

Single Family Dwelling Kitchen Requirements

2005 NFPA-70 New Construction Requirements NEC 210.52(b) & 210.8(A)6 & UCC Reconstruction Code

Kitchen Small Appliances.

The code requires two or more 20-ampere circuits for all receptacle outlets for the small-appliance loads, including refrigeration equipment, in the kitchen, dining room, pantry, and breakfast room of a dwelling unit. The **countertop receptacle outlets in kitchens must be supplied by no fewer than two small-appliance branch circuits**. These circuits may also supply receptacle outlets in the pantry, dining room, and breakfast room, as well as an electric clock receptacle and electric loads associated with gas-fired appliances, **but these circuits are to have no other outlets**. Ground fault protection is required for all receptacles serving countertop surfaces.

No restriction is placed on the number of outlets connected to a general-lighting or small-appliance branch circuit. The minimum number of receptacle outlets in a room is determined by 6 foot/ 12 foot rule based on the room perimeter. It may be desirable to provide more than the minimum number of receptacle outlets required, thereby further reducing the need for extension cords.

Exhibit 210.25 illustrates the application of the requirements. The small-appliance branch circuits illustrated are not permitted to serve any other outlets, such as might be connected to exhaust hoods or fans, disposals, or dishwashers. The countertop receptacles are also required to be supplied by these two circuits. Receptacles installed to serve countertop surfaces are required to be GFCI protection. The dining room switched receptacle on a 15-ampere general-purpose branch circuit is permitted. The refrigerator receptacle supplied by a 15-ampere individual branch circuit is permitted.

Wall Counter Spaces. A receptacle outlet shall be installed at each wall counter space that is 300 mm (12 in.) or wider. Receptacle outlets shall be installed so that no point along the wall line is more than 600 mm (24 in.) measured horizontally from a receptacle outlet in that space.

Island Counter Spaces. At least one receptacle outlet shall be installed at each island counter space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater.

Peninsular Counter Spaces. At least one receptacle outlet shall be installed at each peninsular counter space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater. A peninsular countertop is measured from the connecting edge.

Separate Spaces. Countertop spaces separated by range tops, refrigerators, or sinks shall be considered as separate countertop spaces in applying the requirements of 210.52(C)(1), (2), and (3).

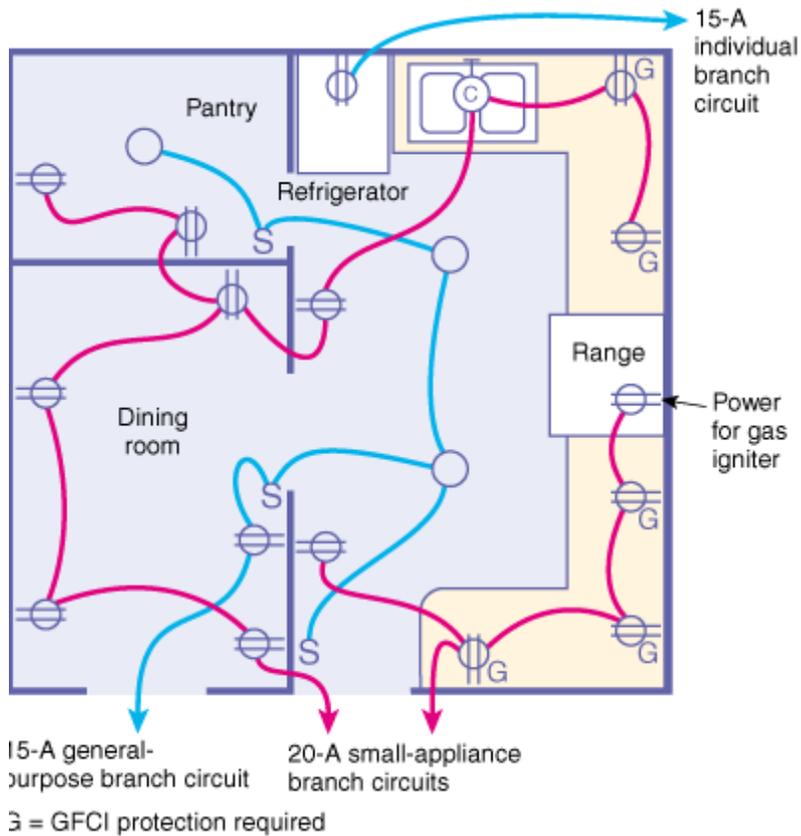
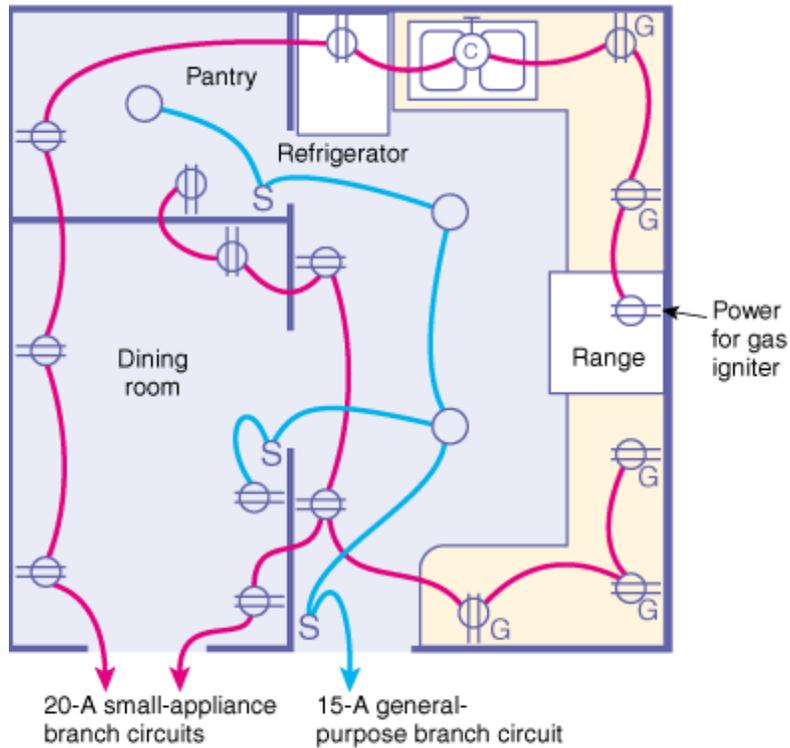
Receptacle Outlet Location. Receptacle outlets shall be located above, but not more than 500 mm (20 in.) above, the countertop. Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, or appliances occupying dedicated space shall not be considered as these required outlets.

Exception: To comply with the conditions specified in (a) or (b), receptacle outlets shall be permitted to be mounted not more than 300 mm (12 in.) below the countertop. Receptacles mounted below a countertop in accordance with this exception shall not be located where the countertop extends more than 150 mm (6 in.) beyond its support base.

Lighting & Switching The entire lighting system is to remain separating from the 20 amp small appliance circuits. They may occupy the same multi-gang box but, may not share circuits. Lighting circuits are permitted to supply hood fans.

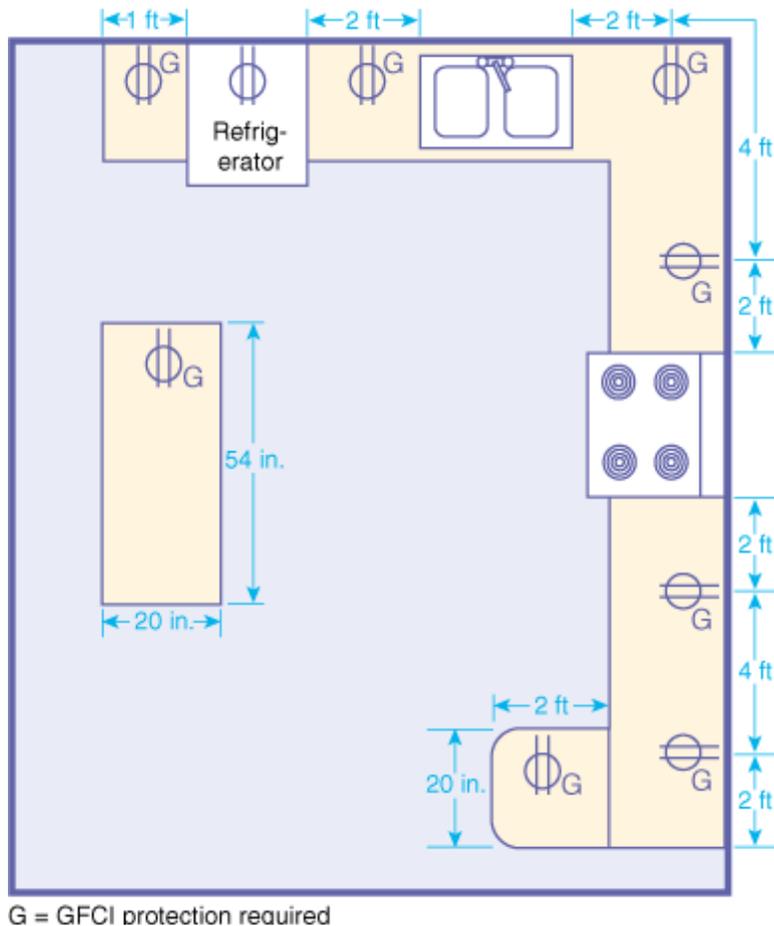
Single Family Dwelling Kitchen Counter Small Appliance Circuits and Lighting

NFPA -70 2002 Requirements of New Construction & UCC Rehab code 12/03



Single Family Dwelling Kitchen Counter Required Receptacles Spacing

NFPA-70 2002 New Construction/UCC Rehab Reconstruction 12/03



The spacing for receptacles is generally called the 2/4 foot rule for outlet spacing on kitchen counters. It's important to note any receptacle installed below counter on island and/or peninsular is required to be a maximum 12 inches below counter. Furthermore receptacles are not permitted below counter if the edge of the counter exceeds 6 inches beyond the base cabinet.

Other issues:

Dishwashers require dedicated 15 or 20 amp circuit. Provide disconnecting means within site of unit. This may be cord connected (receptacle) or switch within site of unit.

Appliances such as ovens and stoves shall be cord connected, have lockout breakers and/or disconnecting switch within site of units.

Appliances may not be suitable for aluminum conductors. Read manufactures instructions. This may require copper conductors only and/or terminations approved for aluminum or copper.