

## FireCuff Three Sided Kit for Partition Walls up to 132mm Thickness and 2hr rating to BS 1366 Part 3 : 2009

### Introduction

The purpose of the FireCuff as a firestop is to ensure that fire is restricted to one compartment even when plastic ducting passes through into another.

The Verplas FireCuff Three Sided Kit has been designed to provide an effective firestop through partition walls up to a thickness of 132mm and in circumstances where the plastic ventilation ducting is to be installed at the top of the partition and tight against the underside of a floor slab.

In a fire situation, the FireCuff expands inwards to crush the softened duct and create an effective barrier against heat and flames. Unlike some other intumescent products, the FireCuff can only expand inwards and does not need any additional support.

The Verplas FireCuff Three Sided Kit comprises a standard FireCuff with 25mm wall thickness and a separate 4mm thick Intumescent Pad. This is installed by cutting a three sided aperture at the top of the partition wall, fitting the FireCuff with the topside removed, fitting the plastic ducting and inserting the Intumescent Pad between the top of the duct and the underside of the floor slab.

This Verplas product and method of installation has been independently tested by Chiltern International Fire to BS EN 1366 Part 3 2009 and achieved a 2hr Firestop Rating and copies of appropriate Test Reports are available on request.

### Preparation

Installers should ensure that they have selected the correct Verplas FireCuff Three Sided Kit for the ducting system to be installed, by referring to the attached Technical Data Sheet VP2016 Issue 1.

The longest top side of the FireCuff should now be cut off with a sharp knife and removed, leaving a "U" shaped three sided cuff ready for installation.

Installers should also have a minimum 2 hr fire rated intumescent mastic available.

### Installation

The position of the penetration through the partition wall will be determined by customer preference, the site conditions and the size of ducting to be installed.

Once the position of the penetration is known, the required aperture in the wall can be measured and marked out as per the Recommended Cut Aperture Size from the Technical Data Sheet or alternatively, the Three Sided Cuff can be offered up into position against the floor slab and partition wall and the required aperture marked around the outside on the partition wall.

The aperture may now be cut through the partition wall, taking care to ensure that the apertures on each side of the wall are aligned correctly.

Once the aperture has been prepared, the three sided cuff should be positioned centrally in the aperture, equi-distant from the face of the wall each side which should leave about 25mm protruding from each side.

The run of plastic ducting can now be fitted centrally through the Three Sided FireCuff with the Intumescent Pad laid on top of the ducting and inserted with the ducting between the ducting and the floor slab, so that the Intumescent Pad is aligned with the Three Sided FireCuff and passes all the way through the partition wall.

Once happy with the positioning, the ducting should be secured with fixing brackets on both sides of the wall, no more than 150mm away from the wall penetration on either side. The ducting should be a snug fit inside the FireCuff and the FireCuff should be a snug fit in the aperture.

Once the fixings are in place, the position of the Three Sided FireCuff and Intumescent Pad should be checked again and adjusted if necessary to ensure that it is equi-distant from the face of the wall on each side. Once happy with the positioning, a 5mm web of intumescent mastic should be applied around the outside perimeter of the Three Sided FireCuff and into any gaps between the Three Sided FireCuff and apertures on both sides of the wall to complete the job.

### Disclaimer

This Installation Guide has been provided for general guidance and when read in conjunction with the Fire Test Report for these products, should satisfy Building Control. However, it may not cover all installations or special requirements imposed by some local Building Control Inspectors. In these circumstances, the onus is on the Specifier, Installer and End Customer to ensure that the product and installation is acceptable to Building Control prior to installation.

The Verplas Warranty for Fire Stop Products is restricted to the use of Verplas products only, either as single items or multiple items used in combinations or assemblies. Failure to use all Verplas products in any combination or assembly and/or failure to demonstrate adherence to this Installation Guide will render our Warranty null and void.