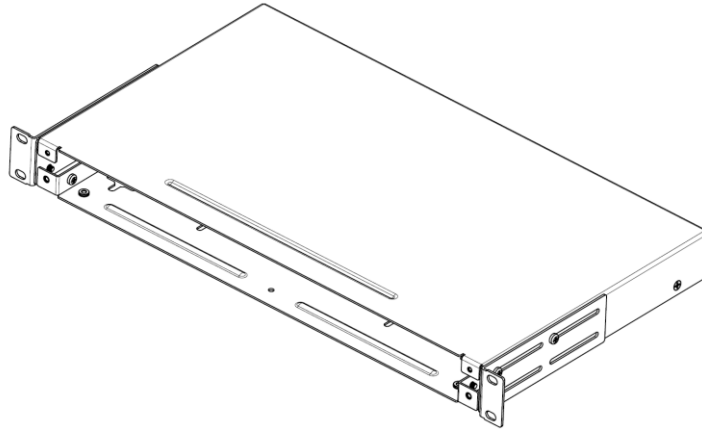


### 1U MULTI-FUNCTION ENCLOSURE INSTALLATION INSTRUCTIONS

**Note: Refer to page 9 for Installation instructions of previous Generation-2 design**

**WARNING:** Improper use of this product or failure to follow these instructions may result in equipment damage and personal injury. Read and understand all instructions for proper installation and use of this product.



#### 1.0 SCOPE

This document will provide installation instructions of the Multi-Function Fiber Enclosure.

#### 2.0 PRODUCT DESCRIPTION

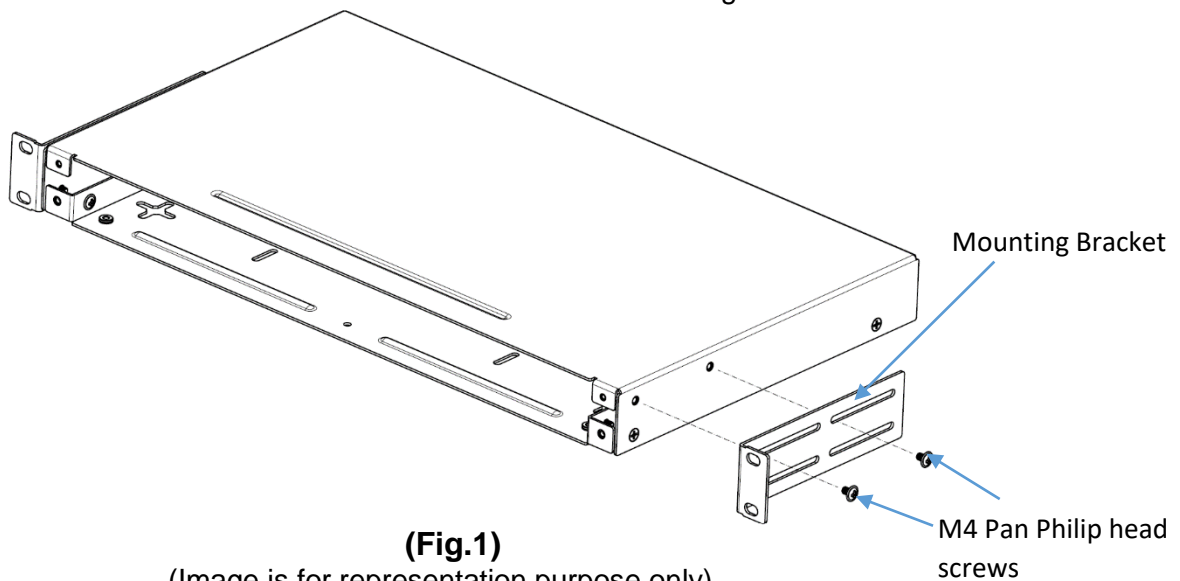
The Multi-Function Fiber Enclosure provides the ability to mix and match a variety of Molex's Optical Fiber platform in a single Enclosure.

#### 3.0 PROCEDURE:

##### 3.1 FIBER ENCLOSURE:

Installing adjustable mounting brackets for rack and Cabinet mounting (Fig 1).

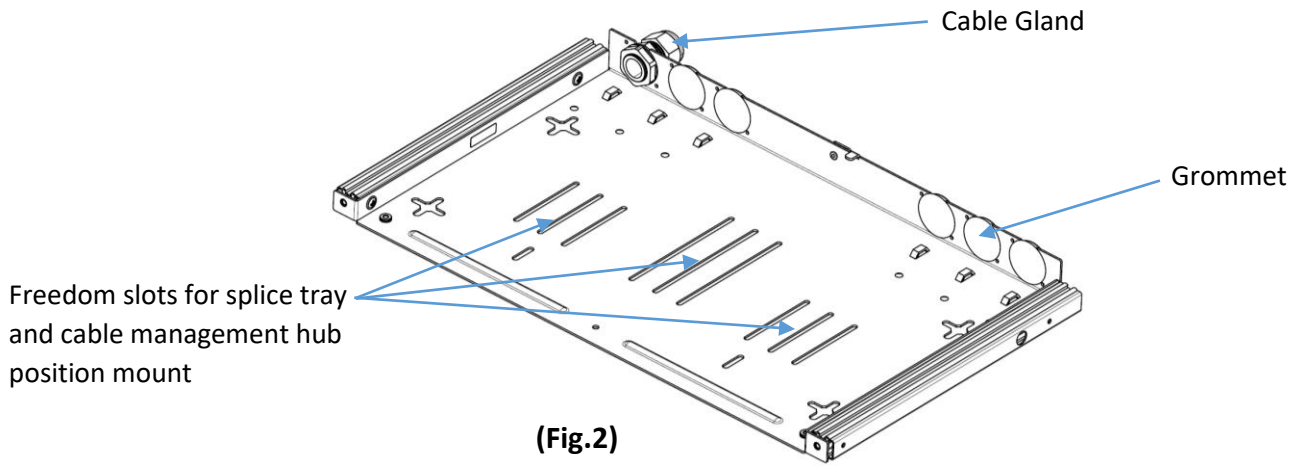
- Mounting brackets can be installed in any position within the available slot which affect the depth of the enclosure installed in the rack or cabinet.
- Use M4 Pan wafer Phil head screws to fix each mounting brackets to the Enclosure.



Installing cable gland, cable grommets into base tray (Fig 2).

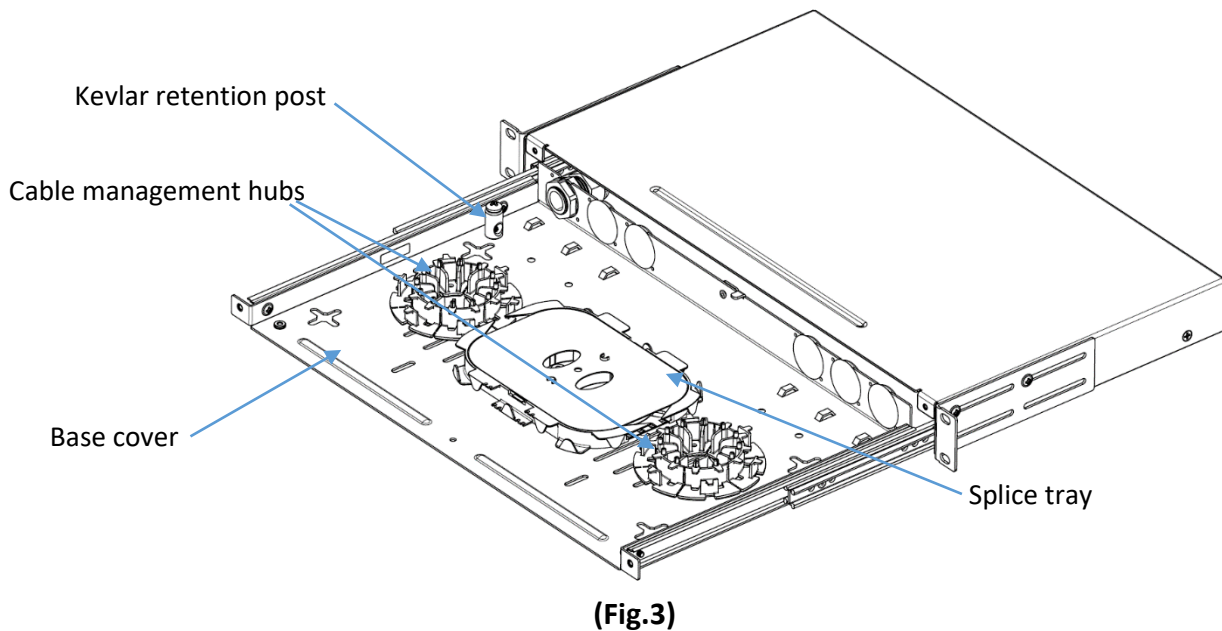
- Cable grommets are installed in the hole of base tray in line with groove provided in it.
- Cable glands are inserted in the hole and fastened with nut provided.

ENGINEERING RECORD NO: 735736	SAP NO: 187000423	Doc No: AS-18700-117	Doc part: AS	REV- D
<a href="http://www.molexces.com">http://www.molexces.com</a>				



Installation of splice tray (not provided) and Cable management hubs with pads (2 numbers each provided in the kit) (Fig 3).

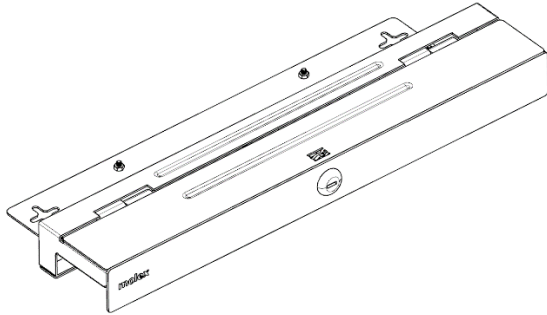
- Slide drawer out (base cover) to its point of full extension.
- Splice trays (2X24F Splice trays can be mounted) and cable management hub are stuck to the base tray.



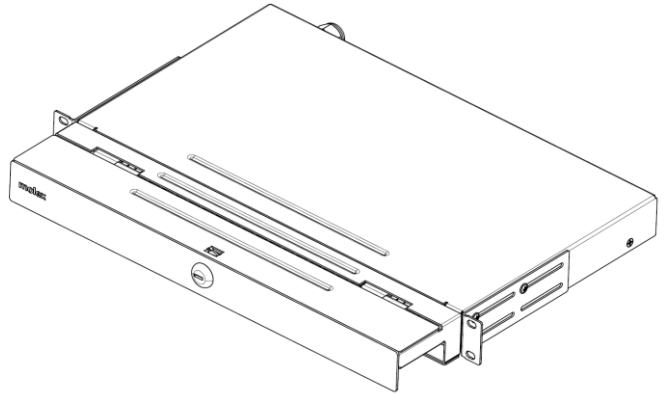
### 3.2 LOCKING KIT and CABLE MANAGEMENT EXTENSION (Optional):

The locking kit and cable management extension are compatible and retrofittable to all Multi-Function Fiber enclosures regardless of front adapter plate. Provides a cable management front of adapter plates for patch cords and Pigtails.

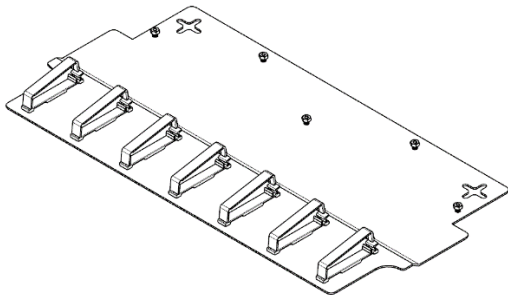
The enclosure has an optional **Front locking kit (Fig.4)** and optional front **Cable management (Fig.5)** to securely route patch cords.



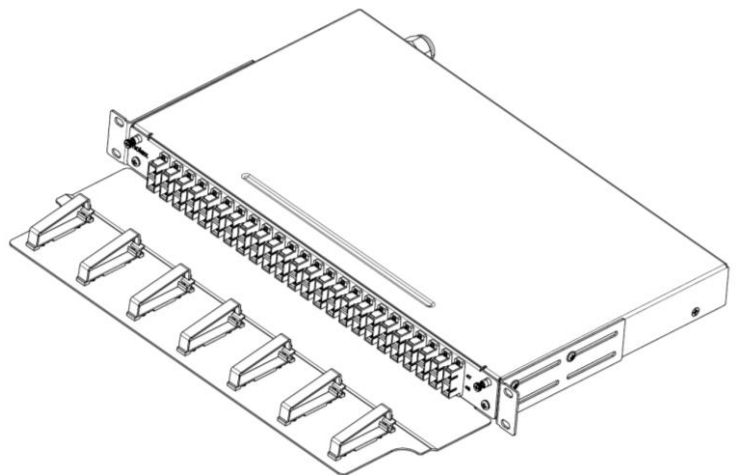
(Fig. 4)



(Assembly condition)



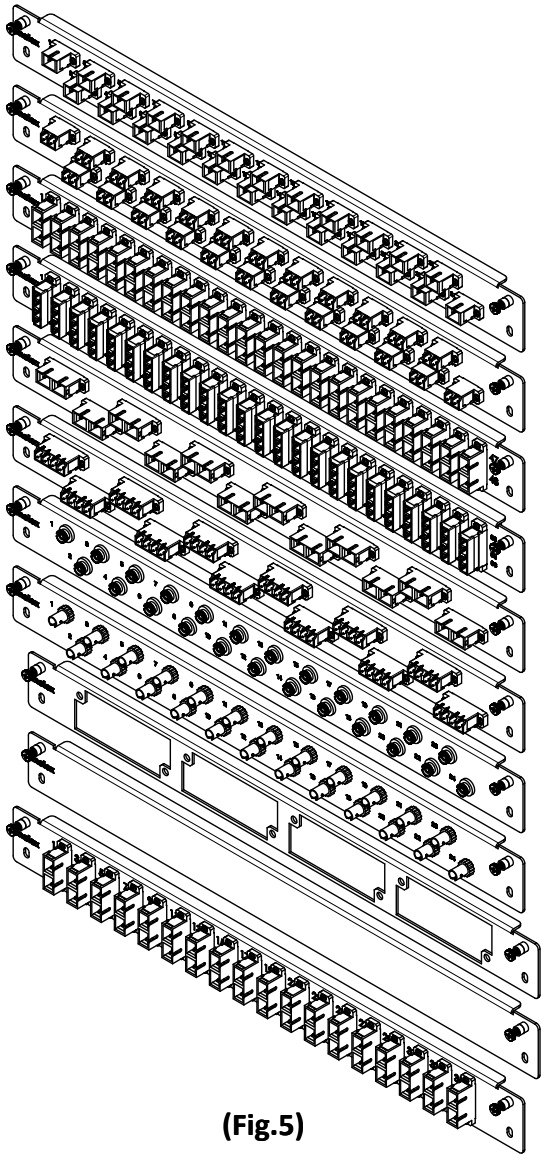
(Fig.4)



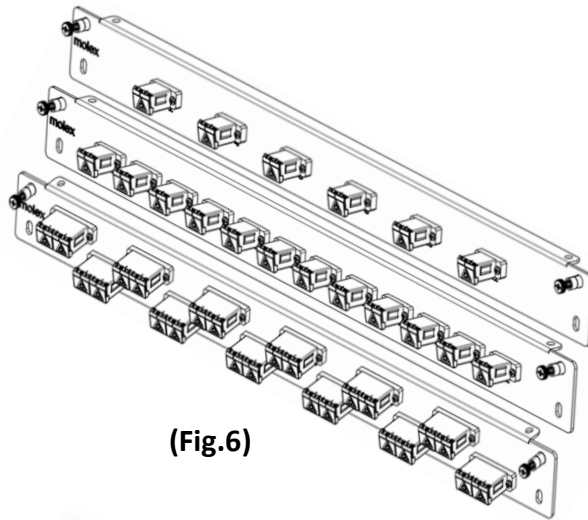
(Assembly condition)

### 3.3 FRONT ADAPTER PLATE FOR MFE AND PON (AFR's):

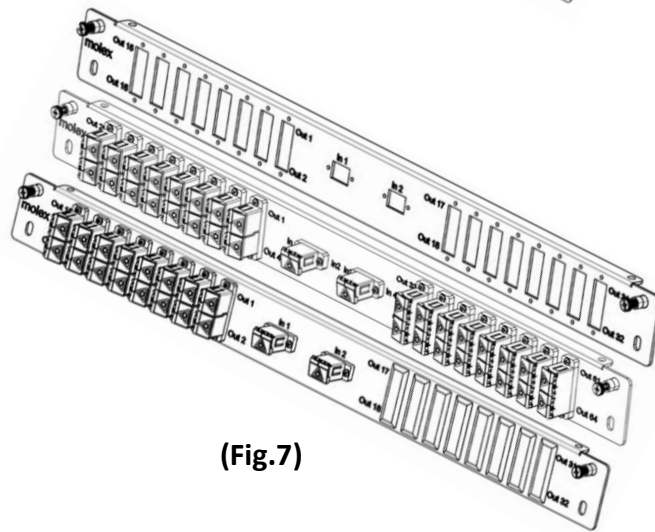
Adapter plates are available in multiple combinations (Fig.5, 6 & 7). Up to 96 fibers may be spliced, with combinations of shuttered and un-shuttered versions adapters, and plates in loaded and unloaded versions. (Contact Molex for the part numbers).



(Fig.5)



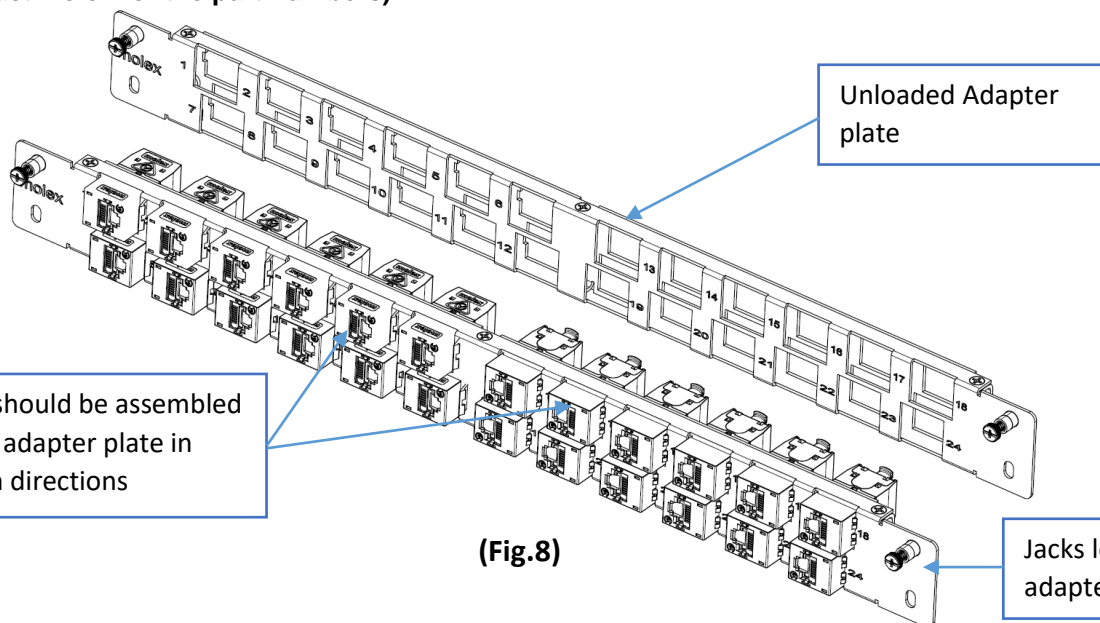
(Fig.6)



(Fig.7)

**FRONT 24P JACK ADAPTER UNLOADED PLATE (AFR) (Fig.8):**

MFE Jack Adapter plate can accommodate up to 24 Jacks (Molex C6A FTP, C6 UTP & C5E UTP).  
**(Contact Molex for the part numbers).**

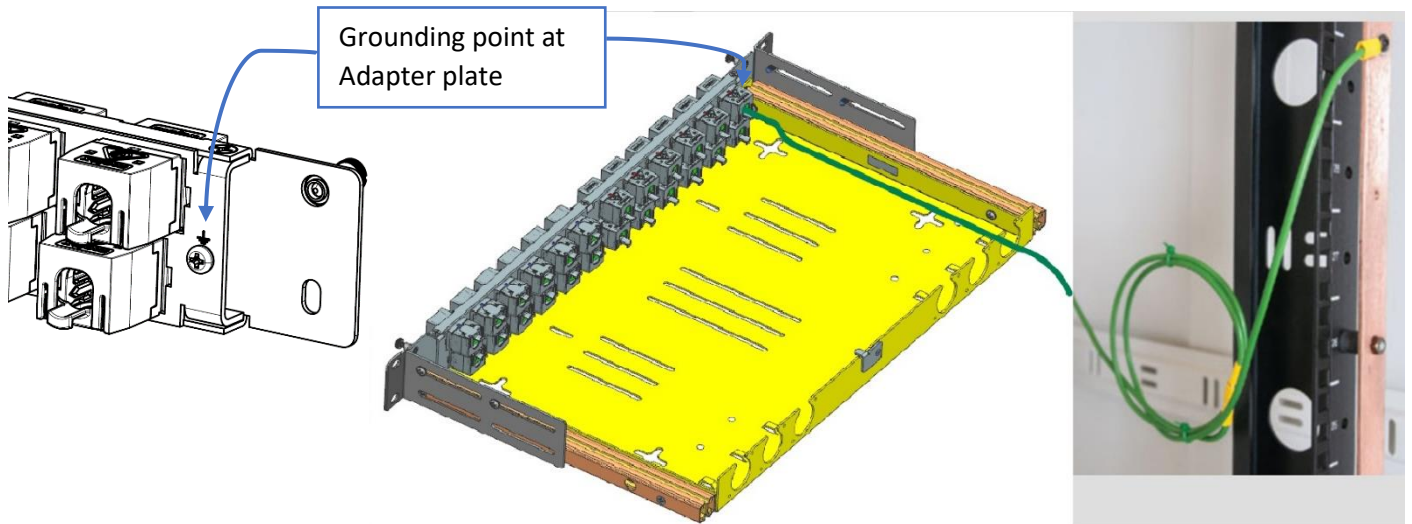


(Fig.8)

(Image is for representation purpose only)

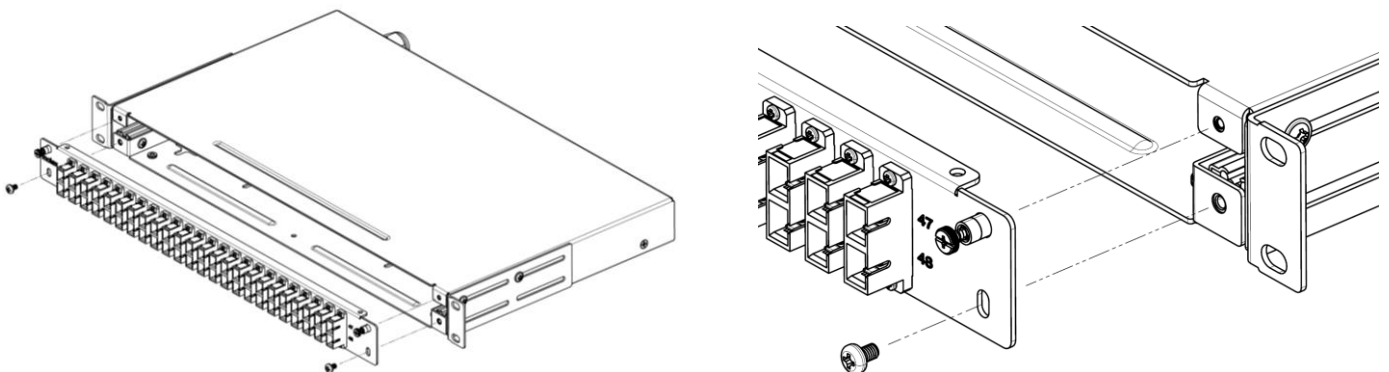
### 3.4 MFE JACK ADAPTER PLATE GROUNDING WITH RACK/CABINET (Fig.9):

- Jumper/grounding cable to be connected from Jack Adapter plate grounding point to the grounding point/bus bar in Rack/Cabinet.
- As enclosure base will be used to slide toward front & backward during installation, ensure cable length at enclosure rear end to be coiled (as below shown example) with cable/twist ties and then connected to Rack/Cabinet.
- Connection should be made using appropriate hardware at both locations.



(Fig.9)

### 3.5 ASSEMBLY OF ENCLOSURE, FRONT ADAPTER PLATE (Fig.10):

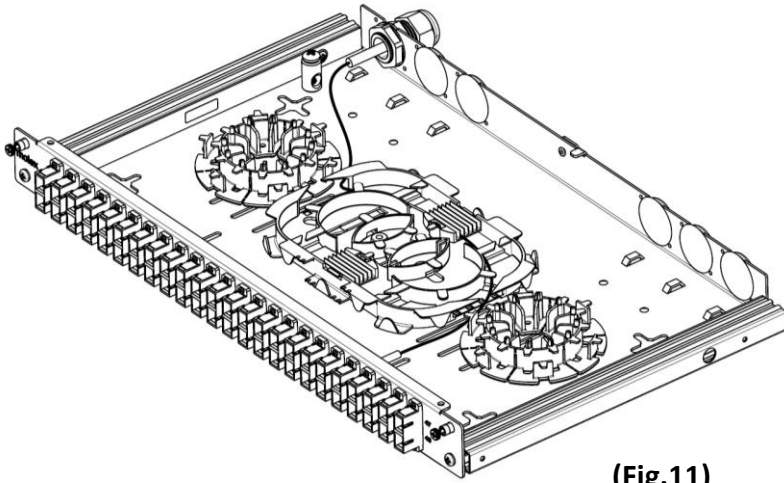


(Fig.10)

Position the adapter plate in the appropriate location and push the captive screws to fasten it to top cover screw hole provided. Additional pan head screw is to be used to fasten it to base tray.

### 3.6 Cable slack and routing (Fig. 11).

- Adequate slack must be included inside the enclosure for the sliding drawer to pull out.
- Full extension of the drawer is 140 mm
- Molex recommends a minimum of 0.5 meter of slack to be stored inside the enclosure for tight buffered and loose tube cables.
- Provide a minimum of 140-180mm of slack between the cable entry point and management hubs.

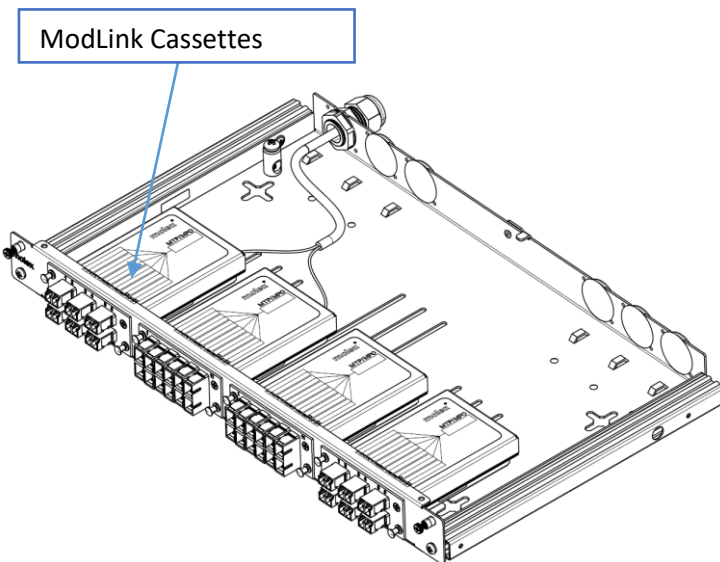


**CAUTION:** Molex recommends wearing safety glasses when cutting fiber optic cable.

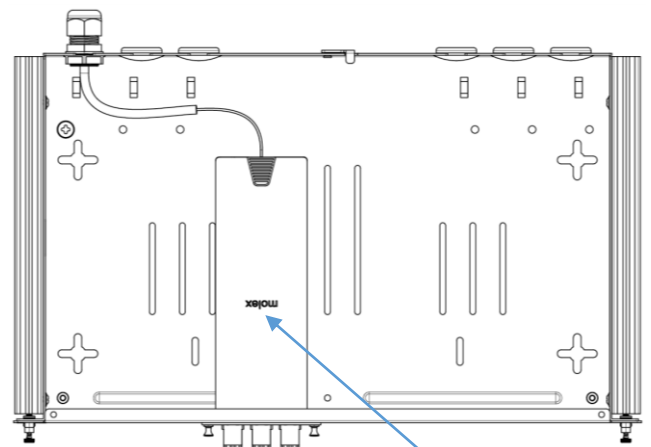
(Fig.11)

**3.7 Installing ModLink / Splice cassette:**

- Up to four ModLink / Splice cassettes may be installed in the enclosure in different combinations.
- Position the cassette in the appropriate location within the enclosure and push the two corner fasteners gently until they will go no further or hear a click sound.



(Fig.12)



(Fig.13)

**4.0 WALL MOUNT APPLICATION (FIG.14):**

Assembly Sequence – Wall mounting Enclosure

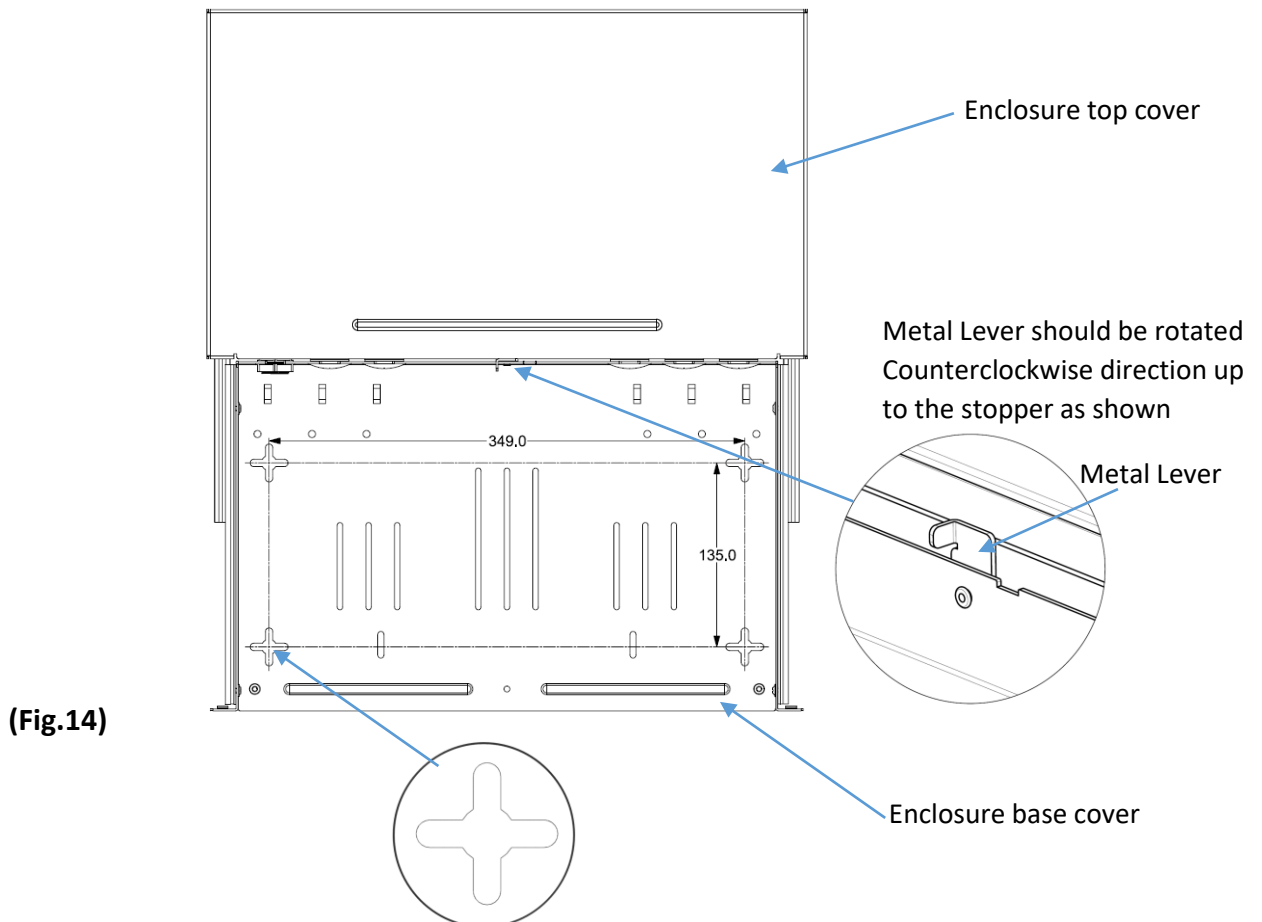
Before installing the Enclosure, ensure that the wall or mounting surface has sufficient strength to support the wall mount and expected wall mount payload.

Recommended hardware's


- Use No.18 wood screws (not provided) to mount enclosure to wall surface such as plywood. When mounting enclosure to any other wall type, use appropriate mounting hardware screw (not provided) and must be obtained locally.
- Washer M10 X 2mm thick Qty as required (not provided).

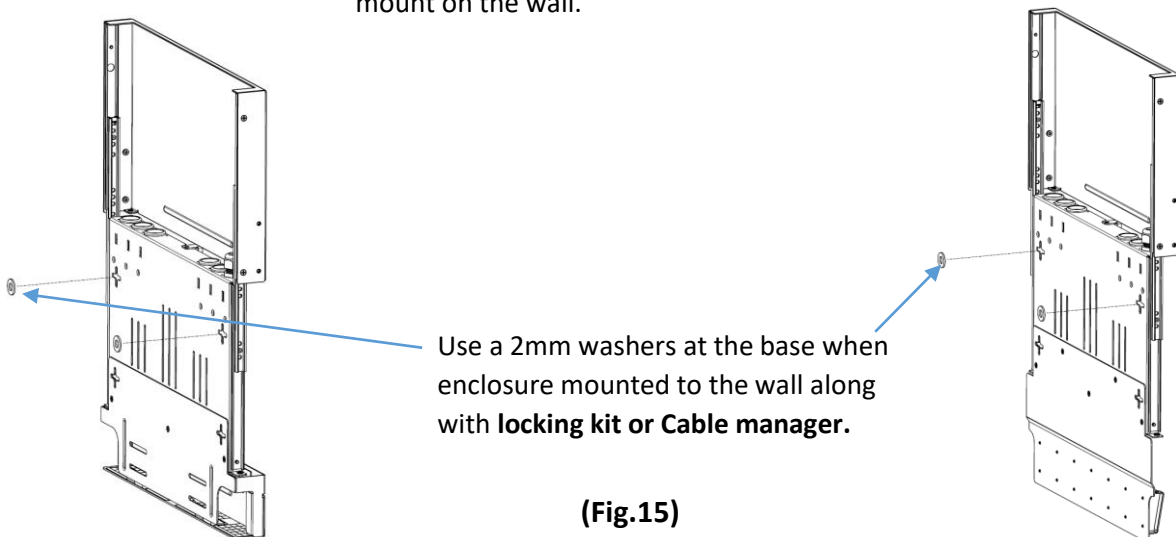
#### 4.1 STEPS:

- Secure the enclosure with screws on mounting surface for suggested pitch dimension in all the four positions by providing, as a minimum, a 5mm to 6mm gap to hang the enclosure base.
- Align and hang down the enclosure base callout four slots to the secured screws.
  - Tighten all the screws maximum, without allowing space for Enclosure base for any movement.
  - Use a 2mm thick washer at the base, when enclosure is mounted to the mounting surface along with Locking kit/cable manager extension. (Fig. 15)
  - Use the available riveted metal lever (with free rotational movement) rotating 90 degrees (Clockwise /Counter clockwise) direction to stop/secure the enclosure top cover (as shown below) when enclosure base is mounted in the below shown position to work on fiber routing (termination and any other installation work) and bring back the lever to original position by lifting and holding the top cover slightly up after installation completion.



(Fig.14)

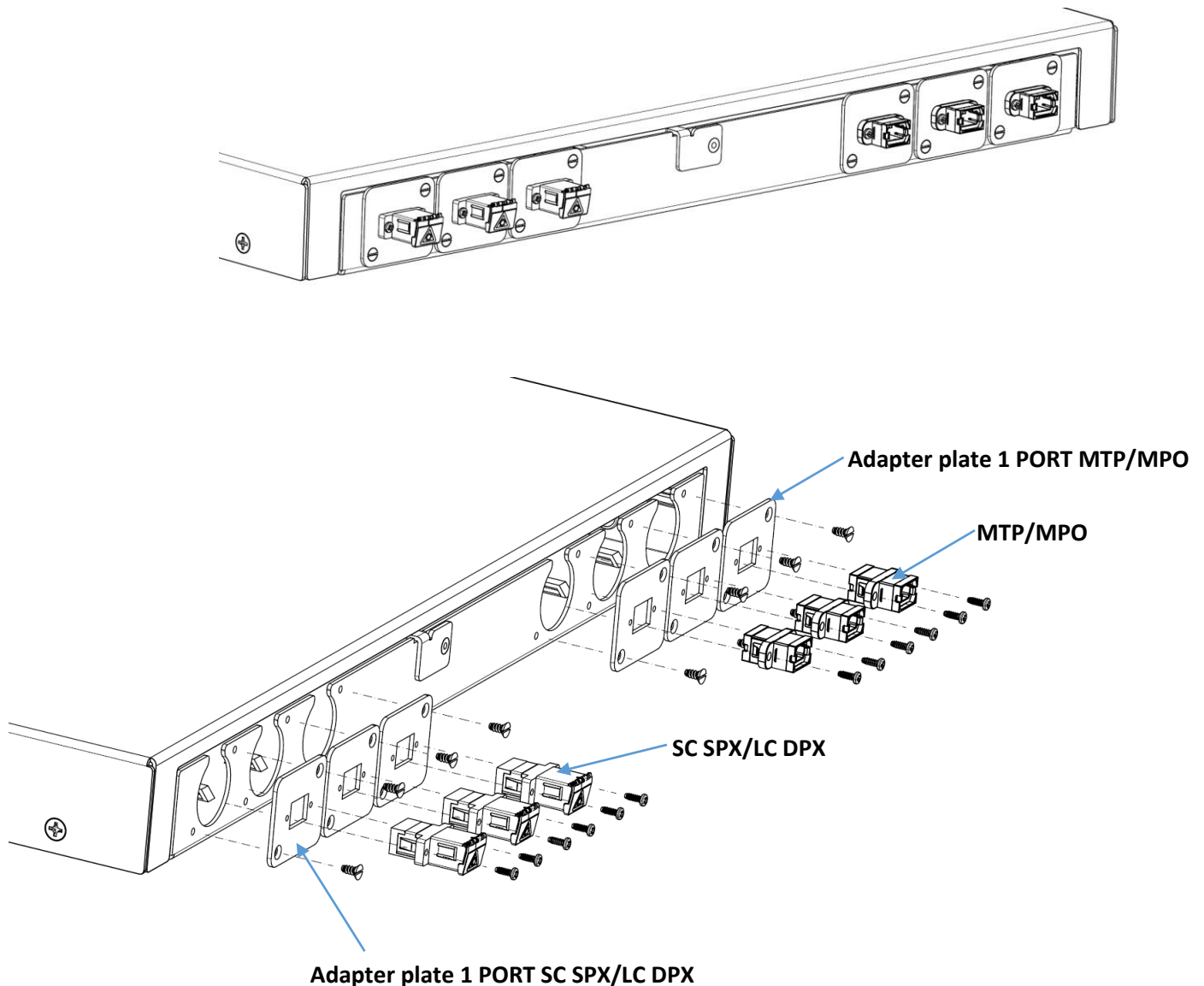
Mounting callout slot (in all 4 positions) provides freedom for all four directions to mount on the wall. 



(Fig.15)

## 5.0 ALLOW FIXING OF ADAPTERS AT CABLE ENTRY APERTURES (OPTIONAL) (FIG. 16):

- As shown in Fig.14, rear side of this enclosure has the option to accommodate SC SPX/LC DPX and MTP/MPO adapters, both flange and snap mount, with 1 PORT SC SPX/LC DPX, and MTP/MPO adapter plate (contact Molex for part numbers).
- Using Synergy Footprint allows SC/APC or LC/APC modules to be fitted – facilitating the fitment of Splitter Kits.
- Using MPO Adapters allows the enclosure to be used as a plug and play product – with use of breakout Kits.
- Fix the 1 PORT SC SPX/LC DPX and MTP/MPO adapter plate with screws (M3X6.5 CSK thread cutting) on mounting surface and tighten all the screws.
- Fix the adapters into the available adapter plates cutouts and tighten them with the screws if they are flange mount adapters.



(Fig.16)



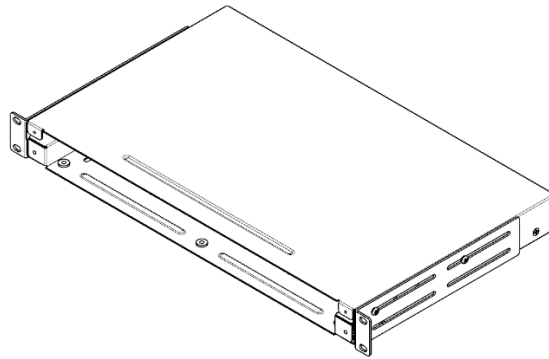
### WARNING:

1. Never look into the connector of an MTP assembly or terminated fiber. Laser light may be present and is invisible. Serious eye damage is possible.
2. Dust caps should be left intact on all adapters not in use. Never look into an open adapter, as laser light may be present and is invisible. Serious eye damage is possible.



# 1U MULTI-FUNCTION ENCLOSURE INSTALLATION INSTRUCTIONS

**WARNING:** Improper use of this product or failure to follow these instructions may result in equipment Damage and personal injury. Read and understand all instructions for proper installation and use of this product.



## 1.0 SCOPE

This document will provide installation instruction of the Multi-Function Fiber Enclosure.

## 2.0 PRODUCT DESCRIPTION

The Multi-Function Fiber Enclosure provides the ability to mix and match a variety of Molex's Optical Fiber platform in a single Enclosure.

## 3.0 ROCEDURE

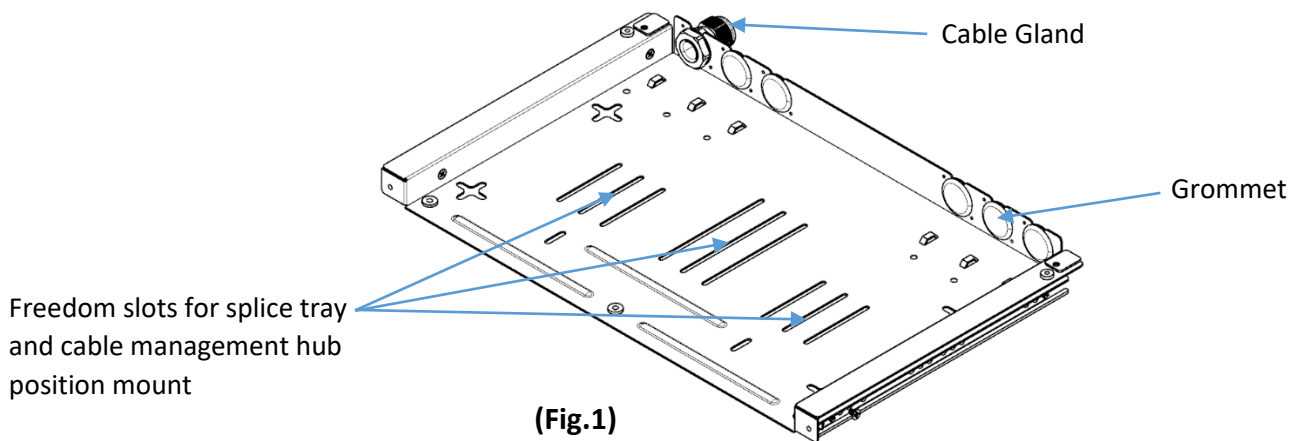
### 3.1 FIBER ENCLOSURE:

Installing adjustable mounting brackets for rack and Cabinet mounting.

- Mounting brackets can be installed in any of the 5 positions within the available slot which affect the depth of the enclosure installed in the rack or cabinet.
- Use M4 Pan Phil head screws to fix each mounting brackets to the Enclosure.

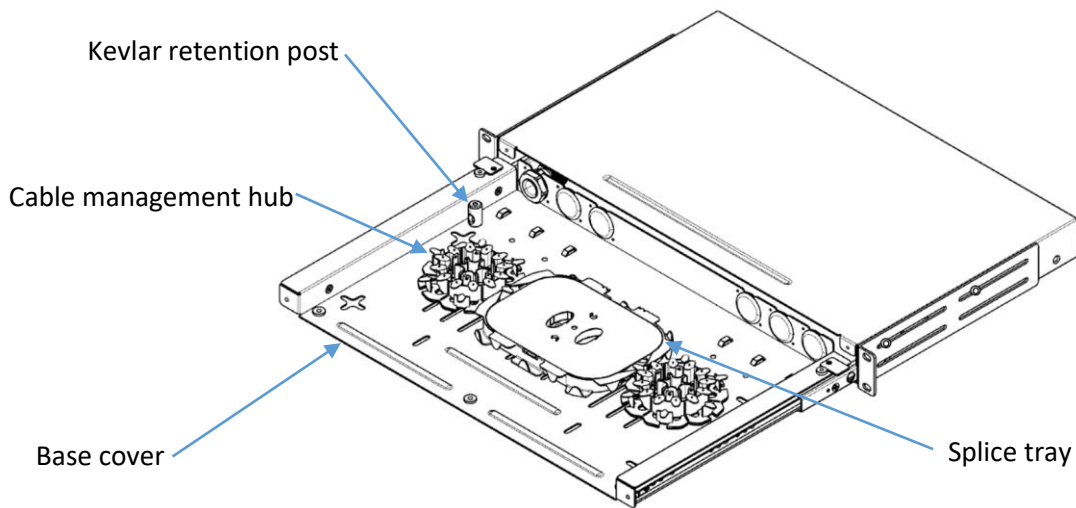
Installing cable gland, cable grommets into base tray.

- Cable grommets are installed in the hole of base tray in line with groove provided in it.
- Cable glands are inserted in the hole and fastened with nut provided.



Installation of splice tray (not provided) and cable management hub (1 piece provided).

- Slide drawer out (base cover) to its point of full extension.
- Splice trays (2X24F Splice trays can be mounted) and cable management hub are stuck to the base tray.

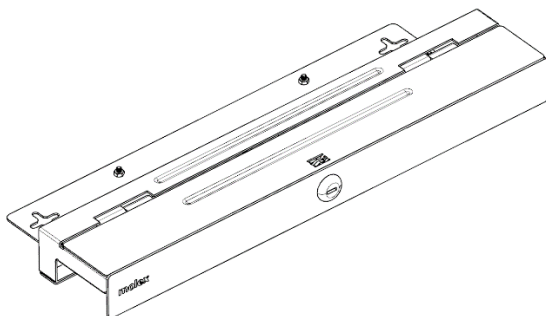


(Fig.2)

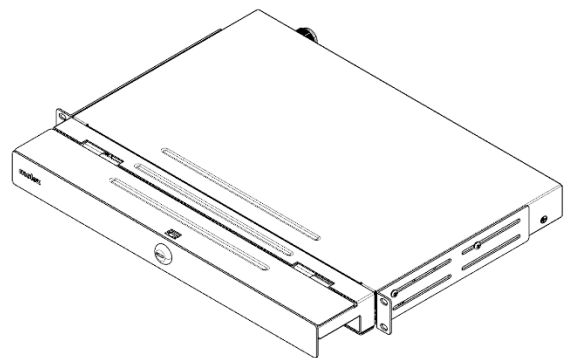
### 3.2 LOCKING KIT and CABLE MANAGEMENT EXTENSION (Optional):

The locking kit and cable management extension are compatible and retrofittable to all Multi-Function Fiber enclosures regardless of front adapter plate. Provides a cable management front of adapter plates for patch cords and Pigtails.

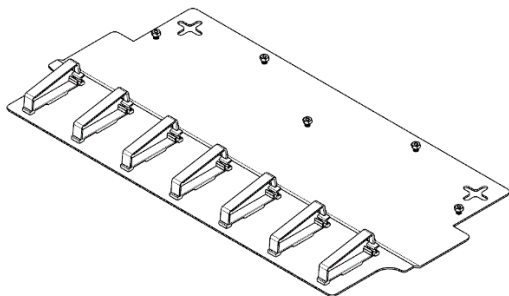
The enclosure has an optional **Front locking kit (Fig.3)** and optional front **Cable management (Fig.4)** to securely route patch cords.



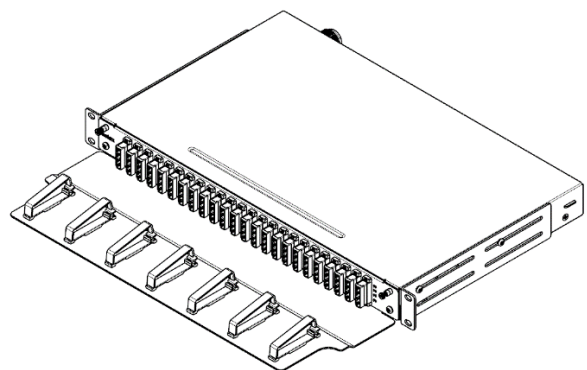
(Fig. 3)



(Assembly condition)



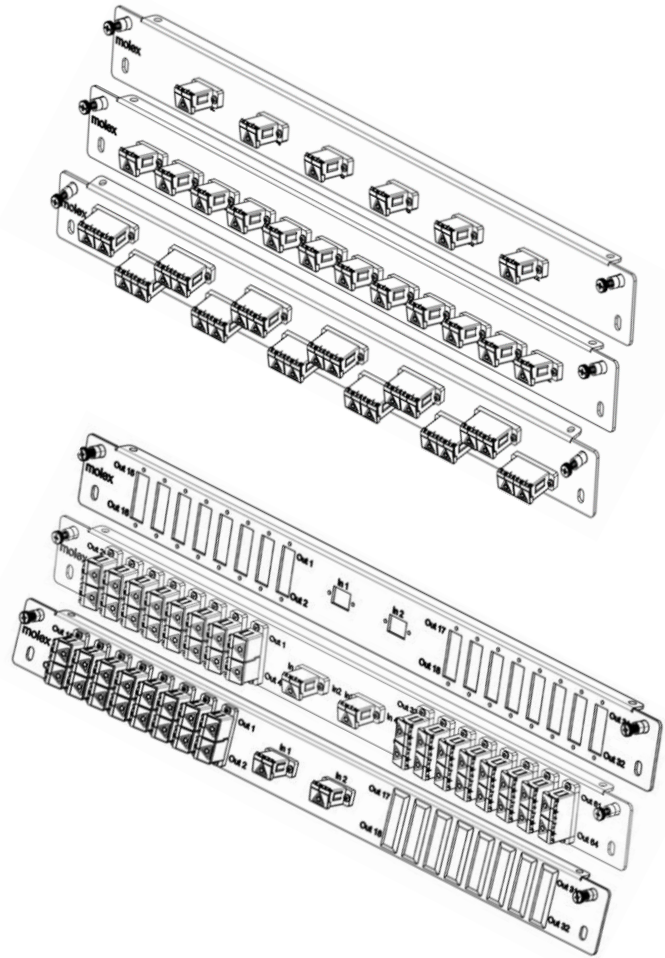
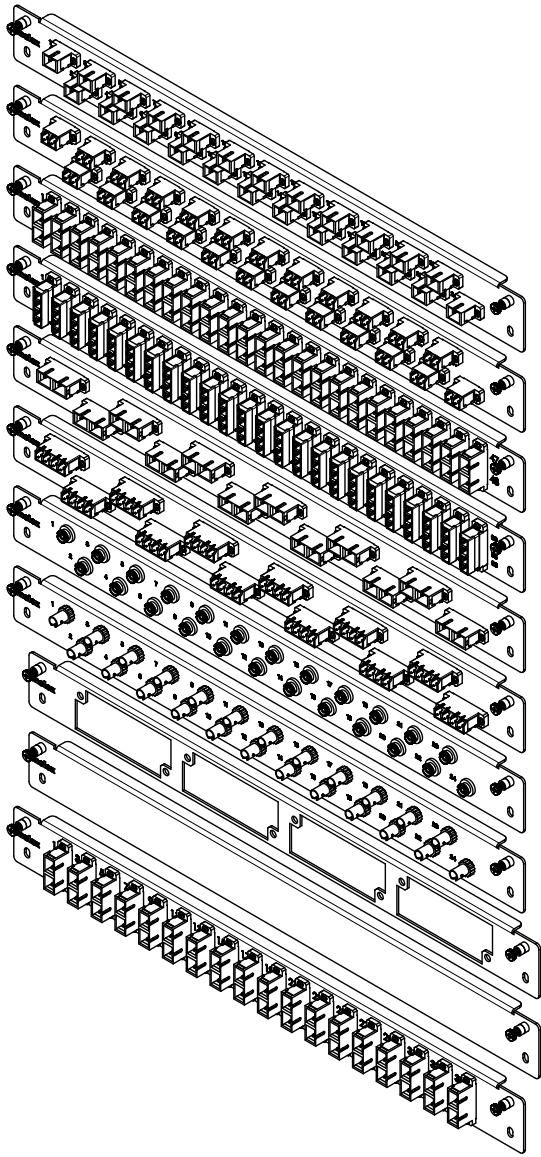
(Fig.4)



(Assembly condition)

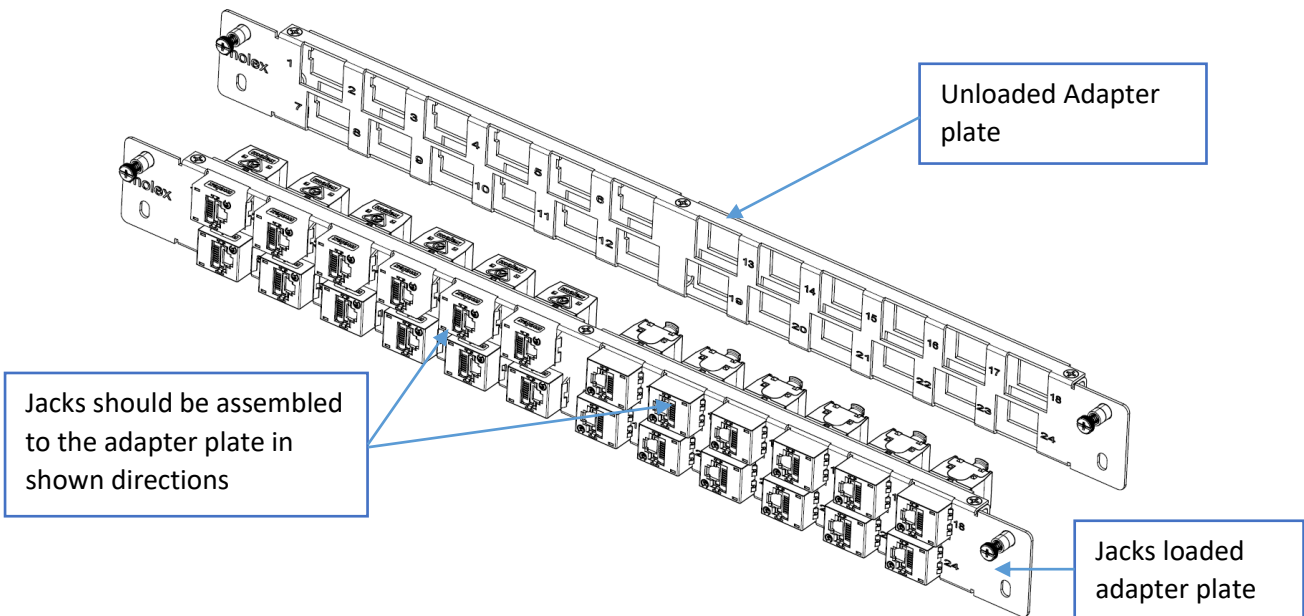
### 3.3 FRONT ADAPTER PLATE FOR MFE AND PON (AFR's):

Adapter plates are available in multiple combinations. Up to 96 fibers may be spliced, with combinations of shuttered and un-shuttered versions adapters, and Plates in loaded and unloaded versions. **(Contact Molex for the part numbers).**



**FRONT 24P JACK ADAPTER UNLOADED PLATE (AFR):**

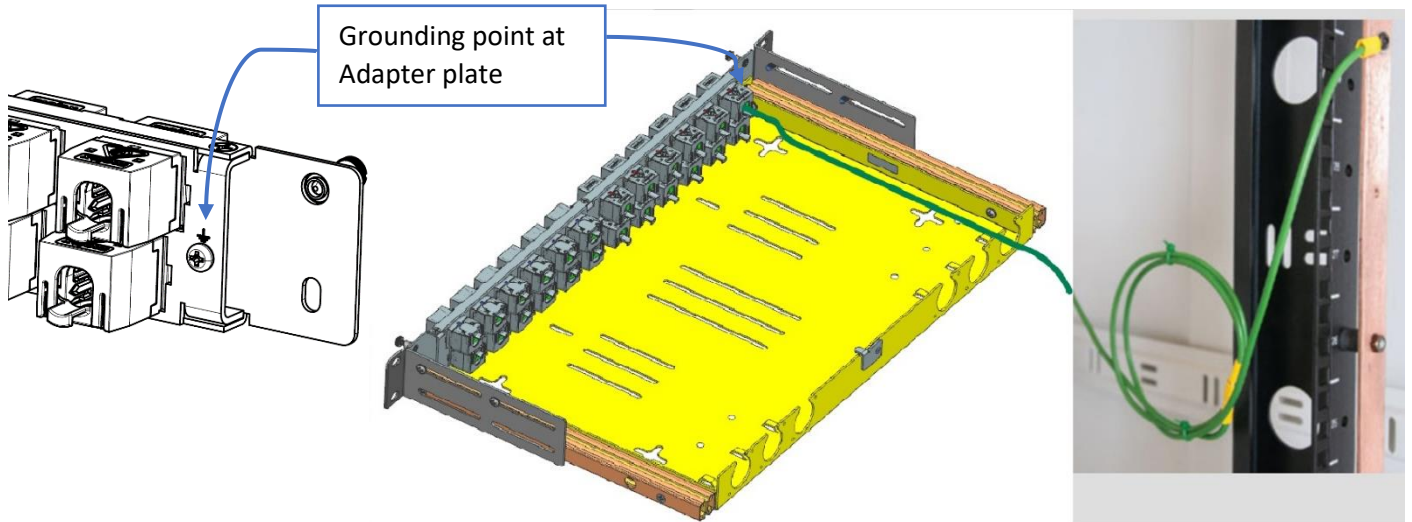
MFE Jack Adapter plate can accommodate up to 24 Jacks (Molex C6A FTP, C6 UTP & C5E UTP).  
**(Contact Molex for the part numbers).**



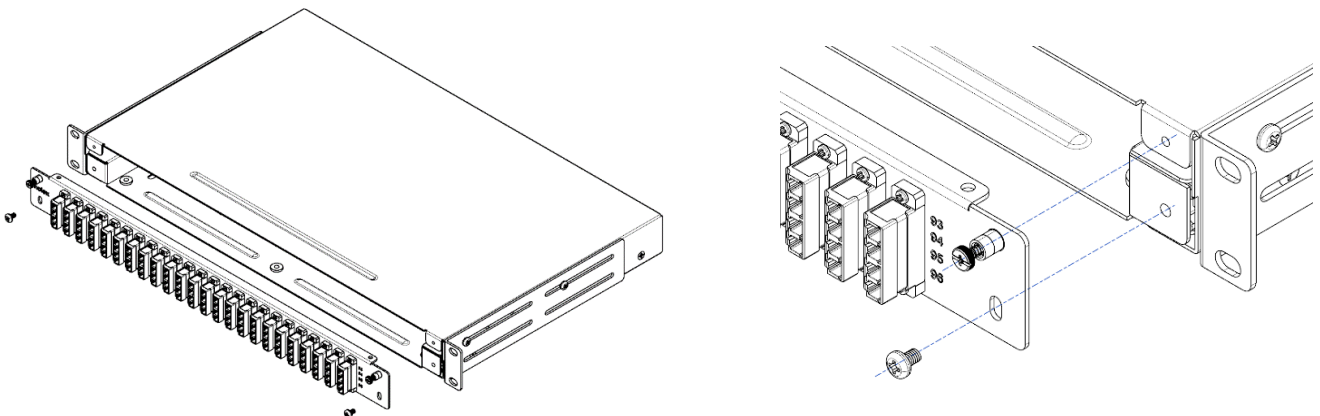
(Image is for representation purpose only)

### 3.4 MFE JACK ADAPTER PLATE GROUNDING WITH RACK/CABINET :

- Jumper/grounding cable to be connected from Jack Adapter plate grounding point to the grounding point/bus bar in Rack/Cabinet.
- As enclosure base will be used to slide toward front & backward during installation, ensure cable length at enclosure rear end to be coiled (as below shown example) with cable/twist ties and then connected to Rack/Cabinet.
- Connection should be made using appropriate hardware at both locations.



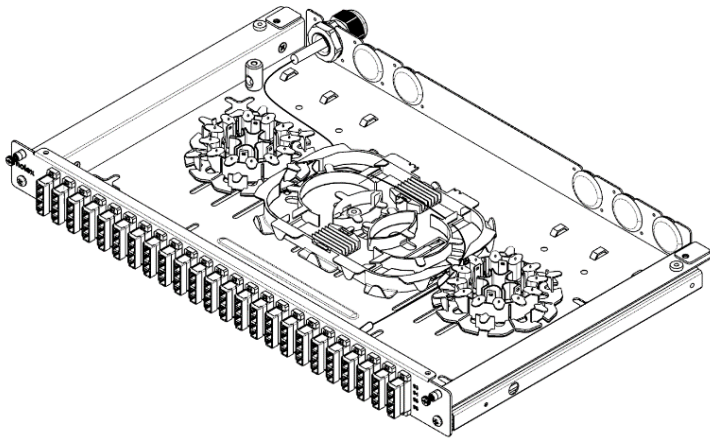
### 3.5 ASSEMBLY OF ENCLOSURE, FRONT ADAPTER PLATE:



Position the adapter plate in the appropriate location and push the captive screws to fasten it to top cover screw hole provided. Additional pan head screw is to be used to fasten it to base tray.

### 3.6 Cable slack and routing.

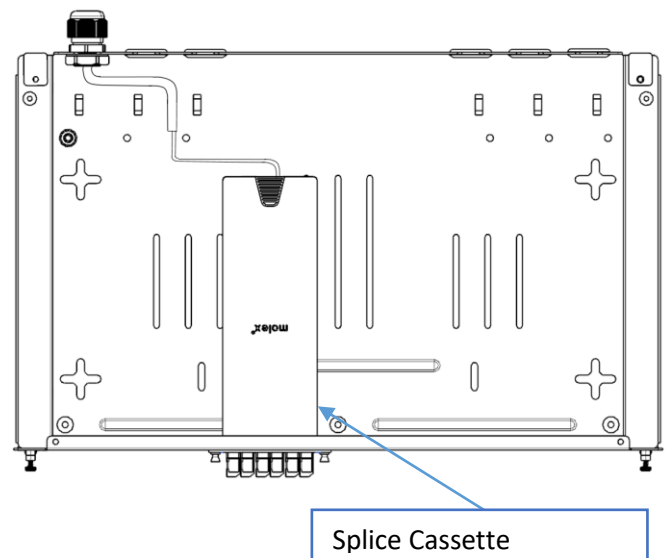
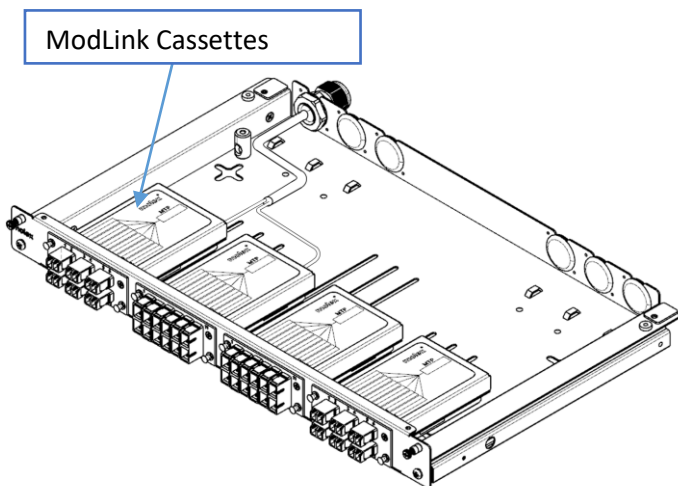
- Adequate slack must be included inside the enclosure for the sliding drawer to pull out.
- Full extension of the drawer is 139.7mm.
- Molex recommends a minimum of 0.5 meter of slack to be stored inside the enclosure for tight buffered and loose tube cables.
- Provide a minimum of 140-180mm of slack between the cable entry point and management spools.



**CAUTION:** Molex recommends wearing safety glasses when cutting fiber optic cable.

### 3.7 Installing ModLink / Splice cassette:

- Up to four ModLink / Splice cassettes may be installed in the enclosure in different combinations.
- Position the cassette in the appropriate location within the enclosure and push the two corner fasteners gently until they will go no further or hear a click sound.



### 4.0 WALL MOUNT APPLICATION:

#### Assembly Sequence – Wall mounting Enclosure

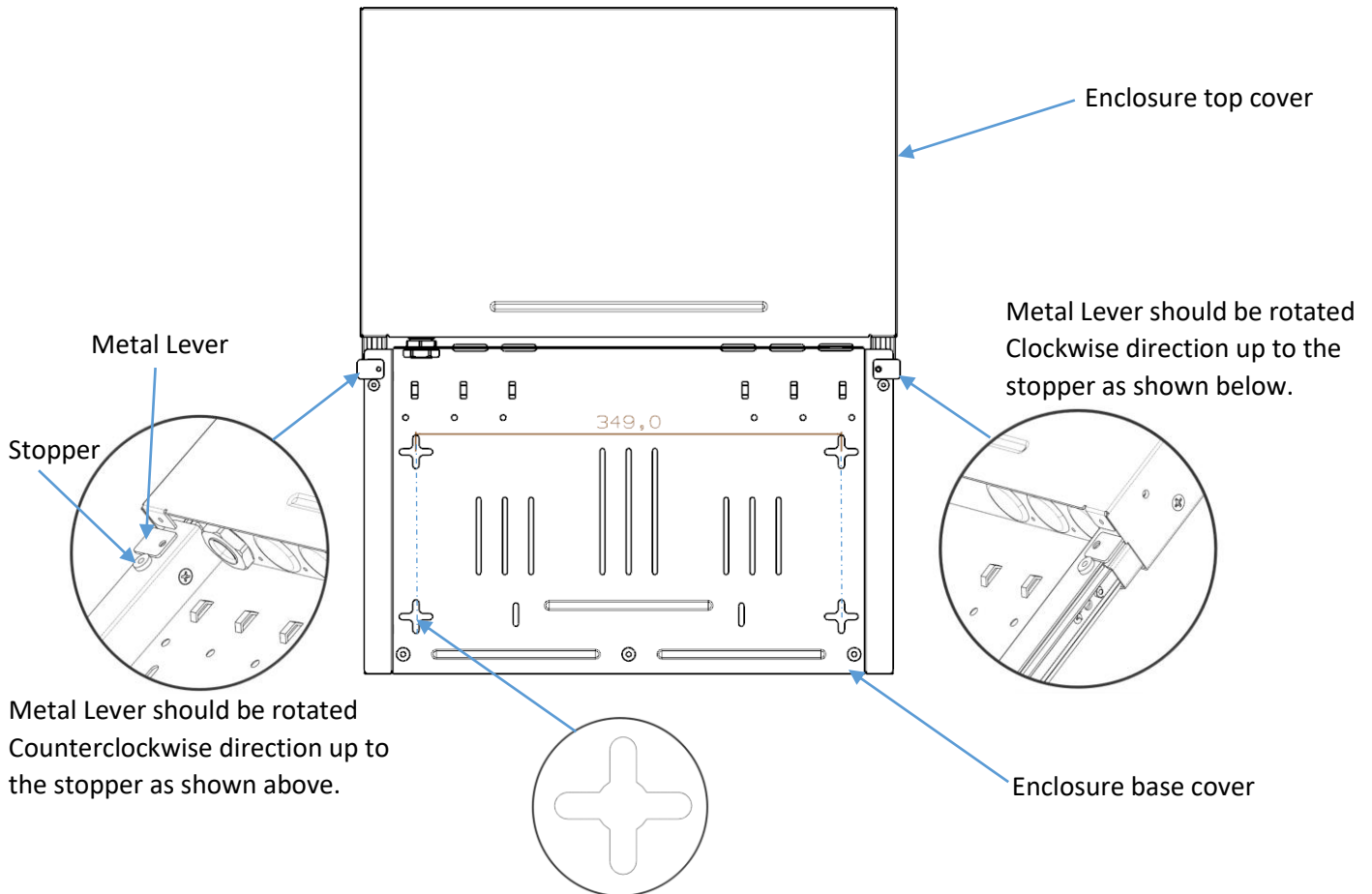
Before installing the Enclosure, ensure that the wall or mounting surface has sufficient strength to support the wall mount and expected wall mount payload.


#### Recommended hardware's

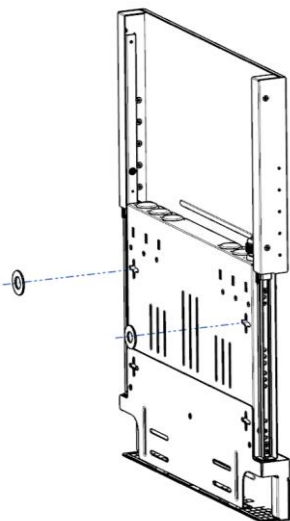
- Use No.18 wood screws (not provided) to mount enclosure to wall surface such as plywood. When mounting enclosure to any other wall type, use appropriate mounting hardware screw (not provided) and must be obtained locally.
- Washer M10 X 2mm thick Qty as required (not provided).

**4.1 STEPS:**

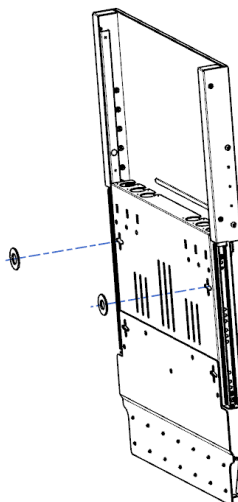
- Secure the enclosure with screws on mounting surface for suggested pitch dimension in all the four positions by providing, as a minimum, a 5mm to 6mm gap to hang the enclosure base.
- Align and hang down the enclosure base callout four slots to the secured screws.
- Tighten all the screws maximum, without allowing space for Enclosure base for any movement.
- Use a 2mm washer at the base, when enclosure is mounted to the mounting surface along with Locking kit/cable manager extension.
- Use the available riveted metal levers (with free rotational movement) rotating 90 degrees (Clockwise /Counter clockwise) direction to stop/secure the enclosure top cover (as shown below) when enclosure base is mounted in the below shown position to work on fiber routing, termination and any other installation work, and bring back the levers to original position by lifting the top cover slightly up after installation completion.



Mounting callout slot (in all 4 positions) provides freedom for all four direction to mount on the wall 



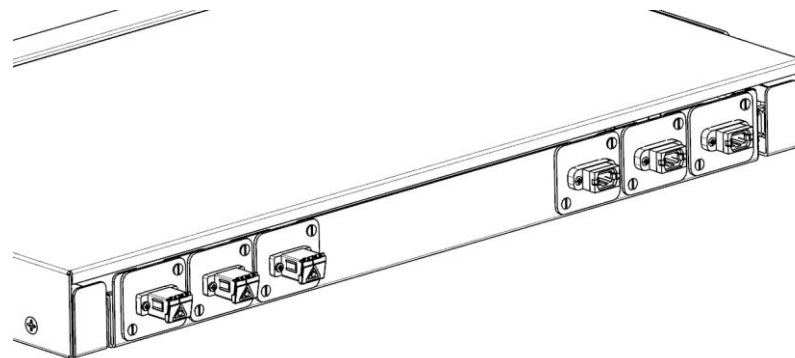
Use a 2mm washer at the base when enclosure mounted to the wall along with **locking kit**.



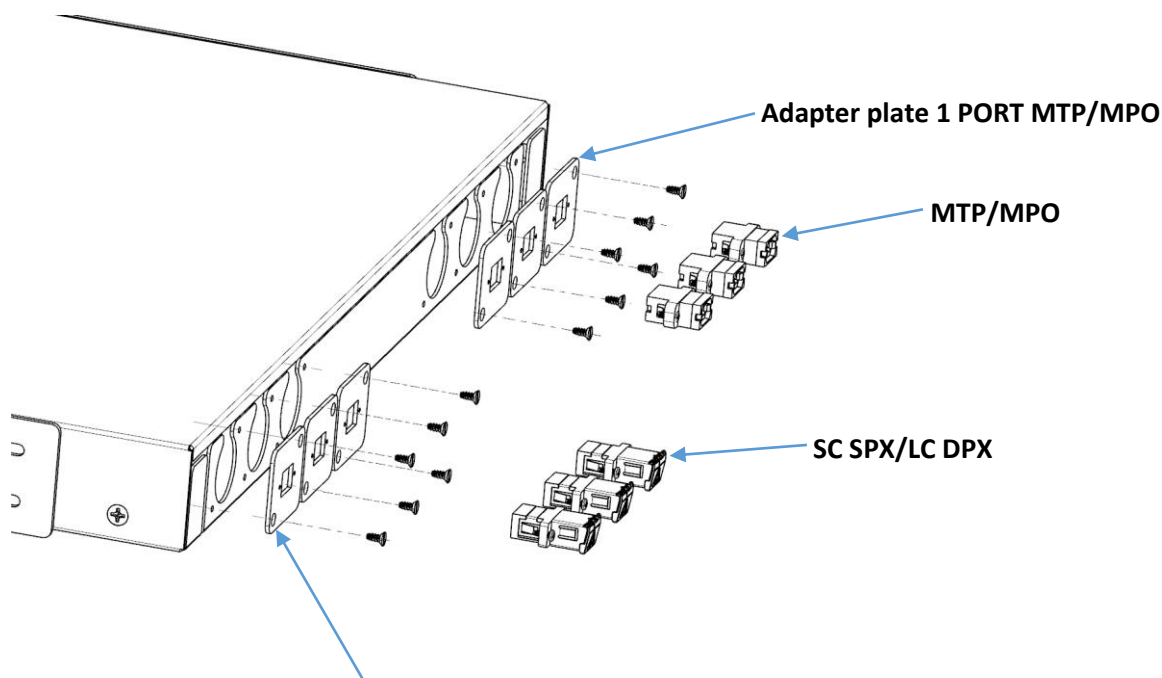
Use a 2mm washer at the base when enclosure mounted to the wall along with **Cable manager**.

## 5.0 ALLOW FIXING OF ADAPTERS AT CABLE ENTRY APERTURES (OPTIONAL):

- As shown in Fig.14, rear side of this enclosure has the option to accommodate SC SPX/LC DPX and MTP/MPO adapters, both flange and snap mount, with 1 PORT SC SPX/LC DPX, and MTP/MPO adapter plate (contact Molex for part numbers).
- Using Synergy Footprint allows SC/APC or LC/APC modules to be fitted – facilitating the fitment of Splitter Kits.
- Using MPO Adapters allows the enclosure to be used as a plug and play product – with use of breakout Kits.
- Fix the 1 PORT SC SPX/LC DPX and MTP/MPO adapter plate with screws (M3X6.5 CSK thread cutting) on mounting surface, and tighten all the screws.
- Fix the adapters into the available adapter plates cutouts, and tighten them with the screws if they are flange mount adapters.



(Fig.14)



Adapter plate 1 PORT SC SPX/LC DPX



**WARNING:**

3. Never look into the connector of an MTP assembly or terminated fiber. Laser light may be present and is invisible. Serious eye damage is possible.
4. Dust caps should be left intact on all adapters not in use. Never look into an open adapter, as laser light may be present and is invisible. Serious eye damage is possible.