CP 617, CP 617L & CP 617XL

Firestop Putty Pad

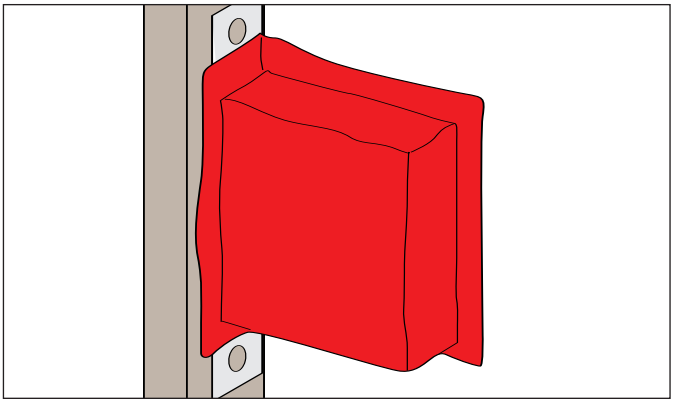
Product description
- A moldable firestop putty designed to help protect electrical outlet boxes

Product features
- Applied by hand
- Fast installation

Areas of application
- Protection of electrical outlet boxes

For use with
- Gypsum wall assemblies with wood or metal studs

Examples
- Where two outlets are within a single stud/cavity or within 24" (not back to back)



CP 617 Technical Data

Dimensions	CP 617: 6" x 7" x 1/8"(15 x 18 x 0.3 cm) CP 617L: 7" x 7" x 1/8" (18 x 18 x 0.3 cm) CP 617XL: 9" x 9" x 1/8" (23 x 23 x 0.3 cm)
Consistency	Moldable putty
Color	Red
Application temperature	40°F (5°C) to 95°F (35°C)
Storage temperature	40°F (5°C) to 104°F (40°C)
Cure	Non-curing
Density	1.48 g/cm³
Intumescent activation	Approx. 220°F to 250°F (104°C to 121°C)
Volatile solvents	None
Asbestos fibers	None
Surface burning characteristics (ASTM E 84-96)	Flame Spread: 5 Smoke development: 5
Sound transmission classification (ASTM E 90-97)	55 (Relates to specific construction)
Approvals	
California State Fire Marshal City of New York	Listing No. 4485-1200:129 MEA-102-99-M
Tested in accordance with	• UL 263 • ASTM E 84

At 73°F (23°C) and 50% relative humidity

WALL OPENING PROTECTIVE MATERIAL
FIRE RESISTANCE CLASSIFICATION
SEE PRODUCT CATEGORY IN
UL FIRE RESISTANCE DIRECTORY
66Y7

FM APPROVED

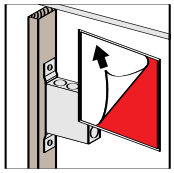
Installation instructions for CP 617

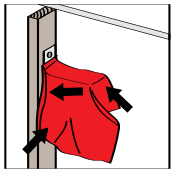
Notice
- Before handling, read Material Safety DataSheet and product label for safe usage and health information.
- Instructions below are general guidelines — always refer to the applicable drawing in the UL Fire Resistance Directory or Hilti Firestop Systems Guide for complete installation information

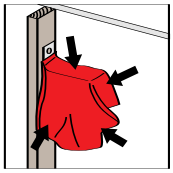
Application of firestop putty
1. Remove label from one side of pad. For a 1 to 2 hour fire rating, one CP 617 pad is required. Exposed side of pad is placed against box.
2. Adhere pad to side of the box, overlapping the stud and all edges of the box. When drywall is installed: fix pad into gap between electrical box and gypsum board slightly overlapping the inner wall board surface. When drywall will be installed later: overlap front edge of electrical box so that CP 617 will be compressed around edges of box as gypsum board is installed.
3. Reshape CP 617 to fit around conduit or cables.
4. Press CP 617 to all sides of electrical box. Trim excess at corners and apply to conduit fittings connected to the box.
5. Remove other side of label. To help prevent passage of cold smoke, CP 617 may optionally be placed into inside of electrical conduit fittings.

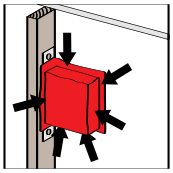
Not for use
- In areas exposed to water

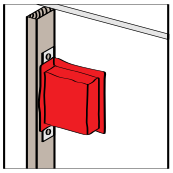
Storage
- Store only in the original packaging in a location at temperatures 40°F (5°C) to 104°F (40°C)


1. Remove label from one side of CP 617


2. Adhere CP 617 to application


3. Reshape CP 617 to fit around box


4. Press CP 617 to all sides of application


5. Remove other side of label

Hilti Firestop
Saving Lives
through innovation
and education

Hilti. Outperform. Outlast.

Certificate of Compliance

Certificate Number **20060214-R13240G**
Report Reference **2006 February 14**
Issue Date **2006 February 14**

Underwriters Laboratories Inc.®

Issued to: **Hilti, Inc.**
5400 S 122ND East Ave
Tulsa, OK 74146 USA

This is to certify that representative samples of **Fill, Void or Cavity Materials**
CP 617

Have been investigated by Underwriters Laboratories Inc.® in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 1479, ANSI/UL 263, CAN/ULC-S115-05

Additional Information: CP 617 Firestop Putty Pad for use in Through-Penetration Firestop Systems and Wall Opening Protective Materials as currently described in the UL Fire Resistance Directory.

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes: UL in a circle symbol: with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory.

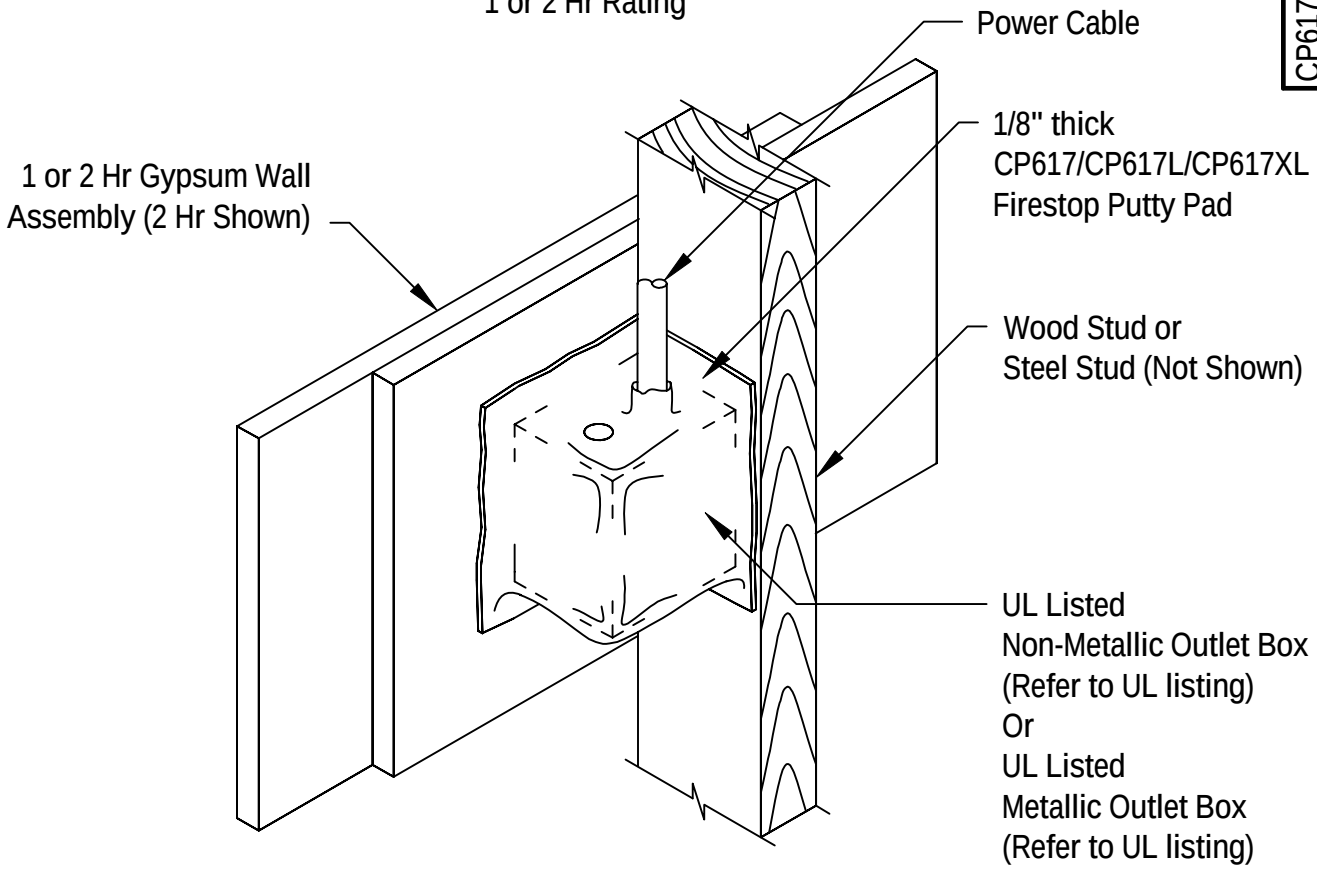
Look for the UL Classification Mark on the product

Issued by:
Mona Couloute
Mona Couloute
Underwriters Laboratories Inc.

Reviewed by:
Christopher Johnson
Underwriters Laboratories Inc.

Wall Opening Protective Materials (CLIV)

as Tested to ANSI/UL 263
1 or 2 Hr Rating



CP 617 Firestop Putty Pads, for use with max 4 by 4 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back.

CP 617 Firestop Putty Pads, for use with max 4-11/16 by 4-11/16 in., or max 4-3/8 by 4-7/8 in., flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 hr fire rated V446 gypsum board/steel stud or U341 gypsum board/wood stud Wall and Partition Design No. in the Fire Resistance Directory. When U341 wall design is used, wall shall be sheathed with 5/8 in. gypsum board, and glass or mineral fiber batt insulation shall be installed in stud cavities in accordance with U341 design. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the box within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. and the boxes may be installed back-to-back.

CP 617 Firestop Putty Pads , for use with max 4-11/16 by 4-11/16 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 and 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 0.8 pcf density fiberglass batt insulation is to be installed within the wall cavity required for 1 hr fire rated gypsum board wall assemblies and optional in 2 hr fire rated gypsum wallboard assemblies. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and to completely seal against the box within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

Wall Opening Protective Materials (CLIV)

as Tested to ANSI/UL 263
1 or 2 Hr Rating

CP 617 Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back .

CP 617 Firestop Putty Pads, for use with max 4 by 4 by 2-7/8 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in the 1 hr fire rated V446 gypsum board/steel stud or U341 gypsum board/wood stud Wall and Partition Design in the Fire Resistance Directory. When U341 wall design is used, wall shall be sheathed with 5/8 in. gypsum board, and glass or mineral fiber batt insulation shall be installed in stud cavities in accordance with U341 design. Outlet box secured to steel stud by means of fastening tab supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. and the boxes may be installed back to back.

CP 617 Firestop Putty Pads, for use with max 2-1/4 by 3-3/4 by 2-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Pass and Seymore, Inc., and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back .

CP 617 Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Allied Molded Products, Inc., made from fiber reinforced thermoplastic and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with plastic cover plates. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back.

CP 617 Firestop Putty Pads , for use with max 4 by 4 in. by 1-½ in. deep flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 hr. fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. The boxes are installed back to back with 5 in. by 4 in. UL Classified fire block, FS 657 or CP 657 installed in the cavity between the two boxes.

LISTING SERVICE

LISTING No. 4485-1200:129

CATEGORY: Opening Protection (Firestopping)

LISTEE: Hilti, Inc., 5400 S. 122nd East Ave, Tulsa, OK 74146
Contact: Clay Hensley (918) 252-6216 Fax (918) 254-1679

DESIGN: Model CP 617, CP617L and CP 617XL firestop putty pads. Refer to listee's printed data sheet and UL Fire Resistance Directory for additional detailed product description and operational considerations.

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes & ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee's name, type identification, hourly rating and UL label.

APPROVAL: Listed as wall opening protective material for use with max. 4 X 4 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum wallboard wall assemblies framed with min. 3 ½ in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory.

Listed as wall opening protective material for use with max. 4-11/16 X 4-11/16 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 hr. fire rated configuration of Wall and Partition Design No. V446 in the Fire Resistance Directory.

Listed as wall opening protective material for use with max. 4-1/16 X 4-11/16 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum wallboard wall assemblies framed with min. 3 ½ in. deep steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min. 0.8 pcf density fiberglass batt insulation is to be installed within the wall cavity for 1 hr fire rated gypsum wall assemblies and optional in 2 hr fire rated gypsum wallboard assemblies.

Listed as wall opening protective material for use with max. 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the “Outlet Boxes and Fittings Classification for Fire Resistance” category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies framed with min. 3 ½ in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box.

Listed as wall opening protective material for use with max. 4 by 4 by 2-7/8 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the “Outlet Boxes and Fittings Classification for Fire Resistance” category in the Fire Resistance Directory. Putty pads and boxes for use in 1 hr fire rated V446 gypsum board/steel stud Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to steel stud by means of two tabs supplied with the outlet box.

Listed as wall opening protective material for use with max. 2-1/4 by 3 3/4 by 2 3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Pass and Seymore Inc., and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies framed with min. 3 ½ in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box.

Listed as wall opening protective material for use with max. 4 by 3 3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Allied Molded Products, made from fiber reinforced thermoplastic and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 hr fire rated gypsum wallboard assemblies framed with min. 3 ½ in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box.

Refer to Manufacturers Installation Instruction Manual and UL Fire Resistance Directory for details.

NOTE: Min. 1/8 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including the nailing tab and completely seal against the stud within the stud cavity. Outlet boxes installed with steel or plastic cover plates. When moldable putty pad outlet box protective materials is used on boxes on both sides of wall as directed, the horizontal separation between boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back to back.

07-30-2006 jw

Date Issued: **JUNE 10, 2008** *Listing Expires **June 30, 2009***

Authorized By: ***BEN HO**, Chief*
Fire Engineering Division

GREEN BUILDING MATERIALS CERTIFICATION FORM

PROJECT NAME: _____

CONTRACTOR: _____ SPEC SECTION(S): _____

CONTACT NAME: _____ TEL. NO: _____ SUBMITTAL NO: _____

Product	Vendor or Manufacturer	Total Installed COST	Material COST [excluding labor + equip.]	Contains Recycled Content?		Manufacture Location[3]	Raw Material Origin[4]	Contains Rapidly Renew-ables?[5] [note %]	For Wood Products [Y/N]		VOC Content[7] [adhesives, sealants, paints, coatings]
				% post con-sumer[1]	% post indust-trial[2]				FSC Certi-fied?[6]	No added urea-formalde-hyde?	
FS ONE	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	75 g/l
CP 604	Hilti Inc			NK	NK	Netherlands	NK	No	N/A	N/A	53 g/l
CP 606	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	71 g/l
CP 672	Hilti Inc			NK	NK	Florida	NK	No	N/A	N/A	0 g/l
CP 601 S	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	3 g/l
CP 620	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	15 g/l
CP 637	Hilti Inc			NK	NK	United Kingdom	NK	No	N/A	N/A	0 g/l
CP 658T/FS 657	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	3.9 g/l
CP 136	Hilti Inc			NK	NK	Texas	NK	No	N/A	N/A	0 g/l
CP 617/CP 619 T	Hilti Inc			NK	NK	France	NK	No	N/A	N/A	5.2 g/l
CP 618	Hilti Inc			NK	NK	France	NK	No	N/A	N/A	14.5 g/l
CP 643N/CP 644	Hilti Inc			NK	NK	Italy	NK	No	N/A	N/A	7.6 g/l

Product	Vendor or Manufacturer	Total Installed COST	Material COST [excluding labor + equip.]	Contains Recycled Content?		Manufacture Location[3]	Raw Material Origin[4]	Contains Rapidly Renew-ables?[5] [note %]	For Wood Products [Y/N]		VOC Content[7] [adhesives, sealants, paints, coatings]
CP 648S/CP 648P	Hilti Inc			NK	NK	Germany	NK	No	N/A	N/A	7.6 g/l
CP 777/767	Hilti Inc			NK	NK	North Carolina	NK	No	N/A	N/A	0 g/l
Mineral Wool	Hilti Inc			NK	NK	Indiana	NK	No	N/A	N/A	0 g/l
CP 680's & Accessories	Hilti Inc			NK	NK	Malaysia	NK	No	N/A	N/A	7.6 g/l

NK = Not Known, N/A=Not Applicable

NOTES / DEFINITIONS:

1. ***Post-Consumer Recycled Content***: Portion of material or product derived from discarded consumer waste that has been recovered for use as a raw material [e.g., plastic bottles, newspaper]
2. ***Post-Industrial Recycled Content****:* Portion of material or product derived from recovered industrial and mfg. materials that are diverted from municipal solid waste for use in a *different* mfg. process, prior to use by a consumer [e.g., fly-ash in concrete or synthetic gypsum board, both of which are by-products of coal-burning power plants]. Spills and scraps from the original manufacturing process that are combined with other constituents after a minimal amount of reprocessing for use in further production of the same product do not qualify.
3. ***Manufactured***: Final assembly of components into building product that is furnished and installed by trades [e.g., if the hardware comes from Dallas, TX, the lumber from Keene, NH, and the joist is assembled in Kent, WA; then the location of final assembly is Kent, WA]. www.gpsvisualizer.com/calculators can be used to calculate straight-line distance between project site / New York, NY and location of manufacture and raw material source. Note: location noted on material data sheets is often *corporate* location; need manufacturer to verify actual *manufacture* location.
4. ***Raw Materials***: Virgin or recovered resources from which the product's components are made [i.e., before processing or manufacturing].
5. ***Rapidly Renewable***: Materials and products made from raw materials that are harvested within a 10-year cycle [e.g., bamboo, cork, linoleum, fast-growing poplar, wheatboard, wool carpet].
6. ***FSC Certified***: Wood-based products that are certified by the Forest Stewardship Council and carry a Chain-of-Custody certificate number from the vendor or manufacturer.
7. ***VOC Content****:* The quantity of volatile organic compounds contained in products such as adhesives, sealants and architectural coatings. VOC content is to be reported in grams/liter or lbs/gallon, less water and any exempt compounds/solvents.

CONTRACTOR CERTIFICATION:

I, _____ a duly authorized representative of_____ hereby certify that the information contained herein accurately represents the listed "green building" characteristics of the materials to be provided by our company as components of the building construction. Furthermore, I understand that any change in such "green building" material characteristics during the purchasing and/or installation period will require prior written approval from the Construction Manager and Owner.

SIGNATURE OF AUTHORIZED REPRESENTATIVE: _____ DATE: _____ p. ____ of ____

MATERIAL SAFETY DATA SHEET

Product name: **CP 617 Firestop Putty Pad, CP 618 Firestop Putty Stick, CP 619T Firestop Putty Roll**

Description: Firestopping putty

Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121

Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Calcium carbonate	1317-65-3	NE	5 mg/m^3(R)	NE
Talc	14807-96-6	2 mg/m^3	20 mppcf	NE
Silica	14808-60-7	0.025 mg/m^3(R)	$\frac{30 \text{ mg/m}^3}{\%SiO_2 + 5}$ (R)	NE
Boron oxide	1303-86-2	10 mg/m^3	15 mg/m^3(T)	NE
Iron oxide	1309-37-1	5 mg/m^3(R)	10 mg/m^3(f)	NE

Abbreviations: **PEL** = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **STEL** = Short Term Exposure Limit. **NE** = None Established. **R** = Respirable dust. **mppcf** = million particles per cubic foot. **T** = Total dust. **F** = as fume.

PHYSICAL DATA

Appearance:	Red colored putty	**Odor:**	Negligible
Vapor Density: (air = 1)	Not applicable	**Vapor Pressure:**	Not applicable
Boiling Point:	Not applicable	**VOC Content:**	Not determined
Evaporation Rate:	Not applicable	**Solubility in Water:**	Slightly soluble
Specific Gravity:	1.45	**pH:**	Not determined

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Not applicable	**Flammable Limits:**	Not applicable
Extinguishing Media:	Water, CO_2, Dry Chemical, Foam		
Special Fire Fighting Procedures:	A NIOSH-approved self-contained breathing apparatus (SCBA) should be worn when fighting fires involving chemical products.		
Unusual Fire and Explosion Hazards:	Fire conditions will activate product causing it to intumesce.		

REACTIVITY DATA

Stability:	Stable.
Hazardous Polymerization:	Will not occur.
Incompatibility:	None known.
Decomposition Products:	Thermal decomposition can yield CO and CO_2.
Conditions to Avoid:	Avoid temperature extremes that could shorten the shelf-life or affect product performance (See handling and storage requirements).

HEALTH HAZARD DATA

Known Hazards:	Irritation of the eyes and skin is possible.
Signs and Symptoms of Exposure:	**Eyes -** Can cause irritation and watering but injury is unlikely. **Skin -** May cause irritation. **Inhalation** - No effects expected. Not considered to be a route of exposure. **Ingestion** – Not known.
Routes of Exposure:	Contact
Carcinogenicity:	IARC classifies crystalline silica as a Group I carcinogen based upon evidence among workers in industries where there has been long term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery. This product does not pose a dust hazard; therefore, this classification is not relevant.

Medical Conditions Aggravated by Exposure:	None known.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush with plenty of water. Contact a physician if symptoms occur.
Skin:	Wash with soap and water. Contact a physician if symptoms occur.
Inhalation:	No effects expected.
Ingestion:	Do not induce vomiting unless directed by a physician. Contact a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Safety glasses with side shields.
Skin Protection:	Impermeable gloves recommended.
Respiratory Protection:	Not required.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool, dry area preferably between 41° and 77° F. For industrial use only. Keep out of reach of children. Avoid prolonged or repeated contact with the skin. Do not rub the eyes after contact with the hands. Practice good hygiene; i.e. wash after using and before eating or smoking.
Spill Procedures:	No special requirements.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard. 29 CFR 1910.1200.
HMIS Codes:	Health 1, Flammability 0, Reactivity 0, PPE B
DOT Shipping Name:	Not regulated.
IATA / ICAO Shipping Name:	Not regulated.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product does not contain any ingredients that are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	**Technical Service:**	1 800 879 8000
Health / Safety:	1 800 879 6000	Jerry Metcalf	(x6704)
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.