



FauxFire™ FAQ's

WHAT IS FAUXFIRE™?

Technifex Products patented FauxFire™ system is designed to produce a realistic simulation of flames, using low-pressure steam from a boiler, or theatrical smoke from a smoke machine, coupled with unique animation and lighting devices.

The effect comprises three main elements:

- A special manifold designed to produce a thin, steady curtain of rising steam, or theatrical smoke.
- Modulated animation blowers directed at the curtain to produce flame-like turbulence in the steam
- A high-brightness lighting system with colored filters to provide coloration of the “flame” effect

FauxFire™ appliances work optimally when they are adjusted to produce “flames” at a maximum height of two to three feet (0.6 to 0.9 meters). The effect may be adjusted to lower levels, if appropriate for the venue.

HOW LARGE IS THE EQUIPMENT?

FauxFire™ appliances are produced as standardized units, in straight lengths of two feet (0.6 meters), four feet (1.2 meters), and eight feet (2.4 meters). The appliances may be placed end-to-end in any combination, to create the desired display length.

When installed as designed, the equipment requires a minimum space equal to the total length of the appliances (including the bracket allowances), by two feet (0.6 meters) tall, by two and a half feet (0.762 meters) deep, front-to-back.

CAN FAUXFIRE™ APPLIANCES BE USED IN A CURVED OR CIRCULAR PATTERN?

A FauxFire™ effect can be created as a segmented arc or circle, using Technifex Products standard straight appliances, within the limits of the required space. It must be noted that there may be gaps in the flame effect in this configuration. There are methods for dealing with this, which we can suggest on a case-by-case basis.

IS THE FAUXFIRE™ EFFECT VIEWABLE FROM BOTH SIDES?

The FauxFire™ system is designed to be viewed primarily from one side; however, the system can be modified to allow viewing from both sides, if we are notified in advance of this requirement. In order to be viewable from both sides, the equipment will require more space for installation than a typical set-up.

CAN FAUXFIRE™ BE PLACED AT FLOOR LEVEL?

The FauxFire™ appliances should be placed such that guests will not be able to see the equipment that produces the effect. That being said, the equipment can be placed in a trough below floor level such that the FauxFire™ appears to emanate at floor level.

CAN THE EFFECT BE COVERED FOR CONCEALMENT OF EQUIPMENT?

If the effect is to be of the highest quality, the top of the equipment space must be open and unobstructed. Any type of cover interferes with the animation and lighting and can cause the effect to be compromised. In specific stage situations, Technifex has had success using certain types of metal grating over the top of our FauxFire equipment. Though the grating can affect the appearance of the FauxFire™ to a degree, none of our clients have found this to be a problem.

ARE THERE OTHER USAGE CONSIDERATIONS?

- The FauxFire™ effect is not generally sold for outdoor applications because there is usually limited control over air currents (wind) and ambient light levels.
- For proper visual appearance, the ambient lighting around the FauxFire™ appliances should be controlled so as not to “wash out” the effect since this is ultimately a lighting effect. Also, the background against which the FauxFire™ effect is viewed should be kept as dark as possible, black being optimal.
- Though there are two forms of FauxFire™ systems, (smoke and steam) we generally sell the steam based system for permanent and long term applications due to the ease of service, reliable nature of boiler systems and the fact that steam is a water based product. The smoke version is oil based (Propylene Glycol) and is generally used for short term applications such as trade shows and special events.

WHAT DOES THE EQUIPMENT COST?

Because of the many variables associated with any particular use of FauxFire™ systems, it is only possible to provide pricing information on a case by case basis. Technifex can determine the cost of a system once we clearly understand the proposed placement, quantity and use of the FauxFire™ equipment. We generally do this through conversations with our clients and careful examination of client-furnished drawings and related documents.

Standard FauxFire™ units come with the FauxFire™ manifold, a single manual valve for adjustment of steam height, one or two animation blowers (depending on the length of the appliance), an incandescent lighting fixture with MR-16 lamps and colored glass filters for the lighting bar, and six feet of 3/4" steam hose.

ARE THERE EQUIPMENT OPTIONS AVAILABLE?

Equipment options for FauxFire™ are as follows:

- A single solenoid-operated valve for turning the steam on and off under electrical control.
- Dual solenoid-operated valves and manual adjusting valves for creating three operating flame heights (high/medium/low) under electrical control.
- Fade-proof dichroic color filters for the lighting, instead of the standard colored glass media.
- Extra animation blowers, which are sometimes needed when Faux Fire appliances are arranged in a curve or circle.
- Optional modules for DMX control of the steam and lighting.
- A DMX lighting board, if DMX control is desired, and the facility does not have the capability.
- Long life LED-based lighting instruments, instead of the standard incandescent units.

WHAT FACILITY UPGRADES ARE NECESSARY TO USE FAUXFIRE™?

There is specific equipment and facility services that must be designed and installed in order to support the Technifex supplied FauxFire™ equipment. These include:

- The boiler system. Unless only a small amount of FauxFire is required, Technifex does not usually furnish and install the steam boiler for use in creating the FauxFire™ effect. This equipment is usually most cost-effectively obtained locally, by the client. However, Technifex will clearly specify the boiler requirements based on the number of appliances to be used, the intended “flame” height(s), the operational frequency and duration, and anticipated steam losses in the piping between the proposed boiler location (equipment space) and the FauxFire™ location.

- Plumbing and electrical wiring required by the FauxFire™ appliances, between the equipment space and the appliance location is usually furnished and installed, to Technifex's specifications, by facility contractors who are hired by the client or project owner. The service runs installed by the facility contractor should also include the steam piping and condensate drain lines.
- Upgrades to HVAC work may be necessary to handle the extra heat and humidity loads created by the FauxFire™ effect. Technifex will provide information relative to anticipated heat and humidity loads to the facility mechanical engineer. It should be noted that these heat and humidity loads are generally fairly modest.

WHAT IS GENERALLY REQUIRED TO OPERATE FAUXFIRE™?

Permanent FauxFire™ applications require a steam source (boiler system), with facility-furnished distribution piping from the boiler location to the FauxFire™ location. A facility drain (or drains) at the appliance location is required to handle the condensation created by the steam. In addition, electrical power is required for the appliance lighting system and for the animation blowers, and, if selected for control of the optional solenoid-operated steam valves.

Regarding steam delivery pressure, FauxFire™ appliances are designed to operate properly with 90 psig at the steam stub-up location.

STANDARD ELECTRICAL REQUIREMENTS

	APPLIANCE LENGTH		
	TWO FOOT	FOUR FOOT	EIGHT FOOT
LIGHTING	120VAC, 60 Hz 750 W	120 VAC, 60 Hz 1500 W	120 VAC, 60 Hz 3000 W
ANIMATION BLOWER(S)	1 FURNISHED 120VAC, 60Hz., 2.5 A	2 FURNISHED 120VAC, 60Hz., 2.5 A EACH	2 FURNISHED 120VAC, 60Hz., 2.5 A EACH

It should be noted that the standard FauxFire™ Lighting systems use 12 Volt, 75 Watt lamps wired in series to accept 120VAC. Thus, an eight-foot bar contains 40 lamps wired in four circuits, a four-foot bar has 20 lamps wired as two circuits, and a two foot bar has 10 lamps on a single circuit.

ELECTRICAL REQUIREMENTS – OPTIONS

	POWER	CONTROL
SOLENOID CONTROL VALVE(S) – TWO MAX.	120VAC, 60 Hz, 2A., <u>EACH</u> <u>VALVE</u>	SWITCHED CIRCUIT FOR EACH VALVE MAY BE A MANUAL SWITCH, A RELAY OPERATED BY A SHOW CONTROL SYSTEM, OR BY A DMX SIGNAL.
4-CHANNEL LIGHTING DIMMER (This is used only if it is desired to create a flicker effect in the lighting)	120VAC, 60 Hz. <u>TWO EA.</u> 20A CIRCUITS	DMX SYSTEM (FLICKER PROGRAM PROVIDED BY DMX SYSTEM VENDOR)
DMX LIGHTING BOARD (For DMX control of dimmers, blowers, valves)	120VAC, 60Hz., 15 A	N/A
DMX INTERFACE MODULES (for DMX control of blowers, valves)	N/A	DMX SYSTEM
LED LIGHTING (For 2 ft., 4 ft., 8 ft. units)	120VAC, 60 Hz. ONE EA. 20A CIRCUIT	DMX SYSTEM OR MANUAL CONTROL

STANDARD MECHANICAL SYSTEMS REQUIREMENTS

Facility-provided stub-ups for steam, electrical power, and control lines (if used) should be provided within 6 feet of each appliance. Additionally, one or more drains to a facility sanitary sewer should be provided at or near the effect locations, to dispose of the condensation. Each appliance creates between 1/2 and 1 gallons per hour of condensate.

WHAT SHOULD THE BOILER SYSTEM INCLUDE?

Typical boiler systems include:

- A steam boiler, which may be gas-fired, or, in some applications, electric. The boiler must be rated for continuous delivery of the required steam volume and pressure. Note that boiler delivery ratings assume that incoming water from the feed system is at or near 212° F. If cool or cold facility water is used, the boiler output must typically be de-rated by 25%-30%. The boiler manufacturer can assist with this consideration.
- A feedwater tank and pump to keep the boiler charged with water
- A chemical treatment tank and metering pump, to assist in preventing boiler scale
- A water softener, to minimize mineral content that creates boiler scale
- An ASME-rated blow-down tank, into which the boiler steam may be safely discharged when the boiler must be shut down, or in the event that the safety pressure valve opens

WHERE DO WE GET A BOILER?

There are a number of boiler manufacturers, with representatives in most areas. For gas-fired units, you may contact local representatives of Parker Boiler Company (www.parkerboiler.com), McKenna Boiler Works (www.mckennaboiler.com) or Lattner Boiler Systems (www.lattner.com).

Electric boilers can be furnished by Sussman Electric Boilers (www.sussmanboilers.com) or Electro-Steam Generator Corp. (www.electrosteam.com).

The boiler manufacturer representatives can, in most cases, help with the installation and startup of the system, and can provide operational and maintenance training.

IS A WARRANTY PROVIDED FOR FAUXFIRE™ EQUIPMENT?

Technifex Products provides a conditional one-year warranty on FauxFire equipment.