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BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G61.110
Issue 2, June, 1936
AT&T Co. Standard

TERMINALS

INSTALLATION OF OUTSIDE DISTRIBUTING TERMINALS ON WALLS

CONTENTS

1. GENERAL

1.01 This section provides instructions for the installation of outside distributing terminals on building walls. The F Type Cable Terminal has been adopted as the standard for this purpose, but in view of the use of repaired C Type and No. 14 Type Cable Terminals, information is also included relative to these terminals.

1.02 The principal change from the previous issue of this section is the inclusion of information concerning the installation of F Type and No. 14 Type Cable Terminals equipped with the stub cable brace which protects this cable during handling of the terminal.

1.03 This section replaces Sections 36 to 38 of Specifications 3931, Supplement G to Specifications 3931 and together with Section G61.102 replaces Section G61.106.

1.04 A description of the anchoring devices specified for attachments to masonry and hollow tile and the methods to be followed in their installation and removal will be found in Section G10.375.

2. LOCATING TERMINAL

2.01 Locate terminal in accordance with the detail plans, complying with the following points in so far as practicable. If the specified terminal location does not appear

desirable from a construction standpoint or is considered as offering potential maintenance difficulties, notify your supervisor in order that he may look into the question of obtaining a more satisfactory location. Locate the terminal:

(a) Where it will be accessible and where it will be possible to work in the terminal without the use of a ladder. Satisfactory working conditions are generally obtained by locating the lower mounting holes approximately 5 feet above ground. This height may be increased if by so doing a hazardous condition or possible damage can be avoided.

(b) Where it will not project in such a manner as to create a hazardous condition.

(c) So as to avoid electric light and power circuits.

(d) Where it will not be subjected to damage such as may occur near driveways, loading platforms, moving machinery, hoists, doors, shutters, etc.

(e) So as to avoid leaders, drains, waste and exhaust pipes.

(f) Not less than 10 inches from the corner of a building.

(g) On a firm and even mounting surface.

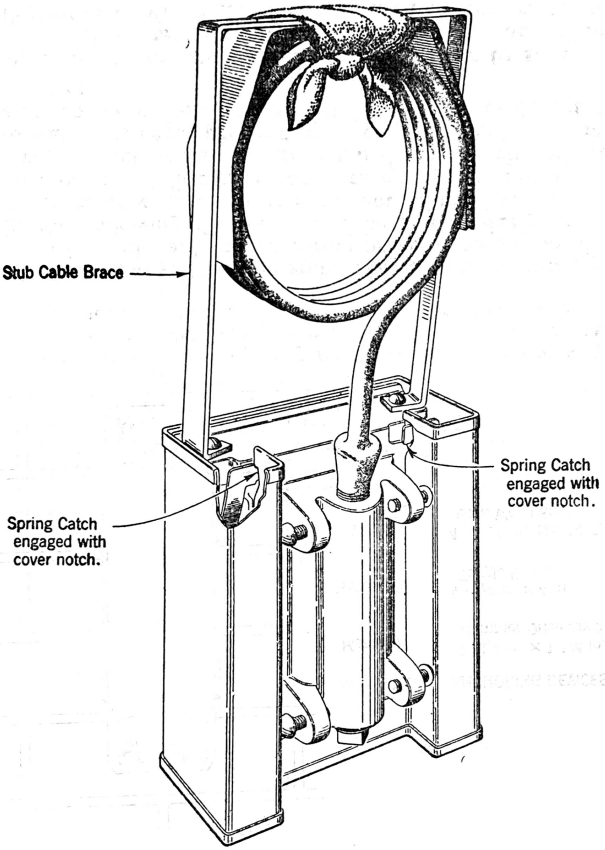
(h) On the dividing line between properties.

3. MOUNTING F TYPE CABLE TERMINAL

3.01 The F Type Cable Terminal is equipped with a stub cable brace to protect this cable during handling of the terminal. In order to minimize the possibility of sheath damage, the stub cable brace preferably should be left in place until removed at the time of splicing. The presence of the brace makes it unnecessary to clamp the stub cable to the wall at the time the terminal is placed, unless it is likely that the coiled cable will be disturbed, in which case the brace should be removed and the stub cable fastened to the wall. The two machine screws which secure the stub cable brace should be replaced in the terminal casting upon removing the brace.

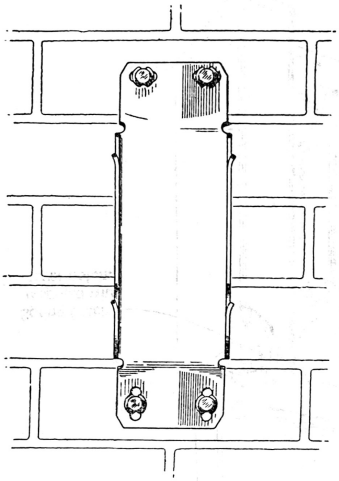
3.02 The use of the stub cable brace requires that the cover be placed on the terminal from the end opposite the stub cable. The spring catches of top and bottom stub terminals are assembled in their proper locations for supporting the cover in the raised position. Before raising the top stub terminal to the mounting plate, the cover should be fully closed and the spring catches engaged with the cover notches to ensure that the cover will not fall. The cover of the bottom stub terminal is fastened in the closed position with a temporary tie which should not be removed until after the terminal has been placed on the mounting plate.

3.03 A top stub F Type Cable Terminal equipped with a stub cable brace is shown in the following illustration.



3.04 **Mount F Type Cable Terminal on building wall** as follows:

(1) Attach mounting plate as shown in the following illustration

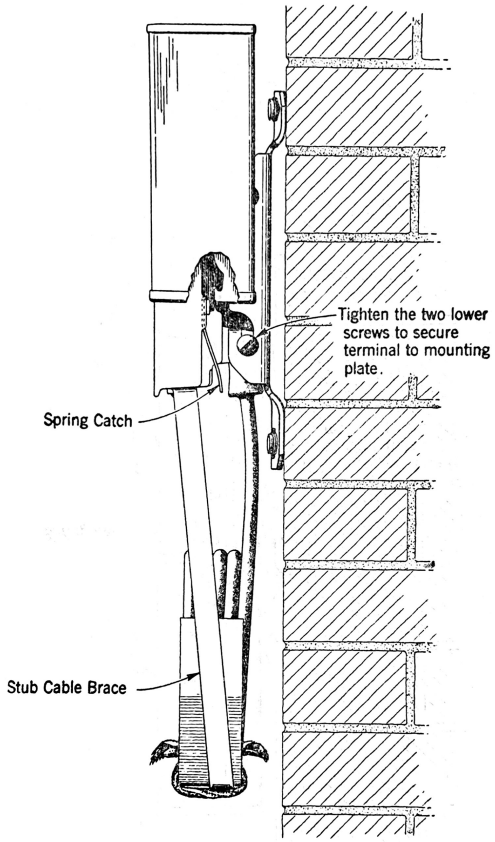


SURFACES	ANCHORING DEVICES
Masonry	4 - 1/4 in. x 1 1/4 in. Hammer Drive Anchors.
Hollow Tile	4 - 1/4 in. x 4 in. Toggle Bolts.
Wood	4 1 1/2 in. No. 14 R. H. Galv. Wood Screws.

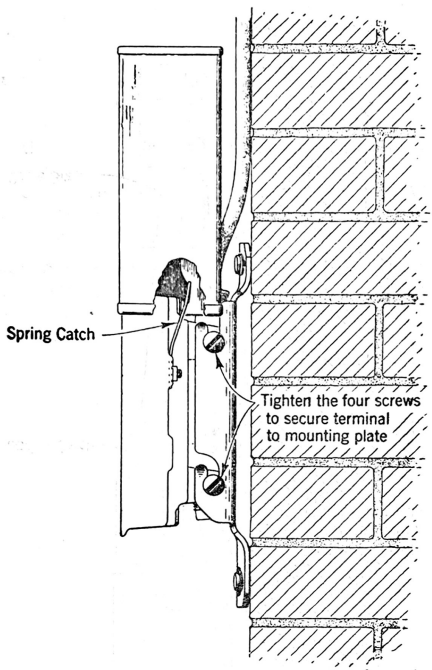
(2) Place top and bottom stub terminals on mounting plate with stub cable coiled within brace at bottom as shown in the following illustrations. Where it is likely that the coiled cable will be disturbed, mount terminal in the proper position for splicing, remove brace, replace two machine screws which secured it to terminal and attach stub cable to wall. It is necessary to remove cover of top stub terminal and replace it from opposite end after stub cable has been uncoiled.

(3) Raise cover and tighten locking screws to secure terminal to mounting plate as shown in the following illustrations. Where terminal is located so close to an inside corner that the locking screws on one side cannot be tightened with a screwdriver, tighten the screws on that side finger tight and then tighten the screws on the other side by means of a screwdriver.

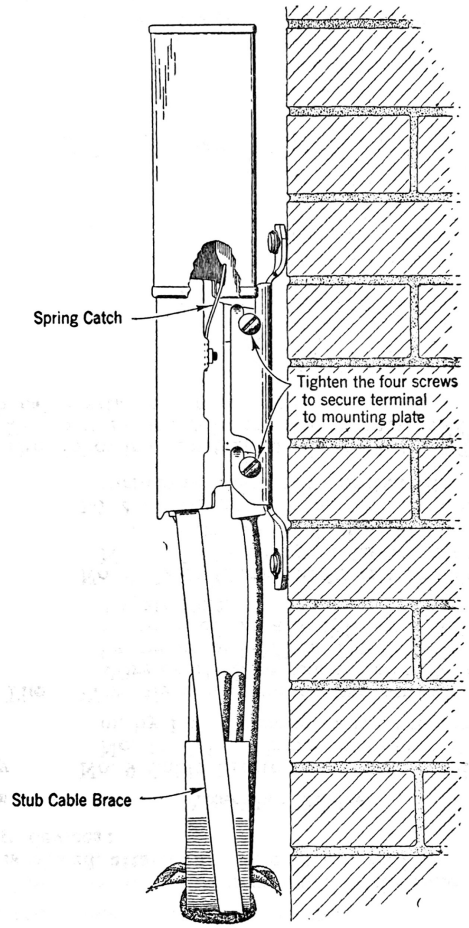
(a) Top Stub Terminal. The terminal should be reversed and the stub cable brace removed at the time of splicing.



(b) Top Stub Terminal. The following illustration shows the terminal reversed and the stub cable brace removed.



(c) **Bottom Stub Terminal. The stub cable brace should be removed at the time of splicing.**

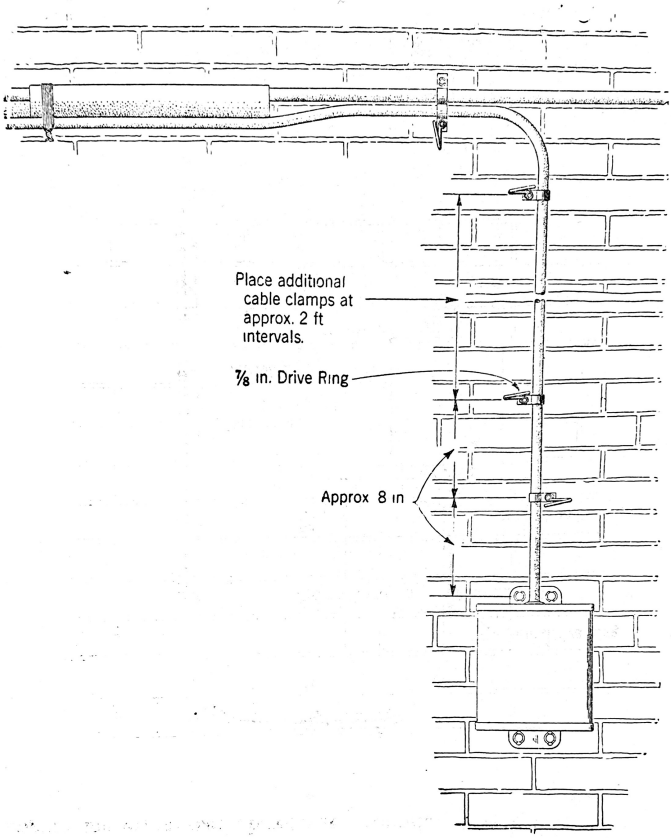


(4) Lower cover. Where spring catches are located adjacent to stub cable as illustrated in (3)(a), make sure that they engage the cover notches.

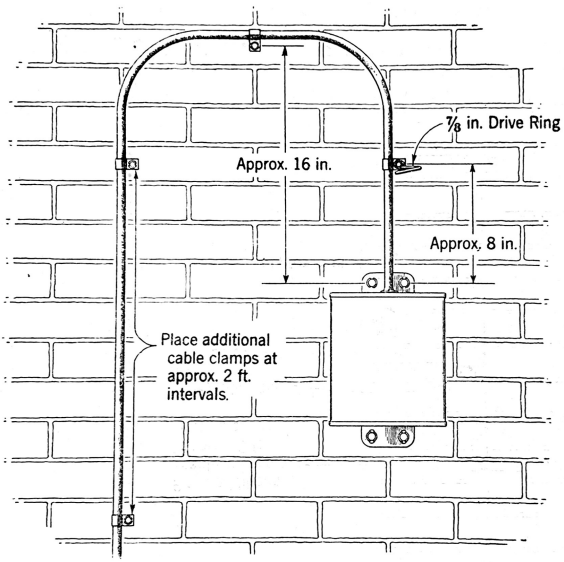
3.05 When the stub cable is uncoiled at the time the terminal is placed, attach the cable to the wall by means of the following devices:

Surfaces	Attaching Devices
Masonry	No. 9 Cable Clamp on 10 and 16-pair stubs and No. 11 Cable Clamp on 26-pair stub with 1/4 in. by 1 in. Hammer Drive Anchor.
Hollow Tile	Wire tie consisting of two strands of Lashing Wire or 049 Steel Construction Wire anchored by means of 1-1/2 in. No. 8 R.H. Galv. Wood Screw used as a toggle or 1/8 in. by 4 in. Toggle Bolt.
Wood	No. 9 Cable Clamp on 10 and 16-pair stubs and No. 11 Cable Clamp on 26-pair stub with 1 in. No. 14 R.H. Galv. Wood Screw. 1-1/2 in. Strap Nail may be used if mounting surface is sufficiently substantial.

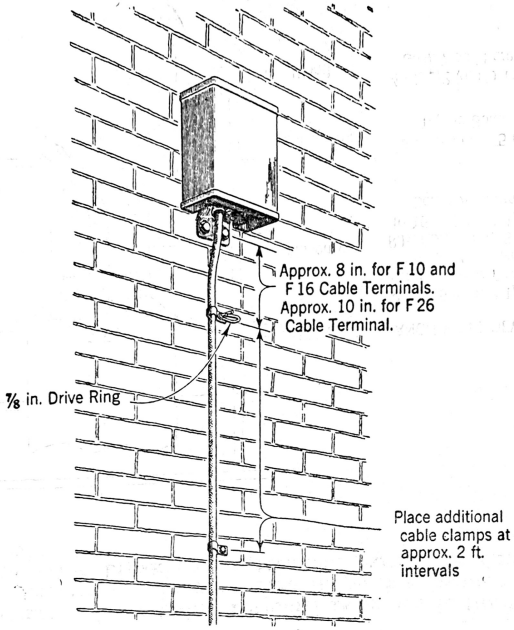
3.06 The following illustration shows the F Type Cable Terminal mounted below a horizontal cable run with the stub cable attached to the wall.


Place additional cable clamps at approx. 2 ft intervals.
⅞ in. Drive Ring
Approx 8 in

3.07 The following illustration shows the F Type Cable Terminal mounted for connection to a vertical cable run with the stub cable attached to the wall. Where it is improbable that the vertical cable run will be extended above the terminal, a bottom stub terminal may be mounted directly above this cable as shown in the following paragraph. The lower end of the splice between stub and subsidiary cables preferably should be located approximately 2 feet above the ground. An 8-foot stub cable is adequate for the arrangement shown in the following illustration where the terminal is located approximately 5 feet above the ground.



3.08 The following illustration shows the F Type Cable Terminal mounted in line with a vertical cable run or above a horizontal cable run.



3.09 When it is necessary to convert a top stub F Type Cable Terminal to a bottom stub terminal, or the reverse, the following rearrangements should be made before the terminal is raised to its position on the mounting plate.

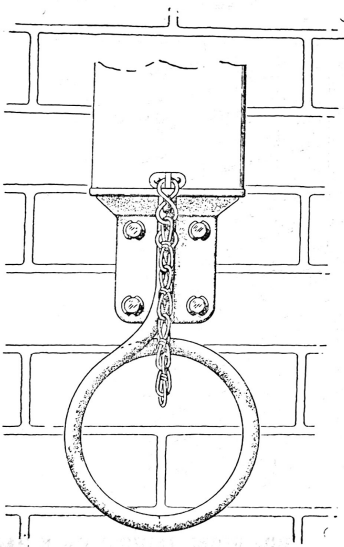
(1) Remove cover, depressing spring catches at rear of sealed chamber to clear cover notches.

(2) Remove spring catches and reattach them in the diagonally opposite positions.

(3) Replace cover from end opposite stub cable, depressing spring catches to clear end of cover. Before raising top stub terminal see that spring catches engage cover notches to ensure that sealed chamber or cover will not fall when terminal is raised. Where bottom stub terminal is to be raised by means of a hand line placed around stub cable and brace, fasten cover in closed position with a temporary tie to ensure that it will not fall. Where top stub cable is to be attached to wall at time of installing terminal, replace cover after terminal has been secured to mounting plate and cable has been uncoiled. Upon removing stub cable brace, replace the two machine screws which secured it to the terminal.

4. MOUNTING C TYPE CABLE TERMINAL

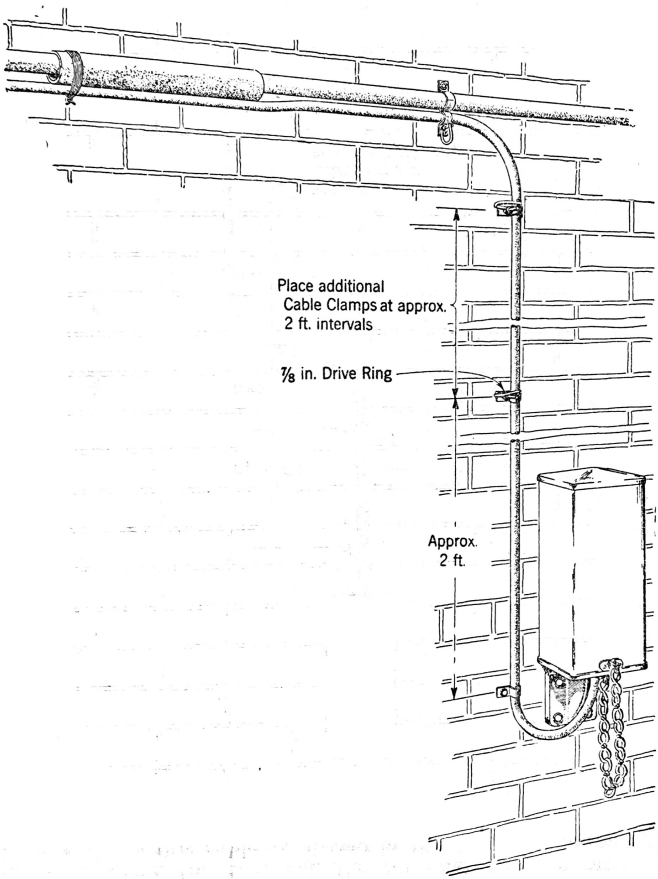
4.01 Attach C Type Cable Terminal as shown in the following illustration. Exercise care in placing hammer drive anchors to avoid breaking the terminal casting or damaging the stub cable.



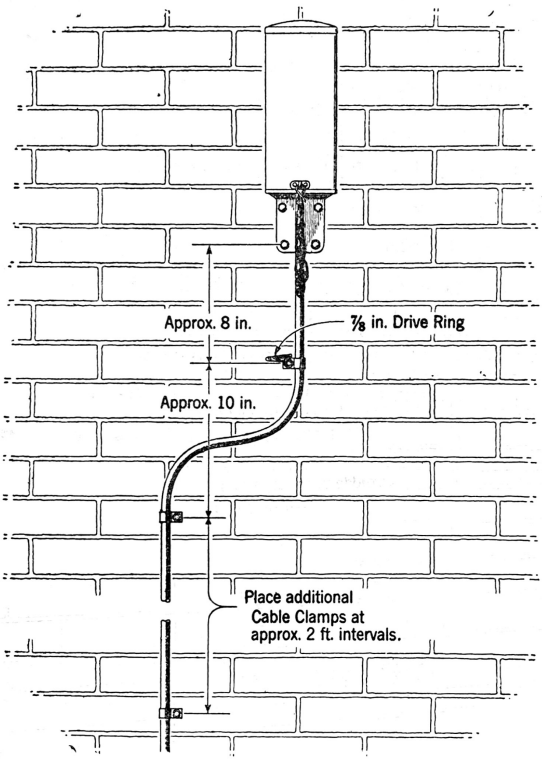
SURFACES	ANCHORING DEVICES
Masonry	4 - 5/16 in. × 2 1/4 in Hammer Drive Anchors. or 4 - 2 1/2 in. No. 18 R.H. Galv. Wood Screws in 16 to 18 × 1 1/2 in. Screw Anchors.
Hollow Tile	4 - 5/16 in. × 5 in. Toggle Bolts.
Wood	4 - 2 1/2 in. No 18 R.H. Galv. Wood Screws.

4.02 Attach the stub cable to the building wall by means of the devices listed in Paragraph 3.05.

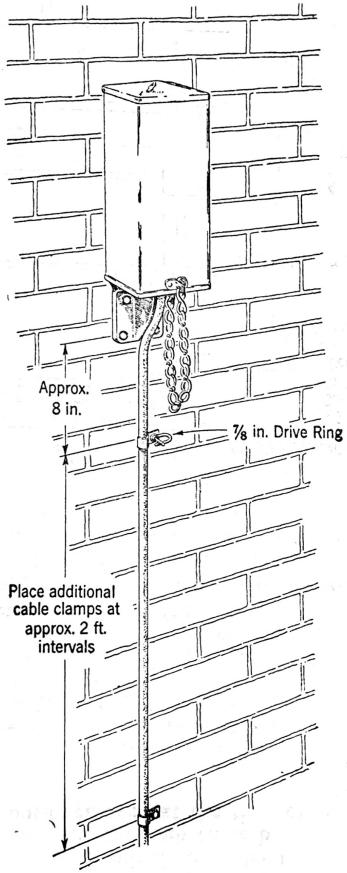
4.03 The following illustration shows the C Type Cable Terminal located below a horizontal cable run.



4.04 The following illustration shows the C Type Cable Terminal mounted for connection to a vertical cable run. Where it is improbable that the vertical cable run will be extended above the terminal, the terminal may be mounted directly above this cable as shown in the following paragraph.



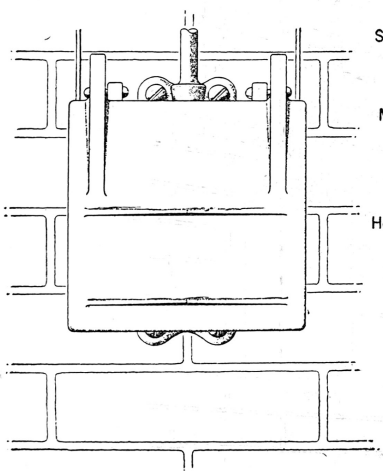
4.05 **The following illustration shows the C Type Cable Terminal mounted in line with a vertical cable run or above a horizontal cable run.**



5. MOUNTING NO. 14 TYPE CABLE TERMINAL

5.01 Repaired No. 14 Type Cable Terminals generally are equipped with a stub cable brace to protect this cable during handling of the terminal. In order to minimize the possibility of sheath damage, the stub cable brace preferably should be left in place until removed at the time of splicing. However, when it is likely that the coiled stub cable will be disturbed and also when a top stub slip cover equipped terminal is to be installed, the stub cable brace should be removed immediately after the terminal has been attached to the wall. The stub cable should then be fastened permanently to the wall and the slip cover of a top stub terminal should be removed and replaced on the terminal from the top. The two machine screws which secure the stub cable brace should be replaced in the terminal casting upon removing the brace.

5.02 Attach No. 14 Type Cable Terminal to the wall as shown in the following illustration. Exercise care in placing hammer drive anchors to avoid breaking terminal casting or damaging stub cable.



SURFACES	ANCHORING DEVICES
Masonry	4 - 1 1/2 in. No. 14 R.H. Galv. Wood Screws in 10 to 14 × 1 in. Screw Anchors or 4 - 1/4 in. × 1 1/4 in. Hammer Drive Anchors.
Hollow Tile	4 - 1/4 in. × 4 in. Toggle Bolts.
Wood	4 - 1 1/2 in. No. 14 R.H. Galv. Wood Screws

5.03 The method of attaching the stub cable to the wall and the location of the No. 14 Type Cable Terminal with reference to horizontal and vertical cable runs are the same

as outlined in Paragraphs 3.05 to 3.08 for the F Type Cable Terminal.

5.04 Paragraphs 3.02 and 3.09 outline the precautions to be followed in securing the slip covers of F Type Cable Terminals before raising the terminal and these precautions should also be observed when installing repaired No. 14 Type Cable Terminals which are equipped with slip covers.

5.05 When it is necessary to convert a top stub slip cover equipped No. 14 Type Cable Terminal to a bottom stub terminal or the reverse, the following rearrangements should be made immediately after the terminal has been attached to the wall with the stub cable in the proper position for splicing.

(1) Remove cover, depressing spring catch at rear of sealed chamber to clear cover notches.

(2) Remove spring catch and reattach it at the vacant wire entrance holes which will bring top of catch the same distance (approximately 1/2 inch) beyond opposite end of terminal.

(3) Replace cover on bottom stub terminal from end opposite stub cable, depressing spring catch to clear end of cover. Replace cover on top stub terminal after stub cable has been uncoiled. Upon removing stub cable brace, replace the two machine screws which secured it to the terminal.