Exova Warringtonfire Aus Pty Ltd
Suite 2002a, Level 20
44 Market Street
Sydney, New South Wales 2000
Australia

Postal Address:
Suite 2002a, Level 20
44 Market Street
Sydney, New South Wales 2000
Australia

T: +61 (0)2 8270 7600
F: +61 (0)2 9299 6076
W: www.exova.com

Testing. Advising. Assuring.

EWFA CERTIFICATE OF ASSESSMENT	CERTIFICATE No : SFC 37571100.1	Page 1 of 7

Report Sponsor	Certificate Issue Date	Product Name
Hilti (Aust.) Pty Ltd 1G Homebush Bay Drive Rhodes, NSW, 2138 Australia Hilti (New Zealand) Ltd P.O. Box 112030 Penrose, Auckland 1642 New Zealand	6/11/2015	Hilti Flexible Firestop Foam CFS-F FX / CP 660

Introduction

The element of construction described below was assessed by this laboratory on behalf of the report sponsor in accordance with the stated test standard and achieved the results stated below. Refer to the referenced test report(s) or Regulatory Information Reports for more information.

Referenced Report	Report Date	Validity Date	Referenced Test Standard
37571100.1	6/11/2015	31/10/2020	AS1530.4-2005 and AS4072.1-2005

Summary of Assessed Performance

The fire resistance performance of Hilti Flexible Firestop Foam CFS-F FX protecting cable and cable conduit penetrations in:

Flexible walls, at least 100mm thick (+ aperture beading). Refer to Tables 1 and 4

Rigid walls, at least 75mm thick (+ aperture beading). Refer to Tables 2 and 5

Rigid floors, at least 120mm thick (+ aperture beading). Refer to Tables 3 and 6

For a complete description of the assessed construction, refer to referenced assessment report.

Notes

THIS CERTIFICATE IS PROVIDED FOR GENERAL INFORMATION ONLY AND DOES NOT COMPLY WITH THE REGULATORY REQUIREMENTS FOR EVIDENCE OF COMPLIANCE.

Reference should be made to the relevant test report or regulatory information report to determine the applicability of the test result to a proposed installation. The results of these fire tests may be used to assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all conditions.

TESTING AUTHORITY	Exova Warringtonfire Aus Pty Ltd	
Address	Suite 2002a, Level 20, 44 Market Street, Sydney NSW 2000, Australia	
Phone / Fax	+61 (0)2 8270 7600/ +60 (0)2 9299 6076	
ABN	81 050 241 524	
Email / Home Page	www.exova.com	
Authorisation	Prepared By:	Reviewed By:
	D. Nicholson	K. G. Nicholls

Summary of Assessed Performance (continued)

Table 1 - 150MM THICK SEAL IN FLEXIBLE WALLS

Service penetrations, flexible wall, at least 100mm thick (+ aperture beading)

Description of Services	**FRL**	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 150mm**	
Area ≤ 0.16m2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m^2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A_2)*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/60**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO); Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 16mm filled with cables, optic fibres or empty	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.

Summary of Assessed Performance (continued)

Table 2 - 150MM THICK SEAL IN RIGID WALLS

Service penetrations, rigid walls, at least 75mm thick (+ aperture beading)

Description of Services	**FRL**	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 150mm**	
Area ≤ 0.16m2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A2)*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/60**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO); Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 16mm filled with cables, optic fibres or empty	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.

Summary of Assessed Performance (continued)

Table 3 - 150MM THICK SEAL IN RIGID FLOORS

Service penetrations, rigid floor, at least 120mm thick (+ aperture beading)

Description of Services	**FRL**	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 150mm**	
Area ≤ 0.16m^2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m^2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A_2) top side only*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/60**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Steel Conduits and Tubes up to 16mm filled with cables, optic fibres or empty	**-/120/120**	-
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO); Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 16mm filled with cables, optic fibres or empty	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.

Summary of Assessed Performance (continued)

Table 4 - 200MM THICK SEAL IN FLEXIBLE WALLS

Service penetrations, flexible wall, at least 100mm thick (+ aperture beading)

Description of Services	FRL	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 200mm**	
Area ≤ 0.16m2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A2)*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/90**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Steel Conduits and Tubes up to 16mm filled with cables, optic fibres or empty	**-/120/120**	**-**
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO); Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 32mm filled with cables, optic fibres or empty	**-/120/120**	
Bundle Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO); Rigid and Flexible PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Conduits up to 32mm filled with cables, optic fibres or empty. Conduits may be bundled up to 100mm in diameter	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.

Summary of Assessed Performance (continued)

Table 5 - 200MM THICK SEAL IN RIGID WALLS

Service penetrations, rigid walls, at least 75mm thick (+ aperture beading)

Description of Services	**FRL**	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 200mm**	
Area ≤ 0.16m^2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m^2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A_2)*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/90**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Steel Conduits and Tubes up to 16mm filled with cables, optic fibres or empty	**-/120/120**	-
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO);* *Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 32mm filled with cables, optic fibres or empty	**-/120/120**	
Bundle Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO);* *Rigid and Flexible PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Conduits up to 32mm filled with cables, optic fibres or empty. Conduits may be bundled up to 100mm in diameter	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.

Summary of Assessed Performance (continued)

Table 6 - 200MM THICK SEAL IN RIGID FLOORS

Service penetrations, rigid floor, at least 120mm thick (+ aperture beading)

Description of Services	**FRL**	
Blank Opening *(up to a maximum of 400mm x 400mm)*	**Note: Ensure that seal thickness (t_A) ≥ 200mm**	
Area ≤ 0.16m^2 Or Diameter ≤ 400mm	**-/120/120**	
Up to 60% full of Standard Cable Services *(up to a maximum of 400mm x 400mm or equivalent area ≤ 0.16m^2)*	*Firestop Foam (A) for full seal depth (t_A)*	*Firestop Foam (A) for full seal depth (t_A) and Firestop Putty Bandage(A_2) top side only*
PVC insulated Power Cables with or without cable tray (Standard D1 cable set, in accordance with AS1530.4-2005 Appendix D)	**-/120/90**	**-/120/120**
PVC insulated Communication Cables with or without cable tray (Standard D2 cable set, in accordance with AS1530.4-2005 Appendix D)		
Steel Conduits and Tubes up to 16mm filled with cables, optic fibres or empty	**-/120/120**	-
Single Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO);* *Rigid PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Single Conduit up to 32mm filled with cables, optic fibres or empty	**-/120/120**	
Bundle Plastic Conduits and tubes: *Rigid and Flexible PO: polyolefin (PE, PP, PPE, PPO);* *Rigid and Flexible PVC: polyvinyl chloride*	*Firestop Foam (A) for full seal depth (t_A)*	
Conduits up to 32mm filled with cables, optic fibres or empty. Conduits may be bundled up to 100mm in diameter	**-/120/120**	

For a complete description of the assessed construction, refer to referenced assessment report.