Warringtonfire
Holmesfield Road
Warrington
Cheshire
WA1 2DS
United Kingdom
T: +44 (0)1925 655116
W: www.warringtonfire.com

Test Report Summary for Hilti (Gt Britain) Ltd

Scope of Report

This Test Report Summary has been prepared by **Warringtonfire** and is a summary of the test report referenced below. Full details of the constructions, the test procedure, and the test results are given in that report.
This summary sheet covers two specimens of floor mounted 'open-state' cavity barriers as previously fire tested by **Warringtonfire** utilising the general principles of **ASFP Technical Guidance Document - TGD 19: Nov 2017** 'Fire resistance tests for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings in the configuration described below.

Test Report Reference	Test Date
WF No. 417308	21st August 2019

Table 1 – Tested 'Open-State' Cavity Barriers

Specimen	Orientation	Substrates	Cavity Width	Seal details
B	Horizontal, floor	AAC to AAC	313 mm	Hilti CP 674V 288, installed with a 25 mm air gap. A vertical section of Hilti CP 674NV 307-313 above and below the barrier.
C	Horizontal, floor	AAC to AAC	318 mm	Hilti CP 674V 241-288, installed with a 25 mm air gap. A Hilti Eurofox MFT-S2S TT rail & U bracket penetrated the barrier with Hilti CFS F FX expanding firestop within the cavity of the rail.

Table 2 – Fire Resistance Performance Utilising the General Principles of ASFP Technical Guidance Document - TGD 19: Nov 2017

Specimen	Integrity (cotton pad)	Integrity (sustained flaming)	Insulation	Insulation (Suspended T/C's)	Closure time
B	64 minutes	66 minutes	46 minutes	46 minutes	3 minutes
C	71 minutes	71 minutes*	36 minutes	38 minutes	3 minutes

* Test was discontinued after a period of 71 minutes.

Table 3 – Brief Details of Specimens Construction	
Specimen	**Description**
B	Specimen B comprised of a foil faced stone wool fibre cavity barrier referenced 'Hilti CP 674V 288' which had a stated density of 120 kg/m^3. The barrier had overall dimensions of 1300 mm long, 288 mm wide and 75 mm thick. The barrier was installed with a butt joint which was taped with aluminium foil tape at 300 mm from one end of the barrier. The barrier incorporated a 25 mm wide by 1.5 mm thick graphite based intumescent strip which was bonded to the leading edge. The barrier was fixed to the supporting construction using four steel hangers. Above and below the joint was two vertical section of 'Hilti CP 674NV 307-313' cavity barrier which incorporated a 30 mm x 30 mm section of intumescent foam strip down the length of the sections. The specimen also included a layer of 150 mm thick 'RW3' stone wool insulation above and below the barrier with a stated density of 60kg/m^3. The insulation was fixed to one face of the supporting construction using metal insulation fixings. The barrier was installed to provide a 25 mm air gap.
C	Specimen C comprised of a foil faced stone wool fibre cavity barrier referenced 'Hilti CP 674V 241-288' which had a stated density of 120 kg/m^3. The barrier had overall dimensions of 1300 mm long, 288 mm wide and 75 mm thick. The barrier was installed in two sections. The barrier incorporated a 25 mm wide by 1.5 mm thick graphite based intumescent strip which was bonded to the leading edge. The barrier was fixed to the supporting construction using four steel hangers. Between the two sections of barrier was a penetrating 'Hilti Eurofox MFT-S2S TT rail & U bracket'. The bracket was fixed to the supporting construction using 4 No. Hilti HRD-H anchors. The rail was fixed to the bracket using 8 No. S-AD 01SS screws. The barrier was installed around the rail and bracket and sealed with Hilti Mastic CP606. The intumescent strip of the barrier was cut and overlapped around the front of the rail to provide a continuous length of intumescent across the full length of the barrier. 60kg/m^3 mineral wool was installed in the cavity between the bracket and rail. The cavity within the rail was sealed with Hilti CFS F FX expanding firestop at the exposed face of the barrier. The specimen also included a layer of 150 mm thick 'RW3' stone wool insulation above and below the barrier with a stated density of 60kg/m^3. The insulation was fixed to one face of the supporting construction using metal insulation fixings. The barrier was installed to provide a 25 mm air gap.

Warringtonfire
Holmesfield Road
Warrington
Cheshire
WA1 2DS
United Kingdom
T: +44 (0)1925 655116
W: www.warringtonfire.com

*This Report Summary is based upon a test report, as referenced above, prepared by **Warringtonfire**. Full details of the constructions the test procedure, and the test results are given in that report. The test report does not provide an endorsement by **Warringtonfire**, of the performance of the actual products supplied.*
*This report summary has been compiled between **Warringtonfire** and **Hilti (Gt Britain) Ltd.** It is intended to provide a brief outline of the above referenced test report and not to replace it.*

Full copies of the test report may be obtained from: Hilti (Gt Britain) Ltd only

Responsible Officer
D. Whittle*
Technical Officer
11th December 2019