

HILTI CP 658 Firestop Plug

The enclosed pages are taken from the
Hilti Firestop Systems Manual
Edition April 2011
Supported by additional standard details

For Material Safety data sheets
visit the technical library at www.hilti.co.uk/cfs

<p>Hilti (Gt Britain) Ltd TECHNICAL ADVISORY SERVICE TELEPHONE 0161 886 1144</p>

Quality Management System Certification

Standard: ISO 9001:2008

Issued by: The Swiss Association for Quality and Management Systems SQS.

Registration No: 12455 (The current certificate can be downloaded from www.hilti.co.uk)

Field of activity: Market Organisation.

Note: The certificate of Hilti (Gt. Britain) Ltd. is a sub-certificate to the master certificate of Hilti Aktiengesellschaft, FL-9494 Schaan with the field of activity: Research, Development, Manufacturing, Sales and Service.

Don't just use Hilti Firestop Products, use our Hilti Accredited Firestop Contractors

It is the combination of a quality conscious and third party accredited manufacturer working in close co-operation with a selected group of third party accredited installers that can offer you the best value.

Here are some of the benefits available to you by using this co-operation:-

- Reduce your liability; liability that comes from poor or incorrect installation and performance of products.
- Efficient Project Management based on the co-operation of a specialised manufacturer with a specialist contractor
- Commercially designed, effective Fire Protection solutions
- Products that adhere to 3rd party product conformity schemes such as FM, UL and Certifire.

These approvals are an assurance of product and manufacturer quality, they can also have an influence on the building insurance premium reducing the service costs of the building.

- Solutions that have been tested for long term performance.
- Solutions that offer business continuity and protections of premises.
- Certification of conformity of work completed.
- Installation work audited by FIRAS on site to ensure compliance with manufacturers' recommendations and Building regulations.
- Installer with site based manufacturer support.
- Installer having available site based manufacturers support when needed.
- Clear and comprehensive documentation of installation.
- Comprehensive support documentation for proposed solutions.
- Clarity and assistance understanding the role of Passive Fire measures in modern building construction.



Product Accreditation

Hilti Firestop Systems have been certified by a wide variety of international bodies, such as FM, UL, Certifire and iBMB

As part of this process products are monitored on an on-going basis so you can have absolute confidence in the quality and standard of the product you are specifying.

Installation Accreditation

Hilti-Accredited Firestop Contractors are also third party certified (e.g. FIRAS or LPCB).

This means that they work to agreed industry standards, employ trained operatives and are subject to on-site audits and inspection of representative samples of the work carried out to ensure compliance with manufacturers' recommendations and Building Regulations

Further details about Hilti accredited Firestop Contractors and the support that we can offer you can be obtained by telephoning Freephone 0800 083 8889 (GB only).



Association for Specialist Fire Protection

Hilti is proud to support and be a member of The Association for Specialist Fire Protection (ASFP)

ASFP Vision

To offer the industry it serves with:

- Knowledge / guidance on all aspects of 'built-in' fire protection
- Technical support / impartial advice
- Direction through industry authority

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FS 112 - 01 Hilti CP 658 – Cables through intumescent Plugs

Data summary Additional Properties of CP 658 seals

Data summary CP 658 - Firestop Plug - BREEAM Criteria summary

Material Safety Data Sheets and CAD files of the standard details FS ***-** can be downloaded from the technical library at www.hilti.co.uk/cfs

Revision History

May 2011	First release
July 2011	Data summaries added
May 2013	Update

Firestop plug (intumescent) CP 658

Temporary or permanent sealing around single or bunched cables



Applications

- Sealing of 50mm - 200mm circular penetrations
- Sealing bunched or single cables through walls and floors
- Perfect in dust free environments
- Suitable for both temporary and permanent applications
- Use in conjunction with CP 611A

Advantages

- Free from dust and fibres
- Halogen and solvent free
- Especially suitable for laying new cables
- Economical in use owing to short installation time
- Easy installation as no special tool is required
- Can be painted



Technical data

CP 658	
Fire rating	Up to 3 hours
Base materials	Concrete, Concrete (porous), Masonry
Application temperature range	5°C - 40°C
Density	0.27 g/cm³
Colour	Red

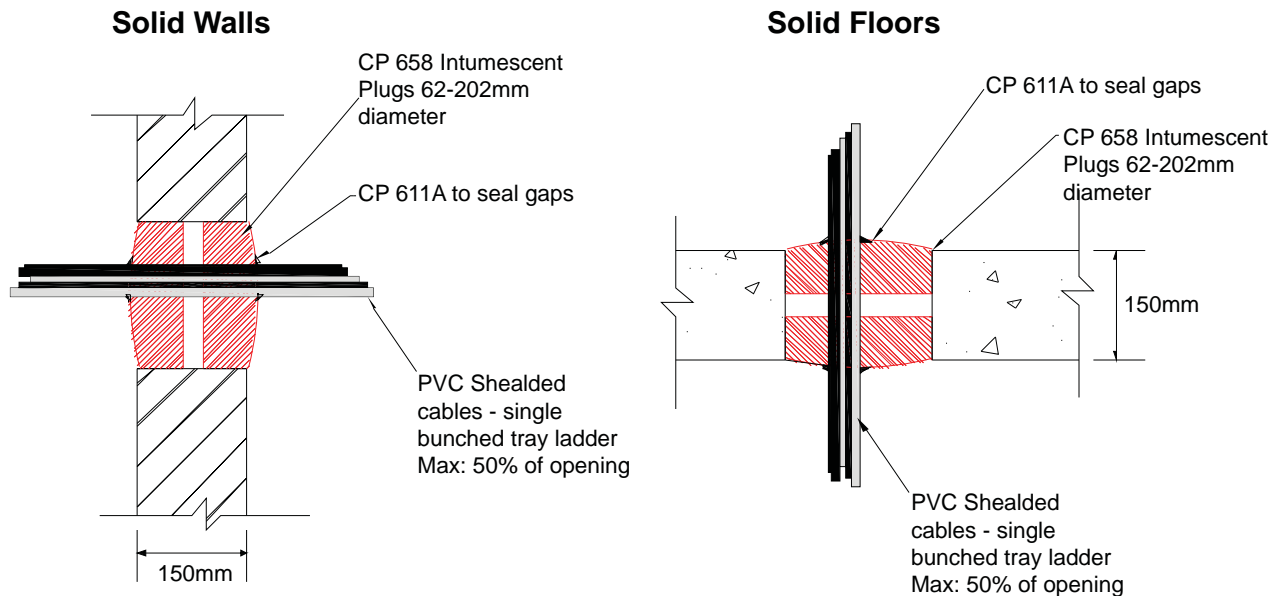
	max. hole dia.	min. hole dia.
CP 658-62	62 mm	42 mm
CP 568-77	77 mm	67 mm
CP 658-107	107 mm	92 mm
CP 658-158	158 mm	152 mm
CP 658-202	200 mm	192 mm

	Wall (mm)	Floor (mm)
Min. building component thickness	150 mm	150 mm
Max. opening size	200 mm	200 mm
Min. distance from cables / cable run and opening surface	0 mm	0 mm
Min. distance to next opening	50 mm	50 mm
Max. cable loading (% of opening size)	60%	60%

Ordering

Order description	Package Contents	Package Quantity	Item number
Firestop plug CP 658-62	20 x CP 658 plug (62mm Dia.)	20 pc	00369293
Firestop plug CP 658-77	20 x CP 658 plug (77mm Dia.)	20 pc	00369294
Firestop plug CP 658-107	20 x CP 658 plug (107mm Dia.)	20 pc	00369295
Firestop plug CP 658-158	20 x CP 658 plug (158mm Dia.)	20 pc	00369297
Firestop plug CP 658-202	20 x CP 658 plug (202mm Dia.)	20 pc	00369298
Firestop sealant CP 611A EN/IT/ES	intumescent mastic (310ml)	1 pc	00382848
Dispenser CB 200-P1	manual dispenser (310ml)	1 pc	00055205

Technical Information



For more standard details and technical information register online at the Hilti Firestop Design Centre at www.hilti.co.uk/cfs

Installation instructions for CP 658

Notice

- Before handling, read Material Safety Data Sheet and product label for safe usage and health information.

Opening

- Clean the opening. surfaces CP 658 will be in contact with, should be cleaned of loose debris, dirt, oil, moisture, frost and wax.

Application of firestop plug

- If there are no penetrations, install CP 658 within opening and bead with Hilti CP 617 Putty pad where firestop plug interfaces with inside of sleeve (when required).
- 3a. If there are penetrations, cut CP 658 to fit around cables.
- 3b. Insert firestop plug into the opening.
- For maintenance reasons, a penetration seal can be permanently marked with an identification plate and fastened in a visible position next to the seal.

Re-installing cables

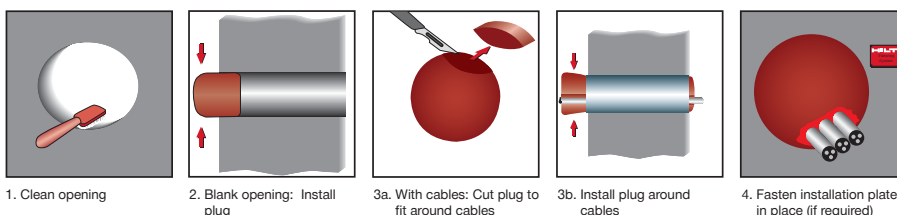
- Remove firestop plug from opening
- Install the penetrant and re-install the firestop plug in compliance with the appropriate system.
- If single cables are installed, a hole can be drilled through the firestop plug and a cable passed through.

Not for use

- In wet rooms or outdoors exposed to the weather or UV radiation

Storage

- Store only in the original packaging in a location protected from moisture and direct sunlight

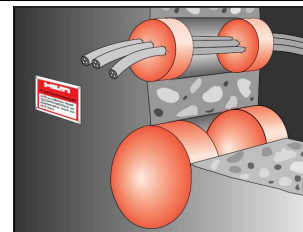


Hilti CP 658 Intumescent Plugs

Test	Up to
Fire Integrity	2 hr
Insulation	2 hr
Acoustics	
Air Tightness	✓
Age Testing	30 years

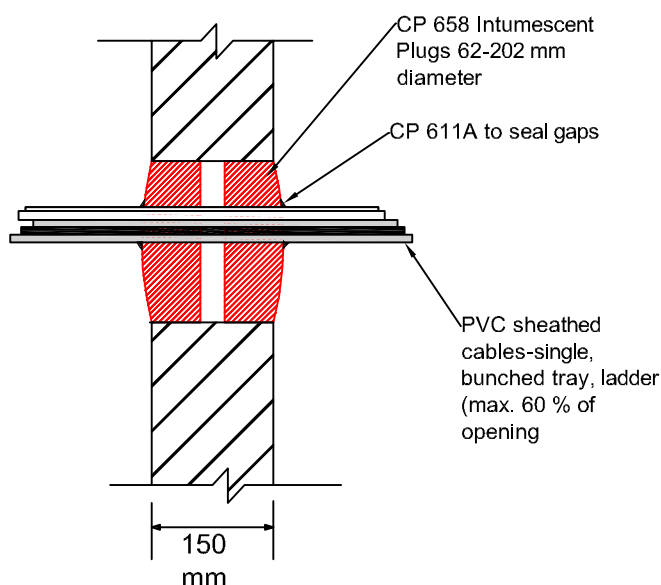
Approvals
BS476 pt 20
EN 1366-3

APPLICATION

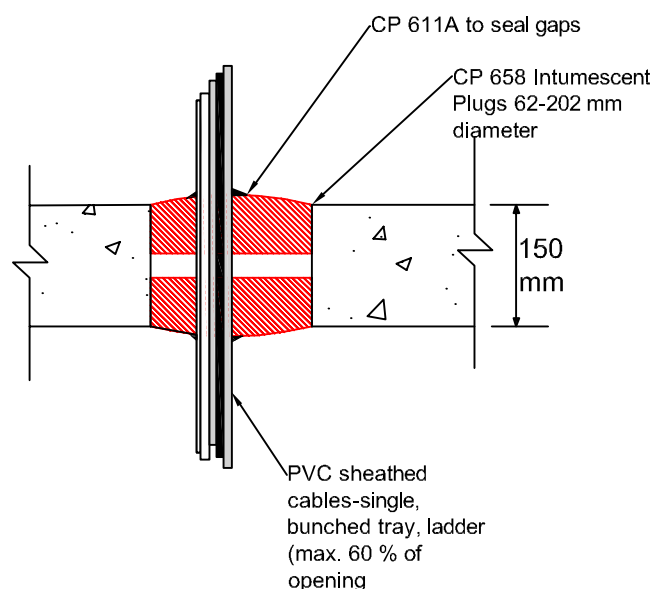


**Cable penetrations
through
solid walls & floors**

Solid Walls



Solid Floors



The above applications are not exhaustive. For further details please contact

1. The application limits on this detail are for guidance purposes only. For more detailed information on the full range of available test results please contact a Hilti Firestop Specialist on 0800 886100.
2. The product and application has been fire tested as a minimum to BS 476. It may have additional European and worldwide testing. Please contact Hilti for further information.
3. All installations should be carried out in accordance with Hilti's installation instructions, by competent, experienced installers using Hilti branded products.



11.03.11

Drawn by

A Brockett

FS

112

Issue

01

Additional Properties of CP 658 – Firestop plugs

Property	Test regime	Notes	
Fire	BS 476 - 20		✓
	FM approval (Class 4990)		✓
Air sealing	DIN 1026		✓ ?
	Pressure difference 50Pa		
	Pressure difference 200Pa		✓ ?
Electrical resistance	Surface resistance		✓
	Volume resistivity		✓
	Insulator		Yes
VOC	LEED 2009	LEED 3.0	3.9g/l
Chemical Resistance	Contact Hilti Technical Advisory Service with details of type, concentration, duration and ambient temperature of exposure conditions		
			N.R Not relevant
			✓ Meets standard

CP 658 –Firestop Plug - BREEAM criteria

BREEAM Section

Management construction site impact	No power tools required for installation (no energy source required)	✓
	Dust free installation	✓
	Saves water during application	✓
	No water pollution	✓
	Low VOC* (air quality)	✓
Health and wellbeing	No ozone depletion potential (ODP)	✓
	Low global warming potential (GWP)	✓
	Smoke and gas tightness	✓
	Noise reduction	✓
Energy	Air tightness	✓
	Avoidance of air infiltration	✓
Materials	Product Carbon Footprint or LCA Data	✓
	Thermal insulation	✓
Waste	Recycling of packaging	✓
	Reuse of materials	✓
	Re-penetration in existing opening (No waste)	✓
Product contributes to Green Building under this clause	✓	
Not applicable for this product	NA	
Product makes No contribution to green Building under this clause	x	

Visit our web site at www.Hilti.co.uk/cfs to access our **Firestop Design Centre**

Penetration product selector	Other product features	Joints product selector
		
Interactive product selector for firestopping openings through walls and floors	Find out more about the benefits of using Hilti firestop systems	Interactive product selector for wall to wall, top of wall, curtain wall , floor to floor and floor to wall applications.

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