



ADMINISTRATIVE REGULATION

Office of the City Manager

Number	608
Sections	1-6
Effective Date	3/1/13
Responsible Dept.	Public Works
Review Date	3/1/17

SUBJECT: COMFORT STANDARDS POLICY

1. **Policy:** To regulate thermal comfort service levels in city owned buildings, the associated work requirements and associated energy expenses of the General Services section of Public Works and non-departmental utility budget.
2. **Authority:** City Charter Section 401, AR 702 and resolution 2011-25 (Energy Action Plan)
3. **Application:** This policy applies to all departments in conjunction with the General Services section of Public Works.
4. **Definitions:**
 - 4.1. **ANSI/ASHRAE standard 55-2010:** Thermal Environmental Conditions for Human Occupancy – determines appropriate thermal comfort temperatures based on the industry standard of satisfying 80% of occupants.
 - 4.1.1. Variables used to determine the temperature ranges are: operative temperature, humidity, clothing levels, metabolic rate (activity), air speed and radiant temperatures.
 - 4.1.2. ASHRAE has developed a graphical representation for typical occupancies for a set metabolic rate and clothing level. This standard range is between 70 degrees and 76 degrees F for normally clothed occupants.
 - 4.2. **HVAC** – heating, ventilating and air conditioning
 - 4.3. **Design Day** - All HVAC systems are designed around a specific design day. The city's cooling systems are designed to maintain comfortable indoor temperatures based on a 90 degree F design day. Weather records show that there are relatively few (average <10-15) per year that exceed this temperature the HVAC systems are unable to maintain set temperatures and the temperatures will drift upward until the evening hours when outside air temperatures cool down and the systems can re-establish the set points.
 - 4.4. **Setpoint** – the setting the HVAC system is instructed to maintain.

4.5. Deadband – a controls term that sets limits adjacent to a setpoint at which a control system will take action. A deadband extends the life of the buildings systems by reducing the number of starts and stops for a piece of equipment thereby extending the life of the equipment and preserving the city's reserves.

4.6. OAT – Outside Air temperature

4.7. Comparative Weather Data – HB's climate is attractive and has relatively few days of above 90 degree F temperatures annually compared to Yorba Linda, Anaheim or Mission Viejo. There are no SCE registered cooling centers in Huntington Beach.

5. Policy:

5.1. The city of Huntington Beach establishes that building temperature set points shall not be heated above 72 degrees F (heating season – October 1 through May 31) or cooled below 74 degrees F (cooling season – June 1 through September 30). These setpoints have a 2 degree deadband that reduces excess wear and tear on mechanical equipment and maintains the city's long-term financial sustainability.

5.2. The range of acceptable heating temperature ranges are:
October 1 through May 31 - 70 degrees F to 74 degrees F
June 1 through September 30 – 72 degrees F to 76 degrees F

5.3. Facilities that are naturally ventilated or have operable windows shall have inter-connects to HVAC system; when windows are open no HVAC service shall be provided to that zone. For specific examples, see the Public Works Water Division Yard buildings.

5.4. Personal space heaters and personal refrigerators are not allowed.

5.5. Facilities Service request for hot or cold temperature calls must include sustained (>30 minutes) temperatures outside of the acceptable range described in this policy.

5.6. Scheduling – intermittently occupied zones shall be set back five (5) degrees F as a default when unoccupied. Fifteen (15) minutes before the beginning of a scheduled event the setpoint will be restored. At the end of events the setpoint shall be set back by five (5) degrees to the unoccupied status.

6. Procedures:

6.1. Departmental Staff Occupying a Facility: When occupants feel that the thermal comfort is not maintained in an appropriate range in an occupied facility, the on-site departmental staff shall use thermometers to take three (3) temperature measurements over the course of 30 minutes.

6.1.1. Room thermometers will be provided by the city.

6.1.2. When the three temperature readings are outside of the comfort ranges designated in this policy, departmental staff will then complete a facilities service

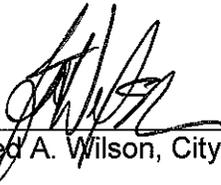
request form. The temperature readings and times taken shall be included in the facilities service request.

6.1.3. No action will be taken by Public Works: General Services for service requests where the temperature readings are within the ranges described in this policy.

6.2. Renters Occupying a Facility: Hot/cold complaints by room renters shall be addressed by taking three (3) independent (thermometer) readings over the course of 30 minutes. If the recorded temperatures are outside of the thermal comfort ranges described in this policy, then staff should complete a facilities service request form. The form shall include the specific location of the readings, the temperature readings and times that the readings were taken as well as any other relevant information.

6.3. Staff Training: Staff responsible for room rentals shall be provided training equipping them to describe the incredible value of city facility room rentals and disclose to the renting party the city's thermal comfort policy. This will help the renter determine the most appropriate rental facility for their needs.

6.4 Next Steps: Public Works: General Services shall respond to facilities service requests within 48 hours and report to the occupant the action taken. Public Works: General Services will analyze service request forms on an annual basis to improve the thermal comfort in city facilities as budgets permit.



Fred A. Wilson, City Manager