

Types of Fire Safety Measures prescribed for issuance of Fire NOCs

Sl.No.	Type of Fire Safety	Reference
1	Electrical Safety	As per Section-2 , Part-8 of NBC, 2016
2	Smoke Management	As per Clause 4.6 of Part-4 & Clause 2.61 of Part-8 of NBC, 2016
3	Breathing Balcony	As per Clause 2.53 of Part-4 of NBC, 2016
4	Kitchen Safety	As per Annexure-G of Part-4 of NBC, 2016
5	Oxygen Cylinder Safety	Introduced as additional safety measures in addition to NBC.
6	Aerosol Suppression system (Gas based)	As per Clause 2.33 of Part-4 of NBC, 2016
7	<p>The following relevant industry experts' reports and recommendations to minimize the human loss and to contain property damage.</p> <ul style="list-style-type: none"> a. HARA- Hazard Analysis and Risk Assessment b. QRA- Quantitative Risk Assessment c. Onsite & Offsite Emergency plans d. PESO - Petroleum and Explosives Safety Organization e. OISD - Oil Industry Safety Directorate f. Mines Safety Officer/ Boiler Inspector g. Solvent handling plants h. Fire and Gas mapping study reports. i. Hazardous area classification study reports. j. Lighting Arrester survey report. k. Exothermic Reactors Safety <ul style="list-style-type: none"> (i) Calorimetric study reports particularly for Hydrogenation / Nitrification/Grignard/ Polymerization reactions. (ii) High level of automation with Distributed Control System (DCS) with minimum human interference and interlocker for terminating reaction. 	Introduced as additional safety measures in addition to NBC as prescribed in MSIHC Rules, 1989, concerned OISD Standards and other Safety Rules.
8	Disclosure of information to prevent disasters in industries	As per A.P. Factories Act 1948.

2.50 Psychrometric Chart — A chart graphically representing the thermodynamic properties of moist air.

2.51 Recirculated Air — The return air that has been passed through the conditioning apparatus before being re-supplied to the space.

2.52 Refrigerant — The fluid used for heat transfer in a refrigerating system, which absorbs heat at a low temperature and a low pressure of the fluid and rejects heat at a higher temperature and a higher pressure of the fluid, usually involving changes of state of the fluid.

2.53 Relative Humidity — Ratio of the partial pressure of actual water vapour in the air as compared to the partial pressure of maximum amount of water that may be contained at its dry-bulb temperature.

NOTE — When the air is saturated, dry-bulb, wet-bulb and dew point temperatures are all equal, and the relative humidity is 100 percent.

2.54 Return Air — Air returned from conditioned or refrigerated space.

2.55 Sensible Heat — Heat which is associated with a change in temperature; in contrast to a heat interchange in which a change of state (latent heat) occurs.

2.56 Sensible Cooling — The process of removing sensible heat (lowering the dry-bulb temperature) from the air passing through it under specified conditions of operation.

2.57 Shade Factor — The ratio of instantaneous heat gain through the fenestration with shading device to that through the fenestration.

2.58 Sick Building Syndrome (SBS) — A term used to describe the presence of acute non-specific symptoms in the majority of people, caused by working in buildings with an adverse indoor environment.

NOTE — SBS could be a cluster of complex irritative symptoms like irritation of the eyes, blocked nose and throat, headaches, dizziness, lethargy, fatigue, irritation, wheezing, sinusitis, congestion, skin rash, sensory discomfort from odours, nausea, etc. These symptoms are usually short-lived and experienced immediately after exposure; and may disappear when one leaves the building.

2.59 Smoke Barrier — A continuous membrane, either vertical or horizontal, such as a wall, floor, or ceiling assembly, that is designed and constructed to restrict the movement of smoke in conjunction with a smoke control system.

2.60 Smoke Damper — A damper similar to fire damper, however, having provision to close automatically on sensing presence of smoke in air distribution system or in conditioned space.

2.61 Smoke Management — A smoke control method

that utilizes natural or mechanical systems to maintain a tenable environment for the means of egress from a large-volume space or to control and reduce the migration of smoke between the area on fire and communicating spaces.

2.62 Stack Effect — The vertical airflow within buildings caused by the temperature-created density differences between the building interior and exterior or between two interior spaces.

2.63 Static Pressure — The normal force per unit area that would be exerted by a moving fluid on a small body immersed in it if the body were carried along with the fluid. Practically, it is the normal force per unit area at a small hole in a wall of the duct through which the fluid flows (piezometer) or on the surface of a stationary tube at a point where the disturbances, created by inserting the tube, cancel. It is supposed that the thermodynamic properties of a moving fluid depend on static pressure in exactly the same manner as those of the same fluid at rest depend upon its uniform hydrostatic pressure.

2.64 Supply Air — The air that has been passed through the conditioning apparatus and taken through the duct system and distributed in the conditioned space.

2.65 Terminal Devices — Devices fixed in the air conditioned space for distribution of conditioned supply air and return of air such as, supply and return air grilles and diffusers.

2.66 Thermal Adaptation — The gradual diminution of the people's response to repeated environmental stimulation and subsumes all processes which building occupants undergo in order to improve the fit of the indoor climate.

2.67 Thermal Comfort — That condition of mind which expresses satisfaction with the thermal environment and is assessed by subjective evaluation.

2.68 Thermal Insulation Material — A material used over the conducting material to retard the flow of heat energy in the form of heat loss or gain to facilitate the temperature control as the process and prevent permeability of moist vapour and reduces condensation on cold surfaces.

2.69 Thermal Energy Storage — Storage of thermal energy, sensible, latent or combination thereof for use in central system for air conditioning or refrigeration. It uses a primary source of refrigeration for cooling and stored thermal energy for reuse at peak demand or for backup as planned.

2.70 Velocity Pressure — The pressure exerted by movement of air which makes the air to travel to longer