35
Abdominal Arc	17.86	18.28	18.96	19.69	20.69	21.94
Hip	34.85	36.01	37.28	38.44	39.71	41.55
Hip Arc Back	17.59	18.32	18.96	19.33	19.86	20.76
Sitting Spread	36.34	38.19	39.25	40.46	41.93	44.07
Midneck	12.20	12.58	12.76	13.11	13.39	13.91
Neck Base **	14.87	15.09	15.19	15.68	15.7	16.32
Armscye	15.62	16.08	16.44	16.74	17.18	18.09
Upper arm	10.11	10.62	11.10	11.73	12.29	12.96
Elbow	9.66	9.73	10.01	10.30	10.64	11.01
Wrist	5.68	6.00	6.08	6.21	6.28	6.46
Thigh,Max	19.88	20.66	21.40	22.12	22.94	23.88
Thigh,Mid	17.69	18.15	18.83	19.57	20.03	20.90
Knee	13.34	13.71	13.85	14.39	14.81	15.27
Calf	12.36	12.70	12.90	13.42	13.80	14.30
Ankle	8.72	9.02	8.97	9.05	9.33	9.50
Vertical Trunk	55.48	56.89	58.08	59.17	60.41	62.30
Total Crotch Length	26.10	26.91	27.40	28.15	28.84	30.07
<b>VERTICAL MEASUREMENTS IN INCHES</b>						
Height	59.63	60.41	60.99	61.47	62.02	62.57
Cervical Height	52.41	52.96	53.44	53.57	54.71	55.39
Waist Height Back	37.35	37.70	38.08	38.33	38.83	39.42
Abdominal Height	34.58	34.85	35.11	35.43	35.90	36.26
Waist to Hip Hgt.	6.98	6.83	6.97	6.97	7.09	7.45
Hip Height	31.26	31.50	31.79	32.09	32.44	32.51
Inseam	27.73	27.64	27.76	27.79	28.04	28.20
Knee Height	16.27	16.39	16.57	16.56	16.86	17.02
Ankle Height	2.55	2.45	2.52	2.50	2.54	2.58
Waist Length, Front	12.42	12.51	13.03	13.38	13.58	13.87
Cervical to CF Waist	18.44	18.91	19.27	19.80	20.11	20.59
Waist Length,Back	15.06	15.26	15.36	15.53	15.85	15.97
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>						
Cross Back Shld.**	14.4	14.85	15.1	15.37	15.58	16.04
Back Width	13.88	14.01	14.76	14.97	15.23	15.95
Chest Width	13.29	13.45	13.81	14.22	14.41	14.97
Shoulder Length	4.95	4.91	4.98	5.07	5.13	5.21
Shoulder slope*	21.12	20.41	21.12	22.09	21.82	20.94
Shoulder to wrist	21.69	21.94	22.27	22.33	22.74	23.01
Shoulder to elbow	12.58	12.71	12.81	12.82	13.06	13.21
Underarm to wrist	16.11	16.23	16.43	16.44	16.64	16.75
Bust point to BP	6.96	7.06	7.41	7.55	7.83	8.25
Neck to bust point	10.12	10.81	10.93	11.20	11.49	11.75
Armscye depth	7.02	6.99	6.95	7.08	7.23	7.49
Armscye to waist	6.64	7.16	7.10	7.26	7.46	7.39
Weight (lbs)	99.81	109.03	117.29	127.20	138.49	153.00

\* Shoulder slope figures indicated as \*degrees of slope.\*

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 3 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION	MP8 N= 18	MP10 N=69	MP12 N= 128	MP14 N=222	MP16 N=302	MP18 N=370
GIRTH MEASUREMENTS IN CENTIMETERS						
Bust	79.89	83.28	87.28	90.79	95.42	100.48
Bust,Arc	42.17	44.52	46.70	48.80	51.45	54.28
Waist	69.97	73.08	75.92	79.20	83.76	89.38
Waist Arc	38.83	38.46	40.02	42.11	44.91	48.06
Abdominal Extension	85.28	88.67	92.31	95.32	99.46	105.02
Abdominal Arc	45.36	46.44	48.15	50.03	52.56	55.72
Hip	88.53	91.46	94.69	97.64	100.86	105.54
Hip Arc Back	44.67	46.53	48.15	49.09	50.44	52.74
Sitting Spread	92.31	97.01	99.70	102.77	106.51	111.93
Midneck	31.00	31.95	32.42	33.29	34.00	35.33
Neck Base **	37.78	38.34	38.59	39.83	38.87	41.45
Armhole	39.67	40.84	41.75	42.53	43.64	45.94
Upper arm	25.67	26.97	28.19	29.80	31.22	32.91
Elbow	24.53	24.71	25.42	26.17	27.03	27.97
Wrist	14.42	15.24	15.44	15.79	15.95	16.41
Thigh,Max	50.50	52.48	54.36	56.18	58.28	60.66
Thigh,Mid	44.94	46.11	47.82	49.71	50.87	53.10
Knee	33.89	34.83	35.17	36.56	37.63	38.78
Calf	31.39	32.25	32.77	34.09	35.05	36.31
Ankle	22.14	22.90	22.79	22.99	23.70	24.14
Vertical Trunk	140.92	144.49	147.51	150.30	153.45	158.25
Total Crotch Length	66.31	68.35	69.61	71.49	73.24	76.38

VERTICAL MEASUREMENTS IN CENTIMETERS

Height	151.46	153.45	154.93	156.14	157.54	158.94
Cervical Height	133.11	134.51	135.75	136.08	138.95	140.68
Waist Height Back	94.86	95.75	96.73	97.37	98.62	100.12
Abdominal Height	87.83	88.51	89.17	90.00	91.19	92.11
Waist to Hip Hgt.	17.72	17.35	17.72	17.69	18.01	18.93
Hip Height	79.39	80.01	80.76	81.50	82.41	82.59
Inseam	70.44	70.22	70.50	70.59	71.21	71.63
Knee Height	41.33	41.63	42.08	42.05	42.82	43.24
Ankle Height	6.47	6.23	6.41	6.36	6.46	6.55
Waist Length, Front	31.56	31.78	33.09	33.98	34.49	35.23
Cervical to CF Waist	46.83	48.03	48.94	50.29	51.07	52.30
Waist Length,Back	38.25	38.77	39.02	39.45	40.25	40.56

WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS

Cross Back Shld.**	36.58	37.71	38.34	39.04	39.57	14.74
Back Width	35.25	35.59	37.48	38.04	38.67	40.51
Chest Width	33.75	34.15	35.08	36.12	36.59	38.03
Shoulder Length	12.58	12.47	12.64	12.89	13.04	13.24
Shoulder slope*	21.12	20.41	21.12	22.09	21.82	20.94
Shoulder to wrist	55.08	55.73	56.56	56.73	57.75	58.45
Shoulder to elbow	31.94	32.29	32.55	32.57	33.17	33.56
Underarm to wrist	40.92	41.22	41.74	41.76	42.28	42.56
Bust point to BP	17.67	17.93	18.82	19.18	19.88	20.95
Neck to bust point	25.69	27.46	27.77	28.45	29.18	29.85
Armhole depth	17.83	17.75	17.65	17.99	18.37	19.04
Armhole to waist	16.86	18.17	18.03	18.44	18.94	18.77
Weight (kg)	45.28	49.46	53.20	57.70	62.82	69.40

\* Shoulder slope figures indicated as \*degrees of slope.\*

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

**TABLE 4 Women 55+ of Misses Figure Type**

SIZE, NUMBER OF SUBJECTS

LOCATION	M6 N=15	M8 N=41	M10 N=85	M12 N=183	M14 N=207	M16 N=220	M18 N=217	M20 N=138	M22 N= 96
<b>GIRTH MEASUREMENTS IN INCHES</b>									
Bust	30.66	31.45	32.60	34.18	35.68	37.22	39.13	41.01	43.23
Bust Arc	16.38	17.11	17.31	18.32	19.34	20.14	21.14	21.93	23.00
Waist	26.64	27.22	28.40	29.81	31.06	32.57	34.48	36.97	39.32
Waist Arc	14.12	14.47	15.06	15.83	16.54	17.42	18.58	20.05	21.10
Abdominal Extension	33.78	33.83	34.75	36.43	37.62	39.07	41.21	43.49	45.54
Abdominal Arc	17.69	17.74	18.29	19.15	19.91	20.71	21.91	23.08	23.96
Hip	35.67	35.51	36.40	37.79	38.92	40.03	41.61	43.46	44.82
Hip Arc Back	18.18	17.88	18.46	19.09	19.58	20.02	20.79	21.55	22.57
Sitting Spread	37.14	36.82	38.02	14.97	40.83	41.96	43.79	45.86	47.77
Midneck	11.99	12.27	12.40	12.82	13.16	13.50	13.83	14.50	14.80
Neck Base **	14.96	15.13	15.33	15.49	15.88	16.30	16.53	17.17	17.22
Armhole	15.43	15.85	16.43	16.58	17.22	17.65	18.23	18.87	19.53
Upper arm	10.08	10.26	10.66	11.27	11.73	12.27	12.85	13.64	14.08
Elbow	9.51	9.53	9.93	10.18	10.51	10.70	11.08	11.60	11.79
Wrist	5.92	5.90	5.98	6.12	6.24	6.36	6.52	6.70	6.85
Thigh,Max	20.17	20.21	21.01	21.99	22.52	23.10	23.92	25.05	25.64
Thigh,Mid	17.51	17.66	18.68	19.34	19.82	20.36	20.93	21.87	22.42
Knee	13.43	13.43	13.86	14.28	14.56	14.94	15.44	15.98	16.37
Calf	12.32	12.62	12.76	13.25	13.58	13.84	14.43	14.86	15.23
Ankle	9.09	9.15	9.18	9.25	9.50	9.52	9.75	10.01	10.18
Vertical Trunk	57.94	57.61	58.59	59.54	61.17	62.07	63.53	65.14	66.64
Total Crotch Length	27.72	27.17	27.34	28.02	29.04	29.38	30.55	30.20	31.85
<b>VERTICAL MEASUREMENTS IN INCHES</b>									
Height	62.70	63.42	64.00	25.20	65.00	65.59	66.10	66.42	67.08
Cervical Height	55.11	55.26	55.79	56.37	57.09	57.64	58.28	58.76	59.42
Waist Height Back	39.38	39.54	39.80	40.43	40.84	41.17	41.53	41.96	42.45
Abdominal Height	36.22	36.48	36.99	37.66	37.82	38.25	38.48	38.49	39.00
Waist to Hip Hgt.	7.40	7.07	6.85	7.02	7.16	7.33	7.76	7.75	8.13
Hip Height	32.57	33.27	33.70	34.15	34.34	34.63	34.61	34.78	34.96
Inseam	28.91	29.19	29.52	29.76	29.82	30.19	30.18	30.23	30.65
Knee Height	16.88	17.18	17.31	17.59	17.76	17.99	18.09	18.10	18.48
Ankle Height	2.49	2.55	2.58	2.59	2.68	2.73	2.71	2.72	2.84
Waist Length, Front	12.94	13.09	13.28	13.44	13.69	13.96	14.17	14.56	14.88
Cervical to CF Waist	19.15	19.20	19.52	19.83	20.27	20.67	20.97	21.56	22.11
Waist Length,Back	15.72	15.71	15.98	15.95	16.24	16.47	16.57	16.80	16.98
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>									
Cross back shoulder **	14.62	14.80	15.18	15.45	15.84	16.01	16.28	16.66	17.19
Back Width	14.21	14.20	14.28	14.57	14.86	15.44	15.95	16.62	17.32
Chest Width	13.54	13.53	13.52	14.00	14.23	14.56	15.02	15.75	16.00
Shoulder Length	4.78	5.09	5.08	5.25	5.15	5.31	5.31	5.39	5.47
Shoulder slope *	21.40	22.02	22.34	21.98	22.54	22.51	21.76	20.51	20.86
Shoulder to wrist	22.41	22.70	23.02	23.23	23.54	23.86	24.08	24.24	24.73
Shoulder to elbow	12.68	12.84	13.42	13.46	13.59	13.71	13.87	13.99	14.21
Underarm to wrist	17.03	17.05	17.09	17.19	17.24	17.59	17.54	17.71	17.75
Bust point to BP	6.67	6.82	7.03	7.29	7.51	7.73	8.24	8.64	8.84
Neck to bust point	10.43	10.62	10.68	11.02	11.40	11.68	11.92	12.09	12.34
Armhole depth	6.86	7.09	6.98	7.09	7.22	7.47	7.68	8.06	8.12
Armhole to waist	7.22	7.12	7.30	7.47	7.59	7.71	7.64	7.81	7.77
Weight (lbs)	103.40	107.27	115.09	125.71	134.71	144.64	159.45	174.13	189.68

\*Shoulder slope figures indicated as "degrees of slope."

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 4 Continued

SIZE, NUMBER OF SUBJECTS									
LOCATION	M6 N=15	M8 N=41	M10 N=85	M12 N=183	M14 N=207	M16 N=220	M18 N=217	M20 N=138	M22 N=96
<b>GIRTH MEASUREMENTS IN CENTIMETERS</b>									
Bust	77.87	79.89	82.80	86.81	90.62	94.53	99.39	104.16	109.80
Bust Arc	41.60	43.45	43.98	46.54	49.12	51.14	53.69	55.71	58.43
Waist	67.67	69.13	72.14	75.71	78.88	82.73	87.57	93.90	99.89
Waist Arc	35.87	36.74	38.26	40.21	42.01	44.24	47.19	50.94	53.59
Abdominal Extension	85.80	85.93	88.27	92.53	95.56	99.23	104.68	110.46	115.67
Abdominal Arc	44.93	45.06	46.46	48.63	50.58	52.61	55.66	58.61	60.87
Hip	90.60	90.18	92.45	96.00	98.85	101.67	105.70	110.38	113.85
Hip Arc Back	46.17	45.43	46.88	48.49	49.74	50.86	52.82	54.74	57.34
Sitting Spread	94.33	93.52	96.58	100.78	103.70	106.58	111.22	116.49	121.33
Midneck	30.47	31.17	31.51	32.57	33.44	34.28	35.12	36.83	37.59
Neck Base **	38.00	38.44	38.95	39.35	40.34	41.39	41.99	43.61	44.38
Armscye	39.20	40.26	41.73	42.12	43.73	44.84	46.30	47.93	49.59
Upper arm	25.60	26.06	27.08	28.63	29.80	31.18	32.64	34.64	35.76
Elbow	24.17	24.20	25.21	25.85	26.71	27.18	28.14	29.48	29.94
Wrist	15.03	14.99	15.18	15.54	15.86	16.16	16.57	17.02	17.41
Thigh,Max	51.23	51.34	53.37	55.86	57.21	58.67	60.77	63.63	65.12
Thigh,Mid	44.47	44.87	47.45	49.12	50.35	51.73	53.16	55.55	56.96
Knee	34.10	34.12	35.19	36.27	36.99	37.95	39.22	40.59	41.57
Calf	31.30	32.05	32.42	33.65	34.49	35.17	36.66	37.75	38.69
Ankle	23.10	23.23	23.32	23.49	24.12	24.18	24.78	25.41	25.87
Vertical Trunk	147.17	146.32	148.83	151.23	155.37	157.66	161.37	165.46	169.26
Total Crotch Length	70.40	69.00	69.44	71.18	73.76	74.63	77.59	76.70	80.91
<b>VERTICAL MEASUREMENTS IN CENTIMETERS</b>									
Height	159.27	161.09	162.57	163.63	165.09	166.59	167.89	168.70	170.38
Cervical Height	139.97	140.37	141.69	143.19	145.01	146.40	148.03	149.24	150.92
Waist Height Back	100.03	100.43	101.08	102.68	103.72	104.58	105.50	106.58	107.83
Abdominal Height	92.00	92.66	93.95	95.66	96.07	97.15	97.73	97.76	99.07
Waist to Hip Hgt.	18.80	17.96	17.41	17.84	18.19	18.63	19.70	19.69	20.66
Hip Height	82.73	84.50	85.61	86.75	87.21	87.95	87.92	88.35	88.79
Inseam	73.43	74.13	74.97	75.59	75.74	76.69	76.65	76.78	77.85
Knee Height	42.87	43.63	43.97	44.69	45.10	45.70	45.96	45.97	46.93
Ankle Height	6.33	6.48	6.54	6.59	6.81	6.93	6.87	6.92	7.22
Waist Length, Front	32.87	33.26	33.72	34.13	34.78	35.46	36.00	36.99	37.81
Cervical to CF Waist	48.63	48.78	49.57	50.36	51.50	52.51	53.28	54.76	56.16
Waist Length,Back	39.93	39.92	40.60	40.51	41.26	41.84	42.09	42.66	43.13
<b>WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS</b>									
Cross back shoulder **	37.13	37.59	38.55	39.24	39.60	40.67	41.35	42.32	43.67
Back Width	36.10	36.06	36.26	37.02	37.76	39.22	40.50	42.21	44.00
Chest Width	34.40	34.37	34.33	35.57	36.15	36.97	38.16	39.99	40.65
Shoulder Length	12.13	12.94	12.90	13.33	13.09	13.49	13.48	13.69	13.90
Shoulder slope *	21.40	22.02	22.34	21.98	22.54	22.51	21.76	20.51	20.86
Shoulder to wrist	56.93	57.65	58.48	59.01	59.79	60.62	61.16	61.56	62.82
Shoulder to elbow	32.20	32.62	34.09	34.19	34.51	34.83	35.24	35.53	36.10
Underarm to wrist	43.27	43.31	43.42	43.68	43.78	44.68	44.56	44.98	45.09
Bust point to BP	16.93	17.32	17.85	18.51	19.08	19.64	20.93	21.96	22.46
Neck to bust point	26.50	26.96	27.13	28.00	28.95	29.66	30.27	30.71	31.35
Armscye depth	17.43	18.00	17.73	18.01	18.33	18.99	19.52	20.47	20.63
Armscye to waist	18.33	18.09	18.54	18.97	19.28	19.58	19.40	19.84	19.72
Weight (kg)	46.90	48.66	52.21	57.02	61.11	65.61	73.33	78.99	86.04

\*Shoulder slope figures indicated as \*degrees of slope.\*

\*\*Measurements not in original PS 42-70 data base.

(1) Subjects measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

**TABLE 5** Women 55+ of Misses Tall Figure Type

SIZE, NUMBER OF SUBJECTS

LOCATION	MT10 N=81	MT12 N=64	MT14 N=74	MT16 N=73	MT18 N=62	MT20 N=26	MT22 N=35
<b>GIRTH MEASUREMENTS IN INCHES</b>							
Bust	33.19	35.48	36.90	38.17	39.94	41.92	44.85
Bust,Arc	17.87	19.13	19.84	20.53	21.54	22.92	24.15
Waist	28.48	30.67	32.30	33.74	35.43	37.83	41.17
Waist Arc	15.24	16.39	17.30	18.09	19.16	20.45	21.99
Abdominal Extension	35.40	37.38	38.95	40.40	42.10	44.04	47.87
Abdominal Arc	18.70	19.76	20.65	21.63	22.39	23.43	25.00
Hip	37.42	38.88	40.08	41.49	42.58	44.18	47.08
Hip Arc Back	18.74	19.37	20.11	20.57	21.08	21.99	23.66
Sitting Spread	38.94	40.70	42.15	43.43	44.90	46.77	50.15
Midneck	12.72	13.08	13.32	13.80	14.28	14.47	15.09
Neck Base **	15.62	15.84	16.15	16.55	17.25	17.22	17.9
Armscye	16.51	17.29	17.76	18.42	19.06	19.69	20.41
Upper arm	10.95	11.57	12.13	12.81	13.26	14.07	14.83
Elbow	10.08	10.37	10.68	11.21	11.49	12.06	12.35
Wrist	6.13	6.23	6.36	6.60	6.66	6.94	7.15
Thigh,Max	21.46	22.35	23.24	24.20	24.61	25.95	27.33
Thigh,Mid	19.21	19.64	20.19	21.54	21.77	22.66	23.80
Knee	14.18	14.65	14.97	15.61	15.72	16.38	17.58
Calf	13.18	13.55	13.89	14.34	14.69	15.22	16.11
Ankle	9.35	9.50	9.72	9.89	9.92	10.11	10.55
Vertical Trunk	60.44	61.61	62.80	64.12	65.53	67.02	69.23
Total Crotch Length	28.19	29.06	29.53	30.60	31.14	32.90	33.41

**VERTICAL MEASUREMENTS IN INCHES**

Height	66.66	67.26	67.65	68.29	69.03	69.67	69.81
Cervical Height	58.01	58.93	59.43	59.82	60.69	61.36	61.75
Waist Height Back	41.59	42.22	42.72	41.14	43.58	43.95	44.35
Abdominal Height	38.97	39.48	39.79	40.13	40.31	40.19	40.55
Waist to Hip Hgt.	7.08	7.17	7.58	7.87	7.79	8.71	8.59
Hip Height	35.46	35.83	36.04	36.10	36.53	35.83	36.29
Inseam	30.95	31.20	31.55	31.63	31.90	31.47	31.81
Knee Height	18.28	18.31	18.82	18.75	19.12	18.77	19.24
Ankle Height	2.70	2.75	2.84	2.78	2.81	3.01	3.00
Waist Length Front	13.96	13.96	13.94	14.28	14.74	14.86	15.64
Cervical to CF Waist	20.30	20.64	20.77	21.03	21.67	21.82	22.88
Waist Length, Back	16.43	16.71	16.71	16.76	17.10	17.36	17.37

**WIDTH AND LENGTH MEASUREMENTS IN INCHES**

Cross back shoulder**	15.47	15.86	16.04	16.31	16.71	16.83	17.38
Back Width	14.71	15.40	15.69	15.88	16.21	16.60	17.55
Chest Width	14.37	14.47	14.83	15.42	15.71	15.94	17.04
Shoulder Length	5.15	5.32	5.37	5.43	5.42	5.44	5.48
Shoulder slope *	22.57	22.08	20.57	21.68	19.64	20.60	20.96
Shoulder to wrist	23.92	24.05	24.41	24.85	25.06	25.03	25.62
Shoulder to elbow	13.75	13.95	13.97	14.36	14.40	14.32	14.81
Underarm to wrist	17.61	17.86	18.07	18.14	18.37	18.10	18.01
Bust point to BP	7.13	7.44	7.73	7.89	8.45	8.77	9.28
Neck to bust point	10.93	11.45	11.60	11.60	12.04	12.44	12.74
Armscye depth	7.11	7.48	7.40	7.80	8.04	8.54	8.57
Armscye to waist	7.77	7.94	7.80	7.70	8.05	7.53	7.74
Weight (kg)	124.28	136.82	147.30	159.12	170.83	187.54	218.00

\* Shoulder slope figures indicated as 'degrees of slope.'

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 5 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION	MT10 N=81	MT12 N=64	MT14 N=74	MT16 N=73	MT18 N=62	MT20 N=26	MT22 N=35
GIRTH MEASUREMENTS IN CENTIMETERS							
Bust	84.30	90.12	93.72	96.95	101.46	106.48	113.93
Bust, Arc	45.40	48.59	50.40	52.15	54.71	58.21	61.34
Waist	72.35	77.89	82.04	85.70	89.99	96.08	104.57
Waist Arc	38.72	41.64	43.95	45.95	48.66	51.94	55.84
Abdominal Extension	89.92	94.94	98.93	102.61	106.93	111.87	121.59
Abdominal Arc	47.50	50.19	52.46	54.95	56.86	59.52	63.50
Hip	95.05	98.75	101.80	105.38	108.15	112.21	119.59
Hip Arc Back	47.60	49.21	51.08	52.26	53.54	55.87	60.09
Sitting Spread	98.91	103.38	107.06	110.30	114.06	118.79	127.37
Midneck	32.30	33.23	33.84	35.05	36.27	36.75	38.33
Neck Base **	39.67	40.23	41.01	42.03	43.81	43.73	45.47
Armhole	41.94	43.91	45.10	46.79	48.40	50.00	51.84
Upper arm	27.80	29.40	30.80	32.55	33.67	35.73	37.66
Elbow	25.59	26.33	27.13	28.49	29.19	30.64	31.36
Wrist	15.56	15.82	16.15	16.76	16.93	17.64	18.17
Thigh, Max	54.52	56.76	59.02	61.47	62.50	65.92	69.43
Thigh, Mid	48.80	49.90	51.28	54.70	55.30	57.56	60.46
Knee	36.02	37.20	38.02	39.65	39.93	41.60	44.64
Calf	33.47	34.41	35.29	36.43	37.32	38.65	40.91
Ankle	23.76	24.13	24.69	25.13	25.19	25.69	26.80
Vertical Trunk	153.53	156.48	159.51	162.86	166.44	170.23	175.84
Total Crotch Length	71.60	73.81	75.01	77.72	79.10	83.58	84.86

VERTICAL MEASUREMENTS IN CENTIMETERS

Height	169.33	170.83	171.82	173.47	175.34	176.96	177.33
Cervical Height	147.34	149.69	150.95	151.95	154.15	155.85	156.86
Waist Height Back	105.64	107.23	108.50	104.49	110.70	111.64	112.64
Abdominal Height	98.99	100.27	101.07	101.94	102.40	102.08	103.00
Waist to Hip Hgt.	17.99	18.20	19.26	19.99	19.78	22.14	21.83
Hip Height	90.06	91.00	91.55	91.70	92.77	91.00	92.19
Inseam	78.62	79.25	80.13	80.35	81.02	79.92	80.79
Knee Height	46.42	46.51	47.80	47.62	48.56	47.67	48.86
Ankle Height	6.86	6.97	7.20	7.07	7.14	7.65	7.63
Waist Length Front	35.46	35.45	35.41	36.27	37.45	37.75	39.73
Cervical to CF Waist	51.56	52.41	52.75	53.41	55.03	55.42	58.11
Waist Length, Back	41.72	42.45	42.44	42.58	43.44	44.10	44.13

WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS

Cross back shoulder**	39.29	40.29	40.73	41.43	42.44	42.75	44.16
Back Width	37.37	39.12	39.87	40.34	41.19	42.17	44.59
Chest Width	36.51	36.75	37.67	39.17	39.91	40.48	43.27
Shoulder Length	13.09	13.51	13.65	13.80	13.77	13.83	13.93
Shoulder slope *	22.57	22.08	20.57	21.68	19.64	20.60	20.96
Shoulder to wrist	60.76	61.09	61.99	63.12	63.65	63.58	65.09
Shoulder to elbow	34.93	35.43	35.49	36.47	36.57	36.39	37.61
Underarm to wrist	44.72	45.37	45.91	46.08	46.67	45.98	45.76
Bust point to BP	18.10	18.91	19.62	20.04	21.45	22.27	23.57
Neck to bust point	27.77	29.09	29.45	29.47	30.58	31.60	32.37
Armhole depth	18.06	19.01	18.79	19.82	20.42	21.69	21.77
Armhole to waist	19.75	20.16	19.82	19.55	20.44	19.12	19.66
Weight (kg)	56.38	62.06	66.82	72.18	77.49	85.07	98.89

\* Shoulder slope figures indicated as \*degrees of slope.\*

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

**TABLE 6 Women 55+ of Half-Size Figure Type**

SIZE, NUMBER OF SUBJECTS								
LOCATION:	12.5 N=44	14.5 N=23	16.5 N=27	18.5 N=33	20.5 N=29	22.5 N=16	24.5 N=72	26.5 N=57
<b>GIRTH MEASUREMENTS IN INCHES</b>								
Bust	37.16	39.51	41.17	42.62	43.72	45.79	47.54	49.72
Bust Arc	20.03	21.39	22.08	22.76	23.56	24.44	25.87	26.39
Waist	32.29	34.86	37.01	38.47	39.91	42.01	43.16	45.75
Waist Arc	17.17	18.80	19.91	20.66	21.54	22.62	23.09	24.16
Abdominal Extension	37.98	40.56	42.74	44.33	45.82	48.20	49.57	52.21
Abdominal Arc	20.81	21.53	22.63	23.42	24.25	25.25	25.93	26.94
Hip	38.04	40.31	42.43	43.79	45.33	47.34	49.09	50.70
Hip Arc Back	19.10	20.19	21.11	21.80	22.63	23.73	24.65	25.77
Sitting Spread	39.96	42.78	45.03	46.67	48.51	50.76	52.83	54.94
Midneck	13.20	13.70	14.07	14.42	14.74	15.27	15.58	15.61
Neck Base**	15.63	15.95	16.44	16.86	17.55	17.9	18.08	18.42
Armseye	17.07	17.63	18.16	18.81	19.43	20.05	20.52	21.27
Upper arm	11.84	12.60	13.22	13.82	14.37	15.11	15.47	16.13
Elbow	10.10	10.74	11.14	11.60	11.87	12.33	12.54	13.26
Wrist	6.05	6.37	6.47	6.64	6.79	6.96	7.01	7.17
Thigh,Max	21.34	22.93	23.90	24.66	25.39	26.28	27.08	27.65
Thigh,Mid	18.53	20.09	20.79	21.53	22.15	22.77	27.06	24.40
Knee	13.82	14.71	15.31	15.73	16.45	16.57	17.11	18.06
Caif	12.95	13.86	14.28	14.78	15.30	15.57	16.01	16.86
Ankle	8.89	9.35	9.45	9.69	9.87	10.02	10.34	10.82
Vertical Trunk	58.17	60.50	62.16	63.92	65.14	67.16	68.35	70.51
Total Crotch Length	27.49	28.99	29.93	31.07	31.97	33.00	34.25	35.04
<b>VERTICAL MEASUREMENTS IN INCHES</b>								
Height	59.90	60.16	60.62	61.78	62.58	62.96	63.47	64.00
Cervical Height	52.65	53.36	53.93	54.14	55.80	56.21	56.90	57.36
Waist Height Back	37.24	37.74	38.20	38.94	39.56	39.77	40.42	40.56
Abdominal Height	34.58	34.74	34.90	35.43	35.92	35.81	36.53	36.23
Waist to Hip Hgt.	6.90	7.07	7.38	7.60	7.87	8.02	7.95	8.34
Hip Height	31.12	31.27	31.29	31.77	32.09	32.00	32.70	32.39
Inseam	27.13	27.20	27.07	27.42	27.72	27.63	28.05	27.77
Knee Height	16.23	16.39	16.56	16.77	17.04	17.01	17.28	17.15
Ankle Height	2.51	2.52	2.56	2.58	2.71	2.69	2.67	2.66
Waist Length, Front	13.01	13.67	14.01	14.26	14.49	14.78	14.79	15.42
Cervical to CF Waist	19.55	20.24	20.75	21.29	21.55	22.12	22.45	23.19
Waist Length,Back	15.31	15.61	15.72	16.00	16.25	16.45	16.48	16.80
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>								
Cross back shoulder**	15.18	15.51	15.98	16.33	16.72	16.89	17.51	17.54
Back Width	14.82	15.65	16.12	16.70	16.94	17.51	18.14	18.83
Chest Width	13.80	14.75	15.10	15.55	15.76	16.19	16.52	17.03
Shoulder Length	5.02	5.11	5.10	5.18	5.24	5.30	5.50	5.34
Shoulder slope *	21.83	21.12	20.31	19.92	20.49	20.09	19.13	20.34
Shoulder to wrist	22.02	22.35	22.60	22.93	23.24	23.53	23.68	24.18
Shoulder to elbow	12.69	12.78	12.93	13.11	13.20	13.48	13.45	13.80
Underarm to wrist	16.12	16.24	16.14	16.43	16.65	16.58	16.52	16.55
Bust point to BP	7.80	8.14	8.53	8.73	9.02	9.19	9.69	9.78
Neck to bust point	11.37	11.73	11.90	12.17	12.44	12.64	13.10	13.36
Armseye depth	7.02	7.27	7.45	7.80	7.94	8.11	8.61	9.03
Armseye to waist	7.18	7.33	7.28	7.29	7.34	7.32	7.30	7.65
Weight	120.15	142.38	156.00	169.33	182.45	198.95	213.92	235.64

\* Shoulder slope figures indicated as "degrees of slope."

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 data base.

TABLE 6 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION:	12.5 N=44	14.5 N=23	16.5 N=27	18.5 N=33	20.5 N=29	22.5 N=16	24.5 N=72	26.5 N= 57
<b>GIRTH MEASUREMENTS IN CENTIMETERS</b>								
Bust	94.39	100.34	104.58	108.25	111.06	116.29	120.74	126.29
Bust Arc	50.88	54.33	56.09	57.81	59.85	62.07	65.71	67.04
Waist	82.01	88.55	94.01	97.72	101.36	106.70	109.63	116.21
Waist Arc	43.60	47.75	50.58	52.49	54.72	57.46	58.65	61.37
Abdominal Extension	96.48	103.01	108.57	112.61	116.38	122.42	125.92	132.61
Abdominal Arc	52.86	54.68	57.48	59.48	61.61	64.13	65.87	68.42
Hip	96.63	102.40	107.77	111.23	115.15	120.24	124.68	128.78
Hip Arc Back	48.51	51.27	53.61	55.37	57.48	60.28	62.61	65.45
Sitting Spread	101.49	108.65	114.38	118.53	123.21	128.93	134.19	139.54
Midneck	33.52	34.80	35.75	36.62	37.45	38.79	39.58	39.65
Neck Base**	39.69	40.51	41.75	42.82	44.58	45.48	45.93	46.79
Armhole	43.36	44.78	46.13	47.79	49.34	50.92	52.11	54.03
Upper arm	30.08	32.00	33.57	35.09	36.50	38.38	39.31	40.97
Elbow	25.65	27.29	28.30	29.45	30.16	31.31	31.85	33.68
Wrist	15.37	16.17	16.43	16.87	17.24	17.68	17.80	18.21
Thigh, Max	54.19	58.23	60.69	62.64	64.48	66.76	68.77	70.23
Thigh, Mid	47.07	51.03	52.80	54.69	56.26	57.83	68.74	61.98
Knee	35.09	37.35	38.90	39.95	41.78	42.10	43.47	45.88
Calf	32.89	35.22	36.26	37.53	38.87	39.56	40.65	42.83
Ankle	22.58	23.75	24.01	24.62	25.07	25.46	26.27	27.47
Vertical Trunk	147.75	153.67	157.89	162.35	165.46	170.58	173.60	179.11
Total Crotch Length	69.83	73.64	76.01	78.92	81.21	83.82	86.99	89.00
<b>VERTICAL MEASUREMENTS IN CENTIMETERS</b>								
Height	152.15	152.82	153.98	156.92	158.95	159.93	161.22	162.56
Cervical Height	133.73	135.53	136.98	137.50	141.74	142.78	144.51	145.69
Waist Height Back	94.60	95.85	97.03	98.92	100.48	101.02	102.66	103.03
Abdominal Height	87.84	88.25	88.64	90.00	91.23	90.96	92.79	92.03
Waist to Hip Hgt.	17.52	17.95	18.74	19.30	19.98	20.36	20.19	21.19
Hip Height	79.03	79.43	79.47	80.71	81.51	81.27	83.05	82.28
Inseam	68.91	69.10	68.76	69.64	70.42	70.18	71.26	70.54
Knee Height	41.23	41.64	42.06	42.59	43.27	43.22	43.88	43.56
Ankle Height	6.39	6.40	6.51	6.56	6.88	6.84	6.77	6.75
Waist Length, Front	33.03	34.72	35.58	36.21	36.79	37.54	37.56	39.17
Cervical to CF Waist	49.65	51.42	52.69	54.08	54.75	56.20	57.04	58.90
Waist Length, Back	38.90	39.65	39.94	40.63	41.27	41.78	41.86	42.67
<b>WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS</b>								
Cross back shoulder**	38.545	39.41	40.58	41.49	42.47	42.89	44.47	44.54
Back Width	37.64	39.75	40.94	42.43	43.02	44.47	46.08	47.83
Chest Width	35.05	37.47	38.37	39.51	40.04	41.12	41.95	43.25
Shoulder Length	12.75	12.98	12.95	13.15	13.32	13.47	13.97	13.55
Shoulder slope *	21.83	21.12	20.31	19.92	20.49	20.09	19.13	20.34
Shoulder to wrist	55.92	56.77	57.40	58.23	59.02	59.76	60.15	61.42
Shoulder to elbow	32.23	32.46	32.84	33.29	33.54	34.24	34.17	35.04
Underarm to wrist	40.96	41.25	41.00	41.72	42.30	42.12	41.96	42.03
Bust point to BP	19.81	20.69	21.66	22.17	22.91	23.33	24.63	24.85
Neck to bust point	28.89	29.80	30.22	30.91	31.61	32.11	33.29	33.94
Armhole depth	17.84	18.46	18.93	19.82	20.18	20.59	21.88	22.95
Armhole to waist	18.24	18.62	18.50	18.53	18.66	18.58	18.54	19.42
Weight	54.50	64.59	70.76	76.81	82.76	90.25	97.03	106.89

\* Shoulder slope figures indicated as "degrees of slope."

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 data base.

**TABLE 7 Women 55+ of Womens Figure Type**

SIZE, NUMBER OF SUBJECTS

LOCATION	W34 N=232	W36 N=237	W38 N=198	W40 N=100	W42 N=55	W44 N=51	W46 N=16	W48 N=9	W50 N=3	W52 N=1
<b>GIRTH MEASUREMENTS IN INCHES</b>										
Bust	38.92	40.59	42.50	44.12	45.85	46.92	49.99	50.98	54.99	58.27
Bust,Arc	20.82	21.80	22.72	23.68	24.54	25.51	26.22	26.40	25.39	29.53
Waist	34.26	36.33	38.45	40.24	41.76	43.52	45.56	49.63	49.02	51.97
Waist Arc	18.26	19.62	20.69	21.60	22.34	23.30	23.65	26.29	24.67	27.95
Abdominal Extension	40.35	42.50	44.31	46.56	47.66	50.42	51.89	54.86	55.12	59.06
Abdominal Arc	21.36	22.67	23.49	24.41	24.99	26.04	26.39	28.19	28.08	30.71
Hip	40.47	42.47	44.13	46.08	46.39	49.98	50.49	53.72	52.82	62.20
Hip Arc Back	20.21	21.13	21.94	23.03	23.16	25.24	24.61	27.23	26.97	29.13
Sitting Spread	42.68	45.16	46.99	49.41	50.14	53.23	54.69	57.35	59.65	67.32
Midneck	13.67	14.18	14.54	14.99	15.30	15.32	16.02	16.47	15.88	17.52
Neck Base **	16.17	16.73	17.15	17.5	17.66	18.01	17.65	18.53	18.86	17.5
Armscye	17.75	18.59	19.07	19.58	20.43	20.54	21.36	22.07	21.52	21.26
Upper arm	12.65	13.35	13.82	14.47	14.93	15.48	15.54	16.58	16.08	16.14
Elbow	10.88	11.30	11.66	12.05	12.44	12.85	12.76	13.50	13.78	12.40
Wrist	6.49	6.58	6.72	6.84	7.06	7.30	7.11	7.46	7.15	7.09
Thigh,Max	23.34	24.31	25.24	26.31	26.13	27.98	27.26	28.54	30.71	29.13
Thigh,Mid	20.33	21.30	21.94	22.85	22.48	24.35	23.62	25.00	26.18	27.17
Knee	14.98	15.60	16.14	16.79	16.82	17.78	17.32	18.44	17.06	20.08
Calf	13.98	14.54	15.08	15.60	15.60	16.46	16.22	16.34	15.88	18.70
Ankle	9.43	9.68	9.90	10.16	10.17	10.63	10.51	10.52	10.37	11.42
Vertical Trunk	61.99	63.66	65.03	66.75	67.98	69.77	70.88	73.05	73.43	75.59
Total Crotch Length	29.49	30.78	31.62	32.72	33.12	33.80	35.25	34.54	36.55	37.80
<b>VERTICAL MEASUREMENTS IN INCHES</b>										
Height	63.92	64.43	64.81	65.27	66.43	66.54	66.77	66.45	65.29	64.37
Cervical Height	56.42	56.87	57.46	58.04	59.23	59.43	59.78	60.08	58.66	57.48
Waist Height Back	40.16	40.66	40.94	41.56	42.34	42.56	42.85	42.17	41.93	39.17
Abdominal Height	37.09	37.35	37.62	37.90	38.34	38.45	38.08	37.58	38.45	36.22
Waist to Hip Hgt.	7.33	7.83	8.07	8.18	8.61	7.99	7.94	8.01	7.87	7.48
Hip Height	33.49	33.40	33.42	33.72	34.19	34.83	34.84	33.62	34.32	32.09
Inseam	29.07	29.08	29.12	29.23	29.92	29.72	29.77	28.76	28.02	25.39
Knee Height	17.48	17.51	17.68	17.82	18.25	18.25	18.42	17.98	17.85	16.54
Ankle Height	2.64	2.61	2.67	2.71	2.73	2.83	2.88	2.78	2.76	2.36
Waist Length Front	14.04	14.24	14.52	15.03	15.27	16.07	15.86	17.37	14.96	15.75
Cervical to CF Waist	20.70	21.18	21.69	22.30	22.67	23.23	23.72	25.13	22.97	23.23
Waist Length,Back	16.23	16.25	16.51	16.50	16.92	16.87	16.92	17.91	16.73	18.31
<b>WIDTH AND LENGTH MEASUREMENTS IN INCHES</b>										
Cross back shoulder**	15.95	16.29	16.62	17.03	17.24	17.4	18.58	18.18	18.18	19.69
Back Width	15.77	16.16	16.67	17.27	17.38	17.69	6.93	19.18	20.08	22.44
Chest Width	14.81	15.26	15.53	16.48	16.10	16.74	17.64	18.22	17.26	16.14
Shoulder Length	5.25	5.22	5.27	5.36	5.49	5.57	5.64	5.73	5.45	6.50
Shoulder slope*	20.93	20.74	20.76	20.42	19.52	20.27	20.19	18.33	18.33	15.00
Shoulder to wrist	23.29	23.72	23.81	23.95	24.57	24.65	24.57	25.46	24.67	22.24
Shoulder to elbow	13.40	13.62	13.61	13.81	14.02	14.08	14.19	14.61	13.98	11.81
Underarm to wrist	17.08	17.11	17.20	17.29	17.58	17.25	17.25	17.21	16.40	16.93
Bust point to BP	8.06	8.38	8.75	9.06	9.50	9.45	10.04	10.32	10.56	11.42
Neck to bust point	11.70	12.03	12.28	12.43	12.80	12.97	13.53	13.36	14.17	16.14
Armscye depth	7.48	7.65	7.84	8.24	8.46	8.59	8.55	9.16	8.53	7.87
Armscye to waist	7.62	7.56	7.54	7.70	7.69	7.82	7.41	8.92	7.28	8.07
Weight (lbs)	148.25	164.47	177.50	194.24	206.30	227.79	233.50	257.89	254.00	285.00

\* Shoulder slope figures indicated as 'degrees of slope.'

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

TABLE 7 Continued

SIZE, NUMBER OF SUBJECTS

LOCATION	W34 N=232	W36 N=287	W38 N=198	W40 N= 100	W42 N=55	W44 N=51	W46 N=16	W48 N=9	W50 N=3	W52 N=1
<b>GIRTH MEASUREMENTS IN CENTIMETERS</b>										
Bust	98.87	103.09	107.96	112.08	116.46	119.18	126.97	129.50	139.67	148.00
Bust,Arc	52.88	55.37	57.71	60.16	62.33	64.78	66.59	67.06	64.50	75.00
Waist	87.03	92.28	97.66	102.22	106.07	110.54	115.72	126.06	124.50	132.00
Waist Arc	46.37	49.83	52.56	54.86	56.76	59.18	60.06	66.78	62.67	71.00
Abdominal Extension	102.50	107.95	112.54	118.25	121.06	128.07	131.81	139.33	140.00	150.00
Abdominal Arc	54.25	57.58	59.66	62.00	63.46	66.14	67.03	71.61	71.33	78.00
Hip	102.78	107.87	112.09	117.04	117.84	126.94	128.25	136.44	134.17	158.00
Hip Arc Back	51.33	53.67	55.72	58.50	58.83	64.10	62.50	69.17	68.50	74.00
Sitting Spread	108.40	114.70	119.36	125.50	127.35	135.22	138.91	145.67	151.50	171.00
Midneck	34.72	36.01	36.94	38.09	38.86	38.91	40.69	41.83	40.33	44.50
Neck Base **	41.08	42.49	43.57	44.5	44.86	45.76	44.84	47.06	42.83	44.5
Armscye	45.08	47.21	48.44	49.74	51.89	52.18	54.25	56.06	54.67	54.00
Upper arm	32.13	33.90	35.10	36.75	37.92	39.31	39.47	42.11	40.83	41.00
Elbow	27.63	28.70	29.62	30.60	31.61	32.64	32.41	34.28	35.00	31.50
Wrist	16.48	16.71	17.07	17.39	17.94	18.55	18.06	18.94	18.17	18.00
Thigh,Max	59.29	61.76	64.12	66.83	66.36	71.08	69.25	72.50	78.00	74.00
Thigh,Mid	51.64	54.09	55.72	58.05	57.10	61.84	60.00	63.50	66.50	69.00
Knee	38.06	39.63	40.99	42.65	42.72	45.17	44.00	46.83	43.33	51.00
Calf	35.50	36.93	38.30	39.63	39.64	41.80	41.19	41.50	40.33	47.50
Ankle	23.95	24.60	25.14	25.81	25.84	27.01	26.69	26.72	26.33	29.00
Vertical Trunk	157.44	161.69	165.18	169.53	172.67	177.23	180.03	185.56	186.50	192.00
Total Crotch Length	74.91	78.17	80.33	83.12	84.12	85.84	89.53	87.72	92.83	96.00
<b>VERTICAL MEASUREMENTS IN CENTIMETERS</b>										
Height	162.35	163.66	164.62	165.80	168.73	169.01	169.59	168.78	165.83	163.50
Cervical Height	143.31	144.45	145.94	147.42	150.45	150.95	151.84	152.61	149.00	146.00
Waist Height Back	102.00	103.28	103.99	105.55	107.55	108.10	108.84	107.11	106.50	99.50
Abdominal Height	94.21	94.87	95.54	96.26	97.39	97.66	96.72	95.44	97.67	92.00
Waist to Hip Hgt.	18.62	19.89	20.50	20.77	21.86	20.28	20.16	20.33	20.00	19.00
Hip Height	85.07	84.84	84.89	85.65	86.86	88.47	88.50	85.39	87.17	81.50
Inseam	73.85	73.87	73.96	74.24	76.00	75.49	75.63	73.06	71.17	64.50
Knee Height	44.41	44.48	44.92	45.26	46.35	46.34	46.78	45.67	45.33	42.00
Ankle Height	6.69	6.63	6.79	6.90	6.94	7.19	7.31	7.06	7.00	6.00
Waist Length Front	35.67	36.17	36.87	38.18	38.78	40.81	40.28	44.11	38.00	40.00
Cervical to CF Waist	52.57	53.80	55.08	56.64	57.59	59.01	60.25	63.83	58.33	59.00
Waist Length,Back	41.22	41.28	41.94	41.92	42.97	42.84	42.97	45.50	42.50	46.50
<b>WIDTH AND LENGTH MEASUREMENTS IN CENTIMETERS</b>										
Cross back shoulder**	40.51	41.39	42.21	43.26	43.79	44.2	44.72	46.17	46.17	50
Back Width	40.06	41.05	42.35	43.86	44.15	44.94	47.59	48.72	51.00	57.00
Chest Width	37.62	38.77	39.44	41.87	40.90	42.52	44.81	46.28	43.83	41.00
Shoulder Length	13.33	13.27	13.37	13.62	13.95	14.15	14.31	14.56	13.83	16.50
Shoulder slope*	20.93	20.74	20.75	20.42	19.52	20.27	20.19	18.33	18.33	15.00
Shoulder to wrist	59.15	60.24	60.47	60.83	62.40	62.61	62.41	64.67	62.67	56.50
Shoulder to elbow	34.04	34.60	34.58	35.09	35.60	35.78	36.03	37.11	35.50	30.00
Underarm to wrist	43.38	43.47	43.70	43.91	44.66	43.80	43.81	43.72	41.67	43.00
Bust point to BP	20.46	21.29	22.23	23.02	24.13	24.00	25.50	26.22	26.83	29.00
Neck to bust point	29.71	30.57	31.19	31.58	32.50	32.94	34.38	33.94	36.00	41.00
Armscye depth	18.99	19.44	19.91	20.92	21.48	21.81	21.72	23.28	21.67	20.00
Armscye to waist	19.36	19.21	19.15	19.57	19.54	19.85	18.81	22.67	18.50	20.50
Weight (kg)	67.25	76.61	80.52	88.11	93.58	103.33	105.92	116.98	115.22	129.28

\* Shoulder slope figures indicated as "degrees of slope."

\*\* Measurements not in original PS 42-70 data base.

(1) Subjects' measurements are listed as comparisons to PS 42-70 numbered sizes. Hang tag numbers currently used in US Apparel

Sizing range from 2 to 4 sizes smaller than the original PS 42-70 database.

## 5. Apparatus

5.1 *Tape Measure*, dimensionally stable (plastic) and approximately 15-mm (1/2-in.) wide and graduated accurately in mm (1/16 in.) increments.

5.2 *Plastic Goniometer*, to measure the degree of shoulder slope.

5.3 *Plastic L-Square*, to determine the abdominal extension.

5.4 *Light Weight Stretch Yarn Knitted Fabric Body Suit*, with cotton tapes added at strategic body locations and front zippered opening. The suit has long sleeves and an approximate 5-cm (2-in.) inseam.<sup>9</sup>

5.5 *Standard Body Weight Scale*.

## 6. Procedure

### 6.1 General Procedures:

6.1.1 Verify that measuring devices and scales are within calibration.

6.1.2 The body measurement descriptions included herein follow the exact procedures and order of the database measurements reported in the research technical report tables (Reich and Goldsberry, 1993) and tables in these tables.

6.1.3 For all vertical and most horizontal measurements, measure the body, which is standing erect without shoes and with feet placed approximately 15-cm (6-in.) apart.

6.1.4 For seated measurements, have the subject sit on a straight, flat seat chair with the feet placed together in front of the body on the floor.

6.1.5 Take measurements over the body suit with subjects wearing basic undergarments normally worn when shopping for well-fitted apparel.

6.1.6 Take all measurements except torso circumferences, arc measurements, height, and weight from the same side of the body for consistency in data gathering.

6.1.7 Refer to Terminology D 5219 for all points to be measured.

6.1.8 Refer to Research Technical Report PCN:33-000006-18, ISR-06 (Reich and Goldsberry, 1993) for data on 13 additional measurements that further describe the proportions of older women.

### 6.2 Body Measurements:

6.2.1 *Bust*—Measure the bust circumference over the fullest part of the breasts and parallel to the floor.

6.2.2 *Bust Arc*—Measure parallel to the floor from one mid-underarm point across the nipples to the other mid-underarm point.

6.2.3 *Waist*—Measure the waist circumference at the waist level immediately below the lowest rib; this may not be parallel to floor.

6.2.4 *Waist Arc*—Measure across the front of the body at waist level from one imaginary side seam to the other imaginary side seam.

6.2.5 *Abdominal Extension (High-Hip Girth)*—Measure the high-hip circumference at a point approximately 7.5 cm (3 in.) below the waist, parallel to the floor.

6.2.6 *Abdominal Arc*—Measure across the front of the body at the level of the fullest abdominal extension (high-hip level)

from one imaginary side seam to the other imaginary side seam.

6.2.7 *Hip*—Measure the maximum hip circumference at the level of maximum prominence of the buttocks, parallel to the floor.

6.2.8 *Hip Arc*—Measure across the back at the fullest hip level from one imaginary side seam to the other imaginary side seam.

6.2.9 *Sitting Spread*—Locate the tape measure around the full hip and hold loosely in place while the subject sits down on a flat chair. The tape will spread when seated. Before reading the measurement, if necessary, reposition the tape on top of body folds that represent additional spread.

6.2.10 *Mid Neck*—Measure the mid neck circumference approximately 2.5 cm (1 in.) above the neck base.

6.2.11 *Armscye*—With the arm relaxed at the side, measure from the shoulder joint down through the front-break point, the armpit, up to the back-break point and up to the starting point.

6.2.12 *Upper Arm*—With the arm down, measure the maximum upper arm circumference parallel to the floor and usually near the level of the armpit.

6.2.13 *Elbow*—With the arm bent, measure the elbow circumference over the prominence of the bone.

6.2.14 *Wrist*—Measure the wrist circumference over the prominence of the outer wrist bone.

6.2.15 *Thigh, Maximum*—Measure the maximum thigh circumference of the upper leg close to the crotch, parallel to the floor.

6.2.16 *Thigh, Mid*—Measure the mid thigh circumference of the upper leg between the hip and knee, parallel to the floor.

6.2.17 *Knee*—With the leg straight, measure the knee circumference over the knee cap, parallel to the floor.

6.2.18 *Calf*—Measure the maximum calf circumference around the leg between the knee and ankle, parallel to the floor.

6.2.19 *Ankle*—Measure the ankle circumference over the greatest prominence of the ankle, parallel to the floor.

6.2.20 *Vertical Trunk*—Measure from the midpoint on the right shoulder between the neck base and the shoulder joint down the back through the crotch and up over the prominence of the right breast to the starting point, taking care to avoid constriction at the crotch.

6.2.21 *Total Crotch Length*—Measure from the center front waist level, through the crotch to the center back waist level.

6.2.22 *Height*—In standing position, with the back next to the wall, measure from the top of the head to the soles of the feet.

6.2.23 *Cervicale Height*—Measurements of waist length and waist height are added together to provide total height from the cervicale to the floor. If measuring in one step, the tape measure would be held next to the body at the center-back level to incorporate the indentation of the body curvature.

6.2.24 *Waist Height (Center Back)*—Measure from the center-back waist level following the body contour from waist to hip and then straight down to the soles of the feet. Note that the waist height measurement in the tables is taken at the center back and not from the side of the body.

6.2.24.1 *Waist Height (Side)*—Measurement (not provided)

<sup>9</sup> Bodysuit available from Debi Gioello, Fashion Institute of Technology, New York, NY.

in the tables) can be calculated by adding the two measurements of waist to hip height and hip height.

6.2.25 *Abdominal Extension Height (High Hip Height)*—Measure at the side of the body from the level of the prominent abdominal extension (high-hip level), following the contour of the body, to the soles of the feet.

6.2.26 *Waist to Hip Height*—Measure at the side of the body from the waist level, following the contour of the body, to the full hip level.

6.2.27 *Hip Height*—Measure at the side of the body from the level of the prominent full hip to the soles of the feet.

6.2.28 *Crotch Height Inseam*—Measure from the crotch intersection straight down to the soles of the feet.

6.2.29 *Knee Height*—Measure from the crease in back of the knee to the soles of the feet.

6.2.30 *Ankle Height*—Measure from the middle of the ankle bone to the soles of the feet.

6.2.31 *Waist Length (Front)*—Measure from the center front neck base line to the center front waist level.

6.2.32 *Cervicale to Center Front Waist*—Measure from the cervicale at the center back along the neck base to the shoulder line, then down to the waist level at center front.

6.2.33 *Waist Length (Back)*—Measure from the cervicale at the back neck to the waist level at the center-back.

6.2.34 *Back Width*—Measure across the back from armseye to armseye back breakpoint to the other back breakpoint at approximately the same level as the chest.

6.2.35 *Chest Width (Front)*—Measure across the chest from armseye to armseye at front breakpoint level.

6.2.36 *Shoulder Length*—With the arms hanging naturally, measure from the side neck base to the armseye line at the shoulder joint.

6.2.37 *Shoulder Slope*—Using a goniometer, position the

measure on the shoulder and move the baseline until it is parallel to the floor; identify on the dial the degrees of difference between the shoulder slant and the horizontal measure of the goniometer.

6.2.38 *Shoulder to Wrist*—With the arm bent at 90 degrees and with the hand placed on the hip, measure from the shoulder joint/armseye intersection along the outside of the arm over the elbow to the prominent wrist bone.

6.2.39 *Shoulder to Elbow*—With the arm bent at 90 degrees and with the hand placed on the hip, measure from the shoulder joint/armseye intersection along the outside of the arm to the center of the elbow bone.

6.2.40 *Underarm to Wrist*—With the arm hanging naturally, measure from the armpit to the midpoint of the inside of the wrist in line with the wrist bone.

6.2.41 *Bustpoint to Bustpoint*—Measure across the front from one bust apex to the other.

6.2.42 *Neck to Bustpoint*—Measure from the intersection of the neck base/shoulder point down to the bustpoint.

6.2.43 *Armseye Depth*—Measure straight down the back from the shoulder/armseye intersection to a point level with the base of the armseye. Determine this point by placing a straight edge high into the underarm parallel to the floor.

6.2.44 *Armseye to Waist*—Measure from the mid-underarm point downward along the side of the body to the waist level.

6.2.45 *Weight*—Using a standard scale on a hard surface floor, read and record the weight.

## 7. Keywords

7.1 adult female apparel; body measurements; garment size; half-size; junior; junior petite; miss petite; misses; misses tall; women's

*The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.*

*This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.*

*This standard is copyrighted by ASTM, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org).*