

## BUILDING TERMINALS RISER AND DISTRIBUTION USING 88-TYPE QUICK-CONNECT HARDWARE

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### 1. GENERAL

1.01 This section covers the description and installation of 88-type hardware for terminating cables at riser and distribution terminals in commercial buildings. Additional information on description and use of 88-type hardware is contained in Section 631-050-120.

1.02 This section is reissued to:

- Indicate that the 88BBW1-type connecting blocks are superseded by the 88BSW1-type connecting blocks
- Include information on white wiring blocks and show colored wiring blocks rated MD
- Include information on colored designation strips
- Show the 188A1 backboard superseded by the 188B1 backboard

• Update text and illustrations.

Since this is a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 Riser and distribution terminals are defined as follows:

- (a) *A riser terminal (apparatus closet)* provides a location for terminating riser and building cables for further distribution within a building.
- (b) *A distribution terminal (satellite closet)* provides terminating facilities for both distribution cable and station cable wiring.

1.04 The objectives of the construction methods outlined in this section are:

- (a) To provide a standard method for construction of terminals
- (b) To permanently tie down all pairs entering and leaving all terminals
- (c) To promote good housekeeping which will:
  - (1) Facilitate work at the terminal
  - (2) Reduce maintenance expense.

1.05 Bonding and grounding requirements for subscriber buildings are outlined in Section 631-400-102.

### 2. EQUIPMENT

2.01 The following equipment is used to terminate cables in riser and distribution terminals.

### NOTICE

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(a) **The 88-type wiring block** (Fig. 1) is a fire retardant molded plastic block. Each wiring block consists of horizontal index strips marked with the five tip colors to establish pair location. Color coded 88-type wiring blocks are

superseded by **white** wiring blocks, which must use color coded designation strips. These blocks are available in 25-, 75-, 100-, and 300-pair size. (See Table A).

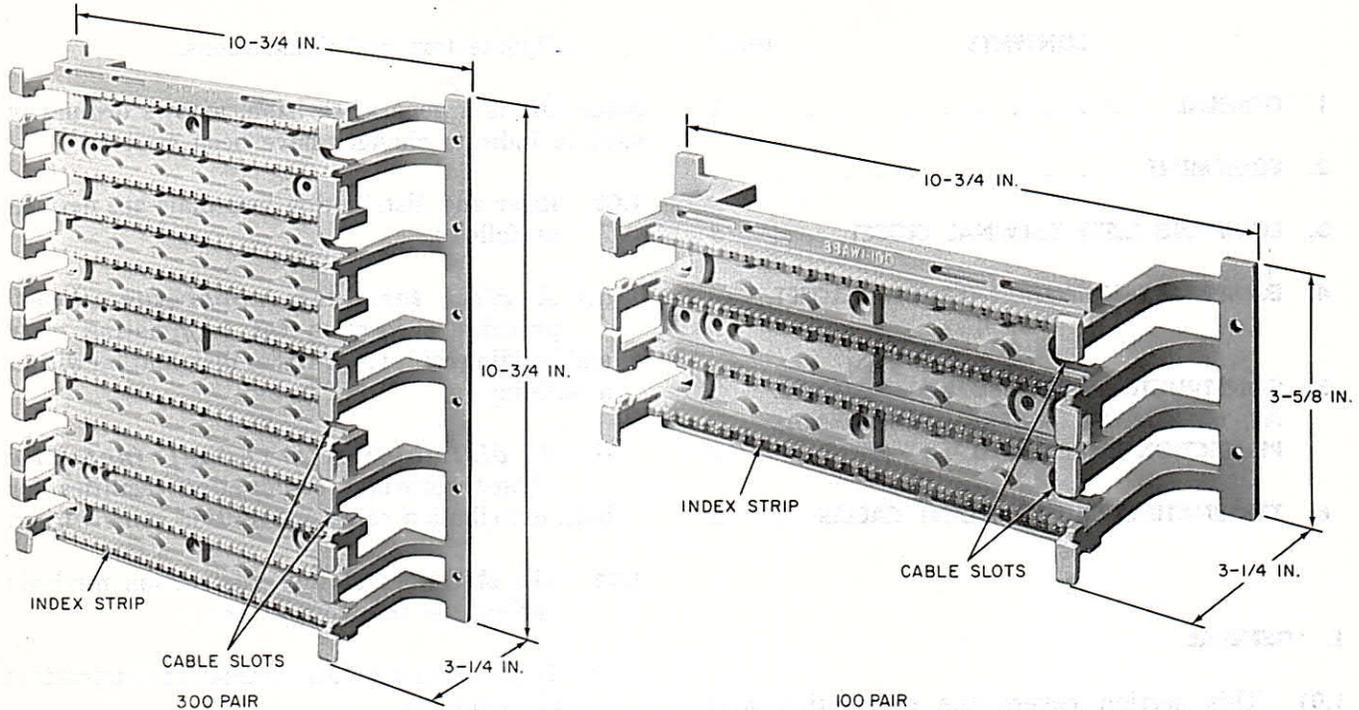


Fig. 1—88-Type Wiring Block

TABLE A

88-TYPE WIRING BLOCK FOR RISER AND DISTRIBUTION TERMINALS

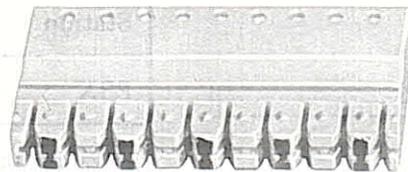
CODE NO.	COLOR	NO. OF PAIRS	USE
88AW1-100	White	100	Riser and Distribution
88AW1-300		300	
88BW1-25	White	25	Key Telephone System Equipment (Multiple Connections)
88BW1-25C*		25	
88BW1-75		75	
88BW1-75C*		75	

\*Wiring block equipped with 25-pair stub cable.

(b) **The 88-type connecting block** (Fig. 2)

consists of a flame retardant molded plastic housing containing quick-connect clips with insulation slicing features. These clips are double ended, one end to accept the cross-connecting wire and the other end to terminate the cable pair. The connecting blocks are white on one side and slate on the other. They are installed

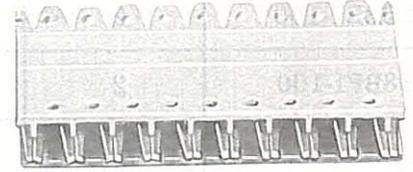
with alternate colors facing up to aid in pair identification. For riser and distribution terminal application, the connecting blocks are available in a 5-pair and 3-pair configuration. The 3-pair connecting block is used in both apparatus and satellite closets to terminate key telephone equipment.



SIDE FOR  
CROSS-CONNECTING WIRE



MINIATURE  
CLIP



MINIATURE CLIPS MOLDED  
IN PLASTIC—SIDE FOR  
TERMINATING CABLE PAIR

Fig. 2—88-Type Connecting Block

(c) **Designation strip** (Fig. 3) is "snapped in" on alternate rows to identify cable count or line designation and to conceal the cable

conductors. They are color coded and are available as shown in Table B.

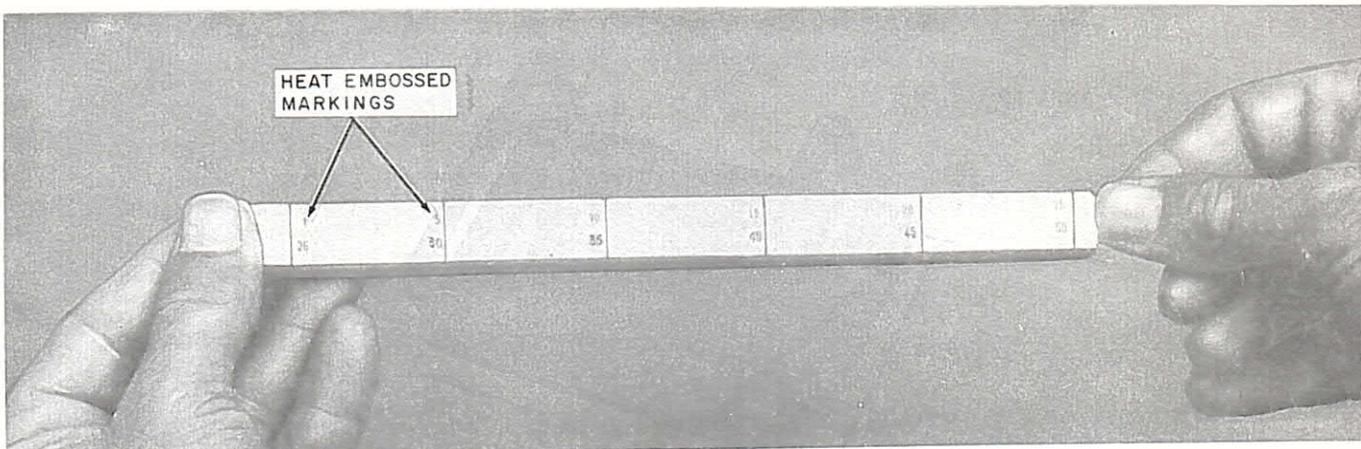


Fig. 3—Designation Strip

TABLE B

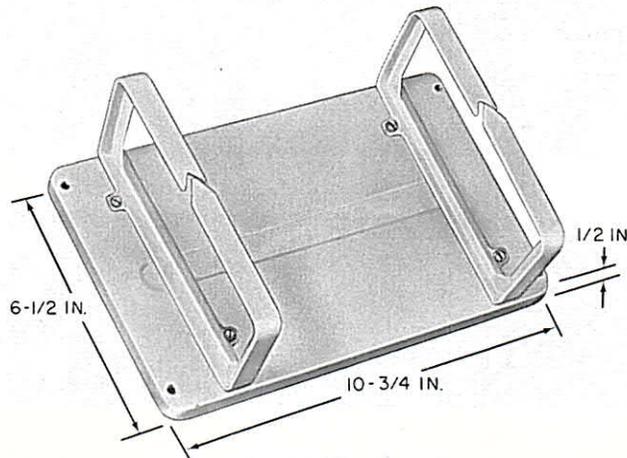
188-TYPE DESIGNATION STRIPS

IDENTIFICATION	QUANTITY PER PACKAGE	COLOR	DESCRIPTION	USE
188AB1-100*	2	Blue	 (one strip used to identify 50 pairs)	Distribution
188AG1-100*	2	Green		Feeder
188BB1-100	2	Blue	 (one strip used to identify 50 pairs)	Station
188BP1-100	2	Purple		PBX
188BR1-100	2	Red		Automatic Call Distributor
188BY1-100	2	Yellow		Auxiliary
188CR1-25	1	Red		 (one strip used to identify 25 pairs)

\* Designation strips are premarked from 1-50 and 51-100 only. For higher numbered designation strips, re-mark the first and last numbers of each 100-pair increment (eg, 101 and 200, 201 and 300, 301 and 400, etc).

(d) **188B1 backboard** (Fig. 4) is constructed of a metal panel and two closed formed plastic distributing rings. The backboard is used

to provide a horizontal channel for cross-connecting wire. The backboard **must** be butted between the wiring blocks.



• USED WITH 88-TYPE MODULAR CONNECTING BLOCKS TO RETAIN CROSS-CONNECTING WIRES.

Fig. 4—188B1 Backboard

(e) **88A retainer** (Fig. 5) is a small molded plastic part that attaches to the leg of the 88-type wiring block to complete its fanning strip. It is used to retain the cross-connecting wires at the top or bottom of a column of the 88-type wiring blocks.

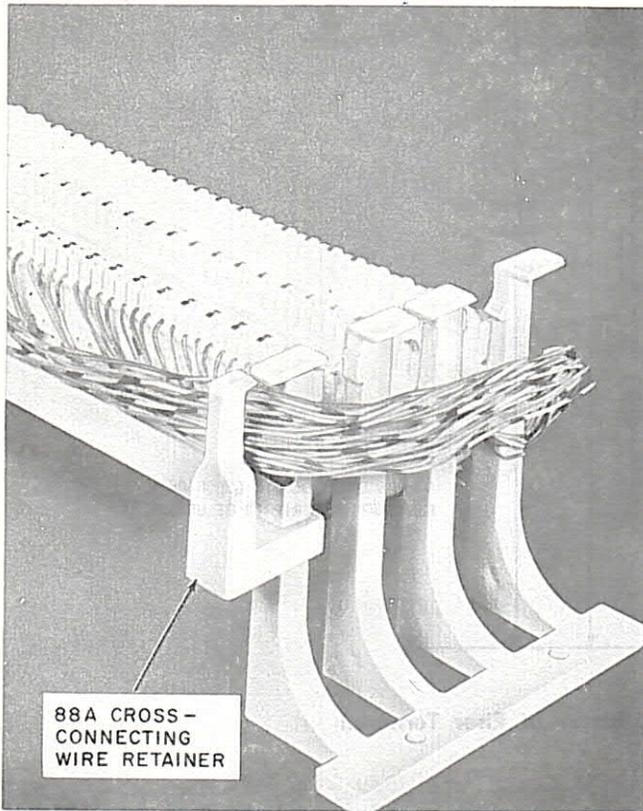


Fig. 5—88A1 Retainer

2.02 The following equipment is required for constructing riser and distribution terminals at locations where additional mechanical protection is required:

(a) **H-type cable terminal section** is a sheet metal housing consisting of a lift-out

type door. The top and bottom assemblies contain an identical arrangement of knockouts for the entering cable. These cable terminal sections are described in Section 631-400-101.

(b) **82-type backboard** is a wood mounting board made of 3/4-inch plywood used for mounting wiring blocks in H-type terminal sections.

### 3. EQUIPPING RISER TERMINAL CLOSET

3.01 Mark the **feeder (in)** cable pairs with **green** designation strips and the distribution cable pairs with **blue** designation strips. The basic layout (Fig. 6) and construction of a riser terminal are as follows:

(a) Mount the **auxiliary equipment** and **key equipment** wiring blocks with the top edge of the blocks a **maximum** of 83 inches off the floor.

(b) The 188B1 backboards should be mounted directly below the auxiliary equipment and key equipment wiring blocks and butted against each other.

**Note:** 188B1 backboards must be used when more than two columns of wiring blocks are required.

(c) The **feeder** wiring block should be mounted directly below the 188B1 backboard.

(d) The bottom edge of the distribution wiring blocks should be placed a **minimum** of 12 inches off the floor.

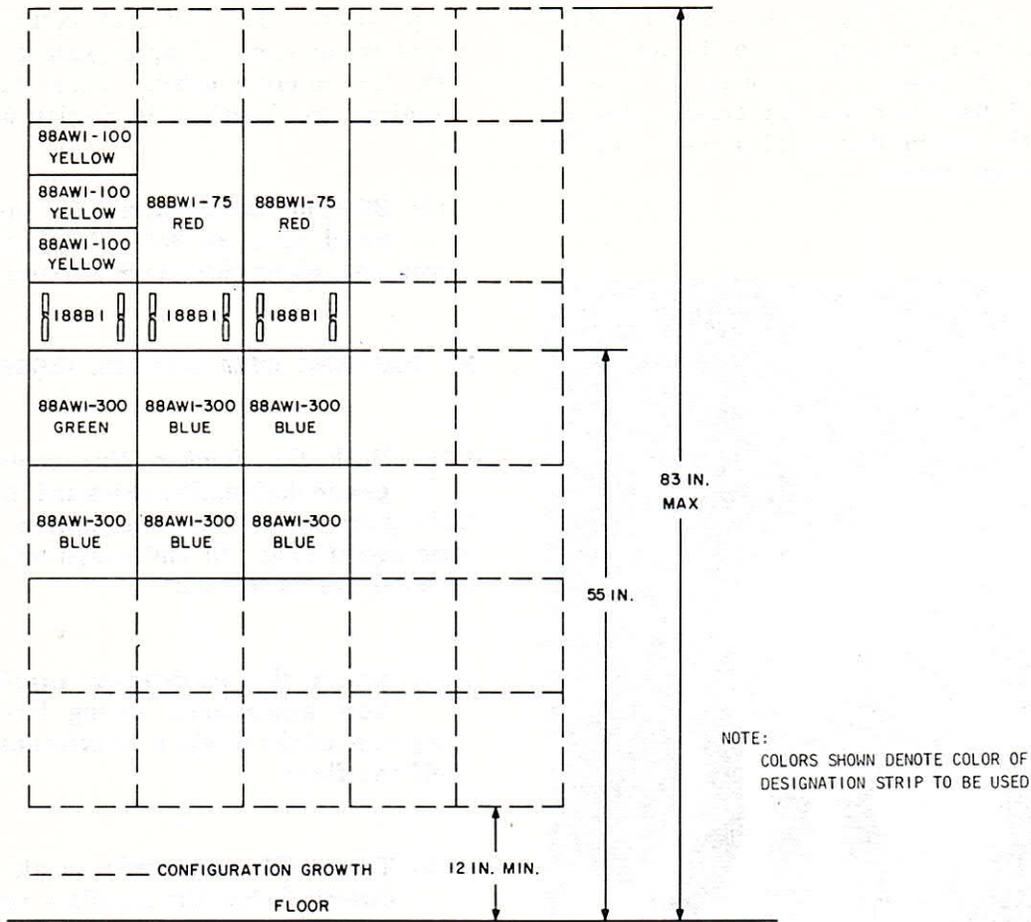


Fig. 6—Basic Layout of Wiring Blocks in Riser Terminal

**3.02** Basic line service from a riser terminal to a distribution terminal requires a cable between the two terminals (Fig. 7). This cable will terminate on the distribution wiring blocks (blue designation strips) in the riser terminal and on the key equipment wiring blocks (red designation strips) in the distribution terminal.

**3.03** Key telephone equipment features from one riser terminal to a second riser terminal requires a building tie cable between the two terminals. This cable will terminate on the distribution wiring blocks in both riser terminals.

**3.04** Auxiliary service and dial intercommunication lines are terminated on a wiring block (yellow designation strips) mounted directly above the feeder wiring blocks (green designation strips) on the left-hand side of the terminal.

**3.05** Key telephone equipment cables terminate on the wiring blocks (red designation strips) mounted generally above the distribution wiring blocks.

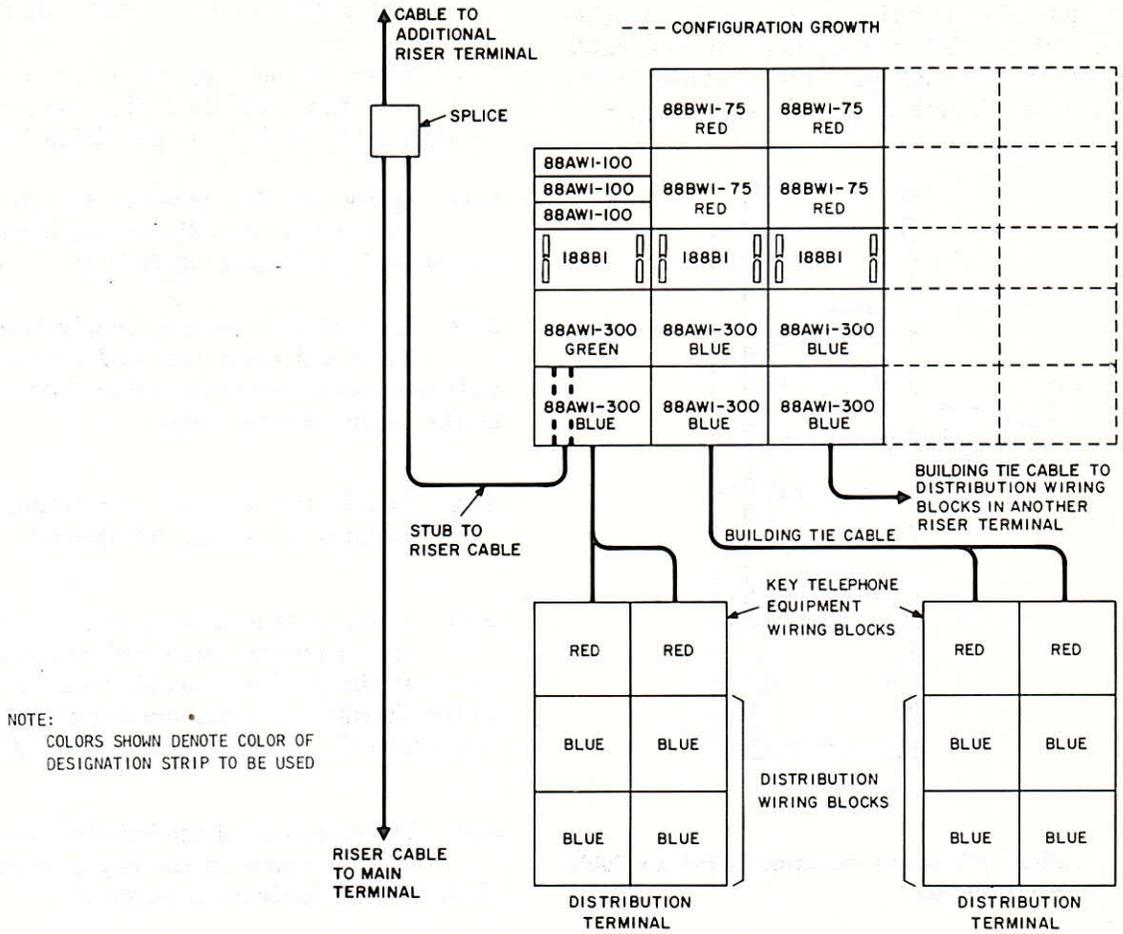


Fig. 7—Block Diagram Showing Riser Terminal Serving Two Distribution Terminals

4. EQUIPPING DISTRIBUTION TERMINAL CLOSET

4.01 Building tie cables from riser terminals which carry basic line service to distribution terminals **shall** be terminated on key equipment wiring blocks (red designation strips) which are installed in the **distribution terminal** as shown in Fig. 7.

4.02 The wiring blocks shown with blue designation strips (Fig. 7) in the distribution terminal are for terminating the station cables.

5. CONSTRUCTING DISTRIBUTION TERMINAL AT LOCATIONS WHERE MECHANICAL PROTECTION IS REQUIRED

5.01 Mount H202 cable terminal section on the wall as outlined in Section 631-400-101.

5.02 Install 82-type backboard in the cable terminal section.

5.03 Mount 75-pair wiring block (red designation strips) in the **upper** part of the cable terminal section and 300-pair wiring blocks in the **lower** part of the cabinet as shown in Fig. 8.

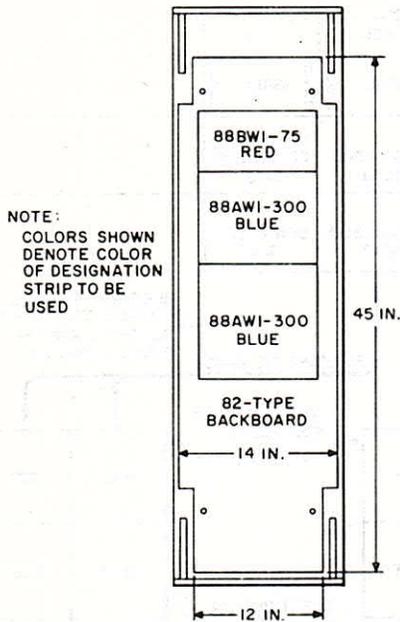


Fig. 8—Distribution Terminal Mounted in H-type Cable Terminal Section

6. TERMINATING OUTSIDE PLANT CABLES

6.01 When the building cable is a through cable, a 24-gauge PIC stub shall be run from the through cable to the 88-type wiring blocks.

6.02 Splice the PIC cable to the through cable and enclose the splice with a K and B closure as outlined in Section 633-560-101.

6.03 Remove the required sheath from the stub cable and route the binder groups in color code sequence through the cable slots on each side of the feeder wiring blocks.

6.04 Install the 88-type connecting blocks as outlined in Section 631-050-120.

6.05 When it is necessary to run a building tie cable from the riser terminal to a distribution terminal, the building tie cable **shall** be terminated on the distribution wiring block in the riser terminal as outlined in paragraphs 6.03 and 6.04.

6.06 The other end of the building tie cable **shall** be terminated on the key equipment wiring block in the distribution terminal.