

London Underground Passenger minimum train ventilation rates required by standards

LU Standard E6222 A2 requires a minimum ventilation rate per passenger of **0.009** m³/s and emergency vent rate of **0.0025** m³/s

LU Standard E6325 A2 defines a "Full Load" of passengers as the theoretical crush load of standing passengers (@ 7 passengers per m²) * 0.7 plus all seats occupied.

To convert from m³/s to cfm - multiply m³/s by 0.00047

0.00047

0.00047

Line	Rolling Stock Type	Max Seated Passengers	Max number of Standing Passengers @ 7 passengers/m ² * 0.7	Max number of Passengers @ Full Load (E6325 A2)	Max Ventilation (m ³ /s per train @ Full Load)	Cubic feet per minute (cfm)	Cubic litres / second	Emergency Ventilation (m ³ /s per train @ Full Load)	Cubic feet per minute (cfm)	Carriages per train	Max cfm per carriage	Emergency cfm per carriage
Metropolitan	S8	360	853	1213	10.913	23220	10913	3.03	6450	8	2903	806
District/Cir/H&C	S7	304	778	1082	9.742	20727	9742	2.71	5757	7	2961	822
Bakerloo	1972TS	268	571	839	7.553	16070	7553	2.10	4464	7	2296	638
Piccadilly	1973TS	228	559	787	7.079	15063	7079	1.97	4184	6	2510	697
Central	1992TS	272	760	1032	9.284	19752	9284	2.58	5487	8	2469	686
W&C	1992TS	136	363	499	4.487	9548	4487	1.25	2652	4	2387	663
Victoria	2009TS	288	719.6	1008	9.068	19294	9068	2.52	5360	8	2412	670
Northern	1995TS	248	541	789	7.102	15110	7102	1.97	4197	6	2518	700
Jubilee	1996TS	290	715	1005	9.042	19239	9042	2.51	5344	7	2748	763

Average	2578	716
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