Flare Fireplaces Summer Kit Installation Guide

[Flare Fireplaces SK system] v3.7
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WARNING!

The direct vent system appliance must be installed as an OEM installation in manufactured homes (USA only) or an aftermarket permanently located, or a mobile home, where not prohibited by local codes and must be installed in accordance with Manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or the Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series, in Canada.

This appliance is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the appliance.


WARNING!

If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Installation and service must be performed by a qualified installer, service agency or the supplier.

WARNING!

NEVER LEAVE CHILDREN OR OTHER AT RISK INDIVIDUALS ALONE WITH THE APPLIANCE
WARNING!

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at-risk individuals out of the room and away from hot surfaces.

WARNING!

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

WARNING!

This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-latest edition or the Canadian Electric Code CSA C22.1.

A 110-120V AC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

WARNING!

Proposition 65 Warning: Fuels used in gas, wood burning or oil-fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. California Health & Safety Code Sec. 25249.6. In the state of Massachusetts, only a licensed plumber and gas fitter may install this product. See note for the Commonwealth of Massachusetts.
FLARE FIREPLACES – FRAMELESS IN EVERY WAY

Flare Fireplaces is where innovation, quality and luxury come together to form new ideas. By combining superior raw materials, contemporary design, creative technology and a frameless way of thinking, we have created a full line of direct-vent fireplaces that are luxurious, simple to operate and efficient. Our Fireplaces are distinguished by their clean design, superior build quality and unique features.

SAFETY

CSA CERTIFICATION

All our fireplaces are tested and have been certified to meet stringent guidelines, ensuring optimum quality, safety and efficiency.

MANUAL MODEL LIST & INFORMATION

The Following manual should be used for the following Flare Fireplaces Models:

- Flare Front 30-100 ™
- Flare See-Through 30-100”
- Flare Corner Right & Left 30-100”
- Flare Double Corner 30-100”
- Flare Room Definer 45-100”

For ease of installation and operation, all above models share the same gas valve system and connection, remote, and glass type. This product meets ANSI standards for “Vented Gas Fireplace Heaters” and applicable sections of “Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles” as well as “Gas Fired Appliances for Use at High Altitudes”.

Installation MUST comply with local, regional, state and national codes and regulations. Consult your insurance carrier, local building inspector, fire officials or other authorities with jurisdiction over restrictions, installation inspection and permits.

This installation must conform to local codes. In the absence of local codes, you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.
The optional Summer Kit (SK) extracts heat from the chase, directing it outside rather than into your home. The inline system of fans allows the fireplace to operate without a significant increase in room temperature. The kit is perfect for commercial use in restaurant or hotels, but also for residential homes in warmer states. Operating the kit is as simple as flipping a switch and can be set up to come on automatically or controlled independently of your fireplace. It is also possible to connect the Summer Kit to a home automation system. The Flare SK system is designed to remove heat mostly from the top of the fireplace. The amount of radiant heat from the front of the fireplace is expected to be reduced but largely depends on the installation of a safety screen or double glass.

**WARNING!**

PLACE SUMMER KIT OUTSIDE OF FIREPLACE CAVITY IN ADJACENT SPACE OR ATTIC. PLACING IT INSIDE OF YOUR FIREPLACE CAVITY WILL OVER HEAT THE FAN CAUSING LONG TERM DAMAGE.
SUMMER KIT INSTRUCTIONS:

The Flare Summer Kit is an optional system that can be installed as part of the Flare overall heating and aesthetic solution.

**NOTE:** The Flare SK system does not change fireplace clearances or heat release requirements as detailed in the Flare installation manual.

Installation requirements and considerations:

- The Flare SK system needs to be installed a minimum of 4 feet away (inlet vent) from the fireplace.
- Overall vent length should not exceed 80 feet.
- SK system should be installed in an accessible space in case service to the unit is needed.
- It is not recommended to install the SK system above the fireplace, inside the chase, due to heat released from the fireplace.
- A 15A 110V outlet is needed. See power requirements for details.
- The SK system is connected to the fireplace with a low voltage wire. The type of wire that should be used is a minimum of 18-gauge stranded copper wire **(Not Hardcore)**
- The kit is designed to remove heat from the chase and has a limited impact on radiant heat released from the fireplace glass. Radiant heat from the front depends on a safety screen or double glass.
- The Flare SK system is designed for indoor use.

Summer vent unit must be installed by a qualified installer in accordance with these instructions.

**CAUTION!** Failure to install, operate, and maintain the power venting system in accordance with manufacturer’s instructions will result in conditions which may produce bodily injury and/or property damage.

The Flare SK system does not change the fireplace clearances requirements or heat release requirements as are detailed in the Flare Fireplace installation manual.
The Flare SK is designed to operate with any of the Flare Fireplaces in the following way:

- The fan starts from a control signal from the fireplace sent over a low-voltage, 2-wire cable.
- The system is set to turn on and off with the fireplace every time.
- The Summer Kit is plugged into a 110V power outlet which can be connected to an independent switch, wireless remote, or home automation system. This allows the user to disable the system during winter or when heat is desired.

**ELECTRICAL CONNECTION**

The SK system is fan system and requires the following electrical connections:

**OPTION 1 - (DEFAULT)**

- 110V connection locally where the SK is installed. It is recommended to put the power on a switch to allow option to disable the SK when needed.
- 6V – DC - Two wire data cable to the fireplace. Fireplace will relay low voltage messages to the SK, to stop and start.

Result: When Fireplace is started, 6v DC signal is sent over the data cable to start the fan. Fan will start assuming it has 110V power mention in first bullet point above. Once Fireplace is turned off, SK will shutoff automatically.

By Default: SK System is wired to receive relay from Receiver or Double Glass board to operate when fireplace is powered.
ELECTRICAL CHART FOR DOUBLE GLASS

When using Flare Double Glass or Power vent system, the SK will connect to the Flare electrical board using a two wire cable. The signal from the fireplace board is 6V DC and keeping polarity is important.

- Make sure to match the black and green wires
- A short in wires from the Fireplace to the SK board may lead to a fireplace not starting.

110V Power – Connected locally where SK is installed. Recommended to be wired to a switch.
ELECTRICAL CHART FOR SAFETY SCREEN - MAXITROL

The Flare screen unit does not have a control board and will use the following connections below the fireplace (Fig. 1)

**STEP 1:**
Place the connection kit under the fireplace. For Wi-Fi enabled receivers/remotes (BLUE STICKER) Connect Aux Cable to the receiver Relay Module port as shown in Fig. 1.

For all Non-Wi-Fi Receivers and remotes (GREEN / BLACK STICKER) connect Aux Cable to receiver Aux Module port as shown in Fig. 2.

![Fig 1. Ensure SK Cable is plugged into “Relay” port on receiver for all Wi-Fi enabled devices (blue sticker.)](image1)

![Fig 2. Ensure SK cable is plugged into “Aux” port on receiver on all non Wi-Fi Receivers/Remotes (Green/Black stickers.)](image2)
**STEP 2:**
Connect the data cable (Green & Black Fig. 1 or Red & Black Fig. 2) to the SK using a 2-wire cable (18 gauge - Red and black pictured below.)

**WARNING!**

1. **LOW VOLTAGE MUST BE USED BETWEEN SUMMER KIT AND FIREPLACE. DO NOT ATTACH HIGH VOLTAGE TO EITHER BRAIDED CABLE. YOU WILL DAMAGE ELECTRONICS IF THIS IS NOT FOLLOWED.**

2. **POLARITY MATTERS WHEN CONNECTING YOUR WIRES. ENSURE POSITIVE (+) IS TIED TO POSITIVE (+) AND NEGATIVE (-) IS TIED TO NEGATIVE (-).**

3. **SHORT IN LOW VOLTAGE CONNECTION WILL PREVENT FIREPLACE FROM FIRING. IF POWER IS Pressed ON REMOTE AND UNIT PILOT DOES NOT SPARK ENSURE COMPLETE CONNECTION AT BOTH LOW VOLTAGE AND 110V POWER.**
The Flare screen unit does not have a control board and will use the following connections below the fireplace (Fig. 1).
STEP 1:
Locate the Fireplace Receiver under the fireplace. Connect Green head Aux Cable to the receiver port 13 as shown in Fig. 1.

STEP 2:
Connect the data cable (Green & Black Fig. 1 or Red & Black Fig. 2) to the SK using a 2-wire cable (18 gauge- Red and black pictured below.)
SCREEN UNIT CONTROLLING SUMMER KIT- SIT PROFLAME 2

The SIT ProFlame 2 Valve can will be wired with the Summer Kit and allows the Aux (port 13) function to control the Summer Kit. To activate the Summer Kit, press the mode Key until the Aux icon appears on the remote. Press the up-arrow key to turn the summer kit on and show the command ‘ON’ on the SIT ProFlame 2 handset. Press the down arrow to turn the summer kit off and show the command ‘OFF’ on the SIT ProFlame 2 handset. A single beep will confirm the reception of the command. See the following figure that shown the activation and deactivation process.

4. LOW VOLTAGE MUST BE USED BETWEEN SUMMER KIT AND FIREPLACE. DO NOT ATTACH HIGH VOLTAGE TO EITHER BRAIDED CABLE. YOU WILL DAMAGE ELECTRONICS IF THIS IS NOT FOLLOWED

5. POLARITY MATTERS WHEN CONNECTING YOUR WIRES. ENSURE POSITIVE (+) IS TIED TO POSITIVE (+) AND NEGATIVE (-) IS TIED TO NEGATIVE (-).

6. SHORT IN LOW VOLTAGE CONNECTION WILL PREVENT FIREPLACE FROM FIRING. IF POWER IS PRESSED ON REMOTE AND UNIT PILOT DOES NOT SPARK ENSURE COMPLETE CONNECTION AT BOTH LOW VOLTAGE AND 110V POWER.
OPTION 2- (INDEPENDENT CONTROL)

- SK unit is connected to 110V. Wall switch or Smart outlet/ Remote /Electrical wiring to start/stop the SK whenever desired.

- No data connection between the fireplace and the SK. SK Board is not used at all. Fans are connected directly to power source.

SK control is in the hand of the operator using the Remote/Smart outlet or electrical wiring. Fan can be started at any time independent of the fireplace operation. SK will operate just like a kitchen vent with wall switch control.

See below information on how to convert from default option 1 to full wall switch control, Option 2.

Start point – Following diagram shows the default wiring on SK board

![Diagram showing default wiring on SK board]

- Power for SK Fan 2
- Power for SK Fan 1
- 5V Relay wires from Receiver/DG Board
- 110V Power inlet for SK
Step 1:  
**Ensure SK is removed from power.** Remove 1 Red wire from SK Fan 1 and SK Fan 2 and wire it with Common White Wire from 110V input. Cap them off to negate risk of a short.

Step 2:  
Remove second red wire from SK Fan 1 and SK Fan 2 and wire it with Black Neutral wire from 110V Input. Cap and tape them off to negate risk of a short.
Step 3:
Remove Ground wire from SK Fan 1 and attach it to Green Ground wire from 110V input. Cap and tape them off to negate risk of a short.

Summer Kit will now power on and shut off whenever Power is fed to Summer Kit.

The SK electrical board is completely disconnected and can even be removed.

Please note, Flare Fireplaces recommends an Electrician wire a switch to control the power source responsible for running the Summer Kit and mounting it somewhere readily accessible for end client.
When installing a Summer Kit on a Flare unit, the fireplace will ship with a metal covering for your connectors. The cover can be attached to the unit or set on top in your shipping crate.
VENTING

The Flare SK system is designed only to vent heat out of the fireplace chase. The system can be connected with flex pipe, air ducts or metal vents. It is designed to work with standard ductwork systems as well as DuraVent DuraFlex Aluminum flex pipe (PART NUMBER: 4DFA-25). See the following links for more details on the duct system:

https://duravent.com/duraflex-aluminum/

**Inlet:**

Two Default 4-inch flex lines to the firebox located on the side. Alternate Option of two 4-inch flex lines from the bottom. Use the collar adapter provided with the kit to connect the 4-inch vent to the fireplace. Make sure only two of the vent openings on the fireplace are connected to the Summer Kit. All other opening should remain open.

**Outlet:**

6-inch flex line from the SK to the outside using a wall termination. Use the standard 6-inch wall termination as sourced from a local home improvement store or HVAC Supplier.

MAKE SURE ROUNDED OPENINGS ON STEEL PANEL THAT ARE NOT CONNECTED TO SUMMER KIT ARE LEFT FREE OF OBSTRUCTION.
Download the Flare Summer Kit Chart or CAD File:

Flare Fireplaces Summer Kit - PDF

Flare Fireplaces Summer Kit - CAD
CLEARANCES

• Clearances from the Summer Kit box to combustible material is 1 inch.
• The SK system can be mounted on wood studs.
• The SK must be installed with a flex line and wall termination to the outside from the outlet on the box.
• Clearance to secondary termination pipe must be at least 24”.
• SK Vent Termination clearance is 12” above the floor.

PARTS LIST

INCLUDED IN SUMMER KIT:

1. Summer Kit Fan Box with Fans & Vent Adapter on Fan (2X4” Inlet, 6” Outlet)
2. Summer Kit 110v Power Plug
3. Relay System (Safety Screen Only)
4. Two 4” Collars on Fireplace

NOT INCLUDED IN KIT: *Source Parts From a local home improvement store or HVAC Supplier

1. *18 AWG-2 Copper Wire (NOT SOLID CORE WIRE) – Used for Low Voltage Signal from Fireplace to Summer Kit
2. Flex Pipe From Fireplace To Summer Kit (DuraFlex)
3. *Ductwork from Summer Kit to Termination Point
4. *Vent Termination (4” or 6”)

WARRANTY POLICY

Flare Fireplaces take extreme measures to assure all products are tested and verified and are free from defects prior to leaving our warehouse. Our Factory is subject to high quality standard and is under the supervision of the CSA organization.

Flare Fireplaces Warranty Information:
- 1-year Limited Warranty on the gas valve, remote, pilot burner assembly, electric components and fan motors, interior decorative media.
- 5-year Limited Warranty for Ceramic glass (thermal breakage only)
- 10-year Limited warranty on the firebox and burners

Flare warranty shall be effective only if the original purchaser of the fireplace appliance is registered with Flare Fireplaces within thirty days of the date of purchase. Minor warping of certain parts or discoloration is normal and is not considered a defect that is covered by this warranty. Major disruption and buckling of parts can be caused by over-firing of your Fireplace. Over-firing above rated value specified in the manual is contrary to the manufacturer’s instructions and may void this warranty. All installations must be performed by a qualified technician in accordance with applicable local and national requirements. Installations must be done in accordance with the appliance manual. The Limited Warranty applies only if the product is installed in the United States or Canada and only if installed, operated and maintained in accordance the attached product manual. Warranty coverage begins on the date of original purchase. It is the responsibility of the installer to ensure the appliance is firing as per the rating plate. Any part that is found in our judgment to be defective shall be repaired, replaced or refunded at Flare Fireplaces option. This warranty only covers Flare Fireplaces appliances that are purchased through a Flare Fireplace authorized dealer or distributor. The warranty is only valid while the Flare Fireplace appliance remains at the site of original installation. Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest Flare Fireplaces authorized dealer or supplier.

This Warranty Is Void If:
Use of an unauthorized type of media in the firebox. The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes. The appliance is subjected to prolonged periods of dampness or condensation. There is any damage to the appliance or other components due to water or weather damage, which is the result of, but not limited to, improper chimney or venting installation. Holes have been drilled into the fireplace for any reason. If the installation of a Flare fireplace or any of its components isn’t done by an NFI certified Installer or Flare Certified Installer this warranty is void.

Exclusions:
This warranty does not apply to any component that shows evidence of misuse, abuse, improper installation, accident or lack of maintenance. Flare Fireplaces is not responsible for televisions, mantles, surrounds or finishing material around the fireplace. Flare Fireplaces is a fireplace manufacturer and does not install any fireplaces. Flare Fireplaces does not warranty any fireplace installation. Issues with installation should be addressed with builder, reseller and/or fireplace installer. Flare Fireplaces may at its discretion discharge all obligations by refunding the wholesale price of the defective part. The Limited Warranty covers only parts and labor as provided above. Flare Fireplaces will not be responsible for materials, components or construction, which are not manufactured or supplied by Flare Fireplaces or for the labor necessary to install, repair or remove such materials, components or construction.