

# **LAMPIRAN**

**Tabel 5.4**  
**Antropometri telapak tangan orang Indonesia yang didapat dari interpolasi data pheasant (1986) Suma'mur (1989) dan Nurmianto (1991).**  
 (Semua dimensi dalam satuan mm)

D I M E N S I	P R I A				W A N I T A			
	5th	50th	95th	S.D.	5th	50th	95th	S.D.
1. Panjang Tangan	163	176	189	8	155	168	181	8
2. Panjang Telapak Tangan	92	100	108	5	87	94	101	4
3. Panjang Ibu Jari	45	48	51	2	42	45	48	2
4. Panjang Jari Telunjuk	62	67	72	3	60	65	70	3
5. Panjang Jari Tengah	70	77	84	4	69	74	79	3
6. Panjang Jari Manis	62	67	72	3	59	64	69	3
7. Panjang Jari Kelingking	48	51	54	2	45	48	51	2
8. Lebar Ibu Jari (IPJ)	19	21	23	1	16	18	20	1
9. Tebal Ibu Jari (IPJ)	19	21	23	1	15	17	19	1
10. Lebar Jari Telunjuk (PIPJ)	18	20	22	1	15	17	19	1
11. Tebal Jari Telunjuk (PIPJ)	16	18	20	1	13	15	17	1
12. Lebar Telapak Tangan ( <i>Metacarpal</i> )	74	81	88	4	68	73	78	3
13. Lebar Telapak Tangan (sampai Ibu Jari)	88	98	108	6	82	89	96	4
14. Lebar Telapak Tangan (Minimum)	68	75	82	4	64	59	74	3
15. Tebal Telapak Tangan ( <i>Metacarpal</i> )	28	31	34	2	25	27	29	1
16. Tebal Telapak Tangan (sampai Ibu Jari)	41	48	47	2	41	44	47	2
17. Diameter Genggam (maksimum)	45	48	51	2	43	46	49	2
18. Lebar Maksimum (Ibu Jari ke Jari Kelingking)	177	192	206	9	169	184	199	9
19. Lebar Fungsional Maksimum (Ibu Jari ke Jari lain)	122	132	142	6	113	123	134	6
20. Segi Empat Minimum yang dapat dilewati Telapak Tangan	57	62	67	3	51	56	61	3

**Catatan :**

- IPJ = Interphalangeal Joint (Sambungan antar ruas tulang jari).  
 PIPJ = Proximal Interphalangeal Joint (Sambungan antar ruas tulang jari ke arah mendekati tubuh).

**Tabel 5.3**  
**Antropometri masyarakat Indonesia yang didapat dari interpolasi**  
**masyarakat British dan Hongkong (Pheasant, 1986) terhadap**  
**masyarakat Indonesia (Suma'mur, 1989) serta istilah dimensional**  
**dari (Nurmianto, 1991a ;Nurmianto, 1991b).**

Dimana :  $G_x$  = nilai rata-rata (mean), T = nilai standar deviasi (SD), 5%  
 nilai 5 persentil, 95% = nilai 95 persentil

DIMENSI TUBUH	P R I A				WANITA			
	5%	X	95%	S.D	5%	X	95%	S.D
1. Tinggi Tubuh Posisi berdiri Tegak	1.532	1.632	1.732	61	1.464	1.563	1.662	60
2. Tinggi Mata	1.425	1.520	1.615	58	1.350	1.446	1.542	58
3. Tinggi Bahu	1.247	1.338	1.429	55	1.184	1.272	1.361	54
4. Tinggi Siku	932	1.003	1.074	43	886	957	1.028	43
5. Tinggi Genggam Tangan ( <i>Lauck'e</i> ) pada Posisi Relaks kebawah	555	718	782	39	646	708	771	38
6. Tinggi Badan pada Posisi Duduk	809	864	919	33	775	834	893	36
7. Tinggi Mata pada Posisi Duduk	694	749	804	33	666	721	776	33
8. Tinggi Bahu pada Posisi Duduk	523	572	621	30	501	550	599	30
9. Tinggi siku pada Posisi Duduk	181	231	282	31	175	229	283	33
10. Tebal Paha	117	140	163	14	115	140	165	15
11. Jarak dari Pantat ke Lutut	500	545	590	27	488	537	586	30
12. Jarak dari Lipat Lutut ( <i>popliteal</i> ) ke Pantat	405	450	495	27	488	537	586	30
13. Tinggi Lutut	448	496	544	29	428	472	516	27
14. Tinggi Lipat Lutut ( <i>popliteal</i> )	361	403	445	26	337	382	428	28
15. Lebar Bahu ( <i>bideltoid</i> )	382	424	466	26	342	385	428	26
16. Lebar Panggul	291	331	371	24	298	345	392	29
17. Tebal Dada	174	212	250	23	178	228	278	30
18. Tebal Perut ( <i>abdominal</i> )	174	228	282	33	175	231	287	34
19. Jarak dari Siku ke Ujung Jari	405	439	473	21	374	409	447	34
20. Lebar Kepala	140	150	160	6	135	146	157	7
21. Panjang Tangan	161	176	191	9	153	168	183	9
22. Lebar Tangan	71	79	87	5	64	71	78	4
23. Jarak Bentang dari Ujung Jari Tangan Kiri ke Kanan	1.520	1.663	1.806	87	1.400	1.523	1.646	75
24. Tinggi Pegangan Tangan ( <i>grip</i> ) pada Posisi Tangan Vertikal ke Atas & Berdiri Tegak	1.795	1.923	2.051	78	1.713	1.841	1.969	79
25. Tinggi Pegangan Tangan ( <i>grip</i> ) pada Posisi Tangan Vertikal ke Atas & Duduk	1.065	1.169	1.273	63	945	1.030	1.115	52
26. Jarak Genggam Tangan ( <i>grip</i> ) ke Punggung pada Posisi Tangan ke Depan (horizontal)	649	708	767	37	610	661	712	31

Tabel 5.6.

Antropometri Kaki Orang Indonesia yang didapat dari interpolasi data Dempster (1955), Reynolds (1978), dan Nurmianto (1991).

Dimana : Panjang telapak kaki = 15,2% tinggi badan pria dan 14,7% tinggi badan wanita. Dari pendekatan tersebut diusahakan interpolasi antropometri dengan koefisien variansi yang sesuai.

D I M E N S I	P R I A				W A N I T A			
	5th	50th	95th	S.D.	5th	50th	95th	S.D.
1. Panjang Telapak Kaki	230	248	266	11	212	230	248	11
2. Panjang Telapak Lengan Kaki	165	178	191	8	158	171	184	8
3. Panjang Kaki sampai Jari Kelingking	186	201	216	9	178	191	204	8
4. Lebar Kaki	82	89	96	4	81	88	95	4
5. Lebar Tangkai Kaki	61	66	71	3	49	54	59	3
6. Tinggi Mata Kaki	61	66	71	3	59	64	69	3
7. Tinggi Bagian Tengah Telapak Kaki	68	75	82	4	64	69	74	3
8. Jarak Horisontal Tangkai Mata Kaki	49	52	55	2	46	49	52	2



<b>Assembly</b>		<b>Inspection</b>	
Rough easy seeing	30	Ordinary	50
Rough difficult seeing	50	Difficult	100
Medium	100	Highly difficult	200
Fine	500	Very difficult	500
Extra fine	1000	Most difficult	1000
<b>Auditoriums</b>		<b>Library</b>	
Assembly only	15	Reading areas	
Exhibitions	30	Reading printed material	30
Social activities	5	Study and note taking	70
<b>Banks</b>		Card files	100
Lobby		Circulation desks	70
General	50	<b>Offices</b>	
Writing areas	70	Reading handwriting in pencil, active filing, mail sorting	100
Teller's stations	150	Reading handwriting in ink, intermittent filing	70
Posting and keying	150	Reading high contrast or well printed materials	30
<b>Conference rooms</b>		Conferring and interviewing	30
Critical seeing tasks	100	Corridors	20
Conferring	30	<b>Residences</b>	
Note-taking during projection	30	Specific visual tasks	
<b>Hospitals</b>		Dining	15
Anesthetizing and preparation room	30	Grooming, shaving, make-up	50
Lobby (or entrance foyer)		Food preparation	50
During day	50	Ironing	50
During night	20	Sewing	
Medical records room	100	Dark fabrics	200
Nurses station		Medium fabrics	100
General—day	70	Light fabrics	50
General—night	30	<b>General lighting</b>	
Patients' rooms		Conversation, relaxation	10
General	20	Visual tasks	30
Reading	30		
Observation (by nurse)	2		
Surgical suite			
Operating room, general	200		
Operating table	2500		

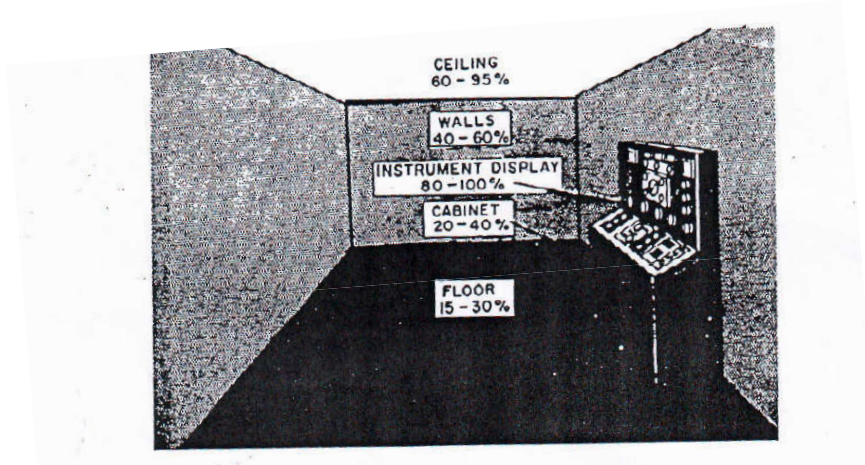


Figure WRKSTN-D2: General Recommendations for Workplac Reflectances<sup>3</sup>

Color	Reflectance	Color	Reflectance
White.....	85		
<b>Light:</b>		<b>Dark:</b>	
Cream.....	75	Gray.....	30
Gray.....	75	Red.....	13
Yellow.....	75	Brown.....	10
Buff.....	70	Blue.....	8
Green.....	65	Green.....	7
Blue.....	55		
<b>Medium:</b>		<b>Wood Finish:</b>	
Yellow.....	65	Maple.....	42
Buff.....	63	Satinwood.....	34
Gray.....	55	English Oak.....	17
Green.....	52	Walnut.....	16
Blue.....	35	Mahogany.....	12

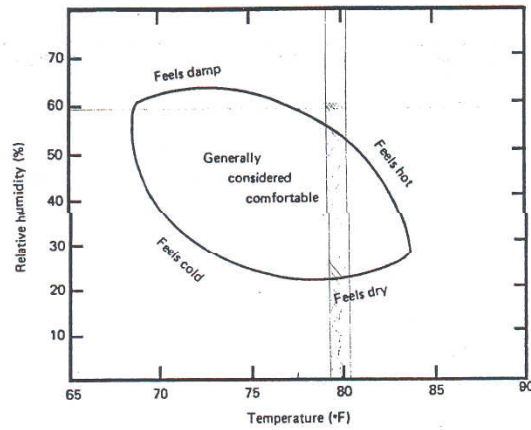


Figure WRKSTN-E4: Comfort Zone as a Function of Relative Humidity Versus Temperature<sup>2</sup>

Common Sounds	Noise Level (dB)	Effect
Carrier deck jet operation Air raid siren	140	Painfully loud (blurring vision, nausea, dizziness)
Jet takeoff (200 feet) Thunderclap Loud Disco Auto horn (3 feet)	130 120	Begin to "feel" the sound Hearing becomes uncomfortable
Pile drivers	110	Cannot speak over the sound
Garbage truck	100	
Heavy truck (50 feet) City traffic	90	Very annoying
Alarm clock (2 feet) Hair dryer	80	Annoying
Noisy restaurant Freeway traffic Man's voice (3 feet)	70	Telephone use difficult
Air conditioning unit (20 feet)	60	Intrusive
Light auto traffic (100 feet)	50	Quiet
Living room Bedroom Quiet office	40	
Library Soft whisper (15 feet)	30	Very quiet
Broadcasting studio	20	
	10	Just audible
	0	Hearing begins