

CraftSmart FiberFirst Metallic Pedestal

Installation Manual



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Application

The CraftSmart FiberFirst Metallic Pedestal provides splice or inter-connect connectivity at the access point for the last mile drop.

Description

The CraftSmart FiberFirst Metallic Pedestal is an empty pedestal that allows customers to deploy in a wide variety of applications, including field-tested slack management and fiber splice trays to provide a craft-friendly splice only access solution. The CraftSmart FiberFirst Metallic Pedestal can be configured to support the specific drop cable, multi-fiber and ring cut requirements. The solid surface back plane makes it possible for customers to integrate multiple products inside the pedestals.



Technical Specifications

CraftSmart FiberFirst Metallic Pedestal	
Dimensions	42.1" H x 10.3" W x 10.2" D (1098.55 mm x 266.70 mm x 266.70 mm)
Cover Height	25" (793.75 mm)
Base Height (Buried)	12" (304.80 mm)
Material	Powder coated Galvanized steel
Density	Up to 144 splices (288 with additional splice tray)
Number of Splice Trays	Up to 12 (24 with additional splice tray bracket)
Splice Capacity	12 splices in each splice tray
Splice Tray Dimensions	10 mm H x 163 mm W x 126 mm D
Weight/Shipping	28 lbs. per ped - 16 per pallet

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Installing the Pedestal

These instructions provide general information useful for pedestal installation. This guide cannot anticipate all situations that could develop in the field. Rather, it represents information applicable to common installation conditions.

Site Preparation:

Ensure that national/local electrical and building codes, as well as OSHA and company safety work rules, are observed and provisions made for street flags, barricades, and cones. Secure permits as required by the city and company.

WARNING: Buried Telecommunications Cables - Call Before Digging

Excavation:

Measure the pedestal base from the bottom to the desired above ground height of the pedestal base. Measure the diameter of the pedestal base. Excavate a hole with the depth you measured plus 4-6 inches, as well as the diameter plus 8 inches, to give 4 inches of room to work with on each side. Confirm the excavation floor is level.

Installation:

Tamp and level the floor of your excavated hole. Clearfield highly recommends the installation of a vapor barrier, which will go below the crushed rock floor of the excavated area. Once the vapor barrier is installed, place 4"-6" of crushed rock and level, then place the pedestal. Optionally, install the pedestal stake. Proceed to backfilling around the outside of the pedestal, tamping and leveling the earth once backfill is completed. Finally, fill the base of the pedestal with at least 6 inches of crushed rock.

Note: Base material shall be crushed rock 3/4" and smaller, and not "river rock" or "round stone." Desired compaction and equivalent resistance to lateral loading will not be achieved with round stone. The rock should be free of soil and organic material.

Pedestal Access

The FiberFirst Metallic Pedestal lid can be removed by loosening the two security bolts at the bottom sides of the lid. Using a can wrench or 7/16" socket, loosen the bolts and lift the lid away.

To reinstall the lid, ensure the top of the pedestal is aligned within the lid and slot the security screws on both sides back into the notches cut in the lid prior to tightening.



Grounding

Clearfield recommends that all grounding installations follow the "per local practice" guidelines for each application.

A ground bar is located on the inside of pedestal on the back wall.



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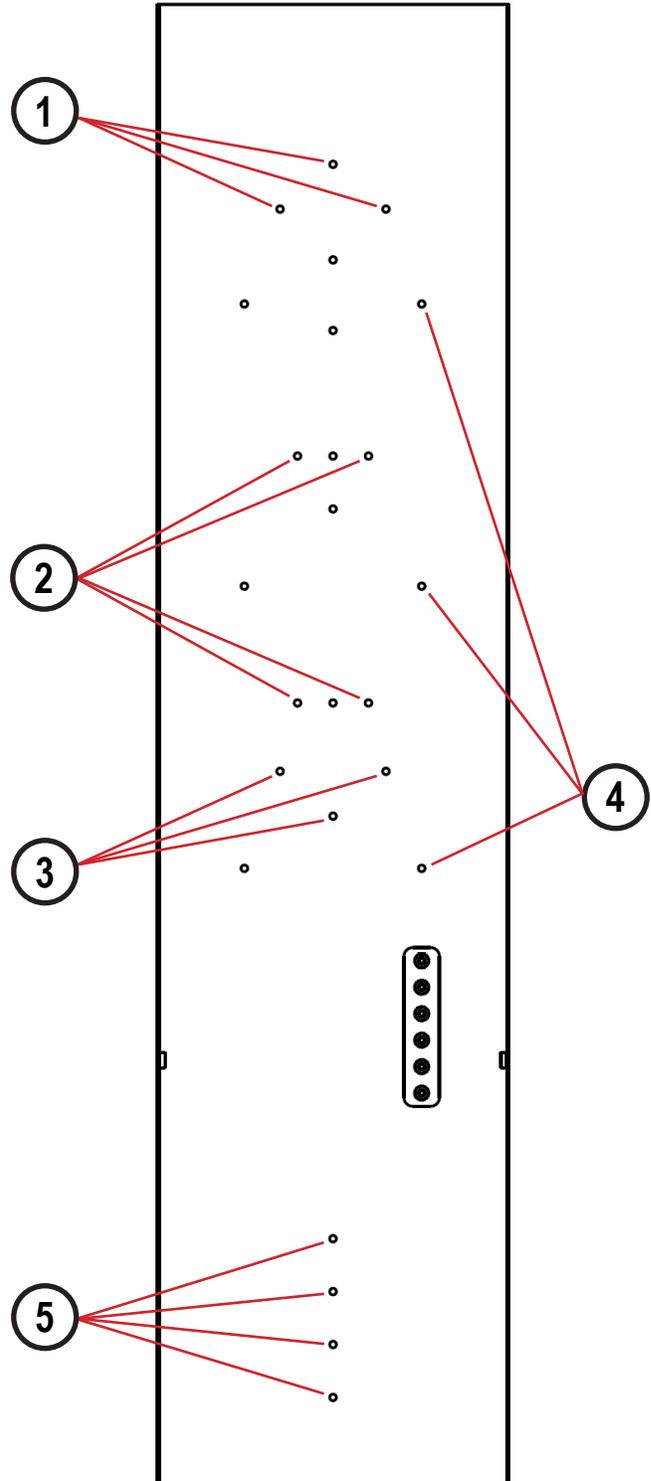
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Drilling Locations - Splice Only

On the back plane of the FiberFirst Metallic Pedestal are dimples which indicate the locations to drill holes for installing Clearfield products into the pedestal. Below is a list of the drilling locations for each part of a Splice Only configuration, and the recommended drill bit size to use to create each hole.

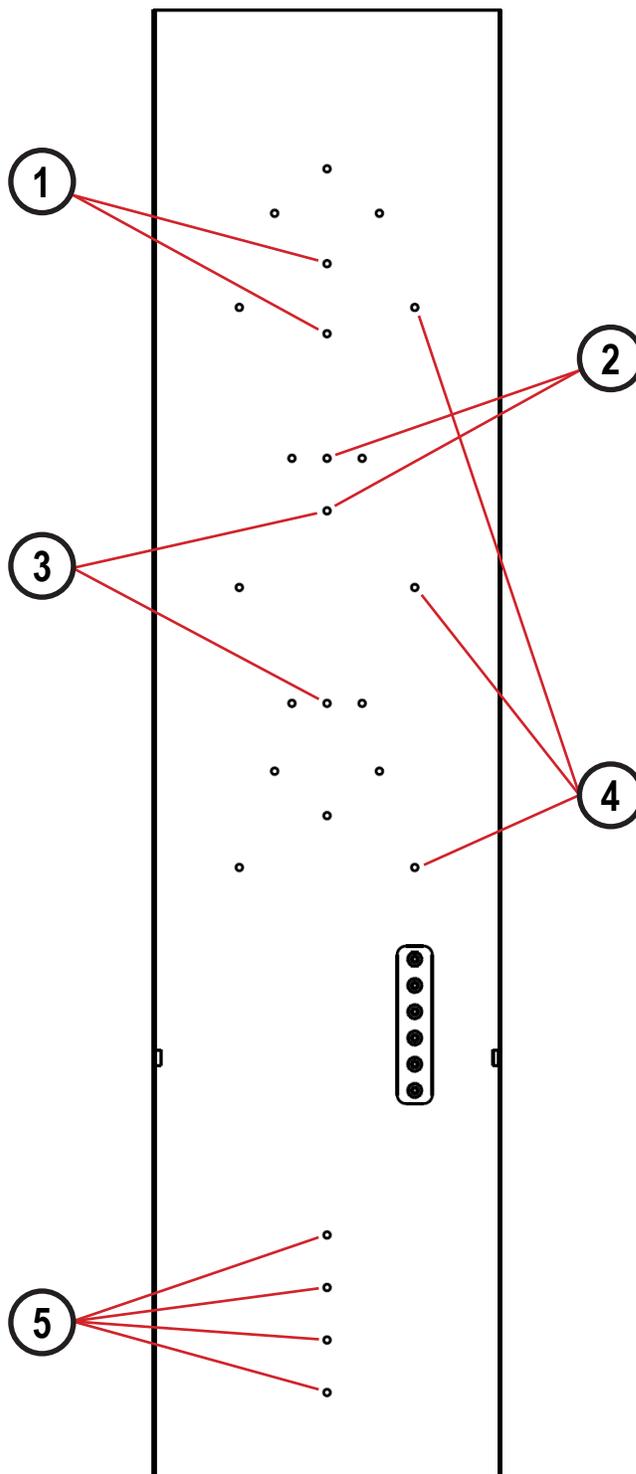
1. Top radius limiter, 1/4" bit, hardware provided
2. Top and bottom splice tray mounting brackets, 3/6" bit, hardware provided
3. Bottom radius limiter, 1/4" bit, hardware provided
4. Protection wrap, 3 dimples on each side, part and hardware customer supplied
5. Pedestal stake, part and hardware customer supplied



Drilling Locations - Terminals

On the back plane of the FiberFirst Metallic Pedestal are dimples which indicate the locations to drill holes for installing Clearfield products into the pedestal. Below is a list of the drilling locations for each part of a mounted terminal configuration, and the recommended drill bit size to use to create each hole.

1. SeeChange Terminal mounting bracket or top mounting bracket for YOURx-Terminal, 1/4" bit
2. SeeChange Terminal mounting bracket, top or bottom mounting bracket for YOURx-Terminal, 1/4" bit
3. YOURx MPT mounting bracket, 1/4" bit
4. Protection wrap, 3 dimples on each side, part and hardware customer supplied
5. Pedestal stake, part and hardware customer supplied



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Splice Only Configuration

Using the guide on the drilling locations page, locate and drill out the dimples needed to install both radius limiters and your splice tray bracket(s). Install the radius limiters and the splice tray bracket(s).

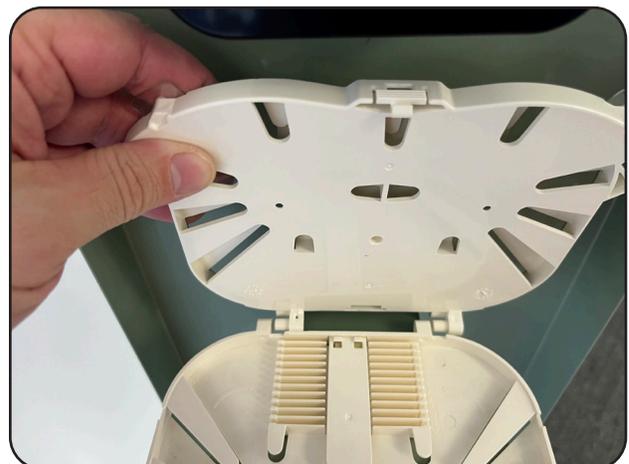


The FiberFirst Metallic Pedestal is capable of holding up to 144 splices by adding up to twelve 12 fiber trays to the included bracket. With the addition of a second splice tray bracket, the FiberFirst Metallic Pedestal can accommodate up to 288 splices.

Note: *If more than 6 trays are used, you will not be able to hinge the entire stack to access lower splices. Although the bracket will accommodate 12 trays, Clearfield recommends only using 6 trays for 72 splices.*

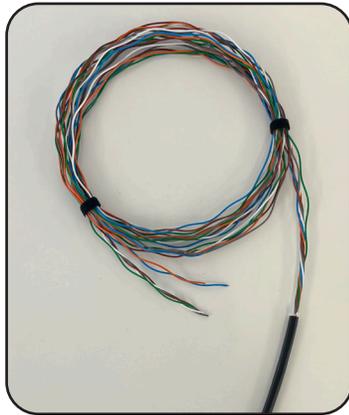
The first sacrificial splice tray is pre-installed. Trays can be added by sliding the new tray onto the hinge pins and then folding it down to snap the tray in place.

Note: *The bottom tray is “sacrificial” because it must be screwed into place and cannot be removed for splicing as easily as the other trays.*



OSP distribution cables that are entering or exiting the pedestal can be prepped in either a ring cut/mid-span opening fashion or at the end of the cable. The pedestal is designed to hold up to 15 feet of buffer tube from a 144 OSP cable, most manufacturers recommend not exposing more than 20 feet in an OSP environment. This rule is especially true for ring cut/mid-span applications. Adjust slack length for cable count, and include an additional 3 feet for splicing in the splice tray.

After splicing, reinstall the splice strays and store your slack around the radius limiters.



End of Cable



Ring Cut/Mid-Span



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Ribbon Splice Trays

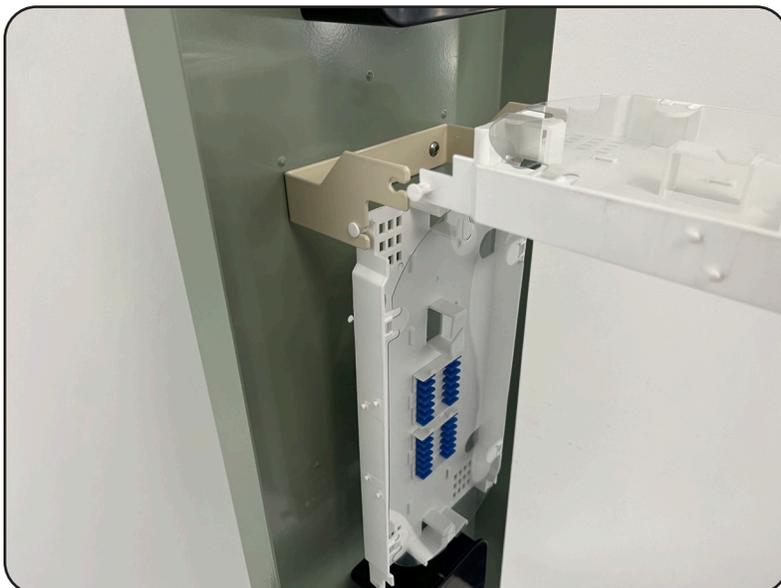
The FiberFirst Metallic Pedestal can hold up to two 144 fiber ribbon splice trays. Using the template provided with the ribbon splice tray kit, install the splice tray mounting bracket and the splice tray bumper onto the back plane of the pedestal in-between the top and bottom radius limiters.

Feed the velcro strap through the splice tray bumper bracket.



Insert the splice trays into the splice tray mounting bracket as needed. Splice trays must enter the bracket while in a horizontal position, then allowed to swing downwards. Splice trays cannot be pulled out of the bracket while in a vertical position.

Proceed to splicing per local practice, securing the splice trays with the velcro strap when finished.



Mounting Terminals in the FiberFirst Metallic Pedestal

SeeChange Terminal

1. Install the top piece of the mounting bracket to the top of the SeeChange Terminal using the two provided screws.
2. Using either of the sets of dimples indicated on the drilling locations page, drill out your holes and secure the mounting bracket to the back plane of the pedestal.
3. Slide the bolt of the top piece of the mounting bracket into the gap on main bracket and tighten the wing nut to secure the terminal in place



YOURx-Terminal Top Mount

1. Install the top piece of the mounting bracket to the top of the YOURx-Terminal using the two provided screws.
2. Using either of the sets of dimples indicated on the drilling locations page, drill out your holes and secure the mounting bracket to the back plane of the pedestal.
3. Slide the bolt of the top piece of the mounting bracket into the gap on main bracket and tighten the wing nut to secure the terminal in place



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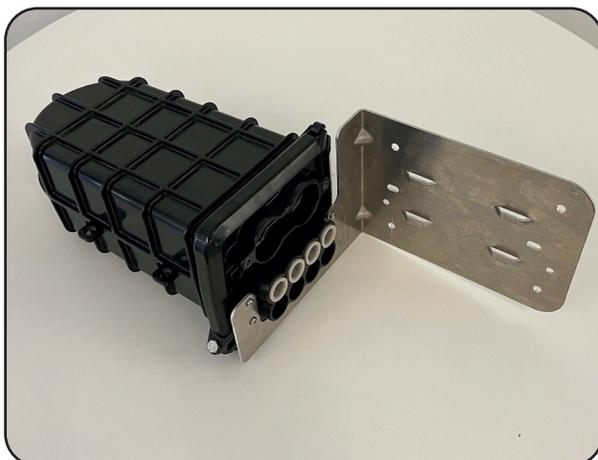
YOURx-Terminal Bottom Mount

1. Using the set of dimples indicated on the drilling locations page, drill out your holes and secure the mounting bracket to the back plane of the pedestal.
2. Using the provided hardware, secure the YOURx-Terminal to the mounting bracket via the four screw holes located around the base of the terminal.



YOURx Multi-Purpose Terminal

1. Using the set of dimples indicated on the drilling locations page, drill out the holes for the MPT mounting bracket.
2. Using the provided hardware, secure the YOURx Multi-Purpose Terminal to the mounting bracket via the four screw holes located on the base of the terminal.
3. Secure the MPT mounting bracket to the back plane of the pedestal.



Connector Cleaning Procedure

Whether factory terminated or field spliced, clean connectors are essential for proper system operation. Even the smallest dust particle can cause transmission problems, so for optimal network performance inspect, and if necessary, clean connectors and adapters prior to mating.

Inspect Then Connect

These are Clearfield recommended products/applications. Use the product you feel will complete your cleaning procedures. Create a “best practice” for your company and follow those procedures.

The use of Chemtronics end face and bulkhead cleaning products and techniques ensures a clean end face, no matter the type of contamination.

Before cleaning any connector, be sure you know what type of contaminate you are cleaning (dry, fluidic, or combination). All the available products are good, it's the process that you need to be aware of. Using a dry cleaning method to clean “dirt” can lead to scratching of the end face. Learn the process of cleaning properly.

Note: It is **NOT** recommended to use isopropyl alcohol to clean the end face.

Cleaning an SC/LC Connector

Cleaning the End Face

- Place one wiping paper on QbE-2 FiberSafe™ Cleaning Platen. (Figure 1)
- Apply small amount of precision cleaner (about 1” in diameter) with Electro-Wash MX pen on to one end of the wipe. (Figure 2)
- Hold end face at a 90 degree angle. For APC connection, adjust by slightly tilting the container or end face. Angle is correct when no drag is felt on the end face. (Figure 3)
- Draw end face from wet to dry part of the wipe 3 times. Use just enough pressure to ensure complete contact between end face and the wipe.

Note: **DO NOT** retrace previous step.



Figure 1



Figure 2



Figure 3

Cleaning the Ferrule

- Lightly moisten the fiber optic swab (2.5mm/38542F or 1.25mm/38040) by spotting a small amount (about 1") of Electro-Wash PX or Electro-Wash MX pen onto the QbE. Hold the swab, 1 side down to the wetted area and hold for a count of 1-2-3-4-5. (**Figure 4**)



Figure 4

- Insert swab into side of ferrule, wet side to the ceramic ferrule and circle around 2-3 times and remove. Turn swab to dry side and repeat. (**Figure 5**)



Figure 5

Cleaning the Mate Through an Adapter AND the Adapter Itself

- Lightly moisten the fiber optic swab (2.5mm/38542F or 1.25mm/38040) by spotting a small amount (about 1") of Electro-Wash PX or Electro-Wash MX pen onto the QbE. Hold the tip of the swab onto the wetted area and hold for a count of 1-2-3-4-5.
- Insert the swab into the adapter to the connector, press lightly against the connector, twist 2-3 times, remove and discard.
- Dry with a second dry swab.
- Inspect, repeat cleaning if necessary, and test for signal strength.
- Use additional swabs to clean inside the actual adapter. Moisten swab, like above, and insert through hole and remove while twisting. (**Figure 6**)

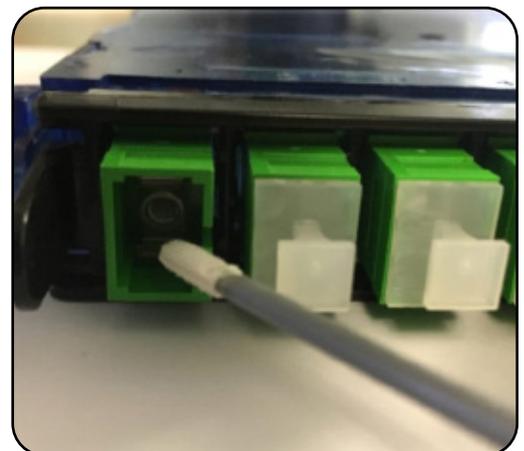


Figure 6

Cleaning an MPO/MTP Connector

Male Connector

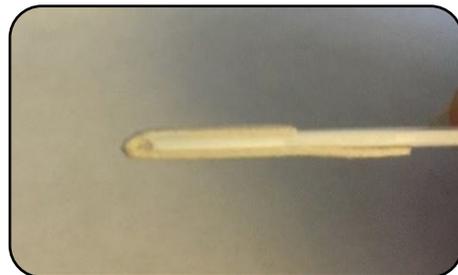
- Use of Chemtronics MTP Connector Cleaning Swabs (CC505F) is recommended. Even after cleaning with a probe cleaner, you should always clean the pins with this (or an equivalent) type swab. Cleans ALL MTP/MPO connector end faces. This swab also cleans the “pins” of the male connector



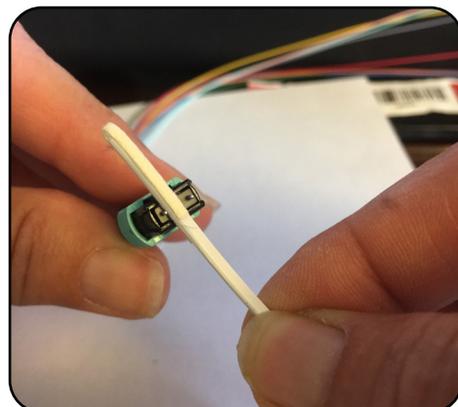
- Lightly “spot” a QbE-2 wipe on the platen with Electro-Wash PX Fiber Optic Cleaner, the FiberWash or MX Pen.



- Lightly touch short side of the MTP/MPO Connector Swab to the wetted area (3-5 secs) to absorb some cleaning solution (DO NOT over saturate the swab).



- Wipe connector areas to be cleaned, sliding pad from bottom of pad across and forward to tip of swab, from 1 side to the other, turn over and use long side to dry in same movement.

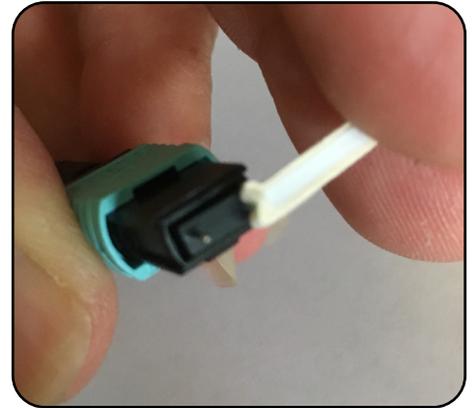
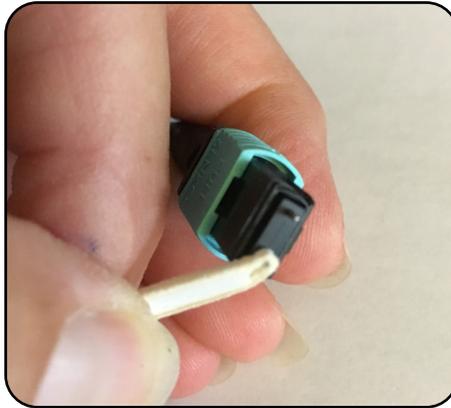


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- Use the hole on end of pad to clean one alignment pin, then press the end of the swab into the other pin to clean.
- Check your work with a fiber scope. This can take several attempts to get the endface clean.

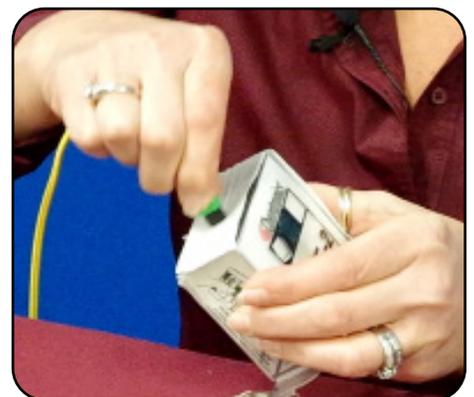


Female Connector (without pins)

- Cleaned like a single fiber connector, using a cleaning platform. The receptacles will be cleaned as long as you are using a combination cleaning process as recommended.
- Again, using a platen, moisten the platen with cleaning solvent on one end to accommodate 3 swipes of the MPO female endface.

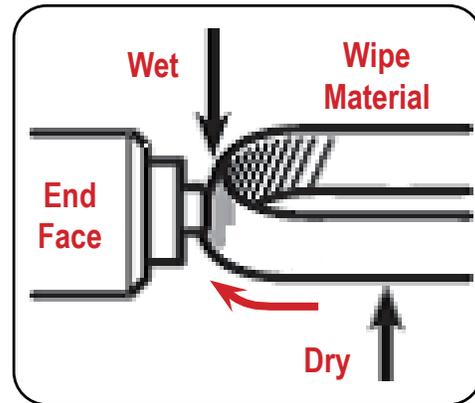


- Holding the connector (If APC, slightly at an angle to accommodate for 8° angle) swiping with medium pressure, from the wet area into the dry area 3 times, without wiping over previous area.
- Inspect, and if clean, make the connection. If NOT, repeat above steps until clean or if determined that the end face is damaged (based on standards of 5 cleanings per connection), replace.

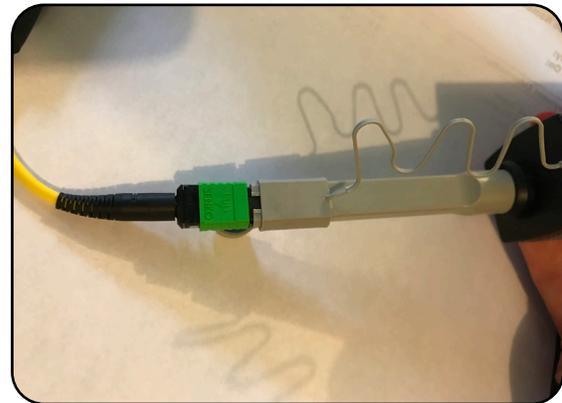
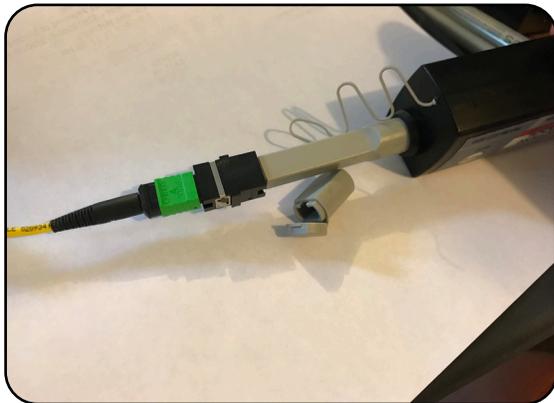


Cleaning Using a Probe-Style Cleaning Tool

- The probe style cleaning tools are capable of cleaning a connector end face separately or through the adapter.
- Slightly engage probe by pulling back but do not allow to click. Lightly “spot” a QbE-2 wipe on the platen with Electro-Wash PX Fiber Optic Cleaner, this will help alleviate “over saturation” of the material.
- Lightly touch the tip of probe and release.



- Insert connector or insert probe through adapter and click 2-3 times to move past the wet area and allow material to dry wipe.



- Inspect connector, repeat if necessary (following standards)
- If cleaning a male connector, clean the pins (see above)

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Standard Warranty

Clearfield warrants to the original purchaser of the Product sold hereunder is free from defects in material and workmanship under normal use and service, subject to exceptions stated herein. Product purchased is warranted as follows: Clearfield designed and branded Products are warranted for three (3) years; Products manufactured by Clearfield to customer prints and/or specifications are warranted for one (1) year; and any Product Clearfield acquires from or through a third-party manufacturer or distributor and resells to Customer as the original customer will carry the manufacturer's pass-through warranty, if any. In all cases, the warranty period commences on the date of shipment to the original purchaser.

Warranty Claim Procedure

If any Product purchased from Clearfield is found defective under the above warranty, the following basic procedure must be followed:

1. Customer must contact Clearfield and obtain a Return Materials Authorization
2. Following authorization, the Customer ships the product-freight collect to Clearfield's manufacturing facility
3. Clearfield shall repair or replace the defective Product at its sole option and discretion, and return the repaired or replacement Product to Customer's site, freight prepaid

Note: If the Product is not found to be defective by Clearfield, the product will be returned to the Customer and the customer billed for freight in both directions.

View our warranty policy here: <https://www.seeclearfield.com/warranty.html>

Limitations of Warranty

Correction of defects by repair or replacement, at the option of Clearfield Inc, shall constitute the exclusive sole remedy for a breach of this limited warranty. Clearfield shall not be liable under any circumstances for any special, consequential, incidental, punitive, or exemplary damages arising out of or in any way connected with the product or with agreement to sell product to buyer, including, but not limited to damages for lost profits, loss of use, or for any damages or sums paid by buyer to third parties. The foregoing limitation of liability shall apply whether the claim is based upon principles of contract, warranty, negligence or other tort, breach of statutory duty, principles of indemnity or contribution, the failure of any limited or exclusive remedy to achieve its essential purpose, or otherwise.

Clearfield will not be responsible for any labor or materials costs associated with installation or incorporation of Clearfield products at customer sites, including any costs of alteration, replacement or defective product, or any field repairs.

Other Limitations

Clearfield assumes no warranty liability regarding defects caused by:

1. Customer's modification of Product, excepting installation activities described in Clearfield documentation
2. Customer re-packaging of Product for shipment to third parties or destinations other than those originally shipped to by Clearfield, or any defects suffered during shipping where the Product has been re-packaged
3. Customer's installation or maintenance, excepting activities described in and performed in accordance with Clearfield documentation
4. Customer's improper or negligent use or application of Product
5. Other causes external to the Product, including but not limited to accidents, catastrophe, acts of God, government action, war, riot, strikes, civil commotion, sovereign conduct, or the acts or conduct of any person or persons not party to or associated with Clearfield
6. Environmental factors and weathering resulting in aging and damage not necessary or applicable to the function of the product



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However, no guarantee is given or implied that the document is error free or that it is accurate with regard to any specification.

Technical Support

Clearfield, Inc. can be contacted for any issues that arise with the supplied product.

If you need to return the supplied product, you must contact the Clearfield, Inc. Customer Service Department to request a Returned Materials Authorization (RMA) number.

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