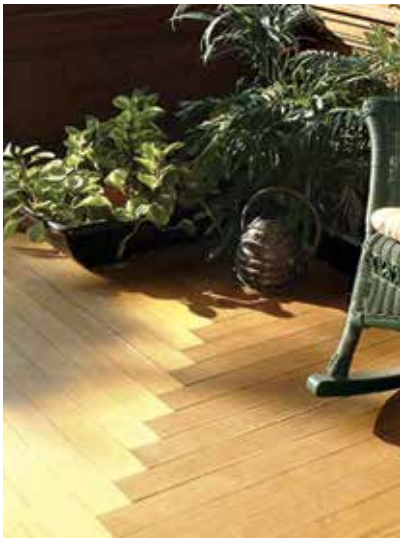
Flooring an L-Shaped Porch

Q What's the best way to frame a T&G fir floor on an L-shaped porch to get sufficient slope for drainage in both directions?

A Scott McBride, owner of Mustard Seed Master Builders in Sperryville, Va., responds: There are two good ways to deal with this situation—by running floorboards into a meeting strip (see photo, below left), or by weaving their ends together in a herringbone pattern (see photo, below right).

The framing is the same in either case: Run a triple 2-by girder on a diagonal from the corner of the house to the outside corner of the porch, and tie the porch joists to the girder. The joists should lie parallel to the house walls, so that water will run off along the length of the floorboards, rather than across them. Since a porch floor is typically pitched 1/8 to 1/4 inch per foot, the girder will need to be pitched as well, much like a very shallow hip rafter.

To fabricate a meeting strip, select a straight piece of flooring—preferably with vertical grain to minimize shrinkage—and glue a spline into the grooved edge, which will give you a floorboard with tongues on both sides. Fasten the meeting strip on top of the hip girder with construction adhesive and blind nails, then start laying the full-length boards from the end of the floor farthest from the corner, tongues toward the meeting strip. When you reach the transition, miter the inboard ends of the boards and groove the mitered ends with a router to engage the tongues on the meeting strip. Cut the boards long by an inch or two and let the outboard ends run wild, trimming to a chalk line after all the boards are laid.



In the herringbone method, the floorboards are chopped square, grooved across the ends, and laid alternately so that each end-groove engages the tongue of the preceding board. Practice with a few scraps to get the hang of it. Because opposing floorboards lie slightly out of plane with each other—owing to the change in direction of pitch—a little belt-sanding will be required to smooth the finished surface.

A limitation of the herringbone method is that the zigzag falls along a 45° intersection, so it can be used only where the adjoining porches are of equal widths. It's also more time-consuming than using a meeting strip, but the finished look is terrific. The herringbone pattern is accentuated because the alternating grain causes the light to reflect differently from the two surfaces.

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Building a Deck Above a Gas Meter

Q There is a gas meter on the wall just below the location where my clients want me to build an elevated deck. Are there any code-required clearances around the meter or minimum-height requirements above it that I need to consider?

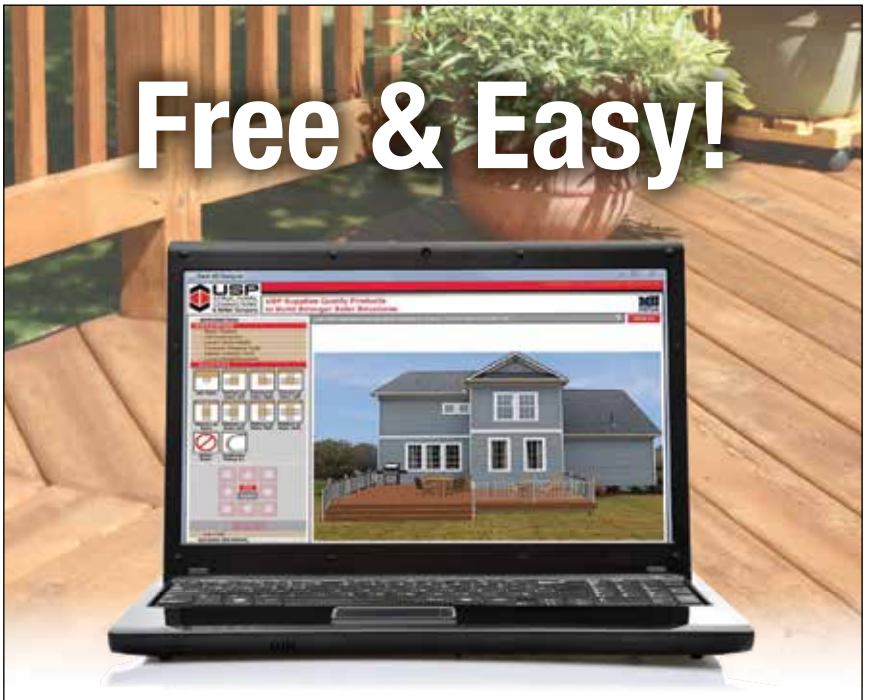
A Glenn Mathewson, a building plans analyst in Westminster, Colo., responds: Gas meters are not addressed by typical building codes, so they don't generally fall under the jurisdiction of local building inspectors. Meters are owned by utilities, which have their own clearance standards for access and maintenance. Since these may vary from state to state and region to region, you should contact the gas utility provider and find out what its requirements are. The guidance may not be specific to decks, but it should at least address

access, freeze/thaw cycles (in cold climates), and ventilation.

Access. Utilities require reasonable access to their meters in order to read, maintain, and repair them (though in many areas, the days of "reading" the meter are over, since transponders are used to communicate gas usage electronically to personnel sitting in their vehicle). What is reasonable? For the sake of comparison, an electrical panel (often where an electrical meter is located) requires a 30-inch by 36-inch by 78-inch-high working clearance. However, working on an electrical meter typically means working with live power, and uncomfortable access could make that work more hazardous—so perhaps a more appropriate standard for a gas meter would be the 30-inch by 30-inch by 30-inch-high access required for a horizontal furnace in a crawlspace.

Freeze/thaw cycles. A less obvious concern applies in regions with freezing temperatures and likelihood of snow. When a deck is built over a meter, it casts shade on the meter. Snow that collects on the deck often starts to melt from the sun's radiation, even when the air temperature is below freezing. As the snow melts and drips down on the shaded meter, it can refreeze and slowly encase the meter in ice. A meter and gas regulator becoming frozen in a block of ice is a very real and dangerous possibility, which is why the utility in my region (Colorado) will not set a meter under a deck. For the same reason, a deck should not be built over a meter in a cold climate (though some utilities may allow you to build a small shed roof over the meter to protect it from freezing snowmelt and falling snow and ice).

Ventilation. Finally, a gas meter should never be installed in an enclosure without ventilation. If a leak were to occur, or if there were a spike in delivery pressure that was relieved by the vent on the regulator, gas would be able to collect. With the right fuel-air mixture and a random ignition source, this is a recipe for disaster. Given the generous amount of ventilation under most decks, this scenario is, of course, unlikely. Still, the wrong deck design can contribute to the right environment for this hazard to occur—such as a low-level deck with ungapped decking (or decking installed over a waterproofing system), along with skirting to the ground around the deck's edge. ❖



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