

Model Regulation / Bye Laws for Installation of Solar Assisted Water Heating Systems in Functional Buildings.

The following provisions are proposed for inclusion in the building bye laws of different States/UTs:

- 1. “No new building in the following categories in which there is a system or installation for supplying hot water shall be built unless the system or the installation is also having an auxiliary solar assisted water heating system:**
 - a) Hospitals & Nursing Homes**
 - b) Hotels, Lodges, and Guest houses**
 - c) Hostels of Schools, Colleges, Training Centres**
 - d) Barracks of armed forces, paramilitary forces and police**
 - e) Individual residential buildings having more than 150 sq. mt. plinth area**
 - f) Functional Buildings of Railway Stations and Airports like waiting rooms, retiring rooms, rest rooms, inspection bungalows and catering units**
 - g) Community Centres, Banquet Halls, Barat Ghars, Kalyan mandaps and buildings for similar use.”**

SCHEDULE ‘.....’

1. Definitions:

i)	“Solar Assisted Water Heating System”	a device to heat water using solar energy as heat source.
ii)	“Auxiliary back up”	electrically operated or fuel fired boilers/systems to heat water coming out from solar water heating system to meet continuous requirement of hot water.
iii)	“New Building”	Such buildings of above said categories for which construction plans have been submitted to competent authority for clearance.
iv)	“Existing Building”	Such buildings which are licensed to perform their respective business.

2. Installation of Solar Water Heating Systems

- a) New Buildings:** Clearance of plan for the construction of new buildings of the aforesaid categories shall only be given if they have a provision in the building design itself for an insulated pipeline from the rooftop in the building to various distribution points where hot water is required. The building must have

a provision for continuous water supply to the solar water heating system. The building should also have open space on the roof top which receives direct sun light. The load bearing capacity of the roof should atleast be 50 kg. per sqm. All new buildings of above said categories must complete installation of solar water heating systems before obtaining necessary license to commence their business.

- b) **Existing Buildings:** Installation of Solar Assisted Water Heating Systems in the existing building shall be made mandatory at the time of change of use to above said category provided there is a system or installation for supplying hot water.
- 3. **Capacity:** The capacity of solar water heating system to be installed on the building of different categories shall be decided in consultation with the local bodies. The recommended minimum capacity shall not be less than 25 litres per day for each bathroom and kitchen subject to the condition that maximum of 50% of the total roof area is provided with the system.
- 4. **Specifications:** Installation of Solar Assisted Water Heating Systems shall conform to BIS (Bureau of Indian Standards) specification IS 12933. The solar collectors used in the system shall have the BIS certification mark.
- 5. **Auxilliary System:** Wherever hot water requirement is continuous, auxiliary heating arrangement either with electric elements or oil of adequate capacity can be provided.
