

# Hilti CP 620 Expanding fire seal

## 1. Product Descriptions

Expanding two-component PU-based foam.

## 2. Uses

- Permanent fire seals for cables and cable trays.
- Permanent fire seal for non-combustible pipes.
- Difficult to reach or irregular openings.
- Can be penetrated later and then re-sealed, if a cable is added.
- Multiple penetrations: cable, cable tray, tray and pipes in the same opening in one seal.
- Opening sizes up to 440 x 550 mm
- Office buildings, hospital, shopping centres, industrial buildings etc.
- Tested and approved in accordance with AS1530.4 (1997). Approvals available from your local Hilti Engineer.

## Applications

- Electrical and communications cables in masonry drywall systems.
- Non-combustible copper pipes up to 150 mm dia. through walls.
- Non-combustible brass pipes up to 100 mm dia. through walls.
- Combined seals.

## 3. Systems advantages/customer benefits

- One solution for various applications.
- Easy handling for difficult-to-reach openings.
- No additional coating required.
- Paintable (common household paints)
- Impervious to smoke.

## 4. Packaging

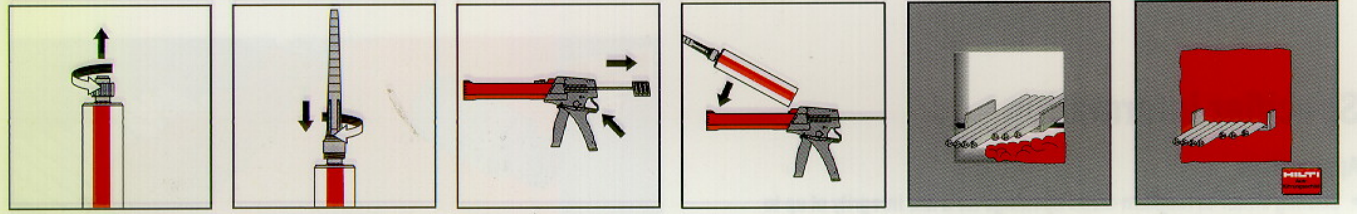
Description	Packaging contents	Ordering designation	Item No
Expanding fire seal (300 ml)	12	CP 620*	338722
Dispenser (carton)	1	DSC (carton)	338720

\*including mixer and extension pipe

## 5. Technical Data

Colour:	Red
Cartridge content:	300 ml
Fire seal yield	Up to 2.2 litres per cartridge (approx. 7 times expansion)
Application temperature	+10°C to + 30°C
Temperature resistance of cured fire seal:	-30°C to + 100°C
Minimum temperature:	
- Substrate	+0°C
- Cartridge	+10°C
Storage/transport temperature	+5°C to + 5°C
Curing:	
- Non-tacky after	Approx. 35 sec
- Ready to cut after	Approx. 1 min
Shelf life: (at 20°C and stored in a dry place)	9 months
Thermal insulation:	
- Warm pipes	0.052 W/mk at 90°C
- Cold pipes	0.048 W/mk at 25°C
(comparable to Foamglas, Armaflex and mineral wool)	
Acoustic insulation (air-borne sound):	59 db, as per DIN 4109
Structure-borne sound insulation:	
Pipe/wall	30-50%
Paintable:	6mm water repellent coating
Not for use:	Exposed to weather Exposed to UV

## 6. Application/Installation



1. Hold the cartridge the nozzle pointing upwards and unscrew the cap. Do not point towards people.

2. Fit the mixer and screw securely

3. Release the dispenser and pull back the piston rod.

4. Insert the cartridge in the dispenser.

5. Apply CP 620, building up the plate (if required) seal by working from the back towards the front.

6. Attach installation

### Application

1-4 Prepare dispenser and cartridge as show above. The fire seal from the first strokes of the dispenser should be discarded until the fire seal in the mixer has a consistent red colour

5. Apply the CP 620 in the opening.

- When dispensed slowly, the fire seal escaping from the mixer is already slightly expanded. This makes it easier to build up the fire seal.
- When dispensed quickly, the consistency of the fire seal is more liquid. The fire seal then flows better between the cables. Begin applying CP 620 at the back of the opening and then work towards the front. Note: The fire seal becomes warm for a short time after application. Fill the opening completely with CP 620 expanding fire seal.

6. For maintenance reasons, a penetration seal can be permanently marked with an installation plate. In such cases, mark the installation plate and fasten it in a visible position next to the seal.

### 7. Re-installing cables or pipes

- Additional cables or pipes can be installed later without difficulty.
- Use a suitable tool to create an opening (screwdriver, drill bit, etc). Push the cable or pipe through and then seal the remaining opening carefully with CP 620.

### 8. Notes

- The extension tube can be fitted when working on difficult-to-reach openings.
- The fire seal can be cut back to no less than the minimum specified installed depth.

- Pieces of cured fire seal which have been cut off can be laid in the next opening and fresh foam applied around these.
- Framing (wall thickness less than 145 mm) – when the wall has a thickness of less than 145 mm and a 2 hour fire rating is required, a frame of plasterboard strips must be attached around the opening in order to achieve a fire seal depth of 145 mm.
- For example – 120 mm drywall thickness: The height of the strips forming the frame must be selected so that the fire seal has a thickness of 12.5 mm either side of the installation, thus achieving 145 mm overall thickness of CP 620,
- The fire seal may cure in the mixer if it is dispensed too slowly or if a long pause occurs between work. Should this happen, the mixer can be replaced. This ensures that the cartridges can be emptied completely.

### 10. Notice for approvals

- When making a seal using Hilti CP 620 expanding fire seal, national approvals must be observed in principle. Please refer to them for restrictions.

### 11. Not for use

- Exposed to weather.
- Exposed to UV

### 12. Safety precautions

- Wearing protective goggles, protective gloves and protective clothing when working.
- Keep out of reach of children.
- Request a copy of the material safety data sheet and observe the information it contains.

### 13. Storage

- Store only in the original packaging in a dry place at a temperature of +5°C to +25°C.

After finishing the job, partly-used cartridge can be stored with the mixer screwed on until they are required again. When used

the next time, only the mixer has to be replaced.

#### 14. Consumption Indicators

The amount of CP 620 required in a given opening, depends on the size and depth of the opening , plus the number of cables (or pipes) passing through ie. density of penetrations.

As an example:

Calculated for a required CP 620 installation depth of 200 mm.

Equivalent Surface area of Seal (m <sup>2</sup> )	Equivalent opening dia. Ø in mm	Equivalent opening size width (mm) x height (mm)	Number of CP 620			
			Density of penetrations, cables/pipes, passing through opening			
			0%	10%	30%	60%
0.005	90	50 x 100	1	1	1	1
0.01	120	100 x 100	2	2	1	1
0.015	140	100 x 150	2	2	2	1
0.02	160	100 x 200	3	2	2	1
0.025	180	100 x 250	3	3	2	2
0.03	200	100 x 300	4	4	3	2
0.04	220	200 x 200	5	4	3	2
0.045	240	200 x 225	5	5	4	2
0.05	250	200 x 250	6	5	4	3
0.06	280	200 x 300	7	6	5	3
0.07	300	200 x 350	8	7	6	4
0.08	320	200 x 400	9	8	6	4
0.09	340	300 x 300	10	9	7	4
0.1	350	300 x 330	11	10	8	5
0.12	400	300 x 400	14	13	10	6
0.16	-	400 x 400	18	16	12	7
0.24	-	600 x 400	26	24	18	12

This product must be used in accordance with the directions stated. However, as conditions vary in the consuming industries buyers and users must assess its performance for their own requirements. No responsibility is accepted save those non-excludable conditions stated or implied by any Federal or State legislation or law of Australia. Manufactured for Hilti (Aust.) Pty. Ltd., 23 Egerton Street, Silverwater NSW 2128. Tel: (02) 8748 1000.