

HVAC Systems

(Heating, Ventilation, Air Conditioning)

Introduction

Heating, Ventilation, and Air Conditioning systems (HVAC) keep our buildings at a comfortable temperature and also provide fresh air in the building. They also can account for half or more of most buildings' energy use. Keeping them operating properly is important for occupant comfort and for energy efficiency. Large buildings typically have large central plants or chillers to accommodate their needs, like the Public Safety Facility. Other buildings may have smaller "package" units that use refrigerants to take heat from the office air and put it outside the building. Many advances have been made in efficiency and there are many different types of HVAC systems. Ductless mini-split systems are considered to be some of the most adaptable and efficient types available today.

What do I do if I have a temperature or climate control issue?

If you are having a temperature or climate issue in your workspace, you should contact Facilities Maintenance at 458-8501 or submit a work order request online. Many of our buildings have highly developed building control systems, and work around solutions like covering up a duct or cranking up a thermostat may cause even worse problems for other people in the building. Unless you are extensively familiar with the operation of the HVAC control systems in your building, DO NOT attempt to implement these kind of workaround solutions before contacting Facilities Maintenance.

Who do I contact for HVAC Installation and Replacement?

Contact Facilities Maintenance 458-8501 or submit a work order request online if you would like to install or replace HVAC equipment.

City of Santa Monica

**EASY
GUIDE**



City Specifications

Minimum Requirements

Generally, the City requirement is to choose the most efficient HVAC option available. The available options will be different for each building. If several units are reaching the end of their service life, it may make sense to look into substituting smaller individual units with a larger, more efficient central system. There are many financial incentives available as long as a high-efficiency system is chosen.

- Do not install equipment that uses CFCs or Halons
- Install MERV 13 filters wherever possible

HVAC System Maintenance

- Buildings that have Building Automation Systems should undergo diagnostics and retrocommissioning every 3 years.



Look for this eco-labels!



Important notes and Tips

This Guide is for sustainability standards and a Professional Engineer should be consulted on actual selection of equipment and/or energy model should be conducted in the selection process. This will be facilitated by Architecture Services.

Check out these "6 Sustainability Tips for Commercial HVAC That Also Save Money" https://www.pge.com/en_US/business/resources/tips-trends-and-incentives/energy-insights/past-articles/6-sustainability-tips-for-commercial-hvac-that-also-save-money.page

Benefits to our personal health, environment, and community

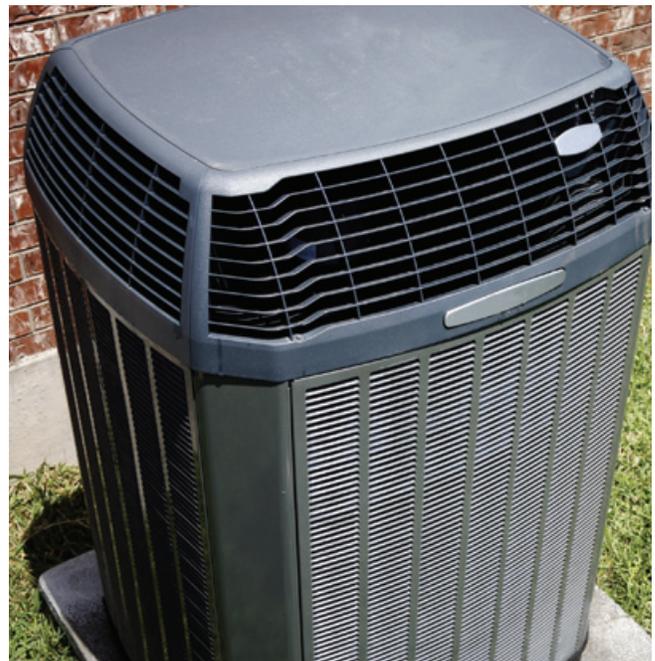
- Reduced energy use
- Reduced greenhouse gas emissions
- Cost savings
- Improved occupant comfort
- Improved indoor air quality



Surprising facts

Heating, ventilation and air conditioning (HVAC) systems are among the most energy-intensive mechanism of any business. In fact, space cooling alone accounts for 15% of the electricity used in commercial buildings on average. According to the U.S. Department of Energy (DOE), much of the energy and cost that goes into powering HVAC is lost to waste – upwards of 30% in the average commercial building.

Many commissioning projects boast payback periods of six months or less.



LEED for Existing Buildings: Operations and Maintenance credit

Efficient HVAC systems can contribute to EAc3
Refrigerant Management can contribute to EAc7
Existing building can contribute to EAc1.1 and 1.2

