

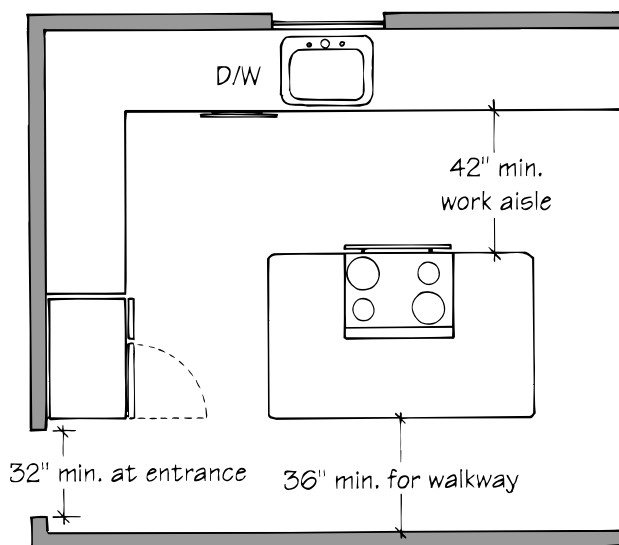
THE 31 RULES OF KITCHEN DESIGN



In 1992, The National Kitchen & Bath Association (NKBA) introduced new design guidelines based on extensive research conducted by the association along with the University of Minnesota. The guidelines were established to help building and

design professionals plan spaces that function well. The kitchen guidelines, in simplified form, appear below. For more information contact NKBA, 687 Willow Grove. St., Hackettstown, NJ 07840; 908/852-0033.

Rules 1 and 3: Walkways and Work Aisles



1 Walkways: Make openings at least 32 in. wide at all entrances to the kitchen. Make walkways at least 36 in. wide, and allow at least 36 in. of clearance for cabinet access (distance from cabinet front to a wall or obstacle).

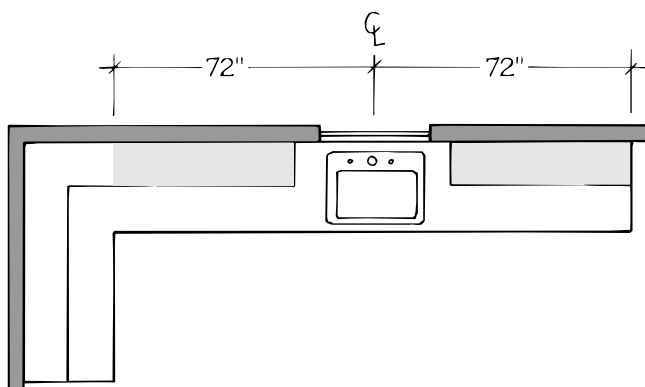
2 Doors: Entry, cabinet, and appliance doors should not interfere with each other.

3 Work Aisles: In a one-cook kitchen, make work aisles at least 42 in. wide (from counter edge to counter edge), and passageways at least 36 in. wide. For two cooks working in the same space, make work aisles at least 48 in. wide.

4 Wall Cabinet Frontage: Kitchens under 150 sq. ft. should have at least 144 in. of wall cabinet frontage. For kitchens over 150 sq. ft., the minimum is 186 in. (Don't count hard-to-reach cabinets over hood, oven, or refrigerator.)

5 Dish Storage: Provide at least 60 in. of wall cabinet frontage within 72 in. of the primary sink centerline. *Alternative:* Substitute a tall cabinet of equivalent size, or provide base cabinets on the back side of a sink peninsula.

Rule 5: Storage Near Sink

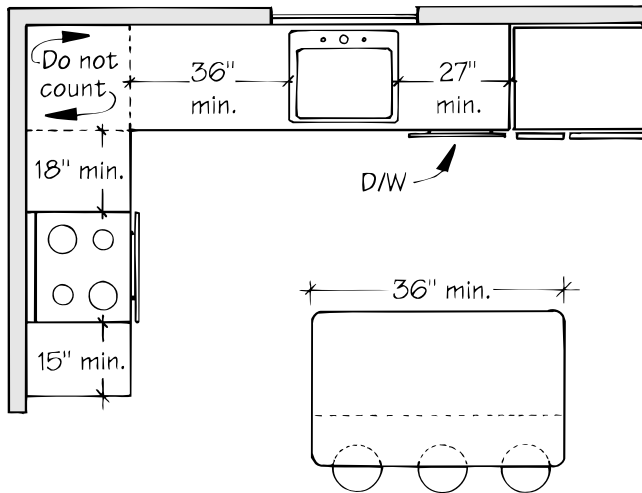


6 Base Cabinet Frontage: Kitchens under 150 sq. ft. should have at least 156 in. of base cabinet frontage (cabinets must be at least 21 in. deep). For kitchens over 150 sq. ft., the minimum is 192 in. (A lazy susan counts as 30 in.)

7 Drawer Frontage: Kitchens under 150 sq. ft. should have at least 120 in. of drawer frontage or roll-out shelf frontage. For kitchens over 150 sq. ft., the minimum is 165 in. (Example: A 21 in. base with three drawers or three roll out shelves counts as 63 in. Drawer cabinets must be at least 21 in. wide to meet this guideline.)

8 Storage: Include at least five storage items in the kitchen to improve its accessibility and usefulness. (Examples: specialized drawers, built-in bins or racks, swing-out pantries.)

Rule 11: Countertop Frontage



9 Corner Storage: In a kitchen with corner cabinets, make at least one corner unit functional. (Examples: lazy susan, angled cabinet front, access from rear of cabinet.)

10 Height of Wall Cabinets: Leave 15 in. to 18 in. of clearance between the countertop and the bottom of wall cabinets.

11 Countertop Frontage: Kitchens under 150 sq. ft. should have at least 132 in. of usable countertop frontage. For kitchens over 150 sq. ft., the minimum is 198 in. Do not count corner space or countertops that are less than 16 in. deep.

12 Work Centers: Never separate two primary work centers (such as the main sink and cooktop) with a refrigerator or full-height, full-depth cabinet, such as an oven or pantry cabinet.

13 Sink Counter: Provide at least 24 in. of countertop on one side of the sink and 18 in. on the other. For a second sink, minimums are 18 in. and 3 in. If these sections turn a corner, measure along the front edge of the countertop.

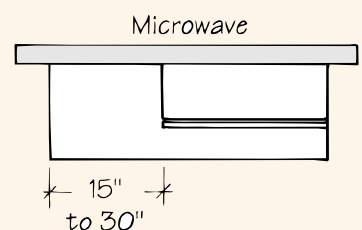
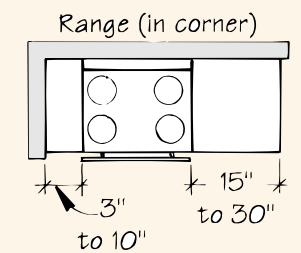
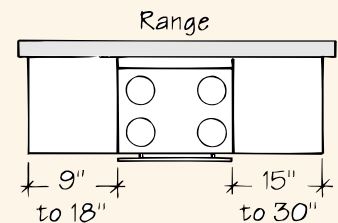
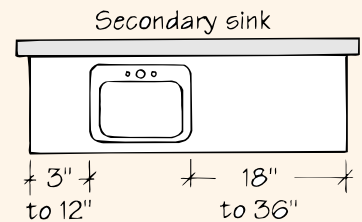
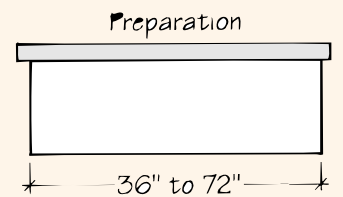
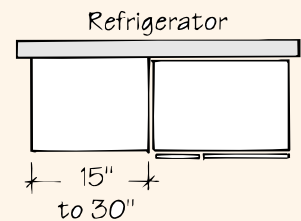
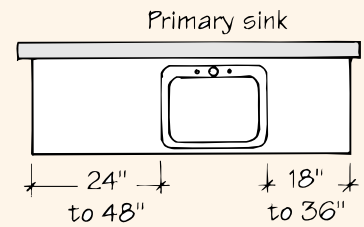
14 Sink Near Corner: Provide at least 3 in. of countertop from the sink to an inside corner (this requires 21 in. of counter on return). Leave at least 18 in. to a dead-end or hard-to-reach corner.

15 Waste Receptacles: Include at least two waste receptacles: one for garbage and one for recyclables.

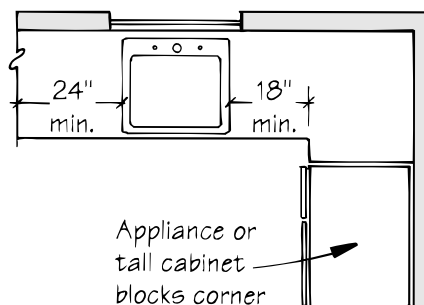
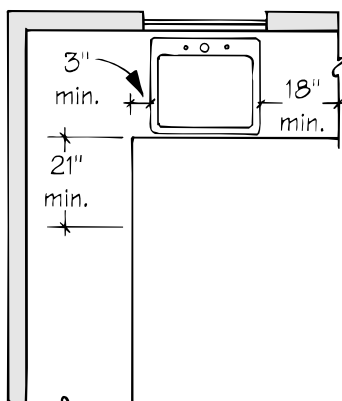
16 Dishwasher Clearance: Allow for 21 in. of standing room extending from each edge of the dishwasher. Also, keep the dishwasher within 36 in. of the sink.

17 Preparation Center: Provide at least 36 in. of straight, continuous

Minimum Work Center Frontage



Rules 13 and 14: Countertop at Sink

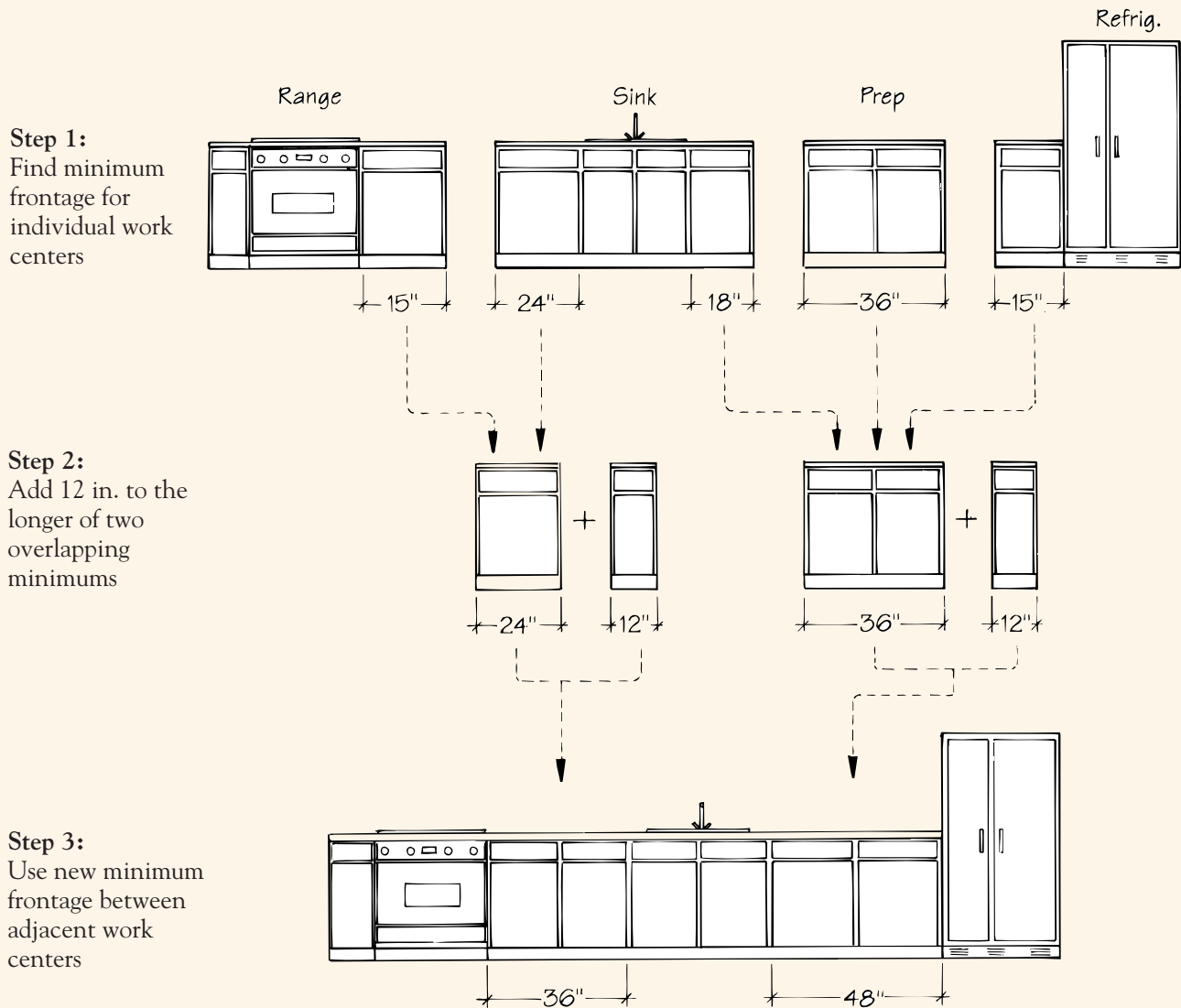


Making Everything Fit

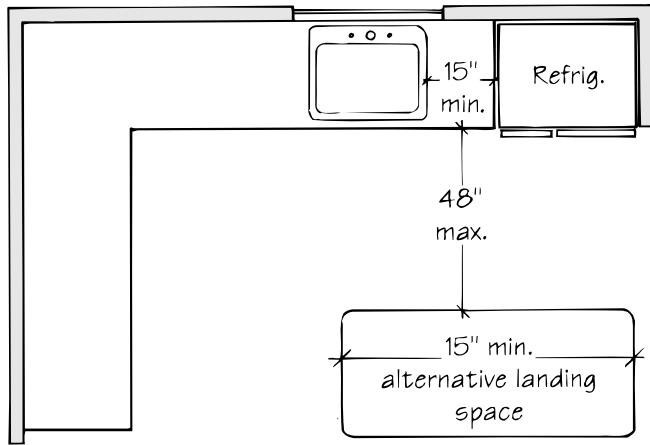
When two work centers are located next to each other, the minimum frontages may overlap. To determine the new minimum:

- Determine the countertop space required by each work center individually.
- Where the two work centers overlap, take the longest of the two minimum dimensions and add 12 in. The result is the new minimum frontage.

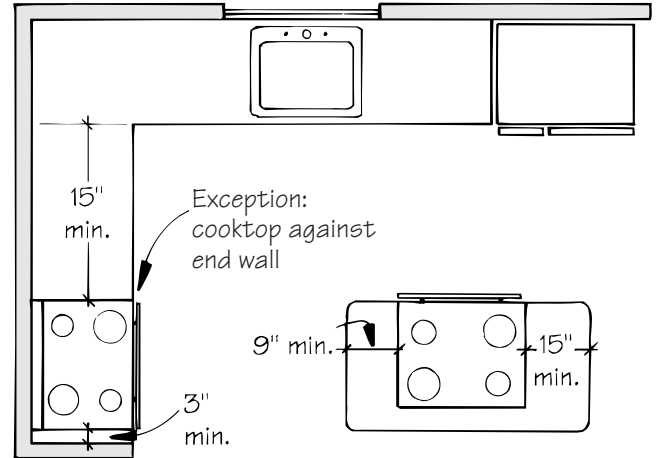
In the illustration below, to find the length of countertop needed between the range and the sink, start with the 24 in. minimum required for the sink (this is larger than the 15 in. required for the range), and add 12 in. The resulting 36 in. is the new minimum for these two adjacent work centers.



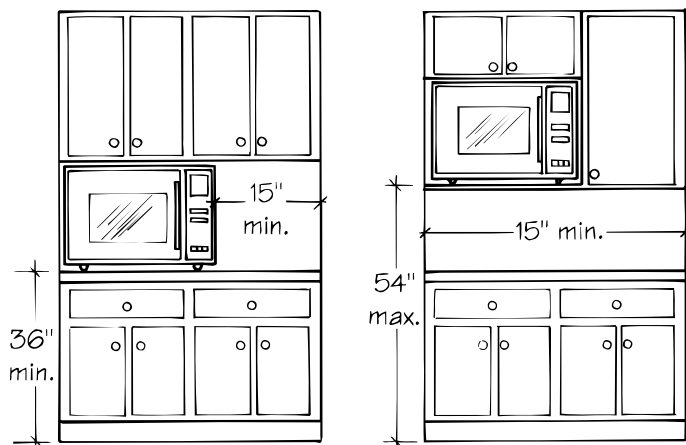
Rule 18: Refrigerator Counter



Rule 19: Cooktop Counter



Rule 22 and 23: Microwave Counter



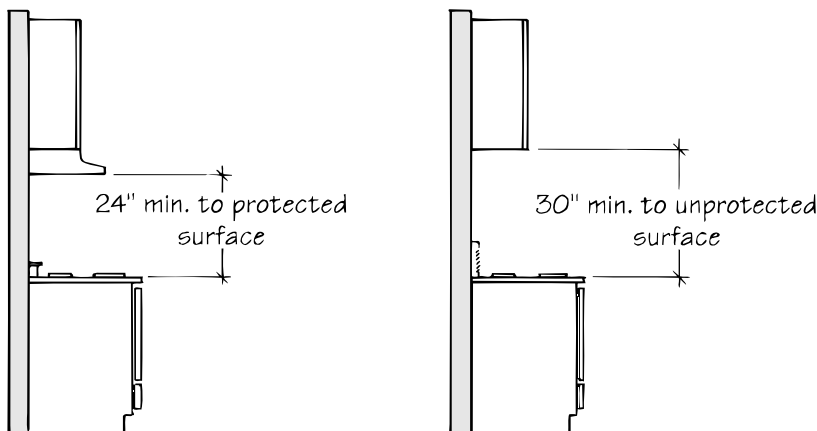
countertop for the preparation center — immediately adjacent to a sink. Add a separate center for a second cook.

18 Refrigerator Counter: Provide at least 15 in. of countertop on the latch side of the refrigerator or 15 in. on each side of a side-by-side unit. *Alternative:* Provide at least 15 in. of landing space no more than 48 in. across from the refrigerator.

19 Cooktop Counter: Leave at least 9 in. of counter space on one side of the cooking surface and 15 in. on the other. *Exception:* If the cooktop goes against an end wall, leave at least 3 in. of clearance and protect the wall from heat.

20 Cooktop Near Window: Do not place the cooking surface below an operable window unless the window is 3 in. or more behind the appliance and more than 24 in. above it.

Rule 25: Cooktop Clearances

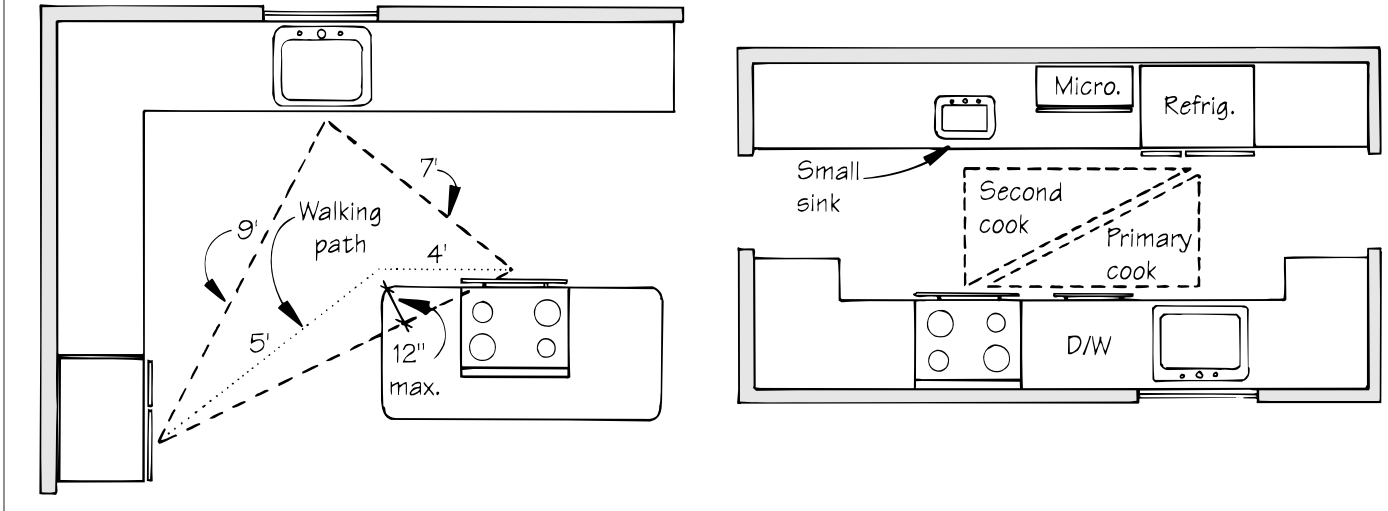


21 Oven Counter: Provide at least 15 in. of landing space next to or above the oven if the appliance door opens into a traffic lane. *Alternative:* The landing space can be across from the oven (no more than 48 in. away) if the appliance does not open into a traffic lane.

22 Microwave Counter: Provide at least 15 in. of landing space below, or adjacent to, the microwave oven.

23 Microwave Clearance: Place the microwave oven so the bottom of the unit is between counter height and user

Rule 26: Work Triangle



eye-level (36 in. to 54 in. off the floor).

24 Cooktop Ventilation: All major appliances used for surface cooking must have a ventilation system with a minimum fan rating of 150 cfm.

25 Cooktop Clearances: Above the cooking surface, leave at least 24 in. to a protected surface (such as a range hood), or 30 in. to an unprotected surface. *Exception:* A microwave/hood combination may be lower than 24 in.

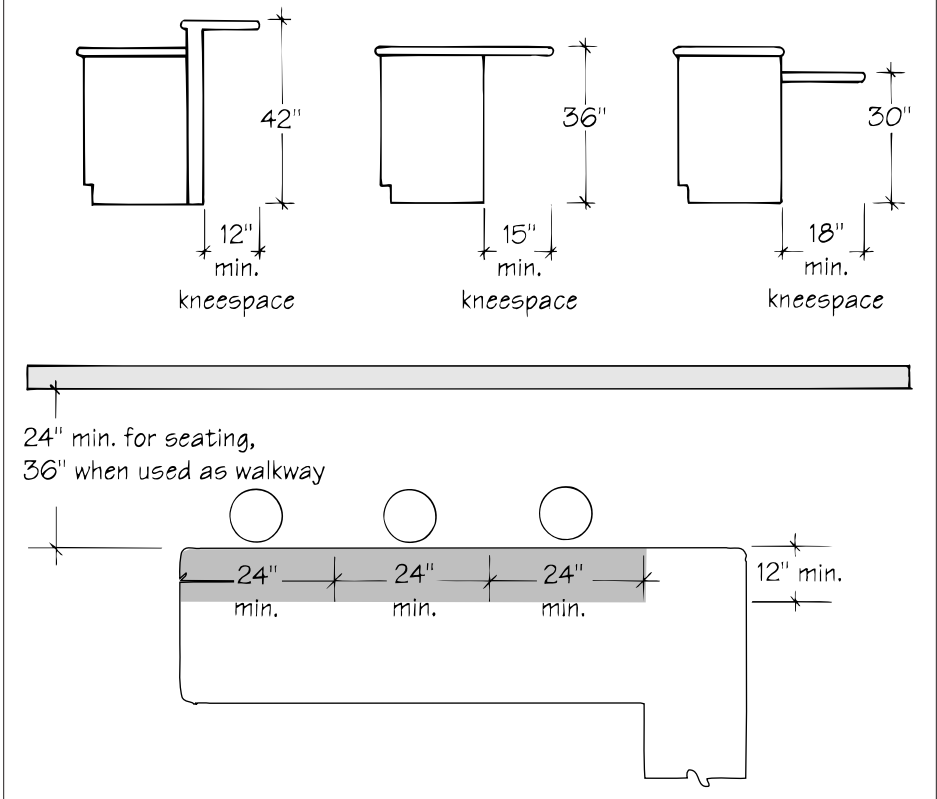
26 Work Triangle: Make the primary work triangle 26 ft. or less. This is the distance between the refrigerator, primary cooking center, and the primary sink, measured from the center front of each appliance. No leg of the triangle should be less than 4 ft. or more than 9 ft. long. If an island or peninsula blocks the triangle, measure the shortest *walking* distance (not actually a triangle), as shown. No leg should intersect an obstacle by more than 12 inches.

In two-cook kitchens, each cook should have a separate triangle. The two triangles can share a leg but should not overlap. Usually, at least the refrigerator is shared by both cooks.

27 Traffic Jams: No major traffic lanes should cut across the work triangle connecting the primary centers (sink, refrigerator, food preparation, and cooktop/range).

28 Eating Counter: If the kitchen has an eating counter, allow counter

Rules 28 & 29: Eating Counter Clearances



space at least 24 in. wide by 12 in. deep for each seated diner. Provide at least 12 in. of kneespace under an eating counter 42 in. high, 15 in. under a counter 36 in. high, and 18 in. under a counter 30 in. high.

29 Kitchen Seating: Provide at least 24 in. of free space behind a counter or table for seating. Increase the clearance to 36 in. if people will need to pass behind diners.

30 Kitchen Windows: The combined area of windows and skylights should equal at least 10% of the area of the kitchen (or of the living space that includes the kitchen).

31 Safety: Specify ground-fault circuit interrupters (GFCIs) on all receptacles within 6 ft. of a kitchen water source. Also, include smoke alarms in the kitchen and a fire extinguisher across from the cooktop. ■