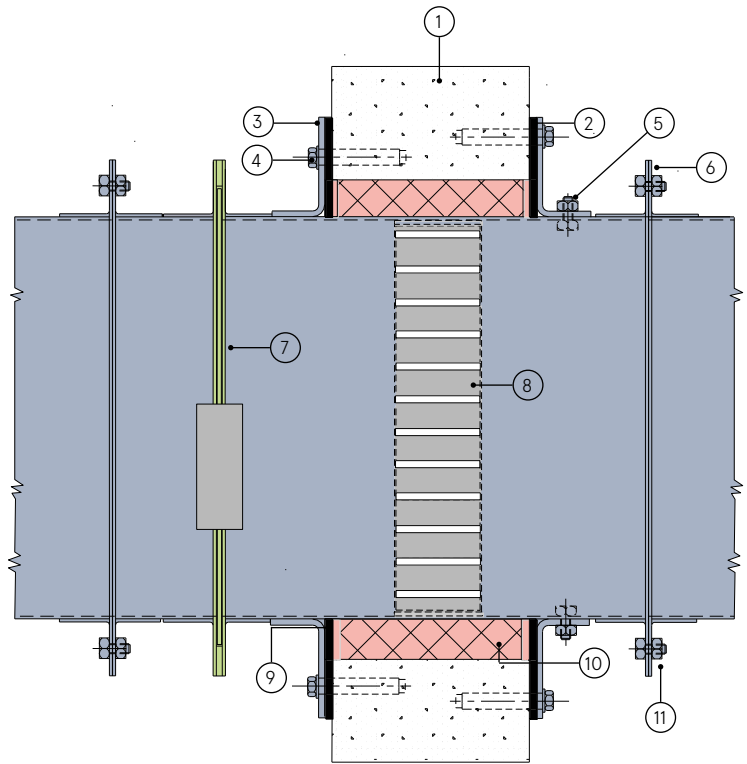


# DUCT 15

## LVHCTD + LVH44/LVH54 IN RECTANGULAR STEEL DUCT

### DESCRIPTION

1	Wall
2	4mm x 65mm wide Lorient graphite based backing pads
3	Prefitted clamping plate
4	65mm anchor bolts
5	70 x 30 x 3mm steel clamping plate fixed to duct with M5 nuts & bolts
6	45 x 45 x 3mm standard steel flanges
7	Sliding shutter plate & actuator assembly
8	LVH44 or LVH54 air transfer grille for fire and cold smoke control or no air transfer grille for cold smoke control only – as per specification
9	Intumescent sealant seal over mineral fibre face
10	Mineral fibre packing
11	Aluminium bolts to fasten duct joint flanges (approx. melting point 540 deg.C).



### CONTENTS

- LVHCTD + LVH44/LVH54 air transfer grille

### TOOLS REQUIRED

- Graphite based intumescent backing pad

- 70 x 30 x 3mm steel clamping plates
- M5 nuts and bolts

- M3 nuts and bolts
- 65mm anchor bolts
- 45 x 45 x 3mm standard steel flanges

- 25 x 25 x 1.5mm steel LVH retaining frames
- Lorient intumescent sealant

## LVHCTD + LVH44\*/LVH54\*\* installation for rectangular steel duct. FR120\*/FR240\*

### Fire Resistance in accordance with

BS 476-22:1987\*

ISO 10294-5\*\*

### Approval Ref

WFRC C121316\*

BRE 227730\*\*

### Max single cell size

600mm x 600mm.

LVH44/LVH54 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.

### INSTALLATION INSTRUCTIONS

- ▶ **This product is primarily designed for installation in the orientation shown; any proposed change to the plane of operation should be discussed with Lorient technical staff in advance.**
- ▶ Cut an aperture in the wall at least 30mm bigger than the outside LVHCTD casing dimension in a position that will allow the smoke control shutter plate to be slid out of the housing. (If the aperture has been cut more than 60mm greater than the casing dimension, then the wall must be made good to the appropriate size before attempting to fit the LVHCTD assembly).
- ▶ For fire rated air transfer grilles cut to size 8 no. pieces of Lorient rigid graphite based intumescent sheet material and fix 4 no. to the flange of the pre-fitted clamping plate using self adhesive tape in order to provide a continuous seal between the clamping plate flange and the wall. Cold smoke control 'only' LVHCTD do not need these seals.
- ▶ Position the assembly into the aperture taking care that the smoke control shutter plate can slide clear of the housing without interference from the surroundings, tightly pack around with mineral wool and seal both exposed faces of the mineral wool with intumescent sealant.
- ▶ Press the pre-fitted clamping plate and where fitted the intumescent sheet seal hard against the wall. Care must be taken to avoid distorting the

assembly by crushing or twisting. Fix the pre-fitted clamping plate flange to the wall ensuring the intumescent sheet seal if fitted is deployed satisfactorily.

- ▶ For fire rated LVHCTD fix the 4 remaining sheet seals with self adhesive tape to the flange of the second clamping plate and position over the casing up to wall and fix in place making sure that the duct is positioned square to the wall in both planes. Seal over all exposed mineral wool with intumescent sealant.
- ▶ Ensure that the inside of the housing and shutter plates are entirely clear of dust and debris.
- ▶ Fit standard jointing flanges to each end of the housing and complete the installation by connecting to the duct, sealing joints with appropriate gasket materials.
- ▶ Check that the shutter plate assembly can slide freely within the housing.
- ▶ The electrical connections for the actuator of the cold smoke control system must be made in accordance with the instructions contained in Talkback Manual. Test the function of the system in accordance with the installing and commissioning instructions supplied with the LVHCTD.