

Modular Wall Cladding for Fish Culture Station

Case Study

Application: Composite Panel Wall & Ceiling Cladding

Product: Furring 500 FRP Over ½” Thick Plywood

Benefits Provided:

- ✓ Customized solution to meet the particular needs of our client.
- ✓ Seamless and durable wall and ceiling cladding to withstand cleaning and high moisture environment.
- ✓ Economical alternative to conventional construction.



The Situation

Our client, a fish hatchery, raises a wide variety of cool and warm water fish including trout, bass and catfish which are then used to stock local lakes and ponds. Due to enhanced quality guidelines, our client had installed new filtration systems which were housed in a newly constructed enclosure at their facility. Though a general contractor had already constructed the enclosure to house these new systems, they required assistance in securing a durable material to clad the interior walls and ceiling. Based on the wide selection of standard and custom composite panels available, this contractor reached out to PortaFab for a solution. After qualifying the lead, PortaFab's sales department passed the lead to our local distributor.

Our distributor provided a general contractor with a modular solution to meet their demand for a durable wall cladding panel that would satisfy the requirements of a newly installed fish culture station enclosure. Once materials were secured, our distributor served as a consultant to the contractor throughout the project.

The Challenge

The interior walls and ceilings would require a high level of durability in order to hold up to regular cleaning protocols and withstand water penetration resulting from the high moisture environment inside. Based on the above and due to past issues with other construction methods, the client was looking for an alternative solution to conventional construction – one that would provide a long-lasting and maintenance free result.

The Solution

Our distributor assessed the project's needs with both PortaFab's engineering department and the contractor assigned to the project. Through these discussions it was determined that a lightweight composite panel could be used as wall cladding to meet the requirements for the interior of the building. Not only would screwed in wall panels provide rigidity for a long-lasting solution, though a fiberglass reinforced plastic (FRP) covered surface would provide a proper seal to withstand the high moisture environment and rigorous cleaning requirements.

Upon evaluating these and other options with PortaFab's engineering department, the decision was made to create a custom panel consisting of an FRP surface over ½” of plywood. This solution was relayed to the client who not only approved based on the durability of the panel, though also appreciated PortaFab's ability to manufacture the custom panels in an economical fashion to meet the budget in place for this project.

Our distributor served as a liaison between the contractor and PortaFab in order to spec out and order the supplies required for the installation. Our distributor also secured trim covers from PortaFab which would cover the seams between each wall panel, providing a seamless surface on the walls and ceiling. Serving as a consultant, our distributor worked directly with the general contractor throughout the rest of the installation process through project completion.

The Results

The newly installed clad walls and ceiling provided a seamless and high quality appearance to the inside of the enclosure. The custom composite panels also met the clients request for durability in order to withstand both the high moisture environment and regular cleaning protocols. This project was completed on time and under budget, much to the satisfaction of our mutual client.