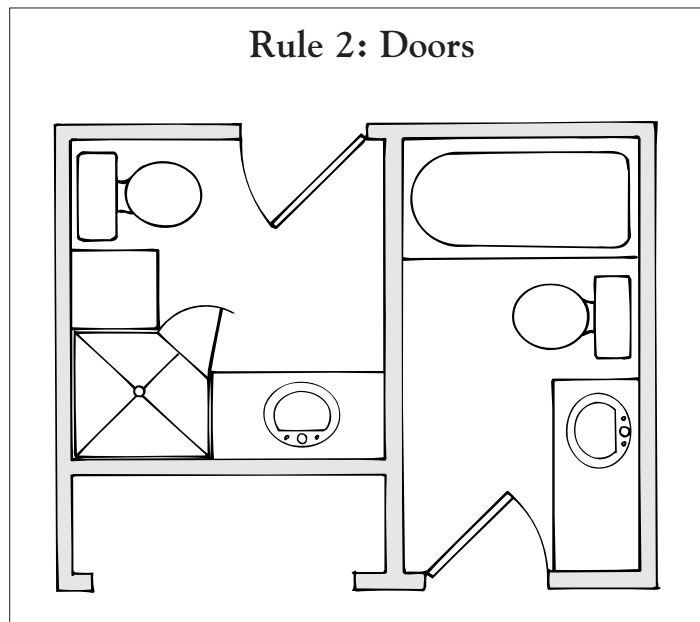


NKBA's 27 Principles of Bath Design

In 1992, the National Kitchen and Bath Association introduced new guidelines for K&B design 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 appeared in the September '94 issue of *JLC*; the bathroom guidelines appear below. Both articles are also found in *Kitchens & Baths: A Builders' Guide to Design and Construction*, published by *JLC*.

1 Entrances. Make a clear walkway at least 32 inches wide at all entrances to the bathroom.

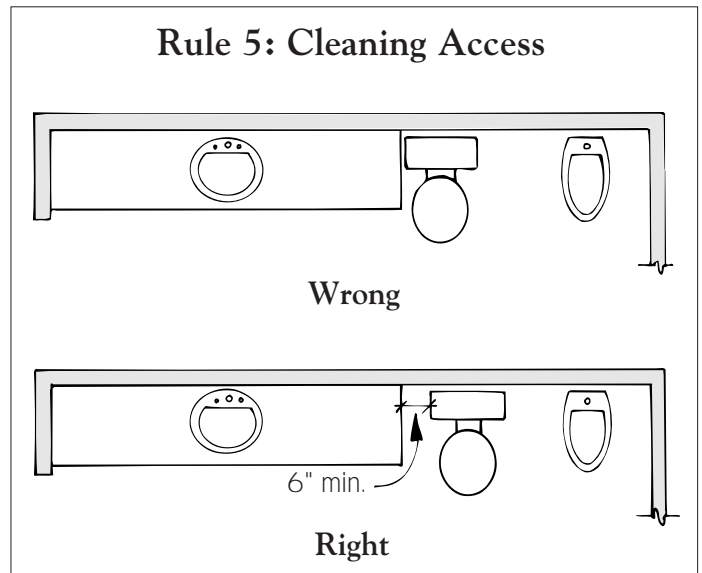
2 Doors. No doors (entrance, closet, or cabinet) may interfere with fixtures.



3 Ventilation. Provide mechanical ventilation in every bathroom to provide a minimum of 8 air changes per hour when operating (more for jetted tubs, spas, etc.). Choose a fan with a noise rating of 3 sones or less at high speed.

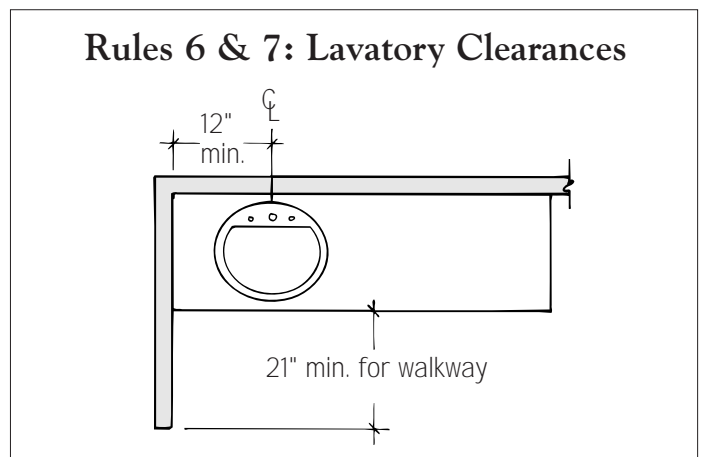
4 Electrical. Specify ground-fault circuit interrupters (GFCIs) on all receptacles. No switches should be within 60 inches of any water source. All light fixtures above tub/shower units should be special-purpose, moistureproof fixtures.

5 Cleaning Access. Where floor space exists between two fixtures, provide at least 6 inches of space for cleaning.



6 Walkway at Lavatory. Provide a clear walkway of at least 21 inches (30 inches recommended) in front of a lavatory.

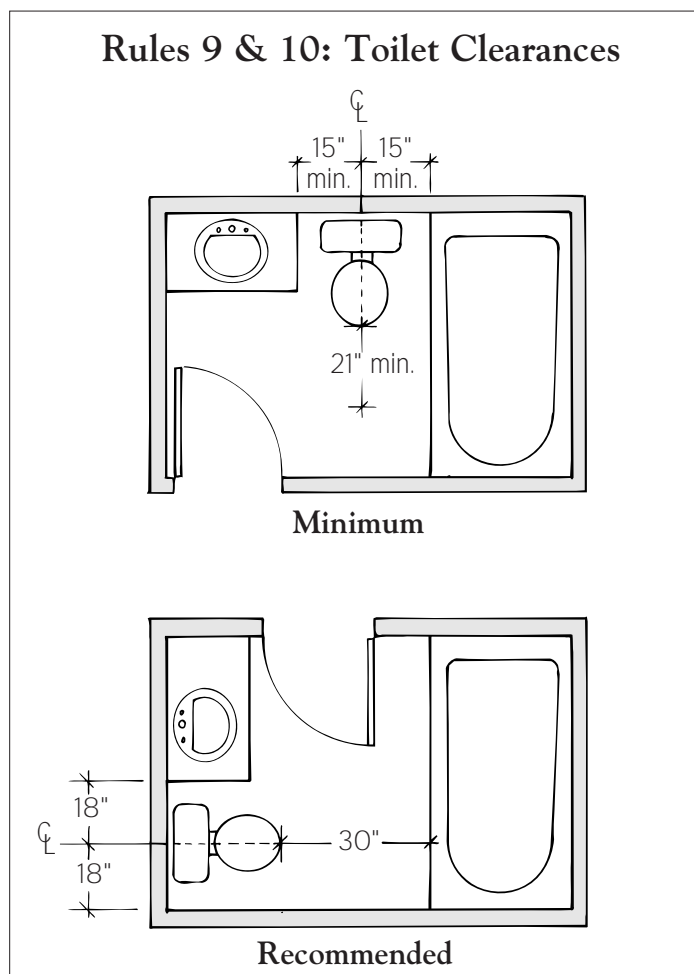
7 Lavatory Clearance. Provide at least 12 inches (18 inches recommended) from the centerline of the lavatory to any side wall.



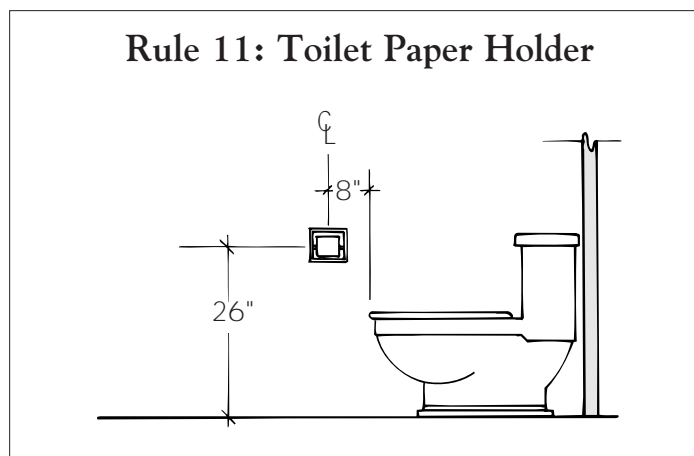
8 Double Lavatory. Provide a minimum of 30 inches (36 inches recommended) between multiple lavatories, measured centerline to centerline.

9 Toilet Clearance. Provide at least 15 inches clearance (18 inches recommended) from the center of the toilet to any obstruction, fixture, or equipment on either side.

10 Walkway at Toilet. Provide a clear walkway space of at least 21 inches (30 inches recommended) in front of the toilet.



11 Toilet Paper Holder. Install the toilet paper holder within reach of a seated user. The ideal location is slightly in front of the toilet bowl, and centered 26 inches above the finished floor.

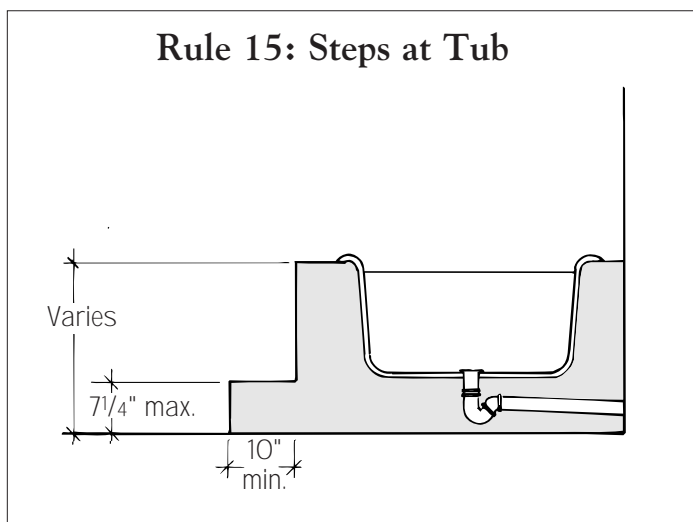


12 Bidet Clearance. Provide at least 15 inches clearance (18 inches recommended) from the center of the bidet to any obstruction, fixture, or equipment on either side.

13 Walkway at Bidet. Provide a clear walkway space of at least 21 inches (30 inches recommended) in front of the bidet.

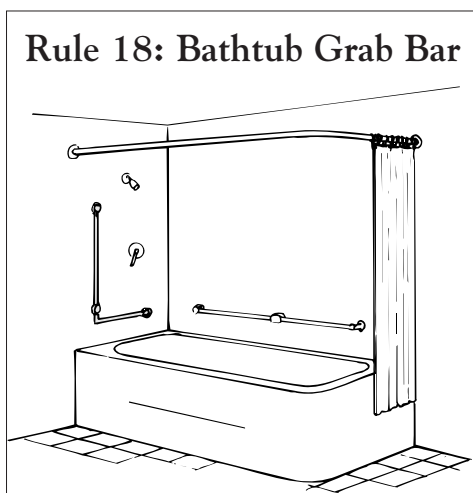
14 Storage Near Bidet. Install soap and towel storage within reach of a person seated on the bidet.

15 Steps at Tub. No more than one step should lead to a bathtub or a tub platform. The step must be at least 10 inches deep and no more than 7¹/₄ inches high.



16 Tub Faucet. The bathtub faucet should be accessible to an adult standing outside the tub.

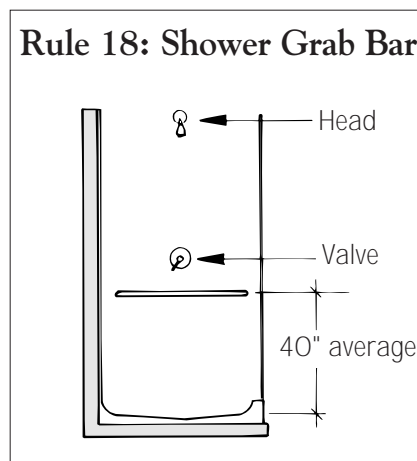
17 Jetted Tub Motor. Provide access to jetted tub motors for maintenance and repair.



18 Grab Bars. Install at least one grab bar in a bathtub or shower. Some of the recommended locations are as follows:

Stall Shower. One horizontal bar on the service wall to facilitate movement within the enclosure.

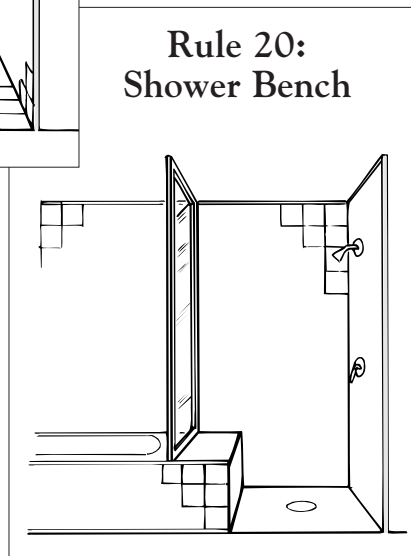
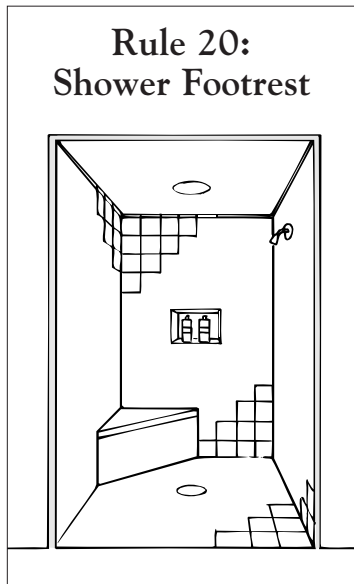
Bathtub/Shower. One horizontal bar



centered on the service wall and a vertical bar near the outside edge where bathers enter and exit.

19 Shower Stalls. Make the interior of a shower stall at least 32x32 inches. The preferred size for a typical adult is 36x42 inches, which allows space for the user to step out of the stream of water. A fixed showerhead should be roughed in at 72 to 78 inches high.

20 Shower Bench or Footrest. Install a bench or footrest within the shower enclosure. A 6x6x6-inch triangle in the corner can serve as a footrest. A built-in seat, 16 to 18 inches high by 12 to 20 inches deep, is ideal.



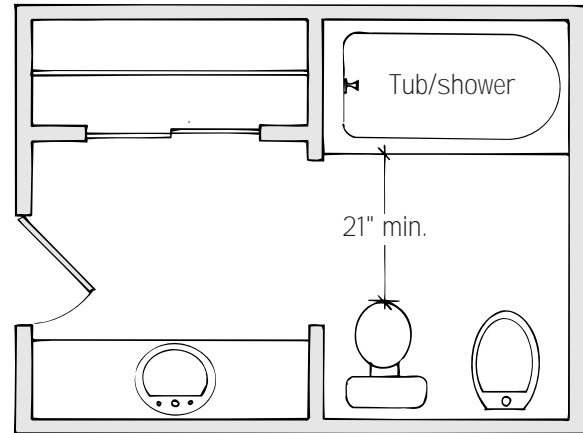
21 Walkway at Tub/Shower. Provide a clear walkway of at least 21 inches (30 inches recommended) in front of a tub/shower.

22 Shower Door. Shower doors must swing into the bathroom, not into the enclosure, to avoid trapping an injured or ill bather. The door should have tempered safety glass or plastic glazing, and should not block access to the shower controls.

23 Scald Protection. Protect all tubs and showers with a pressure-balancing valve, temperature regulator, or other temperature-limiting device.

24 Non-slip Flooring. Make all flooring from slip-resistant materials.

Rule 21: Walkway at Tub/Shower



25 Storage. Provide adequate storage in the plan, including the following: counter or shelf space around the lavatory; space for grooming equipment; space for shampoo and soap in the tub/shower area; and hanging space for bathroom linens.

26 Heating. Provide adequate heating in the bathroom. For comfort, this may require temperatures 3°F to 5°F warmer than the rest of the house. A quick-response auxiliary heat source may be helpful.

27 Lighting. Provide adequate general lighting and task lighting (see chart, below). ■

Bathroom Lighting Rules of Thumb

Application	Guidelines
General Lighting	For surface-mounted fixtures, 1 watt of incandescent or $\frac{1}{3}$ to $\frac{1}{2}$ watt of fluorescent light per square foot. For recessed fixtures, $2\frac{1}{2}$ to 4 watts incandescent or $\frac{1}{2}$ watt of fluorescent per square foot.
Small Mirrors	One 75-watt incandescent or 20-watt warm-white fluorescent on each side of mirror, about 30 inches apart.
Large Mirrors (36 inches or wider)	Along the top of mirror, three or four 60-watt incandescents in a fixture at least 22 inches wide; or a 36- to 48-inch fluorescent. For a theatrical look, 15- to 25-watt G bulbs along the top and sides.
Shower	60-watt incandescent in wet-location ceiling fixture (check local code).