#### **LOW VOLTAGE CIRCUITS**

- STANDARD TELEPHONE WIRING Cat 5, 8 conductor homerun wiring at each jack to our service junction box inside with stub out for phone company junction box. Jacks are designed to accommodate two phone lines.
- STANDARD CABLE TV WIRING RG-6 coaxial cable is used (No connections are made). Each outlet is homerun wired.
- GARAGE DOOR OPENER WIRING Wiring and junction boxes only; the G.D.O. installer makes all connections.

#### **BRANCH CIRCUIT WIRING**

15 Amp circuits control all lighting. They also control receptacles in living areas and bedrooms. Each 15Amp breaker will control a combination of 8 to 12 lights and receptacles.

- 30 Amp circuits control electric clothes dryers, some air conditioner condensers, electric furnaces, and electric cooking units, depending on their size.
- 40 Amp and 50 Amp circuits control some air conditioners and electric cooking units depending on their size.
- 60 Amp circuit breakers control some air conditioners, some electric furnaces, and sub panels.
- 90 Amp and 125 Amp circuits control electrical heating units.

All breakers should be labeled as to what they control.

- Unplugging an item while it is in the ON position can cause these types of breakers to trip.
- If the breaker trips instantly when an item is plugged in but not yet turned on, the problem is in your cord or wiring of the item.
- If the breaker trips after an item is plugged in and been in use for a couple of minutes, more than likely you have purchased an item that pulls a high amperage load and will not work on a typical 15amp circuit. Check the item to see what the power requirements are. If it uses 12 amps or 1440 watts, then the item is pushing the limits of what the circuit will allow. If it uses less than 12amps or 1440 watts, it is more than likely that other items in use are tied to the same Arc Fault Circuit and the combination of items is causing the amps to go above the maximum load and therefore, tripping the breaker.



# **C&B Electric AFTER HOURS**CUSTOMER SERVICE PROCEDURES

FOR AFTER HOURS EMERGENCY SERVICE: CALL 972-790-0707

IF YOUR CALL IS NOT AN EMERGENCY, CONTACT THE CUSTOMER SERVICE DEPARTMENT DURING REGULAR BUSINESS HOURS

#### WHAT IS AN EMERGENCY?

The following is a brief description of "emergency" situations that occur in a new home. In each case, we have suggested appropriate action to help you diagnose and/or solve the problem. If your situation does not fall within the guidelines listed below, please contact our Customer Service Department during regular business hours for assistance.

#### No power to the home:

- Check the electrical box to see if breakers are tripped or if the main breaker to the house is tripped. Gas air handlers will be on a switch locate near the handler.
- Call the electric company to determine if power outage is outside the home.
- Call the emergency telephone number listed above for service.

## No power to heating, air conditioning, or electric water heater due to electrical problems:

- Check the breaker in the breaker box.
- Locate the disconnect switch to each unit as well as the disconnect switches
  for the outside A/C units located on the exterior wall and ensure they are in
  the 'ON' position.
- Call the emergency telephone number listed above for service.

A dangerous electrical situation (arching, electrical shock, exposed wiring, etc):

- Shut off the breaker to that circuit (circuits are labeled in the breaker box).
- In event of fire or visible smoke, call local fire department first.

CUSTOMER SERVICE DEPARTMENT HOURS OF OPERATION 8:00 AM to 5:00 PM MONDAY – FRIDAY 972-790-0707

www.cbelectric.com

### THE FOLLOWING INFORMATION WILL HELP YOU TO UNDERSTAND THE ELECTRICAL SYSTEM INSTALLED IN YOUR NEW HOME BY C&B ELECTRIC

#### WHAT TO DO IF:

LIGHTS BLINK WHEN THE AIR CONDITIONING STARTS UP: This flicker is most likely due to temporary drop in voltage which is generally caused when a large appliance such as a refrigerator or air conditioner cycles on and off. This is a common occurrence and, depending on the power company's demand at that time of day, may or may not be noticeable and is normal. ONLY HALF OF THE LIGHTS WORK:

First, check all breakers to be sure they are completely in the 'ON' position. Next, turn on the electric cooktop, electric clothes dryer, or electric furnace. If these appliances will not heat up, call the power company first.

#### **ARC FAULT & DUAL FUNCTION BREAKERS**

These Breakers are safety breakers that aid in the prevention of electrical hazards. Designed to trip when there is an arching condition within the circuit or the device plugged into the circuit. The requirement of these Breakers to be used throughout the entire house excluding bathrooms & garages. As of September of 2023 the state of Texas requires all cities to conform to the 2023 NEC code.

#### **OUTSIDE, BATH, KITCHEN, OR GARAGE PLUG DOES NOT WORK:**

- Kitchen Push the GFCI receptacle reset button. If GFCI receptacles are not present on the counter top you must reset the dual function AFCI/ GFCI breaker (purple) in the panel.
- Utility Reset the dual function AFCI/GFCI breaker (purple) in the panel.
- Bathrooms, Garage, Exterior Push the GFCI receptacle reset button;

If any of these fail to reset, call us for a non-emergency warranty call.

If exterior outlets have retained water or moisture inside, they will not reset; they must dry out first. Sprinkler heads should be directed away from electrical outlets and light fixtures. Let the outlet dry out before resetting.

#### KNOWING YOUR CIRCUIT SIZES AND HOW TO USE THEM

15 Amp circuits are in most common areas except kitchen, dining, and breakfast areas which are 20 Amps. 20 Amp receptacles are best for higher powered items such as vacuums and irons. 20 Amp Circuits are also small appliances such as the disposal, dishwasher, washing machine, gas furnace, and microwave.

#### **LOAD CENTERS (BREAKER BOX) AND BREAKERS**

Size of main and circuit breakers are determined by the type of appliances, heating, cooling devices, etc.

- Breakers are designed to protect your internal wiring and their devices. They are not designed to protect the appliances.
- Power company requirements and builder specifications determine breaker box locations.

#### **GFCI PROTECTED RECEPTACLES**

GFCI (Ground fault Current Interrupt) receptacles are located in kitchens, baths, garages, attics, and outside. They are sensitive devices that aid in preventing electrical shock at hazardous locations.

Locations protected are:

- KITCHEN The GFCI receptacles in the kitchen protect all other countertop receptacles. (Reset is located on a receptacle or breaker)
- BATHS The GFCI receptacles at the bathroom vanity protects all other bath receptacles. Jacuzzi bathtubs are also protected by a GFCI device usually located in the master closet. (Reset is located on a receptacle or breaker)
- GARAGE The GFCI receptacle in the garage protects all receptacles in the garage except those installed for a specific use such as Garage Door Opener or Freezer. (Current NEC 2023 code requires all receptacles in garage to be GFCI protected, this includes Garage Door Openers and Freezers).

#### **CARBON AND SMOKE DETECTORS**

Dust particles and small insects will cause your CO and smoke detectors to sound off. Occasional vacuuming of the CO and smoke detectors and exterminating of insects should prevent this problem. Test your CO and smoke detectors monthly to ensure proper operation. The 9 Volt battery should be changed out every six months (a good way to remember is to change on Daylight Savings and Daylight Standard time changes).