

Storm shelters

Storm shelters, sometimes called safe rooms, though not required by the code, offer added protection from the destructive forces of high winds, hurricanes, and tornadoes. The design and construction of storm shelters, either as detached structures or safe rooms within a dwelling, must conform to the requirements of ICC/NSSA-500, *Standard on the Design and Construction of Storm Shelters* (Figure 4-11). The International Code Council (ICC) and the National Storm Shelter Association (NSSA) jointly developed this new consensus standard. Primarily designed for life safety considerations, storm shelters protect occupants from serious injury due to high wind and flying debris. The shelters are designed to withstand impact from windborne projectiles, referred to as *missiles*, such as 2×4 s or other construction or natural material debris that are common to high-wind events. The outer shell of above-ground shelters may be concrete, steel, composite, or other materials that have been tested to the prescribed large missile tests. [\[Ref. R323\]](#)

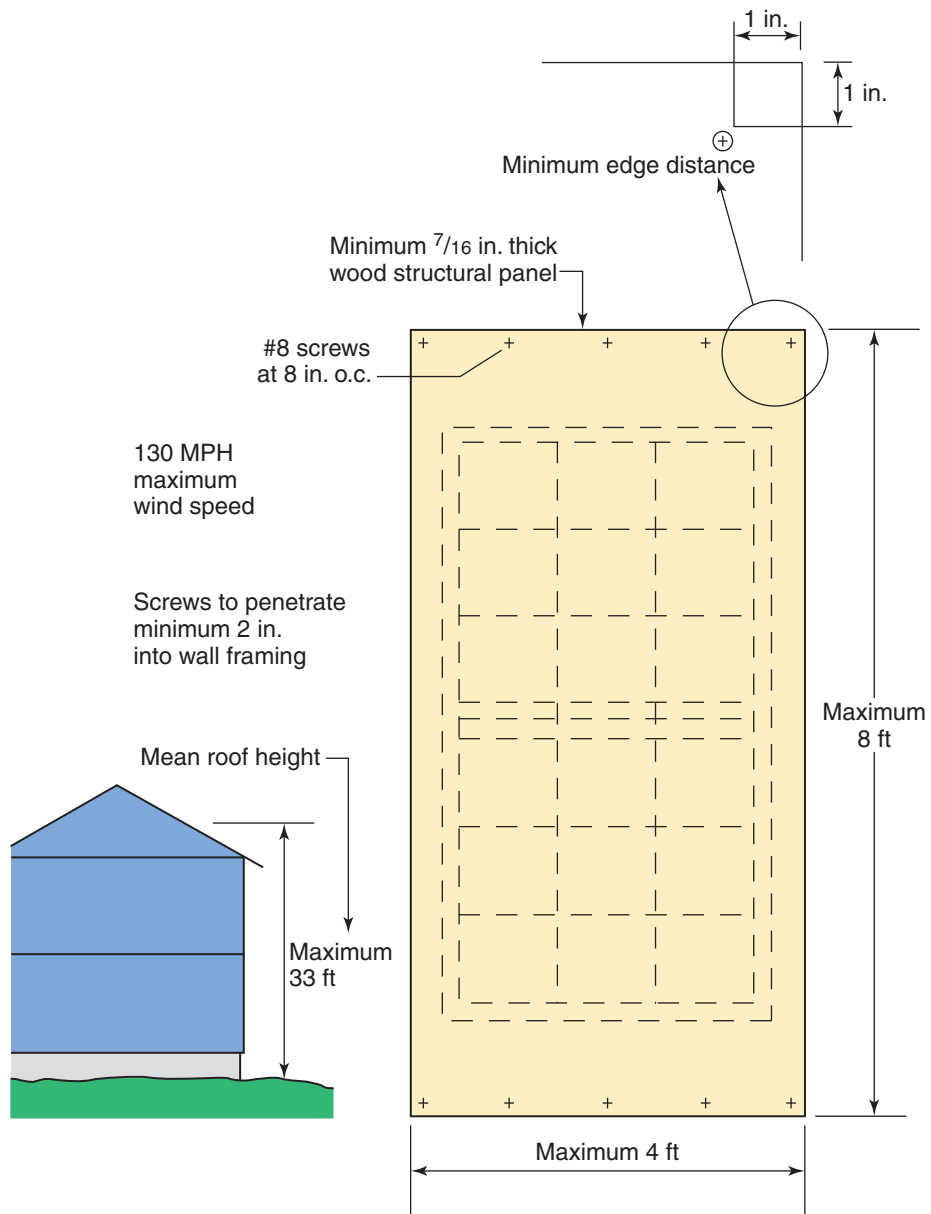


FIGURE 4-9 Prescriptive protection of openings in windborne debris regions



FIGURE 4-10 Tornado damage (Courtesy of iStock)