



Bathroom Lighting

by Patrick J. Galvin

Bathroom lighting—or the lack of it—is one of the features buyers of new homes complain about most often.

This is true not only of minimal-cost houses. The complaint is frequent in expensive homes and rentals, and it's still an issue when owners get around, to remodeling—which is nine years or less in nearly 50 percent of the cases.

And, according to one consumer survey, 66.5 percent of 1,100 bathroom remodeling jobs included improvements in lighting.

The problem is that nobody involved in house design or construction ever gets around to thinking about bathroom lighting. Homeowners usually end up with lights placed merely as a result of where the electrical subcontractor put the wire and how much the budget allowed for the fixture. Other than that, it is unplanned.

It's likely that nobody ever decided to buy a house based on bathroom lighting. But it's also true that good, planned bathroom lighting can be one of the factors that, combined with others, makes a favorable impression on potential buyers—and therefore gets a new house off the market before time trims the profit.

Two things must be considered when planning bathroom lighting. First, the size of the room must be taken into account to establish the general light need. Second, lighting should be placed to facilitate typical bathroom tasks, including shaving and putting on makeup, reading in the tub, and even working a crossword puzzle on the throne.

For general lighting, small bathrooms (up to 75 square feet) should have one to three sockets of 60-watt fluorescent (or 150-watt incandescent) lighting.

Baths of up to 120 square feet need one to four sockets with 60 to 80 watts fluorescent (or 150 to 200 watts incandescent) lighting.

A "super bath" of more than 120 square feet requires $\frac{3}{4}$ watts fluorescent or 2 watts incandescent per square foot. If fluorescence lighting is used, soft white has the best color balance.

In a bathroom, the placement of the lighting is more important than the general light level. Placement always is based on the location of the mirror (usually over the sink). To be effective, the light should be located above and on both sides of the head, and reflected from a light vanity top for under-shin shaving or cosmetics application.

Mirror lighting such as this usually will provide the necessary level of general lighting for the entire bathroom.

For a small mirror, there should be a ceiling fixture located over the front edge of the sink and side lights centered 30" apart and 60" above the floor.

If these lights are fluorescent, the ceiling fixture should have two 24", 20-watt tubes, and the each side fixture should have one tube of this same size and wattage. If incandescent lighting is used, use two wall brackets or swags at least 6" in diameter, with one 75-watt or two 40- to 60-watt soft white bulbs in each. The minimum diameter of the ceiling fixture should be 12", with a total of 100 to 120 watts.

In more expensive houses or rentals, it might be advisable to use a larger mirror at least 36" wide. The side fixtures can be eliminated in such cases, because side lighting will be provided by the power and width of the overhead lighting.

This calls for a diffusing fixture with two 36", 30-watt tubes or two 48", 40-watt tubes on the wall over the mirror or in a dropped soffit with shielding. If incandescent lighting is used, use three or four 60-watt soft white bulbs in separate diffusers at least 22" wide across the top of the mirror.

In a model home, it's usually a good idea to show at least one sample of "theatrical" lighting—bare bulbs that run up both sides of the mirror and along the top—in the master or guest bathroom.

To install theatrical lighting, mount strips with four to six G (globe type) bulbs across the



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top and along each side of the mirror. Ideally, the side strips will be 30" apart. The bulbs should be only 15 to 25 watts—more will be too bright for good vision.

Track lights may also be used along the sides and at the top. But they never should be aimed at the mirror itself, because that creates only glare. They should be aimed at the point where the face will be.

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The idea of light in the shower or tub area often is derided—at first. But showers almost always are screened off from light by a curtain. The curtain might be open in a tub, but the distance from the mirror lighting inhibits vision.

Of course, any light in a shower area must be watertight, either by structure or by caulking. If local codes allow it, it's best to use a recessed, vapor-proof ceiling fixture with a 60- to 75-watt bulb. And the switch must be out of reach.

The existence of separate compartments in the bathroom doesn't change the need for light at the mirror. Use a ceiling fixture of at least 8" diameter with a 32-watt Circline or 44-watt Circline unit (both circular fluorescent bulbs manufactured by General Electric; the latter is designed to replace an incandescent bulb and thus has a screw base) or a 75-watt incandescent bulb. If you go with a recessed box with a closed bottom, use 100 watts.

In a powder room or half bath, which generally is not used for extensive grooming, usually a wall-mounted fixture will be adequate. Use two 75-watt or four 40-watt bulbs, or two 24", 20-watt fluorescent tubes.

All of the foregoing assumes that the bathrooms have light-colored walls and ceilings—which is what most customers want. It's best to leave bathrooms that way so you don't cut out a big part of your potential market; if prospective buyers want dark bathrooms, that's what remodeling is for.

If you do have dark walls and ceilings, however, keep in mind that they double the requirements for light. And if you're building condos for senior citizens, remember that they need 50 percent more light at age 60 than they needed at age 40.

Patrick J. Galvin is the author of Kitchen Planning Guide for Builders, Designers and Architects, and the former editor and publisher of Kitchen & Bath Business magazine.