

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G32.114.2**  
**Issue 2, February, 1954**  
**AT&T Co Standard**

# **DROP AND BLOCK WIRING**

## **EQUIPPING AND INSTALLING**

### **BUILDING ATTACHMENTS**

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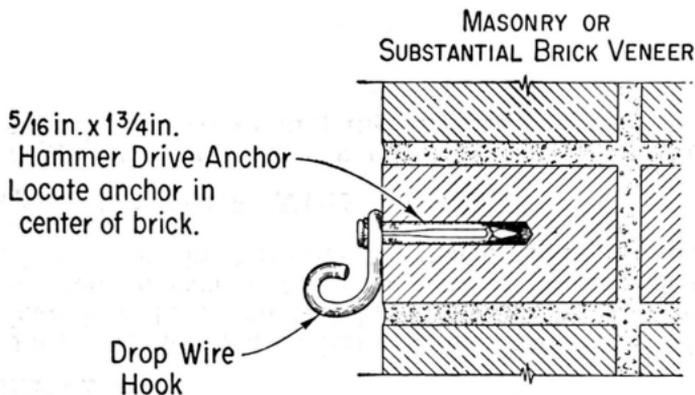
#### **1. GENERAL**

1.01 This section replaces Issue 1 and covers equipping and installing first and last building attachments for drop wire supported on various types of wall. It is reissued to conform with changes in National Electrical Code requirements.

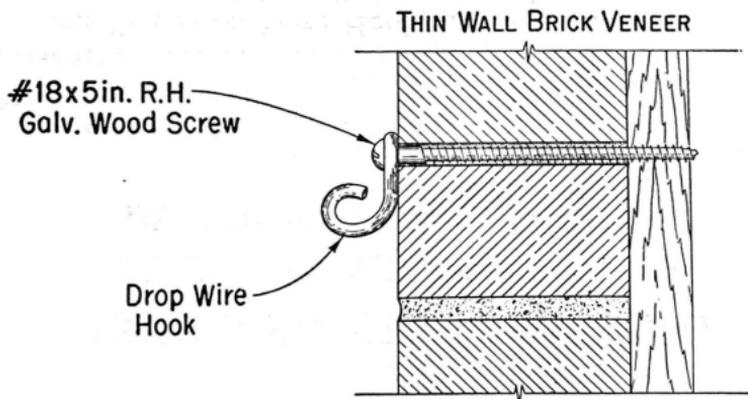
#### **2. INSTALLING DROP WIRE HOOK**

2.01 Align drop wire hook in the direction of the drop wire span before tightening the anchoring device. ↙

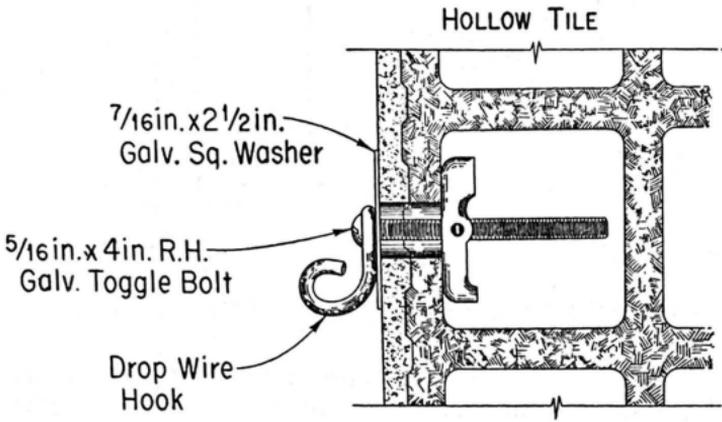
2.02 **Masonry or Substantial Brick Veneer Walls.** Install drop wire hook as indicated below.



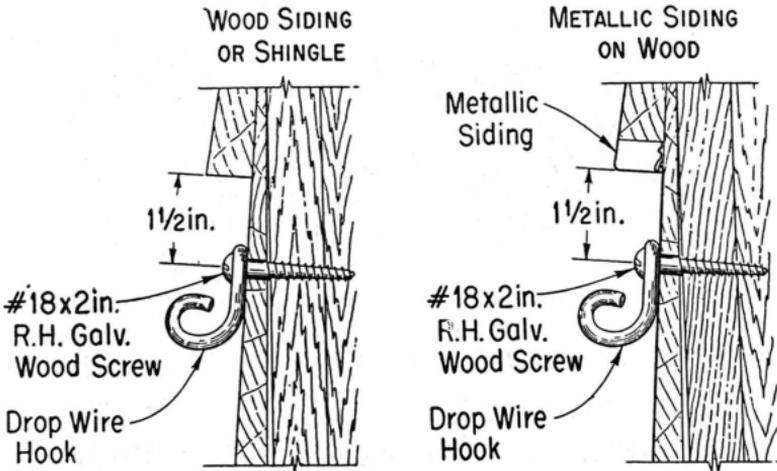
2.03 **Thin-Wall Brick Veneer Wall.** Install hook as for substantial brick veneer walls where practicable. Otherwise attach as indicated below.



2.04 **Hollow Tile Wall.** Attach hook as indicated below.



2.05 **Wood siding or shingle and metallic siding on wood.**

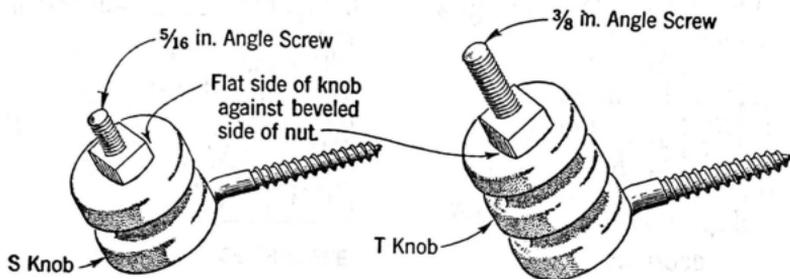


2.06 **Stucco on Wood Wall.** Drop wire hook not suitable as first attachment for this type of wall. Use angle screw or house bracket instead of hook.

### 3. EQUIPPING AND INSTALLING ANGLE SCREWS

#### Equipping Angle Screws with S and T Knobs

3.01 Equip angle screws as indicated below:

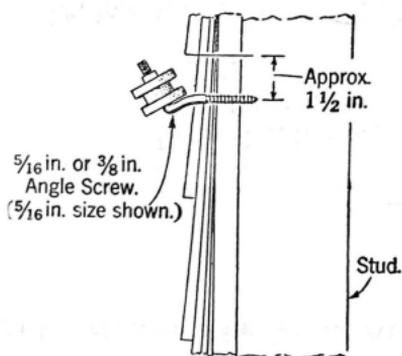


#### Installing Angle Screws

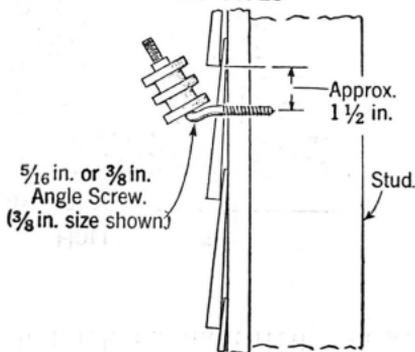
3.02 Place angle screw in a stud to obtain required holding power. Turn angle screw into wall up to the first bend by means of the Angle Screw Wrench or other tool provided for this purpose.

3.03 Install angle screws on wood shingles and clapboards as shown in the following illustrations. Angle screws may also be installed on substantial wood trim, stucco on wood and rigid composition shingles where the screw will penetrate the wood backing at least one inch.

WOOD SHINGLES



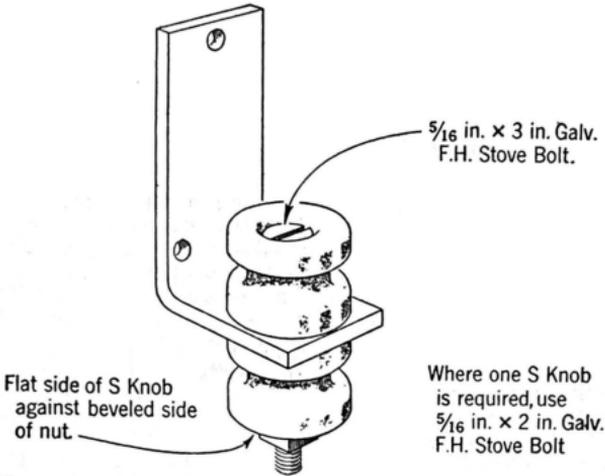
WOOD CLAPBOARDS ALL TYPES



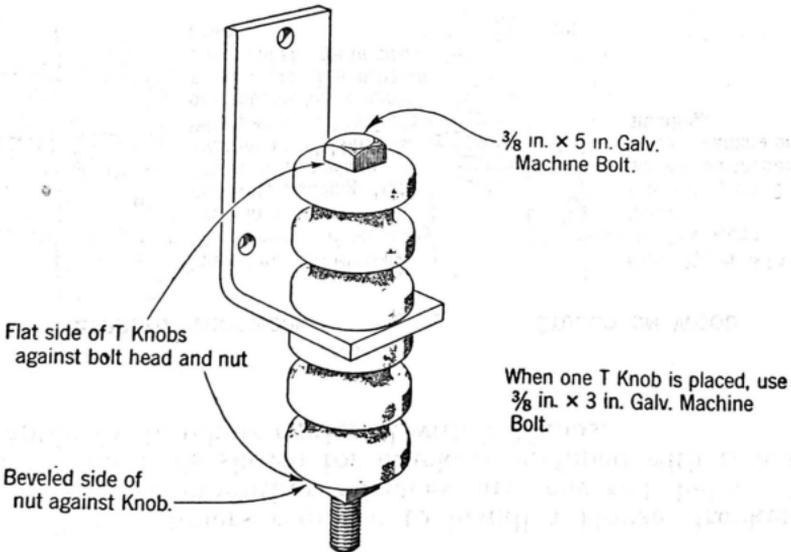
#### 4. EQUIPPING AND INSTALLING HOUSE BRACKET

##### Equipping House Bracket with S and T Knobs

4.01 Equip House Bracket with one or two S Knobs as indicated below.



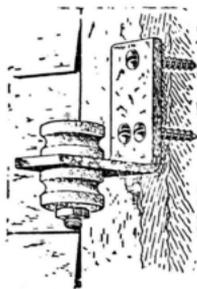
4.02 Equip House Bracket with one or two T Knobs as indicated below.



### Installing House Bracket

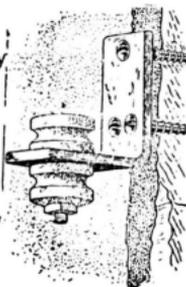
4.03 The fasteners required to install a House Bracket on various mounting surfaces are covered below. The mounting methods shown for brackets equipped with S Knobs also apply for brackets equipped with T Knobs.

#### EXPOSED WOODWORK



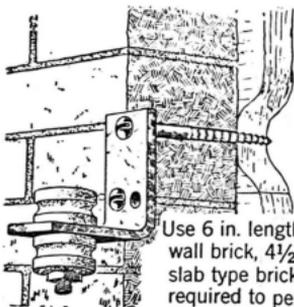
Three 2 in. # 14 RH Galv. Wood Screws. If necessary use 3 in. screws to penetrate studing. Use 1½ in. screws where attached to solid timbers. Where attached to shingle or clapboard locate upper screw approx. 1½ in. below bottom of shingle or clapboard.

#### STUCCO ON WOOD



Three 2½ in. # 14 RH Galv. Wood Screws. If necessary use 3 in. screws to penetrate wood sheathing or studing.

#### THIN-WALL BRICK VENEER



Two # 14 RH Galv. Wood Screws.

Use 6 in. length screws on thin-wall brick, 4½ in. length on slab type brick or length as required to penetrate wood backing approx. 1 in.

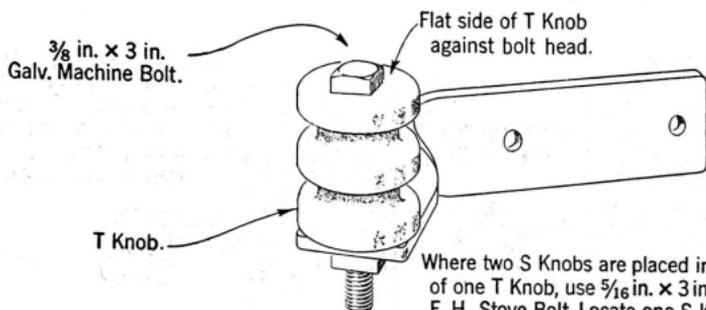
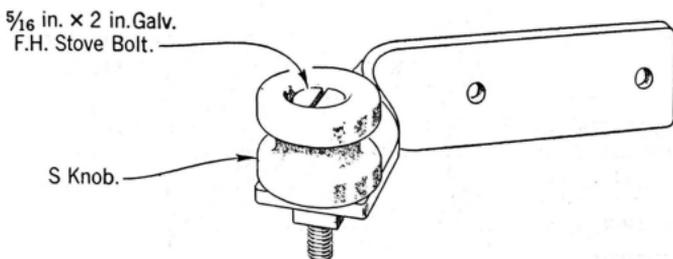
#### RIGID COMPOSITION SHINGLES

Attach House Bracket with three 3 in. # 14 RH Galv. Wood Screws in accordance with G32.114.1 Paragraphs 2.05 to 2.09 inclusive.

## 5. EQUIPPING AND INSTALLING CORNER BRACKET

### Equipping Corner Bracket with S and T Knobs

5.01 Equip corner brackets as indicated below:

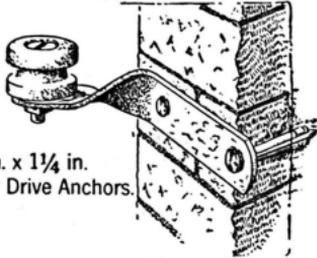


Where two S Knobs are placed instead of one T Knob, use 5/16 in. x 3 in. Galv. F. H. Stove Bolt. Locate one S Knob above and one below the bracket. Place nut against flat side of lower S Knob.

### Installing Corner Bracket

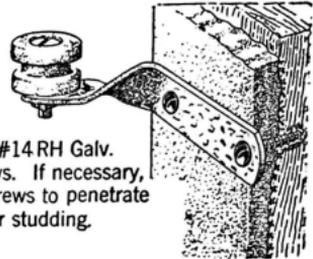
5.02 The fasteners required to install S and L Corner Brackets on various mounting surfaces are shown in the following illustrations.

MASONRY OR SUBSTANTIAL  
BRICK VENEER



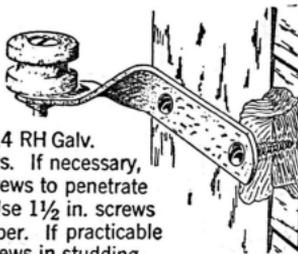
Two ¼ in. x 1¼ in.  
Hammer Drive Anchors.

STUCCO ON WOOD



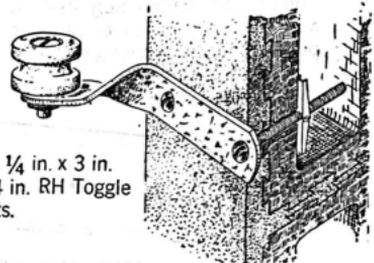
Two 2½ in. #14 RH Galv.  
Wood Screws. If necessary,  
use 3 in. screws to penetrate  
sheathing or studding.

EXPOSED WOODWORK



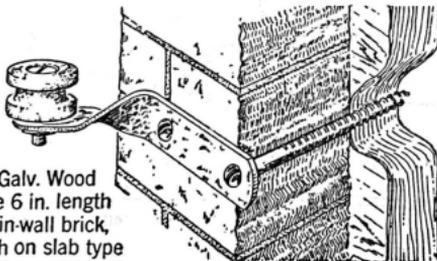
Two 2 in. #14 RH Galv.  
Wood Screws. If necessary,  
use 3 in. screws to penetrate  
studding. Use 1½ in. screws  
on solid timber. If practicable  
place all screws in studding.

HOLLOW TILE



Two ¼ in. x 3 in.  
or 4 in. RH Toggle  
Bolts.

THIN-WALL BRICK VENEER



Two #14 RH Galv. Wood  
Screws. Use 6 in. length  
screws on thin-wall brick,  
4½ in. length on slab type  
brick or length as required  
to penetrate wood backing  
approx. 1 in.

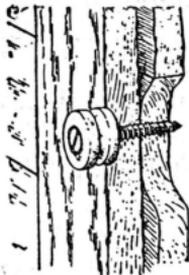
RIGID COMPOSITION  
SHINGLES

Attach Corner Bracket  
with two 3 in. #14 RH  
Galv. Wood Screws in  
accordance with G32.114.1  
Paragraphs 2.05 to 2.09  
inclusive.

## 6. INSTALLING S KNOB

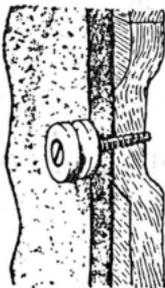
6.01 The fasteners required to install an S Knob on various mounting surfaces are shown in the following illustrations.

EXPOSED WOODWORK



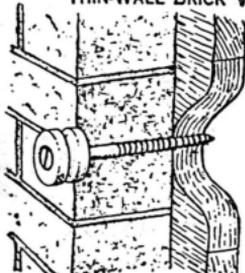
2 1/2 in. #18 FH Galv. Wood Screw. Place screw in studding if practicable. When attaching to shingle or clapboard, locate screw approx. 1 1/2 in. below bottom of shingle or clapboard.

STUCCO ON WOOD



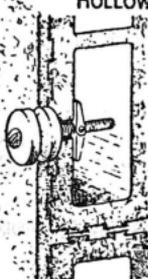
3 in. #18 FH Galv. Wood Screw. Place screw in studding if practicable. Use 3 1/2 in. screw, if necessary, to penetrate wood sheathing or studding.

THIN-WALL BRICK VENEER



#18 FH Galv. Wood Screw. Use 7 in. length screw on thin-wall brick, 4 1/2 in. length on slab type brick or length as required to penetrate wood backing or studding approx. 1 in.

HOLLOW TILE



5/16 in. x 5 in. RH Toggle Bolt. Place flat side of S Knob against head of bolt.

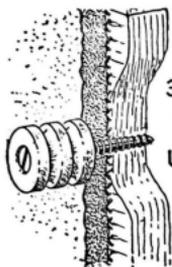
RIGID COMPOSITION SHINGLES

Attach S Knob with 3 1/2 in. #18 FH Galv. Wood Screw in accordance with G32.114.1 Paragraphs 2.05 to 2.09 inclusive.

## 7. INSTALLING T KNOB

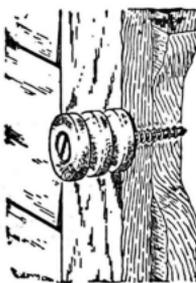
7.01 The fasteners required to install a T Knob on various mounting surfaces are shown in the following illustrations.

**STUCCO ON WOOD**



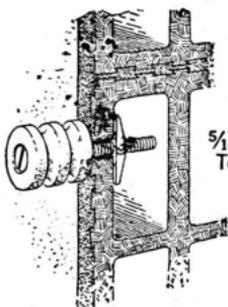
3½ in. # 18 FH Galv. Wood Screw. Place screw in studding if practicable. Use 4½ in. screw, if necessary, to penetrate wood sheathing or studding.

**EXPOSED WOODWORK**



3½ in. # 18 FH Galv. Wood Screw. Place screw in studding if practicable. When attaching to shingle or clapboard locate screw approx. 1½ in. below bottom of shingle or clapboard.

**HOLLOW TILE**



5/16 in. x 6 in. FH Toggle Bolt.

**RIGID COMPOSITION SHINGLES**

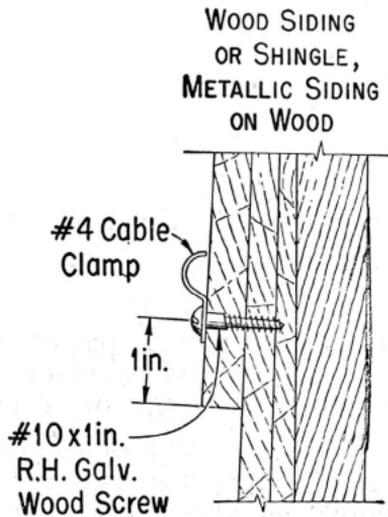
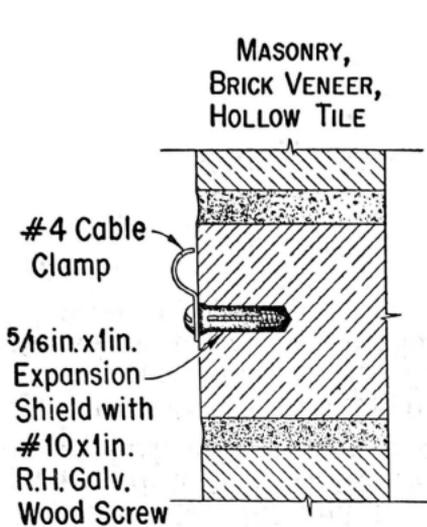
Attach T Knob with 4½ in. # 18 FH Galv. Wood Screw in accordance with G32.114.1 Paragraphs 2.05 to 2.09 inclusive.

7.02 On thin-wall brick veneer the T Knob may be attached to the wood backing by means of a 7 in. No. 18 F.H. Wood Screw passed through the seam between bricks.

## 8. INSTALLING NO. 4 CABLE CLAMP

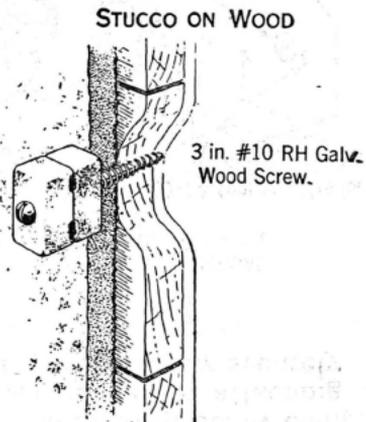
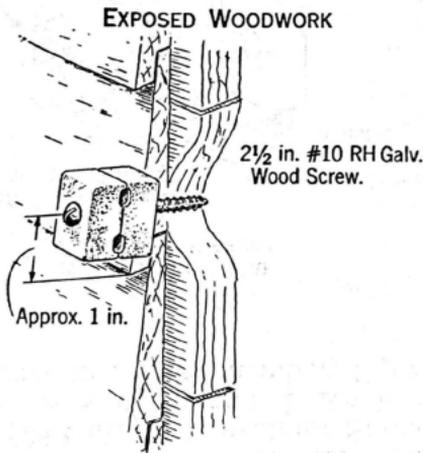
↖

8.01 The fasteners required to install No. 4 Cable Clamp on various mounting surfaces are shown in the following illustrations.



## 9. INSTALLING C KNOB

9.01 The fasteners required to install a C Knob on various mounting surfaces are shown in the following illustrations.

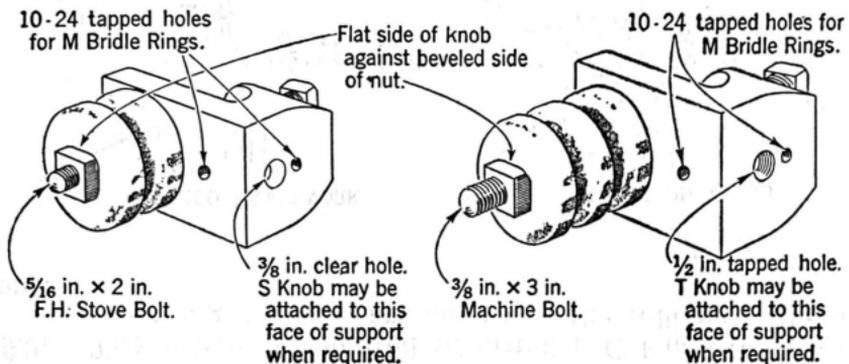


## 10. EQUIPPING AND INSTALLING UNIVERSAL INSULATOR SUPPORTS TO STEEL STRUCTURAL FRAMEWORK

10.01 Attachments to I beams, angle irons, etc., may be made by means of universal insulator supports. The Nos. 505 and 506 Universal Insulator Supports are shown below equipped with an S Knob and T Knob, respectively. In attaching the support to a steel member, tighten the set screw securely.

**NO. 505 UNIVERSAL  
INSULATOR SUPPORT**

**NO. 506 UNIVERSAL  
INSULATOR SUPPORT**



**Note: Only one S Knob or one T Knob shall be attached to the Nos. 505 and 506 Supports, respectively.**

10.02 The No. 505 and No. 506 supports may be equipped with a drop wire hook by means of a 5/16 in. x 1 in. F.H. or R.H. galv. steel bolt obtained locally.

10.03 One drop may span from a No. 505 support and two drops from a No. 506 support, provided that the support is so placed that it will be pulled against the structural steel member.