

**Title:**

Field of Application Report for  
Moralt Laminasse Firesmoke &  
Firesafe 44/54mm Doorsets

For:

30 Minutes Fire Resistance

**Report No:**

Chilt/A13058 Revision D

**WF Contract:**

421102

**Valid From:**

11<sup>th</sup> December 2019

**Valid Until:**

11<sup>th</sup> December 2024

**Prepared for:**

Moralt AG

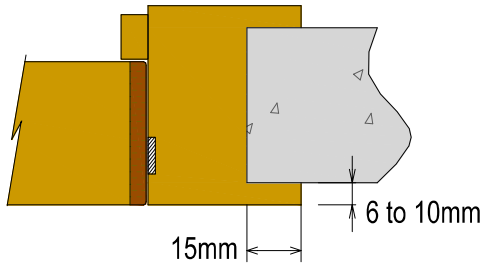
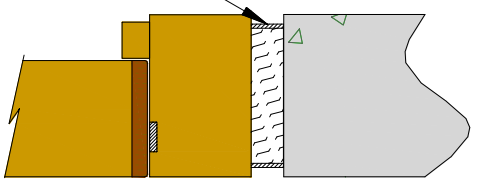
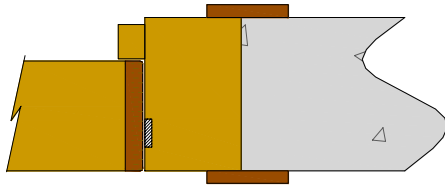
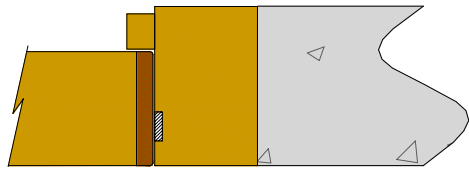
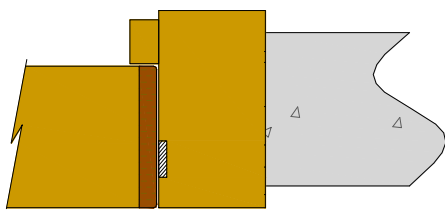
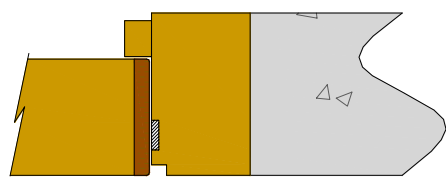
Obere Tiefenbach Str. 1

83734 Hausham

Germany

## 10.5 Door frame installation

The following diagrams indicate acceptable and unacceptable door frame installations.

Permitted Installations	
 <p>6-10mm is the maximum a frame is permitted to be proud of the structural surround when combined with a 15mm bolection return. Projecting frames outside these dimensions will require specific test evidence or assessment.</p>	<p>Max 10 x 10mm shadow gap with 2mm intumescent mastic capping or 10 x 4mm PVC encased intumescent seal</p>  <p>Shadow gaps are permitted as shown in the above diagram providing the frame to structural surround is infilled with timber of the same density as the frame or a non-combustible material such as plasterboard. Other shadow gap dimensions will require specific test evidence or assessment.</p>
 <p>Architraves overlapping the frame to structural surround junction are always permitted where required but may be mandatory depending on the size of frame to surround junction gap and the fire stopping used. See section on Sealing to the Structural Surround.</p>	 <p>Depending on the size of the frame to surround junction gap and the fire stopping methods used, it may be permitted to install doorsets without architraves. See section on Sealing to the Structural Surround.</p>
Installations Not Permitted	
 <p>Projecting frames without bolection returns are not permitted without specific test evidence or assessment due to the potential for increased charring to the back of the frame.</p>	 <p>Quirks between the leaf and frame are not permitted without specific test evidence or assessment due to the potential for increased charring of the leaf to frame gap.</p>

**Notes:**

1. Drawings are representative of door frame installation only; actual installation must be as the text within this document specifies. See section 19 for specification on sealing to structural opening
2. For the shadow detail depicted (top right), the sub-frame must be manufactured from one of the following materials, tightly fitted and with no gaps:
  - timber with a density  $\geq 450 \text{ kg/m}^3$
  - plywood with a density  $\geq 600 \text{ kg/m}^3$
  - MDF with a density  $\geq 700 \text{ kg/m}^3$
  - particleboard with a density  $\geq 600 \text{ kg/m}^3$
  - non-combustible board.

## 11 Lipping Materials

### 11.1 Timber Lippings

Laminese FireSmoke and FireSafe 44/54mm must be lipped on all edges in accordance with the following specification. The lipping specifications for aluminium frame doorsets are contained in appendix D.

Material	Size (mm)	Min Density (kg/m <sup>3</sup> )
Timber for lippings must be straight grained joinery quality hardwood, free from knots, splits and checks.	<ol style="list-style-type: none"> <li>1. Flat = 6 – 14 thick with a maximum of 2mm profiling permitted at corners of lipping (see section 10.1)</li> <li>2. Rounded = 11 – 21 thick with a radius matching the distance between leaf edge and floor pivot (see section 10.3)</li> <li>3. Rebated = 20 – 30 thick with a 12mm deep equal rebate*</li> </ol>	640

**Notes:**

1. Rebated edges are only permitted at the head of single doorsets with flush overpanels
2. Single doorsets with flush overpanels may use either a square or rebated overpanel junction
3. Double doorsets with flush overpanels must use a square junction.

## 12 Leaf Facing Materials

### 12.1 General

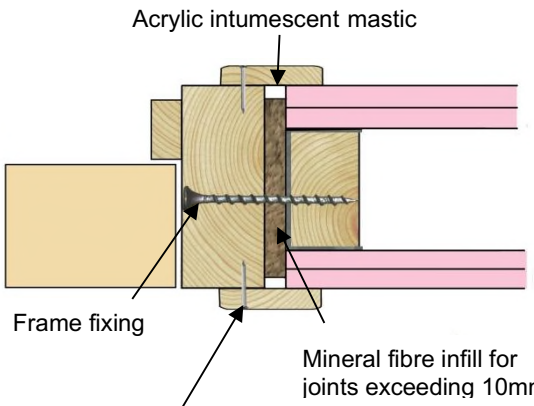
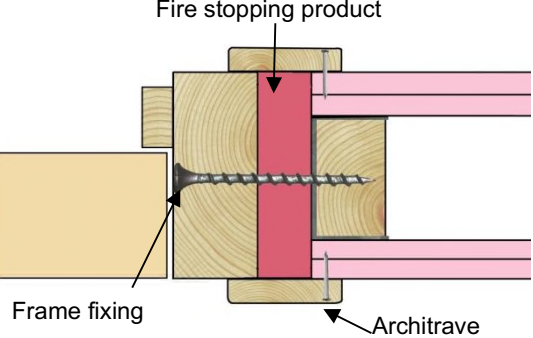
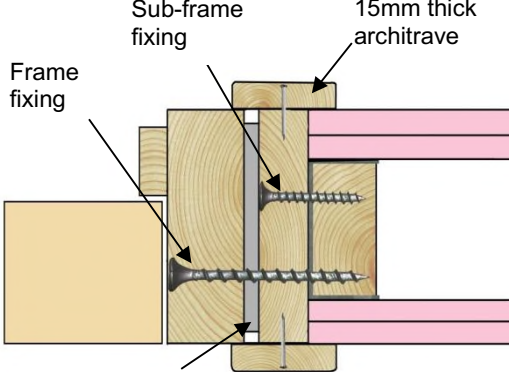
The overall 44mm thick leaf construction consists of the following leaf construction variations:

1. FireSmoke – 6mm MDF facings
2. FireSmoke – 6mm Chipboard facings
3. FireSafe – 3 – 4mm Ply veneer facings.

Tests RF14256 & CFR0706151 evaluated the performance of the 6mm facings.

## 19 Sealing to Structural Opening

The door frame to structural opening gap must be protected using one of the following methods.

<p>1. Gaps up to 10mm must be sealed on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.</p>	 <p>Acrylic intumescent mastic</p> <p>Frame fixing</p> <p>Mineral fibre infill for joints exceeding 10mm</p> <p>Architrave for joints not filled with mineral wool and optional for filled joints</p>
<p>2. Gaps between 10mm and 20mm must be tightly packed with mineral fibre capped on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Architraves are optional.</p>	 <p>Fire stopping product</p> <p>Frame fixing</p> <p>Architrave</p>
<p>4. Timber based or non-combustible sub-frame up to 50mm thick, with gaps up to 10mm between the components filled on both sides with 10mm depth of acrylic intumescent mastic or full depth expanding PU foam, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.</p>	 <p>Sub-frame fixing</p> <p>15mm thick architrave</p> <p>Frame fixing</p> <p>10mm of acrylic intumescent mastic or full depth PU foam</p>

Guidance for various methods of sealing the frame to structural opening gap is also given in BS 8214: 2016, "*Timber-based fire door assemblies. Code of Practice*", which may be referred to where appropriate.

**Note:** Drawings are representative of doorset installation only, actual installations must be as the text within this document specifies.