

# Fiber Jointing Cabinet NCD 518 8004/4

## Installation Instruction



## Contents

1.	<b>General.....</b>	<b>3</b>
2.	<b>Capacity.....</b>	<b>3</b>
3.	<b>Preparation of the cabinet.....</b>	<b>4</b>
4.	<b>Installation of Multi / micro-ducts.....</b>	<b>5</b>
5.	<b>Installation of Cable.....</b>	<b>7</b>

## 1. General

This instruction is valid for installing fibers in jointing cabinet NCD5188004/4. The cabinet is designed for termination of micro-ducts and splicing of EPFU air blown fiber to cables, but can equally well be used for jointing cables to cables. The cabinet is intended for indoor use according to IP 45 but can be fitted conveniently in outdoor enclosures. The cabinet is designed alternately for wall mounting, 19" or ETSI racks. The general installation principle is to enter multi ducts from the top and cables from below. The front door can be folded down 90° to form a fiber work table, or 180° to facilitate assembly and installation of the actual cabinet.

## 2. Capacity

The cabinet contains a patch panel designed to accommodate up to 24 SC duplex adapters. The cabinet contains 8 (2x4) pieces of fiber organizing cassettes. Each fiber organizer is designed to accommodate up to 24 fibers, spliced as single fibers or ribbons. Each organizer has 6 positions for protection sleeves. The cabinet can terminate up to 42 (6x7) micro ducts (84 fibers) or 36 (3x12) micro ducts (72 fibers) organized by 3 duct holders. There are 14 multi-duct entrances (from above) and 5 cable entrances from below. Two of the lower cable entrances can be joined together to form a "mid span access" possibility.

### Packing list (included):

- 1 Installation instruction
- 3 sets of duct organizers with screws
- 8 fiber organizers
- 10 pcs fiber guides "hole" –mount
- 2 pcs fiber guides "tape" –mount
- 3 sets of cable holders with screws
- 1 SXA 113 5851/1 Label for EPFU
- 1 SXA 113 5779/1 Note-label for duct org.

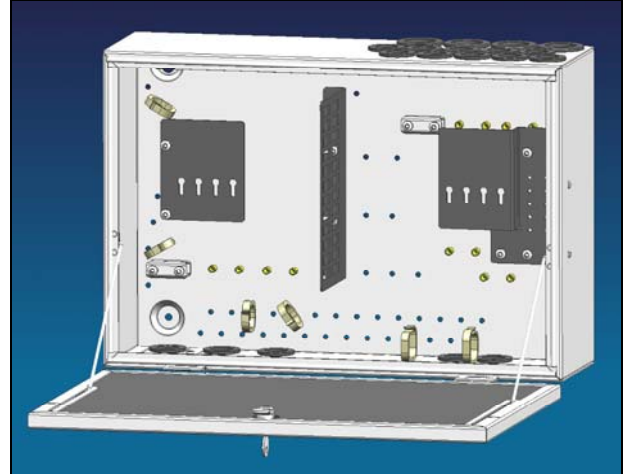
### Accessories (optional orderable):

- NTM 504 032 Strain relief for EPFU (Pkg. 25)
- NTM 502 03 Brackets for rack mount
- SXA 113 5850/5 Label (1-48)
- SXA 113 5850/6 Label (49-96)
- SXA 113 5850/7 Label (97-144)
- SXA 113 5850/8 Label (145-192)
- NTA 16212/7 Splice protection 1-2 f *min 100*
- NTA 16212/4 Splice protection 2-12 f ribb *min 50*

### 3. Preparation of the cabinet

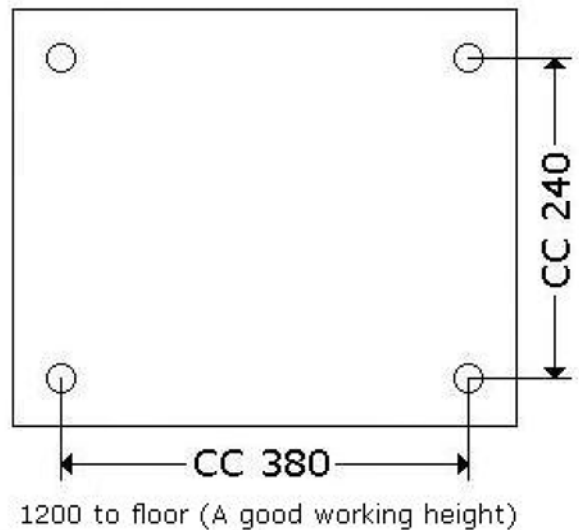
#### Assembly

1. Put the cable strain relief holders in position for the cable inlets to be used.
2. Put the fiber guides in position. They shall guide and maintain the appropriate fiber radius from the cable and air blown fiber units to the organizer. The fiber over length should be enough to move the cassettes to a working position on the opened cabinet door.
3. Insert SC duplex adapters to the patch panel.



#### Wall mount

1. Mark the position of the mounting holes onto the wall according to the picture.
2. Drill and plug the holes if necessary. Attach the two upper screws.
3. Hang the cabinet on the upper screws through the keyholes and fasten the cabinet to the wall.
4. Mark the cabinet with the appropriate ID.



#### ETSI or 19" Rack mount

Two brackets are available as an accessory. If the cabinet is to be mounted in a rack. The same brackets fit both ETSI and 19" standard.

Turn the brackets to the desired standard and assemble them to the pre-fixed holes on the side of the cabinet

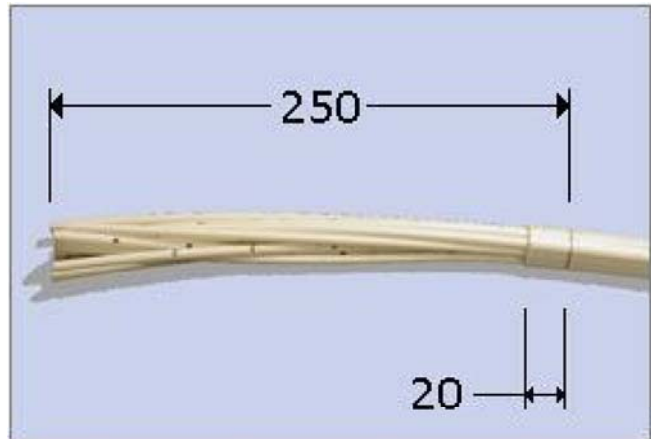


## 4. Installation of Multi / micro-ducts

### Multi-duct preparation

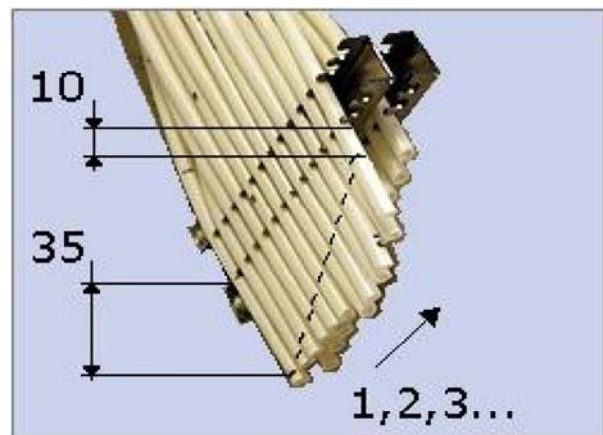
The multi-ducts normally enter the cabinet from the top. It is also possible to enter from the two bottom most right cable entrances.

1. Put the first duct organizer in the lowest most right position.
2. Cut the multi-duct to a convenient installation length (approximately 25 cm below the cabinet entrance)
3. Remove the sheath approximately 20mm below the inlet and tape the sheath end.
4. Enter the cabinet through the inlet and mark the ID on the multi-duct.



### Micro-duct preparation

1. Organize the micro-ducts in numerical order starting with no.1 in the lowest position.
2. Cut the ducts as an "organ pipe" to get a good visual presentation of the duct ends.
3. Snap in the micro-ducts in the correct position and lock them.
4. Continue with the next multi-duct in the same way, putting the next organizer in position to the left of the first one etc...Step up the position of the holders as the installation continues to the left.



### Air blown fiber handling (EPFU)

1. During the fiber blowing, make an arrangement so that the excess fiber is not damaged when exiting the duct.
2. Make sure to leave approximately 1.1 – 1.7m of EPFU for the fiber installation, depending on turns in the tray.
3. Apply the optional fiber strain relieves NTM 504 032 if the cabinet is not in the lowest position of the fiber installation.
4. Mark the fiber units and guide them to the entrance of the fiber organizer. EPFU air blown fiber enters the left inlet.



## Fiber organizer

1. Position the cabinet lid to form a working table.
2. Route the pigtails through the strain relief rubber.
3. Wind down the fibers two turns, and cut where they shall be spliced.
4. Route the fiber units one by one through the strain relief rubber. Note that several fiber units can share the same slot if necessary. Put as much excess fiber length as possible outside the organizer, for easier removal later.
5. Wind down the fibers one or two turns, and cut where they shall be spliced. (Two turns recommended)



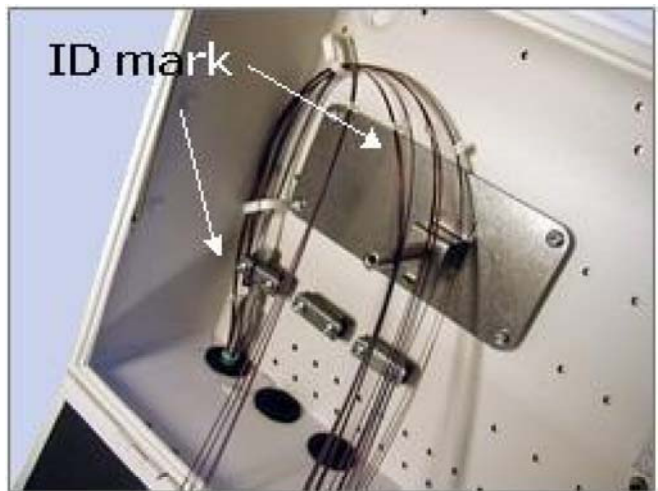
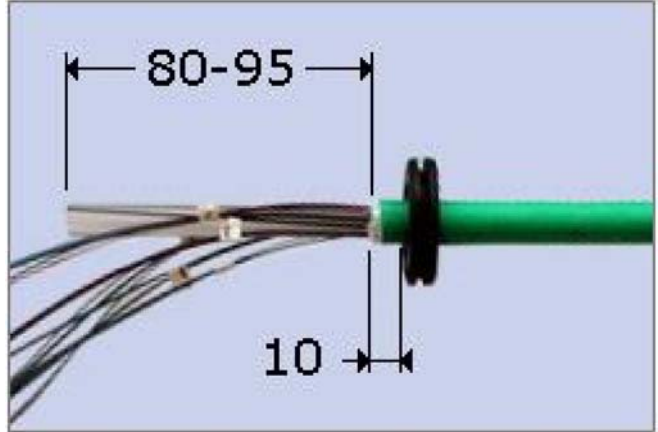
6. After splicing a tray, it's recommended to ID-mark the protection sleeves. Wind down the splices without twisting the fibers. Gently press the sleeves into the holders. Put on the plastic cover.
7. When finished splicing, lift the tray back into the cabinet.
8. Guide the pigtails through the fiber holders to organize the over length. Connect the SC connectors to the right side of the panel.



## 5. Installation of Cable

The cables normally enter the cabinet from the lower left inlets. It is also possible to enter from the lower right or upper left inlets.

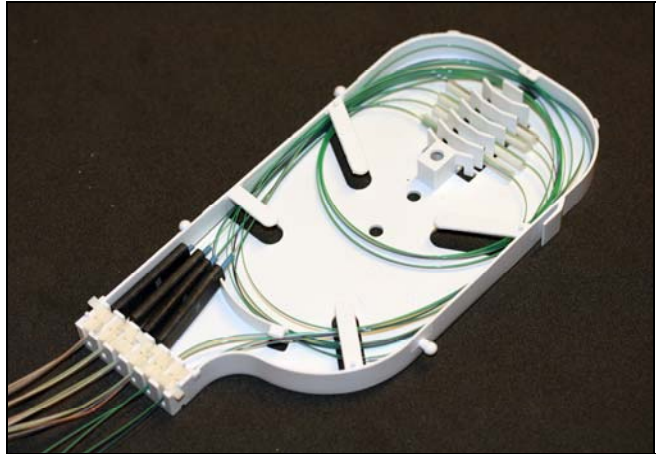
1. Remove the rubber gasket from the cabinet, penetrate it and slide it onto the cable.
2. Prepare the cable according to the picture. Remove the cable sheath approximately 1.6 - 2m from the cable end, depending on turns in the tray.
3. Mark the cable ID.
4. Tape the sheath end, ID-mark the fiber ribbon / tubes and insert the cable through the entrance hole.
5. Secure the cable in the strain relief holder.
6. Guide the fiber through the fiber holders to the right organizer inlet.





## Fiber organizer

1. Position the cabinet lid to form a working table.
2. Route the fibers with connectors through the strain relief rubber. When using fanouts place them in the outer positions of the tray. One for each slot, according to picture.
3. Wind down the fibers two turns, and cut where they shall be spliced.



4. Route the incoming fiber units/ribbons one by one with the same colour upwards through the strain relief rubber. Note that several fiber units can share the same slot if necessary. Put as much excess fiber length as possible outside the organizer, for easier removal later.
5. Wind down the fibers one or two turns, and cut where they shall be spliced. (Two turns recommended)



*Picture of fiber organizer in splicing position.*

6. After splicing a tray, it's recommended to ID-mark the protection sleeves. Wind down the splices without twisting the fibers. Gently press the sleeves into the holders. Put on the plastic cover.
7. When finished splicing, lift the tray back into the cabinet.
8. Guide the fanouts through the fiber holders to organize the over length. Connect the SC connectors to the left side of the panel.

