

Update of the IAQ Objectives

Parameter	Unit	Averaging Time	Old Objectives (Effective since 2003)		New Objectives (Effective on 1 July 2019)	
			Excellent Class	Good Class	Excellent Class	Good Class
Room Temperature	°C	8 hours	20 to <25.5	< 25.5	---	
Relative Humidity	%	8 hours	40 to <70	<70	---	
Air Movement	m/s	8 hours	<0.2	<0.3	---	
Carbon Dioxide (CO ₂)*	ppmv	8 hours	<800	<1,000	800	1,000
Carbon Monoxide (CO)	ppmv	8 hours	<1.7	<8.7	1.7	6.1
Respirable Suspended Particulates (PM ₁₀)*	µg/m ³	8 hours	<20	<180	20	100
Nitrogen Dioxide (NO ₂)	µg/m ³	8 hours	<40	<150	40	150
		1 hour	---	---	100	200
Ozone (O ₃)	µg/m ³	8 hours	<50	<120	50	120
Formaldehyde (HCHO)	µg/m ³	8 hours	<30	<100	30	100
		30 mins	---	---	70	100
Total Volatile Organic Compounds (TVOC)	µg/m ³	8 hours	<200	<600	200	600
Radon (Rn)	Bq/m ³	8 hours	<150	<200	150	167
Airborne Bacteria	cfu/m ³	8 hours	<500	<1,000	500	1,000
Mould*	---	---	---	---	Assessment in the form of walkthrough inspection	

* Measurement for CO₂ and PM₁₀ is required for 1st to 4th annual re-certification for certificate renewal in a 5-year cycle. Assessment of mould is also required when the new IAQ objectives are adopted.

Update of the Alternative Compliance Arrangement for TVOC

VOC Species	Averaging Time	Old Objectives (Effective since 2003) (for Good Class IAQ Only)	New Objectives (Effective on 1 July 2019) ⁽¹⁾
Benzene	8 hours	16.1 µg/m ³ (5 ppbv)	17 µg/m ³ (5.3 ppbv)
Carbon tetrachloride	8 hours	103 µg/m ³ (16 ppbv)	---
Chloroform	8 hours	163 µg/m ³ (33 ppbv)	---
1,2-Dichlorobenzene	8 hours	500 µg/m ³ (83 ppbv)	---
1,4-Dichlorobenzene	8 hours	200 µg/m ³ (33 ppbv)	---
Ethylbenzene	8 hours	1,447 µg/m ³ (333 ppbv)	---
Tetrachloroethylene	8 hours	250 µg/m ³ (37 ppbv)	250 µg/m ³ (37 ppbv)
Toluene	8 hours	1,092 µg/m ³ (290 ppbv)	---
Trichloroethylene	8 hours	770 µg/m ³ (143 ppbv)	230 µg/m ³ (43 ppbv)
Xylene (<i>o</i> -, <i>m</i> -, <i>p</i> - isomers)	8 hours	1,447 µg/m ³ (333 ppbv)	---
Naphthalene	8 hours	---	10 µg/m ³ (1.9 ppbv)
Polycyclic Aromatic Hydrocarbons (as benzo(a)pyrene)	8 hours	---	1.2 ng/m ³ (1.2 x 10 ⁻⁴ ppbv)

(1) The objectives are applicable to both Excellent and Good Classes. Compliance with the respective objective of the five individual VOC species is regarded as meeting Good Class TVOC objective. If at the same time the sum of the five individual VOC is less than or equal to 200 µg/m³ (the Excellent Class TVOC objective level), it will be regarded as complying with the Excellent Class TVOC objective.