

Advantages of Aluminum Windows

- Sightlines that can be replicated to match any style, even historic. Narrow sightlines provide maximum views.
- Receptors make aluminum windows readily replaceable without having to open up the wall. Also, accommodates building movement.
- Ideal for large spans and openings.
- Excellent turnaround time — can be ready in weeks.
- Easy installation with several options available.
- Low maintenance. Windows with grids are easily serviceable — exterior grids allow local contractors to reglaze from the interior without having to remove the grids.
- Earth-friendly product. Aluminum frames can be smelted down and reformed. Fiberglass and vinyl both end up in the landfill.
- Color options abound with multiple selections in both anodized finishes and custom Kynar paint colors.
- Optional accessories include a choice of trim finish, hardware, muntins, and installation materials, providing a customized window.
- Reduced UV degradation with low-e coatings and laminated glass options.
- Mechanically joined corners to avoid water leakage.

Source: <https://architecture2030.org/why-the-building-sector/>

Want to learn more? Contact us for a project consultation!



Fiberglass Windows Fail Catastrophically at The Ridge at Tahoe

In 2019 the Ridge Resort at the top of Kingsbury Grade in Lake Tahoe had a major fallout with their fiberglass and wood composite windows—they were failing catastrophically.

“Windows were literally flying out of the building to the valley below,” said Sal Flores, Senior Manager of Facilities and Operations at the Ridge.

Unlike aluminum thermally-broken windows, fiberglass and wood composite windows do not have the design pressure capacity and life-cycle durability to withstand years of thermal stress and water penetration. The result: Not only was it hard to maintain a comfortable inside temperature, there was a dangerous situation that called for immediate action.

In response, Capital Glass in Carson City brought in WINCO to design a high-performing window solution that also provided natural ventilation and ensured safety.

No Outside Access

With no fast or economical way to put scaffolding on the side of the mountain, WINCO engineers reimagined the sub-framing receptor system to create a “blind” waterproof installation. This allowed all of the installation to be done from the interior.

Continuous Vacation Use

As the resort has no “off-season,” work was carefully scheduled around unit availability with watertight completion turned around within a week.

No Air Conditioning

Due to the resort’s 7,000 ft elevation, air conditioning is not possible. WINCO employed sliding windows and projected awning windows with “hold-open” limit arms to ensure the safety and longevity of the vents. The use of a high-performing low-e coating (Guardian SNX62-27) ensured limited solar heat build-up.

Massive Snow Dump

The real test for the new WINCO-installed windows came in the winter of 2022-23, with the second snowiest weather on record - 56 feet and counting, according to the Sierra Snow Lab. Roofs caved in, and ice dams broke free, slamming through windows and walls of homes and businesses all around Tahoe. Throughout these historic weather events, the new WINCO windows at the Ridge at Tahoe performed as designed, keeping guests dry and comfortable.

