

## DROP AND BLOCK WIRING

### MECHANICAL PROTECTION OF WIRES

### ON BUILDINGS

#### 1. GENERAL

**1.01** This section covers the use of wire guards as protection for drop and block wiring on buildings where required for mechanical and electrical reasons.

**1.02** This information was formerly covered in Section 625-450-205 (G32.162.1) which is canceled.

**1.03** The recommended minimum separations between telephone wires and foreign conductors or metallic objects are covered in Section 620-220-011.

**1.04** Protect drop and block wires, as covered in this section, under the following conditions.

- Where wire runs are subject to mechanical damage as in crossing stone cornices, building projections, overhangs, or similar obstructions, and in passing through metallic gratings.
- Where it is not practicable to obtain recommended separations between drop or block wiring and foreign wires, or cables, rain spouts, etc, as covered in Section 620-220-011.

**1.05** The separations and protection requirements for wires placed on the outside of buildings, such as may be run to off-premise extensions, outdoor stations, loud ringing bells, etc, are the same as specified for drop and block wires and are covered in Section 620-220-011.

**1.06** All wires or cable installed in explosive atmospheres shall be placed in accordance with the instructions pertaining to that equipment.

**1.07** Wire or cable shall not be placed in pipe, conduit, or compartment containing electric light and power wires or cables, nor in the same outlet box, junction box, or compartment unless separated from the electric light and power wires by a suitable partition.

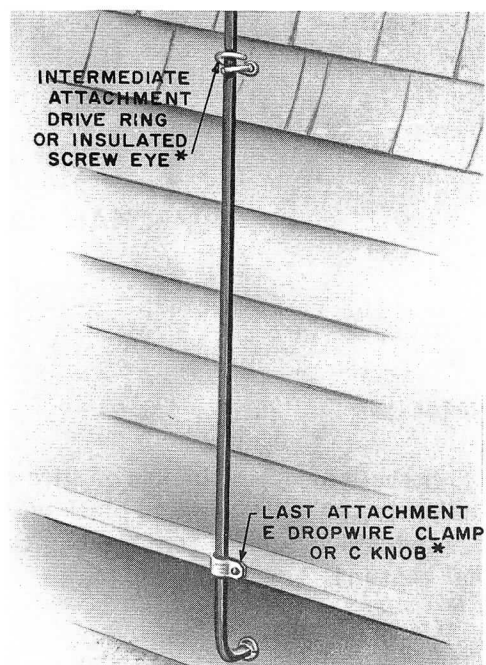
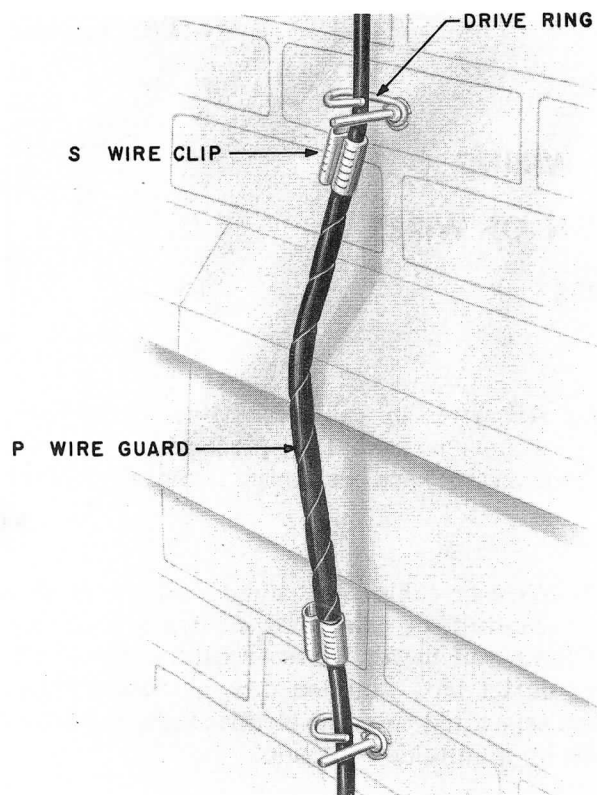
**1.08** Whenever practicable avoid running telephone wire or cable in the same conduit, molding, or runway with signal circuits which are operated by battery or from a step-down transformer. Strict adherence to this recommendation will minimize the possibility of interference by either or both parties during placing or maintenance activities.

**1.09** Cold water pipes sweat under certain conditions; therefore, cross wires *over* rather than under the pipes.

#### 2. PROTECTING WIRES AT BUILDING PROJECTIONS, OVERHANGS AND GUTTERS

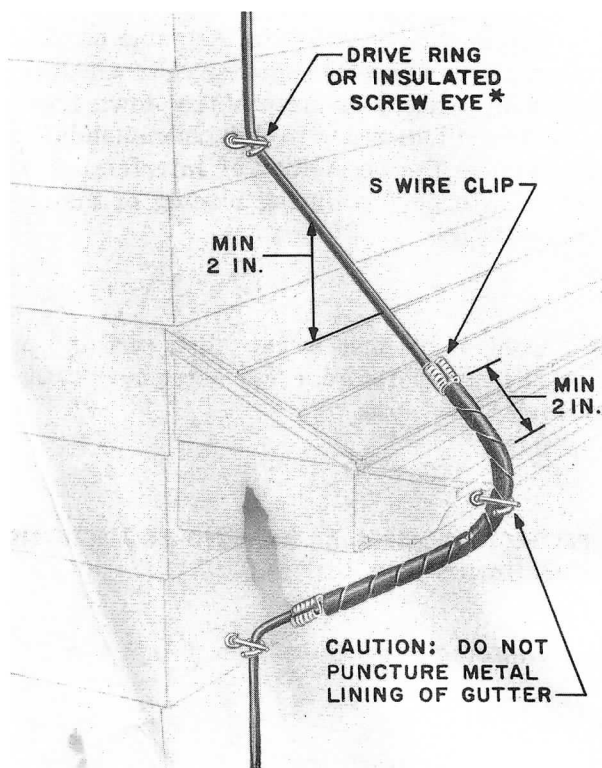
**2.01** *Building Projections:* See Fig. 1 and 2.

**2.02** *Building Overhangs and Gutters:* Avoid crossing such obstructions wherever practicable. However, where there is no alternative, protect wires as shown in Fig. 3.

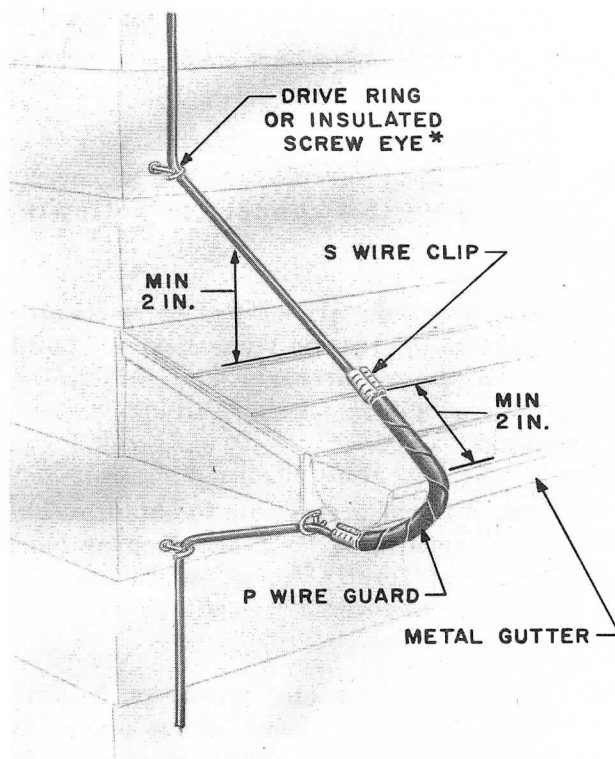


▲ Fig. 2 — Crossing Wood or Stucco on Wood Building Projection

◀ Fig. 1 — Crossing Masonry Building Projection



Metal-Lined Wooden Box Gutter



Metal Gutter

Fig. 3 — Crossing Building Overhangs and Gutters

\* Use insulated attachments where fused protection is required.

### 3. PROTECTING WIRES PASSING THROUGH METAL GRATINGS

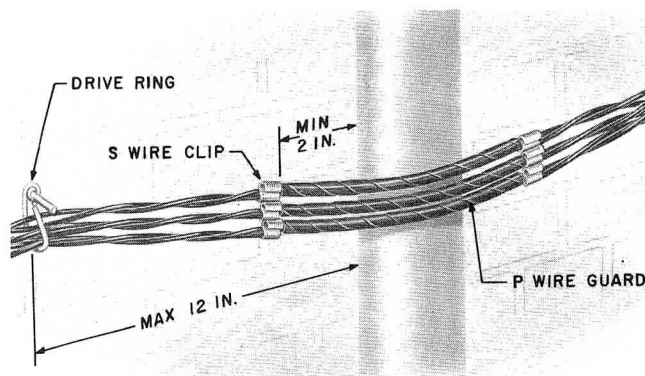
**3.01** Wires should be passed through gratings *only* when there is no other building entrance available. Protect wiring as indicated in Fig. 4.



*Do not run wires or cables through removable gratings.*

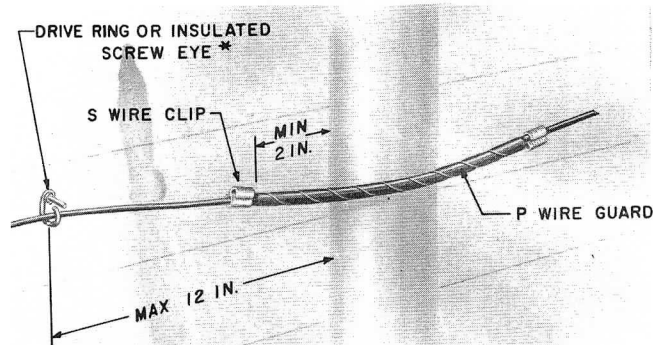
### 4. PROTECTING WIRES CROSSING DOWNSPOUTS

**4.01** Protect wires crossing downspouts as shown in Fig. 5 and 6.



**Masonry or Brick Surface**

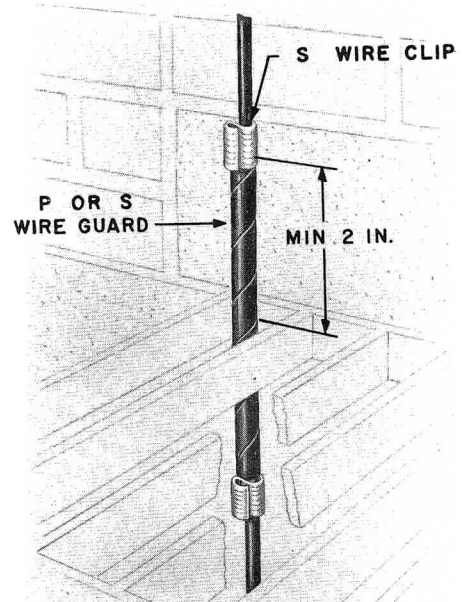
**Fig. 5 — Wires Crossing Downspout**



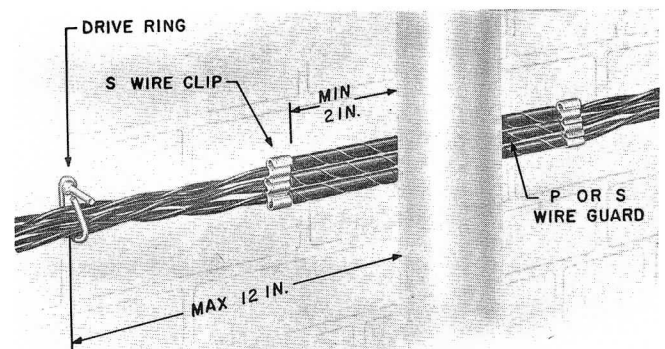
\*USE INSULATED ATTACHMENTS WHERE FUSED PROTECTION IS REQUIRED.

**Wood, Stucco on Wood, or Metal Siding on Wood Surface**

**Fig. 6 — Wires Crossing Downspout**

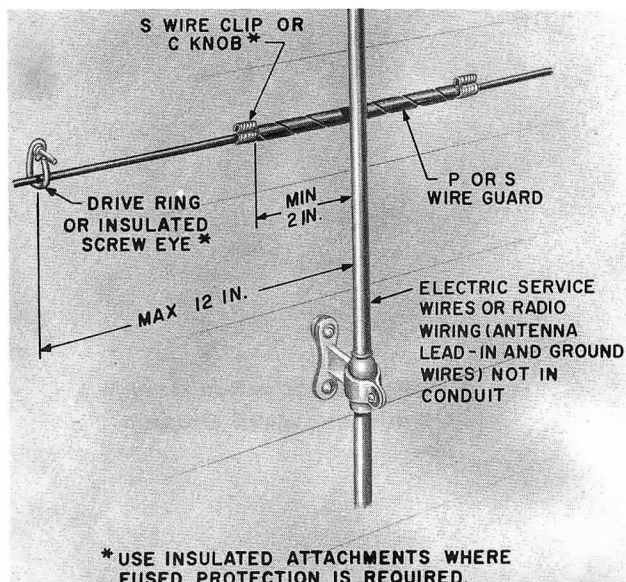


**Fig. 4 — Protecting Wire Run through Stationary Metal Grating**



\*USE INSULATED ATTACHMENTS WHERE FUSED PROTECTION IS REQUIRED.

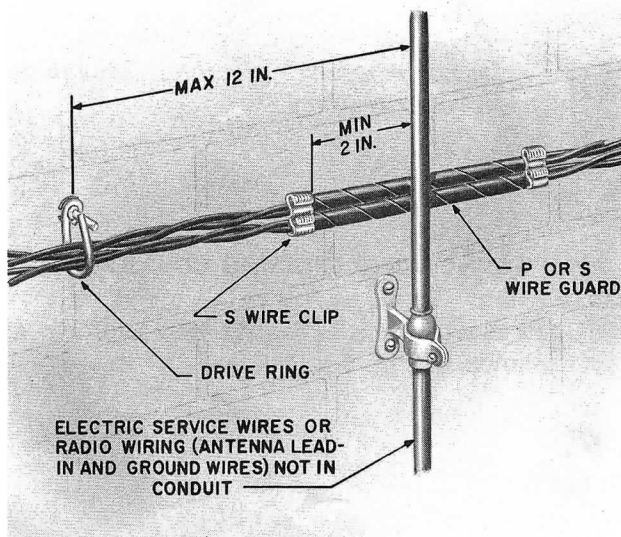
**4.02 W Leader Bracket:** The leader bracket may be used if the number of wires in the run exceeds three. If the downspout is not fastened securely, place W leader bracket.



Wood, Stucco on Wood, or Metal Siding  
on Wood Surface

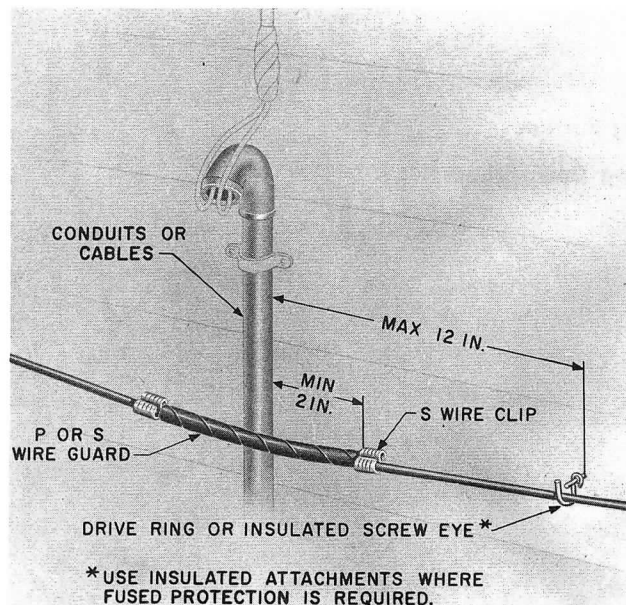
## 5. PROTECTING WIRES CROSSING ELECTRIC SERVICE WIRES, RADIO OR TELEVISION WIRES

**5.01** Where recommended minimum separations between telephone wires and power, radio, or television wires are not obtainable, protect telephone wires as shown in Fig. 7 and 8.

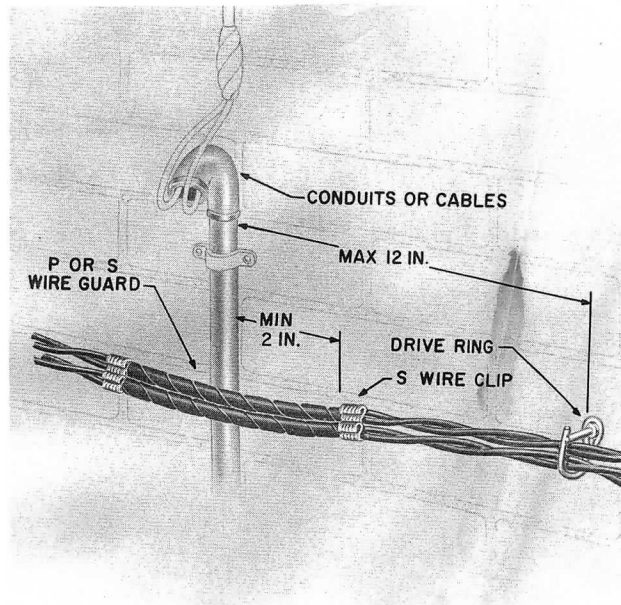


Masonry on Brick Surface

Fig. 7 – Wires Crossing Power Service, Radio Wires, or Television Wires



Wood, Stucco on Wood, or Metal Siding  
on Wood Surface



Masonry on Brick Surface

Fig. 8 – Wires Crossing Foreign Cables, Metal Conduits, Open Signal Wires, or Ground Wires