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Building Material Emission Rate Measurements and Requirements

California – Standard Practice - 01350

California 01350 is a Special Environmental Requirements standard specification developed by the State of California to cover key environmental performance issues related to the selection and handling of building materials. Materials used in the construction of all State buildings must meet these requirements. The following are the maximum emission factors for floor coverings, wall coverings, wall base cove, acoustic ceiling tiles, and thermal insulation for a partial list of the volatile organic compounds (VOCs).

	Maximum VOC Emission Factors (μg/m^2-hr) [a]				
Compound	Floor Coverings	Wall Coverings	Wall Base Cove	Acoustic Ceiling Tiles	Thermal Insulation
Acetaldehyde	131	31	1159	65	131
Benzene	56	13	497	28	56
1,4-Dichlorobenzene	746	179	6,624	371	746
Ethylene glycol	373	89	3,312	186	373
Formaldehyde	31	7	273	15	31
n-Hexane	6,527	1,565	57,960	3,249	6,527
Naphthalene	8	2	75	4	8
Phenol	186	45	1,656	93	186
Styrene	839	201	7,452	418	839
Tetrachloroethene	33	8	2,90	16	33
Toluene	280	67	2,484	139	280
Trichloromethane (chloroform)	280	67	2,484	139	280
Vinyl acetate	186	45	1,656	93	186
m,p-Xylene	653	156	5,796	325	653
o-Xylene	653	156	5,796	325	653

a.) Maximum emission factors as required by California Standard Practice - 01350, "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental". Office scenario. Partial list of VOC's

Indoor Environmental Engineering provides laboratory test chamber measurements of the chemical emission rates of new building materials, office furnishings, and office equipment.

Healthy Building Services

Contaminant Emission Rate Testing

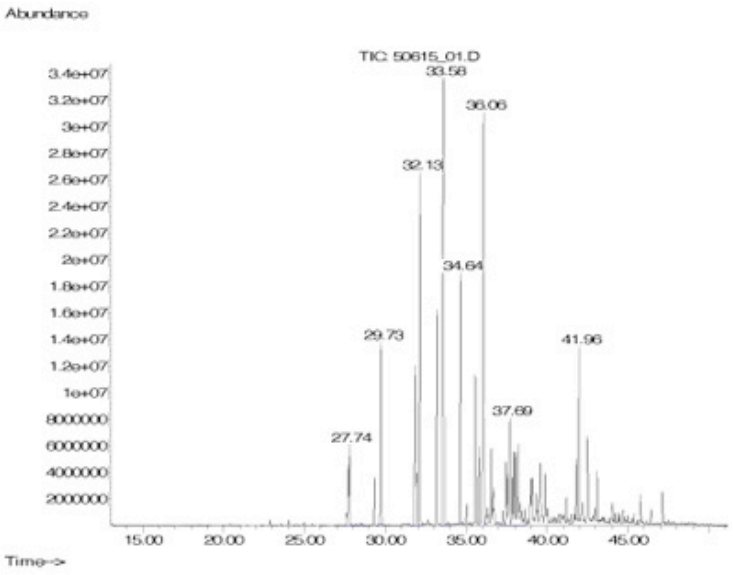
Measurement of contaminant emission rates in situ using the Field Laboratory Environmental Cell (FLEC), or off-site, using small, medium or large laboratory environmental test chambers.

Indoor Environmental Engineering provides on-site measurements of the chemical emission rates of installed flooring and other indoor finishes.

Diagnostic Services

Contaminant Emission Rate Testing

Measurement of contaminant emission rates in situ using the Field Laboratory Environmental Cell (FLEC), or off-site, using small, medium or large laboratory environmental test chambers.



Chromatogram depicting the response peaks and retention times of individual volatile organic compounds from gas chromatography/mass spectrometry analysis of an "in situ" emission rate sampling of a building material surface.

Picture of the FLEC emission cell that can be used to measure contaminant emission rates of building materials onsite after materials have been installed.