Prefab Laser Enclosures

Case Study

Application: Laser Room

Product: OmniFlex Fire & Sound

Benefits Provided:

- ✓ Walls made of fire retardant materials
- ✓ Open design, utilizing pre-existing lighting & sprinkler system
- ✓ Laser safety glass windows in doors

The Situation

Our client is a world-wide leader in the design and build of laser workstations and laser machinery in order to meet an assortment of manufacturing needs within a variety of industries. The client required the construction of a structure to house their laser workstations, which would serve as a protective barrier for personnel outside of the enclosures from the laser process.

The Challenge

Though the client had a budget in place for this project, there were specific safety precautions that would need to be considered in order to meet the safety codes inherent with highly specialized laser equipment. The enclosures needed to provide optimal lighting within the room, as well feature an emergency sprinkler system to meet fire safety codes. The laser enclosures also needed to be constructed of a fire retardant material for added safety.

The Solution

Based on the clients safety requirements, PortaFab chose to use the OmniFlex Fire & Sound Wall System, which would provide optimal protection in the case of a fire emergency situation.

Because of the budget in place for the project, PortaFab opted to design the enclosures as free-standing walls without ceilings. This open design made use of the existing lighting and fire suppression already in place at the facility. The reduction in roofing materials also saved time in the installation, and ensured the project would fall within budget.

In order to meet code, PortaFab designed the 8 foot high, free-standing walls to meet lateral loads of 5 pounds per square foot. Given the importance to protect the outside personnel from the laser process, PortaFab recommended that the structure be built with minimal windows and doors.

For any doors added to the enclosures, PortaFab recommended the placement of small glass windows to avoid accidents with personnel exiting and entering the structure.

PORTAFAB
Modular Building Systems

PortaFab Corporation
18080 Chesterfield Airport Road
Chesterfield, MO 63005

Tel: 1-800-325-3781
Fax: 1-636-537-2955
e-mail: info@portafab.com
www.portafab.com