

NMCI

Label Standards

Label Placement Requirements and Wire Run List Documentation Records

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NMCI Labeling and Placement Requirements

1. Purpose

The purpose of this document is to standardize NMCI Labeling.

Cables will be labeled with a 3-line (or more as required) identifier.

As follows:

Line 1: NMCI - (Zone) XXXX- (cable #) nnn

Line 2: "From" Building #-Room # / "To" Building #-Room #

Line 3: strand count – Fiber type

2. Cable Labeling:

2.1 Line 1

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

- a. The labeling scheme begins with the prefix "NMCI" to identify the Intranet cable from all other base cabling.
- b. The next sequence identifies the Base Area (i.e.: Zone) identifier
- c. 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 Schema

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

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

Example: NMCI –Zone 1 - 001 = First backbone cable located in Zone 1 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

NOTE: If the Distribution Building is in a different base area or zone, insert the Zone Identifier before the "To" Building number in this line.

Example: From Bldg. 302 – Rm. 121 / To Zone 3 - 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: SM, or multimode: MM).

Example: Strand Count, Fiber Type

1 – 144 SM

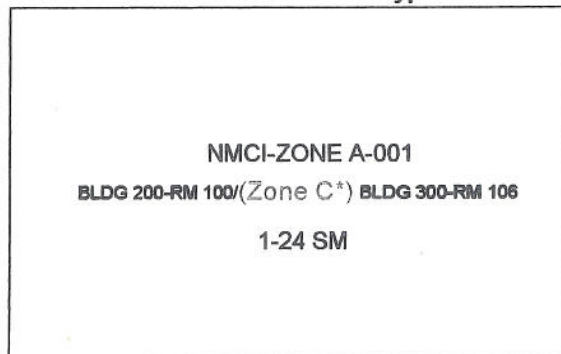
3 Label Examples

3.1 OSP CABLE LABEL: Core to Distribution

All OSP fiber cables shall 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:

NMCI-(Zone) XXXX- (Core cable #) nnn
 "From" Building #-Room # / "To" Building #-Room #
 strand count – Fiber type



* If the "To" building is in a different zone, add the Zone Identifier to the 2nd line

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/hand hole (MH/HH) into two (2) 12-fiber cables. Thus:

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

Beyond the splice, the cable labels shall be as follows:

NMCI-Zone A-001A and NMCI-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 shall 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:

NMCI-XXXX-nnn
 "From" Building #-Room # / "To" Building #-Room #
 Strand count – fiber type

NMCI-ZONE A-201
BLDG 947-RM 100 / BLDG 1805-RM B-6
1-24 SM

3.4 ISP CABLE TIE LABEL

ISP fiber cable ties shall 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 #":

NMCI-Zone A-501
"From" Room # / "to" Room #
1-12 SM

NMCI - ZONE A - 501
RM 100 / RM 106
1-12 SM

3.5 HORIZONTAL CABLE LABEL

Horizontal cables shall be labeled at both ends to indicate "to" and "from". The cable will be a wrap around type label indicating the following:

Room# / Seat # / Data Closet Room #

Example: 101-002-108A

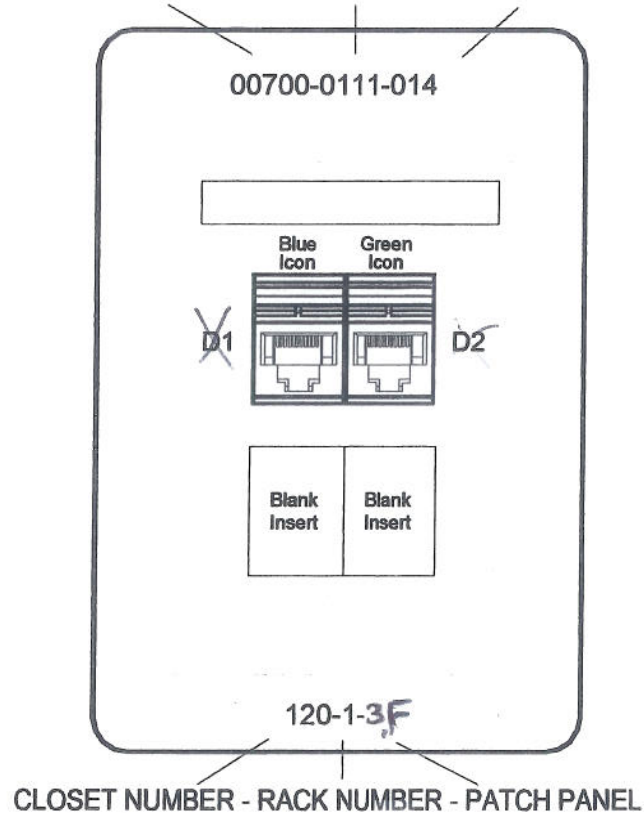
101-002-108A

3.6 Wallplate Labeling

3.6.1 Unclassified CAT5e Wallplate

Example:

BUILDING NUMBER - ROOM NUMBER - DROP(SEAT) NUMBER

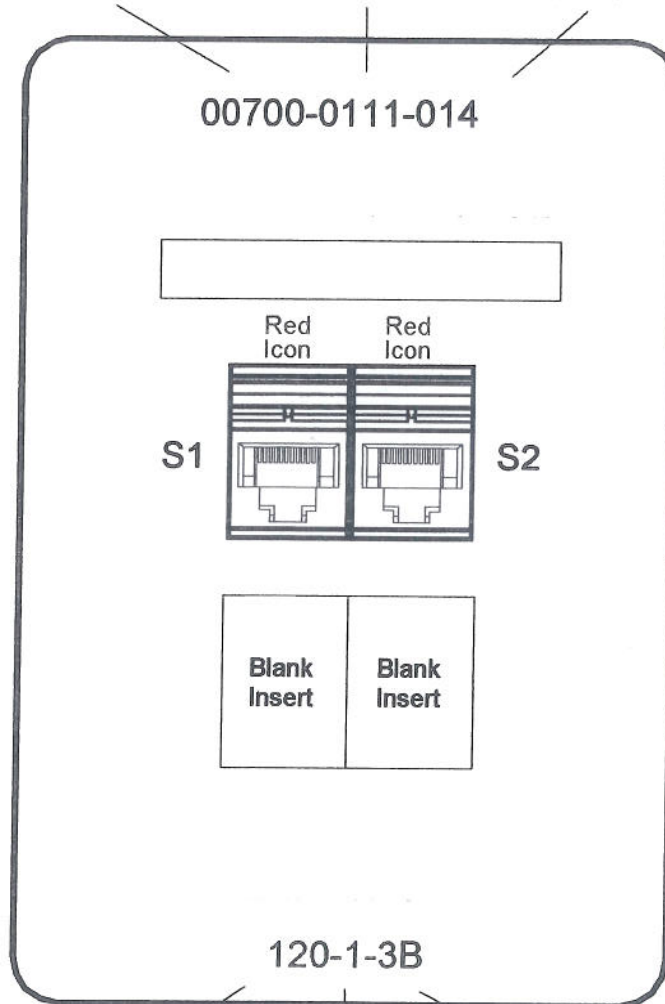


NOTE: Should the cable run originate in another building, place the building number as a prefix in the lower text window.

3.6.2 Classified CAT5e Wallplate

Example:

BUILDING NUMBER - ROOM NUMBER - DROP(SEAT) NUMBER

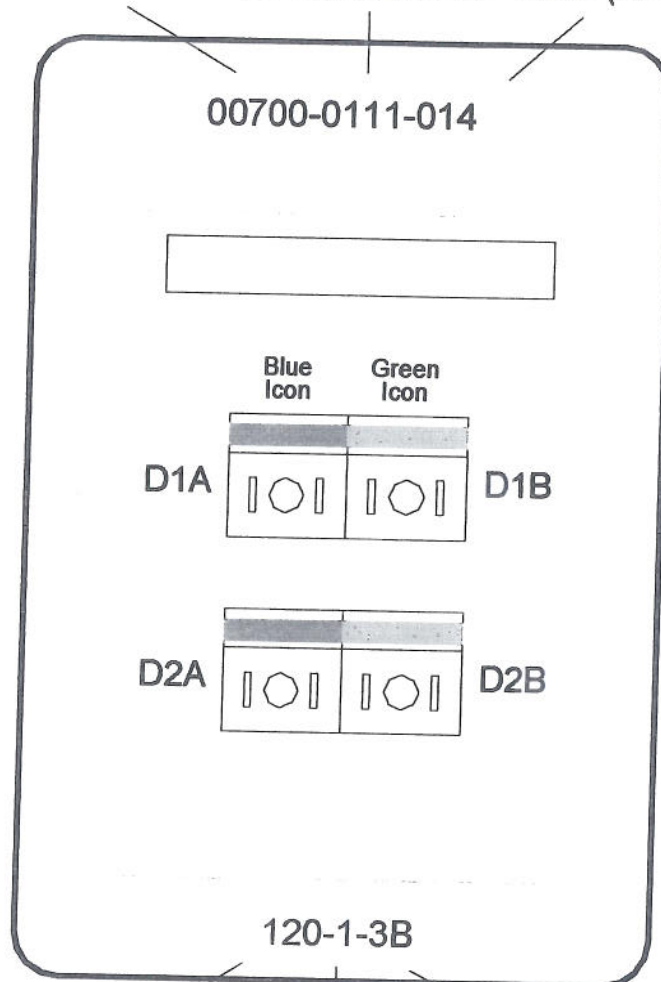


CLOSET NUMBER - RACK NUMBER - PATCH PANEL

3.6.3 Unclassified Fiber Wallplate

Example:

BUILDING NUMBER - ROOM NUMBER - DROP(SEAT) NUMBER

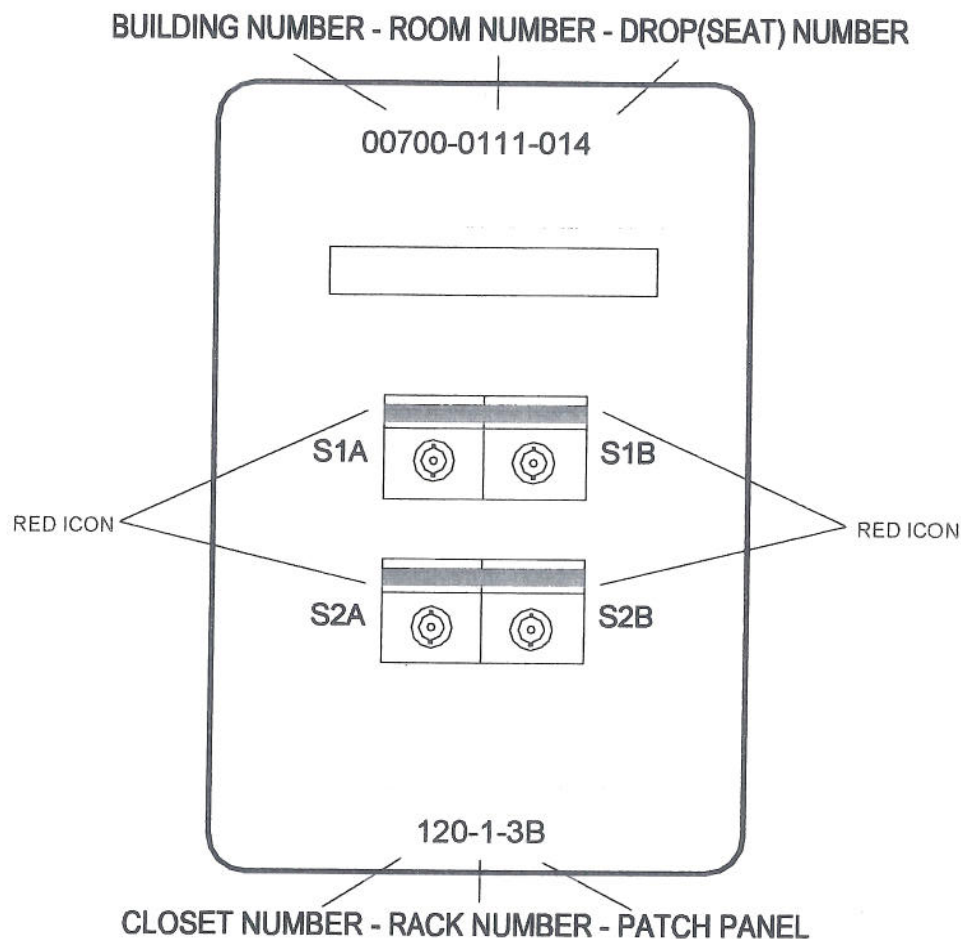


CLOSET NUMBER - RACK NUMBER - PATCH PANEL

Note: UNCLASSIFIED Fiber Connectors are duplex SC type

3.6.4 Classified Fiber Wallplate

Example:



Note: CLASSIFIED Fiber Connectors are dual ST type

NOTE: Wallplate numbering will be sequential for each building.

6.3.5 Naming Convention: Outlet Designations

Seat Type	Number of Cables Cat 5e (Drops)	Number of Wall Plates	Cable Outlet Designations
UNCLASSIFIED Seat	2	1	D1, D2
UNCLASSIFIED Option	4	1	D1, D2, (V1, V2)
CLASSIFIED Seat	2	1	S1, S2
CLASSIFIED Printer	2	1	S1, S2
UNCLASSIFIED Printer	2	1	D1, D2
UNCLASSIFIED Fiber-To-Desk (FTTD) consisting of:			
• UNCLASSIFIED Base	2 MM 2-Strand Pairs (4 strands)	1	D1A, D1B D2A, D2B
CLASSIFIED Fiber-To-Desk (FTTD) consisting of:			
CLASSIFIED Option	2 MM 2-Strand Pairs (4 strands)	1	S1A, S1B S2A, S2B
UNCLASSIFIED Mission Critical (UMC) Seat: consisting of:			
UNCLASSIFIED Mission Critical (UMC) Seat	4	2	D1A, D1B D2A, D2B
CLASSIFIED Mission Critical (CMC) Seat: consisting of:			
• CLASSIFIED Addition	4	2	S1A, S1B S2A, S2B
CMC Fiber Option	2 MM 2-Strand Pairs (4 strands)	1	S1A, S1B S2A, S2B

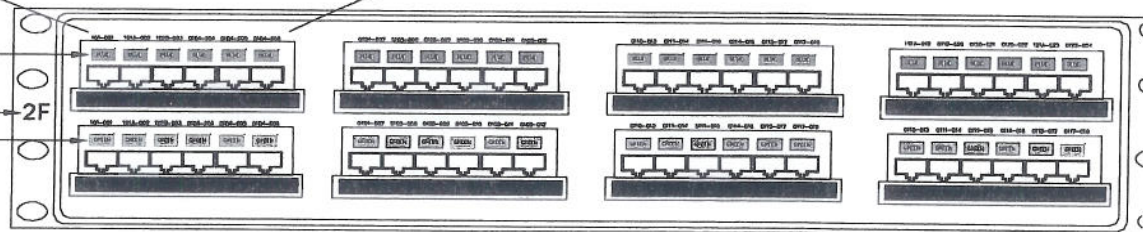
3.7 Rack and Patch Panel Labeling

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 shall 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 shall be labeled at a minimum.

ROOM #—SEAT#

(RM#—SEAT#)
0101-001 101A-002 103B-003 0104-004 0104-005 0104-006

(BLUE)
PATCH PANEL ID — 2F
(GREEN)

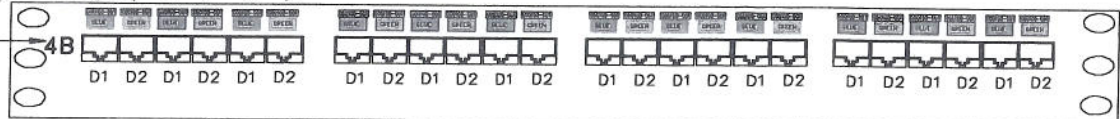


48 PORT
TYPICAL PATCH PANEL
(UNCLASSIFIED)

ROOM #—SEAT#

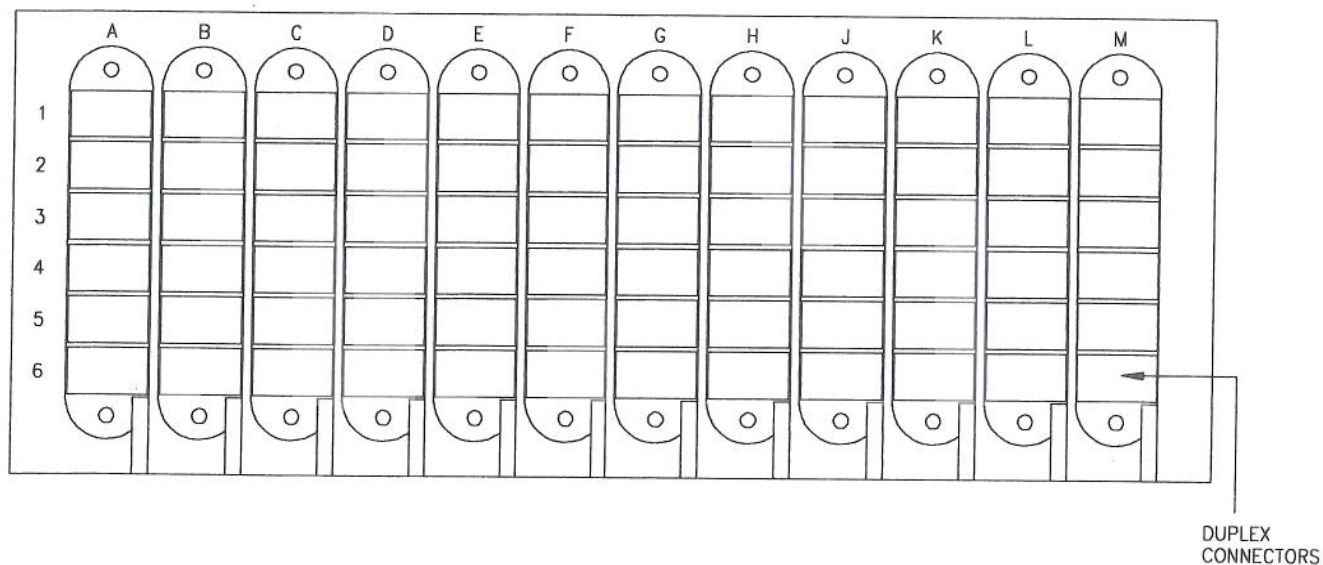
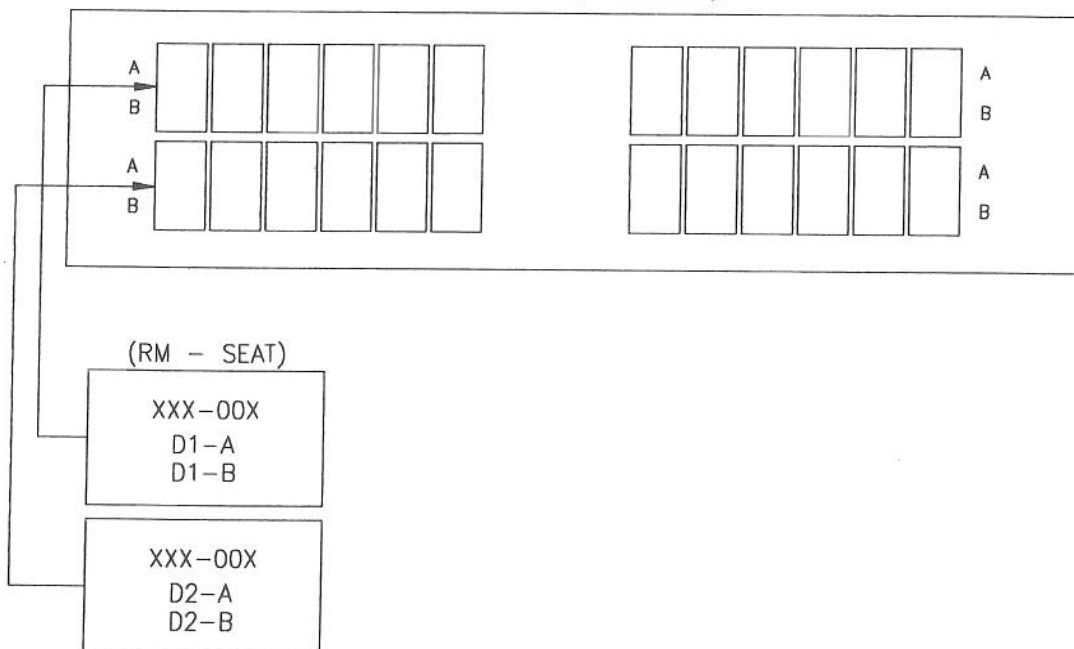
(BLUE) (GREEN) (BLUE) (GREEN) (BLUE) (GREEN)
100-001 100-001 100-002 100-002 100-003 100-003

PATCH PANEL ID — 4B

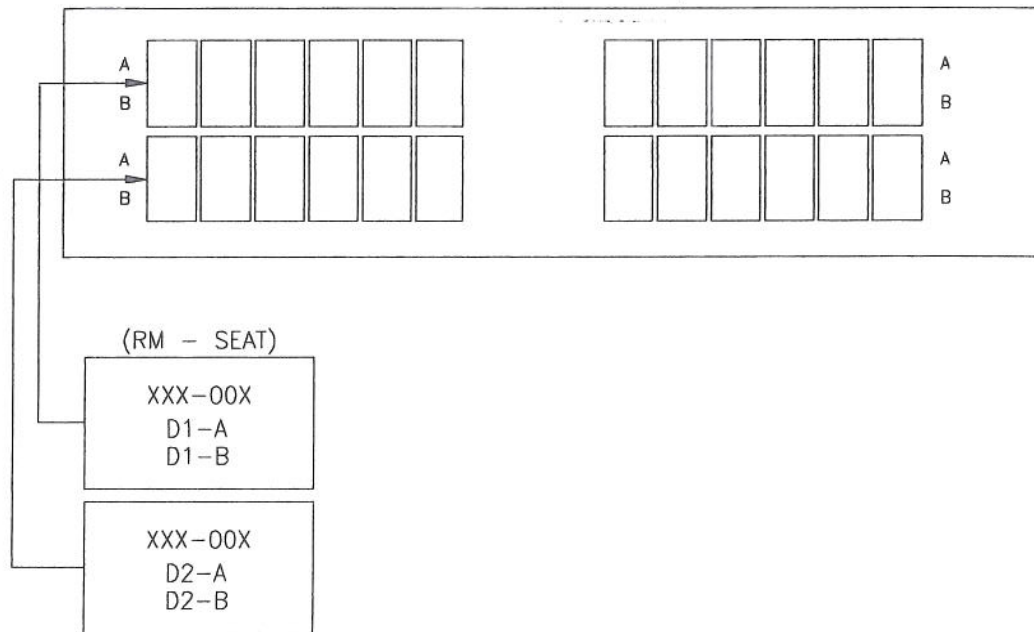


24 PORT
TYPICAL PATCH PANEL LABELING
(UNCLASSIFIED)

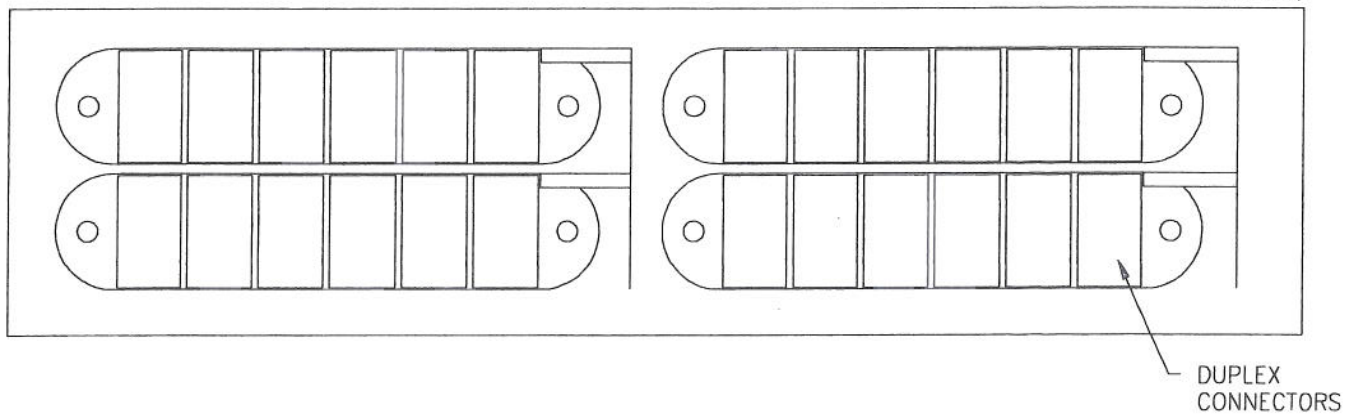
TYPICAL UNCLASSIFIED NMCI FIBER OPTIC PATCH PANEL (FRONT) – 72 SEAT (144 FIBERS)

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

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



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



Wire Run Records

4.1 ISP Examples: 24-Port Patch Panels

ISP WIRE RUN LIST

WIRE RUN LIST/"Base Name"-New CLASSIFIED Seats 24-Port Patch Panels

BLDG.# FLOOR NUMBER

FROM				TO						
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSGN.	CKT ID	WIRE TYPE	LENGTH
RM XXX	1	2F	NEW	1	XXX	1	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	2	XXX	1	SINPR	D2	CAT 5E	
RM XXX	1	2F	NEW	3	XXX	2	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	4	XXX	2	SINPR	D2	CAT 5E	
RM XXX	1	2F	NEW	5	XXX	3	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	6	XXX	3	SINPR	D2	CAT 5E	

GENERAL DYNAMICS

NETWORK SYSTEMS

WIRE RUN LIST/"Base Name"-New UNCLASSIFIED Seats 24-Port Patch Panels

BLDG.# FLOOR NUMBER

FROM				TO						
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSGN.	CKT ID	WIRE TYPE	LENGTH
RM XXX	1	3F	NEW	1	XXX	1	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	2	XXX	1	NIPR	D2	CAT 5E	
RM XXX	1	3F	NEW	3	XXX	2	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	4	XXX	2	NIPR	D2	CAT 5E	
RM XXX	1	3F	NEW	5	XXX	3	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	6	XXX	3	NIPR	D2	CAT 5E	

GENERAL DYNAMICS**NETWORK SYSTEMS****WIRE RUN LIST/"Base Name"-New UNCLASSIFIED 24-Port Patch Panels****BLDG.#****FLOOR NUMBER:** 1ST & 2ND FLOOR

FROM					TO					
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSIGN.	CKT ID	WIRE TYPE	LENGTH
XXX	1	5F	NEW	5	XXX	1	N	D1	OFNP	
XXX	1	5F	NEW	6	XXX	1	N	D2	OFNP	
XXX	1	5F	NEW	7	XXX	2	N	D1	OFNP	
XXX	1	5F	NEW	8	XXX	2	N	D2	OFNP	
XXX	1	5F	NEW	9	XXX	3	N	D1	OFNP	
XXX	1	5F	NEW	10	XXX	3	N	D2	OFNP	

GENERAL DYNAMICS**NETWORK SYSTEMS****WIRE RUN LIST/"Base Name"-New CLASSIFIED 24-Port Patch Panels****BLDG.#****FLOOR NUMBER:** 1ST & 2ND FLOOR

FROM					TO					
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSIGN.	CKT ID	WIRE TYPE	LENGTH
XXX	1	2F	NEW	1	XXX	1	S	D1	OFNP	
XXX	1	2F	NEW	2	XXX	1	S	D2	OFNP	
XXX	1	2F	NEW	3	XXX	2	S	D1	OFNP	
XXX	1	2F	NEW	4	XXX	2	S	D2	OFNP	
XXX	1	2F	NEW	5	XXX	3	S	D1	OFNP	
XXX	1	2F	NEW	6	XXX	3	S	D2	OFNP	

NOTE; GD Site Manager is responsible for generating wire run list.**Patch Panel:** Indicate with number for desired location of P/P in rack and whether F=Front/R=Rear.

4.2 ISP Examples: 48-Port Patch Panels

ISP WIRE RUN LIST:

WIRE RUN LIST/"Base Name"-New CLASSIFIED Seats 48-Port Patch Panel

BLDG.# FLOOR NUMBER

FROM					TO					
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSGN.	CKT ID	WIRE TYPE	LENGTH
RM XXX	1	2F	NEW	1	XXX	1	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	25	XXX	1	SINPR	D2	CAT 5E	
RM XXX	1	2F	NEW	2	XXX	2	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	26	XXX	2	SINPR	D2	CAT 5E	
RM XXX	1	2F	NEW	3	XXX	3	SINPR	D1	CAT 5E	
RM XXX	1	2F	NEW	27	XXX	3	SINPR	D2	CAT 5E	

GENERAL DYNAMICS

NETWORK SYSTEMS

WIRE RUN LIST/"Base Name"-New UNCLASSIFIED Seats 48-Port Patch Panel

BLDG.# FLOOR NUMBER

FROM					TO					
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSGN.	CKT ID	WIRE TYPE	LENGTH
RM XXX	1	3F	NEW	1	XXX	1	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	25	XXX	1	NIPR	D2	CAT 5E	
RM XXX	1	3F	NEW	2	XXX	2	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	26	XXX	2	NIPR	D2	CAT 5E	
RM XXX	1	3F	NEW	3	XXX	3	NIPR	D1	CAT 5E	
RM XXX	1	3F	NEW	27	XXX	3	NIPR	D2	CAT 5E	

GENERAL DYNAMICS

NETWORK SYSTEMS

WIRE RUN LIST/"Base Name"-New UNCLASSIFIED 48-Port Patch Panel**BLDG.#** **FLOOR NUMBER:** 1ST & 2ND FLOOR

FROM				TO						
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSIGN.	CKT ID	WIRE TYPE	LENGTH
XXX	1	5F	NEW	4	XXX	1	N	D1	OFNP	
XXX	1	5F	NEW	28	XXX	1	N	D2	OFNP	
XXX	1	5F	NEW	5	XXX	2	N	D1	OFNP	
XXX	1	5F	NEW	29	XXX	2	N	D2	OFNP	
XXX	1	5F	NEW	6	XXX	3	N	D1	OFNP	
XXX	1	5F	NEW	30	XXX	3	N	D2	OFNP	

GENERAL DYNAMICS

NETWORK SYSTEMS

WIRE RUN LIST/"Base Name"-New UNCLASSIFIED 48-Port Patch Panel**BLDG.#** **FLOOR NUMBER:** 1ST & 2ND FLOOR

FROM					TO					
CLOSET	RACK	PATCH PANEL		P/P PORT	ROOM	SEAT	ASSIGN.	CKT ID	WIRE TYPE	LENGTH
XXX	1	2F	NEW	1	XXX	1	S	D1	OFNP	
XXX	1	2F	NEW	25	XXX	1	S	D2	OFNP	
XXX	1	2F	NEW	2	XXX	2	S	D1	OFNP	
XXX	1	2F	NEW	26	XXX	2	S	D2	OFNP	
XXX	1	2F	NEW	3	XXX	3	S	D1	OFNP	
XXX	1	2F	NEW	27	XXX	3	S	D2	OFNP	

NOTE; GD Site Manager is responsible for generating wire run list.**Patch Panel:** Indicate with number for desired location of P/P in rack and whether F=Front/R=Rear.

4.3 OSP Examples

GENERAL DYNAMICS

NETWORK SYSTEMS

WIRE RUN LIST/"Base Name"-"From Bldg/To Bldg"

Cable Number	Core Bldg. #	Distribution Bldg. #	Design Strands	Std Strands	Distance	Notes
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
NMCI-XXXXX-XXX	0	0	0	24	0	
Backbone subtotal					0	
Cable Number	Distribution Bldg. #	Access Bldg. #	Design Strands	Std Strands	Distance	Notes
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
NMCI-XXXXX-XXX	0	0	0	12	0	
Access subtotal					0	

Example:

Building 375

Floor 1

NMCI_NUMBER_EXAMPLE

