



# **BEATING THE HEAT** DURING COVID-19 – DO'S

Air cooling & Air conditioning



Uttarakhand State Disaster Management Authority Government of Uttarakhand

# Air Cooling & Air Conditioning Equipment

- Temperature setting of all AC devices to be in the range of  $24-30^{\circ}$  C.
- Relative Humidity to be in the range or 40-70%.
- Recirculation of air to be avoided &intake of fresh air to be preferred.
- Cross Ventilation to be adequately ensured & replacement of air by use of exhaust fans.
- Frequent air sanitisation by regular cleaning and sanitisation of filters of indoor unit.

#### For areas with mild exposure &controlled environment: Residences, Standalone Workspaces/Offices

- Window fitted desert coolers.
- ACs (Window/Split)
- Fans aided by maximum fresh air intake by opening of doors/ windows & supported by air replacement through exhaust fan facilities
- Temperature &Humidity range to be maintained as per general guidelines.

## For areas with Moderate Exposure & Concentration: Meeting Rooms, Dispensaries etc.

- Window fitted desert coolers
- Room ACs (Windows/Split)
- VRV/VRF systems (Indoor Units)
- Fans aided by maximum fresh air intake by opening of doors/windows supported by air replacement through exhaust fan facilities.
- Temperature &Humidity range to be maintained as per general guidelines.

## For areas with Maximum Exposure & Concentration: Institutions, Malls etc.

- Window fitted desert coolers
- Room ACs/VRV/VRF systems
- Fans aided by max. fresh air intake by opening of doors/windows supported by exhaust fan facilities.
- Temperature &Humidity range to be maintained as per general guidelines
- Avoid Central AC to the extent possible, if not feasible then
  - Air handling Units to run on max fresh air as possible
  - Heat Recovery Wheels not be used as possible
  - AHUs to run 2 hrs prior &stop 2 hrs after office time

For areas with Ultimate Exposure & Concentration: Hospitals, Isolation Wards etc.

- Ensure adequate room ventilation
- For Ac rooms, ensure 12 ACPH\* & Filtering of exhaust air.
- Negative pressure in isolation rooms desirable for patients requiring aerosolization procedures.
- These rooms may have standalone AC &not to be a part of central air conditioning.
- Temperature & Humidity range to be maintained as per general guidelines.
- If air conditioning is not available, negative pressure to be created through putting up 3-4 exhaust fans driving air out or the room.

#### **Guidelines for Ceiling Fans**

- Should run at low-medium speed with intake of fresh air as much as possible by keeping windows& doors opened
- Switch to window desert coolers as it doesn't work in high temperature & high humidity

#### **Guidelines for Window Fitted Room Cooler**

- Should run with intake of fresh air & arrangement of exhaust as far as possible.
- The water of the cooler &cooler pads must be disinfected at regular intervals
- To control high humidity in the rainy season exhaust fans must be used
- Switch to window fitted desert cooler supplemented with ducted air-cooling plants as it doesn't work in high humidity.
- Guidelines for prevention of Dengue to be followed.

Guidelines for Room AC (Window/Split)

- Should run with temperature setting between  $24-30^{\circ}$  C
- Use with Windows partially open for fresh intake of air

**Guidelines for Exhaust Fans** 

- Should run continuously for exhausting the hot air
- For supplementing air circulation by all types of air cooling/ conditioning devices like ceiling fan, Air cooler, Room AC, etc.

**Guidelines for Ceiling Evaporative Type Air Cooling/Ducted Air Cooler** 

- Should run with intake of fresh air & arrangement of exhaust as far as possible.
- The water, pads of the blower section &ducts must be disinfected at regular intervals.
- Switch to window fitted cooler supplemented with duct air cooling plants it doesn't work at high humidity.
- Guidelines for prevention of Dengue to be followed.

#### Guidelines for VRF\*/VRV\*System (High wall, Cassette type Units etc.)

- Should run with temperature range of 24-30<sup>0</sup> C with maximum fresh air supplemented by adequate exhaust
- Wherever this system is installed, filters of indoor units to be disinfected frequently