



Use an architect's reality checklist to calculate approximate remodeling costs before any design work starts

How Much Will My Kitchen Cost?

BY JOHN McLEAN

In the 2005 edition of *Fine Homebuilding's Houses*, I shared my approach to projecting the cost for homebuilding and renovation projects prior to the start of design work (issue #171, pp. 88-93). I was not surprised to learn that the article generated a lot of reader response. "How much will it cost?" is almost always one of the first questions that clients ask. And it's a good question, because the true costs of their dream home—or in this case, dream kitchen—may not jibe with their budget. Uncovering any disparity before design begins is a good idea.

To the surprise of some people, kitchen remodels are one of the most expensive building projects. They may have seen a kitchen that they liked on television or at a neighbor's house but were left with unrealistic impressions of what it cost. What you see when you visit a new kitchen often doesn't reflect the complexity of construction. The cabinets, countertops, and floor in one house can cost more or less than the same items in another. The difference may be based on a number of factors from difficulty of demolition to region of the country (see "Regional cost adjustments," p. 67).

For these reasons, I often use the following charts to project the initial cost of a kitchen remodel at the first

meeting with new clients (see "The checklist: how to use it," right). When we arrive at an estimated cost for the potential remodel, we compare it to the client's budget. If we're over budget, and the client can't or doesn't want to spend more money, we take a look at each item and try to cut costs. If the estimate is less than anticipated, we may consider upgrades, or the client simply may appreciate the savings.

In my experience, the cost of new construction and the cost of remodeling are similar. Therefore, these charts are viable whether renovating an existing kitchen or building a new one.

Once you've arrived at an estimated cost per square foot, multiply it by the total square footage of your kitchen. Changes to adjacent spaces need to be considered as well. For example, if you are removing a 10-ft. wall between a kitchen and a dining room, you likely will incur collateral costs for moving outlets and switches or patching the floor or ceiling in the dining room. To incorporate these costs into the estimate, I consider at least 2 ft. into affected adjacent spaces in the total size projection. For the example I just mentioned, I would add 20 sq. ft.

John McLean is an architect in San Francisco. Photos by Brian Pontolilo, except where noted.

THE CHECKLIST: HOW TO USE IT

The checklist consists of three charts. Each focuses on a chapter in a kitchen remodel, from demolition to fixture installation. The items in the chart affect the cost of a remodel in different ways. For each item listed in the left-hand column, five project levels are listed in the columns to the right. They progress from the simplest construction and least-expensive materials to the most-complex construction and most-expensive materials. To use the chart, highlight the choices that most closely match your situation and preferences. Total the number of choices in each column, and move to the next chart. If a term is unfamiliar, skip it until you can get an explanation. If an item doesn't apply, don't highlight any level of that particular item.

To illustrate the charts in action, I've highlighted items for a kitchen remodel in San Francisco: a 235-sq.-ft. second-story kitchen in the back of the house. The room has two exterior walls that need new windows, one interior wall to be removed, and one to be given a 7-ft.-wide opening, adding 65 sq. ft. of collateral costs to the size of the renovation (now 300 sq. ft.). The new kitchen will have cabinets along both exterior walls and an island with a breakfast bar that seats three.

CHART 1

DEMOLITION & STRUCTURAL CHANGES



Kitchen access

Direct access to the kitchen from a parking/loading area speeds debris removal and material delivery.

Flooring removal

Sheet flooring is light and usually easy to remove. Tile and wood take longer to pry up and dispose of. Removing strong adhesive is labor intensive.

Wall removal

Removing load-bearing walls is expensive, requiring temporary support and a new post-and-beam system.

EASY AND INEXPENSIVE

HARD AND EXPENSIVE

Item	1	2	3	4	5
Kitchen access	Direct; less than 3 ft. above grade	Direct; one story above grade	Indirect; less than 3 ft. above grade	Indirect; one story above grade	Indirect; more than one story above grade
Flooring removal	Flooring to remain	Remove sheet vinyl or linoleum	Remove tile on mortar bed	Remove wood flooring	Remove any floor installed with tenacious adhesive
Wall removal	All walls to remain	1-2 partition walls	1 load-bearing wall replaced with beam below ceiling	2 load-bearing walls replaced with beams below ceiling	1-2 load-bearing walls replaced with beams above ceiling
Ceiling removal	Ceiling to remain	Remove 8-ft. to 9-ft. drywall ceiling	Remove sloped or tall (more than 10 ft.) drywall ceiling	Remove flat wood or complex drywall ceiling	Remove plaster ceiling
Wall changes	No changes	1 opening in interior partition wall	1 opening in interior load-bearing wall or new partition	1-2 openings in exterior wall or a new curved partition wall	More than 2 openings in or 2 new exterior walls
New windows	None; or 1 new aluminum slider, mill finish	1-2 new aluminum or economy-grade white vinyl	1-2 white vinyl or inexpensive wood in standard sizes	2 good-quality wood, standard sizes, primed or clad color	More than 2 top-quality clad wood or steel
New exterior doors	No new doors	1 site-finished wood or metal; or aluminum slider, mill finish	1 prefinished door, wood or metal; or wood slider, primed	3-panel wood slider; or 1 pair site-finished French doors	2-3 pairs French doors; premium hardware
New interior doors	None; or 1 paint-grade hollow-core prehung	1 stain-grade, hollow-core prehung	1-2 paint-grade, solid-core wood doors	1-3 paint- or stain-grade, frame-and-panel doors	1-3 custom frame-and-panel or glass doors
New ceilings	None; or an 8-ft. flat drywall ceiling	9-ft. flat drywall with soffit above cabinets	10-ft. flat or sloped drywall attached to rafters	Sloped drywall at different angle from roof rafters	Multiangle or curved drywall, or flat plaster
Subtotal	1	1	3	2	2

Ceiling removal

Lower ceilings and flat ceilings are easier to reach. Removing plaster is messy and requires diligent dust protection.

Wall changes

Working with interior partition walls is almost always less expensive than working with load-bearing walls. Exterior wall openings require flashing and exterior finish work.

New windows

Fixed and sliding windows are less expensive because they are simpler to fabricate than casement and double-hung windows. Choose standard sizes and common colors to keep down costs.

New exterior doors

Standard-size aluminum and clad-wood swinging and sliding doors are produced in large quantities, are readily available, and often fit existing openings. Larger doors may require new framing and exterior finish work.

New interior doors

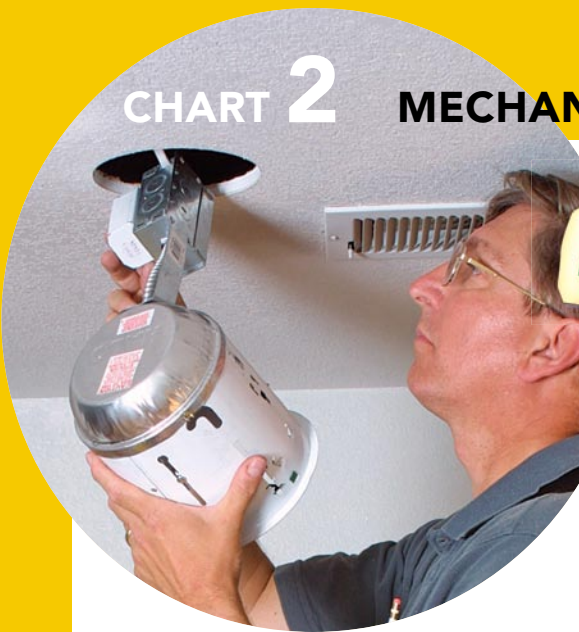
Standard-size prehung doors keep down costs because they require the least time to install. Prefinished doors tend to cost less than site-finished doors. Custom doors take much more time and money to build and install.

New ceilings

Ceilings are expensive when additional framing is needed, which is why drywall ceilings attached to existing rafters or joists are the least-expensive option for both flat and sloped ceilings. Curved and plaster ceilings take longer to build.

CHART 2

MECHANICAL CHANGES, SURFACE FINISHES, & TRIM



EASY AND INEXPENSIVE

Item	1	2
Plumbing changes	None	Relocate sink and dishwasher supply and drain lines less than 3 ft. from present location; use existing vent pipe
HVAC changes	None	Relocate 1 supply-air register and duct within 3 ft. of present location; connect to nearby supply duct from furnace
Electrical changes	None	Minor wiring to relocate 1-2 switches and/or receptacles close to existing locations
Lighting controls	Use existing switches	Replace switches with decorator-style (rocker) switches; install 1 new rotary or slide dimmer for incandescent fixtures
Light fixtures	No changes	Replace surface-mounted ceiling fixtures with new midrange-quality surface-mounted fixtures
Flooring	No new flooring	Vinyl or linoleum sheets or tiles; floating laminate flooring
Wall finish	½-in. drywall with medium or heavy texture	½-in. drywall with light texture or sufficiently smooth for flat paint
Ceiling finish	½-in. drywall with medium or heavy texture	½-in. drywall with light texture or sufficiently smooth for flat paint
Trim and detailing	Common paint-grade moldings for door casings; drywall-cased window openings; vinyl baseboard	Common paint-grade moldings for door casings, window casings, and baseboard
Subtotal	0	1

Plumbing changes

Moving water and drain lines is inexpensive until the framing has to be modified; then cost rises quickly. New plumbing vents must extend to the roof, so unless the line is placed on an exterior wall, a new vertical space (a chase) has to be built. A second sink requires a second set of drain and vent lines.

HVAC changes

Changing supply-register positions is not expensive as long as the new duct run serving the register does not entail extensive framing changes. It may be cost-effective to install a new small furnace close to the new kitchen being served. Updating the entire heating system is generally not cost-effective for just a kitchen.

Electrical changes

If an existing panel has sufficient capacity, the cost of adding kitchen circuits is minimal. Bringing an old kitchen up to modern codes may require new circuits, and increased load on an electrical system may require a new panel or subpanel.

Lighting controls

Automated and electronic lighting controls are innovative, convenient, and very expensive. Dimmers for incandescent lights are readily available and less expensive than those for fluorescent lights. Dimmers for the latter must be high quality to be reliable.

Light fixtures

Replacing surface-mounted fixtures with similar fixtures may require only a new junction box in the wall or ceiling. Standard-voltage recessed fixtures, while relatively inexpensive to buy, may require framing, mechanical, or plumbing changes. Low-voltage fixtures, requiring step-down transformers, are more costly.

HARD AND EXPENSIVE



	3	4	5
	Relocate sink and dishwasher supply and drain lines more than 3 ft. from present location, with new vent pipe in existing vertical chase	Add new sink and dishwasher supply and drain lines and new vent pipe in existing vertical chase	Add supply, drain, and vent lines for 2 sinks and dishwasher, requiring considerable reframing of walls and floor; construct vertical chase
	Relocate 2 supply-air registers and ducts more than 3 ft. from present location; connect to nearby supply duct from furnace	Add new supply-air registers, duct, and return-air grille and duct to and from new furnace; add cooling capability to heating system	Replace or supplement existing heating system with new hydronic radiant-floor system; install solar-heating system
	Wiring for up to 6 new switches, receptacles, and/or light-fixture junction boxes with 1–2 new circuits from existing panel	Wiring for more than 6 new switches, outlets, and/or light-fixture junction boxes, requiring 3 or more new circuits from existing panel	Replace all existing wiring; install new panel; upgrade electrical service to higher amperage
	Replace all switches with rotary or slide dimmers for incandescent fixtures	Install new touch dimmer controls (incandescent and fluorescent types) and motion detectors	Install programmable electronic light-control system
	Replace surface-mounted ceiling fixtures with midrange-quality recessed ceiling fixtures	Install new low-voltage recessed fixtures and undercabinet task lighting	Install new low-voltage recessed fixtures, wall sconces, cove lighting, and undercabinet task lighting
	Engineered wood, solid-wood parquet, or floating linoleum	Prefinished or site-finished hardwood	Ceramic or stone tile
	½-in. drywall with smooth finish for any paint gloss level	¾-in. drywall with smooth finish; painted wood wainscot	Full-height plaster finish; ceramic- or stone-tile wainscot
	½-in. drywall with smooth finish for any paint gloss level	½-in. drywall with smooth finish on many ceiling planes	Plaster with cove detail or clear vertical-grain wood
	Common stain-grade moldings for door casings, window casings, baseboard, and crown	Paint-grade, built-up moldings for door casings, window casings, baseboard, and crown	Custom stain-grade trim details including wainscot; or contemporary minimal trim with reveals to separate adjacent flush surfaces
	1	6	1

Ceiling finish

Working overhead is difficult. Thinner, lighter drywall is the easiest ceiling material to install. Installing wood paneling or a coffered ceiling is labor intensive. In any case, the complexity of the ceiling increases the cost.

Trim and detailing

A trim package can be as simple as stock door casings, drywall around window openings, and vinyl baseboard. Wood molding profiles used alone or in combination increase installation time and cost. Stain and clear finishes require more-expensive wood. Wainscot, built-up casings, and crown molding increase material and installation cost. Contemporary details (without surface trim) require detailed planning and precise craftsmanship.

Flooring

More flooring options are available at better prices. Installation costs, though, remain unchanged, which explains the high cost of tile and hardwood floors. Floating floors and sheet flooring can be installed quickly.

Wall finish

High-gloss paints and smooth surfaces require better craftsmanship because they show imperfections much more than flat finishes. Textured wall finishes are less expensive and help to hide poor framing and drywall work. Tile and wood wainscot and plaster are more expensive and complicated to install.

CHART 3

CABINETS & APPLIANCES



EASY AND INEXPENSIVE

Item	1	2	3
Cabinet configuration	Linear (galley) base- and wall-cabinet plan	L-shaped base- and wall-cabinet plan	U-shaped base- and wall-cabinet plan
Cabinets	3-in. modular widths, economy-grade carcasses and drawers, pressed-wood doors and drawer fronts with lipped (standard offset) design; prefinished; 3/4-in. extension slides; exposed hinges; no cabinet accessories	3-in. modular widths, midgrade carcass and drawer construction, pressed wood doors and drawer fronts, flush overlay; melamine finish; 3/4-in. extension slides; concealed hinges with minimal adjustment	3-in. modular widths, midgrade carcass and drawer construction, wood frame-and-panel doors and drawer fronts, flush overlay; clear finish; full-extension slides; adjustable concealed hinges; some accessories
Countertop and backsplash	Plastic laminate with square edge; 4-in.-high splash	Plastic laminate with bullnose edge; 4-in.-high coved splash	Solid-surface material in neutral color with 1-in.-thick square edge; 4-in.-high splash
Primary sink	8-in.-deep single or double bowl, drop-in; 20-ga. stainless steel or white enameled steel	8-in.-deep single or double bowl, drop-in or metal frame; 18-ga. stainless steel or white enameled cast iron	10-in.-deep double bowl, drop-in or undermount; 18-ga. stainless steel or neutral-color enameled cast iron
Secondary sink	None	N/A	N/A
Faucet	Two-handle, swivel spout, brass construction, rubber washers, polished chrome, utilitarian design	Single control, swivel spout, brass construction, ceramic-disk valve, polished chrome, hand-spray, utilitarian design	Single control, angled swivel spout with pullout spray, ceramic-disk valve, finish other than polished chrome
Appliance group	Bargain brand or economy line in white: small fridge with top freezer, electric range, recirculating hood, base model dishwasher, 1/3-hp disposal	Brand names in white: small fridge with top freezer, electric or gas cooktop, ventilating hood, wall oven, microwave, midrange dishwasher, 1/2-hp disposal	Brand names in most colors: side-by-side fridge, electric or gas cooktop with ceramic or glass top, 300-cfm hood (or downdraft), convection wall oven, microwave and dishwasher with presets, 3/4-hp disposal
Subtotal	0	0	4

Cabinet configuration

Galley-style kitchens may not be the most efficient working arrangements, but straight runs of cabinets are easy to install. Inside-corner cabinets have less convenient storage, are more expensive to purchase, and may require undesirable spacers between adjacent cabinets.

Cabinets

Prices are based on case and finish material, construction type, and the quantity and quality of hardware. Large manufacturers offer economy-grade cabinets. Custom cabinets are appropriate for unusual kitchen configurations and unique owner preferences.

Countertop and backsplash

Plastic laminate is inexpensive to buy and easy to install; stone is expensive, requires careful fabrication, and must be installed over an even, properly supported substrate. Color choice, thickness, and edge profile affect the price of solid surface.

Primary sink

Stainless-steel sinks rise in price as thickness (and quietness) increases. White cast-iron sinks are as much as 25% less expensive than neutral colors, and 45% less expensive than dark colors. Regardless of material, drop-in sinks are less complicated to install than undermount sinks.

Secondary sink

These sinks are a good idea in large kitchens with multiple workstations or as a convenience. Because a secondary sink often is a significant distance from the primary sink, they may not be able to share water, vent, and drain lines.

Faucet

A tall, swiveling faucet with an integral spray handle is a useful convenience that may outlast its inexpensive counterpart. Single-control valves are more expensive than dual controls, and finishes other than polished chrome add 15% to 50% to the cost.

TOTALS

Once you've highlighted the appropriate boxes, you can add up the subtotals from all three charts. Chances are, all your choices haven't landed in the same project-level categories. Find the average by following the equation demonstrated below.

EXAMPLE

Project level						
	1	2	3	4	5	
Total items	1	2	8	9	5	Total items 25
Total items x Project level	1x1=1	2x2=4	8x3=24	9x4=36	5x5=25	
Item values	1	4	24	36	25	Total item value 90

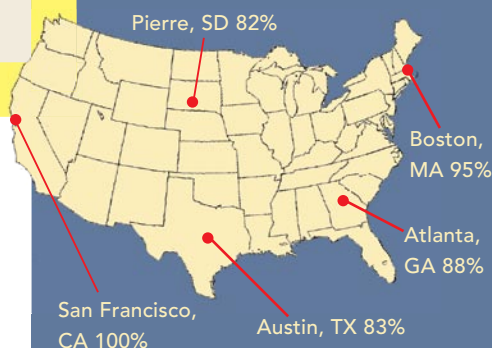
Divide total item value by total items: $90 \div 25 = 3.6$

Now find the unadjusted square-footage cost in the chart below. In our example, the item-value average is 3.6, putting it at the high end of \$450 to \$600 per sq. ft. We'll figure \$600 per sq. ft. (remember, these are San Francisco prices). Next, we make an adjustment to the cost by subtracting \$75 per sq. ft. from our projection because the homeowner is using a small, two-person construction company. Our adjusted ballpark number is \$525 per sq. ft., bringing our reality-check cost projection to 300 sq. ft. x \$525 = **\$157,500**.

Project cost per square foot

	1	2	3	4	5
Sq.-ft. cost	Under \$300/sf	\$300-\$450/sf	\$450-\$600/sf	\$600-\$900/sf	\$900 and up/sf
Adjustments to cost					
Kitchens over 300 sf	N/A	N/A	N/A	Subtract \$50/sf	Subtract \$100/sf
Kitchens under 100 sf	N/A	N/A	N/A	Add \$50/sf	Add \$100/sf
Small crew	N/A	Subtract \$50/sf	Subtract \$75/sf	Subtract \$100/sf	Subtract \$125/sf

REGIONAL COST ADJUSTMENTS A dollar's worth of building in San Francisco would cost 82¢ in Pierre, S.D. That's according to HomeTech, an information service that keeps tabs on construction labor and material costs. You can customize your educated guess with the help of its Web site, www.myremodelingproject.com.



Simply key in the details of a project with San Francisco's ZIP code (94102), and print out the results. In a new browser (very important), key in the exact same project for your ZIP code. Divide the number for your area by the San Francisco estimate. The result is your regional adjustment percentage.

HARD AND EXPENSIVE

4	5
U-shaped base- and wall-cabinet plan with raised eating counter	Perimeter base- and wall-cabinet plan with island cabinet in center
Custom widths, screwed plywood and fiberboard carcasses, slab or frame-and-panel doors and drawer fronts, flush overlay; full-extension slides; fully adjustable concealed hinges; many accessories	Custom widths and heights, screwed plywood carcasses, slab or frame-and-panel doors and drawer fronts, frameless or inset; special finishes; top-quality hardware and cabinet accessories
Solid-surface material in dark color with full 1½-in. bullnose edge; 4-in.-high coved splash	Stone, quartz, solid surface, concrete, or stainless steel with slab or tile backsplash more than 6 in. high
10-in.-deep double or triple bowl, undermount; 18-ga. stainless steel or dark-color enameled cast iron	Triple bowl, commercial-type work center; undermount or apron front; 16-ga. stainless steel, any color enameled cast iron, bronze, or copper
Bar sink, 18-ga. stainless steel or neutral-color enameled cast iron	10-in.-deep single bowl; 18-ga. stainless steel or any color enameled cast iron
Single control, high-arch swivel spout with pull-down spray, washerless ceramic valve, finish other than polished chrome	Single control, very-high-arch swivel spout with pull-down adjustable spray, washerless ceramic valve; or articulated long-reach spout
Quiet, excellent-grade stainless-steel appliances with electronic controls: side-by-side fridge, 5-element or -burner cook-top, 600-cfm hood, double wall ovens, microwave and dishwasher with presets, quiet ¾-hp disposal	Quiet, commercial-grade stainless-steel appliances with electronic controls: 24x36 fridge, 6-burner range, double convection ovens, 1200-cfm hood, large microwave, 2 dishwashers, 1-hp disposal
1	2

Appliance group

Selecting white appliances with few bells and whistles usually provides the highest value. Extremely energy-efficient and quiet appliances tend to cost more initially. As the number of appliances rises, so does the cost of the necessary mechanical work.