



GUEST-FACING RETAIL KIOSK STRUCTURE

Built for Install Day,
Not Just Fabrication



Rivtec was engaged to fabricate a guest-facing retail kiosk structure designed for a high-traffic public environment where visual quality, alignment accuracy, and installation predictability were critical.

The Project Combined:

-  Welded structural fabrication
-  Exposed finished surfaces
-  Laser-cut cosmetic panels
-  Schedule-sensitive installation coordination

Unlike concealed industrial assemblies, every visible surface in this project would be directly exposed to guests, operators, and surrounding trades.

The Expectation Was Not Simply Structural Completion.

The Expectation Was:

-  Clean alignment
-  Consistent finish quality
-  Predictable installation
-  Minimal field correction
-  Zero visible fabrication compromise



THE ENVIRONMENT

Public-Facing Installation Conditions

This structure was built for a fully visible, guest-facing environment where cosmetic quality directly affected the final customer experience.

The installation environment introduced several execution sensitivities:



High public visibility



Multi-trade coordination



Tight installation sequencing



Limited tolerance for onsite modification



Cosmetic finish exposure

In environments like this, fabrication inconsistencies do not stay hidden behind walls or ceilings.

They become immediately visible:



Through panel alignment



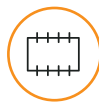
Installation cleanliness



Surface continuity



Overall presentation quality



Seam consistency



The project effectively carried zero tolerance for cosmetic defects.

PROJECT CONSTRAINTS

Why This Project Required Precision

Several operational constraints increased the sensitivity of the fabrication process.



Cosmetic Surface Exposure

All major surfaces remained visible after installation, meaning weld movement, dimensional drift, or uneven panel spacing would immediately impact appearance quality.



Tight Installation Window

The installation schedule required predictable assembly without delays caused by field correction or rework.



Multi-Trade Coordination

Fabrication accuracy directly affected surrounding trades and installation sequencing onsite.



Finish Protection Requirements

Handling and transportation had to be carefully managed to avoid cosmetic damage before final placement.



Alignment Dependency

The final assembly depended on accurate frame geometry to ensure clean panel integration across visible surfaces.



WHY THIS WAS TECHNICALLY SENSITIVE

Small Deviations Could Create Visible Problems

This project combined structural fabrication with cosmetic presentation requirements. That combination significantly increased fabrication sensitivity.

Even minor dimensional inconsistencies could create



Visible panel gaps



Uneven reveals



Alignment inconsistency



Cosmetic distortion



Installation interference



Heat movement during welding also presented a downstream cosmetic risk. Without controlled weld sequencing, distortion could telegraph through finished surfaces after installation and lighting exposure.



In public-facing environments, these issues are not viewed as minor fabrication imperfections. They become visible quality failures.

WHAT COULD HAVE GONE WRONG

Typical Failure Points In Install-Sensitive Fabrication

Several common fabrication risks had the potential to impact installation quality and schedule performance.



Frame Misalignment

Small deviations across welded frame intersections could create inconsistent panel fitment and visible cosmetic misalignment.



Weld Distortion

Uncontrolled heat input could distort cosmetic surfaces and affect final finish appearance.



Field Drilling & Site Rework

Poor dimensional control could force installers to modify components onsite, delaying installation sequencing and increasing labor exposure.

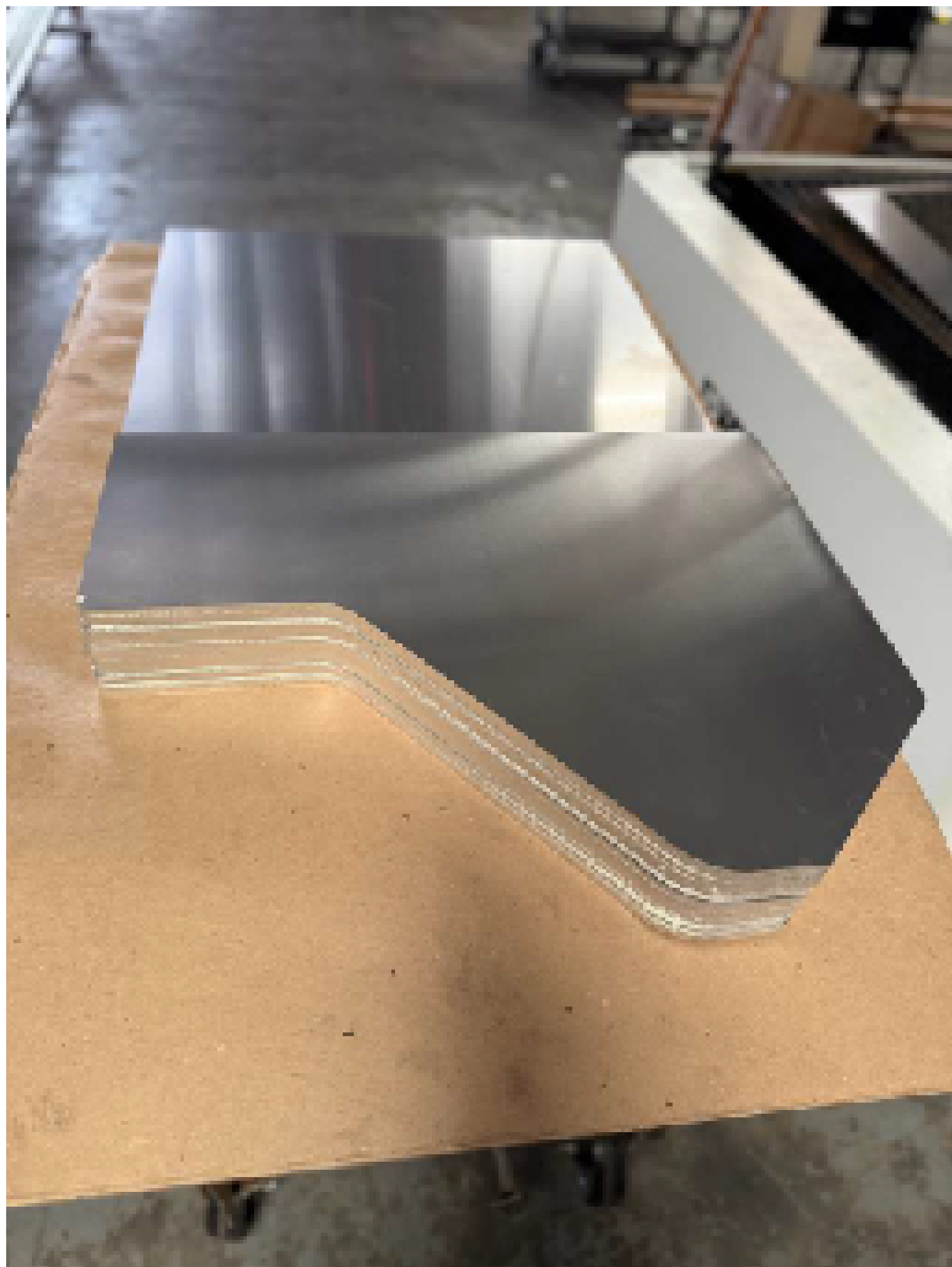


Finish Damage During Handling

Without planned packaging and handling controls, cosmetic surfaces could be damaged during transportation and staging.



For guest-facing environments,
none of these outcomes were acceptable.



RIVTEC FABRICATION STRATEGY

Engineering The Assembly Around Install-Day Conditions

Rather than treating fabrication and installation as separate phases, Rivtec approached the project around downstream assembly requirements from the beginning.



Tube-Laser Frame Processing

Structural frame members were tube-laser processed to improve miter accuracy and reduce cumulative tolerance stack-up across welded intersections.

This improved:

- frame consistency
- alignment predictability
- cosmetic panel fitment
- assembly repeatability



Controlled Weld Sequencing

Weld sequencing was planned around visible cosmetic zones to minimize heat-related distortion before finishing operations.

The focus was not simply structural completion.

The focus was cosmetic stability after installation.



Frame Validation Before Cosmetic Panel Fabrication

Cosmetic panels were fabricated after structural frame validation to reduce downstream fitment risk and improve final alignment consistency.



Packaging & Handling Protection

Handling and packing strategy were developed specifically around finish protection to minimize cosmetic exposure during transportation and staging.

INSTALLATION OUTCOME

What Happened On Site

The final installation proceeded without significant field correction or fabrication-related delay.



Clean Panel Alignment

Panels aligned consistently without requiring shimming or visible compensation onsite.



No Field Drilling

Installers were able to assemble components without site-side dimensional modification or rework.



Clean Cosmetic Execution

Finished surfaces installed cleanly while maintaining visual consistency across exposed areas.



Installation Schedule Maintained

Installation completed within the planned execution window without fabrication-related disruption.



OPERATIONAL IMPACT

Why The Outcome Mattered

The success of the project extended beyond fabrication quality alone.

Accurate fit-up and controlled execution helped:



Maintain
installation
sequencing



Reduce
field labor



Avoid
last-minute
correction



Preserve
cosmetic
quality



Reduce
downstream
trade disruption



Trades remained on sequence
without fabrication-related delays.



No last-minute fixes
were required before completion.



Most importantly,
the final assembly met the expected guest-facing visual standard.

WHAT THIS PROJECT DEMONSTRATED

This project demonstrated Rivtec's ability to:



Fabricate cosmetic-critical welded assemblies



Manage tolerance-sensitive fit-up



Reduce downstream installation risk



Support schedule-sensitive builds



Coordinate fabrication around real installation conditions



Deliver public-facing structures requiring precision execution

The project also reinforced a core Rivtec principle:



Successful fabrication is not measured when parts leave the shop.
It is measured when installation happens cleanly onsite.

BUILT FOR **INSTALL DAY**

If you're building:



Guest-facing structures



Architectural metal assemblies



Themed environments



Retail installations



Cosmetic-critical fabricated systems



Early coordination around
installation constraints matters.

Rivtec builds for **install day —
not just shop drawings.**



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