**Action Research Project Report**

 **on**

 **IS 6074 : 1971**

**Code of Practice for Functional Requirements of hotels, restaurants and other food service establishments**

Sectional Committee No.: CED 12

Title: Functional Requirements In Buildings Sectional Committee

1. **OBJECTIVE OF THE STANDARD**

This Indian Standard was adopted by Bureau of Indian Standards. This code covers requirements specific to the large food service establishments. However, theBasic principles of hygiene underying the technical advice in this code should be applied with appropriate modifications to all food service establishments.

**2 SCOPE OF THE STANDARD**

This standard Jays down the functional requirements essential for proper upkeep of hotels, restaurants and other food service establishments.

**3 ACTION RESEARCH METHODOLOGY AND RESEARCH**

The objective of this review process is to study the developments, is any, for incorporation the latest international/other major advancements and assimilate the same in the Indian Standard is so far as these are applicable to Indian context.

**4 NATIONAL AND INTERNATIONAL REFERENCES**

1. IS 1256 : 1967\* - Code of building byelaws
2. IS 4878 : 1968 - Byelaws for constructions of Cinema buildings
3. IS 2470 (Part I): 1985 - Code of practice for installation of septic tanks: Part 1 design criteria and construction (Second Revision)
4. IS : 2470 ( Part II ) :1985 - Code of practice for installation of septic tanks: Part 2 secondary treatment and disposal of septic tank effluent (Second Revision)
5. IS: 2170 ( Part I ) : I963\* - Accessories for Milling Arbors
6. IS 1860:1980\* - Code of Practice for Installation, Operation and Maintenance of Electric Passenger and Goods Lifts
7. IS 2190:2010\*\* - Selection, installation and maintenance of first-aid fire extinguishers - Code of practice (Fourth Revision)
8. IS 2217:1963\* - Recommendations for providing first-aid fire fighting arrangement in public building
9. IS 4393-2016\*\* - Basic requirement for an abattoir (Second Revision)

\* Withdrawn

\*\* Revised

**5. COMMENTS**

* **WATER, PLUMBING & WASTE**

**Capacity**

1. The water source and system shall be of sufficient capacity to meet the peak water demands of the FOOD ESTABLISHMENT.
2. Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands throughout the FOOD ESTABLISHMENT

 **System**

 Water shall be received from the source through the use of:

1. An APPROVED public water main; or
2. One or more of the following shall be constructed, maintained, and operated according to LAW:
3. Non-public water main, water pumps, pipes, hoses, connections, and other appurtenances,
4. Water transport vehicles, or
5. Water containers.
* **Plumbing System**

 **Materials**

 **Approved**

1. A PLUMBING SYSTEM and hoses conveying water shall be constructed and repaired with APPROVED materials according to LAW.
2. A water filter shall be made of SAFE MATERIALS.
* **Design, Construction, and Installation**

 **Approved System and Cleanable Fixtures**

1. A PLUMBING SYSTEM shall be designed, constructed, and installed according to LAW.
2. A plumbing fixture such as a handwashing sink, toilet, or urinal shall be easily cleanable.
* **Handwashing Sink, Installation**
1. A HANDWASHING SINK shall be equipped to provide water at a temperature of at least 29.4oC through a mixing valve or combination faucet.
2. A steam mixing valve may not be used at a HANDWASHING SINK.
3. A self-closing, slow-closing, or metering faucet shall provide a flow of water for at least 15 seconds without the need to reactivate the faucet.
4. An automatic handwashing facility shall be installed in accordance with the manufacturer’s instructions.
* **Backflow Prevention, Air Gap**

An air gap between the water supply inlet and the flood level rim of the PLUMBING FIXTURE, EQUIPMENT, or non-FOOD EQUIPMENT shall be at least twice the diameter of the water supply inlet and may not be less than 25 mm.

* **PHYSICAL FACILITIES**

 **Light Bulbs, Protective Shielding**

1. Except as specified in (B) of this section, light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas where there is exposed FOOD; clean EQUIPMENT, UTENSILS, and LINENS; or unwrapped SINGLE-SERVICE and SINGLE-USE ARTICLES.
2. Shielded, coated, or otherwise shatter-resistant bulbs need not be used in areas used only for storing FOOD in unopened packages, if:
3. The integrity of the packages cannot be affected by broken glass falling onto them; and
4. The packages are capable of being cleaned of debris from broken bulbs before the packages are opened.
5. An infrared or other heat lamp shall be protected against breakage by a shield surrounding and extending beyond the bulb so that only the face of the bulb is exposed.
* **Heating, Ventilating, Air Conditioning System Vents**

Heating, ventilating, and air conditioning systems shall be designed and installed so that make-up air intake and exhaust vents do not cause contamination of FOOD, FOOD-CONTACT SURFACES, EQUIPMENT, or UTENSILS.

* **Lighting**
* **Intensity**

The light intensity shall be:

* 1. At least 108 lux (10 foot candles) at a distance of 75 cm (30 inches) above the floor, in walk-in refrigeration units and dry FOOD storage areas and in other areas and rooms during periods of cleaning;
	2. At least 215 lux (20 foot candles):
1. At a surface where FOOD is provided for CONSUMER self-service such as buffets and salad bars or where fresh produce or PACKAGED FOODS are sold or offered for consumption,
2. Inside EQUIPMENT such as reach-in and under-counter refrigerators; and
3. At a distance of 75 cm (30 inches) above the floor in areas used for handwashing, WAREWASHING, and EQUIPMENT and UTENSIL storage, and in toilet rooms; and
	1. At least 540 lux (50 foot candles) at a surface where a FOOD EMPLOYEE is working with FOOD or working with UTENSILS or EQUIPMENT such as knives, slicers, grinders, or saws where EMPLOYEE safety is a factor.
* **Ventilation**

**Mechanical**

If necessary to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes, mechanical ventilation of sufficient capacity shall be provided.

**4 ACTION RESEARCH OUTPUT**

In pursuance to the above, the Indian Standard still seems to be relevant and the expert members are requested to give their inputs. It may be decided to reaffirm the standard without any change from the date being due for further period of five years. In case of any further developments, the same may be taken up through necessary amendment/revision in between also.

**VAIBHAV YADAV**

Scientist-B

Water Resources Department