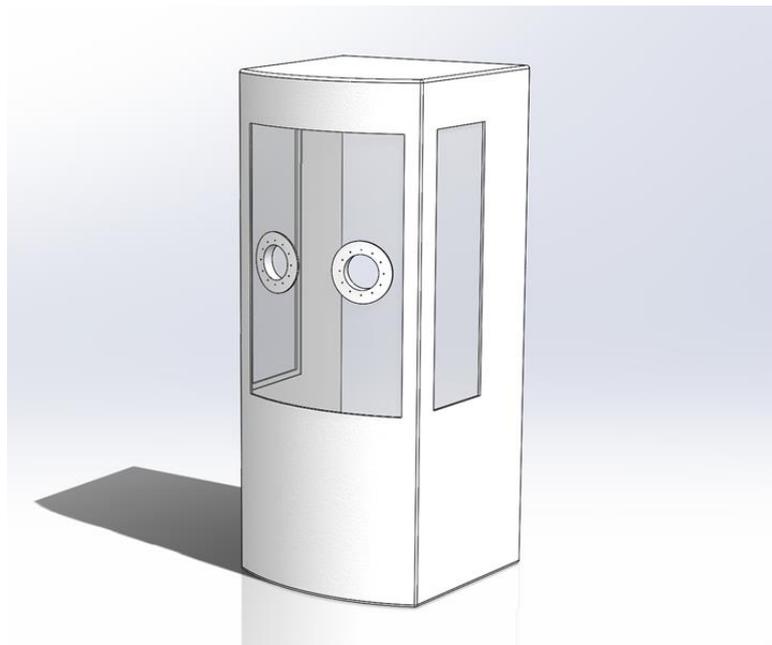


# How Composites Are Helping Pandemic Response Campaigns

The seemingly never-ending pandemic has had significant and ongoing impacts on our daily lives. During the last months, many companies have accepted the new challenges that have emerged from the current situation. In many cases, engineers were able to use composite materials to manufacture brand-new projects that facilitate the pandemic response. Two very interesting projects are going to be discussed in this blog.

## Fiberglass Covid-19 Testing Booth

In June 2020, Imagine Fiberglass Products Inc. announced a Covid-19 testing booth's new design, intending to eliminate the need for PPE by healthcare workers. To develop a lighter, sturdier version, the company used fiberglass-reinforced composites.



Fiberglass Testing Booth Design [1]

Imagine Fiberglass' design incorporates three clear polycarbonate viewing panels attached to three fiberglass panels reinforced with polypropylene honeycomb core in places that require additional stiffness. The composite panels were produced via an open molded process, but the company is looking to switch to an RTM once the demand picks up. The booth weighs about 90 pounds, can be easily carried by two people, and at 33 inches deep, is designed to fit through most standard commercial doors. [1]

## Composite Vaccine Shipment Container

Last month, Swedish pharmaceutical air freight solutions provider Envirotainer has announced the RAP e2, which is a temperature-controlled air cargo container that is now being deployed for safe transportation of Covid-19 vaccines worldwide. During its development, the company decided to replace the more traditional aluminum/polyurethane foam construction with sandwich composites with high-performance cores. The result is impressive: a container that offers almost twice the insulation value compared to the equivalent aluminum/polyurethane foam container. The interior temperature can be maintained at a constant temperature (from -20 to +40°C) throughout the container's journey. Full-scale tests have also shown that it can withstand more than a 23-ton static load on its roof! [2]



RAP e2 Container [2]

### References:

[1] Article: Fiberglass composites enable lighter, sturdier COVID-19 testing booth design

<https://www.compositesworld.com/articles/fiberglass-composites-enable-lighter-sturdier-covid-19-testing-booth-design>

[2] Article: Composite vaccine shipment container incorporates Diab structural core

<https://www.compositesworld.com/news/composite-vaccine-shipment-container-incorporates-diab-structural-core>