

### SPECIFICATIONS

Where the EK Series Fireplace specification involves:

- Attaching the fireplace to a building's external wall, or
- With flue pathways through timber framed roofing, or
- Positioning the fireplace adjacent to combustible materials,

One of two tested solutions is to surround the fireplace in an AAC Panel cavity, that is designed to surround the fireplace, and insulate the timber framed walls from heat. These installations require the **EK Series Timber Cavity Flue Kit**, for compliance, safety and AAC cavity ventilation. The timber cavity flue kit consists of a **350/400/450mm Ø** flue and twin liners. An additional **550mm Ø** flue liner forms the roof penetration. *Note: The EK1550 requires 2x flue kit and flue dropbox.*

### FIREPLACE FINISHES

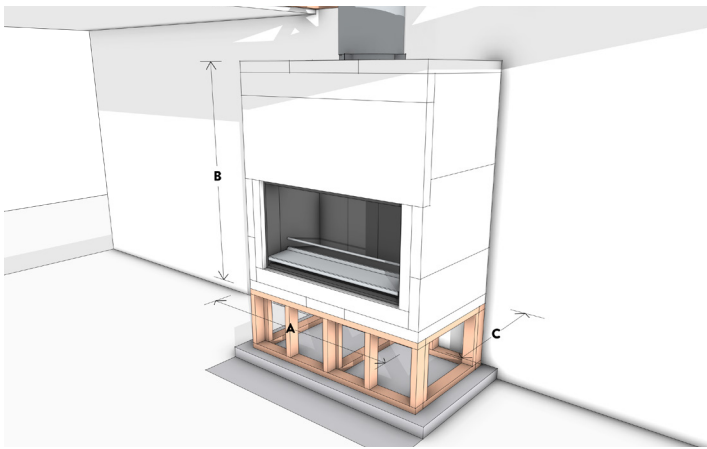
Front wall AAC cavity claddings must be heat resistant or non-combustible, while side or back claddings can be combustible. Choose materials that are suitable for the location. Escea takes no responsibility for material selection or weathertightness, ensure the installation complies with local and national building codes.

### HEARTH

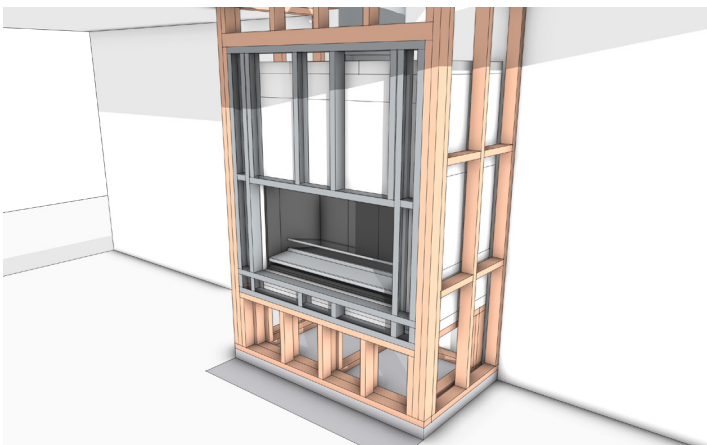
A heat-resistant Floor Protector is required when the fireplace is positioned at or above 790mm from the floor level to the fireplace opening. Below this threshold, either a 1000mm deep, insulating, non-combustible hearth in front of the fireplace according to *AS/NZS 2918* standards, or a fully non-combustible floor, is required. Floor Protector dimensions below (W x D):

<b>EK950</b>	1348mm x 300mm
<b>EK1250</b>	1647mm x 300mm
<b>EK1550</b>	1947mm x 300mm

### INSTALLATION OPTION



Obtain flue centreline to ensure the flue run is clear from obstructions. Install the EK Fireplace, flue and build the AAC Cavity to the required dimensions and provide the ventilation inlet hole to the exterior. Restrain the fire to its base structure. **Fireplace weight: 127kg + Flue (40kg)**



In this scenario an additional lightweight steel frame is used on the front face to support the wall linings and finishes.

### AAC PANEL CAVITY REQUIREMENTS

The AAC panel cavity is a self-supporting structure, utilising aerated concrete's insulating properties to safeguard the surrounding timber framework from the fireplace, allowing for a safer installation in timber-framed buildings. AAC panels are to be a minimum **75mm thick**, and have an R Value = 0.56m<sup>2</sup> K/W. The AAC cavity requires venting to provide fresh air into the cavity. Venting out of the AAC heat cell is through the 400mm flue liner.

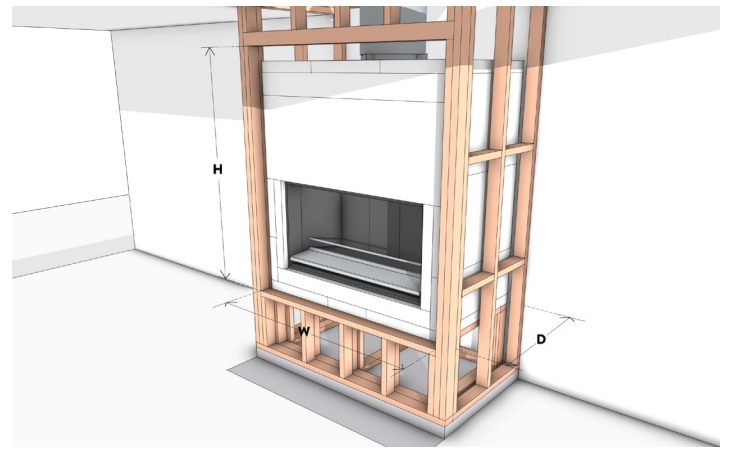
	A	B	C	Vent Size
<b>EK950 AAC Panel Cavity</b>	1260mm	1700mm	896mm	24000mm <sup>2</sup>
<b>EK1250 AAC Panel Cavity</b>	1560mm	1700mm	896mm	24000mm <sup>2</sup>
<b>EK1550 AAC Panel Cavity</b>	1860mm	1700mm	896mm	48000mm <sup>2</sup>

### TIMBER CAVITY REQUIREMENTS

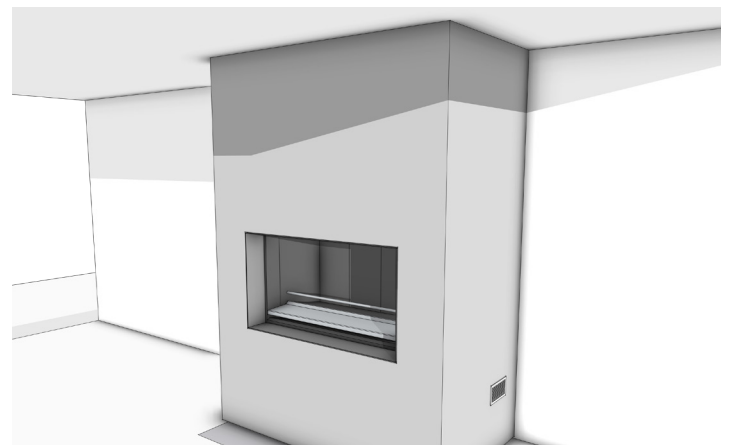
Timber framework can be used to the rear and sides of the fireplace but not to the front face, and it cannot be in contact with the AAC Panel Heat Cell. It is recommended to use lightweight steel framing to the front face of the cavity, to support wall claddings and finishes.

The timber cavity requires venting with air coming from an external space and not the building cladding cavity. Vents must be no higher than 300mm above the base.

	W	H	D	Vent Size
<b>EK950 Timber Cavity Opening</b>	1320mm	1800mm	930mm	35300mm <sup>2</sup>
<b>EK1250 Timber Cavity Opening</b>	1620mm	1800mm	930mm	35300mm <sup>2</sup>
<b>EK1550 Timber Cavity Opening</b>	1920mm	1800mm	930mm	70600mm <sup>2</sup>



Build the timber frame with correct clearances in place. Complete the flue installation by installing the remaining 400mm and 450mm Ø flue liners to the correct configuration and height. The flue height is a combination of the minimum flue length and the requirements of *AS/NZS2918 External Clearances*. **Minimum flue length: 2.4m**



Fix the non-combustible substrate to the framework. Detail the opening to cover the wall linings and protect from direct heat exposure. Complete the installation by installing the remaining fireplace components, apply any finishes to the walls, and install the floor protector or hearth.