

Grand Entrances for Basements

by Gordon Tully

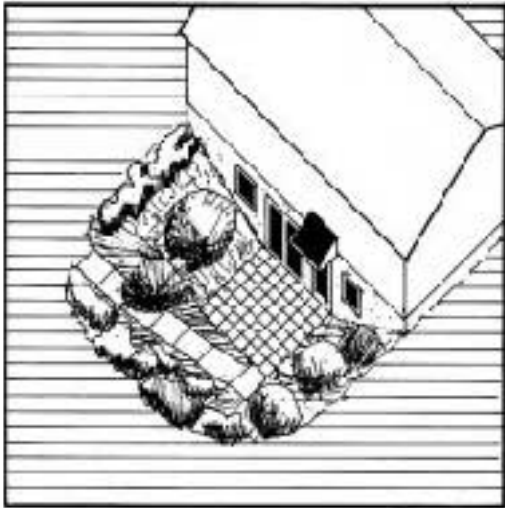


Figure 1. Bad solutions. A basement apartment should have an attractive walk-out entry. But how do you get from the sunken terrace to grade? A simple planted 1:3 slope (top) is easy and cheap, but visually undermines the house and takes too much yard space. Using a small retaining wall at the slope's bottom, along with steeper banks stabilized with rip-rap (bottom), can reduce the hole's size. But it still gives that "cratered" look.

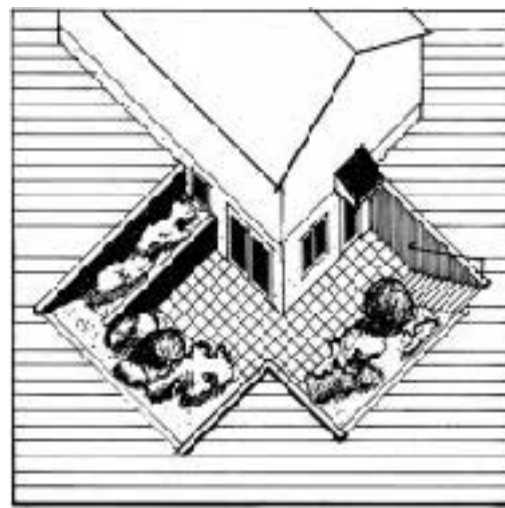
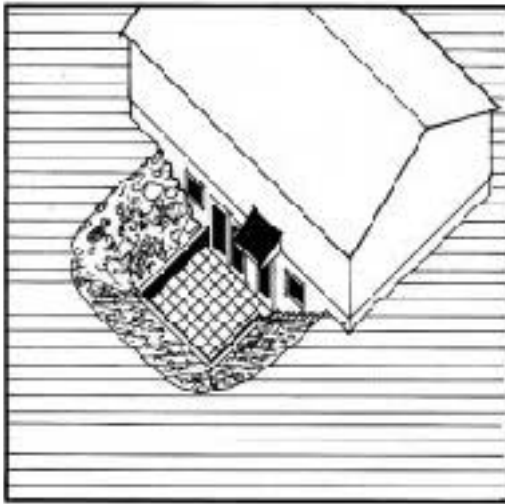
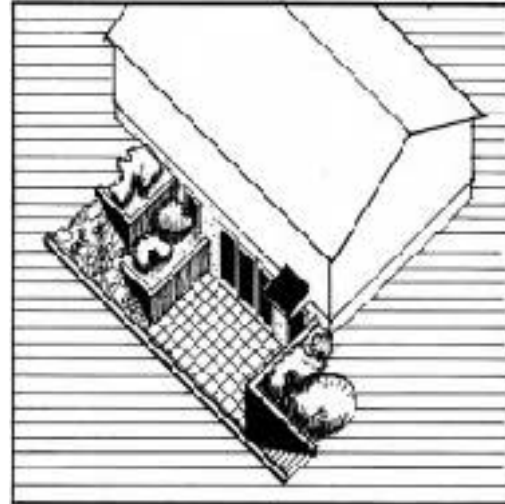


Figure 2. Good solutions. This corner walkout (top) has both full-height and terraced retaining walls abutting the house, with planted slopes extending into the yard. Full-height walls facing the corner help integrate the courtyard area and the house. In tight quarters or a small yard (bottom), full-height walls all around save crucial yard space. Terraces at one end and steps at the other help open up and ventilate the courtyard.



Basement apartments present unique challenges. First and foremost is that of controlling water: You can forget about an economical basement apartment if you have ground water that ever rises above the basement floor level. Other technical challenges include draining or ejecting sewage; lowering the floor (or raising the house) if more headroom is needed; and providing adequate light and cross-ventilation.

These technical challenges are real enough, and must be met. But this column deals with another issue, which often gets overlooked: making the walkout entry attractive.

To my mind, an attractive walkout entry is a key ingredient for a below-grade apartment. When you can walk straight outdoors into an attractive courtyard with the sky

overhead, you no longer feel you are in a basement. Also, this entrance will count as one of the two means of egress required under most codes.

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Shaping the Hole

Excavating a terrace or small courtyard outside the basement wall at the basement floor level usually presents no serious technical problem. You will need to extend the foundation footings

between the house and the terrace below the new frost line, and to drain the terrace properly. But the real challenge for a designer or builder working within normal budget limits is how to treat the sides of the hole.

First, the practical issue: Making a hole that doesn't take up the entire yard. Figure 1(top) shows a typical house on a flat lot. With a framed first floor set 18 inches or so above the ground, the terrace will be about 6 feet below the surrounding grade. A planted slope shouldn't be steeper than 1:3, which means the side slopes would each have to be 18 feet horizontally. Thus to provide for a 12-foot-wide terrace at the bottom of such a planted slope, you would have to take up a space 48 feet long by 30 feet wide.

A steeper slope can be created

by laying in big stones on a slope and planting between them to create a rock garden, as in Figure 1(bottom). This might get you up to a slope of 1:2 or even 1:1.5, cutting the hole's length to somewhere between 30 and 40 feet.

All these solutions eat up a lot of yard. More importantly, they present a serious aesthetic problem, by visually undermining the house. A house is a big object, and needs to sit decisively in the landscape. When the ground adjacent to it slopes down to the house, it looks as if the ground is caving in. The house loses its visual foundation on that side, with a very unsettling result.

Put a Hard Edge on It

To make the hole combine with the house to form a single architectural complex, which can then set-

tle comfortably into the landscape, you must give the hole a hard edge. This means using vertical retaining walls. Depending on the depth of the hole and other design considerations, you might or might not terrace these. Figure 2 shows some options.

Ideally, the retaining walls would be made of brick or stone, which look great and last indefinitely. But budgets (usually tight on basement renovations) often eliminate these more expensive options. This leaves you with concrete, concrete masonry units, or railroad timbers to choose from.

Concrete or concrete masonry units can look stark. But you can dress them up with trellises for climbing plants and decorate the walls with hanging pots, benches, and other elements to break up the expanses of concrete.

The cheapest solution of all is a retaining wall of railroad ties or similar timbers. A well-made timber retaining wall (see "Timber Retaining Walls That Last", March 1991) looks good and will last for 20 or 30 years. Its main drawback is that the next generation will have to figure out how to replace it without disturbing the mature plant material. These are all pros and cons you need to bounce around with the clients.

Getting There From Here

Access is important. Stepped terraces invite you to put flights of stairs next to walls, connecting one terrace to another, as in Figure 2

(bottom). Don't settle on a wall or terrace layout until you work out the staircase. Try to provide a little roof covering the entry, but don't add a mud room unless you can work out one within the plan. (A little box just stuck onto the foundation will look awful.)

Open the Inside Too

I can't close this column without mentioning a crucial consideration for a basement apartment's interior: Let there be light. No matter how hard you work to light a basement, it will still seem dark compared to upper floors. To alleviate this as much as possible, don't just divide the unit up into separate rooms: make the space flow by separating spaces with dividers such as counters and bookcases. Consider putting double doors or big pivoted or sliding doors between bedrooms and living spaces, so that in the daytime the two rooms can be thrown together. And never overhang a basement window with an outdoor deck: if necessary, move the deck further into the yard and build a bridge to it.

Basement apartments pose their own design challenges on top of those you face everywhere else. But if you set aside enough money to do the outside right, let in all the light you can, and open up the plan, you'll end up with a first-rate apartment at a moderate overall cost. ■

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