DX SERIES - Indoor Outdoor Fireplace Specification

1.0 DESIGN SPECIFICATION

A double-sided **DX Series Gas Fire** can be located in an external wall with one face viewable from outside the building. The low glass temperature and **mandatory multi-room ducting system**, as part of this range, assist in making this possible.
This specification will require space to house the ducting system and have access to service the duct fan. More importantly the key issue here is avoiding the external elements of outside air, dust, condensation and pests entering the appliance and getting into the working components of the fire. For this to be a successful specification and installation, these issues need to be addressed.

2.0 DESIGN CONSIDERATIONS

Fireplace Location

- The cavity size will be determined by the requirements described in the DX Series Install Manual.
- Any heat provided by the fireplace will be internal only. The external aspect of the fire will be for aesthetic purposes only.
- The fireplace should be located to provide an **air gap of 20mm minimum** between the outward facing side of the appliance and the internal face of the external wall is recommended to allow air to enter the firebox around the glass and release any heat from the glass. This may require an increase in the cavity depth but only minimally.

Weathertightness

- The weathertightness of the external façade of the chimney needs to be addressed. Indoor Fires cannot be used outside as the appliance itself would be open to the ingress of moisture or dust etc. into the internal workings of the fire. The requirement is to **install a window**, preferable Aluminium Joinery, to match those already in the building.
- The window glass and the fire glass must be separated by **100mm minimum**.
- The window **needs to be openable** for cleaning the fire glass panel and service of the fire itself when required. This should be a lockable window that can only be opened by the owner.
- The opening portion of the window should be greater in size (approx. 35mm each side) than the glass viewing area of the fire.

2.0 DESIGN CONSIDERATIONS cont.

Cavity Construction

- Standard timber framed construction can be used to construct the chimney cavity around the appliance, in accordance with the cavity dimensions defined in the **DX Series Installation Manual**.
- No specific non-combustible materials are required.
- Framing should remain clear of the appliance ends to allow straightforward connection of Gas supply, Power and Ethernet cables.

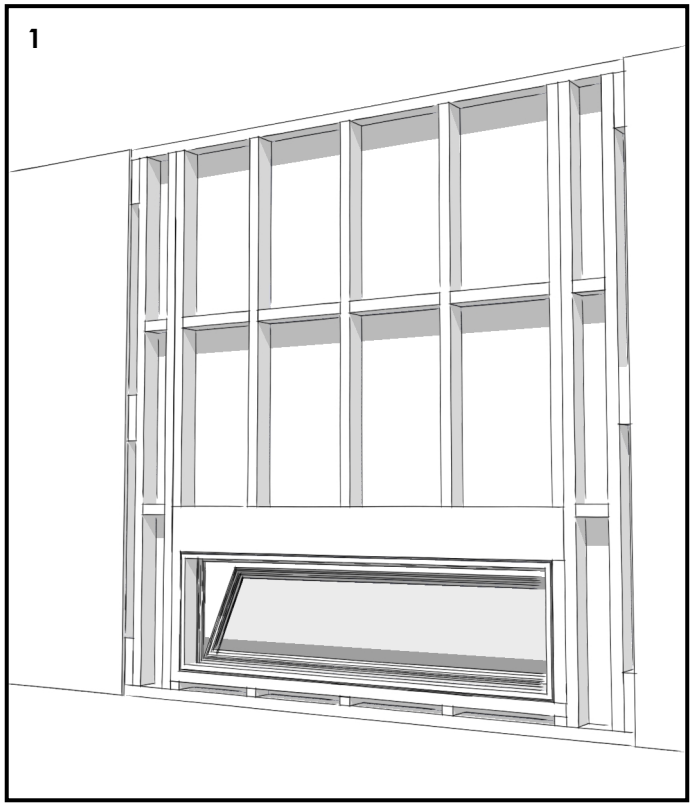
Ducting System

- The DX Series uses a **mandatory** ducting system to distribute heat away from the fire to outlets located around the room. Follow the instructions for the ducting system as defined within the **DX Series Installation Manual.**
- The ducting components including duct fan, are normally located in the roof. In some installations this can be all installed within the chimney cavity (as shown). The duct fan must remian accessible.
- The fire cannot be used without the ducting system. The fire may not operate correctly if the duct is crushed, restricted or poorly laid out.
- A minimum of **3 outlets** are required, with a minimum open area of 0.05m^2. These initial 3 outlets must be located in the same room as the fire. *For other ducting options contact the Escea Architectural Advisory Team.*
- Ensure to follow an **S-curved duct pathway** (as shown) to reduce noise transfer from the duct fan. Fan noise is a possibility and every step should be taken to reduce noise transfer through the ducting system.
- Fan noise can be minimised by considering alternative duct fan locations than shown, or considering noise attenuation options.

Finishes

- It is recommended to line the exterior facing side of the appliance as part of this can be seen through the exterior window. This needs be no larger than the appliance, and painted black to match the trim of the fire. Neatly trim around the glass opening.
- Due to the low temperatures at the fire the internal facing side of the chimney cavity can be finished in a multitude ways. The trim around the glass opening allows for a **10mm Plasterboard frameless finish.**

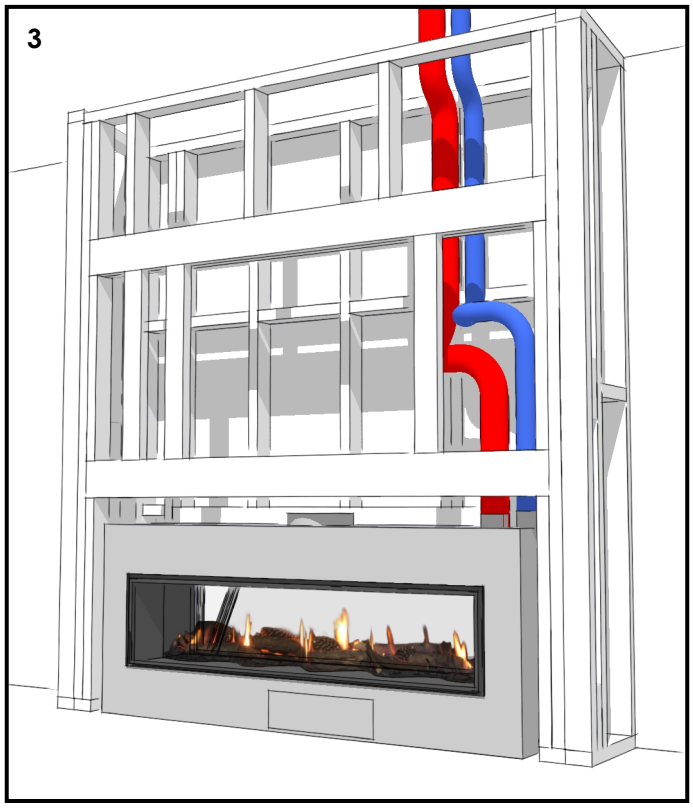
3.0 INSTALLATION GUIDE



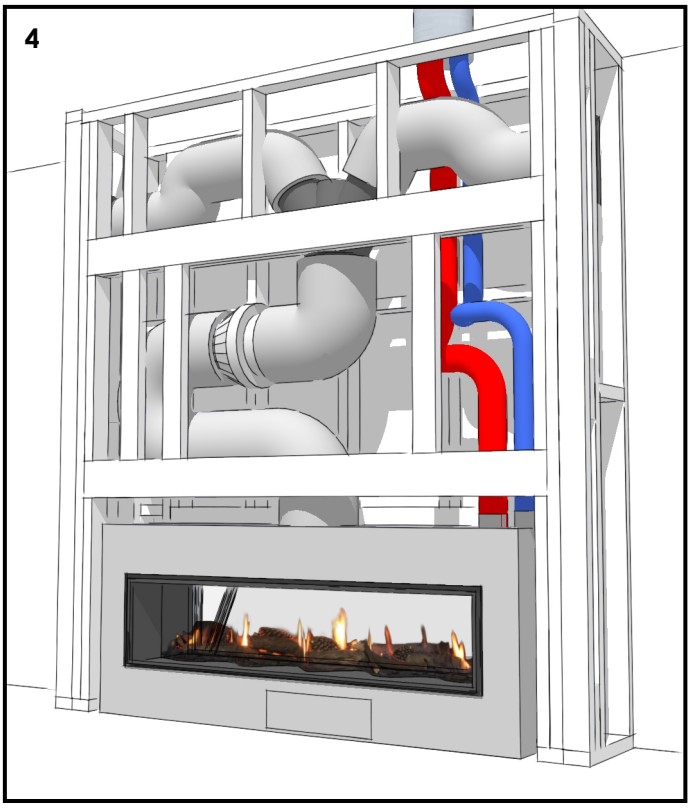
+ A space is created with an external window installed.
+ The aluminium window should match the remainder of those in the building.

+ The cavity for the fire is created following the minimum requirements for the cavity, the flue and the duct components.

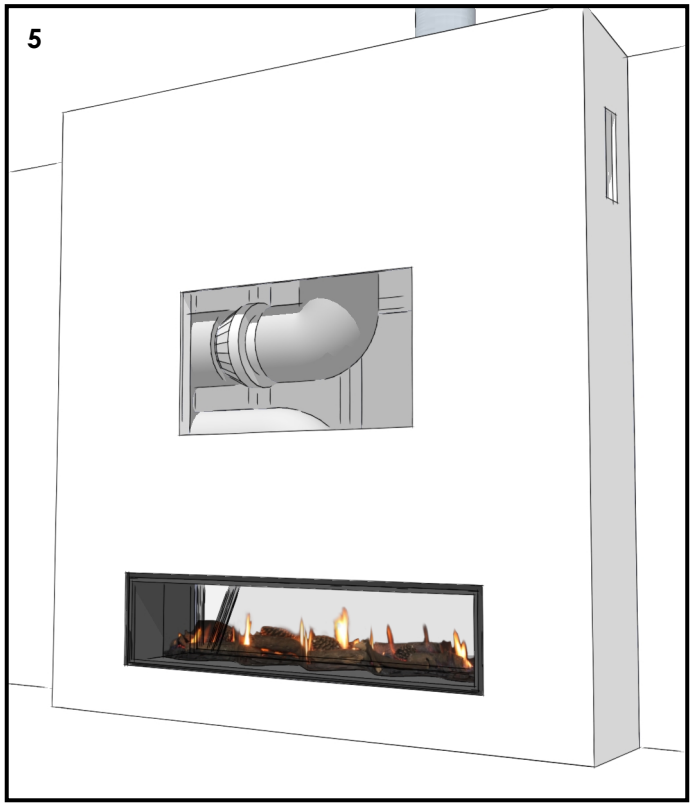
3.0 INSTALLATION GUIDE cont.



+ Fire and flue system are installed.
+ Power, Gas, and Ethernet connections are made.



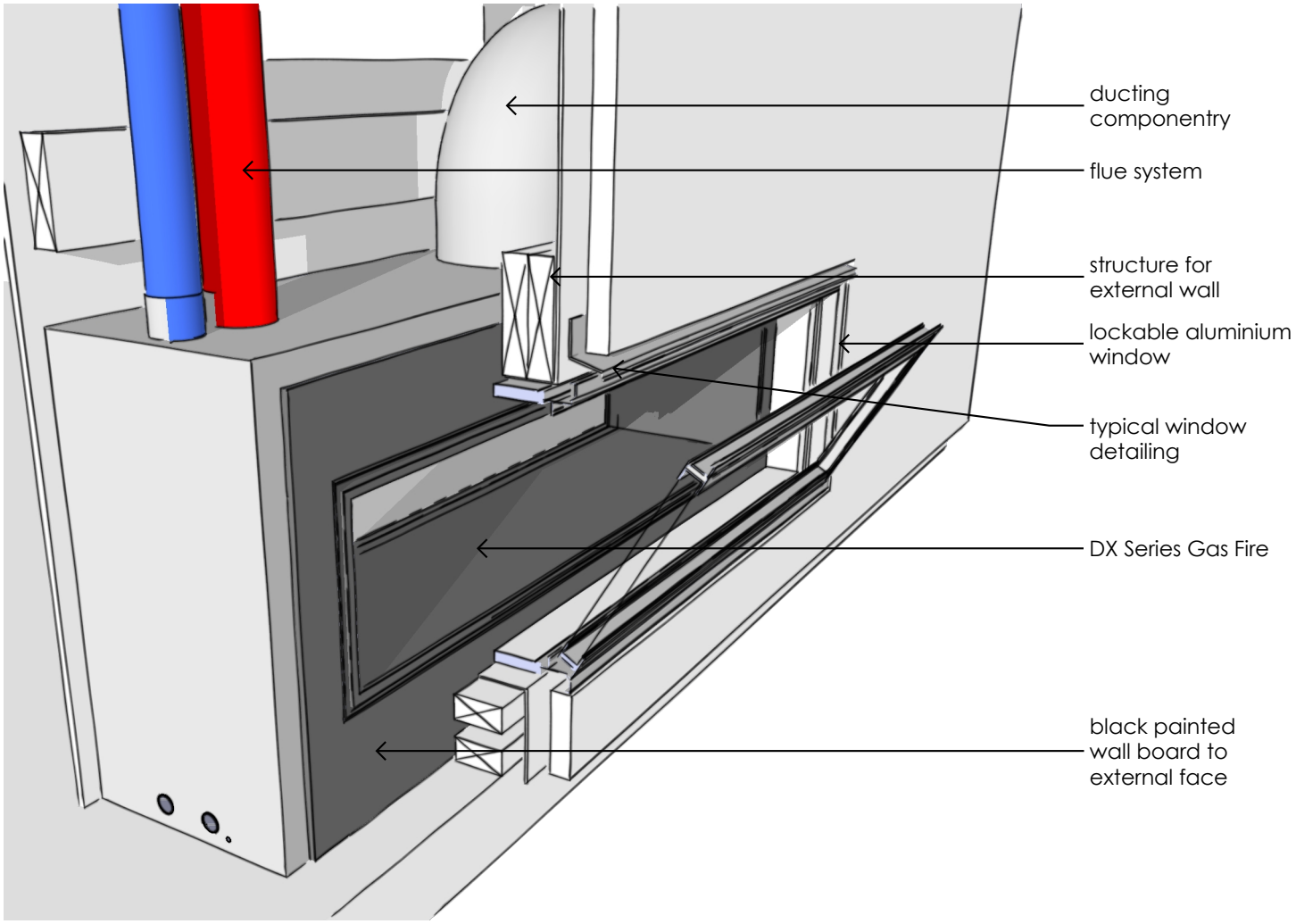
+ The ducting componentry is installed from the fire to the duct fan, and finally to the outlets.
+ Create an S-Shape curve in the ducting to reduce fan noise back to the appliance.



+ Wall finishes can be applied with access provided to the duct fan.

+ Project is completed with vents added, and finishes and fixtures finalised.

4.0 CAVITY DETAIL



5.0 PRODUCT DIMENSIONS

	DX1000	DX1500
Appliance Dimensions	1328 W x 744 H x 382 D	1828 W x 744 H x 382 D
Recommended Cavity Size	1428 W x 800 H x 412 D	1928 W x 800 H x 412 D
Fireplace Viewing Area	1062 W x 362 H	1560 W x 362 H
Minimum Window Openable Area	1132 W x 430 H	1630 W x 430 H

*all dimensions in mm

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