Since stainless steel has a melting point about 2800°F, it is very unlikely that airborne cinders coming in contact with the stainless steel roof, for example will ignite a fire. Except for carbon steel which has a similar melting point, the other metals used in construction have melting points that range from 500 to 1200°F.

While we cannot guarantee that thinner gauge stainless steel installed on a roof that is subjected to a hailstorm will not dent, the more insidious damage comes from painted metals should the paint craze from hail impact. In that case, moisture and contaminants can become and trapped on the exposed metal propagating an accelerated corrosion process. This might lead to panel failure without the owner becoming aware of the problem until interior damage occurs. This exact problem occurred on a painted galvanized roof in suburban Pittsburgh. It took a few years after a hailstorm for the roof to fail but it nonetheless did, requiring a complete replacement of the roof. Roofing installed in hail prone areas would benefit from the use of stainless steel. Further, a heavier thickness of stainless steel can reduce the risk of denting altogether.

Additional hail resistance can be achieved by adding one of our deep textured patterns, which add strength.
Vandalism is an all too common problem that building owners face. In the case of taggers or graffiti artists that apply spray paint to building surfaces, it is a great deal easier to remediate the damage in the case of stainless steel. Solvents can be used to remove the unwanted paint without damaging the stainless steel surface beneath.

The surface finish is pretty important here. Rolled-in finishes like InvariMatte®, InvariLux®, and InvariTone are the easiest to clean, and removing paint is no exception. For panels that can tolerate a glossier appearance, InvariLux® and InvariTone are the easiest to clean among stainless steel finishes that do not have a coating applied. All are much more dirt resistant and easier to clean than the vast majority of stainless steel finishes on the market, especially those that are abraded, like the typical home appliance finish. It would take a higher degree of effort to remove the last traces of paint from and abraded finish.

In the case of severe damage to a building panel that requires its replacement, the owner gets better results with stainless steel. If an architectural quality stainless steel finish was originally installed, a new panel of the same finish stands a good chance of matching the old ones. Some finishes are better than others in terms of repeatability from batch to batch such as the rolled in finishes mentioned above. Since stainless steel does not deteriorate from environmental exposure and therefore does not weather, unsightly mismatches from aged vs. new paint, for example, are of no concern.

The use of stainless steel building panels can reduce damage losses. Enveloping a building in stainless steel can also reduce energy consumption and reduce maintenance expenses compared to more common materials. There is no doubt that the investment in a stainless steel building returns on the owner’s investment.