

PORTABLE HEATERS & COOLERS

Help contractors work better... and faster.

Portable heaters and coolers provide temporary comfort to people and help bring construction projects to completion faster. Utilizing portable heating and cooling can help improve productivity and profitability.

Controlling temperature and humidity with portable heaters or coolers helps in two basic ways: (1) workers are more comfortable, motivated and productive; and (2) construction processes are expedited - allowing jobs to progress at a faster pace. Some common examples are:

- On open construction sites during cold weather, construction heaters can help speed processes such as ground thawing, concrete and drywall or plaster curing. Workers will also appreciate the warmth.
- On LEED and other “green” building projects, temporary cooling and heating is often required during construction and build-out to improve indoor air quality and protect workers from extreme heat or cold. Portable rental units help contractors satisfy requirements of LEED or other regulatory bodies.
- For contractors working inside in warm weather, portable air conditioners can keep workers cool until the permanent a/c system becomes operational. This isn’t just a comfort issue but a question of human health and safety. Portable units - typically 5 or 12 tons in capacity - deliver cool, dry air to create a safe, climate-controlled environment. By reducing humidity, portables also help to speed tasks such as drywall finishings.
- During renovation or repair of a building’s primary HVAC system, portable air conditioners or heat pumps are an excellent option for temporary climate control. In a high-rise tower or other large building, air handling equipment repair or replacement is typically performed on a zoned basis, usually floor by floor. Portable units provide an ideal way for contractors to fill the gap and keep occupants comfortable during partial HVAC service or refurbishment. The portables can be easily wheeled to different areas or floors as work progresses.

PORTABLE HEATING

Key equipment used for portable heating:

DIRECT-FIRED HEATERS: Air is blown across a natural gas or propane



Fresh outdoor air is heated using an indirect-fired gas heater and then ducted to multiple areas to warm this construction site.

flame and into the area to be heated. On an open construction site, nothing works more cost-effectively. However, there is an open flame that has some level of toxic emissions, which can be a concern, and some municipalities restrict the use of these heaters. Where allowed, for temporary use in well-ventilated open areas, it is a viable choice and can help speed construction processes. These units typically feature large capacities of 400,000 to 1,500,000 BTU.

INDIRECT-FIRED HEATERS are becoming more popular because of their enhanced fire safety, no harmful emissions, and ability to heat outdoor or indoor construction areas. These user-friendly powerhouses generate a high amount of heat, ranging from about 100,000 to 1,000,000 BTU capacity.

These heaters incorporate a heat exchanger, using a natural gas line or a propane or kerosene/diesel tank to provide fuel. Fresh air is heated and then blown or ducted into a building or other area. Indirect-fired heaters have advantages over electric heating units such as: they are easier to operate, are self-contained and convenient, and operate with low power consumption, so generator power is not required.

ELECTRIC HEATERS use resistive heat which is very effective in cold environments but can be the more expensive option. Large electric heaters with capacities of 34,000 to 512,000 BTU are available. They use a forced air fan to blow or duct fresh, warm air to the area to be heated, delivering clean, dry air with no emissions. Electric heaters are often rented when there is a concern over fumes or using temporary gas lines or diesel equipment, especially in areas where chemicals are being applied. Electric heaters are useful in renovations, heating lobbies and other large areas, while work is being performed. They usually require 3-phase 220 volt or 460 volt high-voltage wiring which often requires the assistance of a generator or an electrician.

PORTABLE HEAT PUMPS in 1 to 5 ton capacities are the newest technology, having come into use over the past 10 to 15 years. They look like portable air conditioners or “spot coolers” that are well known for event and emergency cooling, but also have a heating function that is more efficient than resistive electric heating.

Portable heat pumps are unique with their cooling and heating functions. They are safe to operate and can run off a standard electrical outlet, with no gas or fuel required. Because of their versatility and the need for cooling and heating in many regions of the country, more rental centers are stocking heat pumps.



Direct-fired heaters are ideal for contractors due to their rugged design and dependable operation on construction sites and other open-air locations.



1.5 ton heat pump combines both cooling and heating capabilities in a single, self-contained unit.

PORTABLE COOLING

12 TON PORTABLE AIR CONDITIONERS are popular in size for construction applications, powerful enough to serve large areas yet compact enough to be used inside. Some units can fit through a standard doorway.

25 TON MOBILE COOLERS are large enough to cool an entire building or floor and are typically positioned outside the building, requiring flexible air ducts and generator power.

1 TO 5 TON PORTABLE AIR CONDITIONERS or “spot coolers” are usually for indoor use on job sites and often the product of choice to cool smaller areas, whether to help construction materials dry and/or keep workers cool. Multiple spot coolers can be used and moved as needed.

EVAPORATIVE COOLERS are an option for open-air job sites. They need water to provide cooling; a standard hose can be attached for automatic fill or they can be manually filled as long as the water level is monitored. A fan in the unit pulls the air across the space. Evaporative coolers are simple and cost-effective, and can run on a standard current. A lower-cost alternative to portable air conditioning for parties and event venues, evaporative cooling plays a different role in construction: it is used to raise humidity during cold winter months for woodworking applications. A remote humidistat may be used to control the humidity level.

When there is too much humidity in the air, and heat or cold are not an issue - for example, during the spring thaw periods - low ambient portable dehumidifiers have very high water removal rates yet are lightweight and portable. They help dry out walls and other building components that have become over-saturated with moisture, or even provide restoration where serious water damage has occurred.

PORTABLE AIR SCRUBBERS handle indoor air quality needs on restoration jobs involving sewage, mold or fire damage; to control dust in work areas or on construction sites; or to capture allergens during and after cleaning jobs. The best units combine several stages of air filtration to remove particulate contaminants as well as smoke and odors, and provide variable speed control to handle different airflow requirements.



Temporary cooling keeps this medical lab operational while the permanent system is being refurbished.



The air scrubber continuously cleans and recirculates air within a local area

Sunbelt Rentals, Climate Control Services is a leading provider of temporary, portable, supplemental and emergency heating, cooling and dehumidification equipment. The company provides climate control equipment as well as engineered solutions for a wide array of applications including server rooms, hospitals, commercial, industrial and event entertainment sites. Sunbelt Rentals offers 24/7 emergency service and support from fully stocked locations nationwide. For further information, call 800-892-8677, or visit www.sunbeltrentals.com.

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