

This document outlines different cooling strategies for cooling individual suites, common areas, and entire buildings.





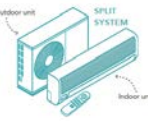
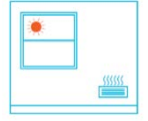
No-cost Cooling Strategies


Keeping buildings cool can be challenging, especially in existing buildings. Here are some no-cost ways to keep spaces cooler:

- Minimize heat gain - close blinds or drapes during the day
- Use natural ventilation if available - **keep windows closed during the day and open at night when it is cooler**
- Use a fan to increase airflow in a room
- When it's warmer inside than outside, use a bathroom fan and range hood to remove heat and humidity
- Limit heat from appliances like stoves, ovens, dryer, and dishwasher by reducing use on hot days

Mechanical Cooling Strategies

Where mechanical cooling is the only option available for tenants to reside comfortably and safely in their suites or to provide comfort in refuge areas, the table below lists options in an ascending order of efficiency.

Type of Cooling						
Cost (Purchase and Maintenance)	\$\$	\$\$\$	\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$\$

Efficiency  Least efficient Most efficient

Pros and Cons

Mini Split Heat Pumps – Ductless

- ✓ Provides cost savings: offers both heating and cooling
- ✓ Very efficient
- ✓ Quiet operation
- ✓ Running costs are low
- ✓ Requires only a small hole in wall
- May be used for multiple rooms
- × Expensive to purchase and install

Personal Fans – Pedestal/Tower

- ✓ Inexpensive to purchase
- ✓ Low running costs and energy usage
- ✓ Portable, adjustable airflow direction
- ✓ Provides temporary cooling when directed at the body
- Single room use only
- × Does not lower room temperature

Packaged Terminal Air Conditioners (PTACs)

- ✓ Provides cost savings: offers both heating and cooling
- Single room use only
- × Noisy operation
- × Requires large hole in wall, creating infiltration and sound transmission channels
- △ BCH design standards do not recommend using these systems

Portable Air Conditioners

- ✓ Portable
- ✓ Installation is easy and inexpensive
- Electric costs = 5 times that of a fan
- Only works for smaller sized spaces
- × Less efficient – operation discharges heat back into the room while cooling
- × Noisy operation
- × Has placement restrictions
- × Could go missing
- × Water drainage/management issues
- × Requires frequent filter maintenance
- △ 2 hose models are more efficient than single hosed models

Window Mounted Air Conditioners

- ✓ Relatively low noise
- Electric costs are 7 times that of a fan
- Single room use only
- × There are placement restrictions
- × Limits window use, water drips outside, security concerns
- × Could be a security risk
- × Requires frequent filter maintenance
- △ Mounting height should not exceed 5ft
- ! BCH design standards do not permit using these systems

Central Air Conditioning

- ✓ Quiet operation
- Cools entire suite/common areas
- △ Not an option in existing buildings