



Astra Duo 38 II

Owner's Manual

Model Number: 38SFC_D_II

This product is proudly developed and manufactured in North America by **SUPREME FIREPLACES INC.**

3594 Jarry East, Montreal, QC H1Z 2G4

www.supremem.com

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IMPORTANT: Keep the owner's manual for future use.

For the most up-to-date manual, please refer to the official Supreme Fireplaces Inc website.

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1 SAFETY

SUPREME FIREPLACES INC. congratulates you on purchasing an Astra Duo wood burning fireplace. This manual describes the installation and operation of the Astra Duo non-catalytic wood heater. The Astra Duo 38 II model meets the 2020 U.S. Environmental Protection Agency's cordwood emission limits for wood heaters sold after May 15, 2015. Under specific test conditions, this heater has been shown to deliver heat at a rate of 25,403 Btu/hr. In addition, this fireplace complies with the ULC-S610 and UL-127 standards.

SAFETY NOTICE: Carefully read this manual before installation and operation of this fireplace. A house fire may result if not properly installed. To reduce the risk of a fire, follow the installation instructions. Failure to follow instructions presented in this manual can lead to property damage, bodily injury or even death. Alterations or modifications made on the unit or the installation is strictly forbidden as it may predispose the user to hazardous risks. Contact your local building or fire officials for restrictions and installation inspection requirements in your area and the need to obtain a permit.

WARNING: This unit is hot during operation; keep children, pets, flammable liquids, or combustible materials at a safe distance. Ensure that all clearances to combustible materials are respected. Contact with the unit during operation may cause severe harm. Install a safety screen to keep children and pets away. To avoid the risk of damaging fireplace materials and increasing the risk of spreading a fire, do not use this fireplace to cook or warm food.

CAUTION:

- Do not connect this unit to a chimney flue serving another appliance.
- Do not connect to any air distribution duct or system.
- Never use chemicals to ignite the fire.
- Never burn waste or flammable fluids (such as gasoline, naphtha, or engine oil).
- Only burn dry natural cordwood.
- Never leave the unit unattended with the door open or unlatched.
- Only refuel this unit when the wood is reduced to embers.
- Always keep the door closed during operation.
- Do not operate this unit with a fireplace grate.
- Do not install an unvented gas log set into the firebox.
- Do not install this unit in a mobile home.
- Do not clean or service the unit while it is hot.
- Do not use a fireplace insert or other products not specified for use with this fireplace.
- Allow proper air flow by keeping the louvers/openings clear of any obstructions.

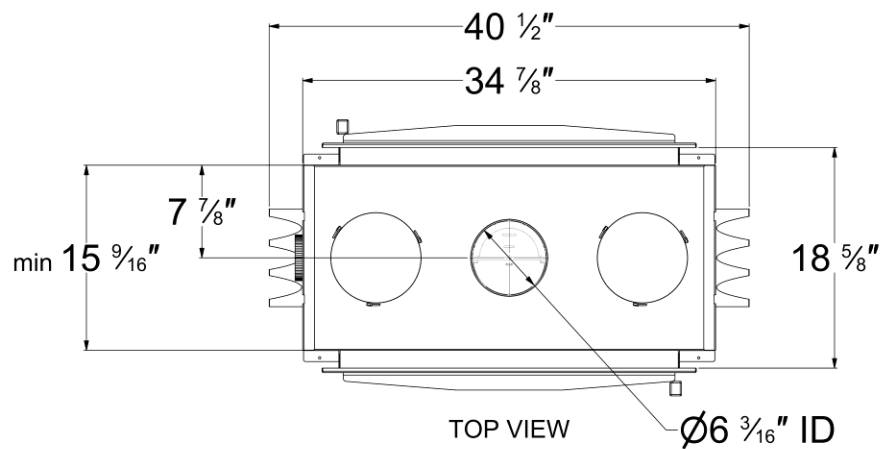
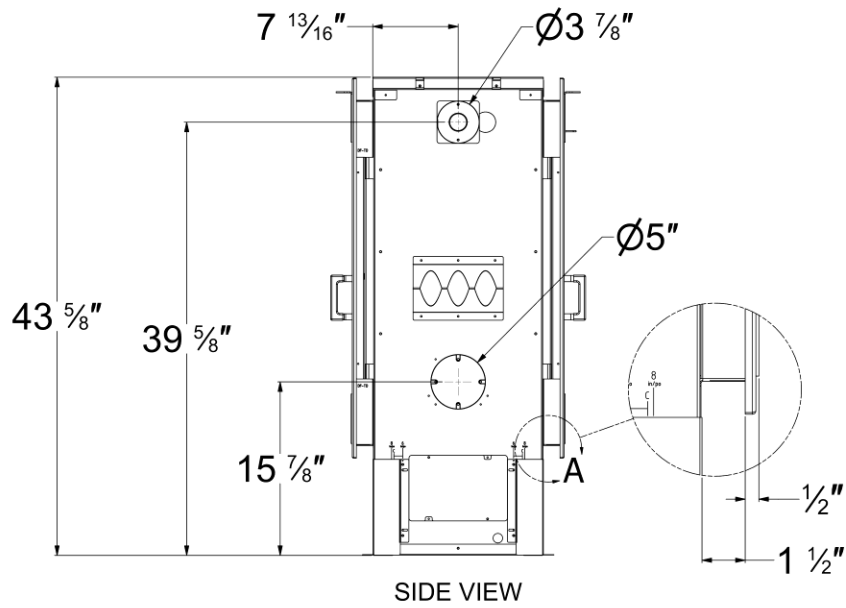
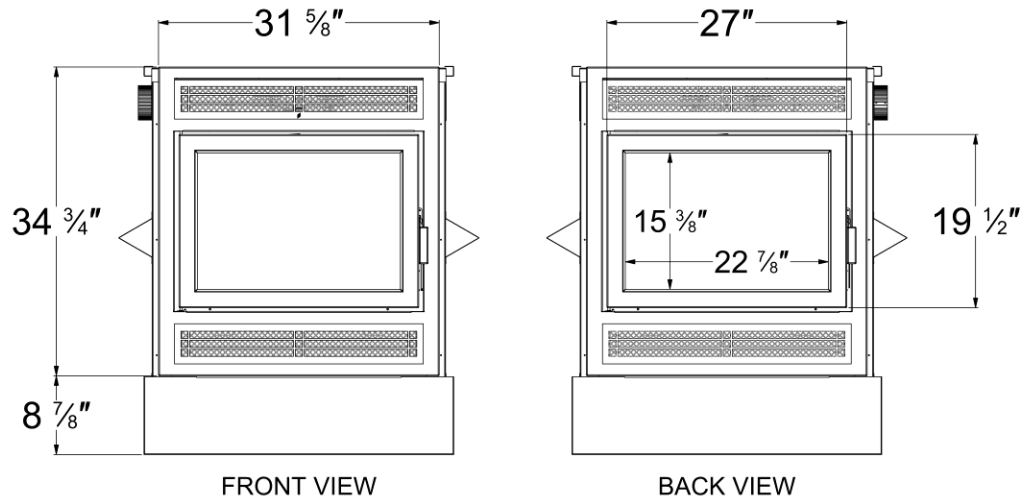
Note: Failure to respect the above cautions may cause damages to the unit, damages to personal property, bodily harm and will void the warranty. "This wood heater needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual."



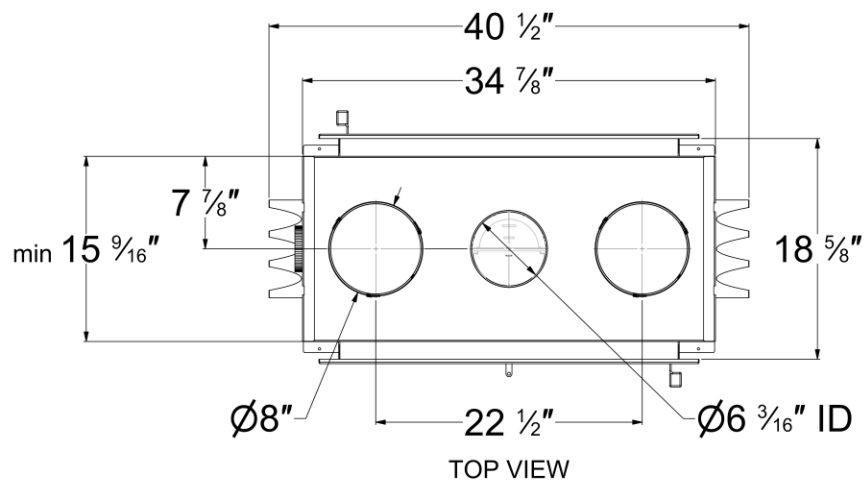
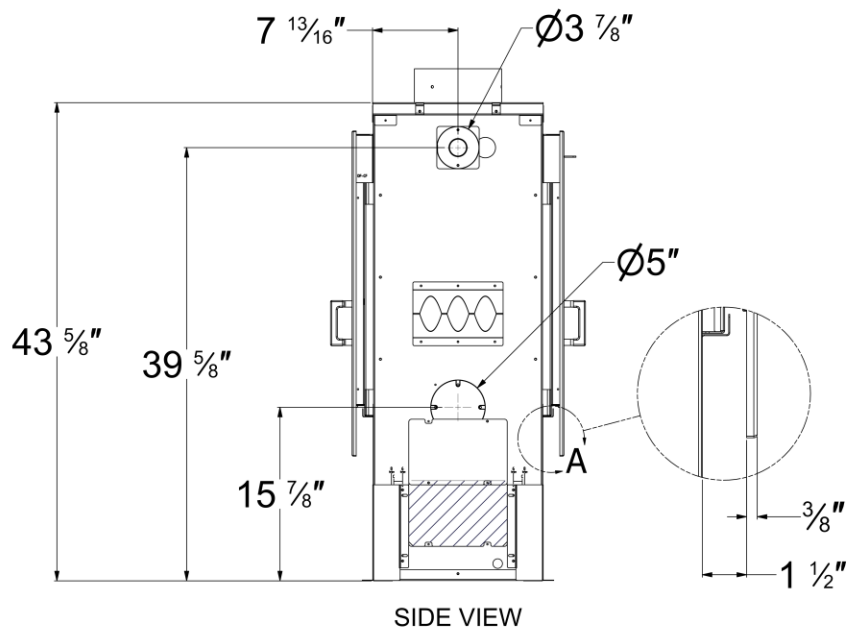
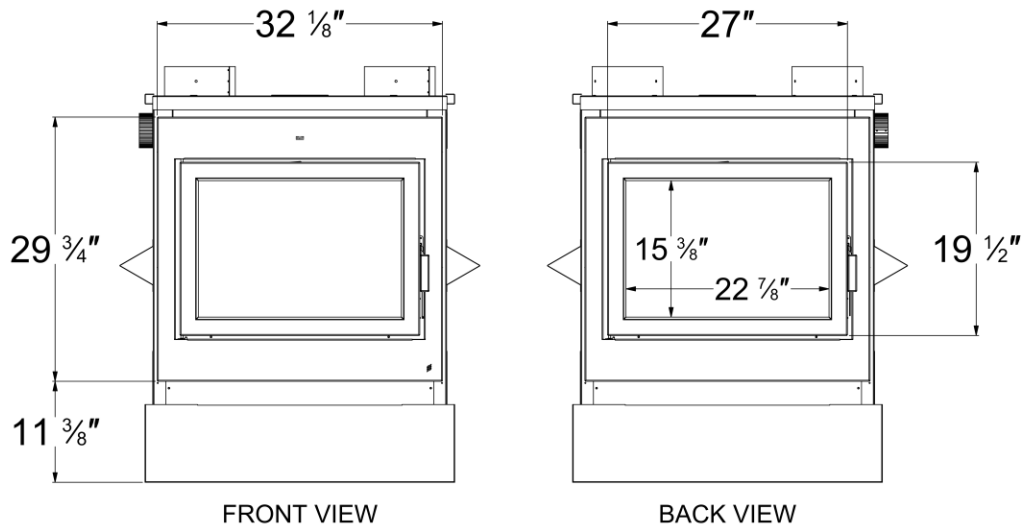
This product can expose you to chemicals including carbon monoxide, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov/

2 GENERAL INFORMATION

2.1 Dimensions – Astra Duo 38 II Traditional



2.2 Dimensions – Astra Duo 38 II Clean Face

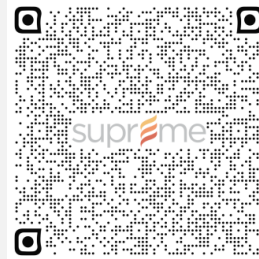


2.3 Specifications

Model:	Astra Duo 38 II
Appliance Type	Single Burn Rate Wood Heater – Non-Catalytic
Fuel Type:	Dry Cordwood
Maximum Log Length:	24 in (60.9 cm)
Burn Time¹:	6 hrs
Firebox Volume²:	4.48 ft ³ (0.127 m ³)
Firebox Width:	24.00" (60.96 cm)
Firebox Depth:	17.31" (43.97 cm)
Firebox Height:	18.63" (47.32 cm)
Heating Area:	1,500 to 2,500 ft ² (139 to 232 m ²)
Average Particulate Emissions Rate³:	1.4 g/hr
Average CO Emissions Rate:	2.15 g/min
EPA Protocol:	Method 28R, ASTM2780-10, ASTM2515-11, and ALT-154
Efficiency (Crib Wood):	HHV ⁴ : 70% LHV ⁵ : N/A
Heat Output (Crib Wood):	25,289 BTU/hr (7,411 W)
Optimum Efficiency:	75%
Optimum Heat Output:	125,000 BTU (36.6 kWh)
Efficiency Protocol:	CSA B415.1-10

WARRANTY REGISTRATION

To ensure full warranty coverage for your SUPREME product, please complete the registration by scanning the QR code. Proof of purchase is required to process all warranty claims.



¹ Depending on combustion air control setting (see Section 5.3 for further details).

² Usable volume according to ASTM E2780-10 standard is calculated at 3.49 ft³ - figure used in EPA Method 28R testing.

³ Officially tested and certified by an independent laboratory.

⁴ Higher Heating Value.

⁵ Lower Heating Value.

2.4 Combustion Air Control

The Combustion Air Control is a patented mechanism (Patent No: US 7,325,541 B2) that regulates the air flow into the firebox based on the temperature of the unit. It is located on the top of the firebox, at the front center of the unit. The combustion air control of the Astra Duo is a single burn rate mechanism with an Activator lever (see Figure 2-1). When starting a fire or adding a new load of wood, the Activator must be pushed in to allow a primary source of air to enter the firebox and a proper ignition. The Activator will retract automatically with heat.

WARNING: Never manipulate the Combustion Air Control with bare hands as it gets hot when the Astra Duo is in operation. Use the Cold Hand Key (see Section 2.5) to adjust the Combustion Air Control.

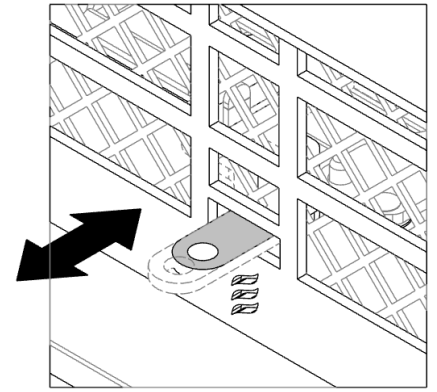


Figure 2-1: Combustion Air Control

2.5 Cold Hand Key

The Cold Hand Key is an accessory that comes standard with the Astra Duo fireplace (Figure 2-2). The Cold Hand Key is a tool used to manipulate the Combustion Air Control's Activator when they are hot.

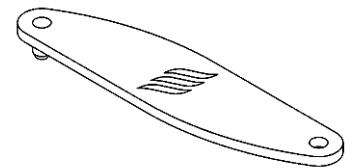


Figure 2-2: Cold Hand Key

2.6 Baffle Secondary Burn Technology

The baffle system (38DF1150 – Figure 2-3) of the Astra Duo fireplace is located within the upper portion of the firebox and is fastened by 8 bolts (3/8 Hex). SUPREME baffle systems are constructed out a specific grade of stainless steel capable of withstanding high-temperature conditions. The secondary combustion air is drawn into the baffle system, pre-heated, and distributed below the lower plate, allowing for a cluster of small flames flowing downwards. This effect is more visible in the minimum burn rates. For optimal performance, it is recommended to clean any creosote build-up on the lower plate of the baffle system.

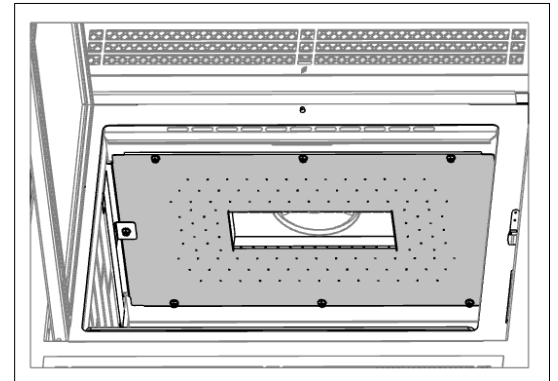


Figure 2-3: Baffle Secondary Burn Technology

2.7 Bypass System

The bypass system is located at the baffle of the Astra Duo, which permits direct access to the chimney from the baffle cap opening (Figure 2-4). When the front door (side of combustion air control) is closed, a push rod actuates the bypass system to block the baffle cap opening. When the front door is opened, the push rod springs forward and opens the bypass system in the baffle cap opening, which reduces the risk of smoke spillage into the dwelling during refueling of the unit.

WARNING: The bypass system should always be blocking the access to the chimney during combustion. A bypass system that is not blocking the baffle cap opening during combustion is a safety hazard, will overheat the fireplace, and void the warranty.

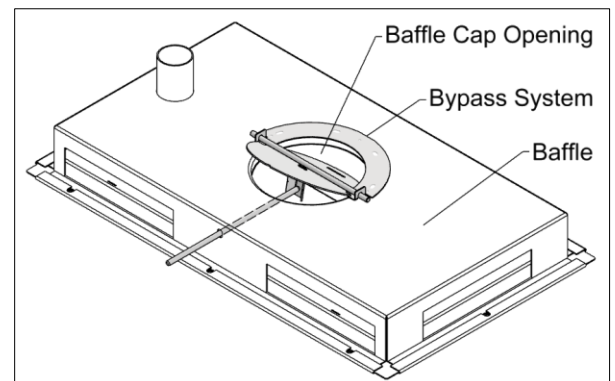


Figure 2-4: Bypass System

2.8 Door

The Astra Duo wood burning fireplace comes with two Pyroceram III glass panel doors. Pyroceram III is the highest grade available for fireplaces and stoves and can withstand temperatures up to 1300°F. To remove any door, open the door, lift it until the rod exits the bottom hinge hole and then pull it towards out of the top hinge hole.

2.9 Certification Label

The certification label contains important information regarding the installation and operation of the Astra Duo fireplace. In addition, the serial number of the unit is permanently embossed onto the top right corner. See Figure 2-5 for the location of the certification label at the front of the unit.

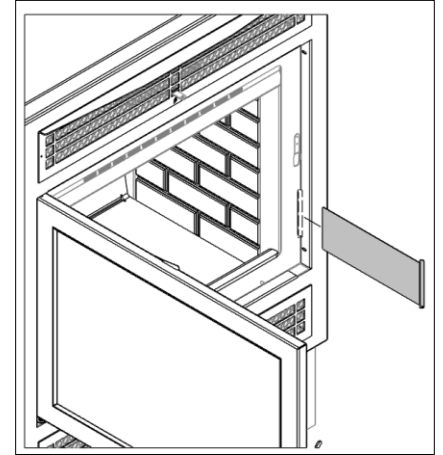


Figure 2-5: Serial Number Location

2.10 Removable Ash Lip

The Ash Lip (one per unit) is a removable accessory that comes standard with the Astra Duo fireplace. It can be installed on both door holders (under the two small pins below the door) and prevents ashes from falling onto the front of the hearth extensions (Figure 2-6). The Ash Lip can be installed with the door opened or closed. It is safe to operate the unit without the Ash Lip.

NOTE: The doors of the Astra Duo must always remain closed during operation.

2.11 Cast Iron Interior

The Astra Duo's stainless steel firebox is lined with cast iron panels for an extra layer of durability and strength. Designed to provide long-lasting heat and thermal protection, these industry-first, decoratively stamped panels also provide the added benefit of the timeless beauty of cast iron. Forged in fire, tempered with time, the Astra Duo offers a lifetime of warmth.

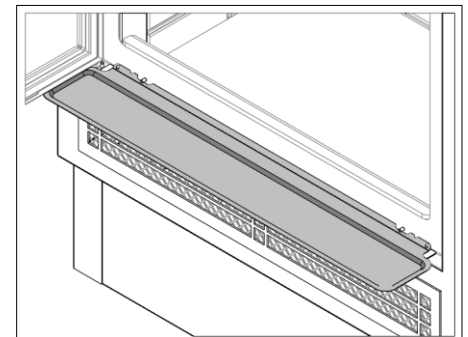


Figure 2-6: Removable Ash Lip

2.12 Optional SUPREME 6 - 8 Inch Chimney Adapter

The SUPREME 6 - 8 Inch Chimney Adapter (SF8100 – Figure 2-7) is an optional accessory that permits the installation of the Astra Duo with an 8" chimney. The adapter is installed on the top of the unit with the Front / Back marks facing the door openings. Refer to Section 4.1 for installation instructions. Note that it is recommended to install the Astra Duo with an 8" inch chimney system in areas where the unit is susceptible to backdraft during operation, such as in high altitude or mountainous regions.

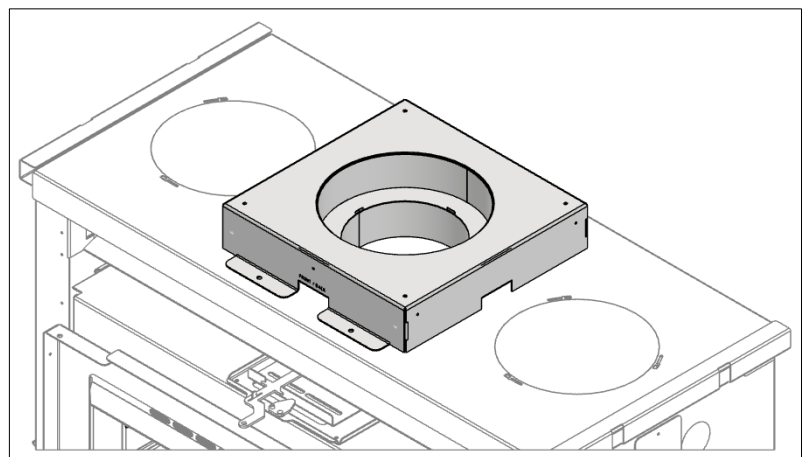


Figure 2-7: Optional SUPREME 6 - 8 Inch Chimney Adapter

2.13 Optional Fresh Air Kit

The Optional Fresh Air Kit (kit number UPEA4 – Figure 2-8) allows for exterior air (outdoors) to be drawn into the baffle of the fireplace during operation of the unit. Note that a 4" insulated duct is required for the installation (item ordered separately). Refer to Section 4.2 for installation instructions. Contact your local building official regarding mandatory fresh air kit installations within your area.

CAUTION: Only a fresh air kit provided by SUPREME FIREPLACES INC. can be installed onto the fireplace. Substituting the fresh air kit may result in overheating and will void the warranty.

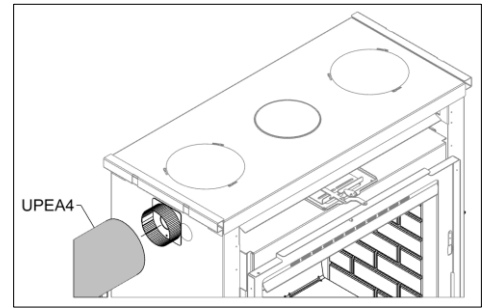


Figure 2-8: Optional Fresh Air Kit

2.14 Optional 100% Fresh Air Kit

The Optional 100% Fresh Air Kit (100P_UPEA4 / 100P_UPEA4_25 / 100P90_UPEA4 / 100P90_UPEA4_25 – Figure 2-9) brings the combustion air from outside the dwelling (exterior source) into the primary and secondary intakes of the firebox through completely sealed channels during operation of the unit. Note that a 4" insulated duct is used to connect the combustion air from an exterior source to the 100% Fresh Air Adapter. Refer to Section 4.3 for installation instructions. Contact your local building official regarding mandatory fresh air kit installations within your area.

CAUTION: Only a fresh air kit provided by SUPREME FIREPLACES INC. can be installed onto the fireplace. Substituting the fresh air kit may result in overheating and will void the warranty.

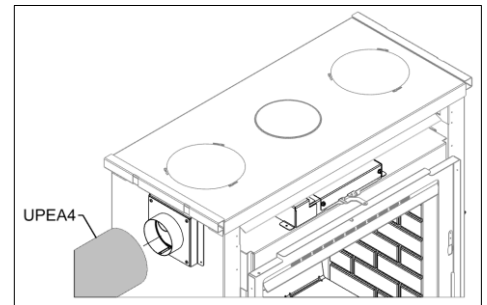


Figure 2-9: Optional 100% Fresh Air Kit

2.15 Optional Hot Air Distribution Kit

The Optional Hot Air Kit (kit number SU250_INL) allows heat to be drawn from the unit by a thermostatically controlled blower (electrical rating: 115 V and 60 Hz) and dispersed to different areas of the house. This option is recommended when the fireplace is installed in an area below the maximum heating space. A total of two kits can be installed onto one unit with a maximum distance of 25 feet each. Note that a 5" insulated duct (part number UCAC5) is required for the installation (item ordered separately). Refer to Section 4.2 for installation instructions.

WARNING: Make certain that the fireplace is not in operation and that hot air blower is not powered (breaker off) before accessing the electrical wiring of the hot air kit.

CAUTION: Only a hot air kit provided by SUPREME FIREPLACES INC. can be installed onto the fireplace. Substituting the hot air kit may result in overheating, will void the warranty and can be hazardous.

2.16 SUPREME 6 Inch Roof Radiation Shield

The SUPREME 6 Inch Roof Radiation Shield (SF7100 – Figure 2-10) is a standard component for the Astra Duo fireplace. Prior to installing the chimney flashing and rain cap, the SUPREME 6 Inch Roof Radiation Shield is fastened within the chimney opening of the roof. The SUPREME 6 Inch Roof Radiation Shield is mandatory for a 6" chimney installation. Refer to the instructions provided in the SUPREME 6 Inch Roof Radiation Shield sheet for installation. NOTE: A Roof Radiation Shield is not mandatory for an 8" chimney installation.

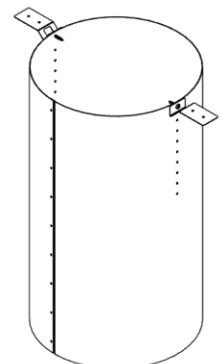


Figure 2-10: SUPREME 6 Inch Roof Radiation Shield

3 INSTALLATION INSTRUCTIONS

Before installing the unit, consult an authority having jurisdiction (such as your municipal building department, your fire department, your fire prevention department...) for any local codes and whether a permit is required. In the absence of local codes, refer to the CSA B365 Installation Code for Solid Burning Appliances and Equipment (Canada) or the ANSI NFPA 211 Standard for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances (USA). **CAUTION: Modifications/alterations to the unit/installation without written authorization from SUPREME FIREPLACES INC. are strictly forbidden and will void the warranty.** Refer to Section 1 for further safety information. Carefully read the instructions below before installing your Astra Duo.

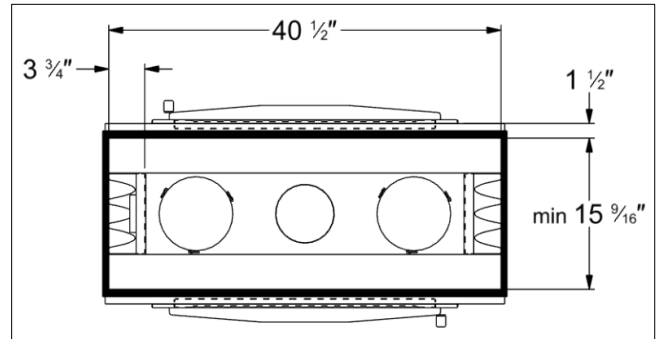


Figure 3-1: Straight Wall Installation

3.1 Location

Determine the location of the Astra Duo by taking into consideration the following criteria:

- The size of the room with respect to the heat output of the fireplace.
- The proximity of windows, doors, and traffic flow.
- The necessary amount of space in front of the unit for the hearth extension and mantel (Refer to Sections 3.6 and 3.8).
- The clearances to combustible materials.
- The passage of the chimney.

If possible, select a location for the fireplace that will minimize the number of offsets in the chimney course. Offsets will reduce the draft, complicate the chimney sweeper's work, and increase installation costs. Do not install an offset directly onto the unit/anchor plate. Technical drawings outlining the chimney route should be prepared prior to the installation. NOTE: The cutting of joists and rafters for floor, ceiling, and roof chimney penetrations will affect the load bearing capacities of the dwelling structure. To determine whether additional support is required, consult your local building codes. Improper cutting of chimney openings in the attic and roof will affect the bearing and thermal insulating capacity, as well as the weather tightness of the dwelling. Avoid incorrect workmanship by consulting a professional engineer or a certified installer.

Through examination of the floor construction, ensure that the fireplace and chimney system is resting on a surface capable of withstanding its weight. Consult your building codes to see whether additional structural supports are required (applicable for rare and isolated cases).

Avoid having the chimney outlet near any obstructions (such as trees and roof offsets) as the draft of the chimney may be affected by wind turbulence. Ideally position the outlet of the chimney at the highest area of the roof.

NOTE: Install a carbon monoxide (CO) and smoke detector near the location of the unit with respect to the requirements of the authority having jurisdiction in your area.

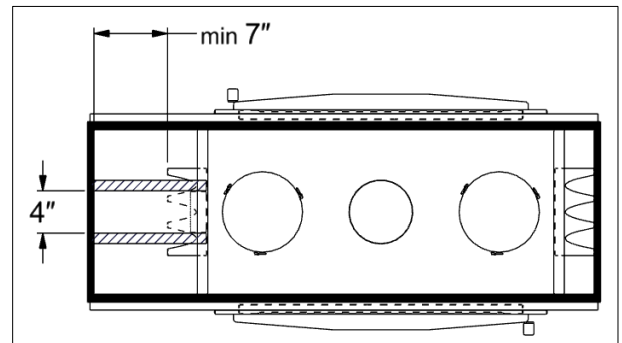


Figure 3-2: Space Requirement for Fresh Air Kit
Refer to Section 4.2

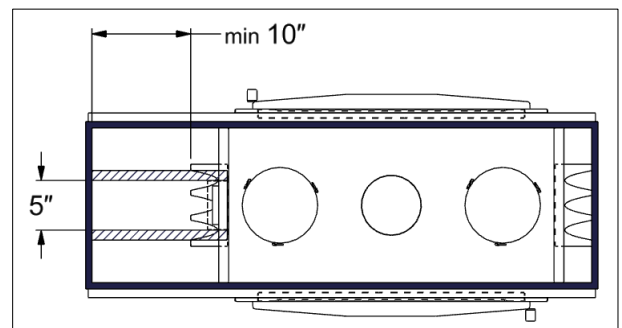


Figure 3-3: Space Requirement for Hot Air Distribution Kit
Refer to Section 4.4

3.2 Chimney Installation

The Astra Duo is approved for 6" and 8" chimneys that are listed under the UL 103 / ULC S629 standards (refer to Table 3-1). **WARNING: Mixing chimney components from different brands is a safety hazard and will void the warranty on the unit.** When connecting the unit to an existing chimney, thoroughly inspect the condition of the chimney and that the installation conforms to the requirements of the chimney manufacturer and the building codes. **Note that to avoid any unnecessary risk, it is often recommended to replace the chimney system.** Always respect the clearances to combustibles from the chimney manufacturers; a minimum clearance of 2 inches is usually required for prefabricated chimneys.

3.2.1 General Rules and Guidelines

- Carefully read the instructions from the chimney manufacturer prior to installation (manuals can be obtained from the chimney manufacturer's website or from the vendor). Unless specified, follow the chimney manufacturer's instructions for proper installation.
- For optimal performance of the unit, it is recommended to install the chimney system in an interior setting. To prevent drafting issues and creosote buildups, avoid exterior installations of the chimney system in regions that experience extreme cold conditions.
- The minimum and the maximum height of the chimney from the base of the unit are 15 and 35 feet respectively.
- A minimum length of 12 inches of straight chimney is required from the top of the unit before having an offset.
- Only chimneys approved under the UL 103 / ULC S629 standards can be installed onto the unit (refer to Table 3-1 in Section 3.2.2).
- A 6 inch anchor plate is required to connect the fireplace to a 6" chimney system. The anchor plate can be secured onto the unit with 4 self-drilling screws.
- An optional SUPREME 6 - 8 Inch Chimney Adapter (Product Code: SF8100) and an 8" anchor plate are required to connect the fireplace to an 8" chimney system. The SUPREME 6 - 8 Inch Chimney Adapter can be secured onto the unit with 4 self-drilling screws and the anchor plate can be secured onto the adapter with 4 self-tapping screws. Note that it is recommended to install the Astra Duo with an 8" inch chimney system in areas where the unit is susceptible to backdraft during operation, such as in high altitude or mountainous regions.
- Seal the anchor plate to the flue of the fireplace with the Anchor Plate Gasket Seal (ANPGA) supplied with the unit.
- The chimney installed onto the unit cannot be connected to another appliance.
- Enclose any portion of the chimney that extends to accessible spaces.
- The clearance of the chimney to any combustible material cannot be less than 2 inches. **WARNING: The 2 inch clearance cannot be filled with insulation or any non-combustible material.**
- At least one support is to be incorporated in any chimney installation.
- A firestop radiation shield is required in the joists/frames where the chimney goes through (ceilings, floors, walls, and attic). Assure that the joist opening is constructed in a way that the firestop is overlapping by a minimum 1" (25 mm) on all 4 sides. A spacer shall provide for substantial continuous interference with the framed joist opening for a height or depth of not less than 1" (25 mm). A joint between factory-made parts which provide for firestopping is not to have a through opening greater than 1/8" (3 mm) wide. Refer to chimney manufacturer's installation instructions.
- The provided SUPREME 6 Inch Roof Radiation Shield is mandatory for a 6" chimney installation. NOTE: A Roof Radiation Shield is not mandatory for an 8" chimney installation.
- A roof assembly shall resist the accumulation of soot and debris therein when such accumulation obstructs flue-gas or cooling-air passages. An opening, other than one for flue gas passage, shall not have an entrance of a 1/2" (12.7 mm) diameter rod.

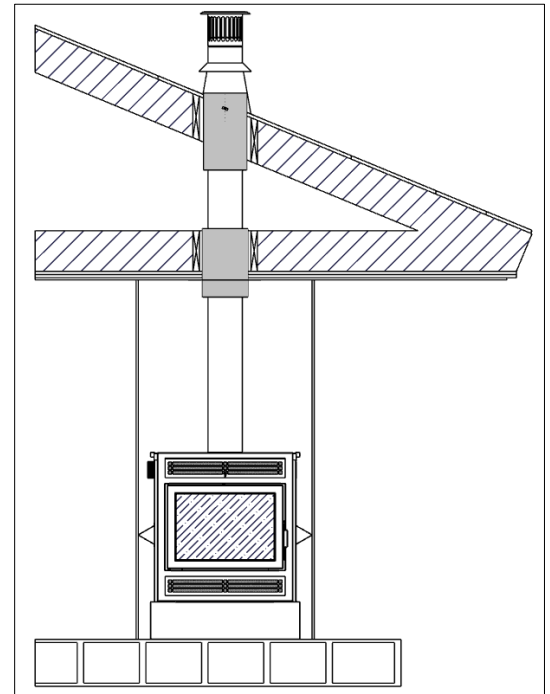


Figure 3-4: Straight Interior Installation

16. A roof and a vented flashing are required in the installation of the Astra Duo. A roof flashing assembly that provides for ventilation shall be constructed so that soot or debris shall not accumulate on the assembly to the extent that ventilation openings intended to remain open are obstructed. The ventilation shall be provided by one or more fixed openings surrounding the chimney and the assembly shall comply with all the following:
- The openings shall not permit entrance of a ¼" (6.4 mm) diameter rod.
 - The lowest portion of the opening in the flashing shall not be less than 6" (152 mm) above the roof, measured perpendicular to the roof.
 - The assembly shall incorporate a storm collar.
 - The intended openings shall be maintained by means of spacers factory-attached to the flashing, or designed openings in the assembly.
17. To prevent drafting issues, avoid deviations wherever possible.
18. The chimney shall extend at least 3 feet above its point of contact with the roof and at least 2 feet higher than any wall, roof, or adjacent building within a 10 foot radius. **WARNING: The Astra Duo has not been tested for use with a chase above the roof. To reduce the risk of a fire, do not install a chase above the roof.**
19. A secure brace is to be installed if the chimney extends a minimum of 5 feet above the contact point with the roof.
20. A rain cap must be installed on top of the chimney to resist the entrance of debris and excess rain into the flue-gas-conveying conduit and into any cooling-air passage terminating exterior to the building.
21. A cap shall be constructed so that leaves and debris falling or blown onto it are not retained, obstructing the flue-gas or cooling-air passages. A cap shall be constructed to resist accumulation of soot that obstructs flue-gas or cooling-air passages. An opening, other than one for flue gas passage, shall not have an entrance of a ½" (12.7 mm) diameter rod.
22. A cap shall be removable and replaceable, without bending or deforming the chimney or parts thereof, using common hand tools, such as flat blade or Phillips head screwdrivers, hand pliers, wrenches, and other tools, to meet the intent of the requirement for chimney cleaning in accordance with the operating instructions.
23. Consult the chimney manufacturer for clearances to combustibles when installing a combustible chimney enclosure above the roof.

3.2.2 Listed UL 103 / ULC S629 Approved Chimney Models (Reference Table)

Note that only chimney models listed in Table 3-1 can be installed for the Astra Duo.

Table 3-1: List of Approved Chimney Models

<u>Manufacturer</u>	<u>Models</u>
Amerivent	<ul style="list-style-type: none"> HS/HSS, AC Triple Wall, 6" and 8" inner diameter
ICC	<ul style="list-style-type: none"> Excel, 1" Solid Pack, 6" and 8" inner diameter
Metal Fab	<ul style="list-style-type: none"> Temp/Guard, 1" Solid Pack, 6" and 8" inner diameter
Olympia Chimney	<ul style="list-style-type: none"> 2100, 1.25" Solid Pack, 6" and 8" inner diameter
Security Chimney	<ul style="list-style-type: none"> Secure Temp ASHT+, 1" Solid Pack, 6" and 8" inner diameter Secure Temp S2100+, 2" Solid Pack, 6" and 8" inner diameter
Selkirk	<ul style="list-style-type: none"> Ultra-Temp (UT), 1" Solid Pack, 6" and 8" inner diameter Galva-Temp (GT), 1" Solid Pack, 6" and 8" inner diameter Sure-Temp (ST), 1" Solid Pack, 6" and 8" inner diameter Super Pro (SPR), 1" Solid Pack, 6" and 8" inner diameter Super Vent (JSC), 1" Solid Pack, 6" and 8" inner diameter UltimateOne, 1" Solid Pack, 6" and 8" inner diameter UltimatePlus, 1" Solid Pack, 6" and 8" inner diameter
DuraVent	<ul style="list-style-type: none"> Dura Tech, 1" Solid Pack, 6" and 8" inner diameter Dura Plus, AC Triple Wall, 6" and 8" inner diameter Dura Plus 2 (DP2), 1" Solid Pack, 6" and 8" inner diameter

3.2.3 Chimney Installation Instructions

1. Cut and frame square openings in the floors, ceilings, and roof where the chimney will pass through while taking into consideration the minimum clearance to combustibles (refer to chimney manufacturer's manual).
2. In the ceiling/floor openings, install a chimney manufacturer's firestop radiation shield and firestop-spacer assembly from below. Install the chimney manufacturer's attic radiation shield and attic insulation shield from above in the chimney opening to the attic. **CAUTION: Maintain proper clearances between the chimney and the attic insulation. Please refer to the chimney manufacturer's manual and National Building Codes regarding proper and safe installation of the attic radiation shield and attic insulation shield.**
3. Install the provided SUPREME 6 Inch Roof Radiation Shield in the opening of the roof if connecting the unit to a 6" chimney system (Figure 2-10 and Item 4 in Figure 3-5) – adjust the shield so that it is extruding approximately 1" above the roof surface. The SUPREME 6 Inch Roof Radiation Shield can be trimmed in order to properly install the vented roof flashing. Ensure to install the appropriate firestop for ceilings and walls.
4. Install the chimney manufacturer's 6" anchor plate onto the unit for a 6" chimney installation.
5. If connecting the unit to an 8" chimney system, install the SUPREME 6 - 8 Inch Chimney Adapter and the chimney manufacturer's 8" anchor plate. Note that it is recommended to install the Astra Duo with an 8" inch chimney system in areas where the unit is susceptible to backdraft during operation, such as in high altitude or mountainous regions.
6. Install the chimney lengths according to the manufacturer's instructions and ensure proper fastening/locking of the joints.
7. Install the roof support once the desired height has been reached.
8. Position the vented roof flashing. Note that for sloping roofs, position the upper portion of the vented flashing under the shingles and position the lower portion of the vented flashing above the shingles. Seal the joint between the roof and the vented flashing with roofing cement or silicone. Secure the vented flashing to the roof with roofing nails.
9. Install the storm collar over the vented flashing by tightening the supplied bolt or through the flange mechanism (depends on chimney brand). Seal the joint between the storm collar and the chimney using a silicone caulking. **WARNING: Do not seal, caulk, or obstruct the ventilation openings.**
10. Install the chimney rain cap.

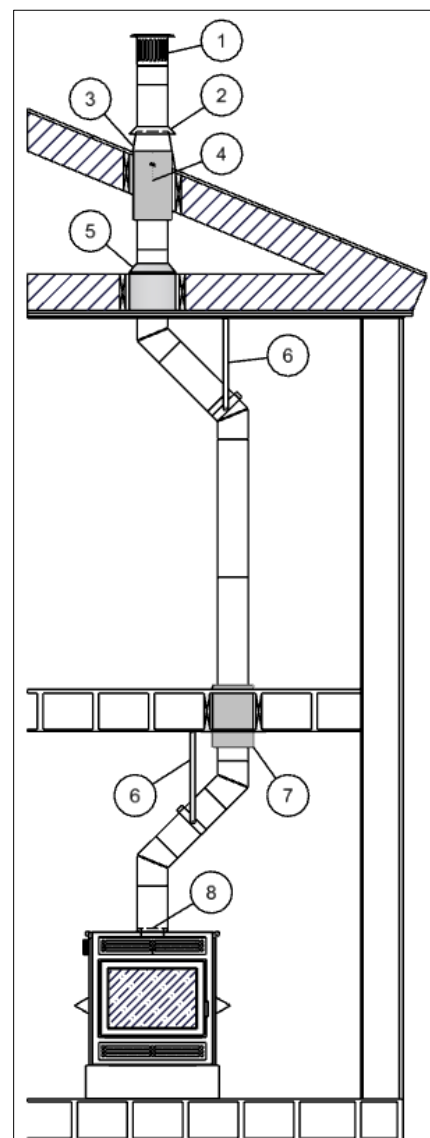


Figure 3-5: Standard Offset Installation

Refer to Figures 3-4 and 3-5 for typical chimney installations.

3.2.4 Offset Installation

An offset installation (Figure 3-5) consists of the use of elbows to deviate from unavoidable obstacles or to extend the chimney outside. The following list is a few general rules to take note when installing offsets:

- A maximum of 2 offsets (2 elbows per offset) is permitted per installation.
- A minimum length of 12 inches of straight chimney is required from the top of the unit before having an offset.

Table 3-2: Standard Offset Installation - Item Description

Item	Description
1	Rain Cap
2	Storm Collar
3	Vented Roof Flashing
4	SUPREME 6 Inch Roof Radiation Shield ⁶
5	Attic Radiation Shield
6	Offset Support
7	Firestop Radiation Shield
8	Anchor Plate ⁷

⁶ Mandatory for a 6" chimney installation.

⁷ Note that the anchor plate is not included with the unit.

- The maximum deviation is 45° in Canada and 30° in the USA.
- Secure the elbows and the chimney components according to the instructions from the chimney manufacturer.
- A support strap, a wall support, or a roof support must be installed above each offset to allow adequate support to the vertical chimney lengths.
- **Never install an elbow in an opening of a floor, wall, ceiling, or roof.** In addition, only vertical chimney sections can be installed within ceiling/floor openings.
- Install a support for the first 15 feet of chimney.

The following are instructions for offset installations:

1. Rotate the elbow in the required direction and secure it to the adjacent chimney section according to the chimney manufacturer's instructions.
2. Follow the chimney manufacturer's instructions to install the chimney length(s) necessary for the offset.
3. Once the desired offset length has been achieved, install the second elbow to redirect the venting to the vertical position.
4. Cut an opening in the floor/ceiling to allow the chimney to pass through.
5. Install the appropriate firestop radiation shield and firestop-spacer assembly.

CAUTION: For offset installations, always install a ventilated flashing and a roof firestop unless otherwise specified by the chimney manufacturer. Never install an elbow directly onto the unit.

3.2.5 Angled Wall Radiation Shield

For chimney installations requiring to pass through a combustible wall at a 30° (Canada) or 45° (Canada and US) angle, an angled firestop or an angled wall radiation shield from the chimney manufacturer must be installed within the wall opening. Install the angled firestop and angled wall radiation shield according to the manufacturer's instructions. It is recommended to use an insulated angled wall radiation shield in areas that experience cold climates.

3.2.6 Connecting to a Masonry Chimney

The Astra Duo fireplace can be connected to a masonry chimney that complies with current national and municipal building codes. A 6" chimney liner that complies with ULC S635 M2000 (Canada) or UL 1777 (US) standards must be installed within the existing masonry chimney. Note that the 6CON connector (manufactured by SUPREME FIREPLACES INC.) must be installed to connect the prefabricated chimney to the liner (6CON sold separately). Refer to Figure 3-6 and Figure 3-7.

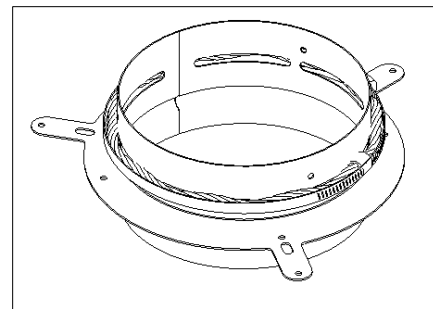


Figure 3-6: 6CON Liner Connector

Note that prior to installation, an inspection from an authority having jurisdiction is required to determine whether the masonry chimney:

- Is constructed in accordance with national and municipal building codes.
- Is in good condition. Note that repairs must be performed on any cracked or missing bricks.
- Is thoroughly cleaned of any soot or creosote.
- Is not connected to another appliance such as a furnace, hot water heater, or another fireplace.
- Has a flue of adequate size for proper installation of the venting.
- Respects minimum clearances to combustibles.

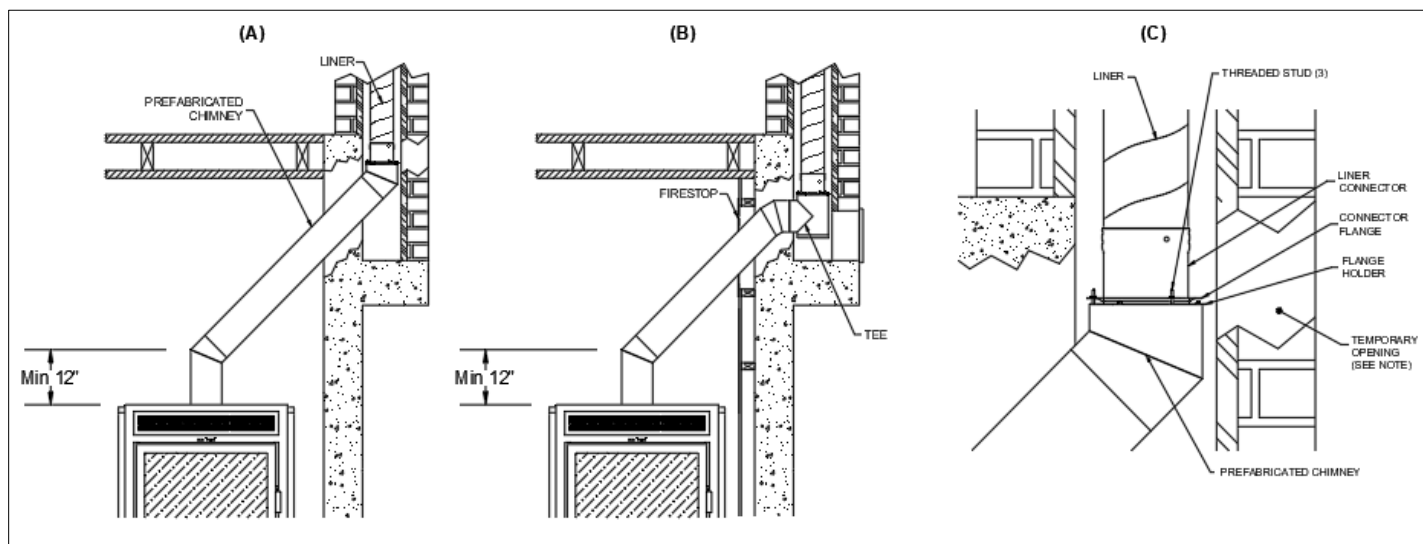


Figure 3-7: (A) Connection into a masonry chimney through an elbow/liner; (B) connection into a masonry chimney through a tee/liner; (C) detailed drawing of masonry chimney connection.

It is recommended to position the fireplace as close as possible to the masonry chimney to ensure proper venting. The prefabricated chimney must penetrate at least 3 inches within the masonry chimney before connecting the liner. Elbows can be used within the masonry chimney, with a maximum deviation of 30° in US and 45° in Canada. **Note: A minimum length of 12 inches of straight chimney is required from the top of the unit before having an offset.**

The installation of the prefabricated chimney and the liner must comply with the manufacturer's instructions. The following are instructions in installing the venting of the Astra Duo running through a masonry chimney:

1. Install the anchor plate onto the unit.
2. Position the fireplace to the recommended location.
3. Install the initial prefabricated chimney lengths and elbows.
4. Mark the area where the prefabricated chimney will penetrate the masonry chimney.
5. Remove the fireplace to allow for sufficient space to work.
6. Make a hole to the required size to allow for the prefabricated chimney to be inserted freely in the masonry chimney. Note that the appropriate firestops need to be installed if running the prefabricated chimney through a combustible wall.
7. Install the remaining prefabricated chimney components center with the masonry chimney.
8. Align the flange holder of the 6CON connector with the studs facing upwards to the center of the prefabricated chimney section (elbow or tee) and secure it with three self-tapping screws.
9. Reposition the fireplace to its initial position.
10. Overlap by 1 inch the lower end of the liner in the expanded portion of the 6CON connector and secure the joint with #8 stainless steel self-tapping screws (x3).
11. From the roof, slide the liner down the masonry chimney until it reaches the upper end of the prefabricated chimney.
12. Install the upper portion of the 6CON liner connector to the flange holder by aligning the threaded studs to the holes and complete the connection by tightening the wing nuts.
13. Seal any openings around the prefabricated chimney and the 6CON connector with refractory cement resistant to high temperatures.

3.3 Surround Installation

The Astra Duo can be installed with either the Traditional Surround or the Clean Face Surround.

3.3.1 Traditional Surround Installation

The Traditional Surround comprises louvers below (intake) and above (outtake) the door. All components and fasteners are included in the surround kit. Refer to Figure 3-8 and Table 3-3 for the instructions below.

1. Remove both doors of the unit and place them on a soft surface, such as a carpet or cardboard, to avoid any scratches or damages.
2. Remove the Lower Framing Brackets (2X).
3. Unbend the Sealing Strips (2X) shown.
4. Install the Upper and Lower Traditional Surround Brackets (Item 3 and 4) at the front and the back of the unit with the included self-tapping screws (16X).
5. Secure the Intake Swivel Covers on the bottom sides of the unit to the closed position (Figure 3-8).
WARNING: For Traditional Surround installations only.
6. Fasten the Lower Framing Brackets (2X) to the exterior casing of the unit as initially. Note that these brackets can be adjusted for framing purposes. Refer to Section 3.4.
7. After building the hearth extensions (Section 3.6) and installing the chase housing the unit (Section 3.7), place the Front Traditional Surround (Item 1) within the front door holder and secure it in place with the included black screws (4X) (one in each corner). Make sure that the activator of the Combustion Air Control pass through the slot of the surround.
8. Install the Back Traditional Surround (Item 2) by placing it within the back door holder and secure it in place with the remaining black screws (4X).
9. Reinstall both doors onto the unit.

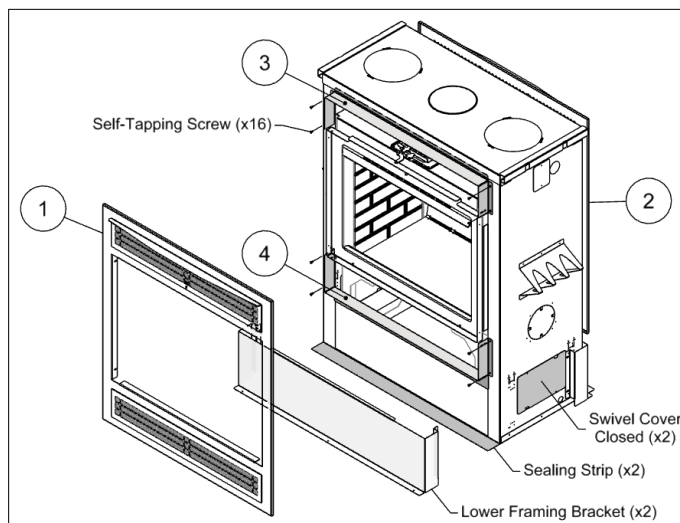


Figure 3-8: Traditional Surround

Table 3-3: 38ATDFA_II-11 Components

TRADITIONAL SURROUND			
ITEM	CODE	DESCRIPTION	QTY
1	38DF4010	Front Traditional Surround	1
2	38DF4110	Back Traditional Surround	1
3	2438DF2411	Upper Traditional Surround Bracket	2
4	2438DF2412	Lower Traditional Surround Bracket	2

3.3.2 Clean Face Surround Installation

The Clean Face Surround comprises no louvers; however, an intake into the chase and an outtake through gravity ducts is required for this configuration. The instructions below describe the installation of the Contemporary surround. Refer to Figure 3-9 and Table 3-4 for the instructions below. Refer to Section 3.5 for Gravity Kit installation instructions.

1. Remove both doors of the unit and place them on a soft surface, such as a carpet or cardboard, to avoid any scratches or damages.
2. Remove the Lower Framing Brackets (2X).
3. Unbend the Sealing Strips (2X) shown.
4. Install the Upper and Lower Clean Face Surround Brackets (Item 3 and 4) at the front and the back of the unit with the included self-tapping screws (16X).
5. Secure the Intake Swivel Covers on the bottom sides of the unit to the **open** position (Figure 3-9).
6. Remove the 8" knockouts at the top exterior case (2X), the top interior case (2X) and the top interior shield (2X) of the unit using a flat head screwdriver (Figure 3-9).
7. Fasten the Lower Framing Brackets (2X) to the exterior casing of the unit as initially. Note that these brackets can be adjusted for framing purposes. Refer to Section 3.4.
8. Install the 8" duct adapters provided with the gravity kit on the newly cut knockouts of the exterior case by aligning/inserting the tabs to the slots and turning clockwise to lock in place.
9. After building the hearth extensions (Section 3.6) and installing the chase housing the unit (Section 3.7), place the Front Clean Face Surround (Item 1) within the front door holder and secure it in place with the included black screws (4X) (one on each corner). Make sure that the activator of the Combustion Air Control pass through the slot of the surround.
10. Install the Back Clean Face Surround (Item 2) by placing it within the back door holder and secure it in place with the remaining black screws (4X).
11. Reinstall both doors onto the unit.

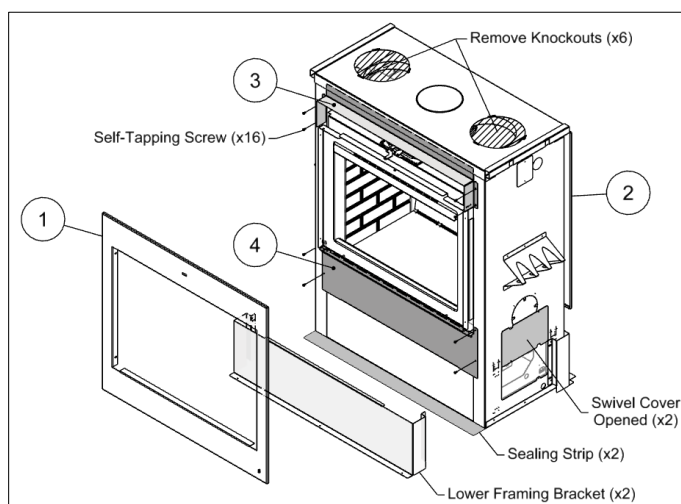


Figure 3-9: Clean Face Surround

Table 3-4: 38ATDFA_II-12 Components

CLEAN FACE SURROUND			
ITEM	CODE	DESCRIPTION	QTY
1	38DF4041	Front Clean Face Surround	1
2	38DF4141	Back Clean Face Surround	1
3	2438DF2421	Upper Clean Face Surround Brackets	2
4	2438DF2422	Lower Clean Face Surround Brackets	2

3.4 Framing

The Astra Duo can be placed directly onto or against normal, combustible construction materials such as lumber, plywood, millboard, particleboard, drywall, and decorative wood paneling. **WARNING: The fireplace should NOT be placed directly against or be in contact with insulation material.** The framing on the face of the chase, as well as above the unit, must be constructed with nominal 2" x 3" or 2" x 4" metal studs. Note that any framing exceeding the 3.75" lateral standoffs can be constructed of 2" x 3" or 2" x 4" lumber. Refer to Figures 3-10 to 3-16 for examples of a framing design based on the surround configuration. The framing must be nailed or screwed onto the floor, the ceiling and the framing brackets. Note that for an installation of the Clean Face Surround configuration, a minimum distance of 3.75" is required between the ceiling and the horizontal framing metal stud for the hot air gravity louvers.

CAUTION: Respect the minimum framing requirements outlined in Table 3-5 referencing Figures 3-10 to 3-16, as well as the chimney manufacturer's clearances to combustibles.

WARNING: Secure the framing structure to the upper and lower framing brackets installed on the fireplace with self-drilling screws. Do NOT nail or screw any framing components on any other components of the fireplace.

Table 3-5: Astra Duo Framing Dimensions

Model Number	6" Chimney Installation				8" Chimney Installation			
	Traditional Surround		Clean Face Surround		Traditional Surround		Clean Face Surround	
	A	B	A	B	A	B	A	B
24SFC_D	TBD	min. 15 9/16"	TBD	min. 17 3/16"	TBD	17 5/8"	TBD	17 5/8"
38SFC_D_II	43 3/4"	min. 15 9/16"	43 3/4"	min. 17 3/16"	46 1/4"	17 5/8"	46 1/4"	17 5/8"

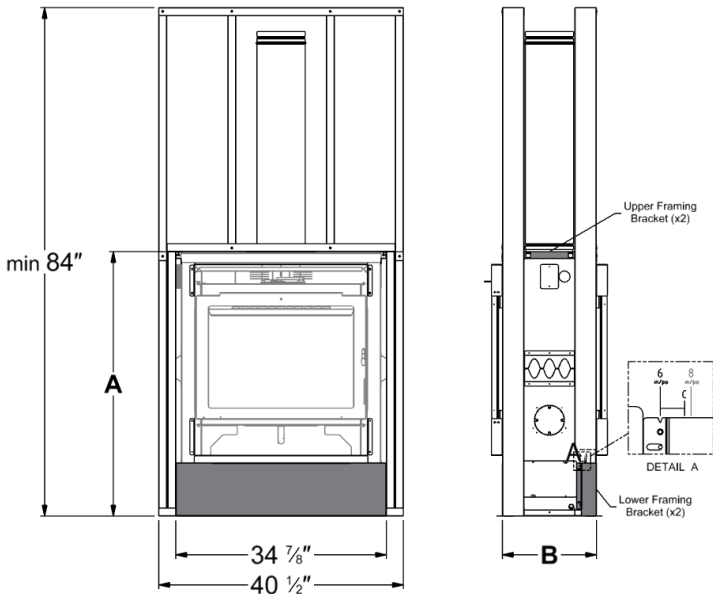


Figure 3-10: Astra Duo Framing Design for Traditional Surround Configuration for 6" Chimney Installation.

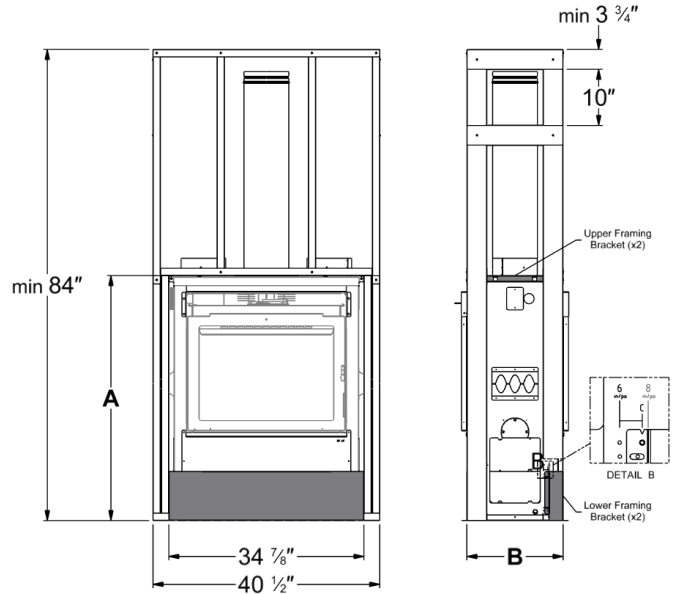


Figure 3-11: Astra Duo Framing Design for Clean Face Surround Configuration with Dual Louver (KG550 Kit) - Side Wall 8" Gravity Ducts for 6" Chimney Installation.

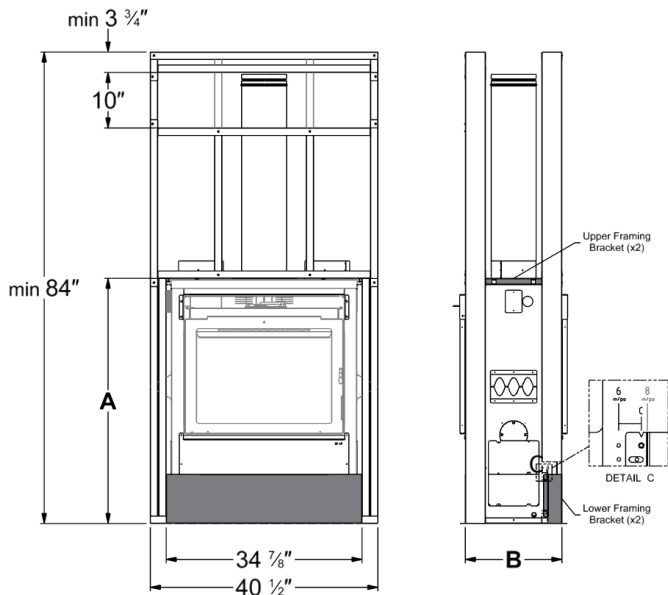


Figure 3-12: Astra Duo Framing Design for Clean Face Surround Configuration with Dual Louver (KG550 Kit) - Front or Back Wall 8" Gravity Ducts Gravity Ducts for 6" Chimney Installation.

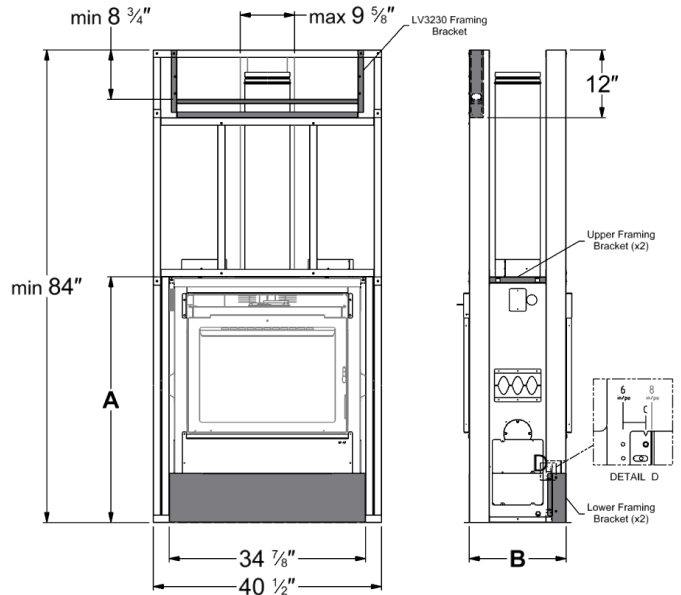


Figure 3-13: Astra Duo Framing Design for Clean Face Surround Configuration with Single Linear Louver (LV32 Kit) - Front or Back Wall 8" Gravity Ducts for 6" Chimney Installation.

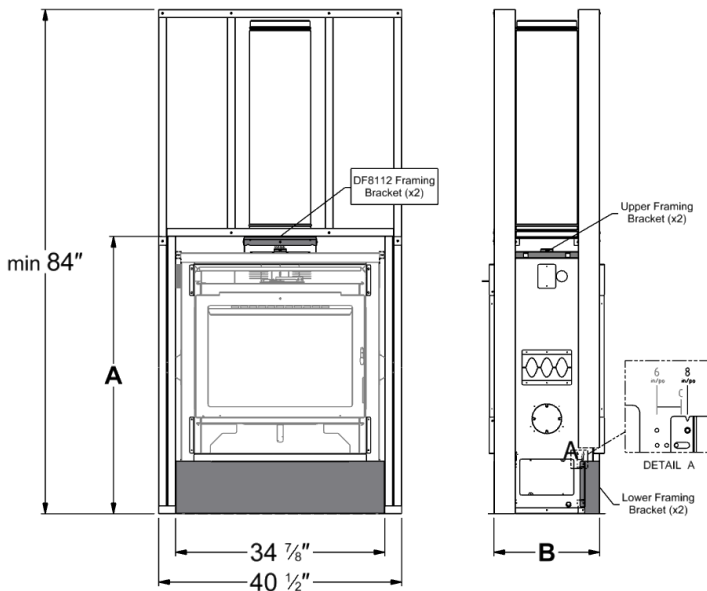


Figure 3-14: Astra Duo Framing Design for Traditional Surround Configuration for 8" Chimney Installation.

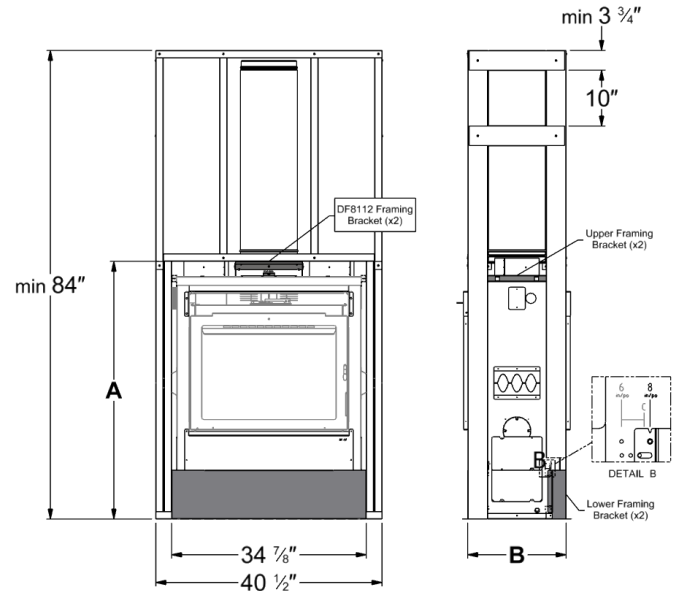


Figure 3-15: Astra Duo Framing Design for Clean Face Surround Configuration with Dual Louver (KG550 Kit) - Side Wall 8" Gravity Ducts for 8" Chimney Installation.

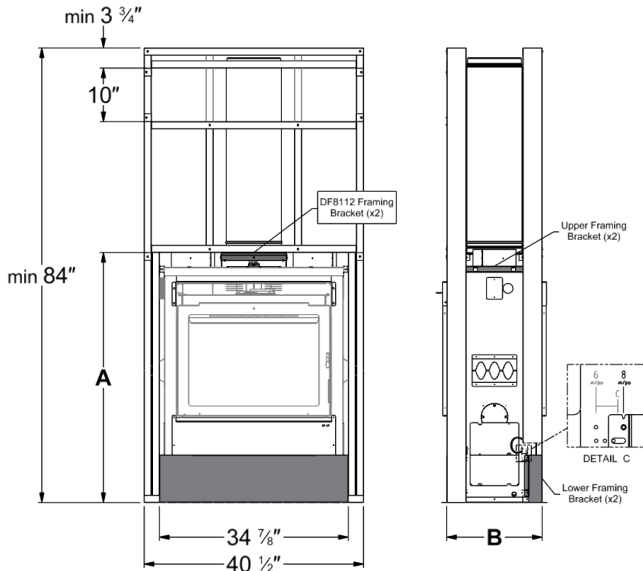


Figure 3-16: Astra Duo Framing Design for Clean Face Surround Configuration with Dual Louver (KG550 Kit) - Front or Back Wall 8" Gravity Ducts Gravity Ducts for 8" Chimney Installation.

NOTE: The Single Linear Louver Gravity Ducts (LV32 Kit) is not available for an 8" chimney installation.

3.5 Gravity Kit Installation

The Clean Face Surround comprises no louvers; however, an intake into the chase and an outtake through gravity ducts is required for this configuration. The instructions below describe the installation of the intake openings, and the gravity ducts/outtakes. Please note that the SUPREME KG550 Kit or LV32 Kit is required for the Gravity Kit installation (Figures 3-17 and 3-18). Note that openings for the intake and the outtake are to be incorporated in the construction of the chase (refer to Section 3.7). Note that the duct adaptors are included in the Gravity Kits.

3.5.1 Dual Louver Gravity Ducts Installation

1. Assure that Clean Face Surround assembly (Section 3.3.2) has been completed prior to continuing with installation of Dual Louver Gravity Ducts.
2. Determine the two locations of the air outtakes within the framing and permit 2 rectangular opening of 10" (W) and 10" (H). Note that a minimum distance of 3.75" is required from the ceiling (Figures 3-11 and 3-12 for a 6" chimney, Figures 3-15 and 3-16 for an 8" chimney). Please note that the air outtakes can be installed in the same room or in different rooms from each other. It is recommended to install both outtakes at the same height for a more uniform heat output.
3. Within the outtake opening, fasten the 10" Louver Diffuser (Item 1 of Figure 3-17) to the framing with the 8" Duct Adapter (Item 3 of Figure 3-17) facing the downward position. Repeat for the other outtake.
4. Measure the distance between the 8" Duct Adapter on top of the unit to the 8" Duct Adapter on the 10" Louver Diffuser and cut the 8" Insulated Flex Duct (Item UCAC8 of Figure 3-17) to the necessary length. Repeat for the other outtake.
5. Complete the connections by sliding the 8" Insulated Flex Ducts over the 8" Duct Adapters and secure the connections with the 8" Worm Gear Clamps (Item 4 of Figure 3-17).
6. Install the 10" X 10" Louver Grids (Item 2 of Figure 3-17) once the chase has been completed (refer to Section 3.7).

WARNINGS:

- The gravity ducts must extend upwards from the top of the unit and cannot exceed 10 feet.
- The ducts should never extend downwards; only upwards.
- The air outtakes must be installed at a minimum of 3.75" from the ceiling.
- The gravity ducts must not be connected to a central heating system.
- A clearance must be maintained between the gravity ducts and the chimney (refer to chimney manufacturer's manual).
- The intake swivel covers at the bottom sides must remain open for all Clean Face Surround installations (refer to Figure 3-9).

Refer to Section 3.7 and Section 3.8 for clearances to combustibles.

Table 3-6: KG550 Kit

DUAL LOUVER GRAVITY DUCTS			
ITEM	PART #	DESCRIPTION	QTY
1	LV3110	10" Louver Diffuser Assembly	2
2	LV3120	10" X 10" Louver Grid	4
3	CM2316	8" Duct Adapter	4
4	WG_CLAMP 8"	8" Worm Gear Clamp	4

*UCAC8 (8" Insulated Flex Duct): Ordered separately.

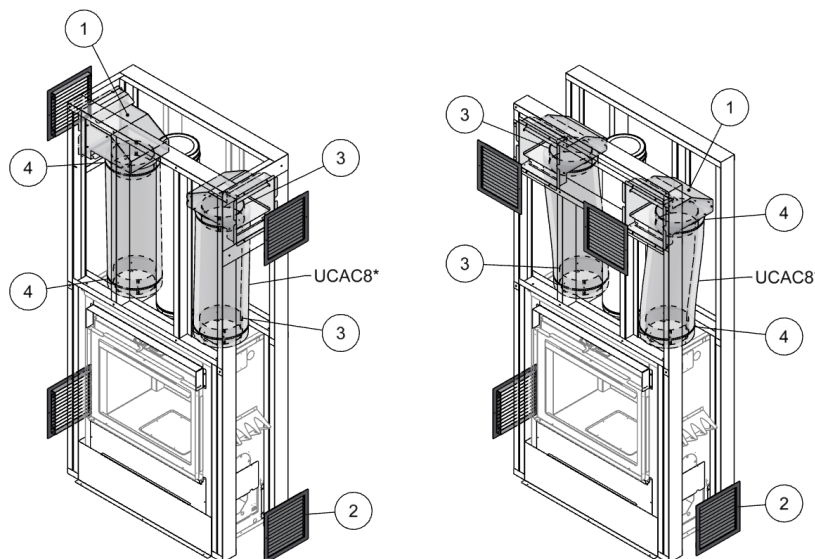


Figure 3-17: Astra Duo 8" Dual Louver Gravity Ducts Installation with Outtakes.

3.5.2 Single Linear Louver Gravity Ducts Installation

1. Assure that Clean Face Surround assembly (Section 3.3.2) has been completed prior to continuing with installation of Single Linear Louver Gravity Ducts.
2. Determine the location of the air outtake within the framing and permit a rectangular opening of 12" (H) for the 32" Louver Framing Bracket (Item 3 of Figure 3-18). Note that a minimum distance of 3.75" is required from the ceiling (refer to Figures 3-13 and 3-24). Please note that the air outtake can be installed in the same room or in a different room.
3. Within the outtake opening, fasten the 32" Louver Framing Bracket (Item 3 of Figure 3-18). Fasten the 32" Louver Diffuser (Item 1 of Figure 3-18) within the 32" Louver Framing Bracket with the 8" Duct Adapters (Item 5 of Figure 3-18) facing the downward position.
4. Measure the distance between the 8" Duct Adapters on top of the unit to the 8" Duct Adapters on the 32" Louver Diffuser and cut the 8" Insulated Flex Duct (Item UCAC8 of Figure 3-18) to the necessary lengths.
5. Complete the connections by sliding the 8" Insulated Flex Ducts over the 8" Duct Adapters and secure the connections with the 8" Worm Gear Clamps (Item 6 of Figure 3-18).
6. Install the 32" Louver Grid (Item 2 of Figure 3-18) and the 10" X 10" Louver Grids (Item 4 of Figure 3-18) once the chase has been completed (refer to Section 3.7).

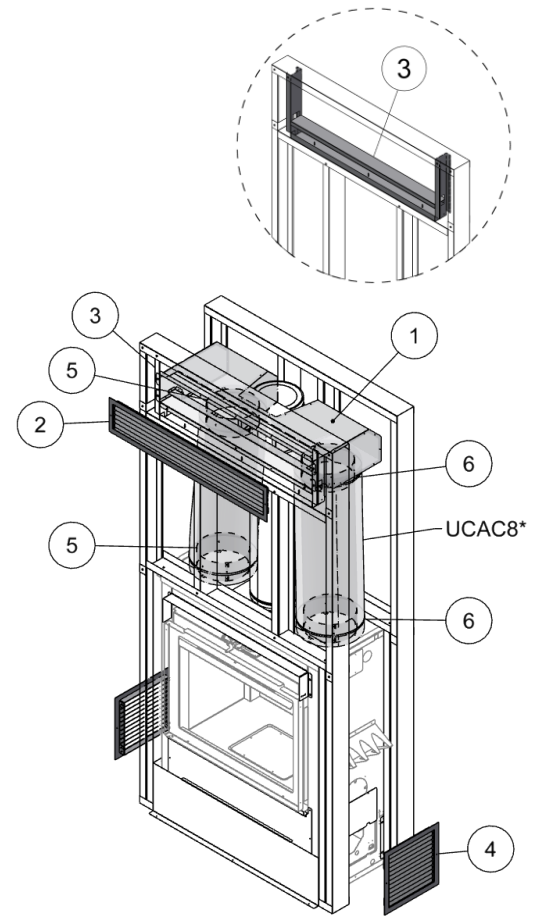


Figure 3-18: Astra Duo 8" Single Linear Gravity Duct Installation with Outtake. (FOR 6" CHIMNEY ONLY)

NOTE: The Single Linear Louver Gravity Ducts (LV32 Kit) must be installed with a 6" chimney system (refer to Figure 3-13).

WARNINGS:

- The gravity ducts must extend upwards from the top of the unit and cannot exceed 10 feet.
- The ducts should never extend downwards; only upwards.
- The air outtake must be installed at a minimum of 3.75" from the ceiling.
- The gravity ducts must not be connected to a central heating system.
- A clearance must be maintained between the gravity ducts and the chimney (refer to chimney manufacturer's manual).
- The intake swivel covers at the bottom sides must remain open for all Clean Face Surround installations (refer to Figure 3-9).

Refer to Section 3.7 and Section 3.8 for clearances to combustibles.

Table 3-7: LV32 Kit

SINGLE LINEAR LOUVER GRAVITY DUCTS			
ITEM	PART #	DESCRIPTION	QTY
1	LV3210	32" Louver Diffuser Assembly	1
2	LV3220	32" Louver Grid	1
3	LV3230	32" Louver Framing Bracket	1
4	LV3120	10" X 10" Louver Grid	2
5	CM2316	8" Duct Adapter	4
6	WG_CLAMP 8"	8" Worm Gear Clamp	4

*UCAC8 (8" Insulated Flex Duct): Ordered separately.

3.6 Hearth Extensions

The hearth extensions of the Astra Duo must be built of a non-combustible material, such as steel, cement or mortar, bricks, or ceramic tiles. Note that unidentified materials may be combustible; verify product specifications prior to installation. The hearth extensions must extend a minimum of 18" from the front of the doors, a minimum of 16 1/2" from the outer edge of the door to the floor, 8" from side of the outer frame of the door and extended all the way to the unit (Figure 3-19 and Figure 3-20). Note that a hearth extension is required for the front and back of the unit and must be installed as illustrated in Figure 3-19 and Figure 3-20.

A sealing strip of non-combustible material must be installed under the Astra Duo and the hearth extension (front and back). The sealing strips are included at front and back of the exterior case; simply unbend the strips prior installation. The sealing strip must cover the full length of the bottom exterior case of the fireplace and overlap a minimum of 2" of the fireplace and hearth extension (Figure 3-20); the minimum dimension of the sealing strip is 33" X 4". Note that sand-cement grout can substitute a sealing strip when installed between the fireplace and an on-site constructed hearth extension.

CAUTION: Make sure to remove any carpet or fabric under the hearth extension.

3.7 Chase Installation

A portion of the front of the chase must be constructed out non-combustible material. Note the chase must be properly fastened onto the framing structure. Refer to Figures 3-21 to 3-24 with Table 3-8 for chase opening dimensions based on the surround configuration.

WARNING: Do not nail or screw the chase onto the fireplace. For the Clean Face Surround option, two intake openings must be constructed onto the chase, as well as the outtake opening(s). Refer to the figures and dimensions below.

NOTE: Chase dimensions are taken from the base of the unit.

NOTE: For an 8" chimney installation, the cement board is installed directly behind the surround; therefore, any finishing material installed will exceed the minimum depth of the chase. The opening dimensions (A and B) illustrated in Figure 3-21 to Figure 3-23 remain the same.

Note that louvers (intakes/outtake(s)) are installed once the chase assembly is completed by fastening the louver to the chase.

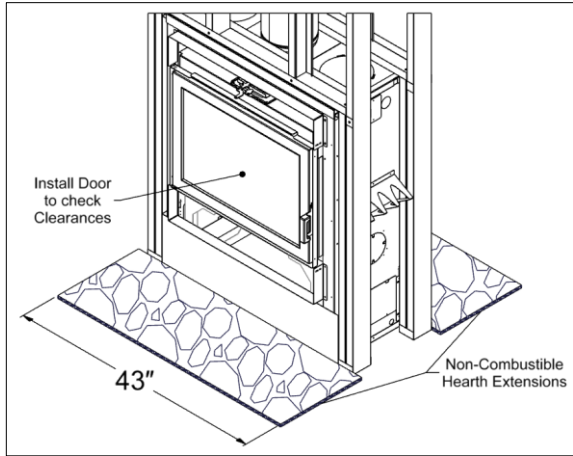


Figure 3-19: Astra Duo Hearth Extension Isometric View

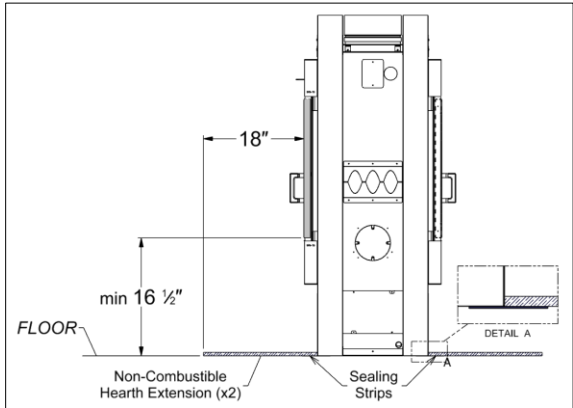


Figure 3-20: Astra Duo Hearth Extension Side View

Table 3-8: Astra Duo Chase Opening Dimensions

Model Number	Traditional Surround		Clean Face Surround	
	A	B	A	B
24SFC_D	TBD	TBD	TBD	TBD
38SFC_D_II	10"	31 5/8"	14 7/8"	26"

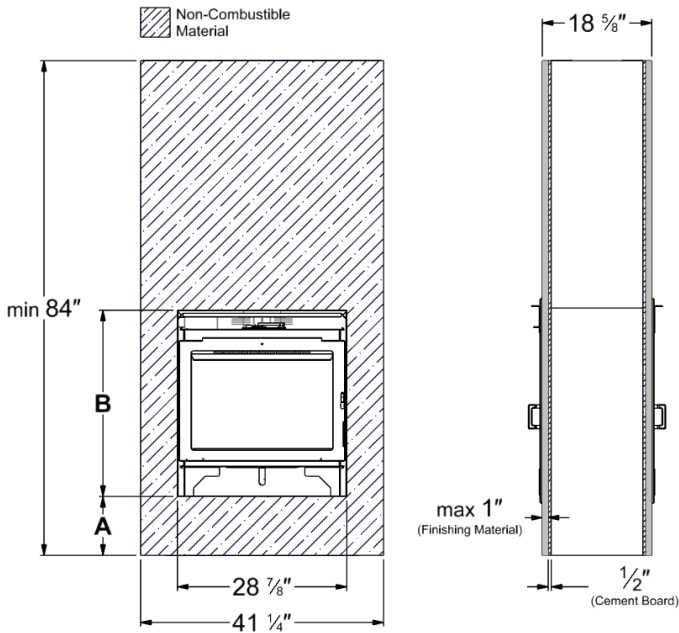


Figure 3-21: Astra Duo Chase for Traditional Surround for 6" Chimney Installation. No finishing material space left for an 8" chimney installation.

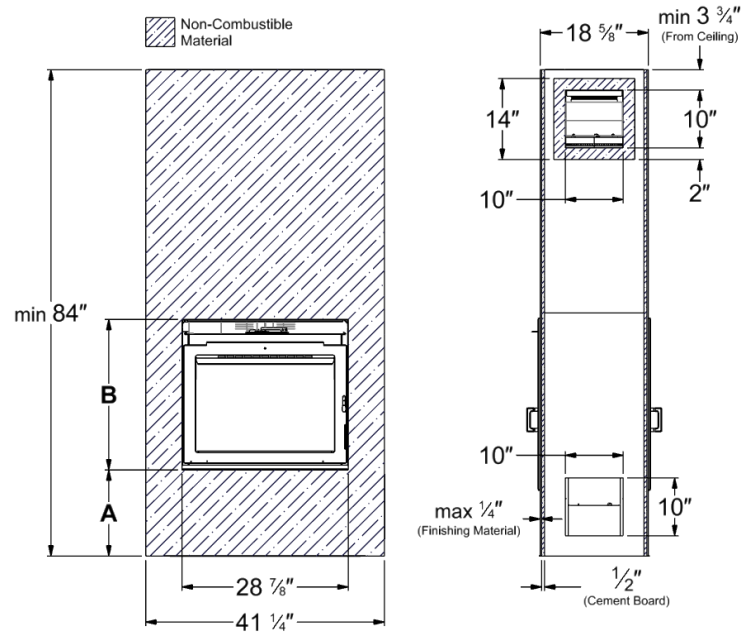


Figure 3-22: Astra Duo Chase for Clean Face Surround with Dual Louver Outtakes (KG550 Kit) at the Side for 6" Chimney Installation. No finishing material space left for an 8" chimney installation.

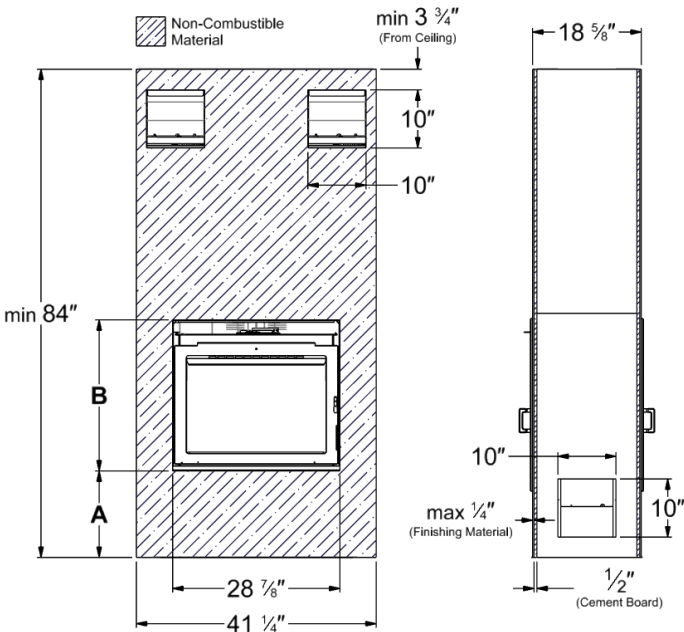


Figure 3-23: Astra Duo Chase Installation for Clean Face Surround with Dual Louver Outtakes (KG550 Kit) at the Front for 6" Chimney Installation. No finishing material space left for an 8" chimney installation.

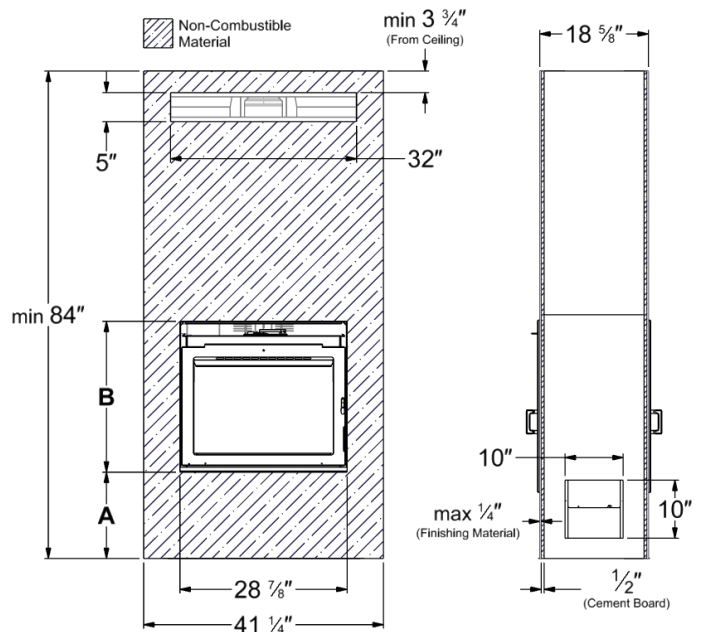


Figure 3-24: Astra Duo Chase Installation for Clean Face Surround with Single Linear Louver Outtake (LV32 Kit) for 6" Chimney Installation. Not available for an 8" chimney installation.

3.8 Clearances to Combustibles

The clearances below must be respected to ensure safe operation of the unit under normal and extreme conditions. Failure to follow the information below is a safety hazard and may result in property damage.

Table 3-9: Overall Clearances

Combustible	Clearance	Reference
Forward Facing Wall	48" (1219 mm)	Glass of fuel door
Side Wall	10" (254 mm)	Outer edge of fuel door
Side Trim	10" (254 mm)	Outer edge of fuel door
Ceiling	84" (2134 mm)	Base of unit
Ceiling	3 3/4" (95 mm)	Gravity air outlet

Table 3-10: Combustible Mantel Clearances

Maximum Mantle Depth	A	
	Traditional Surround	Clean Face Surround
3" (76 mm)	51 1/2" (1308 mm)	45 1/2" (1156 mm)
5" (127 mm)	53 1/2" (1359 mm)	47 1/2" (1207 mm)
7" (178 mm)	55 1/2" (1410 mm)	49 1/2" (1257 mm)

The depth of the mantle is measured from the face of the fireplace door. When the non-combustible wall is recessed, the depth of the mantle can be increased by the amount of the recess (see Figures 3-25 and 3-26). Note that a combustible mantel cannot be installed below the minimum clearance of 51 1/2" for the Traditional Surround and 45 1/2" for the Clean Face Surround (from the bottom of the mantle to the base of the unit). A non-combustible mantel doesn't require a minimum distance from the fireplace.

WARNING: A minimum clearance of 48" is required between the doors of the Astra Duo and any combustible material not specified in this document.

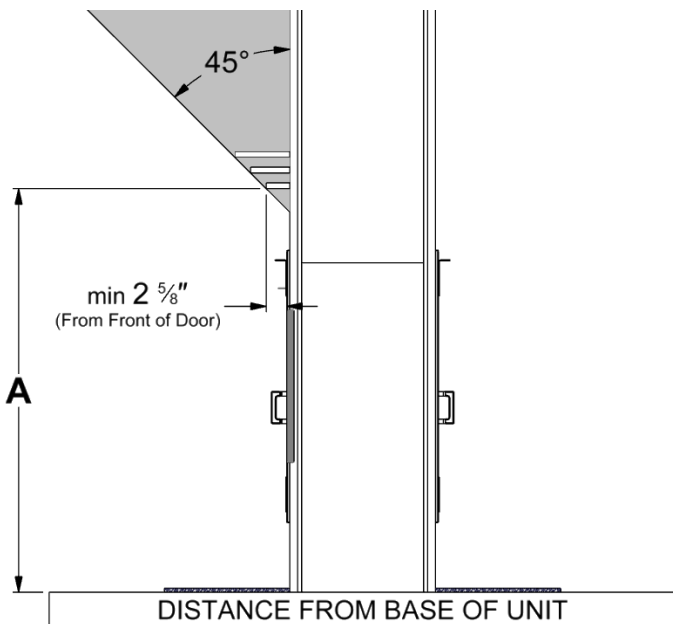


Figure 3-25: Combustible Mantel Clearances for Traditional Surround

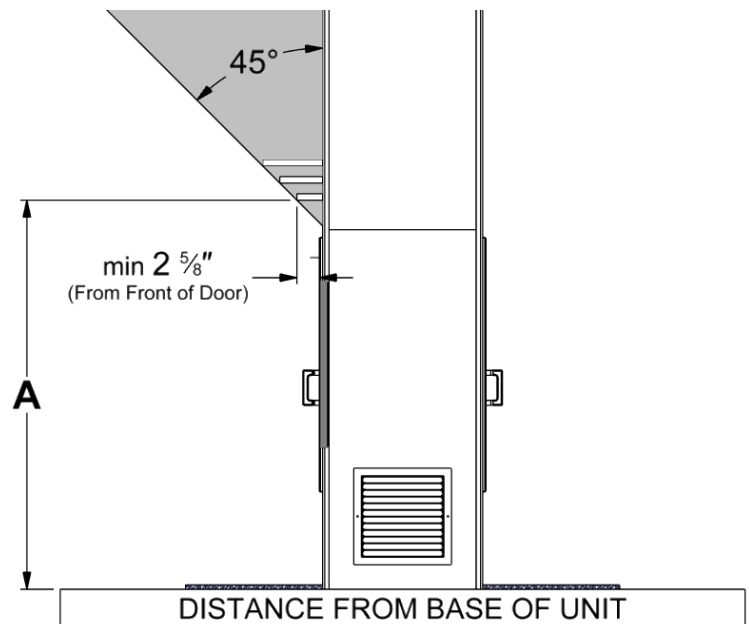
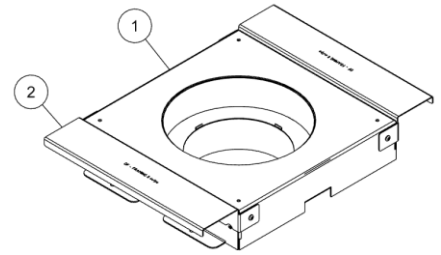


Figure 3-26: Combustible Mantel Clearances for Clean Face Surround

4 OPTIONS

4.1 SUPREME 6 - 8 Inch Chimney Adapter

The SUPREME 6 - 8 Inch Chimney Adapter is an option that permits the connection of the Astra Duo standard 6" flue collar to an 8" chimney. Install the adapter with the appropriate framing brackets (DF8112) and adjust the lower framing brackets of the unit properly prior framing the unit. Order separately the items specified in Table 4-1 to proceed with an 8" chimney installation. Note that it is recommended to install the Astra Duo with an 8" inch chimney system in areas where the unit is susceptible to backdraft during operation, such as in high altitude or mountainous regions.



Follow these instructions to proceed with the installation of the SUPREME 6 inch to 8 inch Chimney Adapter for the Astra Duo (DF8100 Kit).

Table 4-1: DF8100 Kit

SUPREME 6 INCH TO 8 INCH CHIMNEY ADAPTER (DF)			
ITEM	PART #	DESCRIPTION	QTY
1	SF8100	SUPREME 6 - 8 Inch Chimney Adapter	1
2	DF8112	DF Framing Bracket	2

SUPREME 6 inch to 8 inch Chimney Adapter installation instructions for the Astra Duo

STEP 01	<p>Install the SUPREME 6 - 8 Inch Chimney Adapter (Item 1 – SF8100) onto the unit with self-drilling screws (x4) as shown.</p> <p>WARNING: Make sure the gasket is properly placed under the adapter. Add the Anchor Plate Gasket Seal (ANPGA) provided with the unit to fill the gap if necessary.</p> <p>NOTE: Make sure the FRONT / BACK marking on the adapter is towards the face of the unit.</p>	
STEP 02	<p>Install the DF Framing Brackets (Item 2 – DF8112) on each side of the adapter using self-tapping screws (x6) in the intended holes as shown.</p>	
STEP 03	<p>Install the 8 inch anchor plate onto the adapter using self-tapping screws (x4).</p>	

4.2 Fresh Air Kit

Sufficient air exchange is necessary for the fireplace to operate properly and to maintain a good combustion. In an airtight household, the fireplace may not function as designed due to a lack of air; it is therefore recommended to install the fresh air kit in such cases. The Fresh Air Kit (UPEA4 / UPEA4_25) is an option intended to bring combustion air into the baffle of the fireplace from an exterior source. Note that a minimum distance of seven inches is required between the side of the unit connecting to the fresh air kit and the framing to allow significant space (refer to Figure 3-2).

Note that the Astra Duo is designed to use a minimum amount of air during operation. Using an air exchanger or simply opening a nearby window/door during the ignition of the unit will achieve a similar result as the fresh air kit. When the fireplace is idle, there is no air escaping from the house through chimney. **Consult a local authority having jurisdiction (such as the fire department, the municipal building department, the fire prevention bureau) to determine if it is mandatory to install a fresh air kit in your area.**

General Notes:

The outside air kit should be installed according to the following guidelines:

- The air duct must be insulated, wrapped with a vapor barrier, and have an inner diameter of 4 inches.
- The air duct must be constructed of non-combustible materials.
- The length of the air duct should not exceed 25 feet.
- The duct should not be elevated more than 10 feet from the base of the unit.
- Fresh air must come from the outside and not from another room or the attic.
- The outside air register must be away from automobile exhaust fumes, gas meters, or other vents.
- The outside air register must be constructed out of a minimum 20Ga wire mesh with openings not larger than $\frac{1}{4}$ " X $\frac{1}{4}$ " (6.4 mm X 6.4 mm) with the purpose of preventing any debris and rodents from entering the air duct.
- Avoid installing the outside air register where it will likely be covered by snow or exposed to strong winds.
- The outside air register can be installed above or below the level of the fireplace.
- Use the SUPREME FIREPLACES INC. Fresh Air Adapter (ADP4) provided with the unit. Note that the ADP4 is factory-installed on the left side facing the unit (Combustion Air Control).
- Use the SUPREME FIREPLACES INC. Fresh Air Kit (UPEA4) for installations of 10 feet or less.
- Use the SUPREME FIREPLACES INC. Fresh Air Kit (UPEA4_25) for installations between 10 to 25 feet.

UPEA4 / UPEA4_25 Installation:

1. Cut 4 $\frac{1}{2}$ " diameter hole on the exterior wall of an ideal location inside maximum 25 feet of distance.
2. Install the outside air register on the exterior wall.
3. Install the fresh air duct and secure it with worm gear clamps. Cut the exceeding length if necessary.

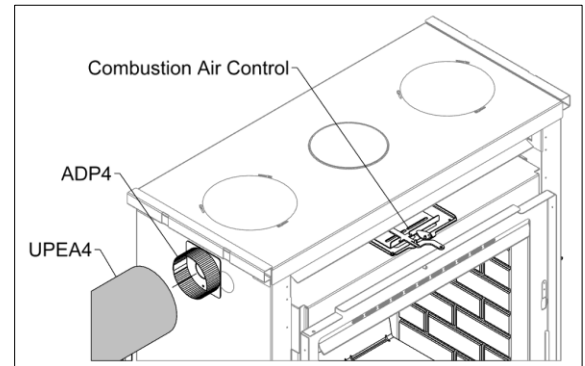


Figure 4-1: Astra Duo ADP4 Location

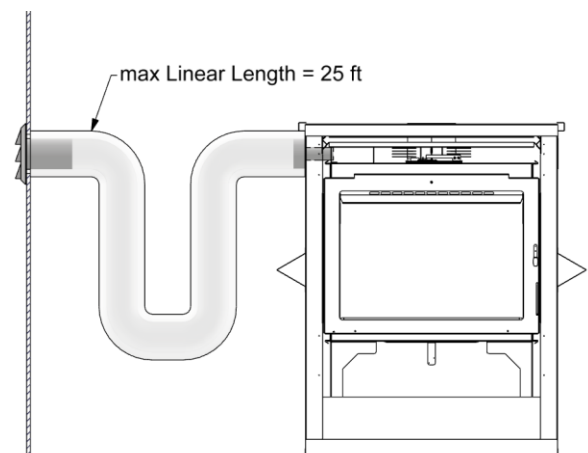


Figure 4-2: Astra Duo UPEA4 Kit Installation

4.3 100% Fresh Air Kit

The 100% Fresh Air Kit (100P_UPEA4 / 100P_UPEA4_25 / 100P90_UPEA4 / 100P90_UPEA4_25) is an option designed to bring combustion air from outside the dwelling (exterior source) into the primary and secondary intakes of the firebox through completely sealed channels during operation of the unit. Use the 4" insulated duct to connect the combustion air from an exterior source to the 100% Fresh Air Adapter (straight or 90 degrees). Refer to Section 4.2 on framing information, general notes, and installation instructions on the 4" insulated duct. Refer to Table 4-2 for the components list offered with the 100% Fresh Air Kit – based on required type of installation. **Consult a local authority having jurisdiction (such as the fire department, the municipal building department, the fire prevention bureau) to determine if it is mandatory to install the 100% Fresh Air Kit in your area.**

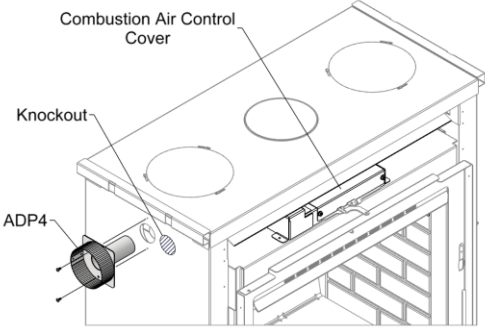
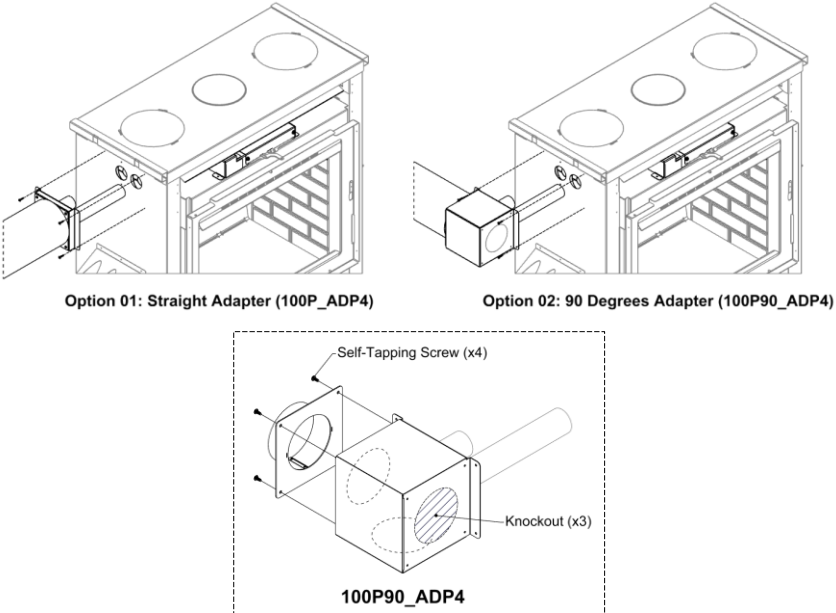
Table 4-2: 100% Fresh Air Kit

PART #	DESCRIPTION	QTY
100P_ADP4	100% Fresh Air Adapter – Straight	1*
100P90_ADP4	100% Fresh Air Adapter – 90 Degrees	
UPEA4	4" Insulated Duct – 10 ft Length (Kit)	1*
UPEA4_25	4" Insulated Duct – 25 ft Length (Kit)	

*Select one option

Follow these instructions to proceed with the installation of the 100% Fresh Air Kit for the Astra Duo.

100% Fresh Air Adapter Installation Instructions for the Astra Duo

<p>STEP 01</p>	<ol style="list-style-type: none"> 1. Remove the existing Fresh Air Adapter (ADP4) by unscrewing the adapter and pulling it out as shown. 2. Remove the knockout next to the ADP4 opening as shown. 	
<p>STEP 02</p>	<p>Insert the 100% Fresh Air Adapter (100P_ADP4 or 100P90_ADP4) into the fireplace with the longer tube going into the previously cut knockout. Secure the adapter on the with self-drilling screws (4X).</p> <p>NOTE: The 100P90_ADP4 orientation is selected by the installer. Remove the knockout on the chosen side and install the flange on that side using the self-tapping screws (4X) as shown.</p>	
<p>STEP 03</p>	<p>Install the 4" insulated duct by following the instructions of Section 4.2.</p>	

4.4 Hot Air Distribution Kit

The Hot Air Distribution Kit (SU250_INL) is an option intended to bring hot air from the fireplace to a remote area using a 255 CFM blower. The system is designed to distribute heat with ducting lengths up to 25 feet. Note that only an insulated flexible duct capable of withstanding a maximum temperature of 210°F can be installed with this kit. Note that a minimum distance of ten inches is required between the side of the unit connecting to the Hot Air Distribution Kit and the framing to allow significant space (refer to Figure 3-3). It is possible to install up to two air ducts and to direct the ducts upwards or downwards.

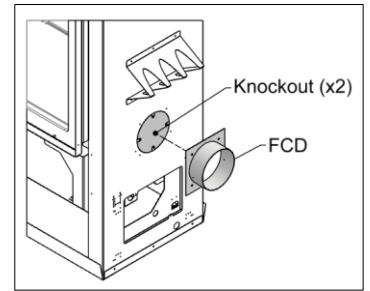


Figure 4-3: Astra Duo Knockout for Hot Air Distribution Kit (Both Sides)

CAUTION: Only a Hot Air Distribution Kit provided by SUPREME FIREPLACES INC. can be installed onto the fireplace. Substituting the Hot Air Distribution Kit may result in overheating, will void the warranty and can be hazardous.

WARNINGS:

- Do not install the blower within the casing of the fireplace.
- The minimum wall opening to run the duct is 6" x 7.5".
- When the hot air duct passes through the chase of the fireplace, the minimum distances to combustible materials must be respected. The duct must be secured to prevent accidental displacement.
- The minimum distance between the blower and the fireplace is 5 feet.
- The duct must not be in contact with the top of the fireplace.
- Do not use a speed control for the blower.
- The top of the hot air grille must be a minimum of 2 inches away from a flat ceiling.
- The hot air grille must be installed in a location that ensures the effective dispersion of the hot air.
- The hot air grille cannot be installed on a floor.
- If the grille is installed near a wall or ceiling, the grille openings must be positioned in such a way to direct hot air away from the wall or ceiling.

Note: For a Clean Face Surround installation, remove the Swivel Covers completely (refer to Section 3.2.2).

Installation:

1. Remove the 5" knockout from the either side of the fireplace (refer to Figure 4-3). **CAUTION: Only remove knockouts where air duct will be installed. Removing a knock-out without installing an air duct could compromise the safety of your fireplace.**
2. Install the fireplace duct connector (FCD - Item 3) on either side of the fireplace (Figure 4-3). Secure with the four metal screws.
3. Choose the desired room to bring the hot air. Cut an opening on the wall of 6.00" X 7.50".
4. Find a suitable location to install the in-line blower (255CFM_INLINE_BLW - Item 1). **CAUTION: A minimum distance of 5 feet needs to be respected between the exterior case of the fireplace and the blower.**
5. Install the wall duct connector (WDC - Item 5).

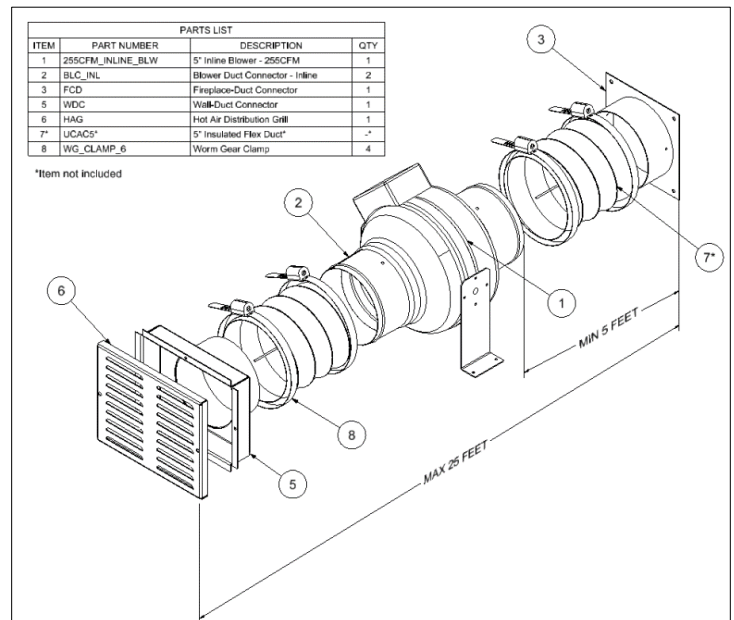


Figure 4-4: Hot Air Kit Parts List

6. Install the air ducts (UCAC5 – Item 7* ordered separately); secure all air ducts with clamps (WG_CLAMP_6 - Item 8).
7. Install the wall grill (HAG – Item 6).

Electrical Connections:

The following diagram (Figure 4-5) illustrates the electrical wiring for the Hot Air Distribution Kit (SU250_INL). Note that the hot air blower is equipped with a thermal reset switch (shutoff) once it reaches its maximal operating temperature. **CAUTION: All electrical connections are to be performed by a qualified electrician.**

Note that the therm-o-disc and electrical box are located within the Astra Duo (Figure 4-6). For installation, maintenance or replacement purposes, 1) Remove the front door carefully and place it away on a soft surface. 2) Remove the firebox bottom plate. 3) Disassemble and remove the stainless steel cover on the bottom of the firebox by unscrewing it (6X). Take caution to the therm-o-disc and wiring assembled onto the stainless steel bracket.

WARNING: Make certain that the fireplace is not in operation and the hot air blower is unplugged (breaker off) before accessing the electrical wiring of the Hot Air Distribution Kit.

1. Using two self-tapping screws, install the therm-o-disc onto the L bracket located under the firebox if necessary.
2. Connect the black wire of the power supply to the therm-o-disc.
3. Connect the therm-o-disc to the black wire of the thermostat (install/mount the thermostat at a convenient location).
4. Connect the white wire of the thermostat to the hot air blower.
5. Connect the hot air blower to the white wire (neutral) of the power supply.
6. Ground the connection with the green wire in the electrical box.

Once the electrical connections are completed, the blower will turn on and turn off automatically during operation of the unit. As the temperature of the fireplace increases and the therm-o-disc reaches 95°F, the hot air blower will turn on. Note that the average time it takes for the blower to activate is between 30 to 45 minutes after starting a fire. The hot air blower will turn off once the fireplace has cooled down and the therm-o-disc is at 85°F. The thermostat allows the user to set a target temperature in the room where the Hot Air Distribution kit is deviating the heat. If the temperature of the thermostat falls below the setting, the blower will turn on until the room has attained the desired temperature. It is safe to operate the Astra Duo in the event of a power failure (hot air blower not powered).

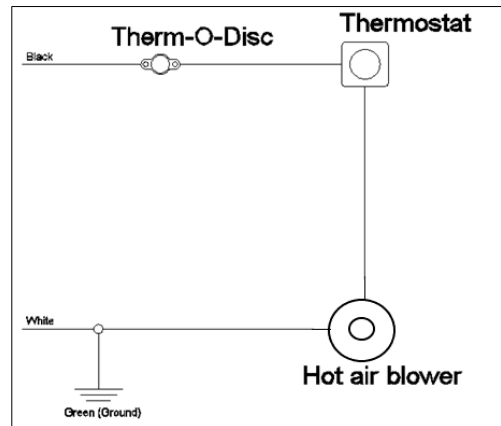


Figure 4-5: Electrical Diagram for Hot Air Distribution Kit

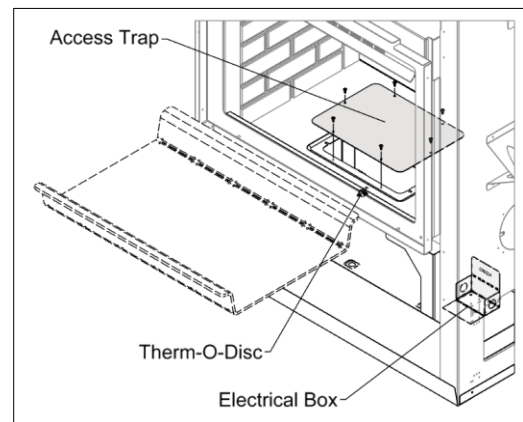


Figure 4-6: Access Trap to Electrical Connections

5 OPERATION INSTRUCTIONS

WARNING: READ THE OWNER'S MANUAL CAREFULLY BEFORE USING YOUR FIREPLACE. The Astra Duo is not intended to serve as a primary source of heat. Note that Supreme Fireplaces Inc. is not responsible for any heating costs related to other sources of heat.

5.1 Fuel

The Astra Duo is designed to burn natural wood only. Higher efficiencies and lower emissions generally result when burning air dried seasoned hardwoods (moisture content below 20%), as compared to softwoods or to green or freshly cut hardwoods. The following are a few signs indicating that firewood is sufficiently dry for use: (a) cracks on the ends and surface of the logs, (b) lighter in weight, and (c) color (yellow/grey). It is recommended to use a moisture meter with pin sensors for determining accurately the moisture content of firewood (read manufacturer's instruction manual before operating). The optimum log length is 18-22 inches, preferably split in halves or quarters and left to dry under a cover or away from external elements for a minimum of one year prior to use. Use good quality dry cordwood only. DO NOT burn garbage, lawn clipping, yard waste, materials containing rubber (including tires), materials containing plastic, waste petroleum products, paints, paint thinners, asphalt products, materials containing asbestos, construction debris, demolition debris, railroad ties, pressure-treated wood, manure, animal remains, coal, salt water driftwood or other previously salt water saturated materials, unseasoned wood, paper products, cardboard, plywood, particle boards, or other foreign materials in this product. The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected wood heater. Burning these materials may result in release of toxic fumes or render the heater ineffective and cause smoke. Do not over fire the Astra Duo fireplace. Over firing will damage the fireplace, is hazardous and will void the warranty. NOTE: Gas logs cannot be installed in the Astra Duo fireplace.

WARNING: Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.

Ecological or composite logs containing chemical additives are not tested and approved to be used with the Astra Duo. Using them will overheat and damage the fireplace and void the warranty. Use only composite fire logs meeting the requirements of ANSI/CAN/UL/ULC 2115, Processed Solid Fuel Firelogs and Firestarters. Refer to the fire log warnings and caution markings on packaging prior to use. Do not poke or stir the logs while they are burning. Never use more than two of these logs at a time. Using more is not only dangerous, but will damage the fireplace and void the warranty. Follow the ecological log manufacturer's safety guidelines and recommendations and be sure that they are intended for use in fireplaces. Reload only once the previous load of wood has been consumed and only embers remain.

WARNING: Do not keep a door open while the fireplace is in operation.

5.2 First Fires

For the first three fires, burn a maximum of three logs to allow for proper conditioning of the unit. Due to oil residues and the curing of the paint of the fireplace, it is normal to smell an odor for the first fires of the Astra Duo. Open a window or a door near the fireplace to ventilate the house during the first fires. Oil residues may cause light smoking.

5.3 Operating the Combustion Air Control

The Combustion Air Control of the Astra Duo has a single component: the Activator (see Section 2.4). When starting a fire or adding a new load of wood, the Activator must be pushed in to allow maximum air to enter the firebox. The combustion air control will automatically and gradually close the primary air source with the presence of heat to maximize the burn time.

NOTE: The Activator must be pushed in when starting a fire or when adding a new load of wood.

WARNING: The combustion air openings should never be obstructed.

WARNING: Never manipulate the Combustion Air Control's Activator with bare hands as it gets hot when the Astra Duo is in operation. Use the Cold Hand Key (see Section 2.5) to adjust the Combustion Air Control.

WARNING: This wood heater is designed to burn at a set burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

5.4 Starting a High Efficiency Fire

The Astra Duo has patented technologies and innovative features that make starting a fire quick and easy. Before starting a fire, assure that all the safety precautions mentioned in the owner's manual are being respected. The following instructions describe starting a fire in Astra Duo fireplace using a "top-down" approach, which results in a cleaner, more efficient, and longer burn:

- a) From the front side of the Astra Duo, place two logs in the firebox. The logs should sit directly on the hearth from left to right or east to west (parallel with the door). Do not use a fireplace grate.
- b) Place a third and fourth log above the two logs of step a) front to back or north to south.
- c) Depending on the size of the logs, a fifth log can be placed above the logs of step a) and step b). For optimal performance of the unit, leave a minimum 1.5" space between the logs and the baffle.
- d) Push inward the Activator lever of the Combustion Air Control.
- e) Place and ignite a firestarter within the between the logs in step b) or below the log in step c). Make sure that the firestarter is visible from the opening (facing the front).
- f) Once the firestarter is well lit, close the door. Do not leave the door open for more than 2 minutes.

NOTE: Install a carbon monoxide (CO) and smoke detector near the location of the unit with respect to the requirements of the authority having jurisdiction in your area.

NOTE: Always start a fire from the front side of the Astra Duo (side of the Combustion Air Control).

CAUTION: The logs of the load should be placed away from the doors to avoid damage to the glasses.

WARNINGS: Over firing the unit may result in overheating and can damage the fireplace and/or result in fire hazards. The maximum firewood load at ignition must not exceed approximately 30 pounds (four to five logs depending on size). This fireplace has been designed to burn with the doors closed. When the fireplace is being used, the doors should always remain closed. Failing to do so is a safety hazard, will damage the fireplace and void the warranty.

WARNING: Do not use fire accelerants to rekindle the fire if the first attempt to start the fire failed. Do not open a door. Simply reactivate the Activator by pushing it inwards.

NOTE: Sufficient air exchange is necessary for the fireplace to operate properly. Air is required in order to maintain the combustion of the fireplace. If the house is airtight, the fireplace may not function properly. If the fireplace is deprived of air, it will be necessary to provide a source of fresh air into the dwelling. This may be done by using an air exchanger unit or simply by opening a window or a door near the fireplace partially for a

few minutes. Make sure that other equipment such as the kitchen exhaust fans or oil central heating systems does not affect the fireplace functionality. Large return ducts of central heating systems located in the same room as the fireplace may affect the proper functioning of the unit and may cause smoking. The Fresh Air Kits (Section 4.2) or the 100% Fresh Air Kit (Section 4.3) are options offered by SUPREME that may help eliminate backdraft at ignition.

5.5 Adding a New Load of Wood

WARNING: Open the door to reload only when the wood has been reduced to embers, otherwise there is a risk of smoke infiltration into the house.

When the wood has been reduced to embers and there's no visible flame, it is time to add a new load.

- a) From the front side of the Astra Duo, crack the door open and wait a few moments before opening the door completely.
- b) Use your fireplace tools to gather the remaining embers at the center of the firebox.
- c) Activate the Combustion Air Control by pushing the Activator inward.
- d) Once the embers begin to glow red, add the new load of wood in the firebox.
- e) Keep the door slightly unlatched until you see a flame in the firebox. **Never leave the Astra Duo door unlatched without constant supervision.**
- f) Completely latch the door.

Assure that a flame is maintained. Avoid wood smoldering on top of embers as this will result in a dirty glass, excessive emissions, chimney creosote buildup and poor heat output. If wood is smoldering, ensure the Activator has been activated and unlatch the Astra Duo door slightly with supervision until a flame has been maintained.

WARNINGS: The maximum amount of firewood at reloading must not exceed approximately 20 pounds (two to three logs depending on size); the unit and chimney system is still relatively hot and does not require the same amount of wood to maintain the surrounding space at a comfortable temperature. Over firing the unit may result in overheating and can damage the fireplace and/or result in fire hazards.

6 TROUBLESHOOTING

6.1 Backdraft / Smoking

Draft is the force created by a difference in pressure, which moves air from the appliance up through the chimney. It is important to operate the Astra Duo with proper draft to ensure optimal performance of the unit. Draft is depended on the length of the chimney, local geography, nearby obstructions and other factors. Proper draft results in an upwards flow through chimney, which prevents smoke infiltrating into the house during operation of the unit. As the temperature of the unit and chimney rises during combustion, the draft consequently increases due to a higher difference in pressure.

In contrast, backdraft is air flow from the chimney into the house, which results in smoke infiltration from the appliance and/or the chimney joints during operation. The unit is experiencing backdraft if the air is flowing out from the exhaust of the baffle system (within the firebox). Backdraft is most caused by fans around the house (such as in the kitchen and bathrooms) simultaneously in operation, insufficient length of the chimney (less than 15 feet), or a blocked chimney. Refer to the following suggestions to eliminate backdraft:

- Close any fans operating around the house (specifically for the duration of ignition).
- Clean the chimney of any obtrusions (when the unit is cold).
- Open one window or one door near the Astra Duo.
- Heat the chimney by burning a firestarter near the exhaust of the baffle system.

6.2 Over Firing

The appearance of a red glow on the exterior of the firebox (top and sides) and/or on the flue is a sign of over firing. Excess air entering the firebox, over fueling, or an abnormal strong draft causes the unit to reach drastic temperatures from an uncontrollable combustion. Over firing is a safety hazard and may result in permanent damage to the unit. In the occurrence of over firing:

- a) Make sure the Astra Duo door is properly closed.
- b) Manually close the Combustion Air Control by pulling the Activator.
- c) If possible, turn on the blower of the Hot Air Distribution Kit option (Section 4.4) by setting the temperature of the thermostat to the maximum. The red glow on the exterior of the firebox and/or the flue should gradually disappear.

WARNING: Do not touch hot surfaces with bare hands. Always wear heat protecting gloves and use fireplace tools.

Guideline to avoid over firing:

- Always keep the door closed during operation.
- Inspect regularly the door gasket/glass and replace accordingly.
- Always operate the unit with the bypass system in the closed position, blocking the baffle cap opening.
- Never start a fire with more than 30 lbs of wood.
- Never reload the unit with more than 20 lbs of wood at a time.
- Ensure that there is no excess draft.

WARNING: Failure to follow the above guideline will void the warranty. Over firing is a safety hazard, can cause irreversible damages to the Astra Duo and will void the warranty.

7 MAINTENANCE

7.1 Disposal of Ashes

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial on soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled. **CAUTION: Always wear heat resistant gloves when removing the ashes from the firebox.**

- Let the firebox cool to ambient temperature before removing the ashes. It is recommended to remove the ashes once the bed has exceeded a height of 4 inches.
- Slowly open the Astra Duo door to prevent ashes from coming into the room.
- Place an ash bucket (metal container) near the fireplace, onto the non-combustible hearth.
- Using a shovel and brush, remove the bulk of the ashes from the firebox into the ash bucket.
- Store the ash bucket (with the tight-fitting lid) on a non-combustible surface, away from any combustible materials, pending final disposal.

7.2 Chimney Maintenance

Creosote – Formation and Need for Removal: When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapor condenses in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney connector and chimney burning wood or coal should be inspected at least once every two months during the heating season to determine if creosote buildup has occurred. The presence in a chimney of soot or creosote more than 3 mm thick will indicate the need for immediate cleaning, possible modification of burning procedures, and more frequent inspections. **Never use chemical cleaners for your chimney.**

WARNING: In the case of a chimney fire: 1) make sure the doors of the Astra Duo are closed; 2) pull the Activator lever of the Combustion Air Control (Section 5.3); 3) call the local fire department (if assistance is needed); 4) use a dry chemical fire extinguisher (baking soda or sand) to control the chimney fire.

CAUTION: Never use water to extinguish a fire as it may result to dangerous steam explosions. Do not use the unit until the chimney is inspected and repaired (if needed) by a qualified technician.

NOTE: Do not clean the chimney when the unit is in operation/hot. Follow the instructions below for sweeping the chimney of an Astra Duo fireplace while referring to Figure 7-1:

- Open the Front Door of the unit – side of the Combustion Air Control.
- Remove the Bypass Push Rod located at the top center of the door holder by pulling it out (Item 2).
- From within the firebox, remove the Baffle (Item 4) by unfastening the 3/8 Hex Bolts (8X) (Item 3).
- Remove the Lock Brackets (2X) (Item 5) located on the sides.
- Remove the Cast Iron Panels (2X) (Item 6) as they are no longer secured with the Lock Brackets.
- Enclose the Front Door of the unit.
- Using the right sized chimney sweeping brush, clean the chimney from any creosote buildup and other residues.

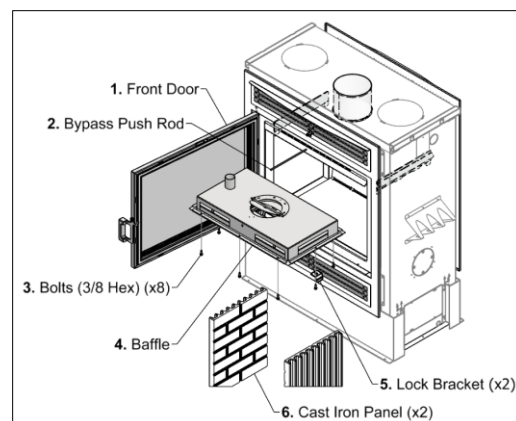


Figure 7-1: Parts to Remove for Chimney Sweeping/Maintenance

- h) Remove all the fallen/loose creosote/residues from the firebox and baffle (a shop vacuum cleaner can be used for a thorough cleaning).
- i) Reinstall the Baffle and the Bypass Push Rod. Make sure that the Bypass System is in the proper position (counterweight facing downward) prior to fastening the Baffle. Test the Bypass System by pressing forward the Bypass Push Rod and observing whether the baffle cap opening fully closes. Refer to Figures 7-2 and 7-3.

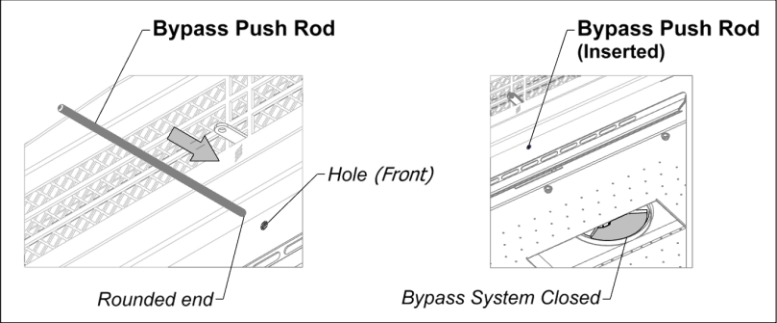


Figure 7-2: Bypass System Testing

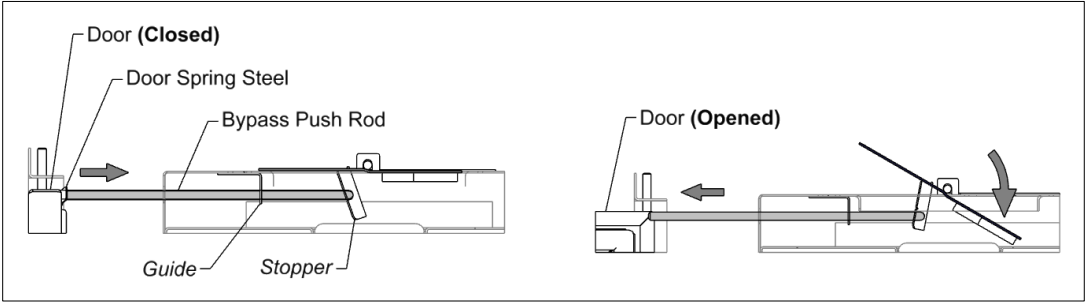


Figure 7-3: Bypass System Functioning

- j) Reinstall the Cast Iron Panels (X2) and the Lock Brackets (X2). Refer to Figure 7-4 to properly install the Lock Brackets.

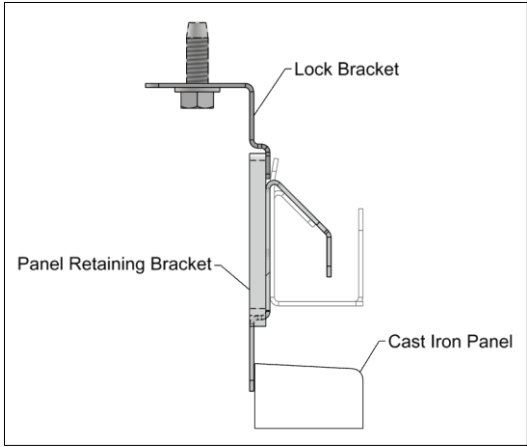


Figure 7-4: Lock Bracket for Cast Iron Panel

CAUTION: Operating the unit without the bypass system in closed position will result in over firing and void the warranty.

7.3 Cleaning of Glass

It is recommended to clean the glass door with a soft cloth, dampened with a non-abrasive solution, such as soap and water.

CAUTION: Cleaning the glass with an abrasive solution will result in surface scratches, reducing glass transparency and resistance to impacts.

The glass of the door may be cleaned with commercial products intended for fireplaces and stoves. After cleaning the glass, remove any remaining solutions with a wet cloth to avoid chemical reactions at elevated temperatures (“cloudiness” on the surface of the glass).

CAUTION: Do not apply commercial cleaners onto any painted surfaces as discoloration/peeling may occur.

NOTE: Never clean the glass when the unit is in operation or hot.

7.4 Replacing a Cast Iron Panel

Two panels are assembled along the firebox side walls (left and right) allowing for a longer and a constant heat output. It is recommended to perform a weekly check on the condition of the panels to ensure proper operation of the unit. The panels need to be replaced when it is gravely chipped and/or cracked. Failure to replace the panel under the mentioned conditions will alter the performance of the unit. Refer to the following instructions for replacing a panel:

- a) Order the replacement kit for the Astra Duo Cast Iron Panel (refer to Section 7.9).
- b) Remove a door from the Astra Duo and place it away face down on a soft surface. NOTE: Rotate the handle to permit proper placing.
- c) Remove the Bottom Plate (hearth) by lifting it out of the firebox.
- d) Remove the left/right Lock Bracket by unbolting the corresponding 3/8 Hex Bolt as shown in Figure 7-5.
- e) Lift upward the left/right Panel Retaining Bracket as shown in Figure 7-5.
- f) Replace the damaged Cast Iron Panel and place it against the side of the firebox.
- g) Reinstall the Panel Retaining Bracket by sliding it back on the Support shown in Figure 7-5.
- h) Reinstall the Lock Bracket to secure the Cast Iron Panel. Refer to Figure 7-4.
- i) Insert the Bottom Plate (hearth) and door to its original position.

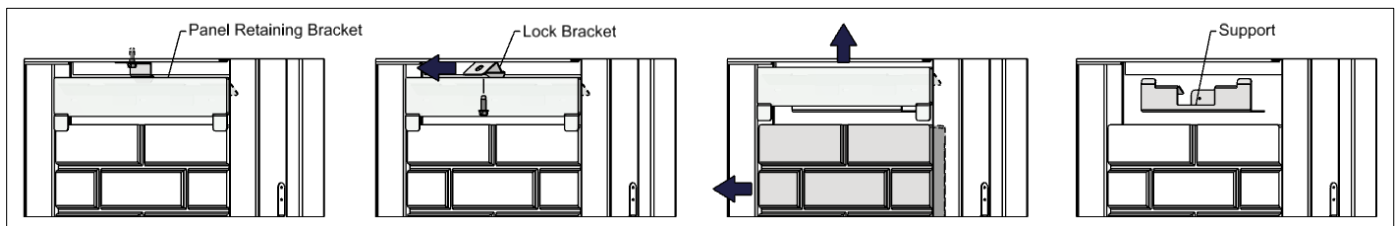


Figure 7-5: Panel Retaining Bracket Removal

WARNING: Do not operate the unit with any of the cast iron panels missing.

7.5 Replacing the Door Gasket

SUPREME FIREPLACES INC. assembles heat resistant graphite coated gaskets on the doors of all products, allowing for a proper seal of the unit at extreme temperatures (up to 1000°F). It is recommended to perform a weekly visual check on the condition of the 7/8" gasket to ensure proper operation of the unit. The 7/8" gasket of your door needs to be replaced when 1) the fibers of the gasket are coming loose and 2) the gasket is disintegrating. Failure to replace a gasket under the mentioned conditions can cause irreversible damage to the unit due to over firing.

Refer to the following instructions for replacing the $\frac{7}{8}$ " gasket:

- Order the replacement kit for the Astra Duo $\frac{7}{8}$ " door gasket GSK_88_7 (refer to Section 7.9).
- Remove the door from the firebox and place it face down on a soft surface. NOTE: Rotate the handle to permit proper placing.
- Cover all painted surfaces of the door to avoid damage and scratches.
- Using a wedging tool or flat head screwdriver, gently remove the old $\frac{7}{8}$ " gasket (along with the old silicone) from the door framing.
- Apply a bead of high temperature silicone along the groove of the metal brackets.
- Place the new $\frac{7}{8}$ " gasket around the door framing and cut any excess gasket with scissors. NOTE: It is recommended to tape the extremity of the gasket for a cleaner result.

Give significant amount of time to allow the silicone to cure before reinstalling the door onto the firebox. A slight resistance is expected when closing the door with the new $\frac{7}{8}$ " gasket; the door will close normally after the gasket has taken proper shape.

7.6 Replacing the Glass Panel

SUPREME FIREPLACES INC. uses a high quality 5mm thick Pyroceram III / Keralite ceramic glass that can withstand temperatures up to 1300°F. It is recommended to perform a weekly visual check for any damages or cracks on the glass.

WARNING: Avoid striking the glass and slamming the door shut. Never operate the unit with a broken or damage glass. Wear protective gloves when handling broken glass.

Refer to the following instructions for replacing the glass:

- Order the replacement kit for the Astra Duo glass (refer Section 7.9).
- Remove, clean, and dispose any broken glass from the door and the surroundings.
- Remove the door from the firebox and place it face down on a soft surface. NOTE: Rotate the handle to permit proper placing.
- Using a wedging tool or flat head screwdriver, gently remove the $\frac{7}{8}$ " gasket (along with the silicone) from the door framing.
- Using a wrench, remove the 8 nuts fastened around the door framing.
- Remove the first row of metal brackets (2 small and 2 big) and thin gasket.
- Remove the damage glass and clean thoroughly the door framing from loose glass fragments.
- Place the new glass onto the second row of thin gasket, centered with the door framing.
- Place back the first row of metal brackets (2 small and 2 big) and thin gasket.
- Using a wrench, fasten the 8 nuts around the door framing (do not over-tighten).
- Apply a bead of high temperature silicone along the groove of the metal brackets.
- Place the $\frac{7}{8}$ " gasket back into position.
- Give significant amount of time to allow the silicone to cure before reinstalling the door onto the firebox.

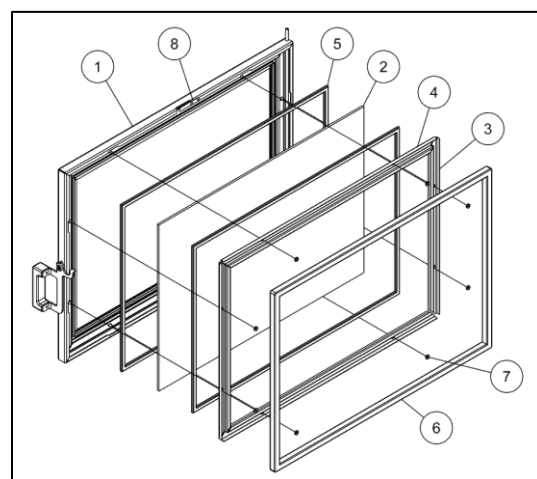


Figure 7-6: Exploded View of Door Assembly

Table 7-1: Parts List of Door Assembly

Item	Code	Description	Qty
1	DR1100	Door Frame Assembly	1
2	PYRO 24.25X17	Pyroceram Glass	1
3	DR_1800	Vertical Metallic Bracket	4
4	DR_2525	Horizontal Metallic Bracket	4
5	GSK_31_7	Thin Gasket	2
6	GSK_88_7	Thick Gasket	1
7	NUT 8-32	8-32 Nut	8
8	DR0111	Bypass Door Spring Steel	1

NOTE: Replacing the glass with a non-conform substitute material may cause irreversible damage to the unit, bodily harm, and void the warranty.

7.7 Door Latch Maintenance

Lightly lubricate the hook of door latch (SFC0031) with graphite grease on a yearly basis to prevent abrasive wear. Occasionally inspect the bushing of the door latch. If required, adjust the tightness of the latch bolt using a 5/32" hex key.

7.8 Paint

Paint touch-ups can be performed on the unit using a high temperature paint (in aerosol spray can format) by Stove Bright®. Refer to your invoice to determine the precise color of your unit⁸. Contact your local hearth shop for further information on purchasing this paint.

NOTE: Apply the paint in a well ventilated area. If applying paint to the door, properly cover/mask the glass of the door using painters' tape and cardboard. Wait for paint to dry before operating the unit. Refer to the instructions on the label of the aerosol spray can for proper paint application. **WARNING: Never apply paint to the unit during operation or when it is hot.**


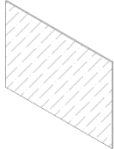


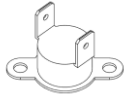
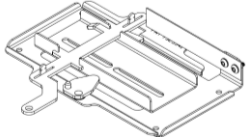


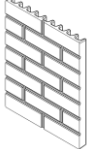
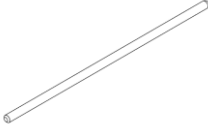
Follow these steps to perform a paint touch-up on the unit:

- Sand and clean the surface to be painted.
- If necessary, apply masking tape and cardboard to protect the glass or any other surrounding surfaces from getting paint splatter.
- Apply paint with air temperature between 21°C to 27°C (70°F to 80°F) – do not paint below 10°C (50°F).
- Shake can vigorously for 90 seconds after mixing ball rattles.
- Point opening of spray towards surface at a 12-15 inch distance. Press spray button firmly.
- It is recommended to spray 2 to 3 light coats as opposed to 1 heavy coat.
- Let the paint dry before removing the masking tape/cardboard. **WARNING: Do not operate the unit with the masking tape and cardboard on the unit.**
- Wait until paint is completely dry before operating the unit. Note that paint will give off fumes during the initial burns – open windows and doors to allow proper air flow while paint is curing.

⁸ Stove Bright® metallic black paint #6309.

7.9 Replacement Parts

Refer to the codes from the table below for any replacement parts:

Code	Description	Illustration
SFC0032-01	Wood pull handle - metallic black	
PYRO_ 24.25"X17"	Pyroceram III / Keralite 5mm thick glass, 24.25" X 17"	
GSK_31_7 (2X)	Graphite coated square gasket, 0.3125" thick, 7" length	
GSK_88_7	Graphite coated square gasket, 0.88" thick, 7" length	
TOD	Thermo-disk <u>Electrical rating:</u> 120VAC, 15A <u>Certification:</u> UL/CSA	
PA5500-01	Combustion Air Control	
CM0020	Cold Hand Key	
24SFC1175 (2X)	Cast Iron Panel 13" X 12" X 1.25" (for Astra Duo 24)	
38SFC1175 (2X)	Cast Iron Panel 15.625" X 12.5" X 1.25" (for Astra Duo 38 II)	
38SFD1159	Bypass Push Rod 0.25" Dia. Stainless Steel Rod, 8.5" length (for Astra Duo 38 II)	

8 WARRANTY

SUPREME FIREPLACES INC. warrants that the factory-built fireplaces, fireplace inserts, and stoves will be free from defects in material and workmanship, under normal use and service, for a period of **ten (10) years** from the date of purchase.

This warranty is only intended for the original retail purchaser and is non-transferable, given that the product was purchased from SUPREME FIREPLACES INC. or one of its authorized dealers. This warranty is conditional upon correct installation and intended use of the products and does not cover damages caused by misuse. This warranty shall be void if the fireplace, fireplace insert or wood stove is not installed by an authorized qualified technician in accordance with the installation instructions in the manual provided with this product. The installation must meet local and national building codes.

Description	Coverage	Labour
Patented combustion air control, bypass system, door handle (breakage only), door latch assembly, podium structure of wood stove series, legs of wood stove series, circulating chamber of fireplace insert series, bimetallic strip of combustion air control, removable ash lip, surround structure, cold hand key, wall intake and outtake grilles of gravity kit	10 years	2 years
Baffle (excluding bypass mechanism), bottom plate, stainless steel components, cast iron panel, firebox soapstone slab, exterior door frame, liner adaptor of fireplace inserts	5 years	2 years
Painted and plated parts, door gasket	2 years	1 year
Electrical components	2 years	90 days
Glass panel (thermal breakage only)	90 days	90 days

8.1 Warranty Limitations

Abuse and improper use of the unit may cause irreversible damage and will void the warranty.

Transportation, packaging, and other related costs or expenses arising from the replacement or repair of defective parts will not be covered by this warranty, nor will SUPREME FIREPLACES INC. assume responsibility for them.

Freight related damages of products that are shipped directly from the SUPREME INC. warehouse are covered under warranty if they were indicated on the Bill of Lading from the carrier and SUPREME FIREPLACES INC. is notified within 48 hours.

This warranty is void for any fireplace, wood stove or fireplace insert that wasn't purchased from an authorized SUPREME FIREPLACES INC. dealer.

The warranty does not cover any physical or aesthetic damages that were caused by glass cleaners, soap, or any other cleaning products.

Soapstone is a natural material. Normal wear and tear of the soapstone may result in surface fractures or small hairline cracks. Since these do not affect the functionality nor the integrity of the product, the warranty only covers fractures that are over 3 mm thick and spread across one extremity of the slab to the other.

Deformations, discoloration, corrosion and scratches are not covered under warranty.

All parts are limited to one replacement per warranty term.

This warranty does not cover the labor or other related costs for the removal of a product already installed, the installation of a replacement product and the shipping and handling for the return of a product or for the replacement part.

This warranty applies to normal residential use only. Damages caused by acts nature or natural disasters, accidents, over firing, misuse, abuse, negligence, improper installation, alterations or substitutions of components of the fireplace, abrasives, chemical cleaners, and negligence are not covered by this warranty. Burning anything other than natural wood will damage your fireplace and void the warranty.

This warranty is void for any product that has been moved from its original installation location.

SUPREME FIREPLACES INC. will not be responsible for environmental conditions and drafting issues such as inadequate vents or ventilation, excessive venting configurations or negative air pressures which may or may not be caused by geographic elements, exterior elements and/or mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

The noise generated by the expansion and contraction of the metallic components is normal as they heat up and cool down and are not covered under the warranty.

Labour covered under the warranty must not exceed the retail price of the part being replaced, are based on a predetermined rate amount found in the dealer program, exclude dealer travel costs and are disbursed to the dealer.

The manufacturer at its discretion may decide to repair or replace any part or unit after inspection and investigation of the defect. The manufacturer may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s).

The manufacturer shall in no event be responsible for any consequential damages of any nature, which are in excess of the original purchase price of the product.

Repairs and/or replacements of parts and labor covered under warranty must be preauthorized by SUPREME FIREPLACES INC.

A proof of purchase (copy of the invoice) is required for all warranty claims, as well as the completed warranty claim form and pictures/videos of the issue.

This **Limited Warranty** is effective on all appliances sold after May 31st, 2022, and supersedes any and all warranties currently in existence.

To register your SUPREME product and ensure full warranty coverage, please scan the QR code below:



Prior to contacting your dealer, please have the following information available for warranty claim processing:

- Customer information (name, telephone number, and address)
- Proof of purchase
- Model name and serial number (see Section 2.9)
- Detailed description of defective component
- Digital photos (if necessary)

In the case of a return for repair or replacement, it is the customer's responsibility to adequately package the component or unit to prevent further damage during transport. Items sent to SUPREME FIREPLACES INC. without an open warranty claim will be returned to the sender.

8.2 Certification Label

<p>MODEL NUMBER/NUMERO MODELE: 385FC_D_II APRIL 2026 / AVRIL 2026 CERTIFIED TO: CAN/ULC S610-2018-REV1, UL127-9th ed. ASTRA DUO 38 II <input type="checkbox"/> ELEGANCE ST 42 II <input type="checkbox"/> MONARCH SEE-THROUGH 38 II <input type="checkbox"/> WAYLAND SEE-THROUGH 38 II <input type="checkbox"/></p>		<p>U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with 2020 particulate emission standards using crib wood for a single burn rate heater. This single burn rate wood heater is not approved for use with a flue damper. Tested with Method 28R crib wood standard at 1.4 gm/hr of emission under model name 38ST_D_II. This wood heater needs periodic inspection and repair for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with the operating instructions in the owner's manual. Certification tests were performed by POLYTESTS SERVICES INC. with PFS-TECO as the third-party-certifier.</p>	<table border="1"> <tr> <td colspan="2">WH-SFCD</td> <td colspan="2">supreme</td> <td colspan="2">3594 Jarry E., Montreal, QC H1Z 2G4, Canada</td> </tr> <tr> <th colspan="6">DATE OF FABRICATION / DATE DE FABRICATION</th> </tr> <tr> <th>JA</th> <th>FE</th> <th>MR</th> <th>AR</th> <th>MA</th> <th>JN</th> <th>JL</th> <th>AU</th> <th>SE</th> <th>OC</th> <th>NO</th> <th>DE</th> </tr> <tr> <td>2026</td> <td></td> <td>2027</td> <td></td> <td></td> <td>2028</td> <td></td> <td>2029</td> <td></td> <td>2030</td> <td></td> <td>2031</td> </tr> </table>	WH-SFCD		supreme		3594 Jarry E., Montreal, QC H1Z 2G4, Canada		DATE OF FABRICATION / DATE DE FABRICATION						JA	FE	MR	AR	MA	JN	JL	AU	SE	OC	NO	DE	2026		2027			2028		2029		2030		2031
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<p>MINIMUM CLEARANCES TO COMBUSTIBLES DÉGAGEMENTS MINIMUMS AUX COMBUSTIBLES</p>  <p>A) CHASE WIDTH / LARGEUR DE L'ENCEINTE 10" B) CHASE DEPTH / PROFONDEUR DE L'ENCEINTE 41" C) CEILING / PLAFOND 16" D) 3 IN. MANTEL FROM FLOOR / MANTEAU DE 3 PO. DU PLANCHER (TRAD.) 64" D) 3 IN. MANTEL FROM FLOOR / MANTEAU DE 3 PO. DU PLANCHER (CLEAN FACE) 51.5" E) HEARTH DEPTH / PROFONDEUR DE L'ÂTRE 45.5" F) HEARTH FROM SIDE DOOR / ÂTRE DE LA PORTE 16" F) HEARTH FROM SIDE DOOR / ÂTRE DE LA PORTE 8"</p>		<ul style="list-style-type: none"> • FOR USE WITH WOOD ONLY, DO NOT USE OTHER FUELS • USE ONLY IN ACCORDANCE WITH MAUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. • NOT SUITABLE FOR MANUFACTURED OR MOBILE HOMES. • A NON-COMBUSTIBLE HEARTH EXTENSION OF MINIMUM THICKNESS 8 MM (5/16 IN.) EXCEEDING 457 MM (18 IN.) FROM THE DOOR FACE AND OF 200 MM (8 IN.) FROM EACH SIDE OF THE DOOR MUST BE INSTALLED. • USE ONLY WITH 6 IN. (152 MM) OR 8 IN. (203 MM) DIAMETER CHIMNEY LISTED UL 103/ULC S629 • MINIMUM MAXIMUM CHIMNEY HEIGHT 15/35 FEET MEASURED FROM THE BASE OF THE FIREPLACE. • CAN BE CONNECTED TO A MASONRY CHIMNEY. SEE OWNER'S MANUAL FOR INSTALLATION INSTRUCTIONS. • DO NOT CONNECT THIS UNIT TO A CHIMNEY SERVING ANOTHER APPLIANCE. • DO NOT INSTALL A FIREPLACE INSERT OR OTHER COMPONENTS NOT LISTED FOR USE WITH THIS PRODUCT. • FOR CLOSED DOOR OPERATION ONLY • DO NOT OVERFIRE THE UNIT. IF HEATER OR CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING. • REPLACE GASSS ONLY WITH CERAMIC 5 MM THICK ONLY. • CAUTION: AIR IS NECESSARY FOR FIREPLACE OPERATION. PRIMARY AND SECONDARY COMBUSTION AIR OPENINGS MUST NOT BE OBSTRUCTED. • WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THE FIREPLACE. • CONTACT LOCAL BUILDING CODE OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA. • THE FIREPLACE AND CHIMNEY MUST BE INSPECTED AND CLEANED REGULARLY. 	<ul style="list-style-type: none"> • POUR UTILISATION AVEC BOIS SEULEMENT, NE PAS UTILISER AVEC D'AUTRES COMBUSTIBLES. • INSTALLER ET UTILISER CONFORMEMENT AU MANUEL D'UTILISATION DU FABRIQUANT. • NE CONVIENT PAS AUX MAISONS MOBILES • PROLONGEMENT DE L'ÂTRE AYANT UNE ÉPAISSEUR DE 8 MM (5/16 PO.) MINIMUM EXCÉDANT 450 MM (18 PO.) DU DEVANT DE LA PORTE ET DE 200 MM (8 PO.) DE CHAQUE CÔTÉ DE LA PORTE DOIT ÊTRE INSTALLÉ. • UTILISER SEULEMENT AVEC UNE CHEMINÉE HOMOLOGUÉE SELON UL 103/ULC S629 DE 6 PO. (152 MM) OU 8 PO. (203 MM) PARMIS LA LISTE DANS LE MANUEL DU PROPRIÉTAIRE. • PEUT ÊTRE CONNECTÉ À UNE CHEMINÉE DE MAÇONNERIE. VOIR LE MANUEL DU PROPRIÉTAIRE POUR INSTRUCTIONS. • NE PAS RACCORDER CET APPAREIL À UNE CHEMINÉE DESSERVANT UN AUTRE APPAREIL. • NE PAS UTILISER UN FOYER ENCASTRABLE OU D'AUTRES COMPOSANTES NON-HOMOLOGUÉES POUR UTILISATION AVEC CE FOYER. • POUR OPÉRATION AVEC PORTE FERMÉE SEULEMENT. • NE PAS SURCHAUFFER L'UNITÉ. SI L'APPAREIL OU LE TUYAU ROUGIT, IL Y A UN SURCHAUFFEMENT. • REMPLACER LA VITRE AVEC UN VERRE CÉRAMIQUE DE 5 MM D'ÉPAISSEUR. • ATTENTION : L'AIR EST NÉCESSAIRE AU FONCTIONNEMENT DU FOYER. LES ENTRÉES D'AIR DE COMBUSTION PRIMAIRE ET SECONDAIRE NE PEUVENT PAS ÊTRE OBSTRUÉES • ATTENTION : CE FOYER N'A PAS ÉTÉ TESTÉ AVEC UN BRÛLEUR AU GAZ. POUR RÉDUIRE LES RISQUES D'INCENDIES OU DE BLESSURES, NE PAS INSTALLER UN BRÛLEUR DE GAZ DANS CE FOYER. • CONTACTER LES AUTORITÉS DE VOTRE LOCALITÉ AYANT JURIDICTION CONCERNANT LES RESTRICTIONS ET INSPECTIONS D'INSTALLATION. LE FOYER ET LA CHEMINÉE DOIVENT ÊTRE INSPECTÉS ET NETTOYÉS RÉGULIÈREMENT. 																																				
<p>CAUTION Hot while in operation. Do not touch. Keep children, clothing, and furniture away. Contact may cause skin burns. See nameplate and instructions.  Chaud pendant fonctionnement. Ne pas toucher. Garder les enfants, les vêtements et les meubles hors de portée. Risque de brûlures au contact. Voir la fiche signalétique et instructions.</p>																																							