

# CORNING

## Wall-Mountable Connector Housing Quick Start Guide (WCH-02P/-04P/-06P/-12P)

P/N 003-427-QSG  
Issue 2

- Refer to Standard Recommended Procedures 003-427 and 003-428 for complete instructions.
- Visit <http://www.corning.com/opcomm/videos> for additional information and videos
- Visit [www.corning.com/opcomm/safety](http://www.corning.com/opcomm/safety) for full safety precautions



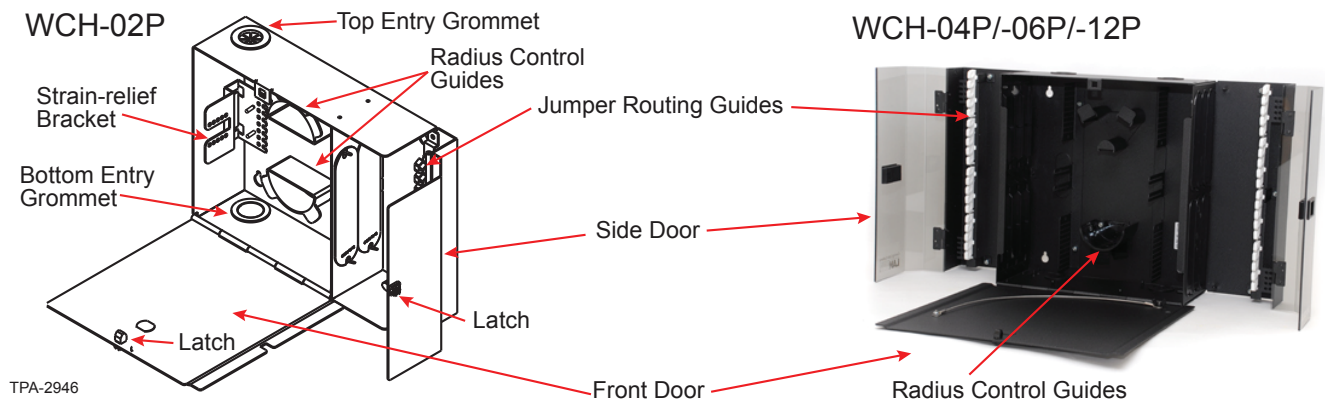
**CAUTION:** Recommend the use of safety glasses (spectacles) conforming to ANSI Z87, for eye protection from accidental injury when handling chemicals, cables or fiber. Pieces of glass fiber are very sharp and have the potential to damage the eye.



**WARNING:** DO NOT use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.



**WARNING:** Never look directly into the end of a fiber that may be carrying laser light. Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.



### 1. Carton Contents

- Wall-Mountable Connector Housing
- WCH-02P Hardware Kit:
  - (1) Laser warning label
  - (2) Fiber identification labels
  - (2) 8-32 Locknuts
  - (1) M6 washer
  - (1) U-shaped washer
  - (3) Cable ties
- WCH-04P/-06P/-12P (x2) Hardware Kit:
  - (1) Laser warning label
  - (6) Fiber identification labels
  - (1) 10-24 carriage bolt
  - (1) 10-24 wing nut
  - (2) M6 washers
  - (1) U-shaped washer
  - (3) Cable ties

## 2. Tools Required

- Phillips-head screwdriver
- Slotted screwdriver
- 5/16-inch (8 mm) socket or wrench
- 3/8-inch (10 mm) socket or wrench
- 11/32-inch (9 mm) socket or wrench
- Needle-nosed pliers
- Pencil, Pen or Marker

## 3. Additional Materials (Purchased Separately)

May or may not be required depending on your application

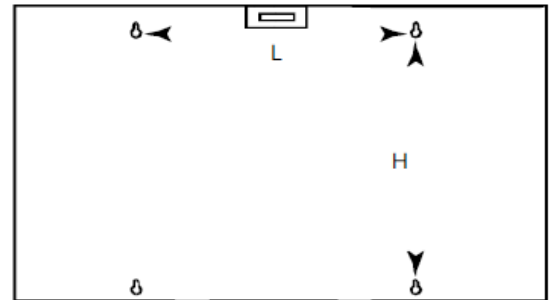
- Connector Panels (CCH-CPXX-YY)
- Mounting hardware appropriate for your installation
- Grounding kit (HDWR-GRND-KIT) for armored cable
- Buffer Tube Fan-Out kits (FAN-XX25-YY)
- Pigtailed Panels (CCH-CPXX-YY-P03ZZ)
- Pigtailed Modules (CCH-RMXX-YY-P03ZZ)
- Splice tray bracket (WCH-SPLC-2/-4-8/-12)
- Reduced Length Splice Trays
- External Strain-Relief (WCH-STRNRLF-KIT)

## 4. Mount the Housing to a Wall

**Step 1:** Open doors with quarter-turn or sliding latches (may require slotted screwdriver).

**Step 2:** Use the housing as a template and mark the mounting holes with a pencil, pen or marker.

- WCH-02P: L = 10 ¼ inches (26 cm), H = 7 ¼ inches (18 cm)
- WCH-04P/-06P: L = 12 inches (30.5 cm), H = 11 1/8 inches (28.3 cm)
- WCH-12P: L = 10 inches (25.4 cm), H = 11 1/8 inches (28.3 cm)

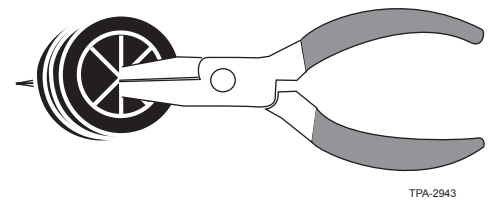


**Step 3:** Drive mounting hardware (not provided) into the wall at these locations, leaving a 1/8-inch gap between the wall and screw or bolt head.

**Step 4:** Place housing onto the mounting hardware and then tighten.

## 5. Cable Preparation

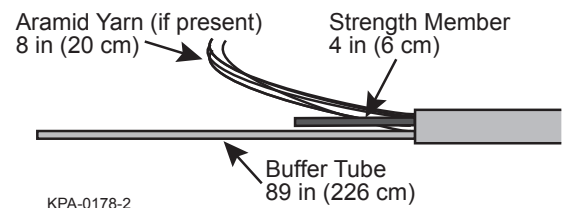
Pierce grommet with needle-nosed pliers or sharp pencil to ensure a tight seal around the cable and slide cable through hole.



### Loose Tube Cable

Access 89 inches of cable leaving 4 inches of strength member and 8 inches of yarn, if present.

**NOTE:** Do not expose the bare fiber until ready for termination.

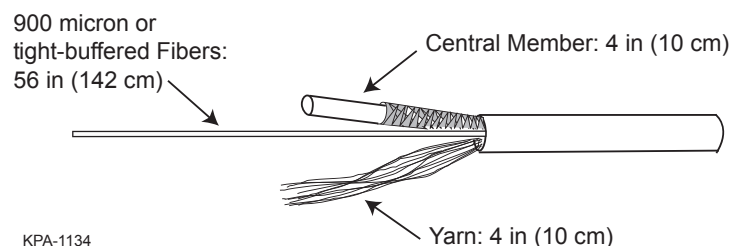


### Tight-Buffered Cable

**Step 1:** Access 56 inches of cable leaving 4 inches of strength member and 4 inches of yarn, if present.

**Step 2:** Ground armored cable according to instructions provided with kit:

- Use (1) HDWR-GRND-KIT per armored cable.



**IMPORTANT:** If you are installing outside plant cable or temperature fluctuates widely along any part of the cable, the strength members of the cable must be strain-relieved. Failure to do so may result in damage to the cable as temperature varies. Other situations only require the cable to be strain-relieved by sheath retention only.

### Cable sheath strain-relief

**Step 1:** Trim strength member and aramid yarn flush with the outer jacket

**Step 2:** Secure the cable to the strain-relief bracket with two cable ties.

### Strength member strain-relief

#### WCH-02P

**Step 1:** Secure the cable to the strain-relief bracket with two cable ties.

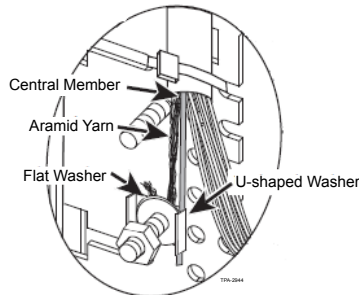
**Step 2:** Wrap the aramid yarn around the top stud for bottom entry or bottom stud for top entry in a clockwise direction.

**Step 3:** Install the U-shaped washer onto the stud.

**Step 4:** Insert strength member on top of the U-shaped washer.

**Step 5:** Place the flat washer over the strength member and secure with the locknut.

**Step 6:** Trim excess aramid yarn and strength member.



#### WCH-04P/-06P/-12P

**Step 1:** Secure the cable to the strain-relief bracket with two cable ties.

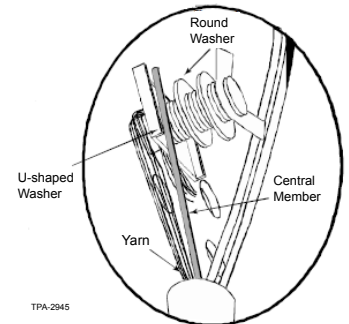
**Step 2:** Insert the carriage bolt through the strain-relief bracket and wrap the aramid yarn around it in a clockwise direction.

**Step 3:** Install the U-shaped washer, two flat washers and the wing nut as shown.

**Step 4:** Insert the strength member between the U-shaped washer and the first flat washer.

**Step 5:** Tighten wing nut.

**Step 6:** Trim excess aramid yarn and strength member.



## 6. Cable Routing

**IMPORTANT:** Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. DO NOT exceed the specifications for the cable you are installing which can be found on the spec sheet. DO NOT crush cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics ultimately resulting in replacement of the cable.

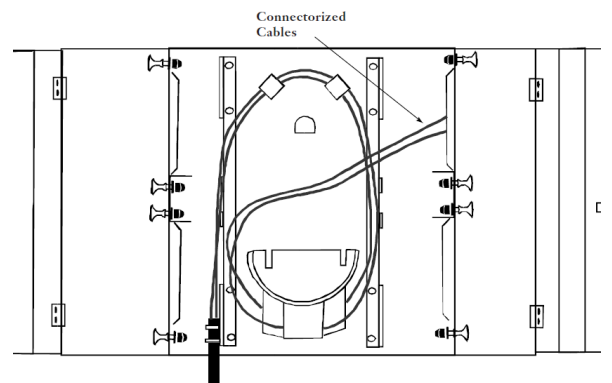
### For Tight-Buffered Cable with Factory- or Field-Installed Connectors

**Step 1:** Install connector panel.

**Step 2:** Terminate fiber if using field-installed connectors.

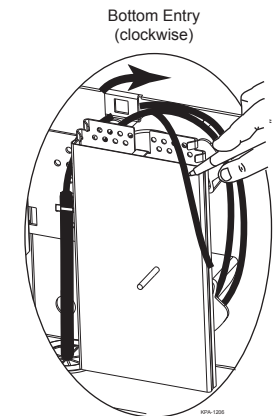
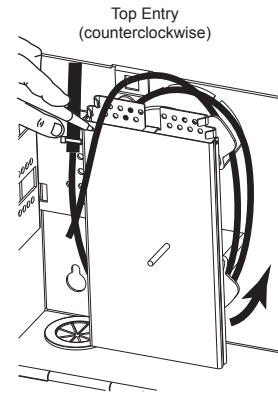
**Step 3:** Route fibers around radius control guides.

**Step 4:** Remove dust caps, clean and mate connectors.



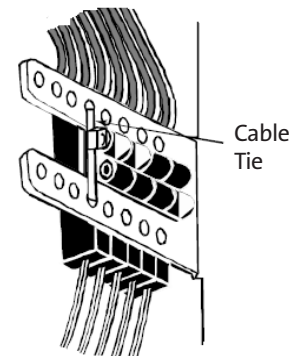
## For Splicing to Pigtailed Panels

- Step 1:** Install Pigtailed Panel into connector panel bracket.
- Step 2:** Install Splice Tray Bracket into housing according to the instructions provided with the kit.
- Step 3:** Route the buffer tube(s) in a clockwise or counterclockwise direction, depending on which entry port you use, around the radius guides.
- Step 4:** Route the pigtail(s) around the fiber guides so that they follow the route of the buffer tube(s) (may need to form figure-8 pattern).
- Step 5:** Temporarily position a splice tray in or on the bracket to determine adequate buffer tube slack.
- Step 6:** Mark the buffer tube(s) and pigtail(s)  $\frac{3}{4}$  inch from where they will enter the splice tray (WCH-02P shown).
- Step 7:** Unwind buffer tube(s) and pigtail(s) from the radius guides and bring them as pairs to a convenient splicing location.
- Step 8:** Access the buffer tube(s) and pigtail(s) to the mark and secure with cable ties to the splice tray.
- NOTE:** Follow instructions included in the splice tray for routing.
- Step 9:** Once splicing is complete, reroute the buffer tube(s) and pigtail(s) around the radius control guides and secure the splice trays with either a wing nut or a hook-and-loop strap.



## For Buffer Tube Fan-Out Kits

- Step 1:** Install connector panels.
- Step 2:** Install the fan-out kit(s) and connectors.
- Step 3:** Route the buffer tube around the radius control guides.
- Step 4:** Slide the fan-out body(ies) onto the fan-out bracket and secure with a single cable tie.
- Step 5:** Route the fanned-out fibers around the radius control guides, making sure to not violate the bend radius.
- Step 6:** Remove dust caps, clean and mate connectors.



## 7. Finalize Installation

- Step 1:** Record fiber identification on the label in a logical way and attach to inside of front door.
- Step 2:** Attach Laser warning label where it can easily be seen inside the housing.
- Step 3:** Secure all doors with quarter-turn or slide latches (may require slotted screwdriver).

