Rounding out the family of 1x1 SNOT bricks are the bricks with studs on two opposite sides (#47905, introduced in 2004) and two adjacent sides (#26604, introduced in 2017). There are larger 1x2 and 1x4 counterparts of some of these SNOT bricks as well (#11211, #52107, and #30414), along with some relatively new bricks that were designed with SNOT geometry in mind. These new bricks (see Figure 5-10) are 5 plates tall with two rows of studs on their sides (#32952, #22885, #67329, and #80796).

DETAILED WALLS
SNOT bricks are great for adding details to the exterior walls of buildings. I used them in the base section of my Empire State Building model, for example, to recess the windows slightly compared to the walls. Instead of pushing the windows in, I pushed the rest of the wall out by attaching sideways 1x6 tiles to the wall sections between the windows (see Figure 5-11). Each floor in this section of the model was 5 plates high, perfect for SNOT. I sandwiched each layer of bricks between two layers of plates to correctly space the sideways studs. I needed 1x1 bricks with 2 studs on adjacent sides in the corners and 1x1 bricks with a single sideways stud everywhere else.

It was a little trickier to create the same effect on the base of my model of New York’s Hearst Tower. Here the scale was bigger (1:156 rather than 1:230), calling for 7 plates per floor. To be able to attach 1x8 tiles to the faces of the wall, I needed to somehow get the studs on the face of the wall to be 5 plates apart, even if each floor was 7 plates high. As you can see in Figure 5-12, I was able to mix and match bricks and plates, sometimes within the same layer. This created a fully interlocked structure with the right vertical spacing between both the windows (7 plates) and the studs on the face of the wall (5 plates).

Figure 5-13: An octagonal column created using 1x1 bricks with studs on all four sides.

To achieve the octagonal effect, rotate every other layer of SNOT bricks 45 degrees, producing studs in eight directions. Then build out horizontally from the SNOT bricks with two layers of 1x2 plates to even out the surface before covering up the interior with long tiles.

CREATING SNOT CORES
You can also combine bricks with studs on one side and two adjacent sides to create SNOT cores, hidden central structures with studs in many directions for attaching plates and curved slopes. These cores can form the basis for cylinders, spheres, and other shapes (see Figure 5-14). We’ll look at this technique in more detail in Chapter 7.

Figure 5-14: Cylinder and sphere shapes created by attaching curved slopes and panels composed of plates, respectively, to SNOT cores.

It isn’t possible to cover all the different ways that SNOT bricks can be used in LEGO builds, but hopefully these examples have given you a small taste of what’s possible and piqued your interest in exploring other applications for these elements.

PLATES WITH STUDS ON THEIR SIDES
Another type of SNOT element is the plate with studs on its side. These modified plates have a section that’s 2 plates thick where the sideways studs are located (see Figure 5-15). They come in 2x2 (#99206) and 2x6 (#87609) versions, though other varieties may be added in the future.