Extruded Aluminum Posts Winning Finish For Churchill Downs $121 Million Renovation

Major Reconstruction Positions Kentucky Derby Home As Premier International Racing Venue

Churchill Downs, international horse racing’s gracious Louisville, Kentucky home to the "most famous two minutes in sports"—The Kentucky Derby—is undergoing the most sweeping and significant capital project in its history, since its majestic Twin Spires were first erected in 1895.
Extruded aluminum framing for the expansive storefront and curtain wall systems visually spotlights the majestic design of the newly-constructed entryway and clubhouse complex. A dazzling extruded aluminum 26-foot diameter octagonal skylight with white translucent glass is the focal point of Gate 17’s 45-foot high entry rotunda, suspending a winged horse sculpture, which will greet more than 150,000 racing fans this spring. The six-story clubhouse will sport 77 luxury suites with stately terraces in an expanse of more than two thousand linear feet of eight-foot high storefront—all with thousands of square feet of extruded aluminum doors and windows.

Churchill Downs management’s vision and goal for the project is twofold: to preserve the historic integrity of the Twin Spires area, which is on the National Registry of Historic Places; while at the same time, creating an internationally-renowned and competitive state-of-the-art facility for its flagship race-track that surpasses any venue in racing history, according to John Asher, V.P. of Racing Communications.

“The public has a strong emotional bond with Churchill Downs and its traditions,” Asher asserts. “We want to preserve, protect and grow, so that the Kentucky Derby will continue to be a truly great event in American sports, and in the world. We expect our racing fans and audience base will continue to grow with us.”

Phase I of the renovation, completed in September of 2003, encompasses a $26 million construction project involving three additional floors of Churchill’s Jockey Club, perched above the existing grandstand space and housing 62 newly-elevated suites, with extruded aluminum windows and doors overlooking the track.

The $95 million Phase II renovation is well under way, involving the demolition and complete rebuilding of a large section of the clubhouse, which began in July of 2003, and is scheduled for completion in April of 2005. The new structure expands Churchill Downs capacity to a total of 1.4 million square feet, with 400,000 square feet already completed,
600,000 square feet of new structure and renovation replacing existing space, and adding another 400,000 square feet of new space to the complex. In addition to hosting 150,000 racing fans on Derby Day, and its regular racing season, Churchill Downs becomes a year-round facility, offering meeting space for conventions, weddings, corporate and special events, serving as the premier tourist attraction in the Louisville, Kentucky area.

The first three floors of renovated Jockey Club suites will be open for the “130th Run for the Roses” at this year’s Kentucky Derby on May 1. Design planning for phases one and two pays homage to the original architectural themes of 1895, showcasing the palladium/Greek look of columns and arched windows.

Rob Diamond, senior vice president and lead architect/project manager with Luckett & Farley Architects & Engineers, of Louisville, Kentucky, highlights the architect firm’s history with Churchill Downs. “The original Twin Spires structure was designed in 1895 by our predecessor, D.X. Murphy & Sons,” he explains. “As direct descendants, Luckett & Farley builds upon their legacy, bringing unique historical perspective and continuity to project design and planning.”

The clubhouse design in particular brings the historic connection to life. Aluminum extrusions play a significant role in forming the framework for the window and door curtain wall systems for the suites and banquet halls on the three floors facing the racetrack. The aluminum extrusions, fabricated in a bone-white Kynar® painted finish, were an ideal fit for retaining the visual signature of the structures, while offering economy, longevity, and low maintenance for the new clubhouse and entryway.

“The new clubhouse, with its 100,000 square foot ground floor reflects the character of the original structure by keeping it an open-air concourse,” explains Diamond. “We used the original brick pavers, and retained the profile of the grandstand seating. For the exterior, the columns, brick work, fluting, and cornice detailing were done in light, soft colors of white and cream, with light green glass framed by white extruded aluminum store front
facing the inside, and clear glass facing the track side. It serves as a subtle backdrop to the Jockey Club’s dark roof, and the green and white of the Twin Spires. The new structure respects Churchill Downs’ history, without overshadowing its most historic and dominant elements.”

The new clubhouse terraces maintain the same concept and character as the balconies of old. Asher points out, “The fourth, fifth and sixth floors are stepped away from the spires, to keep the panoramic view of the Twin Spires intact. The terraces were created to look directly out over the track, allowing racing fans to dine, socialize and enjoy the outdoor atmosphere from the upper clubhouse floors, moving from indoors to outside with ease.”

Diamond emphasizes how seamlessly extruded aluminum expansion joints bring existing and new floors and ceilings together, weaving the buildings into one spectacular complex. He notes, “We selected clear anodized aluminum extrusions for this crucial aspect of construction, primarily for their durability and low maintenance.”

The rotunda forms the exciting new main entrance known as Gate 17, featuring extruded aluminum storefront and curtain wall systems enclosing glass doors and windows 30 feet high, including the rotunda’s magnificent skylight. The 15-foot high skylight, weighing in at nearly 3,000 pounds, took two 60-foot cranes and lots of manpower to hoist the prefab unit into position. Rotunda windows feature the same light evergreen glass as terrace windows facing the inner concourse. The skin of the rotunda is a mixture of flat brick, rock face and synthetic stucco, with manufactured block on the low areas in a paprika color, for easy cleaning and maintenance.

Kentucky Mirror and Plate Glass Company of Louisville, is the supplier for these custom-fabricated extrusions. The large, custom pre-fabricated skylight was extruded by Skywall, of Terrell Texas. The rotunda’s skylight was designed for 1,500 pounds of downward force to support its new equine sculpture. YKK AP America, Inc. is extruding and painting about 12.5 metric tons of 24-foot length window and door extrusions for the curtain wall sys-
tem, featuring arched window elements, some pre-fabricated, and some shaped in place. Manufacturer C.R. Lawrence also supplies aluminum extrusion framing for serving and cashier/ticket windows.

Though not fully complete, the first three floors of the new clubhouse will be open for “the sport of kings,” horse racing’s cherished Kentucky Derby, as well as the Kentucky Oaks race the day before. The contracting firm of Sullivan & Cozart has teams working double shifts to make sure all is ready.

The 130th Kentucky Derby carries on the tradition of the world’s top jockeys racing three-year-old thoroughbreds on the 1-1/4 mile dirt track, just as venerable Churchill Downs does with its newly-renovated clubhouse and famous Gate 17 entry, honoring racing contenders and fans alike, thanks in great part to the winning strength, durability, economy, and beauty of aluminum extrusions!

For more information on Aluminum Extrusions, contact the Aluminum Extruders Council: 847.526.2010; Fax: 847.526-3993; email: mail@aec.org; http://www.aec.org © 2004, Aluminum Extruders Council.

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