

INTERNATIONAL CATEGORY WINNER

THE KAITIF SKATEPARK

Artisan Skateparks - Shotcrete Contractor

THE KAITIF SKATEPARK - CHRIST CHURCH, BARBADOS

This was a unique project in an area of the world that has seen very little shotcrete in its rich history of concrete and masonry structural construction. Shotcrete was the key ingredient to the success of the project. Shotcrete easily accommodated the complexity of the skatepark design and features. The team worked closely with the local concrete supplier to craft a concrete mixture design that would provide a pumpable mix meeting the engineering specifications while allowing the finishers to provide a steel trowel finish. The shotcrete team selected for the project demonstrated their quality of work in previous international projects including one in Sweden where working with the local suppliers and their naturally available materials to craft these mixture designs proved essential to a quality final product.

The shotcrete portions of the skatepark were placed in approximately 12 to 16 cubic meter loads from ready-mix delivery truck. A newly purchased and imported concrete pump was used for the wet-mix shotcrete placement along with a 210 CFM air compressor. Nozzling was accomplished with ACI-certified shotcrete nozzlemen. After shotcrete placement of the fresh concrete, the exposed surfaces were then shaped and floated by hand. These complex structures take a great deal of proven experience to complete. Final finish work was completed by hand troweling the surfaces with 10 in. steel trowels.

Quality shotcrete placement remains the single most important component of a successful concrete skatepark construction project. Quality shotcrete doesn't happen overnight, but requires a quality concrete mixture, well-maintained and adequately sized equipment, placement techniques that ensure high velocity impact and consolidation, experienced finishers, curing and protection of the young concrete.

To properly place consolidated concrete into minimal formwork while following major changes in plane and topography is more than a skill...it is an art. The ability to stop and start wherever deemed best is invaluable to efficient, quality skatepark construction. This project possessed features with complex radii with changing transitions and abundant elevation changes throughout the design. The design also incorporated a standalone bowl that was capped with an imported pool coping over a tile mosaic of the Barbadian flag. This first sanctioned concrete skatepark in all of the southern Caribbean proudly illustrates the value of properly executed shotcrete placement and finishing.

