

**ANSI Y32.9-1972**

(Reaffirmed 1989)

# **American National Standard Graphic Symbols for Electrical Wiring and Layout Diagrams Used in Architecture and Building Construction**

Secretariat

**American Society of Mechanical Engineers  
Institute of Electrical and Electronics Engineers**

Approved June 21, 1972

**American National Standards Institute**

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## Foreword

(This Foreword is not a part of American National Standard Graphic Symbols for Electrical Wiring and Layout Diagrams Used in Architecture and Building Construction, Y32.9-1972.)

This standard is a revision of American National Standard Y32.9-1962. It also supersedes the military standard MIL-STD-15-3, 30 October 1961. The format has been modified and minor changes have been made in the symbols in order to coordinate the industry and military standards. Appendix A shows revised and deleted symbols from both predecessor documents.

The change in Section 2., Receptacles, was based on the latest edition of the National Electrical Code, ANSI C1-1971. The previous edition showed both grounded and ungrounded receptacles, with the grounded ones indicated as the exceptions unless they are the majority of receptacles in the drawing. In this edition, the requirement of the National Electrical Code for grounded receptacles is incorporated.

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| CLAUSE                                                                                                                                  | PAGE |
|-----------------------------------------------------------------------------------------------------------------------------------------|------|
| Introduction .....                                                                                                                      | 1    |
| I1 Scope .....                                                                                                                          | 1    |
| I2 Referenced Documents .....                                                                                                           | 1    |
| I3 Definitions and General Requirements .....                                                                                           | 2    |
| I3.1 Drafting Practices Applicable to Graphic Symbols .....                                                                             | 2    |
| I3.2 Explanation Supplementing the Schedule of Symbols .....                                                                            | 3    |
| I4 Similar or Identical Graphic Symbols .....                                                                                           | 5    |
| I5 Graphic Symbols Used in Existing Technical Documents or Drawings .....                                                               | 6    |
| I6 List of Electrical Wiring Symbols .....                                                                                              | 6    |
| List of Symbols .....                                                                                                                   | 7    |
| 1.    Lighting Outlets .....                                                                                                            | 7    |
| 1.1 Surface or Pendant Incandescent, Mercury-Vapor, or Similar Lamp Fixture .....                                                       | 7    |
| 1.2 Recessed Incandescent, Mercury-Vapor, or Similar Lamp Fixture .....                                                                 | 7    |
| 1.3 Surface or Pendant Individual Fluorescent Fixture .....                                                                             | 7    |
| 1.4 Recessed Individual Fluorescent Fixture .....                                                                                       | 7    |
| 1.5 Surface or Pendant Continuous-Row Fluorescent Fixture .....                                                                         | 7    |
| 1.6 Recessed Continuous-Row Fluorescent Fixture .....                                                                                   | 7    |
| 1.7 Bare-Lamp Fluorescent Strip .....                                                                                                   | 8    |
| 1.8 Surface or Pendant Exit Light .....                                                                                                 | 8    |
| 1.9 Recessed Exit Light .....                                                                                                           | 8    |
| 1.10 Blanked Outlet .....                                                                                                               | 8    |
| 1.11 Junction Box .....                                                                                                                 | 8    |
| 1.12 Outlet Controlled by Low-Voltage Switching When Relay Is Installed in Outlet Box .....                                             | 8    |
| 2.    Receptacle Outlets .....                                                                                                          | 9    |
| 2.1 Single Receptacle Outlet .....                                                                                                      | 9    |
| 2.2 Duplex Receptacle Outlet .....                                                                                                      | 9    |
| 2.3 Triplex Receptacle Outlet .....                                                                                                     | 9    |
| 2.4 Quadruplex Receptacle Outlet .....                                                                                                  | 9    |
| 2.5 Duplex Receptacle Outlet—Split Wired .....                                                                                          | 9    |
| 2.6 Triplex Receptacle Outlet—Split Wired .....                                                                                         | 10   |
| 2.7 Single Special-Purpose Receptacle Outlet .....                                                                                      | 10   |
| 2.8 Duplex Special-Purpose Receptacle Outlet .....                                                                                      | 10   |
| 2.9 Range Outlet (typical) .....                                                                                                        | 10   |
| 2.10 Special-Purpose Connection or Provision for Connection .....                                                                       | 10   |
| 2.11 Multioutlet Assembly .....                                                                                                         | 10   |
| 2.12 Clock Hanger Receptacle .....                                                                                                      | 11   |
| 2.13 Fan Hanger Receptacle .....                                                                                                        | 11   |
| 2.14 Floor Single Receptacle Outlet .....                                                                                               | 11   |
| 2.15 Floor Duplex Receptacle Outlet .....                                                                                               | 11   |
| 2.16 Floor Special-Purpose Outlet .....                                                                                                 | 11   |
| 2.17 Floor Telephone Outlet—Public .....                                                                                                | 11   |
| 2.18 Floor Telephone Outlet—Private .....                                                                                               | 11   |
| 2.19 Underfloor Duct and Junction Box for Triple, Double, or Single Duct System<br>(as indicated by the number of parallel lines) ..... | 12   |
| 2.20 Cellular Floor Header Duct .....                                                                                                   | 12   |

| CLAUSE                                                                                   | PAGE |
|------------------------------------------------------------------------------------------|------|
| 3. Switch Outlets .....                                                                  | 13   |
| 3.1 Single-Pole Switch .....                                                             | 13   |
| 3.2 Double-Pole Switch .....                                                             | 13   |
| 3.3 Three-Way Switch .....                                                               | 13   |
| 3.4 Four-Way Switch .....                                                                | 13   |
| 3.5 Key-Operated Switch .....                                                            | 13   |
| 3.6 Switch and Pilot Lamp .....                                                          | 13   |
| 3.7 Switch for Low-Voltage Switching System.....                                         | 13   |
| 3.8 Master Switch for Low-Voltage Switching System.....                                  | 13   |
| 3.9 Switch and Single Receptacle .....                                                   | 14   |
| 3.10 Switch and Double Receptacle .....                                                  | 14   |
| 3.11 Door Switch .....                                                                   | 14   |
| 3.12 Time Switch .....                                                                   | 14   |
| 3.13 Circuit Breaker Switch.....                                                         | 14   |
| 3.14 Momentary Contact Switch or Pushbutton for Other Than Signaling System .....        | 14   |
| 3.15 Ceiling Pull Switch .....                                                           | 14   |
| 4. Signaling System Outlets (Institutional, Commercial, and Industrial Occupancies)..... | 15   |
| 4.1 Nurse Call System Devices (any type).....                                            | 15   |
| 4.2 Paging System Devices (any type).....                                                | 16   |
| 4.3 Fire Alarm System Devices (any type).....                                            | 16   |
| 4.4 Staff Register System Devices (any type).....                                        | 17   |
| 4.5 Electric Clock System Devices (any type).....                                        | 18   |
| 4.6 Public Telephone System Devices (any type).....                                      | 18   |
| 4.7 Private Telephone System Devices (any type).....                                     | 19   |
| 4.8 Watchman System Devices (any type) .....                                             | 19   |
| 4.9 Sound System (any type) .....                                                        | 20   |
| 4.10 Other Signal System Devices.....                                                    | 21   |
| 5. Residential Occupancies .....                                                         | 22   |
| 5.1 Pushbutton.....                                                                      | 22   |
| 5.2 Buzzer .....                                                                         | 22   |
| 5.3 Bell .....                                                                           | 22   |
| 5.4 Combination Bell-Buzzer .....                                                        | 22   |
| 5.5 Chime .....                                                                          | 22   |
| 5.6 Annunciator.....                                                                     | 22   |
| 5.7 Electric Door Opener .....                                                           | 22   |
| 5.8 Maid's Signal Plug .....                                                             | 22   |
| 5.9 Interconnection Box .....                                                            | 23   |
| 5.10 Bell-Ringing Transformer.....                                                       | 23   |
| 5.11 Outside Telephone .....                                                             | 23   |
| 5.12 Interconnecting Telephone.....                                                      | 23   |
| 5.13 Radio Outlet .....                                                                  | 23   |
| 5.14 Television Outlet.....                                                              | 23   |
| 6. Panelboards, Switchboards, and Related Equipment.....                                 | 24   |
| 6.1 Flush-Mounted Panel Board and Cabinet .....                                          | 24   |
| 6.2 Surface-Mounted Panel Board and Cabinet.....                                         | 24   |
| 6.3 Switchboard, Power Control Center, Unit Substations (should be drawn to scale).....  | 24   |
| 6.4 Flush-Mounted Terminal Cabinet.....                                                  | 24   |

| CLAUSE                                                             | PAGE |
|--------------------------------------------------------------------|------|
| 6.5 Surface-Mounted Terminal Cabinet.....                          | 24   |
| 6.6 Pull Box.....                                                  | 24   |
| 6.7 Motor or Other Power Controller.....                           | 25   |
| 6.8 Externally Operated Disconnection Switch .....                 | 25   |
| 6.9 Combination Controller and Disconnection Means.....            | 25   |
| 7. Bus Ducts and Wireways .....                                    | 26   |
| 7.1 Trolley Duct .....                                             | 26   |
| 7.2 Busway (Service, Feeder, or Plug-in) .....                     | 26   |
| 7.3 Cable Through, Ladder, or Channel.....                         | 26   |
| 7.4 Wireway .....                                                  | 26   |
| 8. Remote Control Stations for Motors or Other Equipment .....     | 27   |
| 8.1 Pushbutton Stations in General .....                           | 27   |
| 8.2 Float Switch—Mechanical.....                                   | 27   |
| 8.3 Limit Switch—Mechanical .....                                  | 27   |
| 8.4 Pneumatic Switch—Mechanical .....                              | 27   |
| 8.5 Electric Eye—Beam Source.....                                  | 27   |
| 8.6 Electric Eye—Relay.....                                        | 27   |
| 8.7 Thermostat .....                                               | 27   |
| 9. Circuiting .....                                                | 28   |
| 9.1 Wiring Concealed in Ceiling or Wall .....                      | 28   |
| 9.2 Wiring Concealed in Floor.....                                 | 28   |
| 9.3 Wiring Exposed.....                                            | 28   |
| 9.4 Branch Circuit Home Run to Panel Board.....                    | 28   |
| 9.5 Empty Raceway .....                                            | 28   |
| 9.6 Wiring Turned Up.....                                          | 28   |
| 9.7 Wiring Turned Down .....                                       | 28   |
| 10. Electrical Distribution or Lighting Systems, Underground ..... | 29   |
| 10.1 Manhole .....                                                 | 29   |
| 10.2 Handhole .....                                                | 29   |
| 10.3 Transformer Mmnhole or Vault.....                             | 29   |
| 10.4 Transformer Pad.....                                          | 29   |
| 10.5 Underground Direct Burial Cable .....                         | 29   |
| 10.6 Underground Duct Line .....                                   | 29   |
| 10.7 Street Light Standard Fed from Underground Circuit .....      | 29   |
| 11. Electrical Distribution or Lighting Systems, Aerial.....       | 30   |
| 11.1 Pole.....                                                     | 30   |
| 11.2 Pole, with Street Light .....                                 | 30   |
| 11.3 Pole, with Down Guy and Anchor .....                          | 30   |
| 11.4 Transformer.....                                              | 30   |
| 11.5 Transformer, Constant-Current .....                           | 30   |
| 11.6 Switch, Manual .....                                          | 30   |
| 11.7 Circuit Recloser, Automatic.....                              | 30   |
| 11.8 Line Sectionalizer, Automatic.....                            | 31   |
| 11.9 Circuit, Primary.....                                         | 31   |
| 11.10 Circuit, Secondary.....                                      | 31   |

| CLAUSE                                                 | PAGE |
|--------------------------------------------------------|------|
| 11.11 Circuit, Series Street Lighting.....             | 31   |
| 11.12 Down Guy .....                                   | 31   |
| 11.13 Head Guy .....                                   | 31   |
| 11.14 Sidewalk Guy .....                               | 31   |
| 11.15 Service Weather Head.....                        | 31   |
| Annex A Revised or Deleted Symbols (Informative) ..... | 32   |



# **American National Standard Graphic Symbols for Electrical Wiring and Layout Diagrams Used in Architecture and Building Construction**

## **Introduction**

### **I1 Scope**

This standard provides a basis for

- 1) Showing the general physical location and arrangement of the sections of the required wiring system
- 2) Identifying the physical requirements for various types of materials needed to provide the electrical installation in buildings

In some instances, the symbols may indicate the function or electrical characteristics of the system; however, that is not their primary purpose. Such functions or characteristics are shown by the use of the graphic symbols for electrical diagrams, as specified in American National Standard Y32.2-1970, Graphic Symbols for Electrical and Electronics Diagrams (IEEE Std 315-1971).

The required installation is shown on the drawing by the use of the various applicable outlet and equipment symbols, together with interconnecting circuit or feeder run lines, supplemented with necessary notations.

In general, basic symbols have been included in the symbol schedule. In some instances, the use of numbers or letters of the alphabet drawn in, or at the side of, the basic symbol to identify a specific application of the symbol for a particular type or use of outlet may be required. In some instances, the physical or electrical size of the item identified by the symbol will be noted to one side of it.

### **I2 Referenced Documents**

American National Standard Y32.2-1970, Graphic Symbols for Electrical and Electronics Diagrams (IEEE Std 315-1971).

## **I3 Definitions and General Requirements**

### **I3.1 Drafting Practices Applicable to Graphic Symbols**

#### **I3.1.1**

Electrical layouts shall be drawn to an appropriate scale or figure dimensions noted. They shall be made on drawing sheets separate from the architectural or structural drawings or the drawing sheets for mechanical or other facilities.

#### **I3.1.2**

Clearness of drawings is often impaired when all different electrical systems to be installed in the same building area are laid out on the same drawing sheet. Clearness is further impaired when an extremely small drawing scale is used. Under these circumstances, each or certain of the different systems will be laid out on separate drawing sheets. For example, it may be better to show signal system outlets and circuits on drawings separate from the lighting and power branch circuit wiring.

#### **I3.1.3**

Outlet and equipment locations with respect to the building should be shown as accurately as possible on the electrical drawing sheets to reduce reference to architectural drawings. Where extremely accurate final locations of outlets and equipment are required, figure dimensions shall be noted on the drawings. Circuit and feeder run lines should be drawn so as to show their installed location in relation to the building insofar as it is practical to do so. The number and size of conductors in the runs shall be identified by notation when the circuit run symbol does not identify them.

#### **I3.1.4**

All branch circuits, control circuits, and signal system circuits shall be laid out in complete detail on the electrical drawings, including identification of the number, size, and type of all conductors.

#### **I3.1.5**

Electrical wiring required in conjunction with such mechanical facilities as heating, ventilating, and air-conditioning equipment, machinery, and processing equipment shall be included in detail in the electrical layout insofar as possible when its installation will be required under the electrical contract. This is desirable to make reference to mechanical drawings unnecessary and to avoid confusion as to responsibility for the installation of the work.

#### **I3.1.6**

A complete electrical layout shall include at least the following on one or more drawings:

- 1) Floor plan layout, to scale, of all outlet and equipment locations and wiring runs
- 2) A complete schedule of all of the symbols used, with appropriate description of the requirements
- 3) Riser diagram showing the physical relationship of the service, feeder and major power runs, unit substations, isolated power transformers, switchboards, panel boards, pull boxes, terminal cabinets, and other systems and equipment
- 4) Where necessary for clearness, a single line diagram showing the electrical relationship of the component items and sections of the wiring system
- 5) Where necessary to provide adequate information, elevations, sections and details of equipment and special installations, and details of special lighting fixtures and devices
- 6) Sections of the building or elevation of the structure showing floor-to-floor, outlet, and equipment heights, relation to the established grade, general type of building construction, etc. Where practicable, suspended

ceiling heights indicated by figure dimensions on either the electrical floor plan layout drawings or on the electrical building section or elevation drawings

- 7) Where necessary to provide adequate information, plot plan to scale, showing the relation of the building or structure to other buildings or structures, service poles, service manholes, exterior area lighting, exterior wiring runs, etc
- 8) In the case of exterior wiring systems for street and highway lighting, area drawings showing the complete system
- 9) Any changes to the electrical layout should be clearly indicated on the drawings, when such changes are made after the original drawings have been completed, and should be identified on the drawing by a revision symbol

## **I3.2 Explanation Supplementing the Schedule of Symbols**

### **I3.2.1 General**

#### **I3.2.1.1 Type of Wiring Method or Material Requirements**

When the general wiring method and material requirements for the entire installation are described in the specifications or specification notations on drawings, no special notation need be made in relation to symbols on the drawing layout: for example, if an entire installation is required by the specifications and general reference on the drawings to be explosionproof, the outlet symbols do not need to have special identification.

When certain different wiring methods or special materials will be required in different areas of the building or for certain sections of the wiring system or certain outlets, such requirements should be clearly identified on the drawing layout by special identification of outlet symbols rather than only by reference in the specifications.

#### **I3.2.1.2 Special Identification of Outlets**

Weatherproof, vaportight, watertight, raintight, dusttight, explosionproof, grounded, ungrounded, or recessed outlets or other outlets requiring special identification may be indicated by the use of upper case letter abbreviations at the standard outlet symbol, for example,

|                |     |
|----------------|-----|
| Weatherproof   | WP  |
| Vaportight     | VT  |
| Watertight     | WT  |
| Raintight      | RT  |
| Dusttight      | DT  |
| Explosionproof | EP  |
| Grounded       | G   |
| Recessed       | R   |
| Ungrounded     | UNG |

The grade, rating, and function of wiring devices used at special outlets should be indicated by abbreviated notation at the outlet location.

When the standard special-purpose outlet symbol is used to denote the location of special equipment or outlets or points of connection for such equipment, the specific usage will be identified by the use of a subscript numeral or letter alongside the symbol. The usage indicated by different subscripts will be noted on the drawing schedule of symbols.

### **I3.2.2 Lighting Outlets**

#### **I3.2.2.1 Indication of Type of Installation**

A major variation in the type of outlet box, outlet supporting means, wiring system arrangement, and outlet connection and need of special items, such as plaster rings or roughing-in cans, often depend upon whether a lighting fixture is to be recessed or surface mounted. A means of readily differentiating between such situations on drawings is deemed necessary. In the case of a recessed fixture installation, the standard adopted consists of a capital letter "R" drawn within the outlet symbol.

#### **I3.2.2.2 Fixture Identification**

Lighting fixtures are identified as to type and size by the use of an upper case letter, placed alongside each outlet symbol, together with a notation of the lamp size and number of lamps per fixture unit when two or more lamps per unit are required. A description of the fixture identified by the letter will be given in the drawing schedule of symbols, in the separate fixture schedule on the drawing, or in the electrical specifications. When the use of lamp and fixture identifications causes drawing congestion, a schedule shall be used to clearly identify the lamps and fixtures required for each location.

#### **I3.2.2.3 Switching of Outlets**

When different lighting outlets within a given local area are to be controlled by separately located wall switches, the related switching will be indicated by the use of lower case letters at the lighting and switch outlet locations.

### **I3.2.3 Signaling Systems**

#### **I3.2.3.1 Basic Symbols**

Each different basic category of signaling system shall be represented by a distinguishing basic symbol. Every item of equipment or outlet comprising that category of system shall be identified by that basic symbol.

#### **I3.2.3.2 Identification of Individual Items**

Different types of individual items of equipment or outlets indicated by a basic symbol shall be further identified by a numeral placed within the open basic symbol. All such individual symbols used on the drawings shall be included on the drawing schedule of symbols.

#### **I3.2.3.3 Use of Symbols**

Only the basic signaling system outlet symbols are included in this standard. The system or schedule of numbers referred to in I3.2.3.2 will be developed by the designer.

#### **I3.2.3.4 Residential Symbols**

Signaling system symbols for use in identifying certain specific standardized residential-type signal system items on residential drawings are included in this standard. The reason for this specific group of symbols is that a descriptive symbol list such as is necessary for the above group of basic system symbols is often not included on residential drawings.

### **I3.2.4 Power Equipment**

#### **I3.2.4.1 Rotating Equipment**

At motor and generator locations, note on the drawing adjacent to the symbol the horsepower of each motor or the capacity of each generator. When motors and generators of more than one type or system characteristic (that is, voltage and phase) are required on a given installation, the specific types and system characteristics should be noted at the outlet symbol.

#### **I3.2.4.2 Switchboards, Power Control Centers, Unit Substations, and Transformer Vaults**

The exact location of such equipment on the electrical layout floor plan drawing should be shown.

A detailed layout including plan, elevation, and sectional views should be shown when needed for clearness in showing the relationship of such equipment to the building structure or other sections of the electrical system.

A single-line diagram, using standard graphic symbols for electrical diagrams, as specified in American National Standard Y32.2-1970, should be included to show the electrical relationship of the components of the equipment to each other and to the other sections of the electrical system.

### **I3.2.5 Symbols Not Included in This Standard**

Certain electrical symbols that are commonly used in making electrical system layouts on drawings are not included in this standard because they are included in American National Standard Y32.2-1970.

Standardization requires that the same symbol not be included in two or more standards. This requirement is necessary because if a symbol is revised in one standard, the same symbol in another standard might not be so revised, thus leading to confusion concerning the proper symbol to use.

Some examples of items for which symbols are not given in this standard are as follows:

- Electric motor
- Electric generator
- Power transformer
- Pothead (cable termination)
- Electric watt-hour meter
- Circuit element, (for example, circuit breaker)
- Fusible element
- Single-throw knife switch
- Double-throw knife switch
- Ground
- Battery

Because of the omission of certain symbols in this standard, as described above, it is incumbent upon the designer to use and refer to both this standard and American National Standard Y32.2-1970 for a complete listing of applicable symbols.

## **I4 Similar or Identical Graphic Symbols**

It is required that when graphic symbols having different meanings are used from this standard or another standard, that have a similar or identical shape or configuration, and are shown on the same drawing or set of drawings, steps shall be taken (such as reference or caution notes, comparison charts, illustrating the conflicting graphic symbols together with proper identification, etc) to avoid misinterpretation of the symbols used. This requirement is especially

critical if the graphic symbols used are from different disciplines and, therefore, represent devices, conductors, or lines of flow, that if misinterpreted might cause damage to the equipment or be dangerous to the life of servicing or operating personnel.

## **I5 Graphic Symbols Used in Existing Technical Documents or Drawings**

Unless otherwise specified, any changes or revisions to an existing drawing, specification, standard, or technical document, prepared under a previous edition of this standard, or the superseded military standard, may use the latest graphic symbols, although the superseded graphic symbols may appear elsewhere in the document or drawing.

## **I6 List of Electrical Wiring Symbols**

The graphic symbols (items) in this list are arranged by item number indicating a generic class. The item number is not significant other than to distinguish between classes. The initial decimal portion of the complete item number indicates a further breakdown of symbols by type or functional designation, usually in alphabetical sequence. Further decimal subordinations indicate a symbol designed for a specific single function arranged alphabetically in order of the special name modifiers. Thus the use of this decimal, item-numbering system for each symbol permits changes and revisions, or insertions, to be made conveniently, and without regard for paragraph and section numbering.

To locate the symbol for a specific part, find the item number under the colloquial or functional name in the index.

## List of Symbols

### 1. Lighting Outlets

*Ceiling*

*Wall*

#### 1.1 Surface or Pendant Incandescent, Mercury-Vapor, or Similar Lamp Fixture



#### 1.2 Recessed Incandescent, Mercury-Vapor, or Similar Lamp Fixture



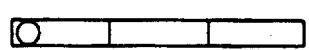
#### 1.3 Surface or Pendant Individual Fluorescent Fixture



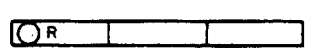
#### 1.4 Recessed Individual Fluorescent Fixture



#### 1.5 Surface or Pendant Continuous-Row Fluorescent Fixture



#### 1.6 Recessed Continuous-Row Fluorescent Fixture



NOTE — In the case of combination continuous-row fluorescent and incandescent spot lights, use combinations of the above standard symbols.

*Ceiling**Wall***1.7 Bare-Lamp Fluorescent Strip**

NOTE — In the case of a continuous-row bare lamp fluorescent strip with diffusing means, show each fixture run, using the standard symbol; indicate the area and type of the diffusing means by light shading and drawing notation.

**1.8 Surface or Pendant Exit Light****1.9 Recessed Exit Light****1.10 Blanked Outlet****1.11 Junction Box****1.12 Outlet Controlled by Low-Voltage Switching When Relay Is Installed in Outlet Box**



## 2. Receptacle Outlets

NOTE — 2A: American National Standard C1-1971, National Electrical Code (NFPA 70-1971) requires that grounded receptacles be used in most installations. Therefore, when a majority of the receptacles are to be of the grounded type, the ungrounded receptacles should be identified by the notation UNG at the outlet location, and the types of receptacles required noted in the drawing list of symbols and in the specifications.

NOTE — 2B: When modifying existing drawings prepared under the previous editions of the standard, care should be exercised in identifying grounded (G) and ungrounded (UNG) receptacles.

NOTE — 2C: Where weatherproof, explosionproof, or other specific types of devices are to be required, use the type of upper case subscript letters referred to in Section 13.2.1.2. For example, weatherproof single or duplex receptacles would have the upper case subscript letters noted alongside the symbol (WP, UNGWP).

*Grounded*

*Ungrounded*

### 2.1 Single Receptacle Outlet



### 2.2 Duplex Receptacle Outlet



### 2.3 Triplex Receptacle Outlet



### 2.4 Quadruplex Receptacle Outlet



### 2.5 Duplex Receptacle Outlet—Split Wired



*Grounded**Ungrounded***2.6 Triplex Receptacle Outlet—Split Wired****2.7 Single Special-Purpose Receptacle Outlet**

NOTE — 2.7A: Use numeral or letter as a subscript alongside the symbol, keyed to explanation in the drawing list of symbols, to indicate type of receptacle or usage.

**2.8 Duplex Special-Purpose Receptacle Outlet**

See Note 2.7A

**2.9 Range Outlet (typical)**

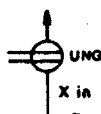
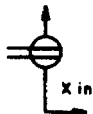
See Note 2.7A

**2.10 Special-Purpose Connection or Provision for Connection**

Use subscript letters to indicate function (DW—dishwasher; CD—clothes dryer, etc).

**2.11 Multioutlet Assembly**

Extend arrows to limit of installation. Use appropriate symbol to indicate type of outlet. Also indicate spacing of outlets as x inches.



*Grounded**Ungrounded***2.12 Clock Hanger Receptacle****2.13 Fan Hanger Receptacle****2.14 Floor Single Receptacle Outlet****2.15 Floor Duplex Receptacle Outlet****2.16 Floor Special-Purpose Outlet**

See Note 2.7A

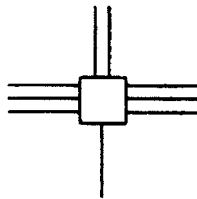
**2.17 Floor Telephone Outlet—Public****2.18 Floor Telephone Outlet—Private**

**2.18.1**

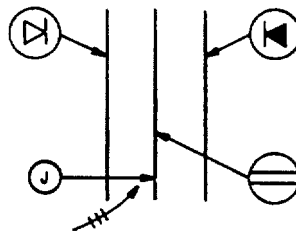
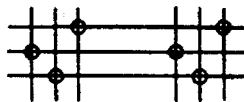
Application: example of the use of several floor outlet symbols to identify 2, 3, or more gang floor outlet



**2.19 Underfloor Duct and Junction Box for Triple, Double, or Single Duct System (as indicated by the number of parallel lines)**

**2.19.1**

Application: example of the use of various symbols to identify location of different types of outlets or connections for underfloor duct or cellular floor systems

**2.20 Cellular Floor Header Duct**

### **3. Switch Outlets**

#### **3.1 Single-Pole Switch**

**S** |

#### **3.2 Double-Pole Switch**

**S2**

#### **3.3 Three-Way Switch**

**S3**

#### **3.4 Four-Way Switch**

**S4**

#### **3.5 Key-Operated Switch**

**SK**

#### **3.6 Switch and Pilot Lamp**

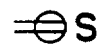
**SP**

#### **3.7 Switch for Low-Voltage Switching System**

**SL**

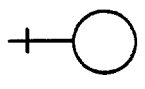
#### **3.8 Master Switch for Low-Voltage Switching System**

**SLM**

**3.9 Switch and Single Receptacle****3.10 Switch and Double Receptacle****3.11 Door Switch****3.12 Time Switch****3.13 Circuit Breaker Switch****3.14 Momentary Contact Switch or Pushbutton for Other Than Signaling System****3.15 Ceiling Pull Switch**

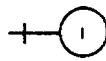
## 4. Signaling System Outlets (Institutional, Commercial, and Industrial Occupancies)

### 4.1 Nurse Call System Devices (any type)

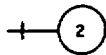


#### 4.1.1 Nurses' Annunciator

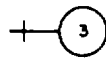
NOTE — Number may be added after symbol to indicate number of lamps. for example:  24.



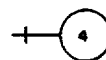
#### 4.1.2 Call Station, Single-Cord, Pilot Light



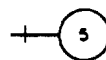
#### 4.1.3 Call Station, Double-Cord, Microphone-Speaker



#### 4.1.4 Corridor Dome Light, one lamp

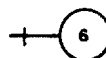


#### 4.1.5 Transformer

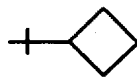


#### 4.1.6 Any Other Item on Same System

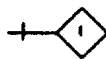
Use numbers as required.



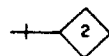
## 4.2 Paging System Devices (any type)



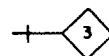
### 4.2.1 Keyboard



### 4.2.2 Flush Annunciator

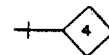


### 4.2.3 Two-Face Annunciator



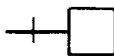
### 4.2.4 Any Other Item on Same System

Use numbers as required.



## 4.3 Fire Alarm System Devices (any type)

Including smoke and sprinkler alarm devices.



### 4.3.1 Control Panel



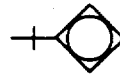
### 4.3.2 Station





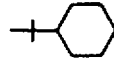
**4.3.3 10-inch Gong****4.3.4 Pre-Signal Chime****4.3.5 Any Other Item on Same System**

Use numbers as required.

**4.4 Staff Register System Devices (any type)****4.4.1 Phone Operators' Register****4.4.2 Entrance Register—Flush****4.4.3 Staff Room Register****4.4.4 Transformer**

**4.4.5 Any Other Item on Same System**

Use numbers as required.

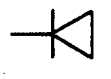
**4.5 Electric Clock System Devices (any type)****4.5.1 Master Clock****4.5.2 12-inch Secondary—Flush****4.5.3 12-inch Double Dial—Wall Mounted****4.5.4 18-inch Skeleton Dial****4.5.5 Any Other Item on Same System**

Use numbers as required.

**4.6 Public Telephone System Devices (any type)**

**4.6.1 Switchboard****4.6.2 Desk Phone****4.6.3 Any Other Item on Same System**

Use numbers as required.

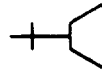
**4.7 Private Telephone System Devices (any type)****4.7.1 Switchboard****4.7.2 Wall Phone****4.7.3 Any Other Item on Same System**

Use numbers as required.

**4.8 Watchman System Devices (any type)**

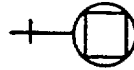
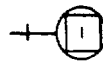
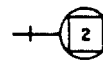
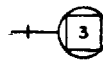
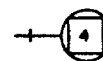
**4.8.1 Central Station****4.8.2 Key Station****4.8.3 Any Other Item on Same System**

Use numbers as required.

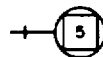
**4.9 Sound System (any type)****4.9.1 Amplifier****4.9.2 Microphone****4.9.3 Interior Speaker****4.9.4 Exterior Speaker**

**4.9.5 Any Other Item on Same System**

Use numbers as required.

**4.10 Other Signal System Devices****4.10.1 Buzzer****4.10.2 Bell****4.10.3 Pushbutton****4.10.4 Annunciator****4.10.5 Any Other Item on Same System**

Use numbers as required.



## 5. Residential Occupancies

Signaling system symbols for use in identifying standardized residential type signal system items on residential drawings where a descriptive symbol list is not included on the drawing. When other signal system items are to be identified, use the above basic symbols for such items, together with a descriptive symbol list.

### 5.1 Pushbutton



### 5.2 Buzzer



### 5.3 Bell



### 5.4 Combination Bell-Buzzer



### 5.5 Chime



### 5.6 Annunciator



### 5.7 Electric Door Opener



### 5.8 Maid's Signal Plug

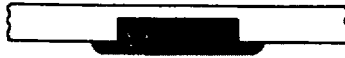


**5.9 Interconnection Box****5.10 Bell-Ringing Transformer****5.11 Outside Telephone****5.12 Interconnecting Telephone****5.13 Radio Outlet****5.14 Television Outlet**

## 6. Panelboards, Switchboards, and Related Equipment

### 6.1 Flush-Mounted Panel Board and Cabinet

NOTE — 6.1A: Identify by notation or schedule.



### 6.2 Surface-Mounted Panel Board and Cabinet

See Note 6.1A



### 6.3 Switchboard, Power Control Center, Unit Substations (should be drawn to scale)

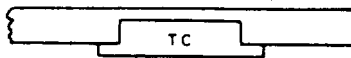
See Note 6.1A



### 6.4 Flush-Mounted Terminal Cabinet

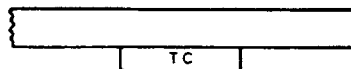
See Note 6.1A

NOTE — 6.4A: In small-scale drawings the TC may be indicated alongside the symbol.



### 6.5 Surface-Mounted Terminal Cabinet

See Notes 6.1A and 6.4A



### 6.6 Pull Box

Identify in relation to wiring system section and size.





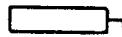
## 6.7 Motor or Other Power Controller

See Note 6.1A



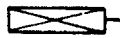
## 6.8 Externally Operated Disconnection Switch

See Note 6.1A



## 6.9 Combination Controller and Disconnection Means

See Note 6.1A



## 7. Bus Ducts and Wireways

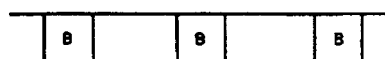
### 7.1 Trolley Duct

See Note 6.1A



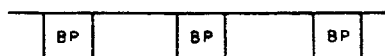
### 7.2 Busway (Service, Feeder, or Plug-in)

See Note 6.1A



### 7.3 Cable Through, Ladder, or Channel

See Note 6.1A



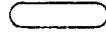
### 7.4 Wireway

See Note 6.1A



## 8. Remote Control Stations for Motors or Other Equipment

### 8.1 Pushbutton Stations in General



### 8.2 Float Switch—Mechanical



### 8.3 Limit Switch—Mechanical



### 8.4 Pneumatic Switch—Mechanical



### 8.5 Electric Eye—Beam Source



### 8.6 Electric Eye—Relay



### 8.7 Thermostat



## 9. Circuiting

Wiring method identification by notation on drawing or in specifications.

### 9.1 Wiring Concealed in Ceiling or Wall



NOTE — 9.1A: Use heavy weight line to identify service and feed runs.

### 9.2 Wiring Concealed in Floor

See Note 9.1A



### 9.3 Wiring Exposed

See Note 9.1A



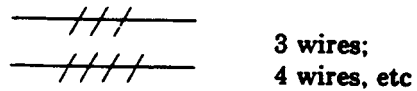
### 9.4 Branch Circuit Home Run to Panel Board

Number of arrows indicates number of circuits. (A numeral at each arrow may be used to identify circuit number.)



NOTE — Any circuit without further identification indicates a 2-wire circuit. For a greater number of wires, indicate with cross lines (see 9.4.1, Applications).

#### 9.4.1 Applications:

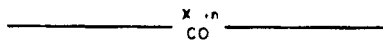


Unless indicated otherwise, the wire size of the circuit is the minimum size required by the specification.

Indicate size in inches and identify different functions of wiring system, such as signaling, by notation or other means.

### 9.5 Empty Raceway

NOTE — 9.5A: Indicate empty conduit by notation CO (conduit only)



### 9.6 Wiring Turned Up



### 9.7 Wiring Turned Down



## 10. Electrical Distribution or Lighting Systems, Underground

### 10.1 Manhole

See Note 6.1A



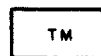
### 10.2 Handhole

See Note 6.1A



### 10.3 Transformer Manhole or Vault

See Note 6.1A



### 10.4 Transformer Pad

See Note 6.1A



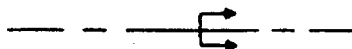
### 10.5 Underground Direct Burial Cable

Indicate type, size, and number of conductors by notation or schedule.



### 10.6 Underground Duct Line

Indicate type, size, and number of ducts by cross section identification of each run by notation or schedule. Indicate type, size, and number of conductors by notation or schedule.



See also symbol 11.11 and Section I4.

### 10.7 Street Light Standard Fed from Underground Circuit

See Note 6.1A



## 11. Electrical Distribution or Lighting Systems, Aerial

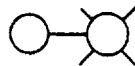
### 11.1 Pole

See Note 6.1A



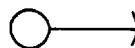
### 11.2 Pole, with Street Light

See Note 6.1A



### 11.3 Pole, with Down Guy and Anchor

See Note 6.1A



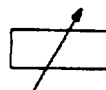
### 11.4 Transformer

See Note 6.1A



### 11.5 Transformer, Constant-Current

See Note 6.1A



### 11.6 Switch, Manual

See Note 6.1A



### 11.7 Circuit Recloser, Automatic

See Note 6.1A



**11.8 Line Sectionalizer, Automatic**

See Note 6.1A

**11.9 Circuit, Primary**

See Note 6.1A

**11.10 Circuit, Secondary**

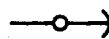
See Note 6.1A

**11.11 Circuit, Series Street Lighting**

See Note 6.1A



See also symbol 10.6 and Section I4.

**11.12 Down Guy****11.13 Head Guy****11.14 Sidewalk Guy****11.15 Service Weather Head**

See Note 6.1A

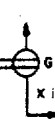


## Annex A Revised or Deleted Symbols (Informative)

(This Appendix is not a part of American National Standard Y32.9-1972.)

| Symbols Formerly in ANSI Y32.9-1962 and MIL-STD-15-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Recommended symbols in ANSI Y32.9-1972, if not otherwise specified |
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| <b>ANSI Y32.9-1962</b><br><br><div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">1.9</div> <div style="text-align: center;"></div> <div style="text-align: center;"></div> <div style="text-align: center;">Recessed Exit Light</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | See item 1.9                                                       |
| <b>ANSI Y32.9-1962 and MIL-STD-15-3</b><br><br><div style="text-align: center;">2 RECEPTACLE OUTLETS</div> <p>Where all or a majority of the receptacles in an installation are to be of the grounding type, the upper case letter abbreviated notation may be omitted and the types of receptacles required noted in the drawing list of symbols and in the specifications. When this is done, any nongrounding receptacles may be so identified by notation at the outlet location. Where' weatherproof, explosion-proof, or other specific types of devices are to be required, use the type of upper case subscript letters referred to in paragraph 3.2.1.3 of this Standard. For example, weatherproof single or duplex receptacles would have the upper case subscript letters noted alongside the symbol (WP, GWP).</p> <div style="display: flex; justify-content: space-around; text-align: center; margin-bottom: 10px;"> <div><i>Underground</i></div> <div><i>Grounding</i></div> </div> <div style="margin-bottom: 10px;"> 2.1 Single Receptacle Outlet <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;">   </div> </div> <div style="margin-bottom: 10px;"> 2.2 Duplex Receptacle Outlet <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;">   </div> </div> <div style="margin-bottom: 10px;"> 2.3 Triplex Receptacle Outlet <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;">   </div> </div> <div style="margin-bottom: 10px;"> 2.4 Quadruplex Receptacle Outlet <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;">   </div> </div> | See items 2.1 through 2.7                                          |



| Symbols Formerly in ANSI Y32.9-1962 and MIL-STD-15-3                                                                                                                                                                                                                                                                                                    | Recommended symbols in ANSI Y32.9-1972, if not otherwise specified |
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| <p>2.5 Duplex Receptacle Outlet—Split Wired</p>                                                                                                                                       |                                                                    |
| <p>2.6 Triplex Receptacle Outlets—Split Wired</p>                                                                                                                                     |                                                                    |
| <p>2.7 Single Special Purpose Receptacle Outlet<br/>Asterisk is not part of the symbol; see footnote ‡‡</p>                                                                           |                                                                    |
| <p>2.8 Duplex Special Purpose Receptacle Outlet<br/>Asterisk is not part of the symbol; see footnote ‡‡.</p>                                                                          |                                                                    |
| <p>2.9 Range Outlet</p>                                                                                                                                                           |                                                                    |
| <p>2.10 Special Purpose Connection or Provision for Connection<br/>Use subscript letters to indicate function (DW — Dishwasher; CD—Clothes Dryer, etc).</p>                       |                                                                    |
| <p>2.11 Multioutlet Assembly<br/>Extend arrows to limit of installation. Use appropriate symbol to indicate type of outlet.<br/>Also indicate spacing of outlets in inches.</p>   |                                                                    |
| <p>2.12 Clock Hanger Receptacle</p>                                                                                                                                               | <p>See Items 2.8 through 2.16</p>                                  |

| Symbols Formerly in ANSI Y32.9-1962 and MIL-STD-15-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Recommended symbols in ANSI Y32.9-1972, if not otherwise specified |
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| <p>2.13 Fan Hanger Receptacle</p> <div></div> <p>2.14 Floor Single Receptacle Outlet</p> <div></div> <p>2.15 Floor Duplex Receptacle Outlet</p> <div></div> <p>2.16 Floor Special Purpose Outlet<br/>Asterisk is not part of the symbol; see footnote ‡‡.</p> <div></div> |                                                                    |
| MIL-STD-15-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See item 6.7                                                       |
| MIL-STD-15-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See item 7.3                                                       |
| <div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                    |