Electrification Guide
for Multifamily Properties

STATE OF CALIFORNIA ENERGY COMMISSION

California ELECTRIC HOMES

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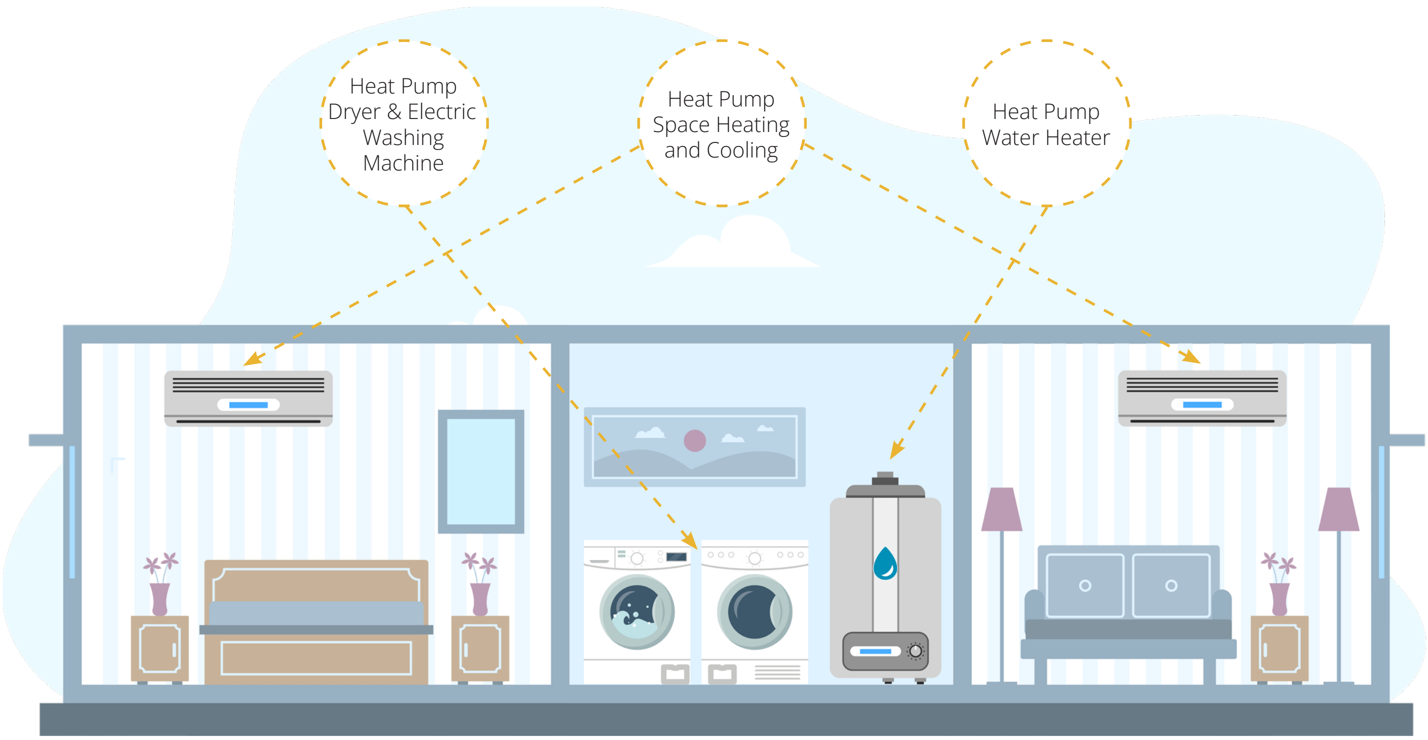
INTRODUCTION

This guide promotes best practices for architects and engineers designing all-electric multifamily buildings in California. The intent is to provide consideration for best practices, equipment selection criteria, and considerations to support energy-efficient, all-electric technology. This guide provides insight into the benefits of electrification, available incentive programs in California, and essential considerations for designing all-electric buildings.

What is an All-Electric Building?



An all-electric building operates entirely without on-site fossil fuel combustion. This includes residential units, amenity spaces, and commercial spaces like restaurants and retail tenants within mixed-use buildings.

BENEFITS OF ELECTRIFICATION

Health: Improves indoor air quality, and reduces local air pollution.

Climate Impact: Electrification supports California's decarbonization goals. Under Senate Bill 100, 60% of the state's electricity must be renewable by 2030, with 100% carbon-free electricity by 2045.

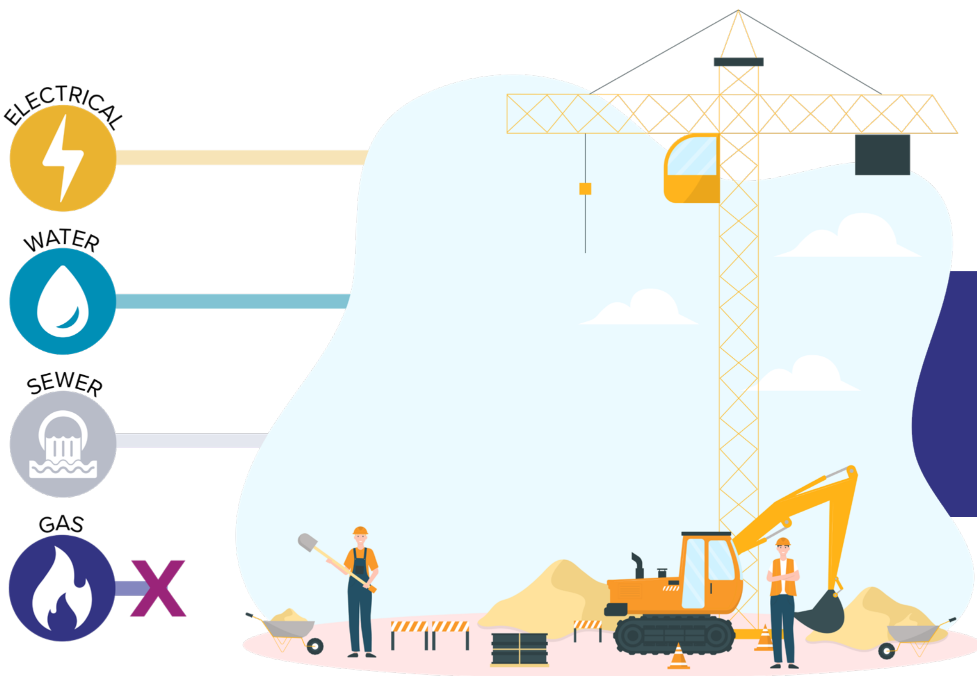
Safety and Resilience: Electricity is often restored first during natural disasters or other utility disruptions.

Streamlined Utilities: Eliminates the need for infrastructure including gas lines and meters.

KEY DESIGN PROCESS FOR ARCHITECTS

Pre-Design/Concept Phase

Initiating electrification during the pre-design phase helps to ensure alignment with client goals, efficient resource use, and integration into the overall design.



Choosing to not install gas infrastructure will save installation and permitting costs.

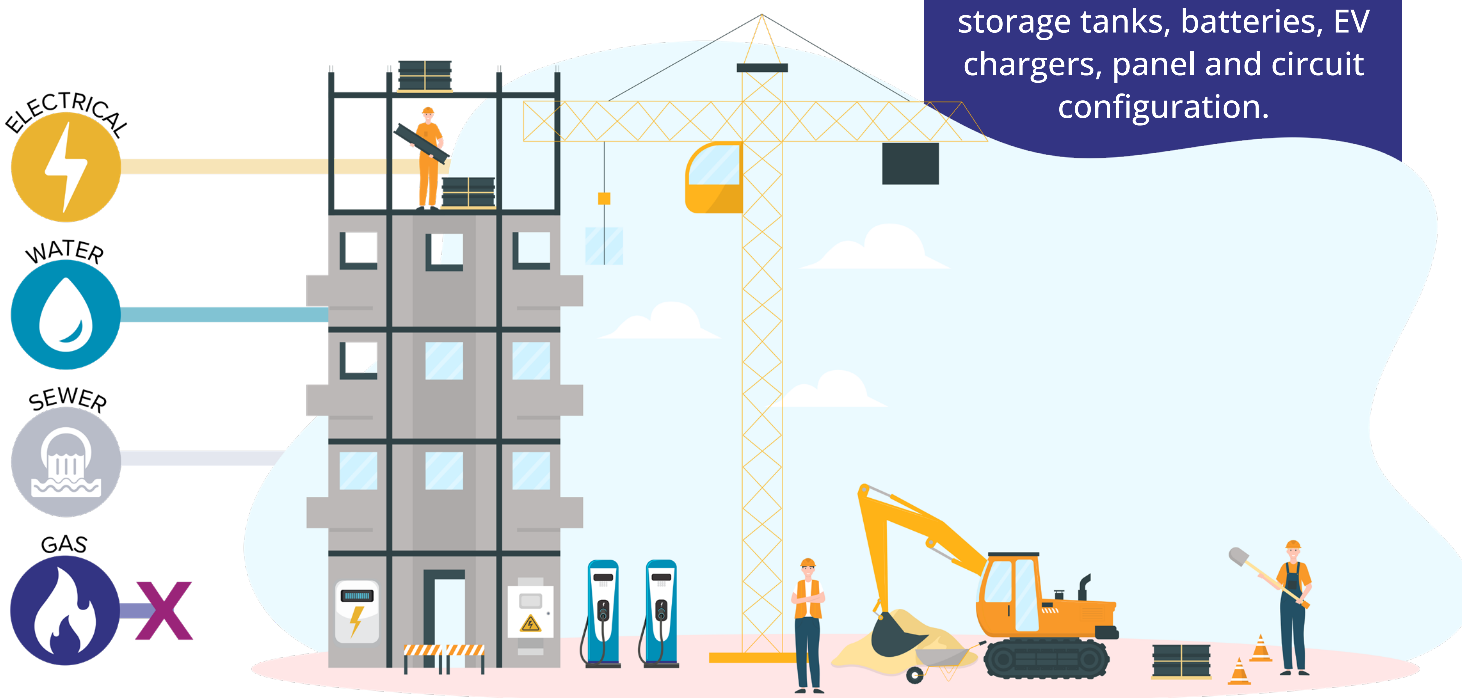
Key considerations:

1. Define client goals and priorities
2. Research local codes, incentives, and active reach code requirements
3. Calculate potential avoided gas emissions from electrification
4. Estimate total costs, including savings from eliminating gas infrastructure
5. Develop tailored client presentation to advocate for electrification
6. Allocate space for electrical and mechanical equipment
7. Assess renewable energy opportunities and potential for battery or thermal storage
8. Plan strategies to mitigate urban heat island effects

Schematic Design

The schematic design phase is an opportunity to lay a solid foundation for electrification.

As you finalize development consider passive design (orientation and shading) principles and space needs for systems: larger HPWH storage tanks, batteries, EV chargers, panel and circuit configuration.

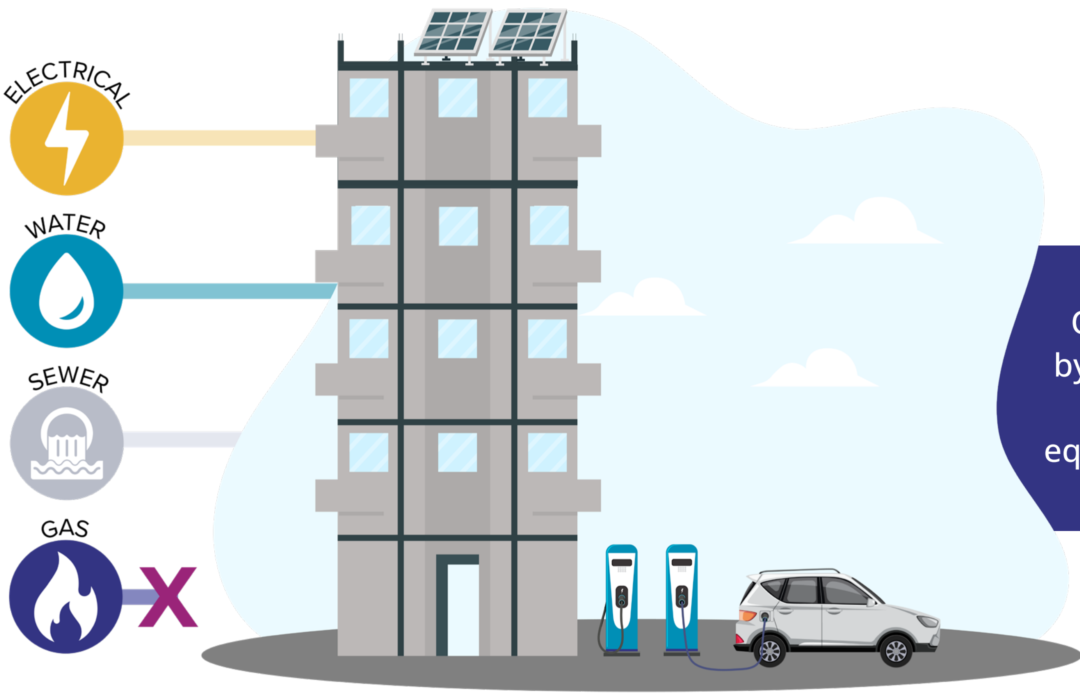


Key actions:

- Collaborate with an experienced non-residential Certified Energy Analyst (CEA)
- Avoid specifying gas infrastructure
- Incorporate battery systems when possible
- Prepare targeted energy and cost models
- Consider passive design principles to improve building efficiency (e.g., orientation, shading)
- Designate adequate service space for MEP infrastructure

Design Development

Focus on fine-tuning operational efficiency that will satisfy the client's goals and comply with applicable codes and standards.



Optimize the buildings by changing orientation, window area, and equipment specifications.

Key steps:

1. Finalize the building layout
2. Optimize the building envelope to enhance efficiency and comfort
3. Specify high-performance fenestration to reduce solar heat gain and avoid overglazing
4. Consider space and location for mechanical, electrical, and plumbing (MEP), solar, and energy storage systems
5. Confirm compatibility with incentive programs, codes, and local ordinances

KEY DESIGN PROCESS FOR ENGINEERS

Pre-Design/Concept Phase

Early identification of electrification opportunities will support efficient resource allocation and system compatibility.

Choosing to not install gas infrastructure may require additional electrical and plumbing consideration for circuit configuration and central heat pump water heater storage tank size.

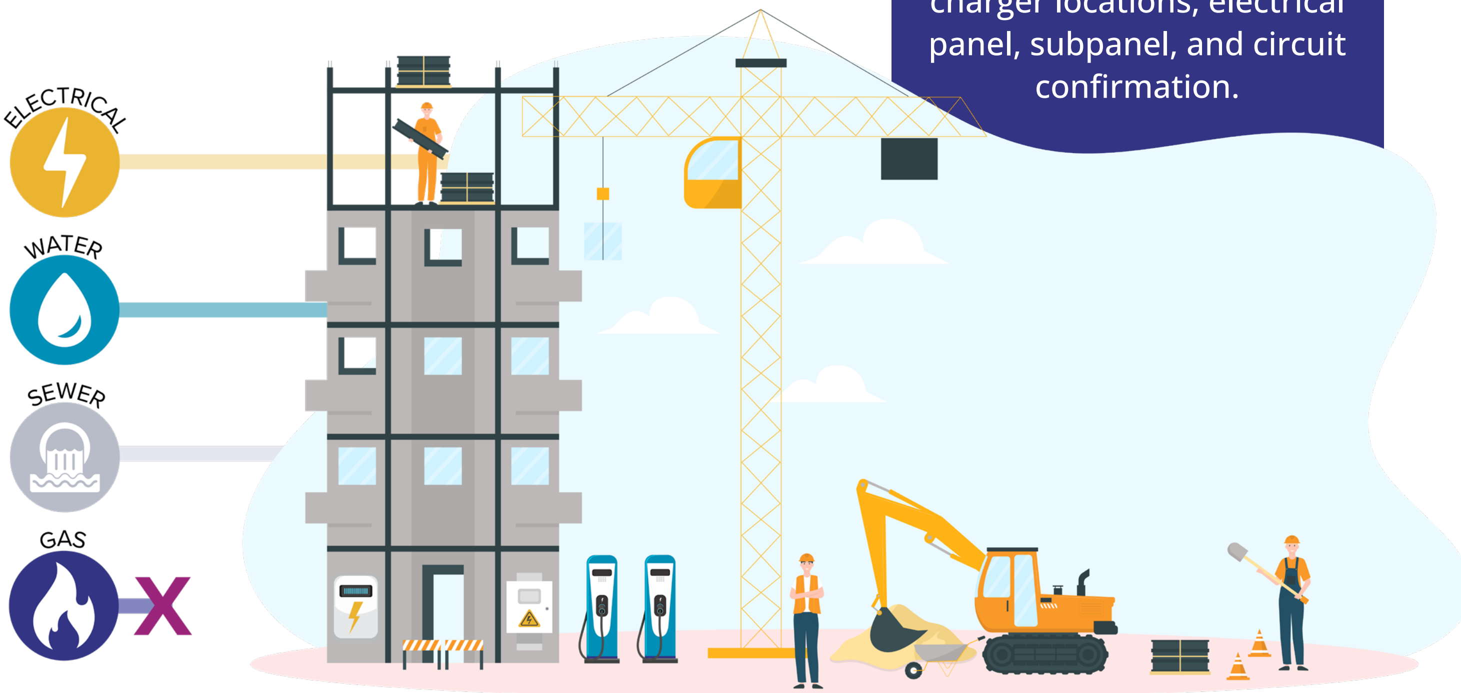
Key considerations:

1. Establish client energy goals and priorities
2. Identify major energy loads including domestic hot water, HVAC, EV charging, and other systems
3. Evaluate opportunities for energy efficiency, renewables, and energy storage solutions
4. Review for compliance with incentive programs, Title 24, active reach codes, and local ordinances
5. Establish general system types for domestic hot water and HVAC (e.g., central or unitary)
6. Estimate electrical service requirements to support planned systems

Schematic Design

The schematic design phase lays the groundwork for system planning, space allocation, and preliminary design integration.

Estimate load profiles for equipment during load calculations. Identify potential electric equipment including battery storage, EV charger locations, electrical panel, subpanel, and circuit confirmation.



Key actions:

- Equipment selection and sizing estimates
- Design for load profiles including domestic hot water demand, storage needs, and peak demand considerations
- Confirm system types (unitary vs. central) for HPWH and HVAC
- Draft a preliminary layout for MEP systems
- Choose metering strategies tailored to central or unitary systems
- Specify space requirements for all MEP components

Design Development

Focus on finalizing systems that will meet or exceed performance, safety, and code requirements while optimizing occupant comfort.

Ensure central systems have adequate space planned for piping and storage in mechanical room.

Key steps:

1. Finalize domestic hot water system type(s) and sizing
2. Develop detailed plumbing plans including recirculation designs for central heat pump water heaters (CHPWH)
3. Specify system controls
4. Incorporate noise control strategies
5. Create detailed mechanical plans including ducts, refrigerant lines, ductless head locations, and compressor placement
6. Design battery and other storage systems
7. Verify all specified equipment complies with applicable codes and standards
8. Confirm voltage requirements for all appliances and systems

SYSTEMS

Heat Pumps

Heat pumps are central to electrifying multifamily buildings, serving critical heating, cooling, and hot water needs.

Design considerations:

- Ambient conditions: Consider the location where the system will operate
- Load requirements: Assess heating and cooling loads and design accordingly
- Output needs: Factor in setpoint, demand profiles, and peak requirements
- Heat sources/sinks: Evaluate available heat sources and sinks for optimal performance
- Conduct a Manual J for each floorplan to calculate the loads
- Account for load variations due to additional external surfaces or windows
- Size heat pumps to the larger load (heating or cooling) to support year-round comfort
- Avoid oversizing that can result in efficiency losses, short cycling, and poor performance

Refrigerant selection:

- Choose refrigerants with low global warming potential (GWP) to align with phasing out of harmful options
- Consider the efficiency and performance of refrigerants under challenging conditions

System types:

Heat pumps can be essential or unitary, depending on building layout and loads. Systems should be sized to provide comfort to occupants and balance:

- Occupant comfort
- Energy efficiency
- Space constraints
- Installation and operational costs
- Compliance with applicable codes and standards

SYSTEMS

Domestic Hot Water

Both central and unitary systems can supply domestic hot water (DHW) to multifamily dwelling units. Selecting the appropriate systems requires consideration of building design, space availability, metering plans, and project goals.

Central Heat Pump Water Heaters (CHPWHs)

A CHPWH system typically includes:

- Heat pumps
- Heat exchangers
- Storage tanks and swing tanks
- Mixing valves
- Recirculation pumps
- System controls

Effective design begins with consideration of end uses, distribution methods, and product availability to meet the demands of the building.

Unitary Heat Pump Systems

Unitary systems serve single dwelling units and are available in two configurations:

- Integrated systems: Combines heat pump, heat exchanger, and storage into a single unit, similar to a tank type gas water heater.
- Split-system: A heat pump that delivers hot water to the storage tank that is located in a separate location from the compressor.

The decision between a central or unitary system should come down to building design, available space in-units, basements, or mechanical rooms, and metering plans. In California, unitary systems are more common in low-rise developments, while mid- and high-rise often feature central systems. Unitary systems are rated using Uniform Energy Factor (UEF) while central systems performance is measured in coefficienct of performance (COP).

RECOVERY, STORAGE, AND SIZING

Storage Design

DHW storage sizing design is critical for meeting peak demand. Heat pumps, while more efficient, heat water more slowly than electric resistance or gas water heaters, resulting in lower first hour ratings. Hybrid HPWHs have electric resistance elements that boost first hour ratings but are less efficient.

Load Shifting

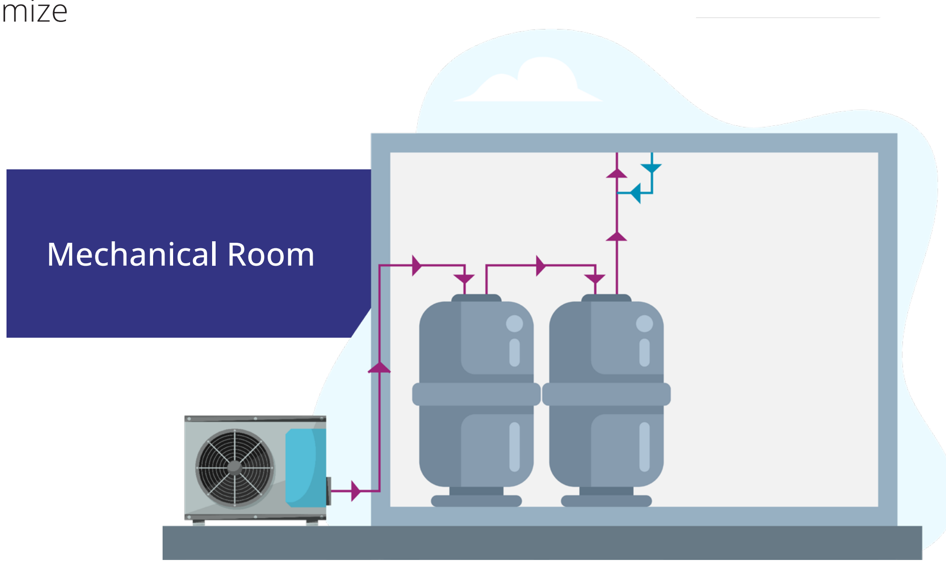
Adding extra storage and controls can reduce peak demand, lowering grid strain and reduce utility costs. Equipment manufacturers can provide guidance on equipment sizing and potential load shifting capabilities.

Sizing Considerations

- Balance storage tank capacity and heat pump size to meet or exceed the building's three hour DHW demand
- Factor in available space for storage tanks and compressors, cost of adding extra equipment, and the potential for load shifting abilities
- Use tools like the Ecosizer to optimize

Space Planning

Space planning is critical for heat pump DHW system design. Heat pumps require sufficient clearances and air volume to operate efficiently. It is best practice to direct-vent unitary systems and locate split-system condensers outside when possible.

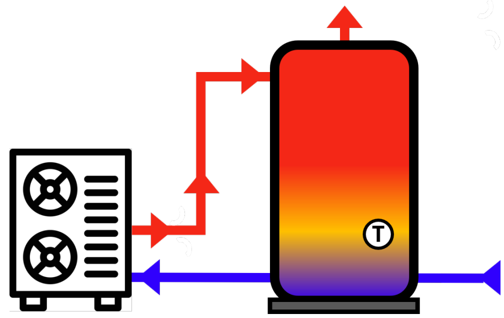


Key considerations:

1. Ventilation requirements: Heat pumps located in an enclosed space will require sufficient air supply to ensure normal operation.
2. Unitary systems: If placed in closets, use louvered doors or external ventilation. For outside placement, insulate storage tanks and account for ambient temperature.
3. Manufacturer specifications: Review manufacturer specifications for space and ventilation requirements.

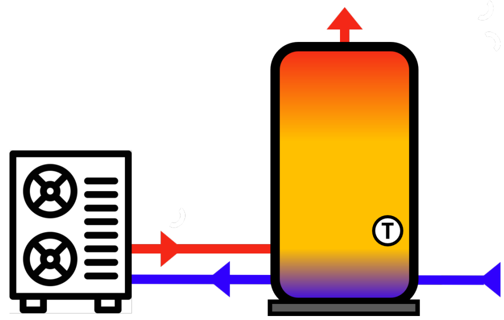
SINGLE-PASS VS MULTI-PASS SYSTEMS

Single-pass systems



- Heat water to working temperature in a single pass
- Require less storage needs, provide better legionella control, and use low-GWP refrigerants like CO_2

Multi-pass systems



- Heat the water to working temperature in multiple cycles through the heat pump, typically in 10 F increments
- Typically require more storage space

Cold climate considerations

Air source heat pumps operating in cold climates must be carefully selected to ensure efficient annual operation. To address this,

- Choose systems with high efficiency at low ambient temperatures
- Consider a cascading system or ground source heat pumps for locations with frequently freezing temperatures
- Conduct a life cycle cost analysis to evaluate options

Recirculation Systems

CHPWH systems can include recirculation loops to keep hot water flowing through the building. However, these will lead to:

- Considerable heat loss
- Increased energy usage to pump water through the building

Design considerations:

1. Shorten pipe lengths by placing fixtures near each other
2. Add insulation to minimize heat loss
3. Include swing tanks, variable-speed pumps, push-button demand controls, master mixing valves, and thermostatic balancing valves to improve efficiency

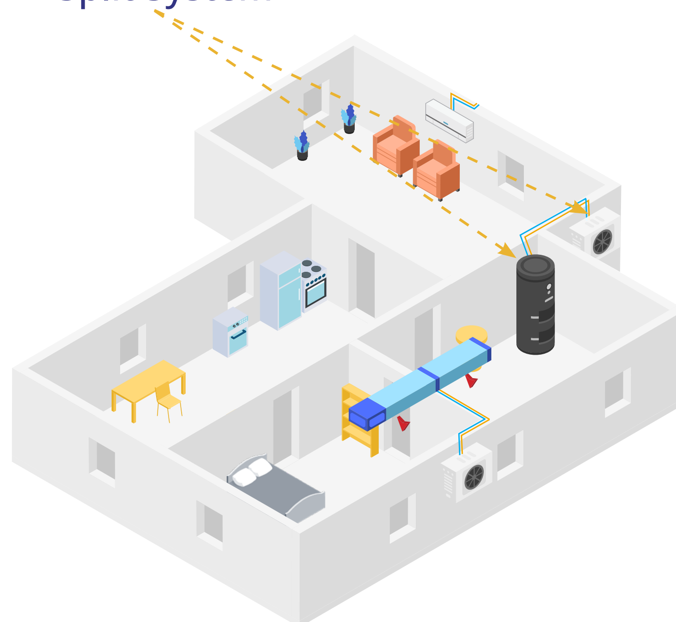
Product Selection

Unitary Systems

- Select systems that match DHW demand without oversizing the equipment
- Confirm integrated systems meet minimum airflow and ventilation requirements
- Consider ambient air temperature for split systems

Integrated System

Split System



Central Systems

CHPWH systems can be comprised of individual components or pre-built systems. Selection should consider project goals, budget, capacity, and energy efficiency.

Selection criteria:

1. Heat pump capacity and storage
2. Ambient air temperature
3. Potential emergency heating capabilities
4. Efficiency ratings and certification listings
5. Refrigerant type (GWP)
6. Noise levels and demand management controls

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)

Air source heat pumps (ASHPs) are an efficient and reliable solution for energy-efficient heating and cooling in multifamily buildings when properly sized, designed, and installed. Effective HVAC design begins with:

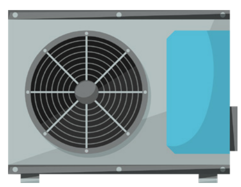
- Calculating zonal loads: Assess the heating and cooling requirements of individual and common area spaces.
- Load requirements: Conduct a Manual J for each floorplan to calculate heating and cooling loads. Assess DHW load to properly size the HPWH system. Avoid oversizing that can result in efficiency loss, short cycling, and poor performance.
- Output needs: Factor in output temperature, demand profiles, and peak requirements. Size the HVAC system to the larger of the heating or cooling load to support year-round comfort.

Unitary heating and cooling

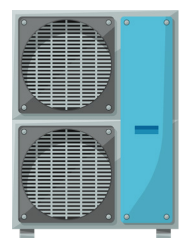
Unitary heat pumps have become common in multifamily housing due to efficiency and ease of energy code compliance. Three types of unitary equipment that are all common in multifamily buildings include:

- Ducted split heat pumps
- Ductless split heat pumps (mini splits or multi-splits)
- Packaged terminal heat pumps (PTHPs)

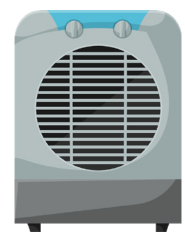
Mini-Split Heat Pump



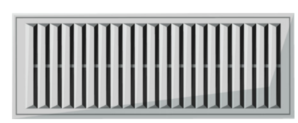
Multi-Split Air Source Heat Pump



Central Heat Pump



Ductless Indoor Unit



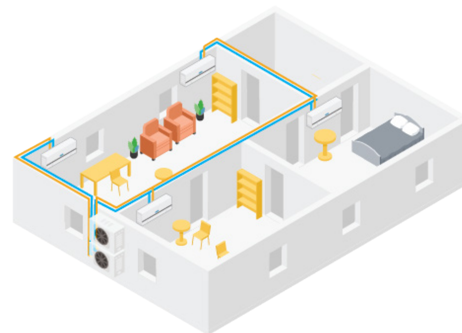
Ducted Air Vent

Unitary systems are common for multifamily buildings as they are highly efficient and easily tailored to individual dwelling units. Central systems, such as variable refrigerant flow (VRF) or air-to-water heat pumps, become more attractive with building scale.

Unitary Systems

Unitary systems should be sized to match the loads of each dwelling unit; ensure each system is sized and designed appropriately to maximize comfort and reduce energy consumption. ACCA Manual S® should be used to select equipment that satisfies the calculated heating and cooling loads.

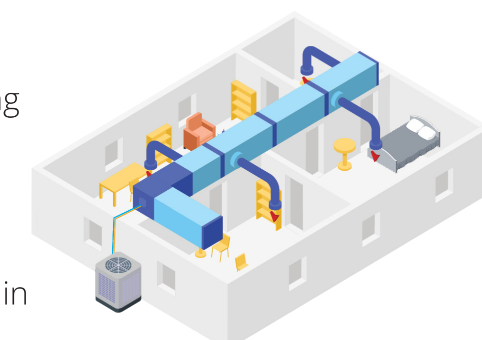
Ductless



Saves space by eliminating the need for ducts. Indoor units come in a variety of types including wall mounts, floor mounts, and ceiling cassettes; each with their own advantages and limitations.

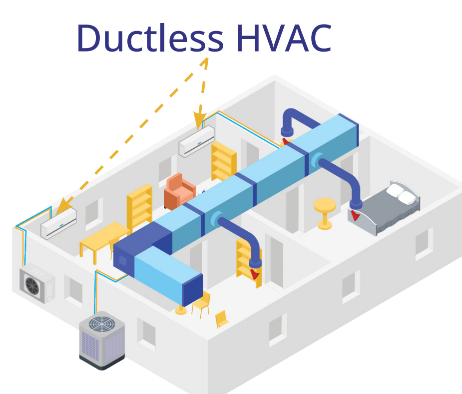
- **Wall mounts**: Popular for affordability
- **Floor mounts**: Offer easy maintenance and can be hidden strategically behind furniture but require clearances around the unit for airflow
- **Ceiling cassettes**: Low-profile and resemble a traditional register but are harder to access for maintenance and require refrigerant and condensate lines to be run through the ceiling

Ducted equipment



- Balanced to provide the required amount of heating and cooling to each zone it serves
- Ducts should be balanced, and zonal controls should be implemented when able
- Have a smaller footprint and can supply smaller thermal zones in multifamily buildings

Mixed systems



- Multiple types of unitary equipment can be the best solution for homes with various thermal zones that require different approaches
- Need for multiple compressors makes these systems less viable as the building scales

Central heating and cooling systems

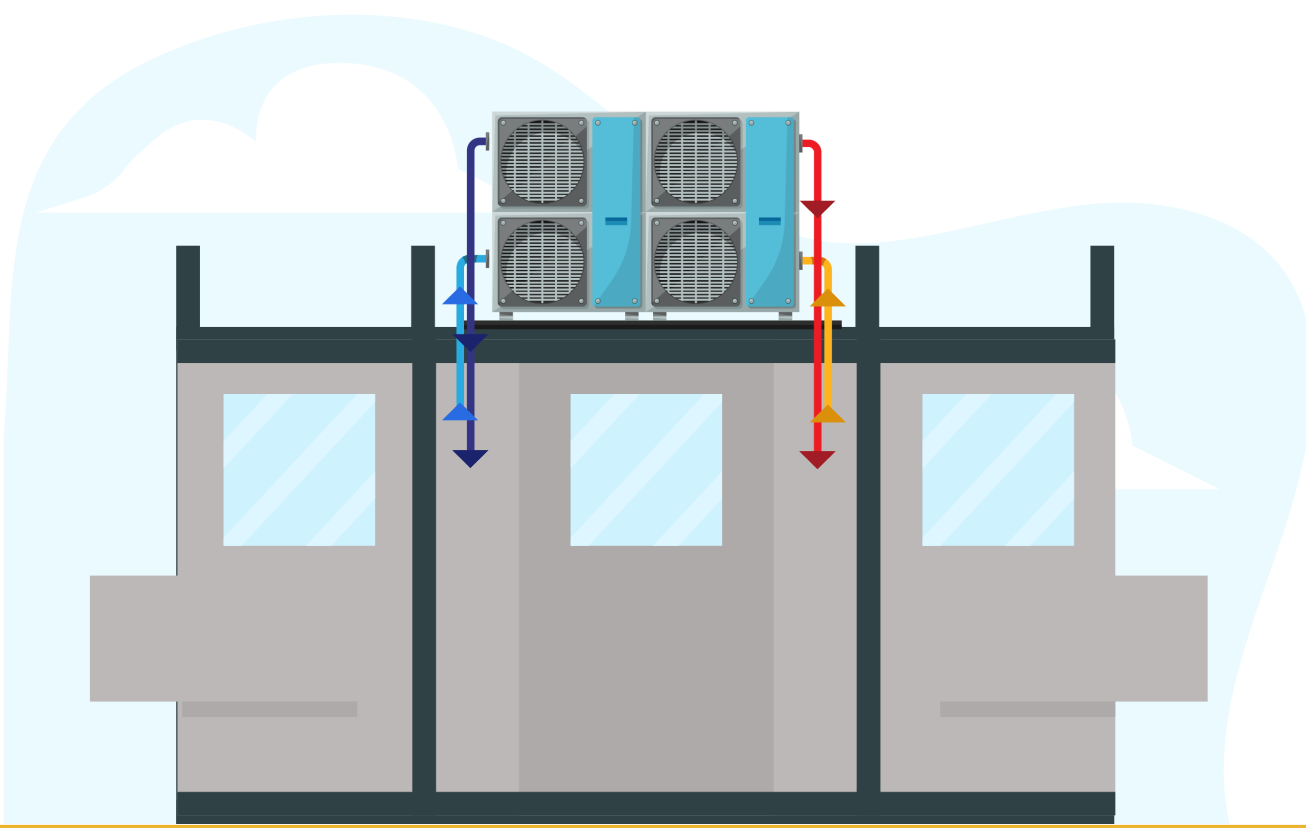
Central HVAC systems become more attractive for larger buildings, offering scalability and potential energy efficiency gains. Key options include:

Key considerations for VRF include:

1. Low-noise fan coils and heat recovery
2. Fewer outdoor condensing units compared to traditional split systems
3. Greater potential for refrigerant line leaks because of more joints
4. Restrictions on quantity of A2L refrigerants allowed which can lead to new designs that require shorter line lengths
5. Require common utility metering or installation of third-party platforms to submeter and bill tenants for their use

Central Air-to-Water Heat Pumps

- Four-pipe fan coil systems provide both chilled water (CW) and heating hot water (HHW), which is an efficient option for heat recovery and peak shifting through thermal energy storage
- Option in place of a traditional water-cooled chiller and boiler



Combined HHW & DHW Systems

- Can transfer heat between chilled water and heating hot water
- Require integration with a small double-wall plate and frame heat exchanger (HEX)
- Requires no additional heat pumps to produce DHW, however it does require DHW supply and return distribution pipework

Water Sourced Heat Pumps

- Two-pipe hydronic system circulates water throughout the building to water-source heat pumps in each dwelling unit for heating and cooling only or include a loop for DHW
- Highly efficient, climate friendly, and makes use of heat recovery while being simpler than a four-pipe hydronic system
- Limited ability to take advantage of thermal storage for peak shifting

OTHER ELECTRIFICATION OPPORTUNITIES

Cooking: Induction Technology

Induction technology provides highly efficient, precise, and safe cooking alternatives to gas. Benefits include:

- Efficiency: According to the EPA, induction is 85% efficient compared to radiant electric (75-80%) and gas (32%)
- Health and safety: Eliminates combustion byproducts, reducing fire hazards and improving indoor air quality
- Space cooling savings: Generates less heat, reduces cooling load to the space
- Electrical requirements: Requires a 240 V branch circuit. Some ranges with built-in batteries allow for operation on 120 V circuits and reduce peak-use hours
- Product recommendations: Choose induction ranges with auto-shut-off features and durable surfaces for enhanced safety and longevity

Fireplaces

Electric fireplaces provide ambiance without combustion. These systems use water vapor and LED lighting to simulate a fire and are available with heating features. Electric fireplaces for ambiance only that do not use electric resistance are recommended to maximize energy efficiency.

Clothes Drying

Electric clothes drying options are available for both in-unit and common-use laundry facilities.

In-unit dryers

- Ventless heat pump dryers are space saving and energy efficient, operating at lower temperatures to preserve fabrics
- Combination washer-dryer systems are ideal for smaller dwelling units
- Typically require a 240 V service

Common-use dryers

- Select commercial grade dryers with short cycle times to accommodate high occupancy while minimizing energy use
- Prioritize ENERGY STAR models for lower energy consumption

Pool and Spa Heaters

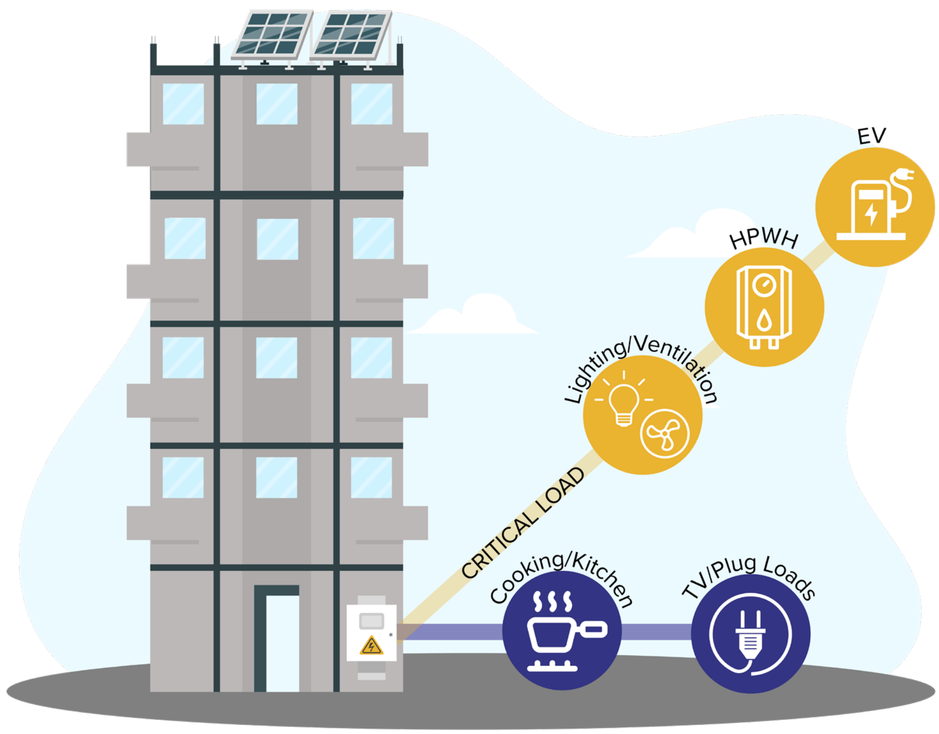
Heat pump technology is an efficient and increasingly popular choice for pool and spa heating.

Key considerations:

1. Performance: Modern heat pump pool and spa heaters operate efficiently even in cold temperatures, maintaining water above 100 for year-round spa use.
2. System design: Consider using multiple small heat pumps or central large-scale heat pump, depending on the size of the pool.
3. Incentives and payback: Pairing heat pump systems with on-site PV generation can result in attractive payback, especially for larger PV arrays.
4. Efficiency tip: Avoid electric resistance heating to maximize system efficiency.

ELECTRICAL INFRASTRUCTURE

Critical Load Isolation



Identify critical loads with the property owner and consider isolating those circuits in a dedicated panel. This allows for easier integration with backup energy systems and enhances resilience during outages. For individually connected systems, consider installing monitoring equipment to allow users to manage and optimize their energy use.

Photovoltaics (PV)

Assess solar PV capability for the building and design the necessary infrastructure for any potential PV. Provide additional or upsized conduits and wires to accommodate future PV capacity and upsizing bus ratings of any panel with PV back feed. Consider adding junction boxes in PV output circuit runs to allow circuits to divert to allow future connection with any energy storage system.

Battery-Ready Systems

On-site energy storage systems improve grid resilience, enable load shifting, and provide islanding capability during power outage events. Energy code requires conduit and wiring available to enable future battery energy storage system installation. Size and specify battery sizing at time of design and provide conduit to future battery energy storage system locations.

RESOURCES

Building Codes - Architects and Engineers can use these resources to review the CA Energy Code documents and ASHRAE Standards.	California Building Code: https://www.dgs.ca.gov/bsc/codes ASHRAE Standards: https://www.ashrae.org/technical-resources/standards-and-guidelines
Energy Codes - Architects and Engineers can use these resources to review the Title 24 part 6 requirements.	Title 24 Part 6: https://energycodeace.com/content/tools-ace-reference-ace&item_category_trait_standards=[15115,15116,23268,52643,65372] IECC (International Energy Conservation Code): https://codes.iccsafe.org/content/IECC2021P2
Equipment - Architects and Engineers can use this resource to review energy design guides, equipment specifications, and sizing tools.	ASHRAE Advanced Energy Design Guides: https://www.ashrae.org/technical-resources/aedgs/zero-energy-aedg-free-download CEE ASHP Decision Matrix and System Design Guide: https://cee1.org/images/pdf/CEE_ASHP_Decision_Matrix_and_System_Design_Guide_TRC_01.18.24.pdf AHRI: https://www.ahridirectory.org/Search/SearchHome?ReturnUrl=%2f Central Heat Pump Water Heater Design Guide: https://www.energytrust.org/wp-content/uploads/2023/04/New-Buildings_Design-Guide-for-Central-Heat-Pump-Water-Heaters.pdf NEEA Water Heater Specification: https://neea.org/img/documents/Advanced-Water-Heating-Specification.pdf CHPWH Ecozsizer: https://ecosizer.ecotope.com/sizer/ ENERGY STAR Product Finder: https://www.energystar.gov/products NEEP Cold Climate ASHP List: https://ashp.neep.org/
Software - Architects and Engineers can use this software to review energy design guides,equipment specifications, and sizing tools.	ACCA Approved Software: https://www.acca.org/standards/approved-software Energy modeling software and tools: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency Roof Azimuth Tool: http://tools.solmetric.com/Tools/roofazimuthtool

NEW CONSTRUCTION PROGRAMS

Engineers to keep in mind sizing and equipment efficiencies. Architects to keep in mind space planning for equipment such as heat pump water heaters.

Program Name	Service Territory	Eligible projects/ building types	Technical Assistance	Key Offerings
California Electric Homes Program (CalEHP)	California	Market-rate single family, multifamily, manufactured homes	Yes	Electrification, Battery Storage
California Energy-Smart Homes	Pacific Gas & Electric (electric service), Southern California Edison, San Diego Gas & Electric (electric service)	Single family, low rise (1-3 stories), multifamily, ADUs	Yes	Electrification, Advanced Technology Bonuses
Building Initiative for Low Emissions Development (BUILD)	Pacific Gas & Electric (gas service), Southwest Gas, SoCal Gas, San Diego Gas & Electric (gas service)	Affordable single family, multifamily	Yes, up to 300 hours	Electrification, energy storage, Solar PV
California Energy Design Assistance (CEDA)	Pacific Gas & Electric, Southern California Edison, San Diego Gas & Electric, SoCal Gas	High rise (4+ stories)	Yes	Design assistance
SMUD All-Electric Smart Homes	Sacramento Municipal Utility District	Single family, multifamily	Yes	Electrification, Induction cooking, EV Chargers, Smart thermostat
SCE Clean Energy Homes	Southern California Edison outside of gas IOU territory	Affordable multifamily	Yes	Design incentives, tenant education
3CE New Construction Electrification Program	Central Coast Community Energy	Single family, single family natural disaster rebuilds, multifamily, farmworker housing, ADUs	No	Electrification
LADWP Zero By Design New Construction Incentive Program	LADWP	High rise (4+ stories)	Yes	Design incentives (prescriptive and whole building performance for exceeding T24)
SCE New Home Energy Storage Pilot (NHESP)	Southern California Edison	Single family, multifamily	No	Battery Storage incentives

DEFINITIONS

- **Air Source Heat Pump (ASHP):** A heat pump that uses outdoor ambient air as its heat source/sink. It operates using a vapor compression cycle to transfer heat between the outdoor air and interior spaces.
- **Air-to-Air Heat Pump:** A system that transfers heating or cooling energy between two separate air streams. Commonly used in California multifamily buildings both in split and packaged HVAC forms.
- **Air-to-Water Heat Pump:** A system that heats or cools the water used in the building by transferring heat to or from an airstream. Advanced systems may include multiple loops. Loop-1 for cooling, Loop-2 for heating hot water (HHW), and Loop-3 for pre-heating domestic hot water (DHW).
- **Cascading Heat Pump System:** System of multiple compressors that engage and disengage compressors to match the load. The ability to engage more compressors increases the maximum capacity of the system and the ability to disengage compressors allows the system to operate efficiently in low load scenarios.
- **Central Heat Pump Water Heater (CHPWH):** A central system that uses one more heat pumps to supply hot water to multiple dwelling units throughout the building.
- **Chilled Water (CW):** Water that has been cooled by a chiller and distributed throughout the building for space conditioning.
- **Certified Energy Analyst (CEA):** A credentialed professional certified by the California Association of Building Energy Consultants (CABEC) who demonstrates expertise in California's Building Energy Efficiency Standards.
- **Domestic Hot Water (DHW):** Heated water intended for consumption (i.e., showers, cleaning, and cooking).
- **Global Warming Potential (GWP):** A measure of how much energy the emissions of 1 ton of gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO_2).
- **Heating or Cooling Load:** The amount of heat gained or lost in a space at an ambient temperature, determining the HVAC system's capacity needed to maintain indoor temperature.
- **Heating Hot Water (HHW):** Water that is heated and distributed throughout the building for space heating.
- **Packaged Terminal Heat Pump (PTHP):** A self-contained heat pump located through-wall and uses vapor compression cycles to move heat between the outdoor air and indoor spaces.
- **Peak Demand:** The highest level of simultaneous energy consumption of the building or system. To accommodate peak demand, a building must have more electrical capacity than the peak demand requires to manage highest usage times.
- **Reach Code:** A local building energy code that "reaches" beyond the state minimum requirements promoting higher energy efficiency in building design and construction.
- **Split Heat Pump:** A system with an outdoor compressor moving heat to/from the indoor unit through refrigerant or water loops. These systems require small wall penetrations and longer line lengths than PTHPs.
- **Swing Tank:** A component of CHPWH systems that reheats return or recirculated water, simplifying system design and increasing efficiency, Typically electric resistance, the swing tank can be heated by a heat pump if sized correctly.
- **Time of use (TOU):** Utility rates that are higher during peak hours and lower during off-peak hours to incentivize occupants to use electricity during off-peak hours.
- **Water-to-Air Heat Pump:** A system that heats or cools the air stream circulating through a building by drawing or dumping heat from the water loop. Examples include: ground-source heat pump or neutral-temp water loops serving terminal heat pumps instead of radiators.
- **Water-to-Water Heat Pump:** A system that heats or cools water by transferring heat to or from a water loop. The most advanced versions feature four water loops. Loop-1 for cooling, Loop-2 for HHW, Loop-3 for pre-heating DHW, and Loop-4 for balancing the overall system loads by serving as a heat sink or source as needed.
- **Variable Refrigerant Flow (VRF):** A system that uses variable flow rates of refrigerant to deliver heating and cooling to conditioned spaces. These systems can transfer heat between refrigerant loops, making use of simultaneous heating and cooling demands within a building. Commonly used in larger buildings and require complex controls.

California
ELECTRIC
HOMES

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The California Electric Homes program is administered by the California Energy Commission. It is authorized by Assembly Bill (AB) 137 (Ting, Chapter 77, Statues of 2021) and the funds were appropriated in the Budget Act of 2021. Incentives are available on a first-come, first-served basis.