

Outlets: The Ins and Outs

Often used interchangeably, a "receptacle" is the "female" counterpart to a plug that provides access to electricity while an "outlet" can be any access point to wiring, such as light fixtures or receptacles.

Out with the old: All outlet installation should be performed by a qualified electrician.

| Туре | Look | Function | Interesting Fact | Recommended Installation Locations | |
|--|--------------|--|--|---|----------|
| Two-Pronged Receptacle | | Provides electricity to plugged in appliance. | Installed prior to 1962. | None. | 4 |
| Grounded Receptacle | | Third prong (ground) reduces the risk of electric shock and protects equipment from electrical damage. | Grounding-type receptacles were first required for all 15- and 20-ampere receptacle outlets in the 1971 edition of the National Electrical Code® (NEC). | Mandated by NEC in all areas unless otherwise specified. | 4 |
| Tamper-Resistant Receptacle (TRR) | [TR] | A built-in shutter system prevents objects from being inserted, except when simultaneous, equal pressure to both slots is provided by a plug. | Outlet covers do not provide adequate protection. 100% of children ages 2 to 4 were able to remove one brand of plastic outlet covers from the sockets in less than ten seconds. | Required by the 2008 NEC. Upgrading rooms and areas where children could have access to the outlets is recommended. | 4 |
| Arc Fault Circuit Interrupter (AFCI) Receptacle | AFCI A | Reduces the risk of fire, by interrupting power when an arc fault occurs anywhere in the circuit, including within items plugged into it. | The CPSC estimates more than 50% of electrical fires that occur every year could be prevented by AFCIs. | Provides protection from arc faults beyond branch circuit wiring extending to appliances and cords using the receptacle. | 4 |
| Ground Fault Circuit Interrupter (GFCI) Receptacle | | Prevents shock by quickly shutting off power to the circuit if the electricity flowing into the circuit differs from that returning, indicating a leakage current. | GFCIs shut off electric power in the event of a ground fault within as little as 1/40 of a second. | Installed in areas where water and electricity are in close proximity, such as bathrooms, garages, kitchens, laundry areas, and any receptacles located outdoors. | 4 |
| Surge Suppression Receptacle | Surge Ground | Protects sensitive electronic equipment from transient surges. | National Electrical Manufacturers Association (NEMA) estimates that 60–80% of surges are created within the building, such as when large appliances, like air conditioners, turn on and off. | Not required by the NEC, though often installed in rooms containing costly devices such as computers, TVs or refrigerators. | 4 |
| USB Receptacle | | Provides a permanent Universal Serial Bus (USB) connection source. | Over 10 billion electrical devices in use today charge via a USB cable. | Offers a permanent adaption for devices requiring a USB terminal for power or charging as needed for convenience. Not required by the NEC. | 4 |



Some receptacles may combine more than one technology such as AFCI+TRR, GFCI+TRR, or USB+GFCI.