

Keeping Homes Cool

Thermal safety and retrofit options for residential property owners and managers

August 2026



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Understand the risk

Why indoor heat matters, and who is most at risk.

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A deeper look at each system named in the cooling option sheets.

Cooling Technology Reference Cards

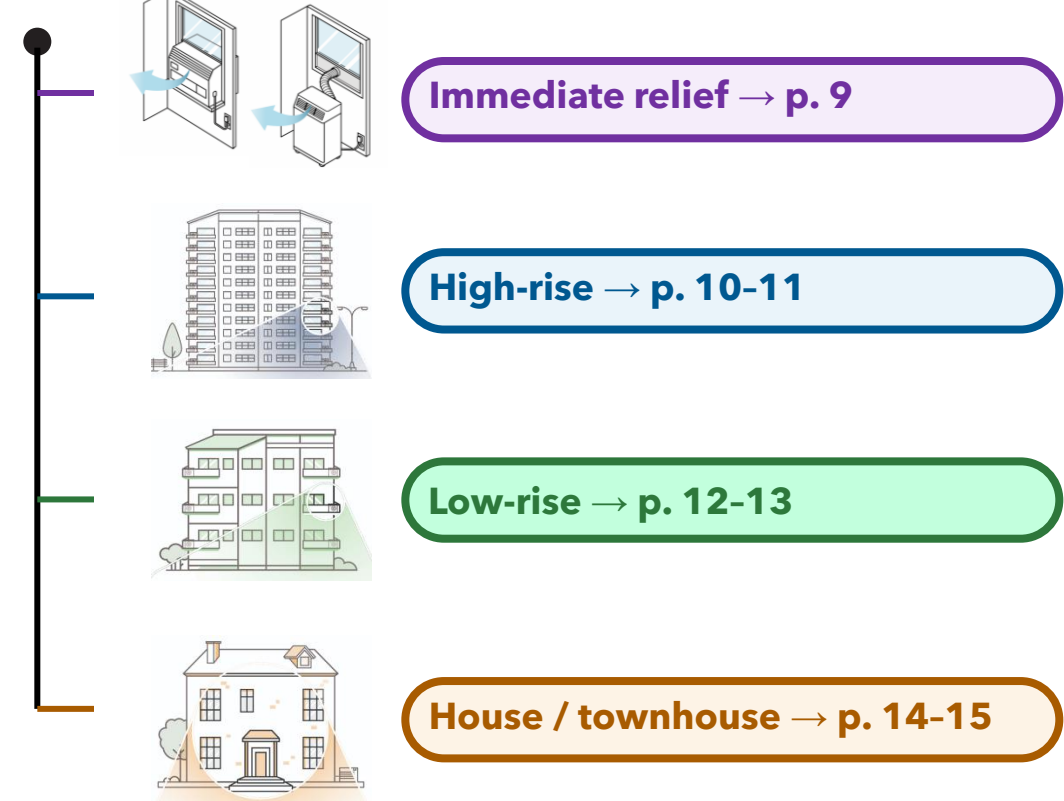
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Find your cooling options

Answer a few questions on p. 7 to see what fits your home or building.

START



About this Guide

A practical starting point for adding cooling to Toronto homes and residential buildings

Why this guide exists

Extreme heat can cause indoor temperatures to rise to unsafe levels, creating serious health and life-safety risks for residents. In rental housing, residents may have limited ability to make building-level improvements or install effective cooling on their own.

Who this guide is for

This guide is intended for Toronto owners or managers of residential properties, including apartment buildings, townhouses, and single-family homes. While many of the cooling options described may apply to condominium properties, this guide does not cover condo-specific governance, approvals, cost-sharing, or common-element responsibilities.

The guide is meant to help residential owners and managers:

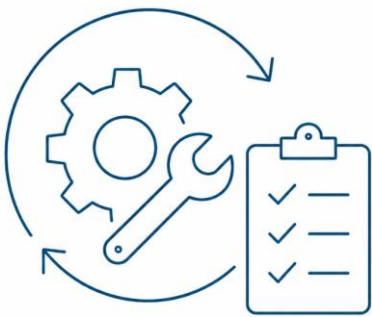
- 1 Understand the building’s cooling needs** from immediate to longer-term options
- 2 Identify suitable cooling options** based on the building’s characteristics
- 3 Take action** by developing a plan to add cooling to the building

Why should I consider adding cooling to my building?



Protect residents

Reduce exposure to unsafe indoor heat and support resident health & safety.



Make the most of planned upgrades

Integrate cooling with upcoming building renewals.



Strengthen your residential property

Improve comfort, attract residents, and add long-term value.



Have Questions?

Please contact the Municipal Licensing and Standards Division at MLSconsultations@toronto.ca

About this Guide

This document provides guidance on best practices for adding cooling to homes and residential buildings, rather than outline mandatory actions for property owners and managers.

Property owners and managers should consult the City webpage on [Indoor Temperatures in Apartment Units](#) or reach out to City staff at MLSc consultations@toronto.ca for information on current indoor temperature bylaw requirements.

Be sure to consult an expert

This guide provides general information and implementation considerations. It does not replace building-specific engineering, architectural, electrical, legal, financial, or contractor advice. Property owners are ultimately responsible for complying with all building requirements. Failure to obtain building permits can result in costly construction delays, legal action and/or the removal of work already completed. Owners should consult qualified professionals when evaluating cooling retrofit projects.

Window Opening Safety Rules

Under City bylaws, a property owner/operator must ensure that all supplied facilities (including air conditioning of all types) are constructed, installed, and maintained to function safely and effectively. A window air conditioning unit or portable unit that vents out a window is safely and securely installed when it is tightly fitted within the window opening and maintains an equivalent level of protection to a window safety device (e.g., sash guard or screen) with respect to limiting the window opening. However, there may need to be further measures taken to ensure safety requirements are met. Where the installation leaves gaps or openings, it is not securely installed, or does not maintain the required level of protection, additional safety measures may be required. For information on safety considerations and requirements about Indoor Temperature and Cooling, please visit this [Frequently Asked Questions document](#).

Supporting Residents During Extreme Heat

Property owners or managers can help residents stay safe during extreme heat by sharing trusted resources on staying cool, recognizing heat-related illness, finding nearby cooling spaces, and accessing support.



Toronto Public Health - Keep Cool [↗](#)

- Staying cool during hot weather
- Recognizing signs of heat-related illness
- Protecting children, older adults, and other vulnerable residents



Toronto Heat Relief Network - Cool Spaces Near You [↗](#)

- Air-conditioned public spaces such as libraries, community centres, and civic centres
- Other public cooling locations during heat events



Heat Warnings and Alerts [↗](#)

- Heat warnings and extreme heat alerts
- Forecast information
- Recommended protective actions during heat events



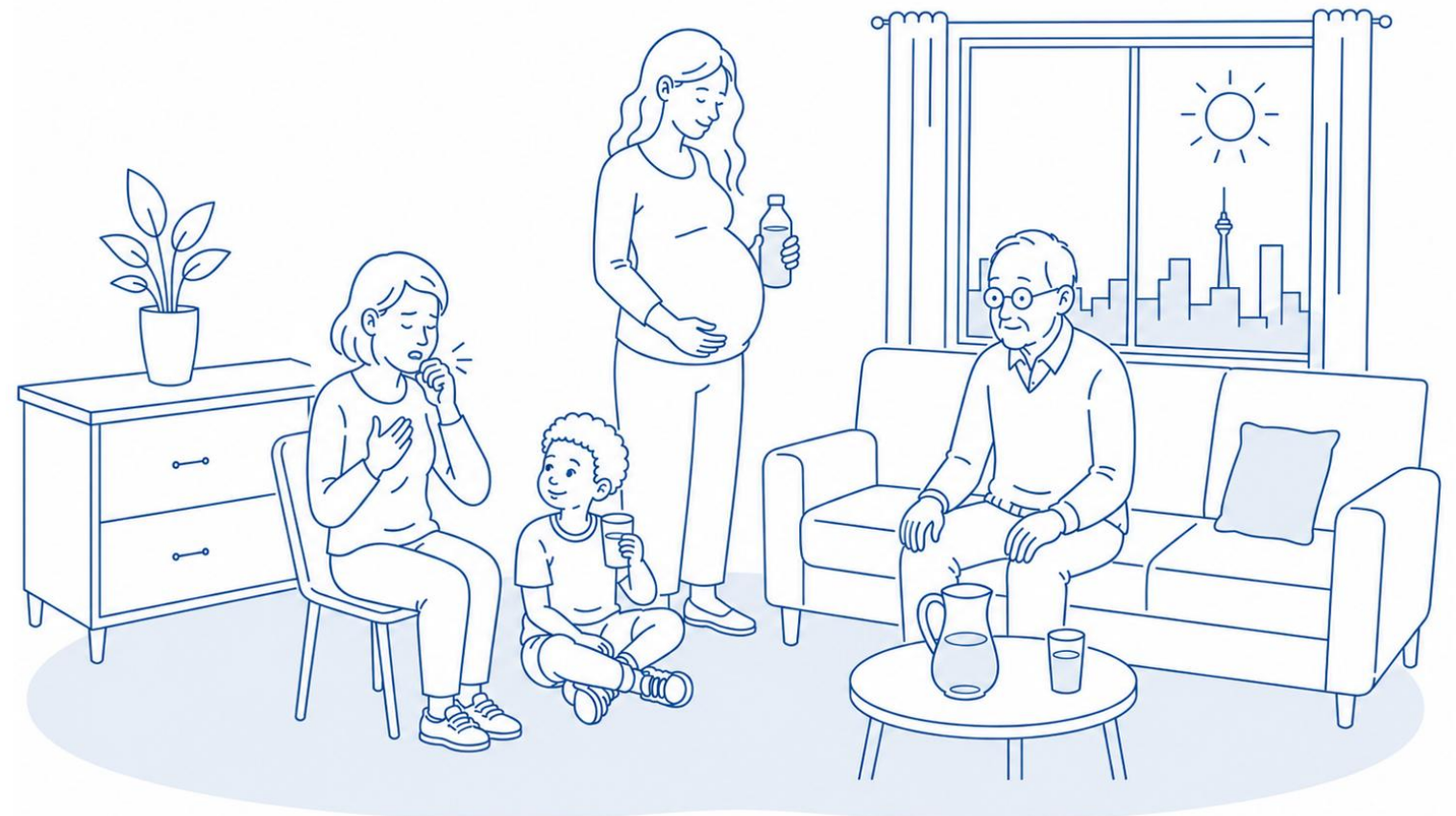
311 Toronto [↗](#)

- Information on cooling locations
- City services during extreme heat
- Referrals to additional supports

Who is at risk during extreme heat events?

Populations that may be more vulnerable include:

- Older adults
- Infants and young children
- Pregnant individuals
- People with chronic health conditions



Cooling and Thermal Safety: What Owners Should Know

A quick introduction to key concepts

Key Terms in this Guide

Thermal safety: Indoor conditions that help protect occupant health during hot weather.

Thermal comfort: How warm or cool a space feels. A space may feel uncomfortable before it becomes unsafe.

Single-room cooling / Partial active cooling: Cooling provided to one room or area, typically using a window or portable air conditioner. It can provide immediate relief from extreme heat but may not cool the entire dwelling.

Integrated cooling: A permanently installed system, such as heat pumps or centrally installed system, that cools part or all of a dwelling and may be coordinated with broader building upgrades.



Indoor heat and the 26°C benchmark

Research from Toronto Public Health and Health Canada has identified elevated indoor temperatures due to extreme heat events as a growing health risk. Maintaining indoor temperatures below 26°C can help reduce heat-related illness and support the health and safety of residents, particularly older adults, young children, and people with existing health conditions.

Cooling and Thermal Safety: What Owners Should Know

Could my building be prone to overheating?

Outdoor conditions can raise indoor heat.

Extended periods of hot weather, direct sun, and warm nights can cause heat to build up inside.

Building characteristics affect risk.

Orientation, insulation, shading, ventilation, roof exposure, and cooling access all influence how much heat enters and stays inside.

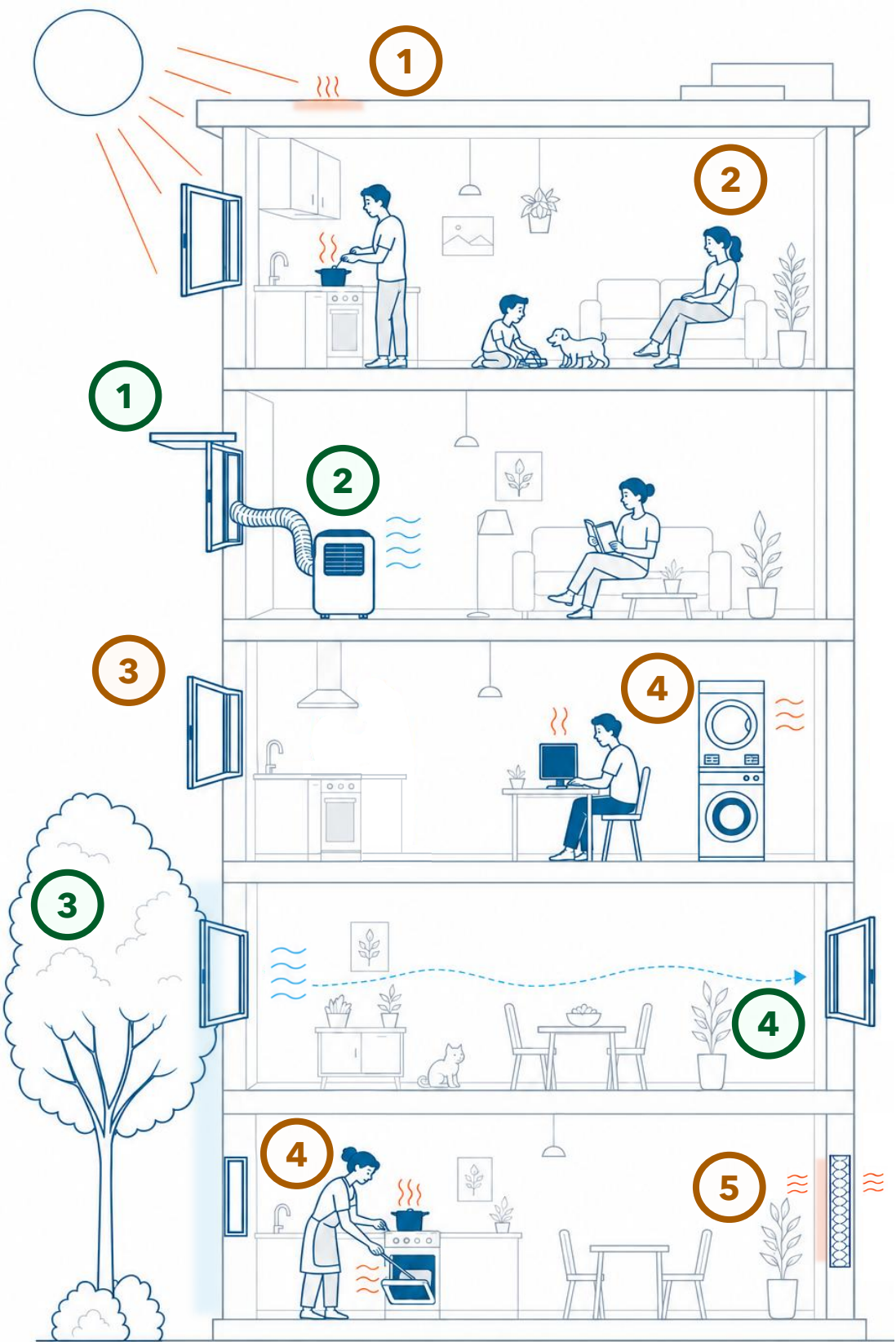
Some suites get hotter than others. Upper floor, corner, or those with large west- or south-facing windows may be more likely to overheat.

People and daily activities add heat. More occupants, cooking, and appliance use can increase indoor heat.

Where are your hot spots?



Identifying the most heat-vulnerable units or areas can help to prioritize and phase upgrades to reduce risk sooner, and make the most of the retrofit budget.



Factors that increase overheating risk

- 1 Roof exposure
- 2 More occupants
- 3 Large and/or south-west-facing windows
- 4 Use of heat producing appliances
- 5 Exposed walls and poor envelope / insulation

Factors that decrease overheating risk

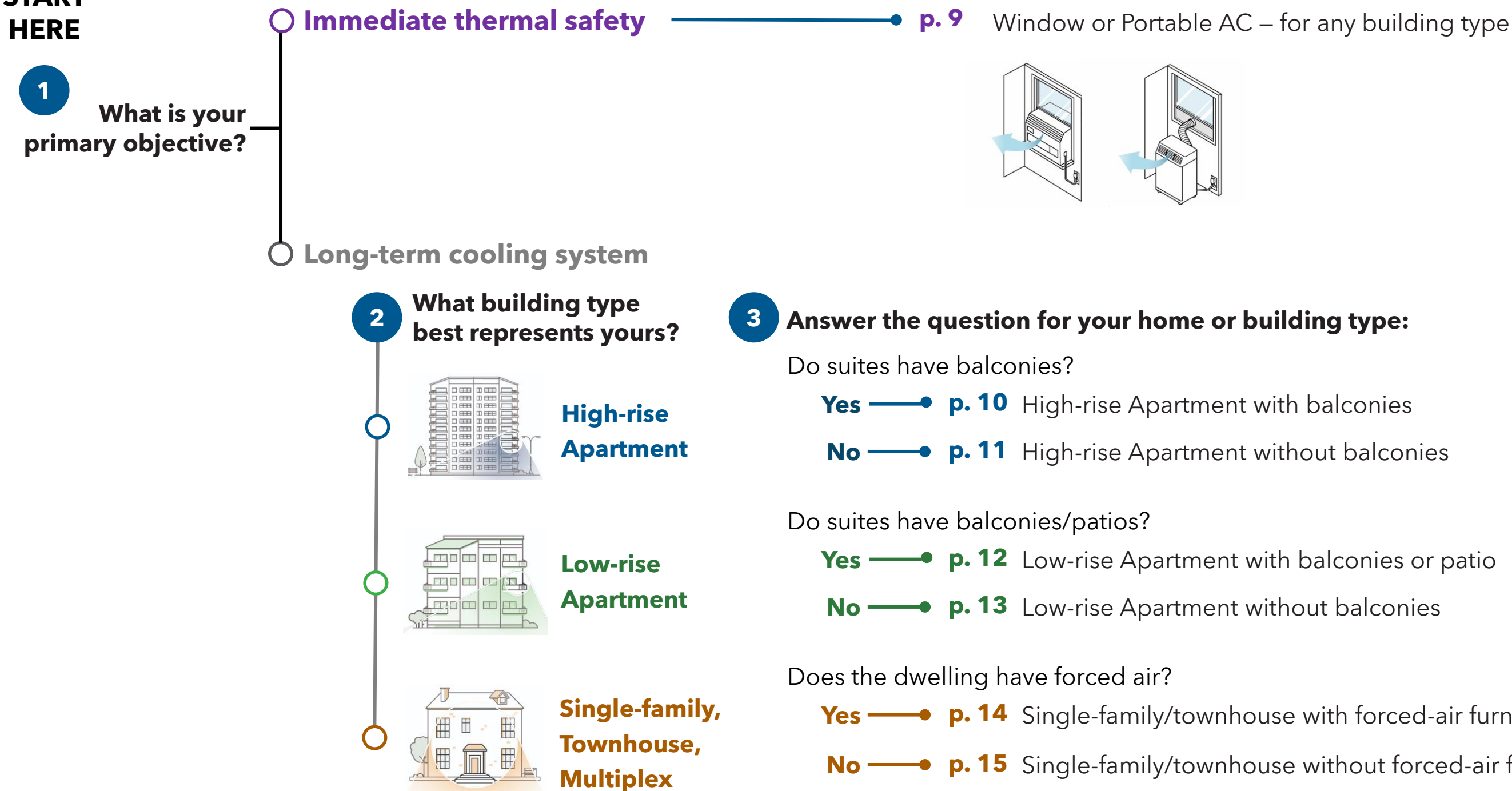
- 1 Physical shading
- 2 Mechanical cooling
- 3 Shading from tree cover
- 4 Ventilation

Find Your Starting Point

Use this map to identify the cooling option most relevant to your home or building.

System options reflect typical building systems in existing buildings without cooling.

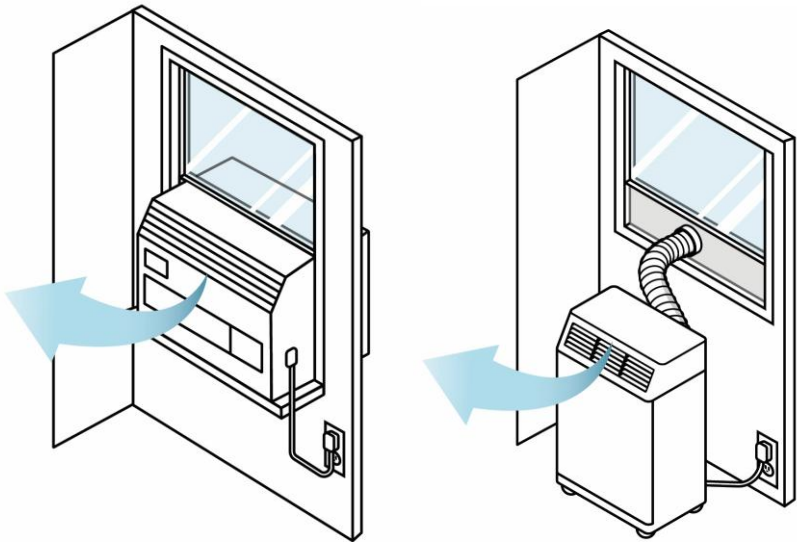
**START
HERE**



Immediate Risk Reduction & Partial Active Cooling

Portable and Window Air Conditioners

Portable and window air conditioners are among the fastest ways to reduce overheating risk in existing buildings. They can often be installed quickly, require limited building modifications, and provide a cooled space for residents during hot weather. For many owners, they can serve as an interim solution while planning longer-term cooling upgrades. For information on safety considerations and requirements about Indoor Temperature and Cooling, please see page 4 in this guidance document, and visit this [Frequently Asked Questions document](#).



Window AC

Portable AC

Benefits



For Owners

- + Quick implementation
- + Lower capital cost
- + Unlikely to need electrical upgrades



For Residents

- + Provides a cooled space
- + Can reduce heat-related health risks
- + Improves comfort during hot weather

Limitations



- Cools only one room, other rooms may still feel hot
- Higher noise levels
- May reduce daylight, views, or window access
- Less effective in shared homes or larger multi-bedroom spaces
- May require a window insert to allow for installation

Long-term Planning

Portable and window AC units can help address immediate overheating risks, but they do not support building carbon reductions and are not a replacement for long-term cooling systems.

Upgrading to heat pumps and integrated cooling can provide long-term thermal safety, whole-building comfort, and lower carbon emissions.

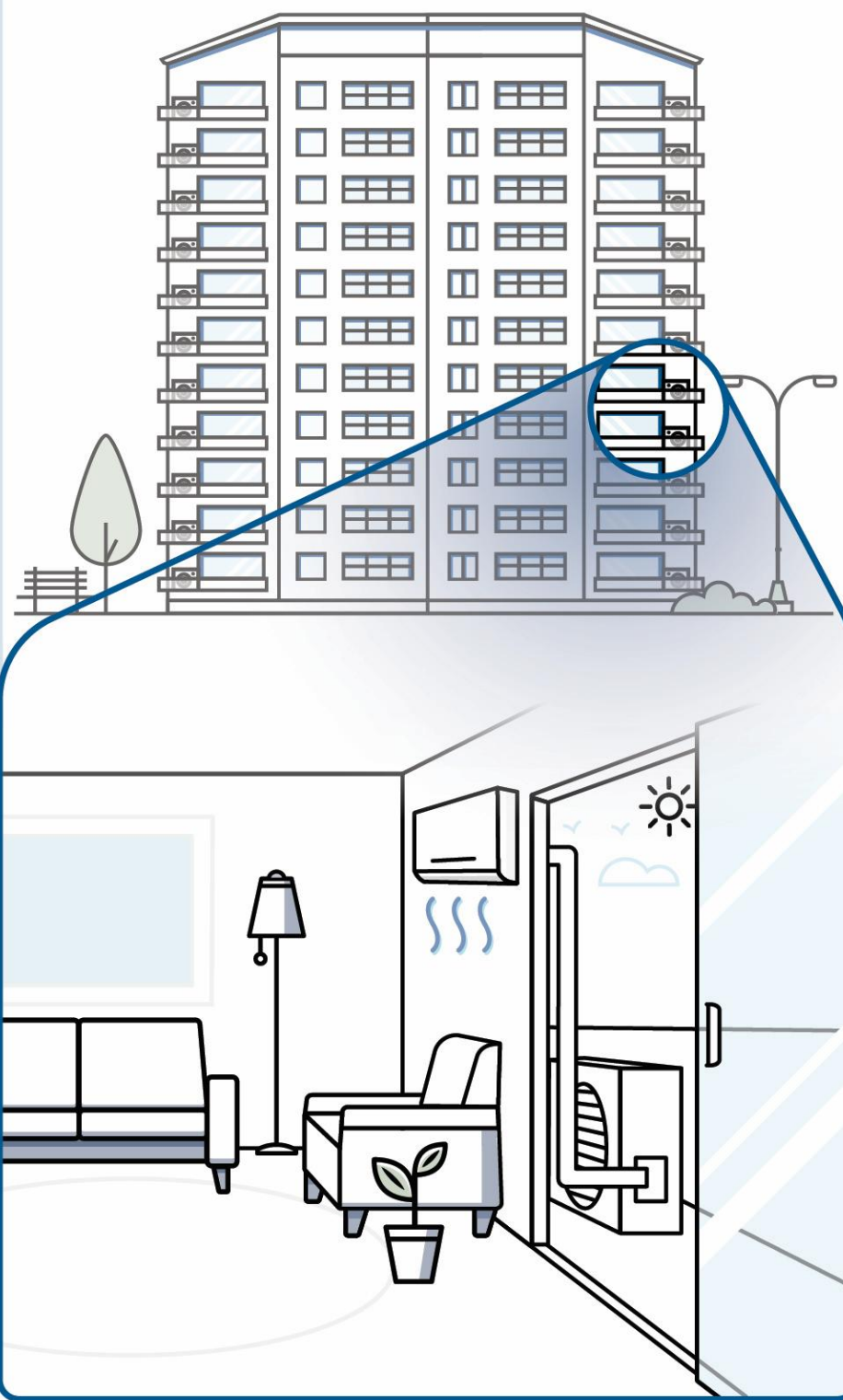
This Summer



- ✓ Focus on the suites most at risk of overheating.
- ✓ Close blinds or shades during the day and limit the use of heat-producing appliances.
- ✓ Install window or portable air conditioners where they are needed most.
- ✓ Keep doors open between cooled and adjacent rooms to improve air circulation.
- ✓ Help residents use their cooling equipment effectively.

Adding cooling to High-rise Apartment with balconies

HIGH-RISE APARTMENT WITH BALCONIES



Recommended Cooling System Multi-Split Heat Pump System

Balconies can often accommodate outdoor equipment, making multi-split systems a practical cooling option. Window and portable ACs remain an option where immediate cooling is required. Buildings with existing fan coil heating may be able to add central cooling equipment and adapt the existing infrastructure to provide cooling more cost effectively. When installing permanent equipment on balconies, safety considerations may apply (e.g., measures to prevent climbing or tripping).

What owners should consider

Installation: Balconies can often accommodate outdoor equipment, with piping routed to indoor units. Confirm equipment locations, piping routes, structural requirements, and maintenance access.

Cost & planning: Multi-split systems can have high upfront costs. Plan early and coordinate installation with other major building projects.

Carbon reduction: Heat pumps provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

Electric or gas heating?



Buildings with electric heating: May have enough electrical capacity to support multi-split cooling systems, so major building electrical upgrades may not be needed.

Buildings with natural gas heating: May need electrical studies and upgrades before multi-split cooling systems can be installed. These upgrades can increase project costs and timelines. Individual air conditioners can provide a faster way to improve resident thermal comfort and safety while a long-term cooling solution is developed.

What residents can expect



Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can adjust the temperature in the rooms they serve.

Day-to-day use: Multi-split systems provide quiet, consistent cooling while maintaining access to windows, daylight, and views.

Space impacts: Outdoor equipment uses space on the balcony and requires access for maintenance.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:

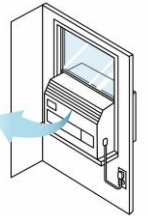


- Lower upfront cost
- Minimal design and construction work
- Less likely to require electrical service upgrades
- Shorter life span than multi-split heat pump system

Residents:



- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.

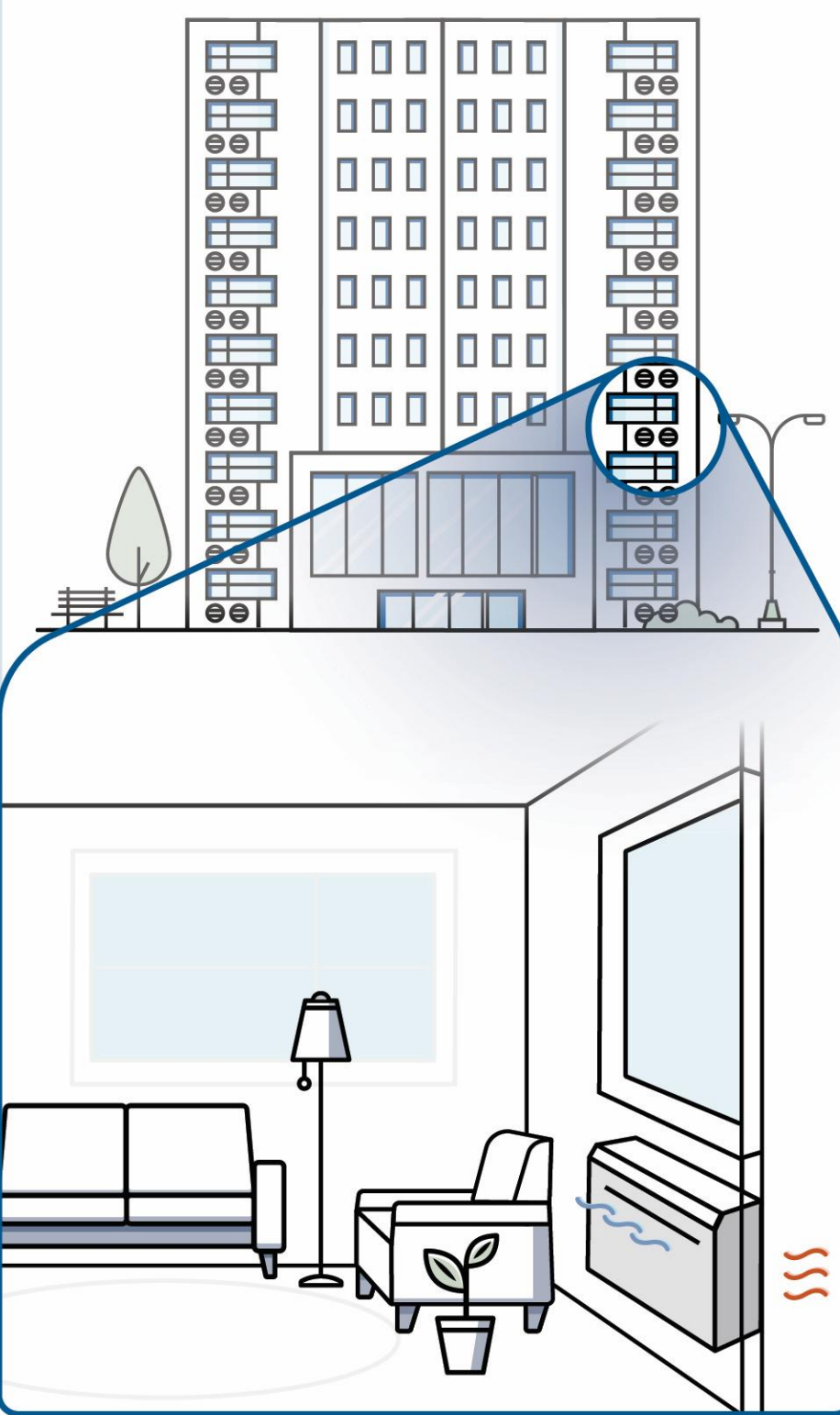


Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home or building.

Adding cooling to High-rise Apartment without balconies

HIGH-RISE APARTMENT WITHOUT BALCONIES



Recommended Cooling System

Packaged Cooling Systems

Packaged Terminal AC or Heat Pump (PTAC/HP)

Without balconies, outdoor condensing units cannot be located at the dwelling level. Packaged cooling systems are often the most practical way to provide permanent cooling. Window and portable ACs remain an option where immediate cooling is required. Buildings with existing fan coil heating may be able to add central cooling instead of installing new equipment in each suite.

Electric or gas heating?



Buildings with electric heating: May have sufficient electrical capacity to support packaged cooling systems, so major building electrical upgrades may not be needed.

Buildings with natural gas heating: May need electrical studies and upgrades before packaged cooling systems can be installed. These upgrades can increase project costs and timelines. Individual air conditioners can provide a faster way to improve resident thermal comfort and safety while a long-term cooling solution is developed.

What owners should consider



Installation: Installed directly through exterior walls. Requires exterior wall openings and unit-by-unit installation. Preferred systems sit mostly in the room and only require small holes to the exterior.

Cost & planning: Packaged cooling systems require moderate to high upfront investment. Plan early and coordinate installation with HVAC, envelope, or other major renewal projects.

Carbon reduction: PTHPs provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect



Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can adjust the temperature in the rooms they serve.

Day-to-day use: Packaged cooling systems provide quiet, consistent cooling, while maintaining access to operable windows, daylight, and views.

Space impacts: Exterior wall installation results in minimal impact on space, but the area immediately around the unit needs to be kept clear for airflow.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:



- Lower upfront cost
- Minimal design and construction work
- Less likely to require electrical service upgrades
- Shorter life span than packaged cooling systems

Residents:



- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.



Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home or building.

Adding cooling to Low-rise Apartment with balconies

LOW-RISE APARTMENT WITH BALCONIES

Recommended Cooling System Multi-Split Heat Pump System

Balconies can provide a practical location for outdoor equipment, making multi-split systems a feasible long-term cooling solution. Low-rise multi-residential buildings may also offer some flexibility to locate outdoor equipment on roofs, exterior walls, or at grade. Window and portable ACs remain an option where immediate cooling is required. Buildings with existing fan coil heating may be able to add central cooling instead of installing new equipment in each suite. When installing permanent equipment on balconies, safety considerations may apply.

Electric or gas heating?



Buildings with electric heating: May have enough electrical capacity to support multi-split cooling systems, so major building electrical upgrades may not be needed.

Buildings with natural gas heating: May need electrical studies and upgrades before multi-split cooling systems can be installed. These upgrades can increase project costs and timelines. Individual air conditioners can provide a faster way to improve resident thermal comfort and safety while a long-term cooling solution is developed.

What owners should consider



Installation: Balconies can often accommodate outdoor equipment, with piping routed to indoor units. Confirm equipment locations, piping routes, structural requirements, and maintenance access

Cost & planning: Multi-split systems can have high upfront costs. Plan early and coordinate installation with other major building projects.

Carbon reduction: Heat pumps provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect



Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can adjust the temperature in the rooms they serve.

Day-to-day use: Multi-split systems provide quiet, consistent cooling while maintaining access to windows, daylight, and views.

Space impacts: Outdoor equipment uses space on the balcony and requires access for maintenance.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:



- Lower upfront cost
- Minimal design and construction work
- Less likely to require electrical service upgrades
- Shorter life span than multi-split heat pump system

Residents:



- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.

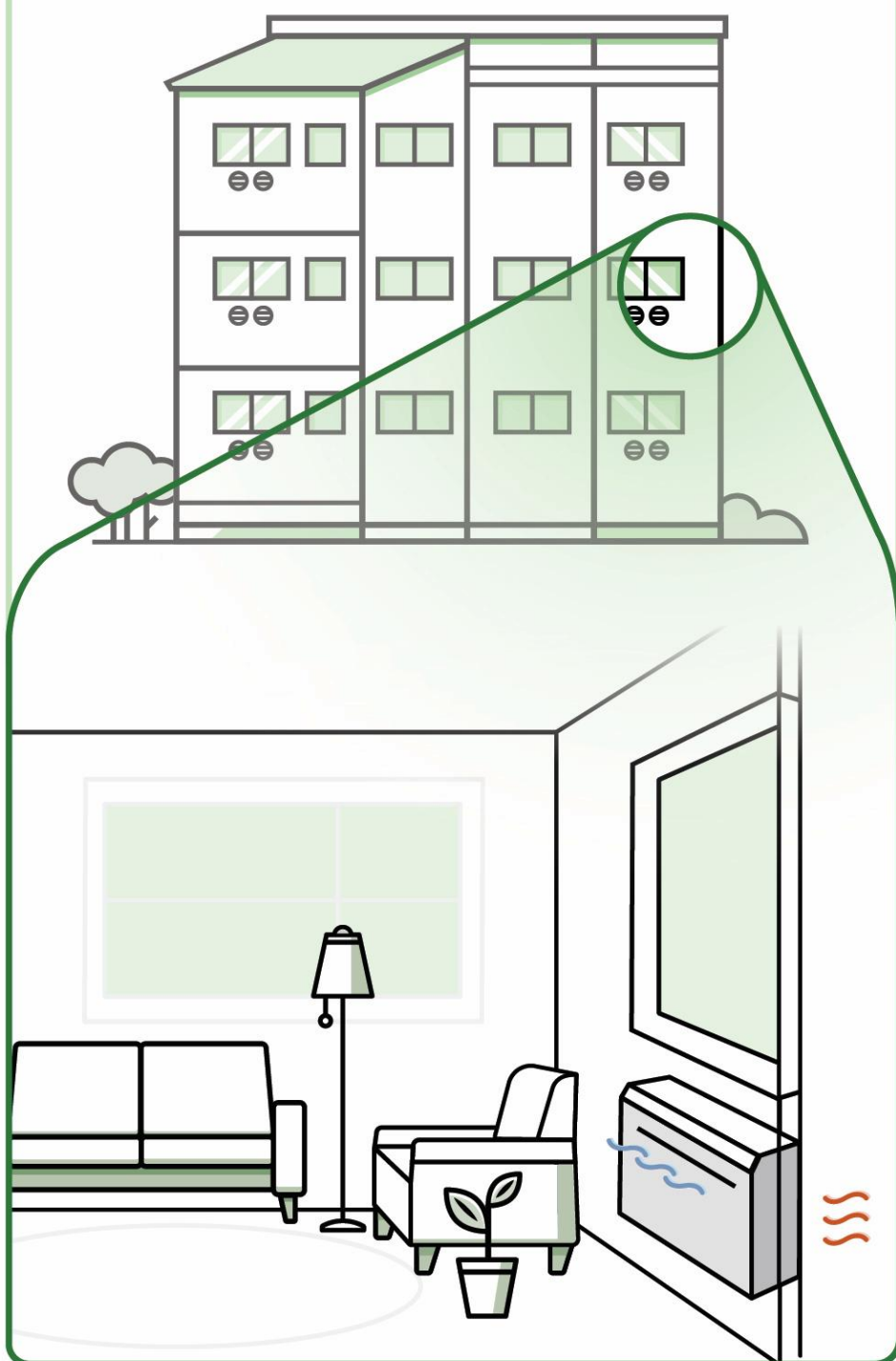


Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home or building.

Adding cooling to Low-rise Apartment without balconies

LOW-RISE APARTMENT WITHOUT BALCONIES



Recommended Cooling System

Packaged Cooling Systems

Packaged Terminal AC or Heat Pump (PTAC/HP)

Packaged cooling systems are often the most practical way to provide permanent cooling when there are no balconies. Window and portable ACs remain an option where immediate cooling is required.

Buildings with existing fan coil heating may be able to add central cooling instead of installing new equipment in each suite.

Electric or gas heating?



Buildings with electric heating: May have sufficient electrical capacity to support packaged cooling systems, so major building electrical upgrades may not be needed.

Buildings with natural gas heating: May need electrical studies and upgrades before packaged cooling systems can be installed. These upgrades can increase project costs and timelines. Individual air conditioners can provide a faster way to improve resident thermal comfort and safety while a long-term cooling solution is developed.

What owners should consider



Installation: Installed directly through exterior walls. Requires exterior wall openings and unit-by-unit installation.

Cost & planning: Packaged cooling systems require moderate to high upfront investment. Plan early and coordinate installation with HVAC, envelope, or other major renewal projects.

Carbon reduction: PTHPs provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect



Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can adjust the temperature in the rooms they serve.

Day-to-day use: Packaged cooling systems provide quiet, consistent cooling, and maintain access to operable windows, daylight, and views.

Space impacts: Exterior wall installation results in minimal impact on space.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:



- Lower upfront cost
- Minimal design and construction work
- Less likely to require electrical service upgrades
- Shorter life span than packaged cooling systems

Residents:



- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.

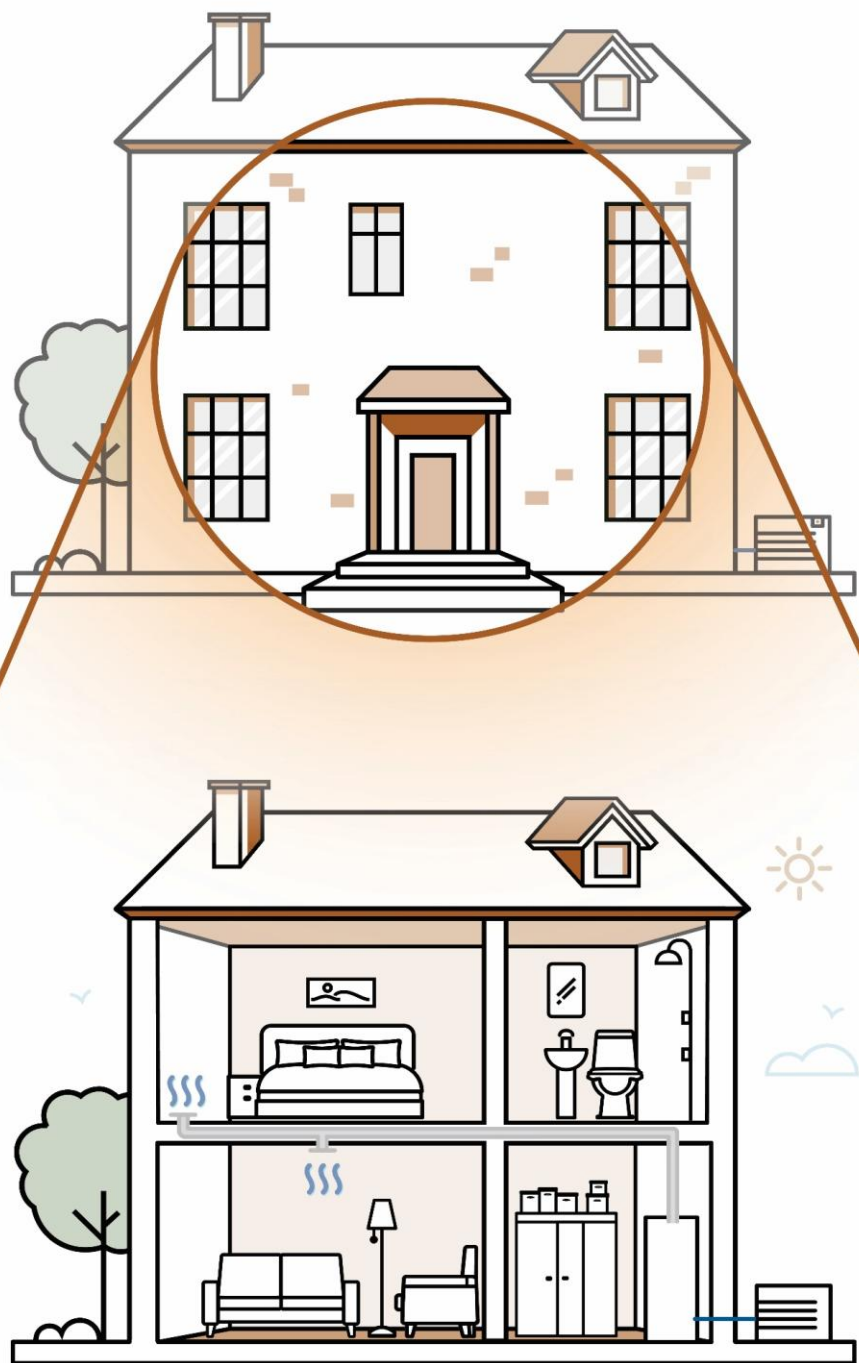


Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home or building.

Adding cooling to single-family/townhouse with forced-air furnace

SINGLE-FAMILY HOME WITH FORCED-AIR SYSTEM



Recommended Cooling System

Central Forced-Air Source Heat Pump System

Existing ductwork makes these buildings one of the easiest types to add whole-home cooling. An outdoor condensing unit and indoor cooling coil can be connected to the existing duct system. Window and portable air conditioners remain an option when cooling is needed sooner.

Electrical considerations



Most cooling-only systems can be installed without major electrical upgrades. Heat pump systems may need an electrical review, and some houses may require an electrical panel upgrade. In some cases, load management devices can avoid panel upgrades by limiting how much electricity high-demand equipment uses at the same time.

What owners should consider



Installation: Uses the existing duct system and generally requires few building modifications.

Cost & planning: Typically the lowest cost long-term cooling option where ductwork already exists. Plan early and coordinate installation at end of life for heating equipment renewal.

Carbon reduction: Heat pump systems provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect



Cooling coverage: Provides whole-home cooling with consistent comfort across rooms.

Day-to-day use: Quiet operation with cooling distributed through existing duct system, and maintain access to operable windows, daylight, and views.

Space impacts: Outdoor unit located near the building. Inside, the system has no impact on living space.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:



- Lower upfront cost
- Minimal design and construction work
- Less likely to require building electrical service upgrades
- Shorter life span than long-term solution

Residents:



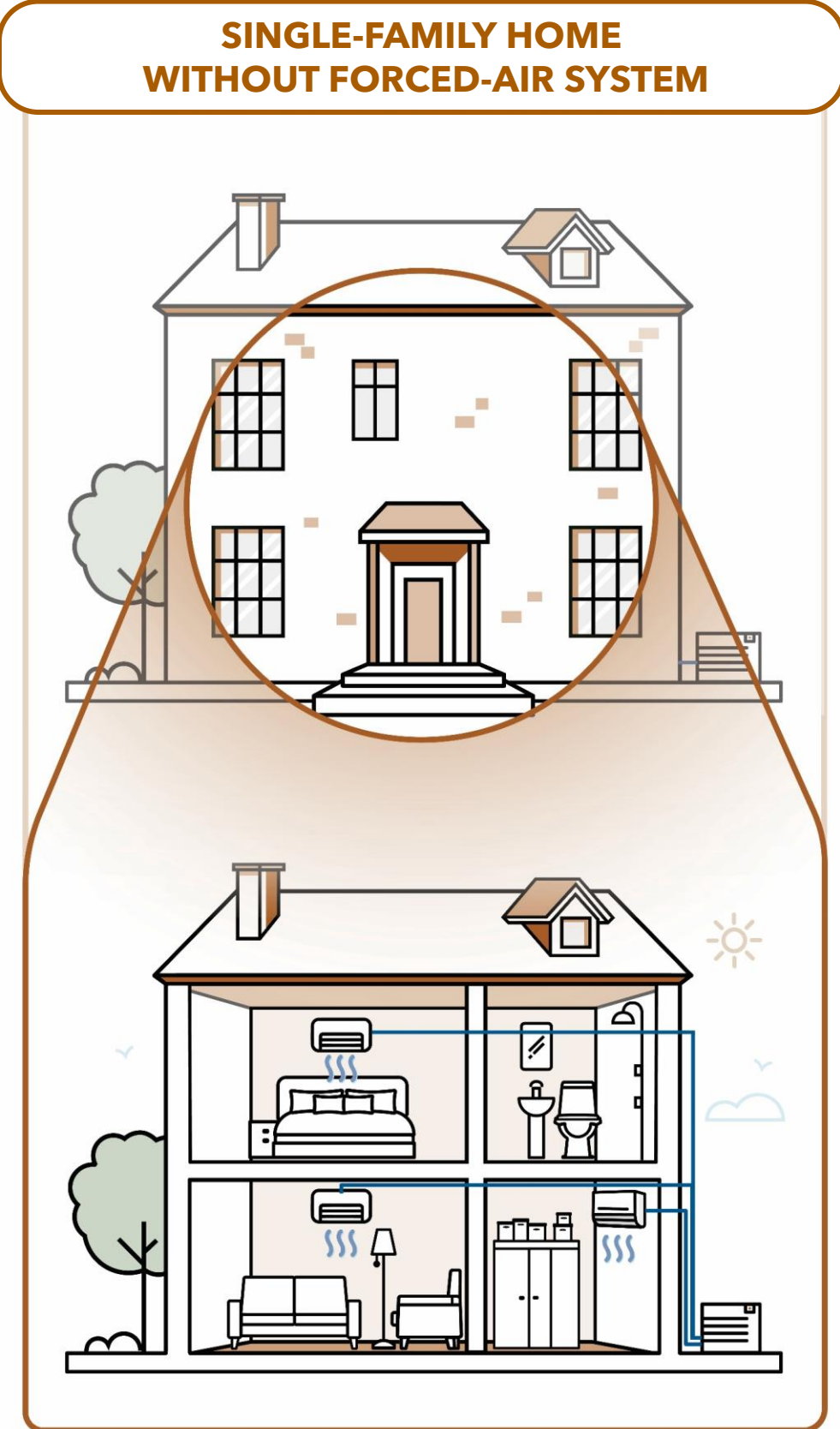
- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.



Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home.

Adding cooling to single-family/townhouse without forced-air furnace



SINGLE-FAMILY HOME
WITHOUT FORCED-AIR SYSTEM

Recommended Cooling System Multi-Split Heat Pump System

Buildings without ductwork may prefer ductless heat pump systems to provide cooling throughout the home. Multi-split heat pumps are often a practical option because they can cool multiple rooms and also support carbon emissions reductions. Window and portable air conditioners remain an option when cooling is needed sooner.

Electrical considerations

Most cooling-only systems can be installed without major electrical upgrades. Heat pump systems may need an electrical review, and some houses may require an electrical panel upgrade. In some cases, load management devices can avoid panel upgrades by limiting how much electricity high-demand equipment uses at the same time.

What owners should consider

Installation: Provides cooling to multiple rooms without adding ductwork. Confirm suitable indoor-unit locations, exterior routing, and space for outdoor equipment.

Cost & planning: Require moderate to high upfront investment. Plan early around desired cooling coverage, equipment locations, and future heating-electrification needs.

Carbon reduction: Heat pump systems provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect

Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can control temperatures in the spaces served.

Day-to-day use: Quiet operation with consistent cooling. Maintains access to operable windows, daylight, and views

Space impacts: Outdoor unit located near the building. Inside, the system has no impact on living space.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:

- Lower upfront cost
- Minimal design and construction work
- Less likely to require building electrical service upgrades
- Shorter life span than long-term cooling solution

Residents:

- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use.
- Seasonal installation and removal to maintain winter comfort.

Ready to move forward?

Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home.

How do they compare?



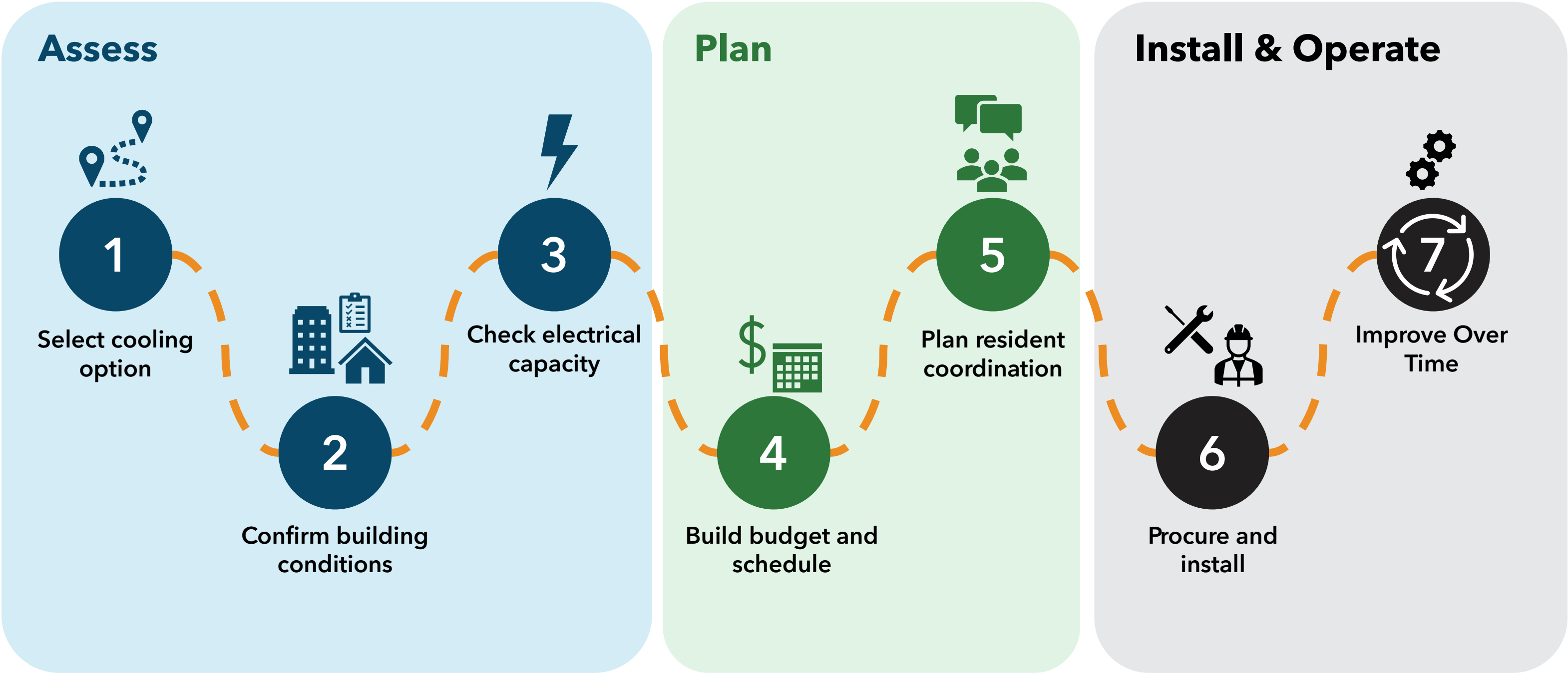
Plan for today and tomorrow

Portable and window AC units can reduce heat risk quickly. For longer-term cooling, also consider comfort, maintenance, operating costs, equipment life, alignment with future building upgrades, and available incentives.

	Portable or Window AC	Long-term Cooling System
	A quick, lower cost option to cool a room and reduce heat risk.	A permanent, whole dwelling system built for long term comfort and safety.
Install requirements	Quick to install Weeks, or within a single cooling season	Slower Design, permits and equipment delays can take multiple years
Upfront cost	Low to medium Scales with the number of units and any wiring needed	High Driven by electrical upgrades. Pair with equipment renewal
Cooling coverage	Partial Cools one room. May not reach the whole dwelling	Full Comfortable temperatures throughout the dwelling
Resident comfort	Moderate Noisy and takes up floor space. Window units block views or light	High Quietest option. Keeps views, daylight and indoor space
Electrical upgrade	Unlikely Generally not required, unless many units are installed	Possibly Depends on the building's existing service capacity
Carbon reduction	Limited Cooling only units add emissions	Strong Heat pumps add low carbon heating too

Planning the Work

How to move from assessment to implementation



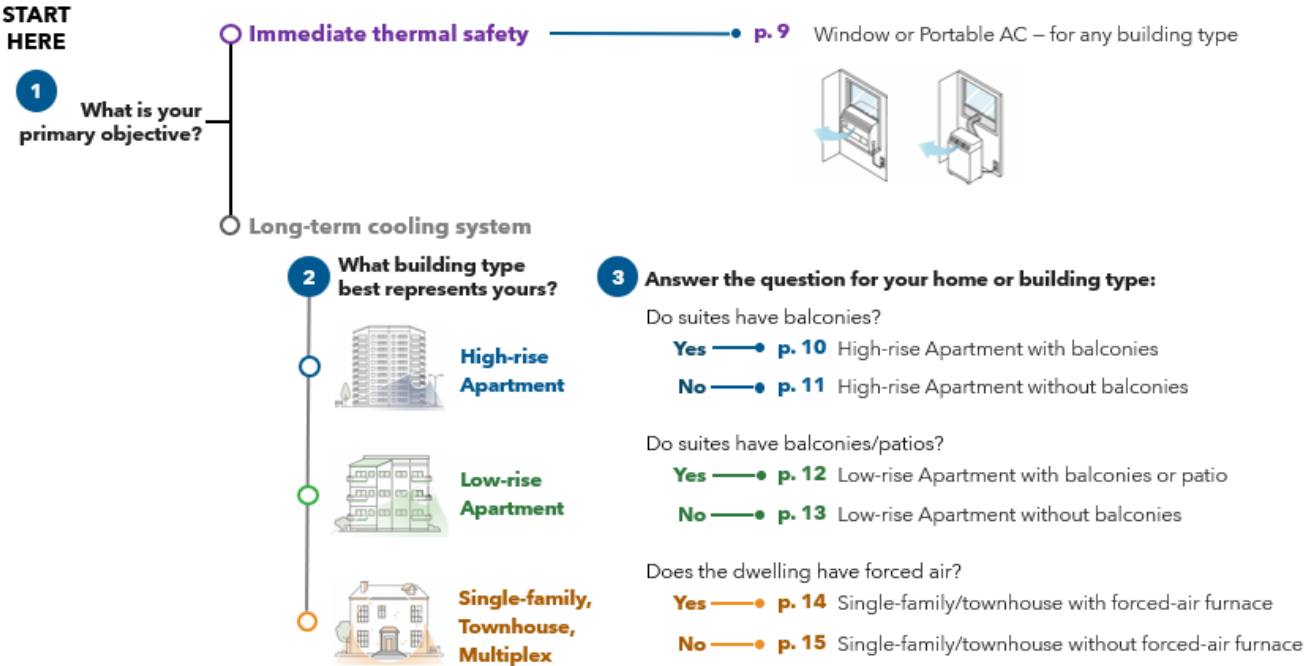
1. Choose Your Cooling Option



Refer to [Page 8](#) to identify a cooling option suited to your home or building. Depending on the complexity of the project, consult a qualified HVAC contractor and/or engineer.

Find Your Starting Point

Use this map to identify the cooling option most relevant to your home or building.
System options reflect typical building systems in existing buildings without cooling.



Cooling Retrofit Guidance – City of Toronto



Adding cooling to High-rise Apartment with balconies

HIGH-RISE APARTMENT WITH BALCONIES

Recommended Cooling System
Multi-Split Heat Pump System

Balconies can often accommodate outdoor equipment, making multi-split systems a practical cooling option. Window and portable ACs remain an option where immediate cooling is required. Buildings with existing fan coil heating may be able to add central cooling equipment and adapt the existing infrastructure to provide cooling more cost effectively. When installing permanent equipment on balconies, safety considerations may apply (e.g., measures to prevent climbing or tripping).

Electric or gas heating?

- Buildings with electric heating:** May have enough electrical capacity to support multi-split cooling systems, so major building electrical upgrades may not be needed.
- Buildings with natural gas heating:** May need electrical studies and upgrades before multi-split cooling systems can be installed. These upgrades can increase project costs and timelines. Individual air conditioners can provide a faster way to improve resident thermal comfort and safety while a long-term cooling solution is developed.

What owners should consider

Installation: Balconies can often accommodate outdoor equipment, with piping routed to indoor units. Confirm equipment locations, piping routes, structural requirements, and maintenance access.

Cost & planning: Multi-split systems can have high upfront costs. Plan early and coordinate installation with other major building projects.

Carbon reduction: Heat pumps provide efficient heating as well as cooling. They can help reduce greenhouse gas emissions and support future building electrification.

What residents can expect

Cooling coverage: The number and location of indoor units determine which rooms are cooled. Residents can adjust the temperature in the rooms they serve.

Day-to-day use: Multi-split systems provide quiet, consistent cooling while maintaining access to windows, daylight, and views.

Space impacts: Outdoor equipment uses space on the balcony and requires access for maintenance.

Window or portable air conditioners: quick to install and provides short-term and partial cooling.

Owners:

- Lower upfront cost
- Minimal design and construction work
- Less likely to require electrical service upgrades
- Shorter life span than multi-split heat pump system

Residents:

- Cools where it is installed, but other rooms may still overheat
- Can be noisy and affect space, views, and window use
- Seasonal installation and removal to maintain winter comfort

Ready to move forward?
Go to [Planning the Work](#) (p.17) section for an overview of the key steps to add cooling to your home or building.

Cooling Retrofit Guidance – City of Toronto



2. Confirm Your Home or Building Conditions



Gather key information about your home or building before selecting a cooling strategy or engaging consultants. Use this to identify a suitable cooling option.

Building Basics

Helps identify which cooling options may be feasible.

- ☐ Number of storeys
- ☐ Approximate construction year
- ☐ Number of dwelling units
- ☐ Existing cooling systems (if any)
- ☐ Existing heating system and fuel type
- ☐ Central ventilation system (if known)

Overheating Hot Spots

Highlights opportunities for equipment placement.

- ☐ Top-floor suites
- ☐ South-facing suites
- ☐ West-facing suites
- ☐ Suites with large windows
- ☐ Suites with limited ventilation
- ☐ Areas with recurring overheating complaints



Cooling Readiness

Can reduce project costs and streamline professional review.

- ☐ Balcony space
- ☐ Roof space
- ☐ Exterior wall access
- ☐ Window opening type and size
- ☐ Ground-level equipment space
- ☐ Heritage or façade restrictions (if known)

Available Information

Helps prioritize areas most likely to benefit from cooling.

- ☐ Architectural drawings
- ☐ Mechanical drawings
- ☐ Electrical drawings
- ☐ Capital renewal or existing decarbonization plans
- ☐ Previous engineering reports
- ☐ Previous electrical studies completed

Don't have every answer?

- Start with what you know.
- Bring the information you have to your HVAC/electrical contractor or engineer.
- Unknown information can be confirmed during technical review.

3. Check Electrical Capacity



An electrical review helps identify feasible cooling options, plan project sequencing, and determine whether upgrades may be needed.

What is the existing heating system?

Heating systems can provide clues about available electrical capacity and cooling options.

- **Electric heating:** Cooling upgrades may be easier because the building already uses electricity for heating.
- **Natural gas heating:** Additional electrical review may be needed before adding cooling equipment.
- **Forced-air heating:** Existing ductwork may allow simpler whole-home cooling options.

Cooling approach	Typical electrical planning needs
One window or portable AC	Usually limited
Multiple AC units	May require panel or circuit review
Long-term cooling system (heat pumps, multi-splits, PTACs)	May require building electrical upgrades and phased implementation

What should be confirmed?

Before selecting a cooling option, confirm (with support of contractor):

- ✓ Available building electrical capacity
- ✓ Dwelling unit electrical panel capacity
- ✓ Available circuits and outlet locations
- ✓ Whether new electrical equipment is required (panels, feeders, metering)
- ✓ Whether Toronto Hydro coordination is required

"When should I involve Toronto Hydro?"

Consider contacting Toronto Hydro if:

- You are planning cooling for many suites.
- You are exploring heat pumps or long-term cooling systems.
- You want to understand the building's available electrical capacity before selecting a cooling option.
- An electrical consultant recommends a service upgrade.

Toronto Hydro's Climate Action Team will assist customers in selecting an efficient and affordable cooling option and will assist providing a non-binding estimate to the customer. Customers are encouraged to email climateaction@torontohydro.com for support early in their project.

4. Build Budget and Schedule

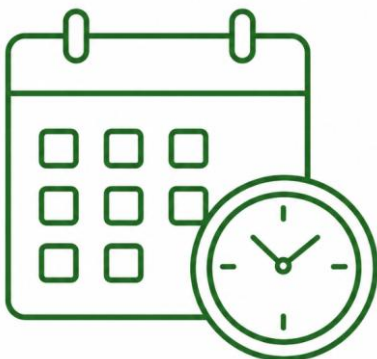


Turn your preferred cooling option into a budget and timeline. Early planning can identify funding needs, schedule constraints, and opportunities to coordinate cooling with other building work.



Build the Budget

- Obtain preliminary HVAC and electrical cost estimates
- Include related costs such as assessments, design, permits, electrical work and contingency.
- Explore available incentives and financing
- Consider ongoing energy and maintenance costs
- When combining work with planned upgrades or end of life HVAC renewal, focus on the incremental cost of adding cooling

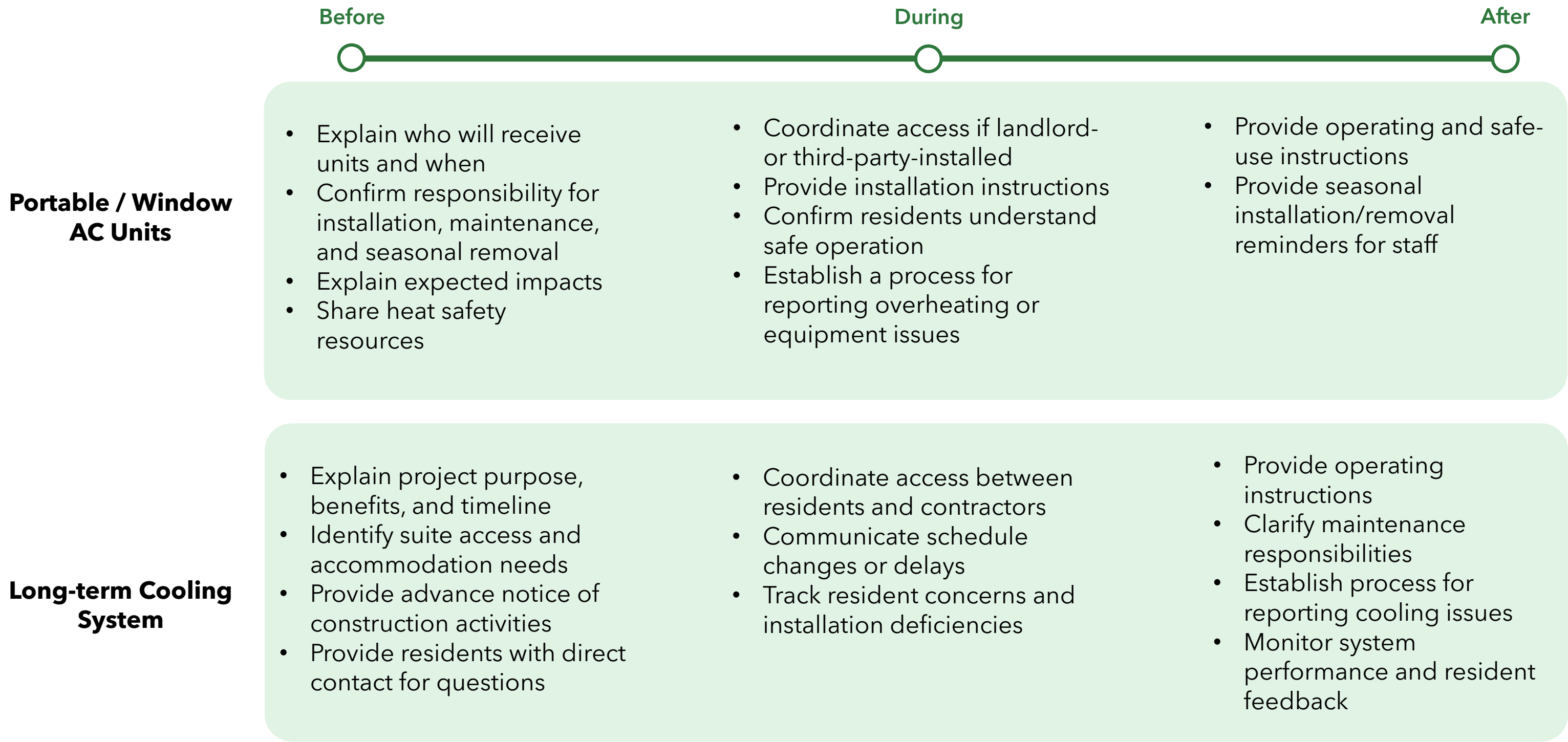


Build the Schedule

- Set a target completion date and work backwards
- Allow time for assessments, approvals, utility coordination and funding or incentive applications
- Consider equipment availability and seasonal demand
- Coordinate with planned heating, electric, or other capital renewal work
- Phase larger projects where needed

5. Plan Resident Coordination

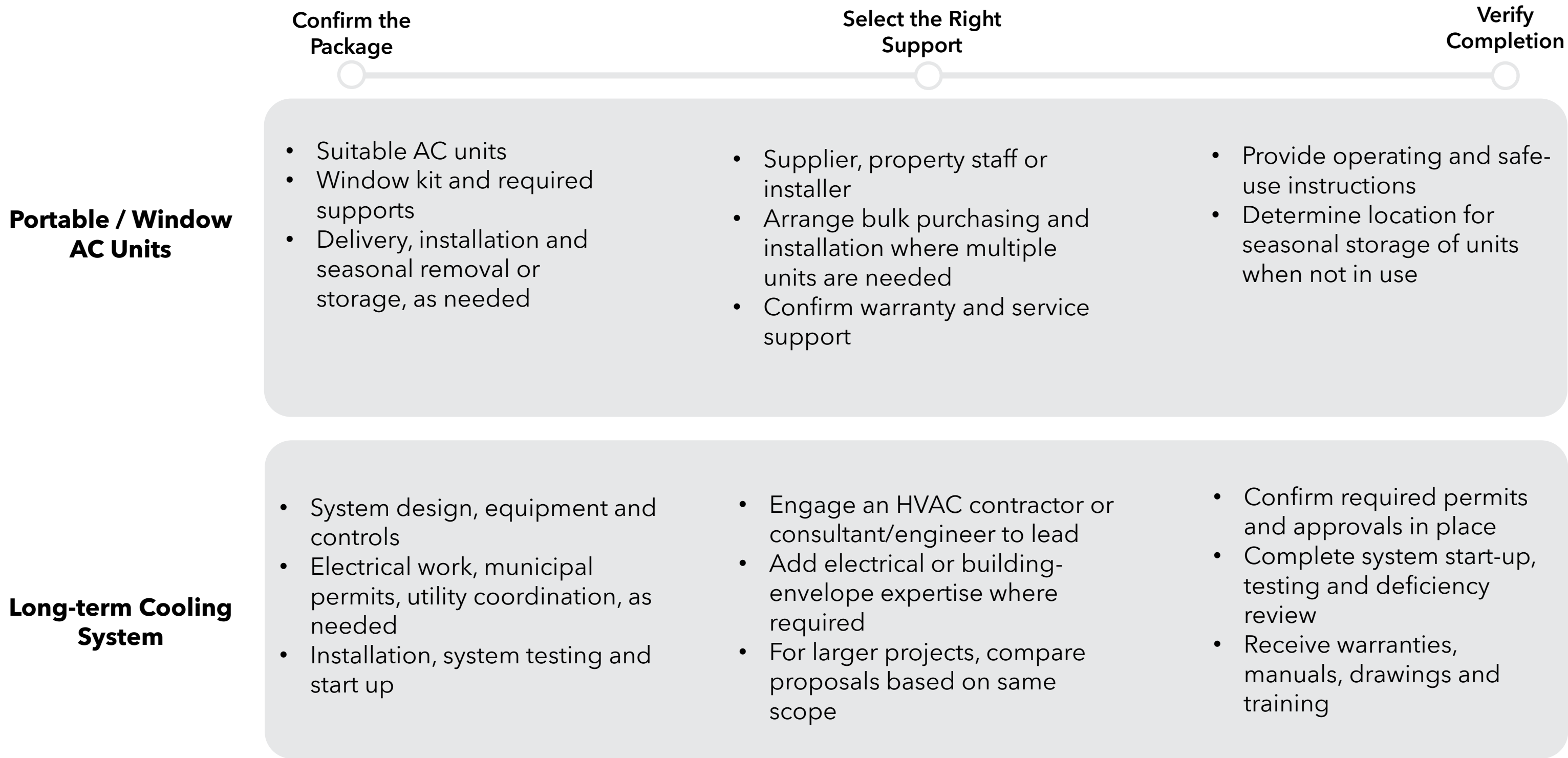
Prepare a simple communication and access plan before work begins.



6. Procure and Install



Use a simple purchasing process for single-room or partial active cooling, and use a qualified project team for long-term cooling systems



7. Improve Over Time

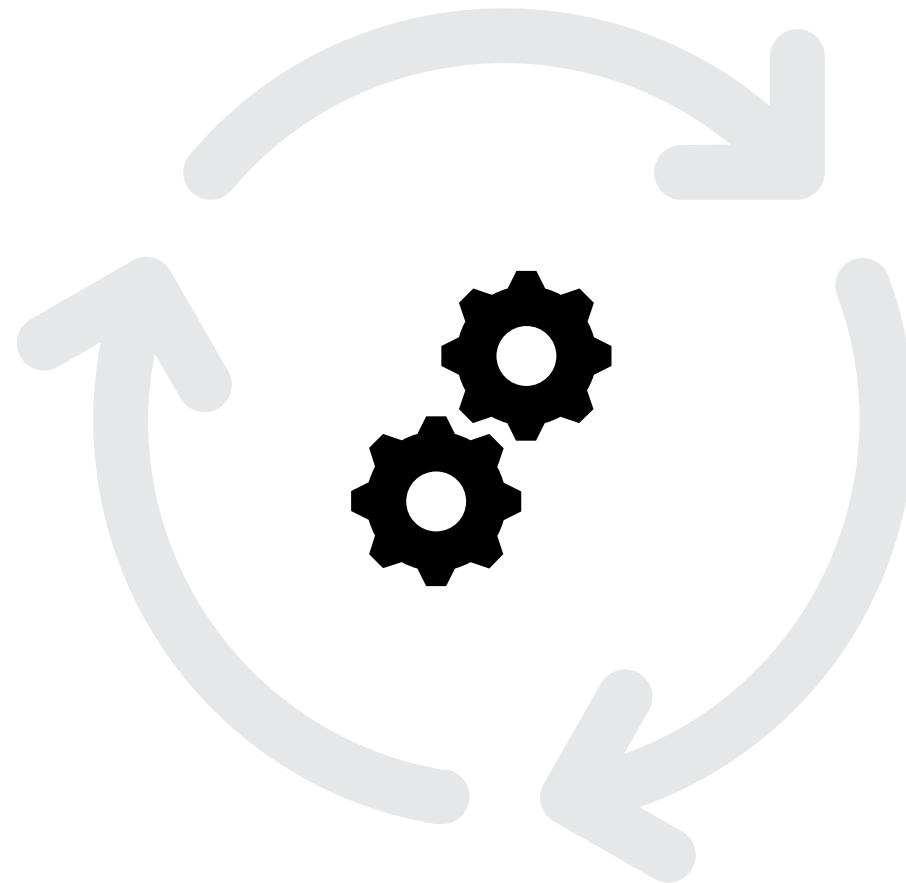


Operate

- Confirm cooling systems are available before hot weather
- Provide clear instructions to residents
- Encourage blinds, door management, and reduced internal heat gains where practical

Improve

- Adjust equipment placement or controls
- Add cooling in priority rooms where needed
- Plan larger upgrades where interim measures are not enough



Maintain

- Clean or replace filters
- Inspect seals, drainage, brackets, and exterior penetrations
- Schedule seasonal installation or removal where needed
- Keep records of maintenance and resident issues

Review

- Track complaints, service calls, and overheating concerns
- Review operating costs and maintenance needs
- Update the building's cooling plan before the next season

Funding and Resources



Need help planning or funding cooling upgrades?
Start here.

For Residential Property Owners



Taking Action on Tower Renewal Program (TATR)

The Taking Action on Tower Renewal Program (TATR) provides a combination of loans and grants to eligible property owners to complete retrofits that increase energy efficiency and reduce greenhouse gas emissions while improving tenant comfort, including cooling upgrades.



High-Rise Retrofit Improvement Support Program (Hi-RIS)

- The High-Rise Retrofit Improvement Support Program (Hi-RIS) program makes low-cost financing available for owners of residential apartment buildings to make improvements that reduce energy and water consumption, including cooling upgrades.
- If upgrading cooling systems to be more energy efficient, or installing heat pumps which come with cooling bonuses, 100% of the loan can be used to fund cooling upgrades. If the upgrades do not have energy savings impacts (e.g. adding cooling to a building), up to 30% of a Hi-RIS loan can fund such cooling upgrades.



Sustainable Towers Engaging People Program (STEP)

The Sustainable Towers Engaging People (STEP) Program provides free utility benchmarking and customized action advice reports to owners of multi-residential buildings to reduce operating costs and improve the quality of life for residents, including cooling upgrades.



Better Buildings Partnership (BBP)

- No-cost concierge support provided to help create tailored funding plans for building owners and property managers, including funding that helps improve indoor cooling, through the BBP's [Navigation and Support Services program](#).
- Information on the Better Buildings Partnership program, resources and funding is also shared through the [program's newsletter](#).



Home Energy Loan Program

Low-interest financing to homeowners to support energy-efficient and low-carbon renovation projects.

For Residents



Air Conditioner Assistance Program - City of Toronto

Helps eligible residents access support for cooling equipment.



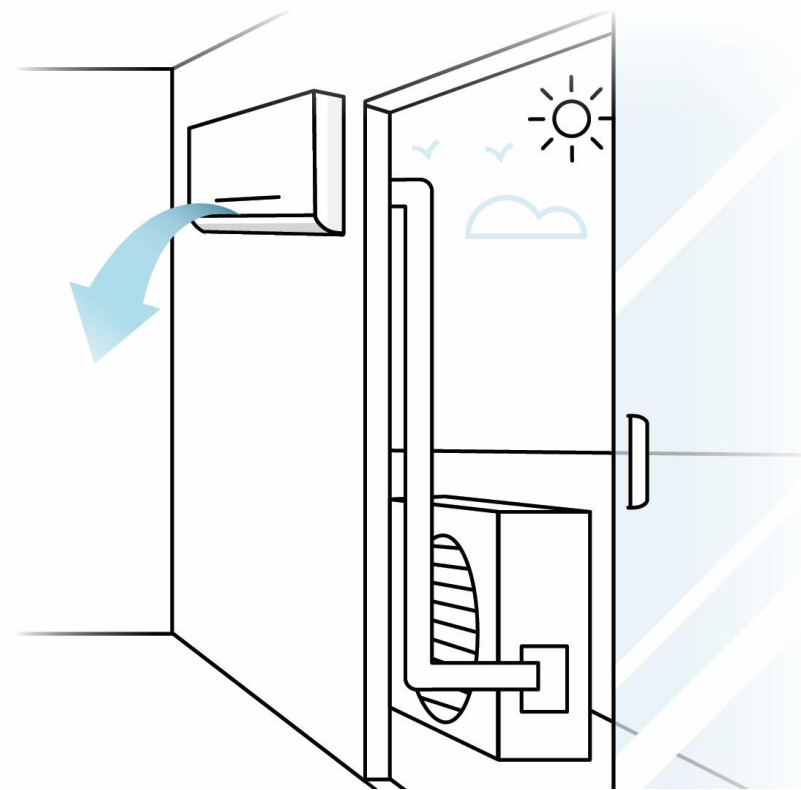
Ontario Works / ODSP or the City's Hardship Fund

Financial assistance options for tenants facing hardship, including support toward cooling-related costs.

Appendix

Cooling Technology Reference Cards

Ductless Mini-Split or Multi-Split Air Conditioners



How it works

A ductless mini-split or multi-split system consists of an outdoor unit containing a fan and compressor connected to one ("mini") or more ("multi") indoor units, typically mounted on walls. Refrigerant piping and electrical wiring connect the indoor and outdoor units. The system removes heat from indoor spaces and releases it outdoors, providing cooling without the need for ductwork. A mini-split typically cools one room, while a multi-split can cool multiple rooms or an entire dwelling unit.

Best Fit + Performance

Where it fits best

Flexible option for many building types. Indoor units can be installed in living rooms and bedrooms, while the outdoor unit is typically placed on a balcony, roof, or at ground level. In apartment buildings, installation may be limited by the distance between the indoor and outdoor units. When installing permanent equipment on balconies, safety considerations may apply (e.g., measures to prevent climbing or tripping).

System Capacity

A multi-split system can cool an entire apartment or house by serving multiple rooms from one outdoor unit. A single mini-split is usually designed to cool one room or area and may not keep all rooms below 26°C during hot weather.

Decarbonization

Very energy-efficient cooling. Many systems are available as heat pumps, which can provide both cooling and low-carbon heating, helping reduce reliance on natural gas.

Implications

Resident / Livability

Provides quiet and consistent cooling with good temperature control. Indoor wall-mounted units are visible but do not block windows, daylight, or fresh air. Generally offers better comfort than portable or window air conditioners.

Exterior Impact

Outdoor units are visible and generate some noise. Refrigerant and drainage lines must be routed between indoor and outdoor units and may be visible on building exteriors.

Electrical

Many existing buildings, especially those with natural gas heating, may require electrical upgrades before these systems can be installed at scale. Buildings with electric heating may have fewer upgrade requirements. In larger apartment buildings, electrical upgrades can significantly extend project timelines.

Install Considerations

Widely available technology with many equipment suppliers and qualified contractors. Installation is more complex than window or portable air conditioners and typically requires HVAC contractors, electricians, and building approvals.

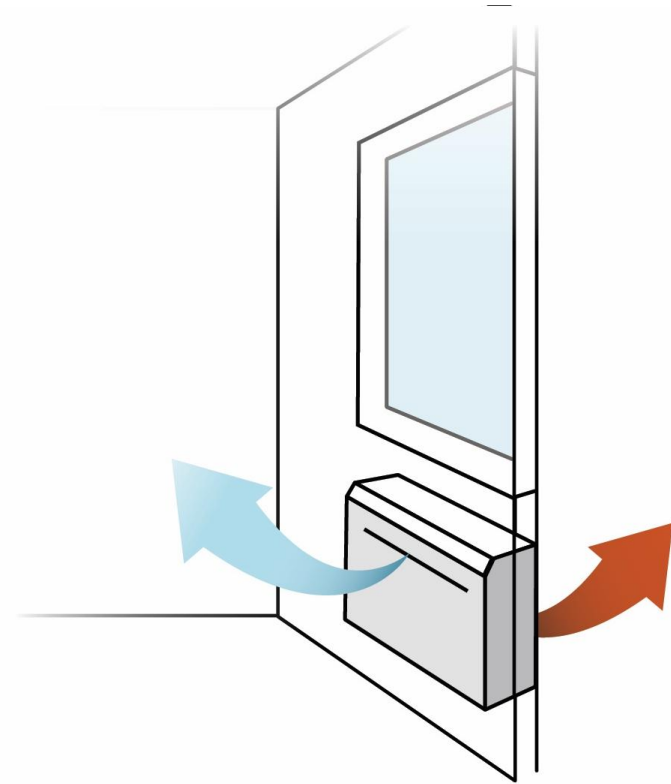
Pros

- Can cool entire dwelling unit
- Quiet operation
- Energy efficient
- Heat pump options can provide both heating and cooling
- Long equipment lifespan (typically 15-20+ years)

Cons

- Higher upfront cost than window or portable air conditioners
- May require building electrical upgrades
- Outdoor units need suitable installation locations
- Installation can be disruptive and may require permits and contractor coordination

Packaged Terminal Air Conditioners (PTAC)



How it works

A packaged terminal air conditioner (PTAC) is a self-contained cooling unit installed on the interior surface of an exterior wall. The unit contains all major cooling components, including the fan, compressor, and heat exchanger, within a single enclosure. Small openings through the wall allow the system to release heat outdoors while providing cooling to the indoor space. A single PTAC typically cools one room or area, while multiple units may be required to cool an entire dwelling unit.

Best Fit + Performance

Where it fits best

Suitable for apartment buildings with or without balconies because the system is mounted directly on an exterior wall. PTACs can be a good option where installing outdoor condensers for mini-split systems is difficult or where exterior space is limited.

System Capacity

A single PTAC can effectively cool one room or open living area. Depending on the size and layout of the dwelling unit, multiple units may be needed to provide cooling throughout all bedrooms and living spaces. Larger units may provide some cooling to adjacent rooms if doors are left open.

Decarbonization

PTAC systems are available as high-efficiency heat pumps that can provide both cooling and low-carbon heating. Installing heat pump models may support future building electrification and greenhouse gas reduction goals.

Implications

Resident / Livability

PTACs maintain window access, daylight, and views because they are installed below or beside windows rather than within them. The units are visible inside the room and generally produce more noise than mini-splits because the compressor is located within the unit rather than outdoors.

Exterior Impact

Requires small openings through the exterior wall for air intake and exhaust. Exterior grilles will be visible on the building façade but are generally less noticeable than large outdoor condenser units.

Electrical

May require electrical upgrades at the dwelling unit or building level, particularly in older buildings currently heated with natural gas. Buildings with electric heating may require fewer upgrades.

Install Considerations

Can be installed without balconies or roof access, making them suitable for a wider range of building types. Installation requires modifications to exterior walls and coordination with qualified contractors. Large-scale deployment in apartment buildings may require planning for electrical infrastructure upgrades.

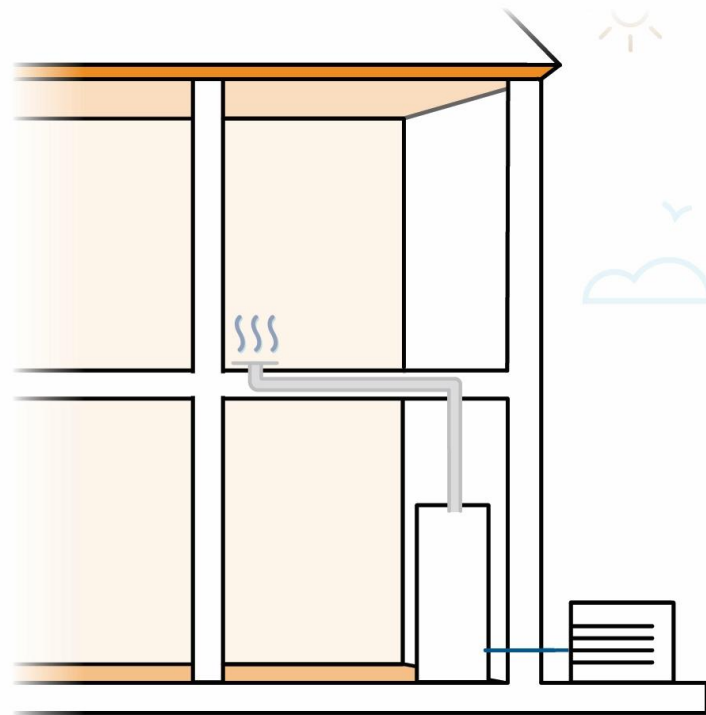
Pros

- Suitable for buildings with or without balconies
- Maintains window views, daylight, and operability
- Heat pump models can heat and cool
- No separate outdoor condenser for each unit
- Can be easier to install than ducted cooling systems in existing buildings

Cons

- Usually cools only the room where it is installed.
- More noticeable indoor noise than mini-split systems.
- Requires openings through exterior walls.
- May require electrical upgrades in some buildings.
- Higher upfront cost than window or portable air conditioners.

Central Forced-Air Split Cooling



How it works

A central forced-air cooling system uses an outdoor condensing unit connected to an indoor cooling coil installed within an existing forced-air furnace system. Refrigerant lines transfer heat between the indoor and outdoor equipment, while existing ductwork distributes cooled air throughout the dwelling. In many homes and townhouses with forced-air heating, cooling can often be added without significant changes to the interior distribution system.

Best Fit + Performance

Where it fits best

Best suited to single-family homes, townhouses, row houses, and multiplexes that already have forced-air heating systems and ductwork. This approach is generally not applicable to most apartment buildings, which typically do not have dedicated duct systems serving individual dwelling units.

System Capacity

Can provide cooling to the entire dwelling unit through existing ductwork. Performance depends on the condition and design of the existing air distribution system, and some homes may require balancing adjustments to improve cooling delivery to all rooms.

Decarbonization

Cooling-only systems are available, but many owners choose heat pump versions that provide both cooling and low-carbon heating. Heat pump systems can support future decarbonization goals while reducing reliance on fossil fuel heating.

Implications

Resident / Livability

Provides consistent cooling throughout the dwelling with minimal visual impact. Windows remain fully operable and unobstructed, and indoor noise levels are typically lower than portable or window air conditioners because the compressor is located outdoors.

Exterior Impact

Requires installation of an outdoor condensing unit and refrigerant piping. Outdoor equipment will be visible and may generate some exterior noise depending on location and equipment selection.

Electrical

Cooling-only systems often require limited electrical modifications. Heat pump systems may require additional electrical review, particularly in older buildings or where panel capacity is limited. Load-management devices may help avoid larger electrical upgrades in some situations.

Install Considerations

Often the simplest long-term cooling retrofit where existing forced-air ductwork is present. Installation typically requires HVAC contractors and electricians but is generally less disruptive than many other long-term cooling approaches.

Pros

- Uses existing ductwork
- Low visual impact indoors
- Quiet operation
- Heat pump options can provide heating and cooling
- Generally simpler installation than other long-term cooling retrofit options

Cons

- Requires existing forced-air ductwork
- Outdoor equipment requires suitable location
- Some homes may require duct balancing improvements
- Heat pump systems may require electrical review

Portable or Window Air Conditioners

Best Fit + Performance

Where it fits best

Suitable for most building types and often used where rapid deployment, lower upfront costs, or temporary cooling solutions are required. Particularly useful where long-term cooling systems are not yet feasible or while longer-term retrofit plans are being developed.

System Capacity

Typically designed to cool a single room or area. Multiple units may be required to cool all bedrooms and living spaces within a dwelling. Cooling performance in adjacent rooms depends on layout, air movement, and occupant behaviour.

Decarbonization

Most portable and window air conditioners are cooling-only equipment and do not contribute to heating decarbonization. Emerging window-mounted heat pump products may provide future opportunities for combined heating and cooling.

Implications

Resident / Livability

Can effectively cool occupied rooms but generally produce higher indoor noise levels than long-term cooling systems. Window units may reduce daylight, obstruct views, and limit window operation. Portable units occupy floor space within the room.

Exterior Impact

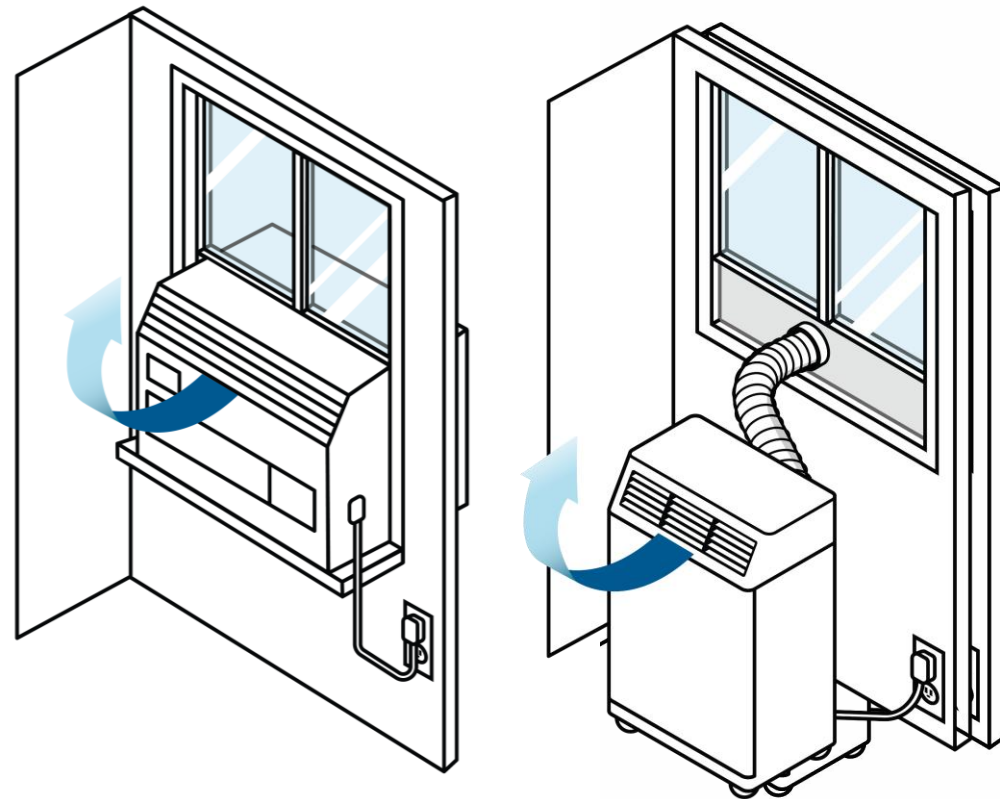
Minimal building modifications are typically required. Window units are visible from the exterior, while portable units require temporary exhaust connections through windows.

Electrical

Usually operate from existing electrical outlets and generally do not require building-level electrical upgrades. However, the number and size of units that can be installed may be limited by available circuit capacity.

Install Considerations

Installation is typically straightforward with minimal building modifications. Window air conditioners require compatible sliding windows, while portable units fit a wider range of window types. Seasonal installation, maintenance, and replacement should be considered.



How it works

Portable and window air conditioners are self-contained cooling units designed to cool individual rooms or areas. Window units are installed directly within a window opening, while portable units sit inside the room and exhaust heat outdoors through a window kit. Both options provide room-level cooling without requiring major building modifications.

Pros

- Lowest upfront cost
- Rapid deployment
- Suitable for most building types
- Minimal construction requirements
- Typically no building-level electrical upgrades
- Flexible and easy to replace

Cons

- Typically cools only one room
- Higher indoor noise levels
- Window units can obstruct views and daylight
- Portable units occupy floor space
- Seasonal installation and removal may be required
- Limited decarbonization opportunities

Window Opening Safety Rules

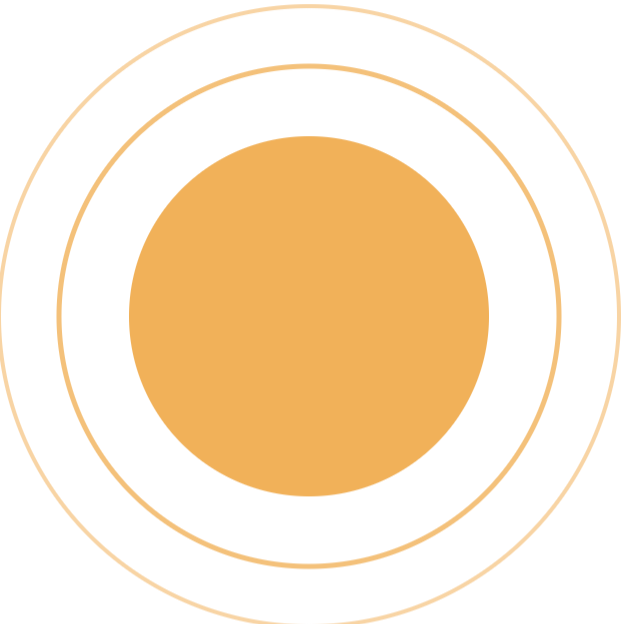
The City has a by-law that requires window safety devices and window screens be fixed to rental apartment windows. The safety device prevents the window from opening more than 10cm to ensure children are safe. If a window air conditioner is installed, it serves as a safety device. For information on safety considerations and requirements about Indoor Temperature and Cooling, please see page 4 in this guidance document, and visit this [Frequently Asked Questions document](#).

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Prepared by:



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