

CABLE PLANT  
LABELING  
STANDARDSs

NAS Patuxent River

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# Table of Contents

<b>1. Purpose .....</b>	<b>1</b>
<b>2. Cable Labeling .....</b>	<b>1</b>
2.1 Line 1 .....	1
2.1.1 Labeling Scheme .....	1
2.2 Line 2 .....	1
2.3 Line 3 .....	1
<b>3. Label Examples.....</b>	<b>2</b>
3.1 OSP Cable Label: Core to Distribution .....	2
3.2 OSP Cable Splice Labels .....	2
3.3 OSP Cable Label: Distribution to Access.....	3
3.4 ISP Cable Tie Label.....	3
3.5 Inside Plant Horizontal Cabling.....	4
3.6 Horizontal Cable Label.....	5
3.7 Wallplate Labeling.....	5
3.7.1 Unclassified CAT5e Wallplate.....	5
3.7.2 Classified CAT5e Wallplate.....	6
3.7.3 Unclassified Fiber Wallplate .....	7
3.7.4 Classified Fiber Wallplate .....	8
3.8 Rack and patch Panel Labeling.....	9

## 1. PURPOSE

The purpose of this document is to identify NAWCAD Patuxent River labeling standards.

## 2. CABLE LABELING

Outside cable plant (OSP) and inside cable plant (ISP) should be labeled at both ends and whenever visible with the three lines of information defined below.

### 2.1 LINE 1

The cable-labeling scheme defined below is to be followed:

- a. The first sequence identifies the Base Area (i.e.: Zone) identifier
  - b. The last number set determines whether the cable is identified as: Backbone, Access, or Tie Cable
- **Backbone cable** (from core building to distribution building): **001 through 199**
  - **Access cable** (from distribution building to access building): **200 through 499**  
OR
  - **Tie cable** (from data room to data room within the building): **500 through 699**

#### 2.1.1 LABELING SCHEME

Each Optical Fiber Cable will be numbered sequentially by assignment as follows:

- **Backbone** (CORE-DISTIBUTION) = XXXXX- 001 – 199
- **Access** (DISTRIBUTION-ACCESS) = XXXXX- 200 – 499
- **ISP Tie** (CLOSET-CLOSET) = XXXXX- 500 – 699

**Example:** Zone A - **001** = First backbone cable located in Zone A of the base.

### 2.2 LINE 2

Line 2 describes the origination and destination of the cable or cable segment

**Example:** “From” Building #-Room # / “To” Building #-Room #

**From Bldg. 302 – Rm. 121 / To Bldg. 1908 – Rm. A7**

### 2.3 LINE 3

The last line of the label is the fiber strand count (in sequence of distribution) and fiber type (singlemode or multimode).

**Example:** Strand Count, Fiber Type

**1 – 144 SM**

### 3. LABEL EXAMPLES

#### 3.1 OSP CABLE LABEL: CORE TO DISTRIBUTION

All OSP fiber cables should be labeled at both ends and wherever visible (i.e. entrance/exit points of HH/MH/PBB).

The following example is for a 24-strand singlemode cable from Building “CORE” to Building “Distribution”: There are three (3) lines of information as follows:

XXXX-nnn  
“From” Building #-Room # / “To” Building #-Room #  
strand count – Fiber type

**ZONE A – 001**  
**BLDG 200-RM 100/BLDG 300-RM 106**  
**1 – 24 SM**

#### 3.2 OSP CABLE SPLICE LABELS

The Main cable should be numbered and subsequent cables should be labeled with the main number, with the addition of A, B, C, etc.

**Example:** A 24-fiber cable exiting core building “A” to distribution buildings “01” and “02” by being spliced in a manhole/maintenance hole (MH) into two (2) 12-fiber cables:

**Zone A-001**  
**coreA/distr01, 1-12 SM**  
**coreA/distr02, 13-24 SM**

After the splice, the cable labels should be as follows:

**Zone A-001A**                      and                      **Zone A-001B**  
**coreA/distr01, 1-12 SM**                      **coreA/distr02, 13-24 SM**

### **3.3 OSP CABLE LABEL: DISTRIBUTION TO ACCESS**

All OSP fiber cables should be labeled at both ends and wherever visible (i.e. entrance/exit points of HH/MH/PBB).

The following example is for a 24-strand singlemode cable from Building “DISTRIBUTION” to Building “ACCESS”: There are three (3) lines of information as follows:

“From” Building #-Room # / “To” Building #-Room #  
Strand count – fiber type

**ZONE A – 201**

**BLDG 947-RM 100/BLDG 805-RM B6**

**1 – 24 SM**

### **3.4 ISP CABLE TIE LABEL**

ISP fiber cable ties should be labeled at both ends and where ever visible (i.e. cabinets/patch panels).

The following example is for a 12-strand single mode cable from “Room #” to “Room #”:

Zone A-501

“From” Room # / “to” Room #  
1-12 SM

**ZONE A – 501**

**RM 100/RM 106**

**1 – 12 SM**

### **3.5 INSIDE PLANT HORIZONTAL CABLING**

This section identifies termination of new premise distribution cabling from the nearest communication room to work station outlet being serviced from this room. All cabling shall be min Category 5e, or the latest approved category standard available. All cabling shall be terminated to the T568B wiring scheme at all locations unless indicated otherwise. All cabling shall be terminated in rack mounted T568B patch panels unless indicated otherwise. All applicable codes and standards shall be followed.

The following cabling color code shall be used:

Data #1 – Blue

Data #2 – Green

Data #3 – White

Voice #1 – Grey

Classified Data #1 – Red

Classified Data #2 - Yellow

### **3.6 HORIZONTAL CABLE LABEL**

Horizontal cables should be labeled at both ends to indicate “to” and “from” but only need one line of labeling. The cable will be a wrap around type label indicating the following:

Room# / Seat # / Data Closet Room #

Example: 101-002-108A

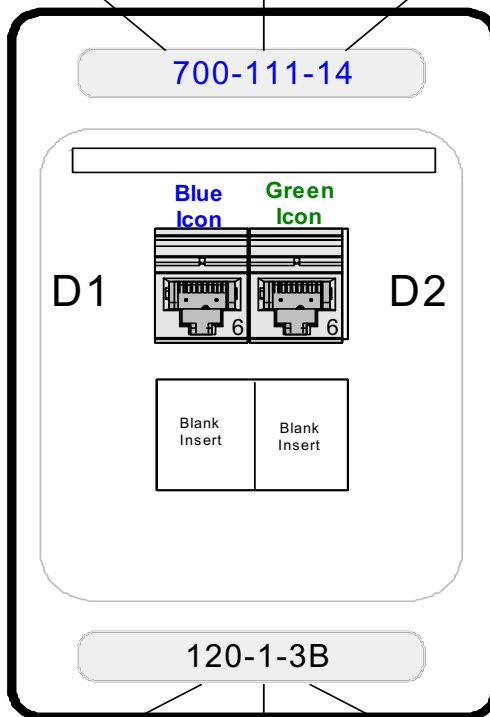
**101 – 102 – 108A**

### 3.7 WALLPLATE LABELING

#### UNCLASSIFIED CAT5E WALLPLATE

**Example:**

Buildingnumber-Roomnumber-Drop(Seat)Number



ClosetNumber - RackNumber - PatchPanel

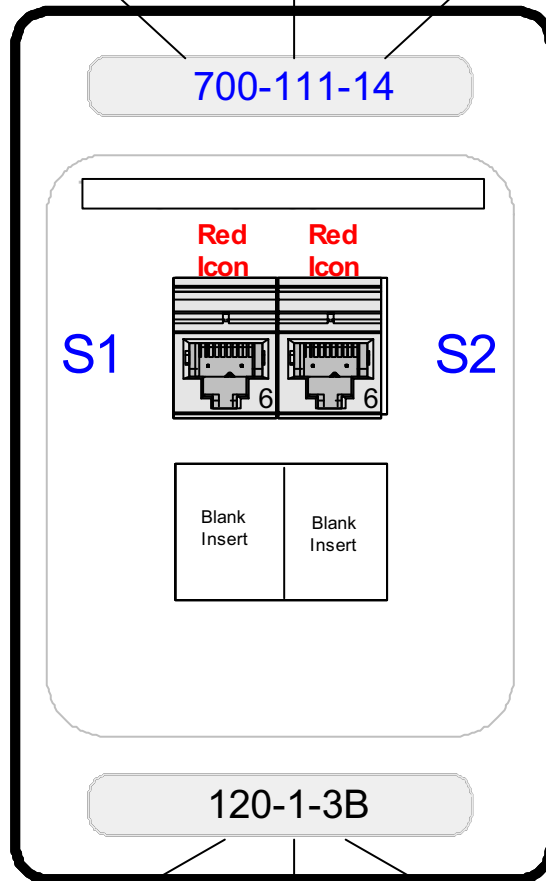
**Example:**

### 3.7 WALLPLATE LABELING (continued)

#### CLASSIFIED CAT5E WALLPLATE

Example:

Buildingnumber-Roomnumber-Drop(Seat)Number



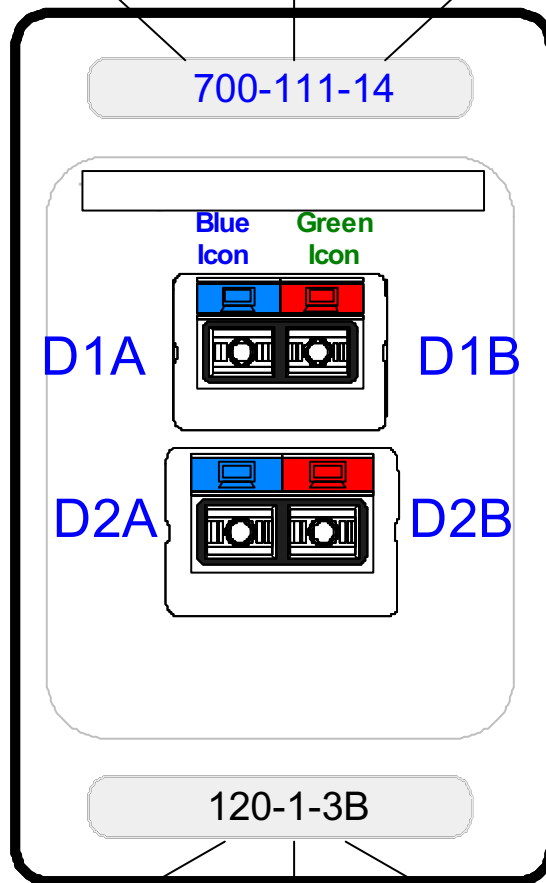
ClosetNumber - RackNumber - Patch Panel

### 3.7 WALLPLATE LABELING (continued)

#### UNCLASSIFIED FIBER WALLPLATE

Example:

Buildingnumber-Roomnumber-Drop(Seat)Number

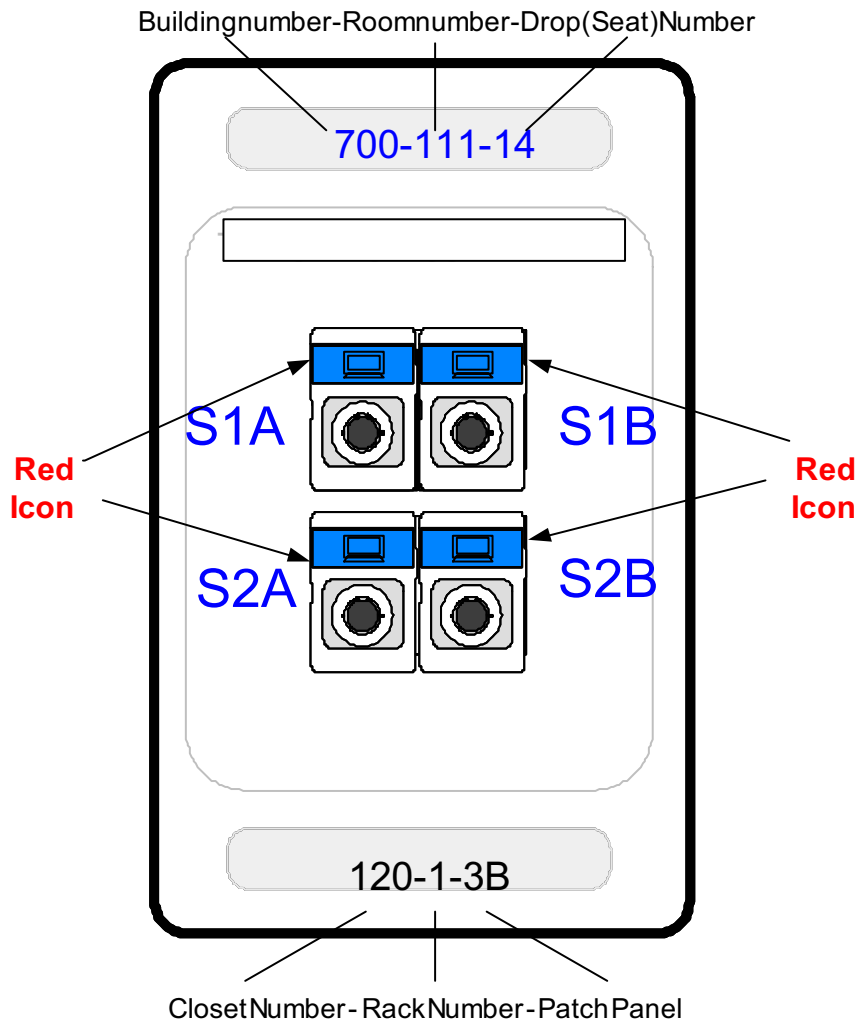


ClosetNumber - RackNumber - PatchPanel

### 3.7 WALLPLATE LABELING (continued)

#### CLASSIFIED FIBER WALLPLATE

Example:



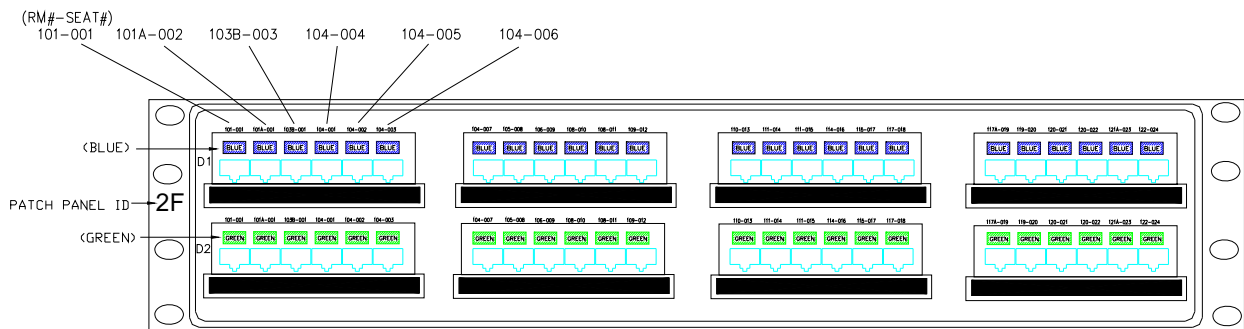
**NOTE: Wallplate numbering will be sequential for each building.**

### 3.8 RACK AND PATCH PANEL LABELING

Each rack should be labeled in accordance with the rack number identified in the Design Approved Drawing. Each Patch Panel should be labeled with “1” starting with the top patch panel. The first panel may be the fiber patch panel label “1” and next patch panel may a CAT5e patch panel that should be labeled “2”, followed by F for front and B for back to denote the placement in the cabinet, as necessary. Labeling of all telecommunications components should be with a printed permanent adhesive label, such as a Brother P-Touch or Brady type label. All faceplates, patch panels, rack rows and racks should be labeled at a minimum.

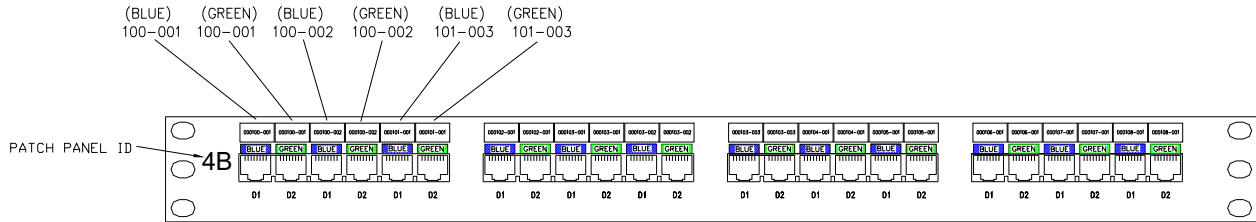
**ROOM #-SEAT#**

As a modification to the below examples, when installing D1 drops into a dedicated rack for only D1 cables, all incons will be blue in color. All D2 cables will be in a separate rack-mounted patch panel in a separate D2 rack. The same for D3 and V1.



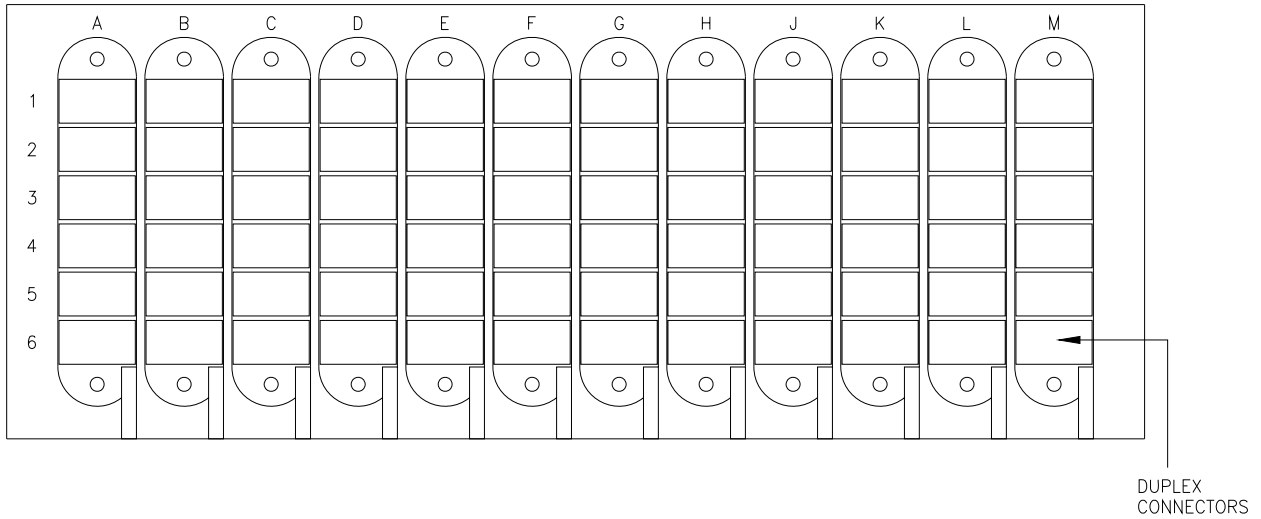
48 PORT  
TYPICAL PATCH PANEL  
(UNCLASSIFIED)

**ROOM #-SEAT#**

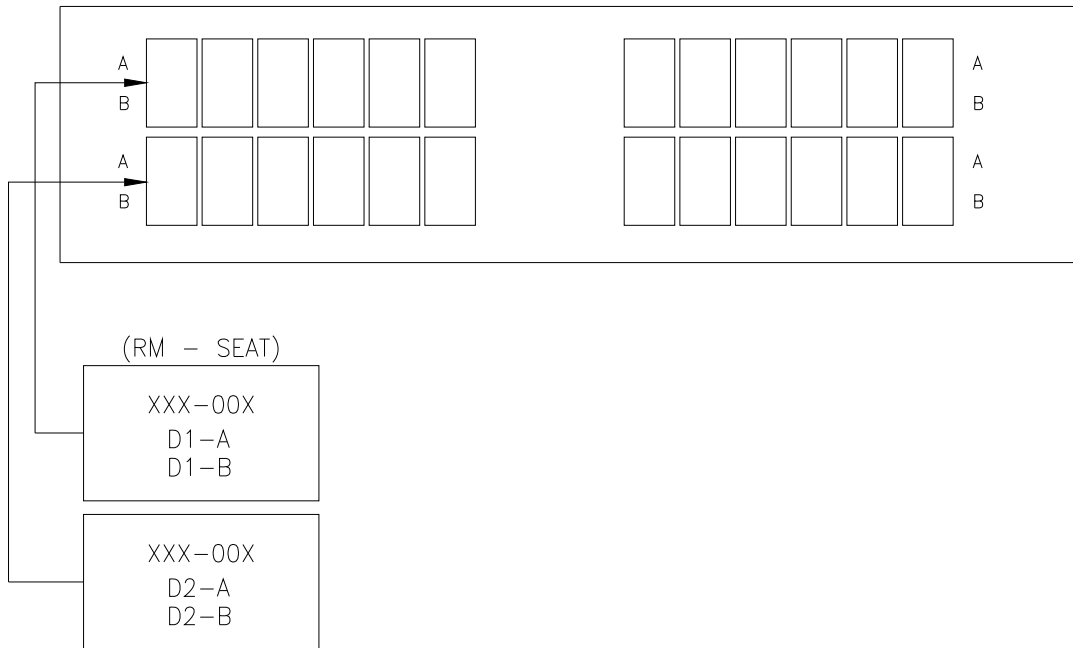


24 PORT  
TYPICAL PATCH PANEL LABELING  
(UNCLASSIFIED)

TYPICAL UNCLASSIFIED NMCI FIBER OPTIC PATCH PANEL (FRONT) – 72 SEAT (144 FIBERS)



TYPICAL LABELING FOR UNCLASSIFIED FIBER OPTIC PATCH PANEL  
24 SEATS (48 FIBERS)



TYPICAL UNCLASSIFIED NMCI FIBER OPTIC PATCH PANEL - 24 SEATS (48 FIBERS)

