

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C24.021
Issue 1, 9-1-31
Standard

STATION WIRING

SUPPLIES

1. GENERAL

1.01 This section contains an alphabetical list of supplies required for the installation and maintenance of station wiring. The principal use for each item when not obvious from the name is also included.

2. SUPPLIES

- Adapter:** **Floor Outlet Adapter.** A. T. & T. Co. Spec. 6375. (For use with floor outlet at end of metal molding.)
- Anchors:** **3/16 inch x 7/8 inch Hammer Drive Anchor.** (Attaching cable to masonry by means of a wire tie.)
6-8 x 3/4 inch Screw Anchor. (Attaching cable clamp to masonry.)
6-8 x 1-1/2 inch Screw Anchor. (Attaching cable clamp to plaster on masonry or plaster block.)
10-14 x 1 inch Screw Anchor. (Attaching E and C bridle rings and cable straps to masonry.)
- Blocks:** **11A Connecting Block.** (One pair.)
11B Connecting Block. (Same as 11A but has metal cover.)
12E Connecting Block. (One triple.)
12F Connecting Block. (Same as 12E but has metal cover.)
- Bolts:** **1/8 inch x 4 inch Button Head Toggle Bolt.** (Attaching cable to hollow tile, etc., by means of a wire tie.)
3/16 inch x 4 inch. Button Head Toggle Bolt. (Attaching fence batten or similar wood strip to hollow tile, etc.)

- Bonding Ribbons:** **Type L Bonding Ribbon.** (Strapping consecutive binding posts of 6 type connecting blocks.)
Type S Bonding Ribbon. (Strapping consecutive binding posts of 30 and 31 type connecting blocks and G type binding post chambers.)
- Cable:** **UA (Number) Cable.** (Lead-covered cable with 22-gauge tinned conductors.)
MUA (Number) Cable. (Lead-covered cable with 22-gauge enamel-coated conductors.)
- | Code No | | No. of Pairs |
|---------|-------|--------------|
| UA6 | MUA6 | 6 |
| UA11 | MUA11 | 11 |
| UA16 | MUA16 | 16 |
| UA21 | MUA21 | 21 |
| UA26 | MUA26 | 26 |
- (Size) Pair (Color) Inside Wiring Cable.** Sizes: 4, 6, 11, 12, 16 or 26 pair. Colors: brown or ivory.
- Clamps:** **No. 5 (Color) Cable Clamp.** (Fastener for inside wiring cables up to 12-pair.) Colors: brown or ivory.
No. 6 Cable Clamp. (3/8 inch.)
No. 7 Cable Clamp. (7/16 inch.)
No. 8 Cable Clamp. (1/2 inch.)
No. 10 Cable Clamp. (5/8 inch.)
Station Ground Clamp.
Ground Wire Clamp. (Fastener for wire on metal desks.)
- Cleat:** **Inside Wiring Cleat**
- Conduit:** **(Length) (Size) Enameled Rigid Steel Conduit.** Sizes: 1/2 inch or 3/4 inch.
- Cord:** **609 Cord.** (Connecting subscriber set mounted under table in hotels, etc., to connecting block.)
- Fittings:** **(Code) National Metal Molding Fitting** or approved equivalent. (Fittings are provided with screws for fastening.)

Code	Name	Use
334	Cross	For running in four directions at right angles.
335	Tee	For running in three directions at right angles.

336	90° Flat Elbow	For making right angle turns on its flat.
337	90° External Elbow	For making turn around outside corner.
338	90° Internal Elbow	For making turn around inside corner.
344-X	Base Coupling	Joining two or more lengths in a straight line.
345	Single Strap	Fastener for one line of molding.
354	Double Strap	Fastener for two lines of molding.
434	Single Strap with Base Plate	Fastener for one line of molding where only one screw can be used as a means of attaching.
435	Double Strap with Base Plate	Fastener for two lines of molding where only one screw can be used as a means of attaching.
500	Bushing	To protect wires from abrasion at ends of metal molding fittings.

(Size) **National Conduit Bushing** or approved equivalent. Sizes: 1/2 inch or 3/4 inch.

Floor Outlet. A. T. & T. Co. Spec. 6375. (Fitting for use where wire passes through wood floor or as end fitting with metal molding.)

Gasket:

Floor Outlet Gasket. A. T. & T. Co. Spec. 6375. (For use with floor outlet where wire passes through wood floor.)

Insulators:

No. 1 Binding Post Insulator. (Protecting special service lines.) Fits over 3/8 inch lock-nuts.

No. 2 Binding Post Insulator. (Protecting special service lines.) Fits over 7/16 inch lock-nuts.

Knob:

C Knob. (Split knob.)

Molding:

No. 333 National Metal Molding or approved equivalent. (For encasing wires run on floor from baseboard to desk, etc.) Dimensions 31/32 inch wide x 7/16 inch high x 8 ft. 4 inches long.

- Nails:**
- 1/2 inch (Color) Inside Wiring Nail.** Colors: brown or ivory.
 - 7/8 inch (Color) Inside Wiring Nail.** Colors: brown or ivory.
 - 1 inch No. 12 Roofing Nail.** (Attaching cable clamp to metal sheathing.)
 - 4D Cut Nail.** (Attaching cable to cinder concrete by means of wire tie.)
 - 4D Finishing Nail.** Also known as 1-1/2 inch No. 15 Common Brad. (Attaching molding to supporting surface.)
 - 6D Slating Nail.** (Attaching wire to plaster block by means of wire tie.)
- Nut:**
- No. 8-32 Brass Nut, P-80135.** (Holding fibre washers on two-post connecting block in outlet box.)
- Rings:**
- 1/2 inch Drive Ring.** (Attaching wire in cellars, factories, storerooms, etc.)
 - E Bridle Ring.** (Attaching wire to masonry or plaster on masonry.) Diameter of ring 5/8 inch; shank has 10-gauge wood thread.
 - C Bridle Ring.** (Attaching wire to masonry or plaster on masonry.) Diameter of ring 1-1/4 inch; shank has 14-gauge wood thread.
 - M Bridle Ring.** (Attaching wire to angle iron or I beam.) Diameter of ring 1-1/4 inch; shank has 10-24 machine thread.
 - Toggle Bridle Ring.** (Attaching wire to plaster on hollow tile.)
- Screws:**
- (Length) No. 8 R.H. Blued Wood Screw.** Lengths: 3/4 inch, 1 inch, 1-1/2 inch, 2 inch or 2-1/2 inch.
 - (Length) No. 8 F.H. Bright Wood Screw.** Lengths: 1 inch, 1-1/2 inch or 2 inch.
 - 5/8 inch No. 8 Type Z Self-Tapping Screw.** Parker-Kalon or approved equivalent. (Attaching ground wire clamps and cable clamps to metal desks.)
 - 1 inch No. 8-32 R.H. Brass Mach. Screw.** (Attaching fibre washers to two-post connecting block where 609 cord is terminated.)
 - 1-1/4 inch No. 14 F.H. Bright Wood Screw.** (Attaching floor outlet to wood floors.)
- Screw Eyes:**
- Screw Eye, P-23582.** (Fastener for cord stay hook where connecting block is not equipped with eye.)

	(Size) S Insulated Screw Eye. (Attaching line wires on wood or metal sheathing on wood at exposed stations.) Sizes: 5/8 inch or 1 inch.
	(Size) L Insulated Screw Eye. (Attaching line wires to plaster on wood lath or plaster board, etc., at exposed stations.) Sizes: 5/8 inch or 1 inch.
Sleeves:	025 Copper Sleeve. (Splicing 22-gauge inside or duct wire.) 032 Copper Sleeve. (Splicing 20-gauge wire.) 036 x 025 Copper Sleeve. (Splicing 22-gauge inside or duct wire to 19-gauge or 20-gauge bridle wire.) No. 16 Tinned Single Tube Copper Sleeve. (Repairing opens in inside, bridle or duct wire.) 5/32 inch x 3-1/4 inch Prepared Cotton Sleeve. (Insulating wire joints in cable splices.)
Solder:	Rosin Core Solder. (Soldering wire joints in cable splices.)
Straps:	No. 13 Cable Strap. (Attaching 1/2 inch conduit or pipe to supporting surface.) No. 16 Cable Strap. (Attaching 3/4 inch conduit or pipe to supporting surface.)
Support:	No. 595 Universal Insulator Support. (Attaching M bridle ring to I beam, angle iron, etc.)
Tag:	Form E-1162 or approved equivalent. 1-3/8 inch x 2-3/4 inch plain designation tag with string.
Tape:	3/4 inch (Color) Friction Tape. Colors: black or ivory. 3/4 inch Rubber Tape. 2 inch Black Friction Tape. (Wrapping hand-made cable of duct wire.)
Tubes:	(Size) x (Length) Porcelain Tube. Sizes: 3/8 inch, 3/4 inch or 1 inch. Lengths: 6 inch or 8 inch. (Size) x (Length) Split Porcelain Tube. Sizes: 3/8 inch, 3/4 inch or 1 inch. Lengths: 6 inch or 8 inch. (Use split tubes in accordance with local instructions.)
Twine:	No. 12 Waxed Twine. (Splicing lead-covered cable.)
Washer:	3/16 inch x 1-1/2 inch Fibre Washer. (Cover for two-post connecting block where used to terminate 609 cord.)

Wire:

Lashing Wire.

(Conductors) (Color) Inside Wire. Conductors: single, pair, triple or quad. Colors: brown or ivory.

(Conductors) Duct Wire. Conductors: single, pair or triple.

E-22-P Distributing Frame Wire.

No. 14 Ground Wire.