#### WHAT IS AN ELECTRIC FIREPLACE?

Electric fireplaces are excellent sources of heat and function as efficient and cost-effective replacements for traditional fireplaces. They don't produce real fire, smoke, harmful byproducts, or emissions, and are incredibly easy to install and operate.

#### **BENEFITS**

- Energy-efficient
  - · Cost-effective
  - · Low-maintenance
  - · Little-to-no clearance requirements
  - · No installation restrictions
  - · No smoke, harmful byproducts, or emissions
  - Long-lasting won't corrode from high-heat exposure like wood or gas fireplaces
  - · Hassle-free installation Simply plug it in
  - · A variety of styles to choose from (traditional, linear, built-in, free-standing, etc.)
  - · Completely safe no fire, stays cool to the touch
  - · Flames can operate separately from heat great focal point for all seasons and climates

## **HOW DO ELECTRIC FIREPLACES WORK?**

Electric fireplaces don't require solid or gaseous fuels to run, but instead, use electricity and specialized technology to produce heat and a lifelike flame presentation. They plug into a wall socket and are operated with a hand-held remote control.

The way electric fireplaces work is brand-specific and can vary from model to model, but in all cases, **cool room air is exchanged with heated air**. Cool air is pulled into the fireplace, warmed by an internal heating coil, then pushed back out into the room by a fan as heat.

Electric fireplaces can also use infrared heat technology to warm people and objects in the room, rather than the surrounding air. With both types of operation, all of the heat produced stays in the room.

The flame effect is created in a variety of ways, but most include **a motorized mechanism that refracts light** off of mirrored panels or strips of metal to create the illusion of a dancing, flickering fire.

Some models, like the Opti-Myst by Dimplex, use specialized technology to create hyper-realistic flames from water vapor. Others feature a video and audio loop of a real wood burning fire to create an immersive, lifelike experience.

The lightbulbs used are typically LED, which contributes to the overall efficiency, lifespan, and environmental impact of electric fireplaces. High-quality **LED lightbulbs can last up to 50,000 hours,** produce approximately 90% less heat and use less than one-sixth of the energy of incandescent bulbs, and up to three times less energy than a typical CFL (Compact Fluorescent Lamp).

With the reduction in heat, **external surfaces of the fireplace stay cool to the touch, allowing for zero-clearance installations** and contributing to overall safety.

LED lightbulbs also don't contain mercury, which when coupled with minimal energy consumption, significantly reduces greenhouse emissions and prevents environmental contamination when the bulbs are discarded.

Some models feature a non-traditional flame color while others are equipped with full-spectrum LED lighting and low-to-high flame settings, allowing you to adjust the color and height of the flames to match your desired mood, the season, a special occasion, or your surrounding decor.

Electric **flames often function separately of the heat output,** making it possible to enjoy the ambiance of a fire in any season, even during hot summer months, and in a variety of climates.

# **HOW MUCH HEAT WILL I GET?**

Electric fireplaces typically heat between 400-1,000 square feet effectively. Square footage varies from manufacturer to manufacturer, so it's best to check the owner's manual or product page listing to find out how many watts and BTUs individual electric fireplaces will produce.

### **ZONE HEATING**

Zone heating helps you **improve heating efficiency** in your home and reduces your overall heating costs. Zone heating consists of supplementing the standard means of heating your house, typically a furnace, with an electric fireplace, stove, or heater in the most occupied rooms of your home.

### **TEMPERATURE CONTROLS**

Most come with a thermostat, making it easy to set the temperature to your desired comfort level as the weather warms and cools throughout the year.

#### WHAT KIND OF ELECTRICAL CONNECTION DO I NEED?

The majority of electric fireplaces **plug into a standard 120-volt wall socket,** so installation can be as simple as taking the fireplace out of the box and plugging it in.

You'll need to **make sure your electrical system can support the addition of another appliance**, especially if you're in an older home with older wiring to prevent blowing a fuse.

Surge protectors or fire-safe sockets can be used to ensure your fireplace and the wall socket won't overheat.

For electric fireplaces that require higher voltage, you'll need to **hire a licensed electrician** to wire the socket.

You can also have an electrician hardwire the fireplace into your electrical system to make it a permanent fixture.

### WHERE CAN I INSTALL AN ELECTRIC FIREPLACE?

The biggest benefit of electric fireplaces is their freedom of installation. **Virtually all free-standing and wall-mounted electric fireplaces are zero-clearance**, meaning they can be installed next to combustible materials without extra consideration.

Installation can include non-traditional indoor locations, such as bathrooms, bedrooms, entryways, attics, basements, cabins, mobile homes, and more, along with close proximity to combustible appliances, like wall-mounted televisions.

Built-in units may have some installation restrictions and clearance requirements to make sure heat can escape thoroughly and won't build-up inside your walls.

Clearances and **restrictions are specific to each brand** and manufacturer, so make sure you check the owner's manual prior to purchase.

Electric fireplaces are **made for indoor use only** and should not be installed outdoors. If you're looking for an outdoor fireplace, go with a gas or wood burning option.

#### ARE ELECTRIC FIREPLACES SAFE?

Yes, electric fireplaces are the **safest fireplace option** because they only require electricity to work and don't produce actual fire, smoke, combustion byproducts, or harmful emissions.

They are **easy to adapt to your installation**, especially in areas where a wood burning or gas fireplace can't be installed.

Electric fireplaces also stay cool to the touch and don't put off any odor, making them a **great option for households with small children**, pets, or for those with chronic lung conditions, like asthma.

### **COST**

Electric fireplaces don't require the framing, chimney, venting, inspections, fuel, or yearly maintenance associated with wood burning and gas fireplaces, saving you a significant amount of money upfront and over time.

They work really well for remodels, renovations, and new builds where an affordable, high-efficiency solution is needed.

Initial installation **costs may include hiring a licensed electrician** to wire in a higher-voltage socket or to hardwire your fireplace, along with hiring a contractor if you want a built-in fireplace.

If you're choosing a wall-mounted fireplace that can plug into a standard wall socket, then you'll have zero installation costs, other than what you need to mount the unit to the wall.

Electric fireplaces can be used with or without heat and as zone heaters, cutting down on both your electric and heating bills. In most areas, electricity is cheaper than gas, but it varies from state to state.

#### **HOW TO CALCULATE COST PER HOUR**

If you'd like to know what the cost to operate an electric fireplace will be, here's how to figure it out:

### Use this equation: (Watts / 1,000) x kw/hr = total cost per hour

- Look-up the maximum amount of watts your electric fireplace consumes. This will be located on the fireplace itself, in the owner's manual, or on the product page listing.
  - · Look-up the local rate for a kilowatt-hour (kw/hr) on your monthly utility statement.
  - · Take the total watts and divide by 1,000 to convert watts into kilowatts.
  - · Multiply the kilowatts by the kw/hr rate from your utility statement. This equals your total cost per hour.

For example, if you have an electric fireplace that consumes 5,000 watts and your kw/hr rate is 15 cents, your total cost would be 75 cents per hour to operate the fireplace:

### (5,000 watts / 1,000) x .15 = .75, or 75 cents per hour

To get the total daily cost, multiply the total cents per hour by the number of hours you use the fireplace each day.

# **STYLES AVAILABLE**

Electric fireplaces come in an array of styles, including traditional, linear, builtin, wall-mounted, stoves, inserts, and free-standing with a mantel or entertainment center.

They are easy to order and come as a finished product, so you don't have to fuss over product configurations, fuel-type, venting, or accessories, like you would with a traditional fireplace.