

# REMODELING A Bathroom a Day

**E**very year, the K&B division of my company remodels 300 to 400 bathrooms. On a daily basis, we take someone's bathroom apart and then re-assemble it, typically in a space no larger than 5x8 or 5x9 feet.

by Bruce Case

The process of coordinating a bath remodel is difficult enough when you're dealing with four or five

subcontractors on a job, but if the process isn't effectively controlled, you've got chaos.

For example, I once worked with a homeowner who had a pedestal sink shipped over from Italy. The sink took eight weeks to arrive and came without instructions. When we finally got the instructions a week later, they were in Italian. My installer said, "Hey, Bruce, this world is hard enough; what are you doing to me here?"

Not only were the instructions unintelligible but, unknown to the plumber, the shut-off valves were supposed to be concealed by a shroud, which was on back-order. He installed the shut-offs in his usual manner. When the shroud arrived from Italy, he had to re-do the rough-in. Nobody was happy.

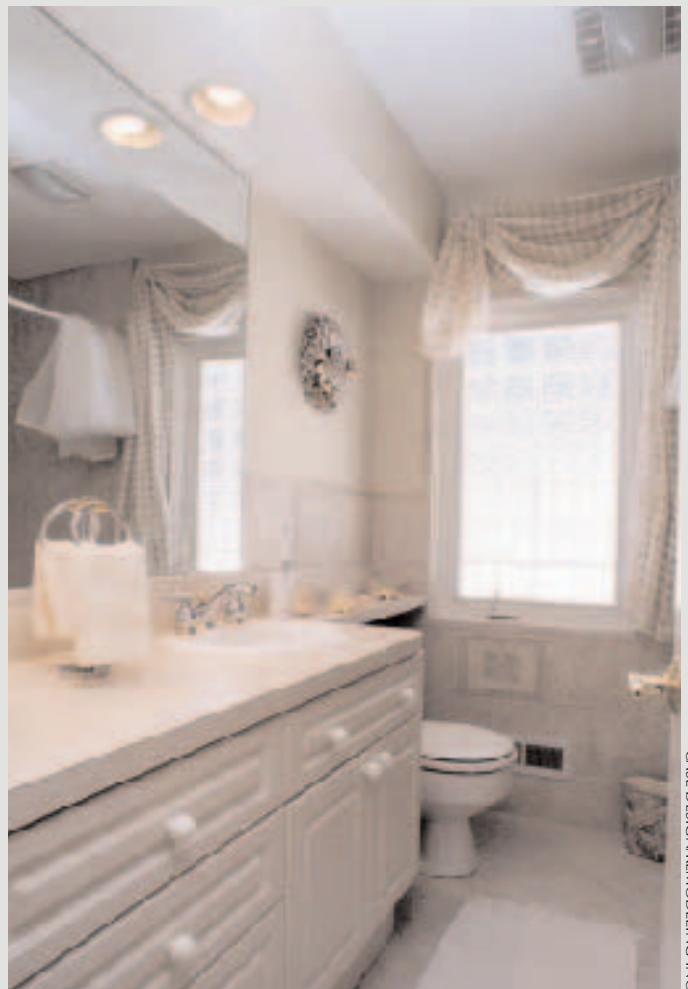
I can't control the size of the bathroom, and I have limited control over the subcontractors I work with. The variables that I can control are the products that go into the remodel. Experience has shown that by controlling the selection of products, we end up with happier clients and our profit margin increases.

## Builder as Expert

Typically, the homeowner who wants a bathroom remodeled looks to us as the experts with the answers. One of the best things we've done to streamline the process has been to develop a complete but limited selection of good-quality products that satisfies most of our customers. These products are neither high- nor low-end, but they are durable and give us the flexibility to meet our aesthetic goals.

On the first visit, we bring our binder of preferred products and tell the client, "We aren't making selections today, but I want to get a feel for the kind of products you're considering." Even though the customer knows that these

Field-tested products  
and fixtures streamline  
the process



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selections are only initial placeholders, nine times out of ten, these are the choices that stick. This saves a lot of time in the selection process and allows us to use our “production-proven” products 85% of the time.

We don’t restrict our customers to this limited selection, but we do educate them on the benefits of these products, including warranty, lead-time, value, return at resale, and so on. If the customer chooses to stray from these products, we adjust our process accordingly. If the customer insists on the Italian sink and says they don’t care if the instructions are in Italian, it’s our job to make them happy. But I tell them that I won’t start the job until I have all the components on hand and that if I

don’t wait, their bathroom could be out of commission for weeks while we wait for the sink to show up.

In this article, I’ll describe some of the products we’ve come to depend on. These are products that not only satisfy the aesthetic wishes of our customers but, more importantly, install easily and give dependable service — all but eliminating callbacks.

### Tubs

There are three ways, and three levels of cost, to remodel a tub: Pull the tub (and at least the first three courses of surround tile) and replace it, reglaze it, or install a tub liner. For quality and warranty, I think replacement is the best solution.

Our market tends to be upper-middle-class older homes. As a result, we primarily use tubs that fit in a standard 5-foot alcove, and we don’t use many acrylic or fiberglass units. American Standard’s Americast line (see “Manufacturers of Bathroom Products,” page 79) offers a solid feel without the weight of cast iron. The Princeton model 2391.202 is a standard 14-inch-deep tub that’s convenient for shower or tub use (see Figure 1). The Cambridge model 2461.002 is a 17<sup>3</sup>/<sub>4</sub>-inch-deep tub for customers who request a soaking tub.

Although cast iron is heavier and harder on our craftsmen, some tradition-bound homeowners insist on it. We offer Kohler’s Villager model K-715 in a 14-inch depth. Because of the extra



**Figure 1.** The author likes American Standard’s Americast Princeton (above left) for a standard-size replacement tub. For customers who prefer soaking to showering, the 17<sup>3</sup>/<sub>4</sub>-inch-deep Cambridge model (above right) also offers a jetted option. If the client insists on genuine cast iron, the author uses the Kohler Villager (below left), but charges more for installation due to the extra weight. Pearl Baths’ replacement-size whirlpool tub has an access panel in its apron for easy installation and mechanical maintenance (below right).

weight, we charge more to handle and install this tub.

Some customers prefer a bath to a shower, and they want a whirlpool option. We offer Pearl's 59<sup>3</sup>/4x30x20 whirlpool. It fits in a standard tub alcove yet is deep enough for soaking. Pearl also provides built-in pump access and relatively quiet operation.

On the other hand, some customers will say that they want a soaking tub, but when I ask if they always use a tub to bathe, it often turns out that they mostly take showers. At this point, I get them to imagine stepping into that deep tub for every shower. It's important that customers understand how much deeper than the standard 14 inches some of these tubs are. Usually, I'll end up steering these customers back to a standard tub and, for us, a standard installation.

**Reglazing** the existing tub (essentially repainting it) is done by a specialist, costs around \$300, and takes a couple of hours. Reglazing is less expensive than pulling a tub, but the process involves potent chemicals and, in three to six years, the coating starts to peel. I don't recommend it.

**Tub liners** fall in between reglazing and replacement. A tub liner is basically a 1/4-inch-thick acrylic unit, molded to fit inside various existing tubs. A front apron conceals the old tub completely. Liners definitely get me in and out of a bathroom job quicker, but because the liner doesn't extend behind the existing surround, there is a chance that the caulked seam will eventually leak.

## Showers

Many of the bathrooms we renovate have old tiled shower pans. If the customer chooses to stick with tile, and a preformed pan won't work because of size constraints, we rebuild the pan. One product that saves us time and effort when establishing the pan's drainage is W.R. Bonsal's ProForm PF-102 Slope (Figure 2).

Depending on the size of the shower pan, we limit the selection to 2x2 tiles or, at most, 4x4 tiles to avoid slope-angle installation challenges. Whenever



**Figure 2.** The Pro-Form PF-102 from Bonsal speeds installation of a properly sloped pan in a custom shower.



**Figure 3.** Knock-down shower stall components bolt together for easy installation, come in many colors, and offer customers a good value.



**Figure 4.** Solid-surfacing offers a versatile alternative material for clients who don't want tile and grout lines in the shower. Preformed pans, wall panels, and trim kits simplify installation of an easy-to-clean custom shower.

possible, we use a preformed pan to avoid potential leaks and to minimize labor charges. We use Aker's KDS-32 and KDS-36 knock-down units. These units include the pan and surround walls; they're a good value, come in many colors, and bolt together in four easy pieces (Figure 3, previous page).

**Solid-surfacing.** Many homeowners are tired of cleaning grout. We're seeing a growing trend toward solid-surfacing and other alternatives to tile surrounds. Swanstone and Corian have some shower- and tub-surround kits that provide a unique alternative to tile and grout joints (Figure 4, previous page). However, odd-sized shower or tub surrounds that incorporate windows aren't compatible with these out-of-the-carton products. Because of the benefits of working with solid-surfacing — it's nonporous, relatively easy to work with, and has proven brand-recognition — we've worked with DuPont to develop a Corian surround solution that's adaptable to any configuration. We can even incorporate ceramic tile into the surround to add visual interest or to conceal the joint between sheets.

**Neoangle showers** are a good space-saving trick, but keep in mind that a neoangle shower takes up more wall area (at least 36 inches per side) than a square shower. Often, the sink sits 33 inches away from the wall corner, so there isn't room for a neoangle shower.

**Shower curb.** Recently, we've been using solid-surfacing to cap tiled shower curbs, because it's less likely to leak than tile is. We buy most of our stock from a local supplier who charges me about \$20 per waste cut-off that's big enough to use for the cap.

**Shower seats.** People want seats in showers. Think about doing the top of the seat in solid-surfacing rather than tile. It's a good way to eliminate a few grout lines and carry the look of the vanity top into the shower.

**Niches** are an in-house joke in our company because for two or three years I sold homeowners on the idea of ceramic tile niches. I love recessed niches in the shower surround, between the studs, to stow bath items. Finally, my installers cornered me and said, "Bruce, do you understand what a pain in the neck it is to run the backerboard

and the tile and all the bullnose around this little niche?" We looked into it and found some ready-to-install solid-surface niches made of Corian and cultured marble (Figure 5). On some of these units, the shelves are removable for cleaning.

## Shower Doors

In a 5x9-foot bathroom, it's better to use a sliding shower door than a hinged door. Aside from the space advantage, a bather can easily slide the door open, adjust the valve, and close it again while the water heats up before getting in.

I also like sliding doors because I can order them before the job even starts. Even if a measurement turns out tighter than planned, the door overlap will absorb it. Sliding doors get the homeowner back in their bathroom quicker and let us move on to the next job sooner.

We have a subcontractor provide and install our shower doors because they get a deep material discount. The sub's installed cost is about equal to what we'd otherwise pay for the door alone. Alumax offers framed and semi-frameless



**Figure 5.** Ready-to-install seats and storage niches of cultured marble or solid-surfacing eliminate a lot of fussy cuts and fits in a tiled surround (left). Bonsal supplies labor-saving preformed tile-backer niches in several configurations when the specs call for tile (above).

**Figure 6.** Overlapping sliding-glass doors eliminate the need for precise premeasuring, so they can be ordered before the job begins. The author specifies Alumax doors and has them provided and installed by a subcontractor to control costs.

units in sliding, pivot, and bi-fold options (Figure 6).

**Stock vs. custom.** Custom shower doors often add three weeks to the job. I've found that it's best to stick with 1/4-inch-thick glass. The 3/8- and 1/2-inch glass is beautiful, but it's also expensive. I seldom run into a client who's excited about paying three times more for 1/2-inch glass.

## Toilets

There are two toilets, in particular, that we use a lot: Kohler's Wellworth K-3422 and American Standard's Cadet II EL #2174.139, both stock economical two-piece fixtures (Figure 7). It's important to educate the client on today's water-saving restrictions. Some manufacturers have vastly improved the flushing action of their toilets since the 1.6-gallon regulation was first enacted. The improved models feature an increased water surface and enlarged, glazed trapways. However, depending on use patterns, even these toilets may have to be flushed twice every two to four uses (see *Notebook*, 11/98 and 4/00). If the customer is sufficiently

concerned about this issue to spend a bit more, Toto's Ultra Max MS854114S offers a quality flush and relatively quiet operation. We don't encourage selection of pressure-assisted toilets, however, because of the noise.

**Wood seat vs. plastic.** When we have the option, we always order our toilets with wood seats rather than plastic. We've found that our customers consider plastic seats to be cheap and flimsy.

## Cabinets

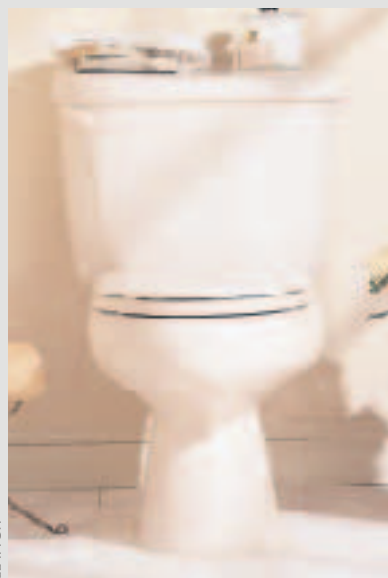
You can usually tell if storage is a primary concern simply by looking at the existing bathroom — there will be items stuffed in every nook and cranny. For many clients, storage is king in these little bathrooms.

**Over-toilet cabinet.** We like to hang a shelf unit over the toilet to add storage space. If I get one from a cabinet company, it's going to be a basic box. Instead, I tell customers to go to Ballard Designs or The Pottery Barn to find a specialty cabinet with a towel bar or other useful features (Figure 8, next page).

**Vanity.** Homeowners love drawers in the vanity cabinet. You can get cabinets with two 24-inch-wide 18-inch-deep drawers and one door, instead of the typical two-door cabinet. Add a tilt tray under the sink — you can buy the kit from the cabinet manufacturer. It's a little thing, but the clients love the extra space for toothpaste and toothbrushes. We usually specify Merillat or Aristokraft vanities because they offer good variety and options, and they ship quickly. Only when the client insists or the circumstances demand it do we go to a semicustom or custom cabinet line.

**Cabinet height.** Most of the master-bathroom vanity cabinets we've installed lately have been 36-inch kitchen height (Figure 9, next page). However, we try to keep hallway or guest bathroom cabinets at the lower standard height to accommodate children.

A unique alternative to a standard vanity is Walney's cabinet with a porcelain top and integral sink bowl that projects beyond the face (Figure 10, next page). It actually saves space because the cabinet is only about 15 inches deep. The unit costs about \$900



**Figure 7.** Water-saving toilets can spell trouble. The author has had good results with Kohler's Wellworth model K-3422 (left) and the Cadet II EL #2174.139 (center) from American Standard. Both toilets provide fairly reliable service at an economical price. Toto's Ultra Max MS854114S toilet (right) is a high-performance, higher-priced option for clients who want to avoid the occasional need to double-flush.



**Figure 8.** Storage over the toilet is a popular feature. Instead of installing an ordinary cabinet, the author directs his customers to Ballard Designs or The Pottery Barn to select a specialty cabinet.

**Figure 9.** Storage is king in small bathrooms. Drawers are more user-friendly than doors in the vanity cabinet. Kitchen-height vanity tops are popular in the master bathroom, while lower, standard-height vanities are easier for children to use.



**Figure 10.** This out-of-the-ordinary porcelain vanity top, from Walney, projects beyond the 15-inch-deep base cabinet, saving floor space while adding storage.



— that's more expensive than the average cabinet and top purchased separately, but it's not outrageous.

### Vanity Tops

Corian and Cultured Marble make stock tops with integral bowls. I use those 80% of the time because I can order one even before I start the job. I don't want to order a custom top until the cabinet is installed, and then have to deal with lead-time and scheduling. Corian has a 61-inch stock top that I can chop down on both ends to fit wall to wall. It takes a little time, but nothing compared to bringing a fabricator in to measure and make a custom template, then waiting a week for delivery.

**Banjo tops.** We typically use one-piece toilets when the client wants a banjo top, so that the plumber can get in there and fix the toilet later. Or else we cut the top where it narrows and make the banjo section a removable shelf.

### Faucets

We mainly use Moen faucets. They provide a good value for our customers, including moderate price, easy maintenance, and a warranty on the brass finish. All of our salespeople, project managers, and installers are familiar with the Moen line, and faucet orders are quickly filled. The line we specify is the Monticello, because it has proven to be popular, it's a stocked item, and it's offered in a variety of options (Figure 11). We use several steps to guide clients through the selection process.

**Finish.** Most homeowners know whether they prefer white, chrome, brass, or some other finish. This basic question helps to limit the number of options.

**Lever vs. knob.** This question narrows the field further: Would they prefer a cross handle, lever handle, or acrylic knob? All of a sudden, instead of having ten million faucets to wade through, you have a couple of thousand. "Mrs. Jones, you said you want levers instead of cross handles, you want chrome, and you want a regular-height spout. Here's the Moen Monticello 4560. The spout has a nice line to it, not too modern, not

too traditional.” Eighty percent of the time, we end up with this selection, and I can get it in a day.

**Shower heads.** We let the sink faucet selection drive the shower valve and head selection. As a result, we primarily use the Moen Monticello shower fixture line. If a unique shower head is desired, Moen also offers accessories such as slide-bar-mounted hand-held shower heads. Alsons also offers various shower head options at an economical price.

### Medicine Cabinets

Robern makes a high-end line of medicine cabinets that can easily exceed \$1,000. However, this company also offers an economical line of CabFit cabinets, starting at around \$200 (Figure 12). You can get cheaper cabinets, but this is a top-quality unit, offered at a competitive price point that helps to differentiate us from the competition. Try to get a medicine cabinet that fits in the same opening as the existing one. It makes the job easier and less expensive.

### Mirrors

We have our mirrors custom-cut because I don’t want to have big gaps that make it look like I just stuck a mirror up there. Larger mirrors help to enhance the sense of space in a smaller bathroom (Figure 13, next page). Using mirrors over the tub is something we’re doing more of, again trying to get that sense of a larger space.

### Tile

Ceramic tile is far and away our most popular floor and wall finishing material. We use Daltile because of their quick lead times and convenient distribution. Daltile offers more of a selection than I think many contractors realize. We run tile to the ceiling in tub and shower surrounds. That way, we’re not buying and installing bull-nose corners. You also won’t have that area above the tile that you have to paint or wallpaper.

**Floor tile.** Installing tile on the diagonal takes longer, but diagonal lines stretch the sense of space in a small room.



MOEN



MOEN

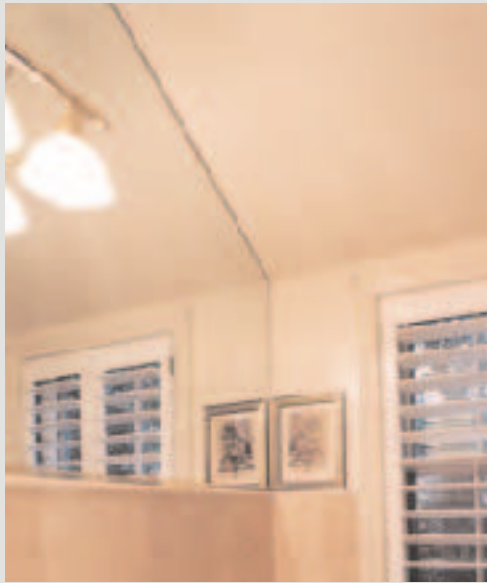
**Figure 11.** By defining the customer’s choice of finish and handles, the author narrows a huge field of faucets to a manageable few. Eighty percent of the time, customers will choose from Moen’s Monticello line, establishing easy familiarity for the installers.



ROBERN

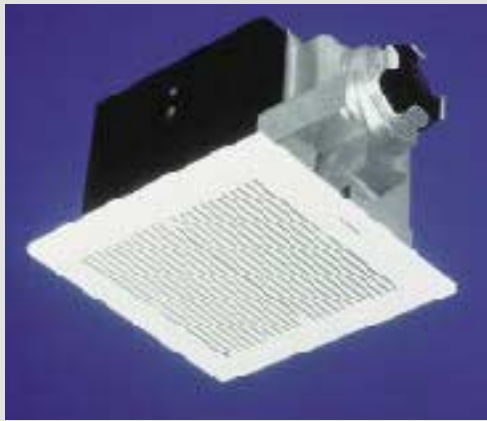
**Figure 12.** Using a medicine cabinet that fits into the existing recess makes the job easier and less expensive. Robern’s CabFit line offers an affordable selection with a distinctive look and brand recognition.

**Figure 13.** Large mirrors enhance the sense of space in a small bathroom. A custom-fitted mirror costs more and requires more planning, but it distinguishes the job from a hang-and-run remodel.



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**Figure 14.** New bathroom exhaust fans, such as those from Panasonic and Broan-NuTone, have air removal capacities from 70 to 340 cfm, and they also operate quietly, with some ratings in the 0.5 to 3.0 range. The author ducts the exhaust to the exterior, never into the attic.



PANASONIC



NUHEAT

**Figure 15.** A custom-fitted electric heating grid, troweled into the thinset adhesive, adds no more than 1/8 inch to the thickness and takes the chill out of a ceramic tile floor.

**Tile base.** Outside the shower, I mostly avoid wall tile. Our market has a lot of old bathrooms with existing tile wainscot, but I think this adds too many lines and too much visual clutter. Instead, we run the drywall down to a tile basemold; the unbroken plane looks cleaner and it saves the homeowner money.

**Grout color.** By the time I get through all the selections, the last thing I want to think about is the grout. I used to leave it for the installer to work out with the homeowner. But then we had a couple of situations where the homeowner said, “I love everything but, Bruce, that grout color, can you just pull that up?” As you know, this is easier said than done, so take the time to select the grout color with the owner and specify the width of all grout joints for the floor and walls.

**Thresholds.** Don’t forget the thresholds. We specify “save existing wood threshold” because it often matches the stain on the existing wood floors. If not, we specify a “carrera gris marble threshold” — we used to merely specify a “marble threshold” but ran into problems with custom color selections, which can easily cost more.

## Lighting

Not only does accent lighting define and expand a space, but it also lends a more personal feeling to the bathroom. Because of the personal nature of taste, we request that the homeowner provide all surface-mounted lights. We’ll install them and all recessed lighting. Recessed lights are popular above the shower and are definitely appreciated above a tub, where people are likely to read while taking a relaxing soak. Note that electrical codes require wet-location fixtures to include a damp-proof cover.

## Grab Bars & Mechanicals

We offer grab bars to all of our customers — anyone can slip getting into the tub or have an injury that makes it difficult to get in and out. Secondly, we install blocking behind the wall, even if the customer elects not to have a grab bar, and then we inform them that




we're looking out for their future needs.

**Exhaust fans.** Oh sure, we can throw one in! That response has been painful for us from a profitability standpoint. Adding an exhaust fan, switch, and ducting to the exterior (not just up into the attic!) takes a significant amount of time and should be charged for accordingly. Panasonic's powerful and super-

quiet ventilating fans are popular (Figure 14). Broan also has a line of quiet bathroom ventilators.

**Radiant floors** have become popular in bathrooms. If you get involved in a radiant installation, it's best to hire a subcontractor who will install not only the heating element, but the floor tile as well. Otherwise, you may be left with a

nicked wire or a problem installation, with no one to pin the responsibility on. NuHEAT supplies a custom-fitted heating mesh and a certified installer program (Figure 15). 

*Bruce Case is vice president of Case Design/Remodeling, Inc., and director of its Kitchen/Bath division, in Bethesda, Md.*

## Manufacturers of Bathroom Products

### Aker Plastics

2121 Walter Glaub Dr.  
Plymouth, IN 46563  
800/348-2211

### Alsons

42 Union St.  
Hillsdale, MI 49242  
800/421-0001  
www.alsons.com

### Alcoa/Alumax

P.O. Box 40  
Magnolia, AR 71753  
800/643-1514  
www.alumag.com

### American Standard

P.O. Box 6820  
Piscataway, NJ 08855  
800/442-1902  
www.americanstandard-us.com

### Aristokraft

P.O. Box 420  
Jasper, IN 47546  
812/482-2527  
www.aristokraft.com

### Ballard Designs

1670 Defoor Ave.  
Atlanta, GA 30318  
800/367-2775  
www.ballarddesigns.com

### Bonsal

P.O. Box 241148  
Charlotte, NC 28224  
800/738-1621  
www.bonsal.com

### Broan-NuTone

926 W. State St.  
Hartford, WI 53027  
800/558-1711  
www.broan.com

### Daltile

7834 C.F. Hawn Fwy.  
Dallas, TX 75217  
800/933-8453  
www.daltile.com

### DuPont Corian

P.O. Box 80012  
Wilmington, DE 19880  
800/426-7426  
www.corian.com

### Heritage Marble

7086 Huntley Rd.  
Columbus, OH 43229  
614/436-1464  
www.heritagemarble.com

### Kohler

444 Highland Dr.  
Kohler, WI 53044  
800/456-4537  
www.kohlerco.com

### Merillat

P.O. Box 1946  
Adrian, MI 49221  
517/263-0771  
www.merillat.com

### Moen

25300 Al Moen Dr.  
N. Olmstead, OH 44070  
800/289-6636  
www.moen.com

### NuHEAT

Unit 9  
8145 130th St.  
Surrey, BC V3W 7X4  
800/778-9276  
www.nuheat.com

### Panasonic

Panazip 4A-6  
One Panasonic Way  
Secaucus, NJ 07094  
866/292-7292  
www.panasonic/building.com

### Pearl Baths

9224 73rd Ave.  
N. Minneapolis, MN 55428  
800/328-2531  
www.pearlbaths.com

### Pottery Barn

10000 Covington Cross  
Las Vegas, NV 89144  
800/922-9934  
www.potterybarn.com

### Robern

701 N. Wilson Ave.  
Bristol, PA 19007  
800/877-2376  
www.robern.com

### The Swan Corp.

1 City Centre, Suite 2300  
St. Louis, MO 63101  
800/325-7008  
www.theswancorp.com

### Toto USA

1155 Southern Rd.  
Morrow, GA 30260  
888/295-8134  
www.totousa.com

### Walney

108 W. Walnut  
N. Wales, PA 19454  
800/650-1484  
www.walney-online.com