# **Complete Fire Protection Ltd**

Manufacturers of Intumescent Products

## FIREPLUG VENTILATED CAVITY BARRIER FIRE SEALS

### Fireplug CB & Fireplug DUO

Rainscreen and cladding systems are designed to provide an open cavity to give ventilation for moisture dissipation and repel rain penetration. However, in a fire situation, the chimney effect creates an opening through which fire could spread unabated.

Complete Fire Protection Ltd's range of ventilated cavity barriers will maintain the ventilation qualities in normal conditions but in the event of fire, the intumescent quickly expands to seal the cavity thus preventing the spread of fire.

### **KEY FEATURES**

- Continuous free airspace
- CB50 Exceeds CWCT 38mm requirements
- Simplifies panel installation
- Easily accepts building tolerances
- Wrapped in protective foil tape for weather protection
- Tested by Chiltern International Fire BS476 Pt 20
- Fire ratings of up to 120 minutes
- For use in combustible and non combustible systems
- Supplied in easily cut 1m or custom lengths
- Tested for cavities up to 300mm
- Meets requirements of Building Regulations, Approved Document B (2006 Edition), Appendix A, Table A1
- Meets requirements of Building (Scotland) Regulations, Domestic and Non-Domestic – Section 2.4
- Suitable for both horizontal and vertical installation
- Performance unaffected by moisture



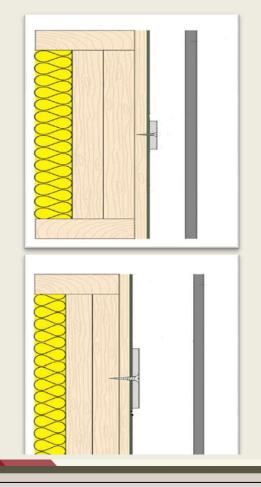
Fire damage behind an unprotected cladding system



# **Fireplug CB30 & CB50** Ventilated Cavity Barriers for Timber Frame & Non – Combustible Rainscreen Applications.

Most timber framed structures require a ventilated cavity to dissipate moisture and prevent damp problems. Complete Fire Protection Ltd's ventilated cavity barriers have been tested in a timber frame construction to provide a minimum of 60 minutes fire protection whilst maintaining the ventilation in normal circumstances.

Fireplug CB30 to suit a 25mm gap is designed to meet NHBC requirements to maintain a minimum 15mm ventilation gap in timber frame. Our system was successfully tested at Chiltern International Fire Ltd, with a 25mm cavity (CB30) & 50mm cavity (CB50) within in a timber frame structure, each seal exceeded 60 minutes fire rating. As Fireplug CB30 & CB50 have been tested in a timber frame construction (i.e. combustible structure) this means CB30 & CB50 is also suitable for use in non combustible applications (for air gaps up to 50mm)



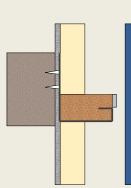
The Fireplug Duo ventilated cavity barrier provides an effective solution where cavities exceed 50mm with the product being successfully tested for up to 120 minutes in a 300mm cavity. The Fireplug Duo not only offers much improved fire rating but also allows a ventilation space exceeding CWCT Requirements of up to 46mm. This provides good ventilation behind the cladding system while leaving enough space for the installer to fit the cladding panels after fitting the Fireplug Duo.

Typical dimensions of the Fireplug Duo:-

- Mineral fibre thicknesses 75mm (30/60minutes) & 100mm (120minutes)
- Finished product dimensions = Total cavity width less 25mm or 50mm e.g. For a 300mm cavity: mineral fibre = Depth 75/100mm
- (30/60min) x Width 275/250mm (25/50mm gap) + intumescent width 2.3mm (25mm gap) or 4.6mm (50mm gap)
- Standard length 1m. Other lengths available on request.

The pictures below show a typical fixing bracket together with a cross section of a cavity at slab level.





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# Fitting Instructions Fireplug CB30 - CB50 & Fireplug Duo

#### Fitting Instructions Fireplug CB30 & CB50

Fireplug CB ventilated cavity barriers are designed for use in cavities from 15mm to 50mm, which is the size range most commonly found in timber framed buildings. They are supplied with double sided tape which is used only for initial positioning. The seals should be mechanically fixed using panel pins/staples/screws with a maximum head diameter of 6mm. All fixings through the intumescent should be located along the centre of the Cavity Barrier @ 4No per metre. Adjoining cavity barriers should be tightly butt jointed.

#### **Fitting instructions for Fireplug Duo**

Fix the brackets to the substrate at 500mm centres (250mm from each end of the cavity barrier) using non combustible fixings. Install the Fireplug Dou on to the brackets front edge first, and then slide the cavity barrier into the bracket. Adjoining cavity barriers should be closely butt jointed with the joints foil taped. Where cavity insulation is installed, this must be cut back so that the cavity barrier is fixed to the substrate as shown above. Where possible install the insulation after the installation of the cavity barrier.

#### **Performance:**

#### Non combustible construction: With PE insulation board

- Test No. Chilt/IF11025: Chiltern International Fire Ltd in May 2011, to BS EN 1363-1: 1999 & EOTA TR31: 2008.
- Results: 300mm cavity: 25mm gap 120 minutes / 50mm gap 90 minutes.

#### **Combustible Construction - Timber frame construction:**

- Test No. Chilt/IF11026: Chiltern International Fire Ltd in June 2011, to BS EN 1363-1: 1999 & EOTA TR31: 2008.
- Results: 25mm & 50mm cavity 60 minutes.

#### Specification for CB Duo:

Supply and fix in accordance with manufacturers' instructions, Fireplug Duo, Manufactured by Complete Fire Protection Ltd, to suit: overall cavity size (mm) / free air gap (mm) / fire rating required (mm)

• Example: FIREPLUG DUO 300/25/120 = 300mm cavity/ 25mm gap / 120 minutes

#### Specification for CB30 & CB50:

Supply and fix in accordance with manufacturers' instructions, Fireplug CB. Manufactured by Complete Fire Protection Ltd, to suit: overall cavity size (mm) / fire rating required (mm)

• Example: FIREPLUG CB50/60 = 50mm cavity / 60 minutes



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