

CABLING, WIRING AND CONNECTING TERMS

DEFINITIONS

1. GENERAL

1.01 This section covers the definitions of the generally used cabling, wiring, and connecting terms.

2. DEFINITIONS

- 2.01 **Arm:** A branch of a main section of the form.
- 2.02 **Butt:** The point at which the cable sheath or covering terminates.
- 2.03 **"C" Wiring:** Wires to be run on the outside or inside of a form for electrical reasons, such as wires carrying tone. These wires are designated "C" or "C1" on the circuit drawings and are to be sewed in a separate form.
- 2.04 **Cable Butt:** See Butt.
- 2.05 **Cable Form:** See Form.
- 2.06 **Cable, Local Power:** See Form.
- 2.07 **Cable, Roof:** See Form.
- 2.08 **Cable Switchboard:** Any cable with a fabric sheath covering.
- 2.09 **Connecting:** The operation of securing or fastening wires to terminals. This may be completed by soldering or by fastening with screws or clamps.
- 2.10 **Dress, Wrap:** Refers to the dressing of wires at terminals on connecting racks where $1\frac{1}{2}$ to $1\frac{3}{4}$ turns of the insulated portion of skinners are wrapped around the base of the terminals before the connections are completed.
- 2.11 **Dressing:** The process of arranging skinners in accordance with a predetermined layout considered from the standpoint of the relation of skinners to apparatus, appearance of dressed skinners, and accessibility to terminals. Disposition of slack wire for repair and maintenance purposes is also considered in dress of skinners.
- 2.12 **"F" Stitches:** Supplementary stitches required on a form for separating wires of the same color which are to be connected to different terminals of the same piece of apparatus.
- 2.13 **"F" Stitch Leads:** Wires which are to be placed under "F" stitches. These wires are designated "F", "F1", "F2", etc., on the circuit drawings.
- 2.14 **Form:** A formation of wires not inclosed in a woven fabric covering or lead sheath. The wires may be held in formation either by sewing with twine or by means of a fanning strip. The term "Form" shall be considered to include all cable forms, local cables, roof cables, local power cables and the formed ends of switchboard and lead covered cables.
- 2.15 **Form, Fanned:** A formation of a switchboard or lead covered cable where wires are brought directly from the butt of the cable, or from a point along the sewed part of a form, through a fanning strip or other separating device, to terminals of apparatus without being otherwise secured.
- 2.16 **Form, Sewed:** Cable wires, bulk wires, or both, compactly sewed in such a manner that they are brought out approximately opposite their associated terminals at the apparatus, and secured without the aid of a fanning strip or other separating device.
- 2.17 **"Front" and "Rear":** When used to designate the location of framework parts or apparatus in switchboards and desks, "Front" shall be considered as the side of the switchboard or desk nearer the operator and "Rear" as the side away from the operator. At relay racks, the ap-

paratus, cover, or can side shall be considered as the "Front," and the terminal or wiring side as the "Rear."

Leads

- 2.18 Leads, Common:** See Wiring, Common.
- 2.19 Leads, Loop:** Straps made of switchboard wire which are sewed in the form.
- 2.20 "Left" and "Right":** When used to designate equipment for switchboards, desks, frames, or racks shall be interpreted as being taken when facing the front of such switchboards, desks, frames, or racks.
- 2.21 Leg of a Form:** A branch of the main section of a form.
- (a) **Butt Leg:** The nearest leg, as measured along the form from the main body or butt of the cable.
- (b) **Tip Leg:** The farthest leg, as measured along the form from the main body or butt of the cable.
- 2.22 Loops:** Insulated common leads which are run in sewed forms, such as the common ringing leads for ringing relays in trunk circuits.
- 2.23 "Rear":** See "Front" and "Rear."
- 2.24 "Right":** See "Left" and "Right."
- 2.25 Skinner:** In a sewed form, that portion of a wire from the sewed portion of the form to the end of the wire, and in a fanned form, from the butt of the cable to the end of the wire.
- 2.26 Skinners, Slanting:** Skinners which are of unequal length, and where the edge of the form nearest the apparatus to which the wires are soldered is slanting and not parallel to the row of terminals on the apparatus.
- 2.27 Skinners, Straight:** Skinners which are of equal length and where the edge of the form nearest the apparatus to which the wires are soldered is straight and parallel to the row of terminals on the apparatus. This term does not apply to the dress of skinners of a form.
- 2.28 Skinner Length:** In a sewed form, the length of wire from the point where it leaves the sewed portion of the form to the point of connection to the apparatus. In a fanned form, the length of wire from the butt of the cable to the point of connection to the apparatus.
- 2.29 Skinning:** The operation of removing insulation from skinners or conductors.
- 2.30 Soldering:** The operation of fusing wire and terminal (or other metal parts) together by use of a suitable alloy of low melting point.
- 2.31 Strapping:** The process of connecting two or more terminals on the same or adjacent pieces of apparatus by means of bare or sleeved wire, or loop leads, for the purpose of supplying battery or ground to apparatus, or to serve as a common lead for testing, listening or other purpose.
- 2.32 Straps:** Leads made of bare wire, sleeved wire, or switchboard wire run as loop leads.
- 2.33 Straps, Bare:** Straps made of bare wire.
- 2.34 Straps, Common:** Leads connecting terminals on two or more pieces of apparatus in the same circuit or different circuits for the purpose of supplying battery, ground or other common potential to the apparatus, or to serve as a common lead for testing, listening, ringing, etc.
- 2.35 Straps, Formed:** Straps that are formed at each terminal to which they are to be connected, in such a manner as to clear other terminals or to provide a greater soldering surface.
- 2.36 Straps, Individual:** Leads connecting two or more terminals on the same piece of apparatus.
- 2.37 Straps, Sleeved:** Straps made of sleeved wire.
- 2.38 Straps, Straight:** Straps run straight across terminals which are to be connected together.

2.39 Straps, Surface: Straps placed in notches of terminals on terminal strips so as to be easily removed.

Stripper

2.40 Stripper, Single: That portion of the end of a cable from which the outer covering is stripped or removed. The length of the "single stripper" is the distance between the butt and the end of the stripper before the conductors are unwound.

2.41 Stripper, Double: That portion of a continuous cable from which the outer covering is stripped or removed. The length of the "double stripper" for a continuous cable is the distance between the stripper butts.

2.42 Stripper, Splice: Same as "double stripper."

2.43 Stripping: The operation of removing the sheath or covering from switchboard and lead covered cable, together with the inner wrappings.

2.44 "U" Wiring: Wires which are shielded by copper sheathing placed between the insulation on the wires and the outer braided covering. These wires may be run in the regular local cable or as separate wiring.

2.45 Wires, Spare: Extra wires placed in switchboard or lead covered cables for use in cases where, through breakage or other unusual causes, the regular wires in the cables are not available for use.

2.46 Wires, Unequipped: Regular wires, other than spares, formed out for future apparatus, but not used initially. Unused wires in universal local cables are classed as unequipped wires.

2.47 Wires, Unused: Regular wires, other than spare wires which are not required for future use and generally are left dead in the form or at apparatus fanning strips. Unused wires in universal local cables are classed as unequipped wires.

2.48 Wiring, Common: Refers to wires generally used to supply battery, ground, ringing current, tone, or other features common to apparatus of several circuits strapped or looped together.

2.49 "X", "Y", "Z", etc., Wiring: Wires so designated on circuit drawings in cases where it is necessary to distinguish between several wiring arrangements for a particular part of a circuit. The particular wiring to be used is specified on the circuit drawings, on wiring list drawings, or in job specifications.