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LAMPIRAN 1

Tabel Konversi Satuan

<u>SATUAN PANJANG :</u>		<u>SATUAN BERAT :</u>	
1 mil	= 1760 yards = 5280 feet = 1.609 km	1 US Long ton	= 2240 lbs = 1016 kg
1 yard	= 3 feet = 0,914 meter	1 US Short ton	= 2000 lbs = 907 kg
1 foot	= 12 inches = 308,4 mm	1 pound (lb)	= 16 ounces = 7000 grains = 0,454 kg
1 inch	= 25,4 mm	1 ounce (oz)	= 0,0625 pound = 28,35 gr
100 ft/min	= 0,508 m/det	1 grain	= 64,8 m . gr = 0,023 ounce
1 km	= 1000 m = 0,621	1 lb/ft	= 1,488 kg/m
1 meter	= 1000 mm = 1,094 yard = 3,281 feet = 39,37 inches	1 metrik ton	= 1000 kg = 0,984 long ton = 2205 lbs
1 mikron	= 0,001 mm = 0,000039 inch	1 kilogram	= 1000 gr = 2.205 pound
1 m/det	= 196,9 ft/min	1 gram	= 1000 m . gr = 0,03527 ounce = 15,43 grains
<u>SATUAN LUAS :</u>		1 kg/m	= 0,672 lbs/f
1 mil . 2	= 640 Acres = 259 Hektar	<u>SATUAN VOLUME :</u>	
1 Acre	= 4840 sq . yards = 0,4047 Hektar	1 cu . yard	= 27 cu . feet = 0,765 m ³
1 sq . yard	= 9 sq . feet = 0,836 M ²	1 cu . feet	= 1728 cu . inches = 28,32 liter
1 sq . feet	= 144 sq . inches = 0,0929 m ²	1 cu . inch	= 16,39 mm ³
1 km ²	= 100 Hektar = 0,3861 sq . mile	1 Imp.gallon	= 277,4 cu.inches = 4,55 liter
1 Hektar	= 10.000 m ² = 2,471 Acres	1 US Gallon	= 0,833 Imp.gallon = 3,785 liter
1 m ²	= 1.000.000 mm ² = 1,196 sq . yards		

LAMPIRAN 5

Tabel A-9 Sifat-sifat Air (Zat cair Jenuh)

Catatan $Gr, Pr = \left(\frac{g\beta\rho^2 C_p}{\mu k} \right) x^3 \Delta T$

°F	°C	C_p kJ/kg.°C	ρ kg/m ³	μ kg/r. . s	k W/m.°C	Pr	$\left(\frac{g\beta\rho^2 C_p}{\mu k} \right)$ 1/m ³ °C
32	0	4.225	999.8	1.79x10 ⁻³	0.566	13.25	
40	4.44	4.208	999.8	1.55	0.575	11.35	1.91x10 ⁹
50	10	4.195	999.2	1.31	0.585	9.40	6.34x10 ⁹
60	15.56	4.186	998.6	1.12	0.595	7.88	1.08x10 ¹⁰
70	21.11	4.179	997.4	9.8x10 ⁻⁴	0.640	6.78	1.46x10 ¹⁰
80	26.67	4.179	995.8	8.6	0.614	5.85	1.91x10 ¹⁰
90	37.22	4.174	994.9	7.65	0.623	5.12	2.48x10 ¹⁰
100	37.78	4.174	993.0	6.82	0.630	4.53	3.3x10 ¹⁰
110	43.33	4.174	990.6	6.16	0.637	4.04	4.19x10 ¹⁰
120	48.89	4.174	988.8	5.62	0.644	3.64	4.89x10 ¹⁰
130	54.44	4.179	985.7	5.13	0.649	3.30	5.66x10 ¹⁰
140	60	4.179	983.3	4.71	0.654	3.01	6.48x10 ¹⁰
150	65.55	4.183	980.3	4.3	0.659	2.73	7.62x10 ¹⁰
160	71.11	4.186	977.3	4.01	0.665	2.53	8.84x10 ¹⁰
170	76.67	4.191	973.7	3.72	0.668	2.33	9.85x10 ¹⁰
180	82.22	4.195	970.2	3.47	0.673	2.16	1.09x10 ¹¹
190	87.78	4.199	966.7	3.27	0.675	2.03	
200	93.33	4.204	963.2	3.06	0.678	1.90	
220	104.4	4.216	955.1	2.67	0.684	1.66	
240	115.6	4.229	946.7	2.44	0.685	1.50	
260	126.7	4.250	937.2	2.19	0.685	1.36	
280	137.8	4.271	928.1	1.98	0.685	1.24	
300	148.9	4.296	918.0	1.86	0.684	1.17	
350	176.7	4.371	890.4	1.57	0.677	1.02	
400	204.4	4.467	859.4	1.36	0.665	1.00	
450	232.2	4.585	825.7	1.20	0.646	0.85	
500	260	4.731	785.2	1.07	0.616	0.83	
550	287.7	5.024	735.5	9.51x10 ⁻⁵			
600	315.6	5.703	678.7	8.68			

Adaptasi dari A.I.Brown dan S.M.Marco, "Introduction to Heat Transfer," 3d ed., McGraw-Hill Book Company, New York, 1958

LAMPIRAN 8

Daftar Sifat-sifat Bukan-Logam (lanjutan)

Bahan	Suhu °C	k, W/m°C	ρ , kg/m ³	C, kJ/kg°C	α , m ² /s x10 ⁷
Bahan Isolasi					
Asbes :					
Ditetal longgar	-45 0 100	0.149 0.154 0.161	470-570	0.816	3.3-4
Papan asbes semen	20	0.74			
Lembaran	51	0.166			
Lakan, 40 laminasi/in	38	0.057			
	150	0.069			
	260	0.083			
20 laminasi/in	38	0.078			
	150	0.095			
	260	0.112			
Gelombang, 4 plat/in	38	0.087			
	93	0.100			
	150	0.119			
Asbes semen	-	2.06			
Wol basalt, 2.2 lb/ft ³	32	0.04	35		
Karton, gelombang	-	0.034			
Celotex	32	0.048			
Papan gabus, 10 lb/ft ³	30	0.043	160		
Gabus butiran ulang	32	0.045	45-120	1.88	2-5.3
Ciling halus	32	0.045	150		
Tanah diatom (Sil-o-cel)	0	0.061	320		
Lakan, rambut	30	0.036	150-250		
Wol	30	0.052	330		
Serat, papan isolasi	20	0.048	240		
Wol gelas, 1.5 lb/ft ³	23	0.036	24	0.7	22.6
Insulex, kering	32	0.064			
		0.144			
Kapuk	30	0.035			
Magnesia, 85%	38	0.067	270		
	93	0.071			
	150	0.074			
	204	0.080			
Wol buatan, 10 lb/ft ³	32	0.040	160		
Ditetal longgar	150	0.067	61		
	260	0.087			
Serbuk gergaji	23	0.059			
Silika aerogel	32	0.024	140		
Serutan kayu	23	0.059			

Adaptasi ke satuan SI dari A.L. Brown dan S.M. Marco, "Introduction to Heat Transfer," 3d ed Mc Graw-Hill Book Company, New York, 1958