

PORTAFAB

CASE STUDY

Quality Inspection Room

Location: South Carolina, US

Application: Glass Manufacturer Inspection Room

Product: OmniFlex 14' Tall Steel Fire & Sound

Benefits Provided:

- Temperature-controlled enclosure with particle filtration to improve product quality and aid inspection process.
- Extra-high walls to accommodate large equipment inside, while installing the building neatly underneath existing bridge crane outside.
- Steel framing for structural integrity and Fire & Sound panels for thermal control.



Our distributor provided their client with an environmentally-controlled quality inspection room to improve product quality and operational throughput at their glass manufacturing facility.

THE SITUATION

Guardian Glass is a worldwide manufacturer of float glass and fabricated glass products in addition to a major supplier of exterior glass products for the automotive industry.

In order to improve product yield and operational throughput, our client required the installation of an environmentally controlled inspection room within their manufacturing plant in South Carolina.

THE CHALLENGE

A main challenge with this project involved maintaining the desired level of environmental control within the enclosure despite the non-conditioned atmosphere of the surrounding manufacturing facility. Aside from controlling temperature fluctuations, the enclosure would also need to filter outside dust and debris in order to protect the delicate inspection process inside.

Our distributor also closely evaluated the height requirements for the inspection equipment within the enclosure and determined that 14-foot high walls would provide enough inside clearance while also allowing the enclosure to fit underneath an existing bridge crane operating overhead. Our distributor worked closely with PortaFab to coordinate the extra heights that were required and to avoid any additional obstructions.

THE SOLUTION

After reviewing their client's needs and consulting with PortaFab design and engineering departments, our distributor recommended the OmniFlex wall system for the enclosure. The steel framing system would provide the required structural integrity to accommodate a large conveyor opening for the transfer of products in and out of the building. Utilizing fire and sound panels would provide the ideal thermal control as well as provide sound deadening characteristics in order to enhance the inspection process within the enclosure.

For the finishing touches, our distributor worked closely with the additional trades to ensure proper installation of HVAC and air filtration equipment in order to provide the required amount of thermal control. The final enclosure provided our client with a highly advanced modular solution to enhance their operational capacity and inspection processes.

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