Chapter Ind 20

DUSTS, FUMES, VAPORS AND GASES

			•
Ind 20.001	Scope	Ind 20.10	General exhaust ven-
Ind 20.01	Definitions		tilation; hazardous
Ind 20.02	Harmful exposure		area
Ind 20.03	General ventilation	Ind 20.11	Approval of plans
1110 20.00		Ind 20.12	Dretont of drawt from
T	required	111u 20,12	Extent of dust, fume,
Ind 20.04	General ventilation		yapor and gas removal
	equipment	Ind 20.16	Capacity of local ex-
Ind 20.05	Exhaust ventilation at		haust ventilation sys-
	source of contamina-		tems
	tion and make-up air	Ind 20.17	Hoods at exhaust out-
Ind 20.06	Protection from dusty		let
1114 = 0.00	operations	Ind 20.18	Ducts
Ind 20.07		Ind 20.19	
Ina 20.07	Protection from harm-		Mechanical equipment
	ful fumes, vapors or	Ind 20.20	Disposal of exhaust
_	gases		material
Ind 20.08	Separation of exhaust	Ind 20.21	Respirators and sim-
	systems		ilar protective devices
Ind 20.09	Protection against in-	Ind 20.22	Shop cleaning
	terference of exhaust	Ind 20.23	Maintenance and op-
		III 20.26	anation of continues
	systems .		eration of equipment

Ind 20.001 Scope. (1) The provisions of this code shall apply to all places of employment and public buildings as defined in the statutes. **History:** Cr. Register, April, 1957, No. 16, eff. 5-1-57.

Ind 20.01 Definitions. (1) Ventilation is the process of supplying or removing air by natural or mechanical means to or from any space.

- (2) A ventilation system is any combination of building construction, machinery, devices or equipment, so proportioned, arranged, installed, operated and maintained as to secure, with normal operation, the standard of ventilation required by this code.
- (3) A heating system is any combination of building construction, machinery, devices or equipment, so proportioned, arranged, installed, operated and maintained as to produce and deliver in place the required amount and character of heating service.
- (4) A gravity system of ventilation is any ventilation, the practical effectiveness of which depends wholly upon atmospheric conditions, such as relative density, temperature or wind motion.
- (5) A mechanical system of ventilation is any ventilation, exhaust or heating system, the effectiveness of which depends upon the operation of power-driven fan equipment.
- (6) An exhaust system of ventilation is any combination of building construction, machinery, devices or equipment, so proportioned, arranged, maintained and operated, that dusts, fumes, vapors, gases, vitiated air, or other materials injurious to health, are effectively withdrawn from the breathing zone of employes and frequenters and disposed of in an approved manner.
- (7) Air supply is the delivery and distribution of the air required for ventilation.
- (8) Outside air is air that is taken from outside the building and is free from contamination of any kind in proportions detrimental to the health or comfort of the persons exposed to it.
- (9) The outside air intake includes the ducts and outdoor openings through which outside air is admitted to a ventilation or heating system.

Dust, Fumes, Vapors and Gases Register, October, 1961, No. 70

- (10) An outlet or supply opening is any opening, the sole purpose of which is to deliver air into any space to provide heating, ventilation or air conditioning.
- (11) An exhaust or "return" opening is any opening, the sole purpose of which is to remove air from any space being heated, ventilated or air conditioned.
- (12) A duct is any pipe, flue or channel used, or intended to be used, for the conveyance of air, gases or entrained materials pertaining to a heating or a ventilation system. An underground duct is any duct wholly, or in part, below the surface of the ground adjacent to the
- (13) A hood is the enlargement of an outlet, shaped and arranged in a manner to direct air motion to, or confine exhaust air currents at, the source of air contamination.
 - (14) Dust is an air suspension of solid particles of any material.
- (15) Fumes are the products of combustion or of chemical action on matter such that it is held in suspension in air.
- (16) Vapor is the gaseous form of substances which are normally in solid or liquid state and which can be changed to these states by increasing the pressure or decreasing the temperature.
- (17) Gases are normally formless fluids which tend to occupy a space or enclosure completely and uniformly at ordinary temperatures and pressures.
- (18) The term "harmful" as applied to the effect of dusts, fumes, vapors or gases means any mechanical or toxic action which in any way injures any part of the body or reduces in efficiency the normal function of any part of the body.

History: Cr. Register, April, 1957, No. 16, eff. 5-1-57.

Ind 20.02 Harmful exposure. Harmful exposure, concentrations that equal or exceed those listed in the most recent list of maximum allowable concentrations (Threshold Limit Values) published by the American Conference of Governmental Industrial Hygienists shall constitute harmful exposures or harmful concentrations.

Note: The American Conference of Governmental Industrial Hygienists is located in the United States Public Health Service Offices, 1014 Broadway, Cincinnati 2, Ohio. Copies of the current "Threshold Limit Values" for 1961 are also on file with the revisor of statutes, the secretary of state, and the industrial commission.

History: Cr. Register, April, 1957, No. 16, eff. 5-1-57; r. and recr. Register, October, 1961, No. 70, eff. 11-1-61.

Ind 20.03 General ventilation required. Ventilation shall be provided and maintained for all occupied areas in places of employment as required under section Ind 58.53 of the Heating, Ventilation and Air Conditioning code issued by the industrial commission.

History: Cr. Register, April, 1957, No. 16, eff. 5-1-57.

Ind 20.04 General ventilation equipment. The nature and control of air supply, and the details of general ventilation equipment installation and maintenance, shall be in conformance with the requirements

Next page is numbered 7