

Case Study

Adler-Alpika Servis Tunnel, Sochi, Russia
2014 Winter Olympics

TEAMWORK CREATES SUCCESSFUL TRAFFIC CORRIDOR IN TIME FOR SOCHI OLYMPICS

Architect and Engineers:

Bautrade and Front Engineering, Russia

Specialty:

Infrastructure

Overview:

Timely and world renowned architectural project achieved in partnership between PolyVision, Bautrade and Front Engineering.

“Contributing to the construction of the main passage corridor to one of the world’s most inspirational and recognized events is very gratifying for PolyVision. We started this project in 2012 with our two Russian partners – Bautrade and Front Engineering. Together, it is very rewarding to now see it stand as the gateway to such a renowned sporting event as the Olympics,” says Peter Lewchanin, General Manager for PolyVision.

While it is important to make a good first impression, making a long-lasting impression is even more critical. That was never more evident than in the vital, new infrastructure built for the 2014 Winter Olympics in Sochi, Russia.

As government officials and construction engineers sought to build the primary passenger transportation

route for the games, they wanted it to be visually appealing for travelers while also complementing Russia’s long-term plans for the city. The road extends nearly 48.2 km (30 miles) from Adler, where the airport is located, and leads into the mountain ski resort Alpika Servis. During the Olympics, this area served as a key hub to access a variety of facilities; however, it also helped improve regional infrastructure by connecting the federal road through several traffic interchanges.

PolyVision, a leading manufacturer of CeramicSteel surfaces, partnered with Bautrade LLC and Front Engineering to provide smooth, durable wall panels for the main road tunnel of the new traffic corridor.

Working closely with both companies on project design, engineering and installation, PolyVision supplied 18,000 m² (193,752 ft²) of a³™ CeramicSteel panels for the nearly 2,300 m-long (1.43 miles) tunnel.

According to Nikolay Senyuk, Director for Bautrade in Moscow, the curved panels were bonded to 1.0 mm-thick galvanized steel sheets. “This design allowed us to obtain a good, sturdy panel shape without deformations,” he explains.

PolyVision’s CeramicSteel panels were selected for the first highway tunnel based on the surfaces’ ability to resist scratches, graffiti, weather, pollutants and fire, as well as a lifetime guarantee. With road throughput of 11,000 vehicles per day in both directions, the main tunnel is a focal point and gateway for this vital new infrastructure.



Installation ease was another key factor contributing to the project's overall success. **"Compared to other materials, CeramicSteel panels are lighter and the surface is flexible enough to fit the tunnel's curve,"** Senyuk says.

Equally critical to the project's success was the ability of PolyVision, Front Engineering and Baurtrade to coordinate all aspects and meet the extremely tight time frame, ensuring construction was completed prior to the Olympics. "It was a fast-track project," adds Senyuk. "Site work began in December 2012, the first panels were shipped before Christmas and

the last panels were installed by mid-2013. It was an impressive project where everyone worked well together to meet the deadline."

Post Olympics

CeramicSteel's sustainability complements Russia's vision for Sochi. Following the Olympics, a major international football stadium, large trade and exhibition center, and multi-purpose sports and entertainment complex are expected to occupy the site venues. This requires a traffic corridor that is durable both aesthetically and purposefully for many years to come.