

Budweiser keeps consistently cool with CarbonCast insulated wall panels

The exterior walls of the new 138,000 square-foot Budweiser Distribution Center use CarbonCast, an innovative precast concrete technology that replaces conventional shear reinforcement with a non-corrosive, high-strength carbon fiber grid supplied by TechFab, LLC.

The panels' thickness ranges from 12" in the storage area to a conventional 8" thickness in other sections of the building.

The panels have 2-1/2" inner and outer wythes which encase 7" of foam insulation for R-26 or a 2-1/2" inner wythe and 2" outer wythe which encase 4 1/2" of foam insulation for R-15. Furthermore, the thermal mass effect of the panel could result in even better R-values for the structure.

The high R-value creates a consistently cool warehouse. Budweiser had tried using masonry-based systems for other distribution buildings, but found that the insulation qualities of the carbon-fiber-reinforced panels provided a lower-cost option.

In the Budweiser project's insulated wall panels, C-GRID™ carbon fiber grid was used for shear transfer, connecting the inner and outer wythes to yield a 100 percent structurally composite panel. And because carbon fiber has extremely low thermal conductivity, the panels provide an even insulation profile; they do not have problems with hot spots or cold spots that can plague other wythe connection options, creating an ideal, even refrigeration essential to keeping products fresh. The added insulation value can lead to performance up to R-37, depending on thickness.

CarbonCast panels can be considered as an alternative to conventional precast, tilt-up or masonry construction. In addition, CarbonCast technology can also be used in architectural panels, double tees and a variety of multi-family residential uses.

The CarbonCast panels were fabricated and installed by AltusGroup founding member Metromont Corporation.



Quick Facts

Project: Budweiser Distribution Center

Location: Greenville, S.C.

Footprint: 138,000 sq. ft.

Type of CarbonCast: Insulated Wall Panels

CarbonCast surface area: 124,500 sq. ft.

Architectural Firm: AIA – Roebuck Builders, Roebuck, S.C.

Lead GC/CM Firm: Roebuck Builders, Roebuck, S.C.

Precast Company: Metromont Corporation, Greenville, S.C.

About Altus Group

The first-ever national partnership of precast companies, AltusGroup was founded to develop, manufacture and market precast innovations such as the breakthrough CarbonCast™ line of products. With more than 20 structural and architectural locations in the United States, AltusGroup companies have an unparalleled national network of manufacturing plants, technical staff and sales personnel to ensure architects, engineers and contractors that they will get the help they need—and the quality and performance they expect—when they select C-GRID reinforced CarbonCast products.

(866) GO-ALTUS
www.altusprecast.com