

# KITCHEN ISLANDS



## Practical Makes Perfect

Put function before form to get the most out of your kitchen island

BY MATTHEW MILLHAM

**O**h, the kitchen island. Almost everybody seems to want one, and for good reason. With the kitchen and entertaining spaces of homes increasingly melding together, islands serve numerous purposes. They're transitional areas, where one side may pull double duty as a homework desk and dining counter. They help define the area between the kitchen and the space beyond. They're social gathering places that allow the cook to interact with family and guests. But ultimately, they're part of the kitchen, and they need to play nice with it. Before even thinking about aesthetics, it's important to nail down the practical details. Above all, an island should add functionality and efficiency to a kitchen, not hamper them. Here are some guidelines and ideas to help you get the most out of your kitchen island and get the thumbs-up from code-enforcement officers. □

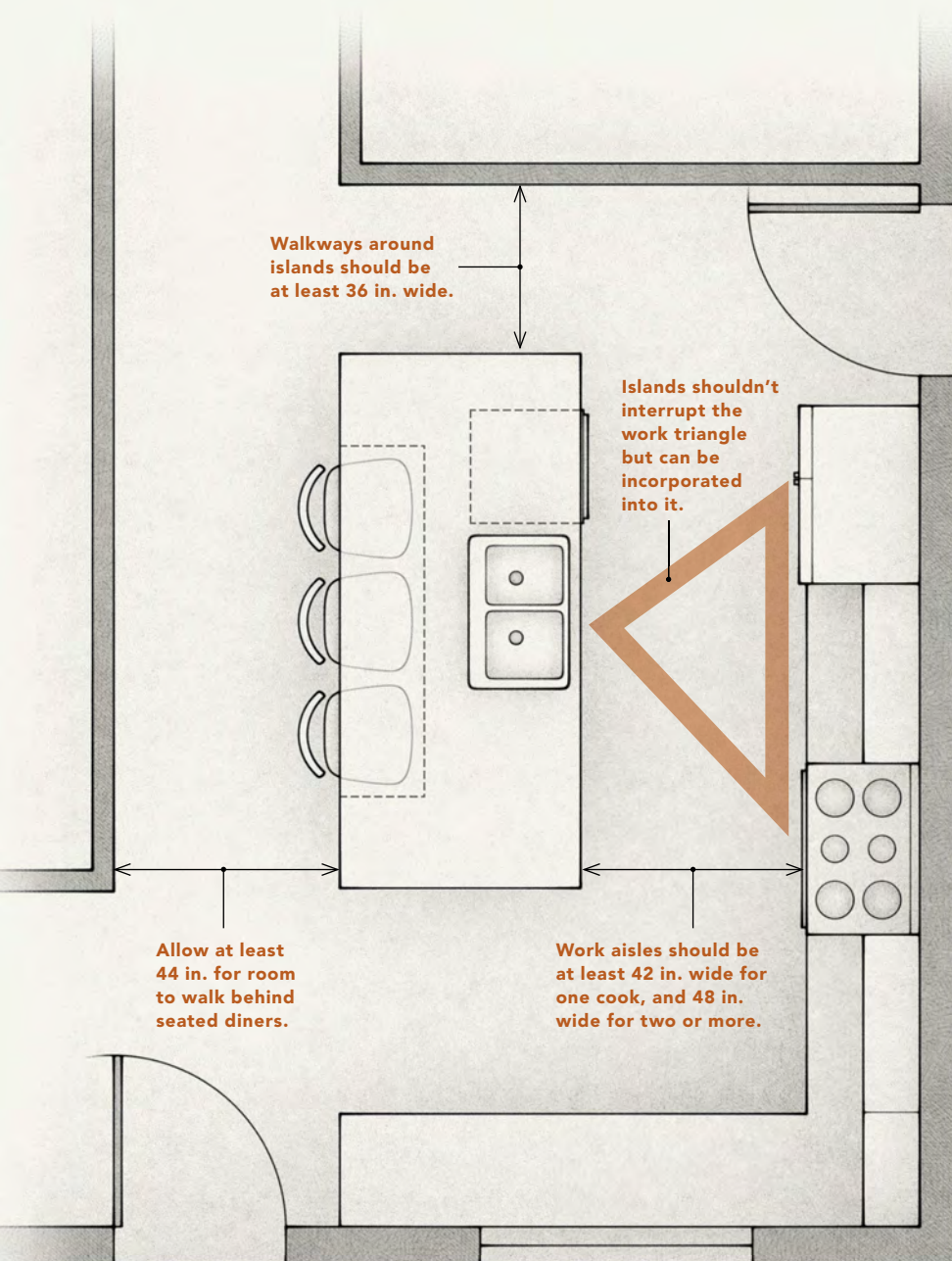
Matthew Millham is associate editor. Drawings by Christopher Mills.

### CLEARANCES DETERMINE AVAILABLE SPACE

Even a small island has big space requirements. The National Kitchen and Bath Association (NKBA) recommends that work aisles be at least 42 in. wide for one cook and at least 48 in. wide for two or more cooks. Walkways that pass around the island should be at least 36 in. wide. If the island has a seating area, and no traffic passes behind the seated diners, the recommended minimum space from the edge of the counter to an adjacent wall or obstruction is 32 in. For room to shuffle behind seating, increase the distance to 36 in. For walking room, bump it up to 44 in. Practically, what does that mean? Say you have a 3-ft. by 5-ft. island. For a rough estimate, figure 42 in. all around. The actual space required to accommodate this modest island is 120 sq. ft. These are just guidelines, though, not code requirements, and they're considering the "average" user. Families or cooks that are on the petite side can easily get away with narrower work aisles.

# WORKING DIMENSIONS

An oversize, undersize, or misplaced island can wreak havoc on kitchen efficiency, causing more problems than it solves. Keep these basic principles in mind when sizing and placing a kitchen island.



## THE WORK TRIANGLE STILL WORKS

The work triangle has been the backbone of efficient kitchen design for more than half a century, and it revolves around the three primary work centers—the sink, the range, and the refrigerator. These elements are typically arranged in a triangle, with no leg less than 4 ft. long, and none longer than 9 ft. Nothing should get in the way of any leg of the work triangle—including an island. Think about how you move through the kitchen, and how many times things will need to be moved to go from storage to prep to cooking. Keeping the work triangle free of obstructions reduces unnecessary moves. Incorporating a work center or two into the island can keep it from becoming an obstacle to efficiency. If it obstructs workflow, reconsider the size, shape, and placement of the island, or whether you should have one at all.

## USABLE SPACE

There is no ideal size for an island; sizing tends to come down to the space available, how the island fits into the space, and the budget. But there are some guidelines. The entire work surface should be reachable from the work aisles, and the entire island surface should be reachable so it can be cleaned easily. Going wider than about 5 ft. can leave items and debris stranded in the middle. Anything narrower than the depth of standard cabinets (24 in.) won't accommodate sinks, cooktops, or dishwashers, nor will it be very useful for food prep. There is no maximum length for an island, but long islands can be a bear to walk around. Rather than expanding an island to accommodate additional appliances and features, consider breaking it into two. If clearances permit, consider different island shapes—such as an ell—which can result in a bigger island with shorter distances between points.



# COUNTER ARGUMENTS

Islands are the Swiss Army knife of the kitchen, but that doesn't mean the counter should be packed with features and gadgets. A multifunctional counter is one that can be used for many different tasks. Appliances and fixtures quickly eat up counter space and can reduce the overall utility of smaller islands.

## HEIGHT MATTERS

An island's primary work surface should be the same height as other counters in the kitchen—around 36 in.—to facilitate easy movement between counters. Beyond that, the choice between a flat or multilevel island comes down to preferences and how it will be used. A flat island—the most common type in new homes and kitchen remodels—is the easiest to clean, lends an open feel, and has a lot to offer in terms of versatility. The entire surface of a flat island can be used for food prep or other tasks while still accommodating a seating area. Varying counter heights has perks, too. A higher portion at the back is a good way to hide the mess of food preparation from guests, and it provides space to put switches and required electrical outlets. For bakers, a lower counter—around 30 in. to 32 in.—is useful for kneading or rolling dough. But varying counter heights can also be limiting. A higher dining counter at the back of the island, for example, limits that portion to a specific use: eating. A raised counter also tends to wall the kitchen off from the space outside, especially if there's a range hood dangling over the top.

## APPLIANCES

The number of appliances available for kitchen islands is constantly growing—everything from wine fridges and ice makers to refrigerator and freezer drawers, as well as the trusty old dishwasher and cooking appliances. Only things the cook needs ready access to should be on the working side of the island, so put any extras on the end, the back side, or somewhere else in the kitchen. If the cleanup sink is in the island, put the dishwasher next to it.





## FIXTURES AND LANDING AREAS

Just as varying counter heights can limit the use of island space, the same can be said of fixtures and appliances that take up counter space. If the island will have a sink, range, or cooktop, keep the work triangle in mind when deciding where to put them. If space for an island is limited, leave sinks and cooktops off (or pick the one that's most used) to maintain its multifunctionality. For example, if the cook spends more time preparing food for cooking than cooking it, put the sink in the island to maximize his or her interaction with guests and the home. If the island is going to be the main prep

area, place appliances and fixtures in a way that maximizes prep space. The NKBA recommends a minimum 36-in.-wide by 24-in.-deep counter space immediately next to a sink for the primary prep area, but this is too small for anything more than basic meals. To maximize island prep space, consider putting a secondary sink dedicated to food prep near one end of the island, leaving a wide open space next to it. Since prep sinks aren't used for washing up, there's little need for landing space on both sides as there is with a primary sink, where 24 in. on one side and 18 in. on the other is recommended. If

the island includes a cooktop or range, the ideal place for the prep area is between it and the prep sink to minimize movement and the possibility of spillage. For cooking surfaces, the NKBA recommends a 12-in. landing area on one side and 15 in. on the other. If the island is flat, include at least 9 in. of clear space behind the cooking surface for safety. Include landing areas above microwaves, refrigerator drawers, and warmers to place items as they're removed from the appliances. These landing areas can be shared with other landing areas or prep spaces.



## SEATING

Seating at an island requires an overhang, and the size of the overhang can vary based on the height of the counter. The higher the counter, the less knee space required, since diners' legs dangle at a steeper angle the higher they sit. The NKBA recommends an 18-in. overhang for 30-in.-high counters, 15-in. overhangs for 36-in.-high counters, and 12-in. overhangs for 42-in.-high counters. Overhangs often require legs, brackets, or other means of support, especially if they're big. If space is tight, raising the dining counter can gain back some inches on the overall width of an island, albeit at the expense of workspace. Dining counters should be at least 18 in. deep, and diners should have at least 2 ft. of counter space per seat to eat comfortably.



# UNDER THE COUNTER

This is where the island-as-Swiss-Army-knife analogy is most apt. Limiting or eliminating amenities from island counters frees up space under the counter for additional appliances and storage, which, used wisely, can allow the island to truly serve as a transitional space between the kitchen and beyond.

## ELECTRICAL

Code typically requires electrical receptacles on islands and usually allows them to be placed in the countertop (pop-ups), in backsplashes above the counter (in multilevel islands), or in the faces of cabinetry below the counter (where they can be hidden behind false panels). All receptacles serving kitchen counters require ground-fault circuit interrupter (GFCI) protection. By code, the counter can't overhang cabinet-mounted receptacles by more than 6 in., and receptacles can't be more than 12 in. below the counter surface. Flat islands with nothing installed in the counter often need only

one receptacle for the entire island, though local codes may require more.

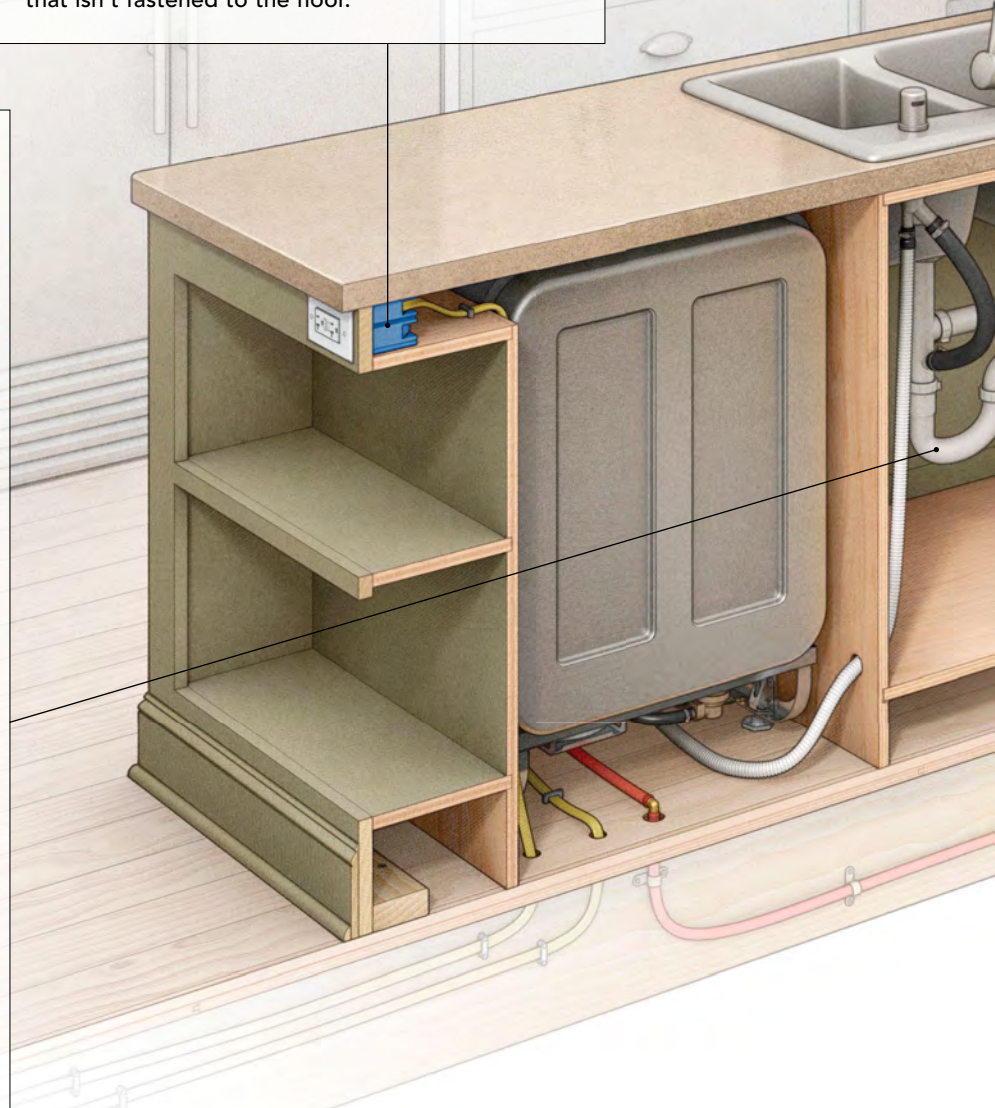
When a sink, range, or cooktop is installed in an island, the spaces on either side of it are considered separate counters unless the counter extends at least 12 in. behind the sink or appliance. Any island countertop space with a long dimension of 24 in. or more, and a short dimension of 12 in. or more, requires its own receptacle.

If you want to avoid the receptacle requirement altogether, consider a large rolling cart or worktable that isn't fastened to the floor.

## PLUMBING

Plumbing traps are designed to hold water to prevent sewer gases from backing up into the home. Without proper venting, water gets siphoned out of the traps and sewer gases get in. Vent pipes typically run up through the walls and penetrate the roof. Because of an island's location, venting can be difficult, and there are generally two approved ways to do it. Of the two, the one most likely to provide years of trouble-free service is a bow vent, or "Chicago loop." Bow vents take up considerable cabinet space, require accessible cleanouts, and need to connect with a standard vent stack or stack vent. The other option is an air-admittance valve (AAV), which is much easier to plan for and install. This device opens under negative pressure to allow air into the drain system, and closes by gravity once the sink is drained. AAVs are installed just downstream of the trap and at least 4 in. above the horizontal drainpipe that runs out of the trap.

Dishwasher connections vary by local code. Some allow for a "high loop," where the drain line runs from the dishwasher up to the bottom of the counter and back down to the drain system. Others require an "air gap" fixture, which usually gets installed on the sink. In either case, the discharge end of the drain line connects to the sink drain, either to a special fitting located above the trap, or to an inlet on a food disposal.





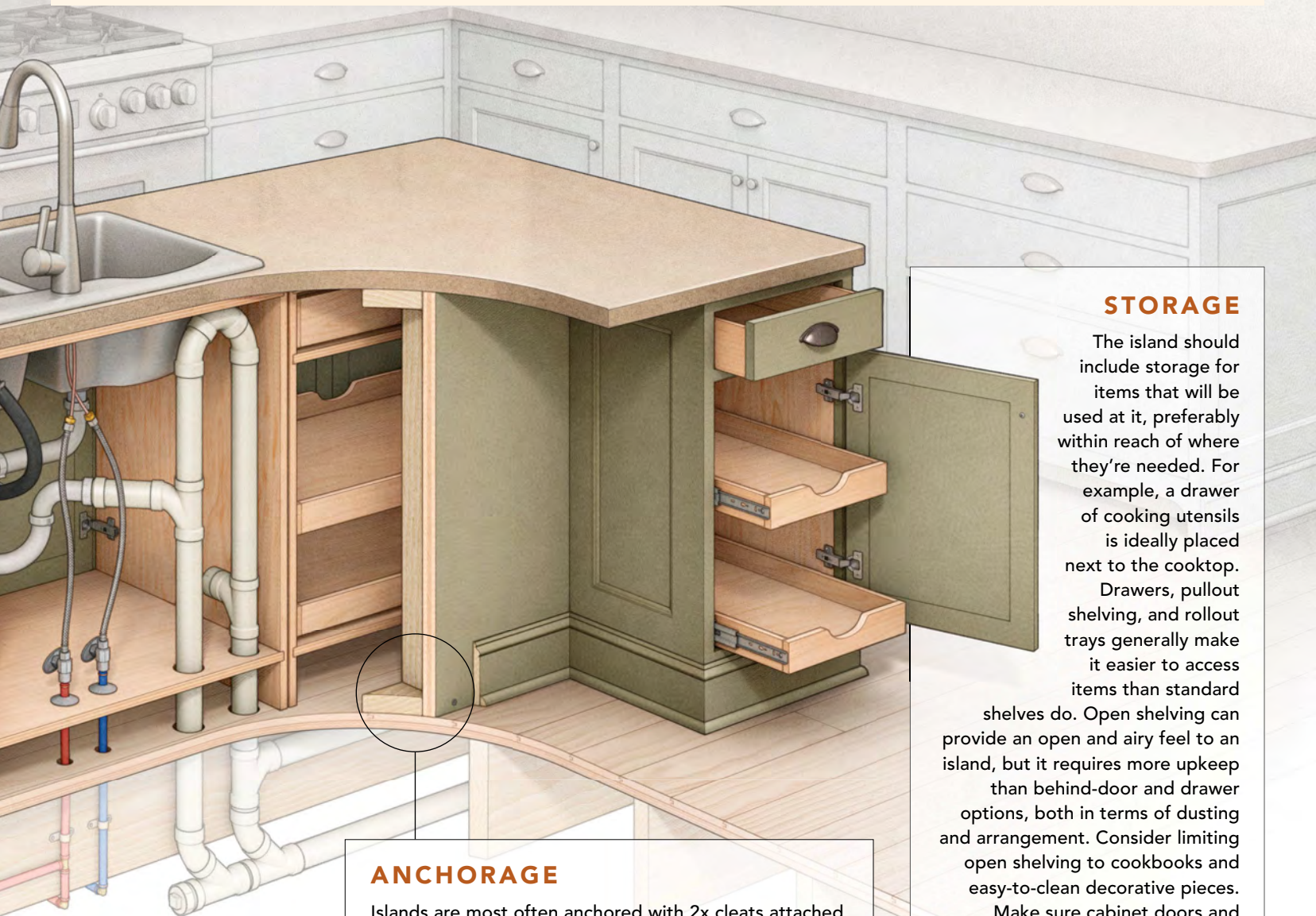
## VENTING

Dedicated ventilation for ranges and cooktops isn't always code-required, but when it is installed, it has to follow code. Range hoods must be at least 24 in. above cooking surfaces, and manufacturers' installation specifications and instructions must be followed to pass muster with the code inspector and be covered by the warranty. Ducted range hoods mounted over the cooktop are the most effective option, but island hoods typically have to be larger—extending beyond the footprint of the cooktop—and have more powerful

fans than similar wall-mounted hoods to be effective. They can also interfere with sightlines, and models for islands are more expensive than their wall-mounted kin. Ceiling-mounted vent units, which work with standard-height ceilings, or downdraft vents, which mount next to or behind the cooking appliance, won't interfere with sightlines but are generally less effective than overhead hoods. By code, vents that exhaust more than 400 cu. ft. of air per minute require makeup air at a rate equal to the exhaust rate.



**Hoods handle odors.** Expect to pay more, and to need more makeup air, for an island range hood.



## ANCHORAGE

Islands are most often anchored with 2x cleats attached to the flooring beneath them. If possible, attach the cleats with long deck screws to the joists below. If the cleats can't be attached to the joists, use construction adhesive and shorter screws to penetrate into the subfloor. Then screw through the bottom of the island's cabinetry and into the cleats to hold it fast.

## STORAGE

The island should include storage for items that will be used at it, preferably within reach of where they're needed. For example, a drawer of cooking utensils is ideally placed next to the cooktop.

Drawers, pullout shelving, and rollout trays generally make it easier to access items than standard shelves do. Open shelving can provide an open and airy feel to an island, but it requires more upkeep than behind-door and drawer options, both in terms of dusting and arrangement. Consider limiting open shelving to cookbooks and easy-to-clean decorative pieces.

Make sure cabinet doors and drawers don't interfere with doors and drawers across the work aisle.

If your island will have appliance garages for mixers or other items, include electrical connections in the garages for these devices.