Holmenkollen National Arena Ski Jump - Oslo, Norway
Project Spotlight: March 2011

PROJECT: Holmenkollen National Arena Ski Jump
Oslo, Norway

ARCHITECT: Julien de Smedt Architects
Copenhagen, Denmark

TILE CONTRACTOR: Bad & Flis AS
Oslo, Norway

LATICRETE SUPPLIER: LATICRETE Nordic AS
Oslo, Norway

TILE SUPPLIERS:
Vitra - Istanbul, Turkey
Villeroy & Boch - Merzig, Germany
Grespor - Andia, Portugal
By Eric Carson

For the average recreational skier, finding yourself high in the mountains staring down from the vantage point of HS 134, K120, it wouldn’t take very long to realize that you either hopped on the wrong chair lift or, at some point, took a drastic wrong turn. At these dynamic ski flying indicators, the hope is that instead you happen to be a trained professional in a sport that sends each athlete soaring to unreal heights in an eventual effort to travel the farthest. In either case, with faith in nothing more than a pair of thin fiberglass planks strapped to each foot it would be quite normal to be very concerned with the immediate future.

At these odds, moments before hurtling down a narrow track of icy snow just prior to being ejected a good 120 meters (394’) through the air, the use of high performance LATICRETE® products to install the tiles directly beneath you in the supporting superstructure might not be the first thing on your mind. Which is probably a good thing. If all goes well, there should be plenty of time later to admire the quality of the tile work at Holmenkollen in Oslo, Norway site of the 2011 FIS World Ski Championships.

But for Julien de Smedt Architects, tile installers from Bad & Flis AS and the municipality of Oslo, LATICRETE products were the perfect fit for Holmenkollen’s goal of hosting the most eco-friendly ski championships of all time. Marketed in part as “Hvit Vinter” (White Winter), the ski climate and the environment were integrated throughout every phase in the planning and materials specification of the NOK$1.6 billion (US$300 million) Holmenkollen National Arena that lends a modern look and engineering spin on what has long been the sport’s most storied hillside.

“For LATICRETE it’s a great thing to be involved in projects like this that we can point to and clearly see our products are well-respected around the world,” said Morten Gaarud, director of LATICRETE Nordic AS. “It’s a famous site for the sport and the developers made it clear from the beginning that the goal was to be completely green. That’s another way that LATICRETE brings value to the table. We can point to several projects around the world, including more than one Olympic venue that’s been specified LATICRETE to see how our products meet even the most stringent requirements.”

Surprisingly to those outside of Norway, the capital city of Oslo has snuck up on the global scene and currently owns the title of Europe’s fastest growing city. Oslo lies in waiting at the end of a 100-kilometer (62 mile) archipelago as a city that’s on the rise and carving out its own brand as a global destination. In 2011, Oslo claimed the distinction of the “World’s Winter Capital” for the fifth time as site of the March World Skiing Championship. Since it first opened in 1892, Holmenkollen has hosted many of the most historical moments in winter sports including the politically-charged 1952 Winter Olympics that captivated a post-World War II global audience with athletes from 30 countries participating in 22 events.

The new Holmenkollen National Arena, still just eight kilometers (five miles) outside Oslo’s city center, revolves around the eight-piece concrete and steel ski jump that’s certified Hill Size 134 with a critical point of K-120, denoting the estimated minimum distance of 120 meters (394’) each jumper will fly.

Among a host of other environmental initiatives that took place for the 2011 WSC, LATICRETE Nordic AS supplied the entire system of products for the cafeteria flooring and tile work in two buildings that evolve around the superstructure. LATICRETE products were specified for the tiles in the public eatery directly below the take-off point, as well as for all the tiles in the locker rooms and bathrooms of both buildings next door. The first building houses the showers for the athletes, while the second facility is used by WSC officials to test athletes for performance enhancing substances.

The one common thread shared by all the tiles installed at Holmenkollen was the use of LATICRETE SpectraLOCK® PRO Grout†, the tile grout manufactured by LATICRETE that revolutionized the industry by providing the unrivaled performance of epoxy grout with extraordinary workability and ease of use.

In consultation with Gaarud on LATICRETE products, Bad & Flis AS, owned and operated by Bjørn
Karlsen, performed the high-level tile work in all three applications. For Bad & Flis AS, as well as the future integrity of the tile work, the wet areas benefited from another of the most innovative products ever developed by LATICRETE.

With the potential threat of moisture intrusion for the cafeteria flooring and locker rooms, LATICRETE® Hydro Ban™ was used for waterproofing and anti-fracture protection. Unlike most waterproofing membranes, LATICRETE Hydro Ban does not require the use of fabric in the field, coves or corners, and the same is also true at all metal piping penetrations and PVC plumbing fixtures. LATICRETE Hydro Ban offers dramatic reductions in time and labor hours by not requiring the tedious repetitive step of cutting and applying fabric. Most impressively, LATICRETE has engineered the waterproofing membrane with an advanced formula that allows for flood testing in just 2 hours. Easily applied with a roller, brush or trowel, the impressive list of issues that LATICRETE Hydro Ban has solved contributes in several ways to the project’s bottom line by reducing the overall cost of tiling.

“LATICRETE Hydro Ban has been a product that we’re very proud of,” said Alec Hedley, LATICRETE Regional Manager Europe. “It really is an unbelievable product and it has been immediately embraced by specification professionals as well as tile contractors. The benefits of using this product certainly are reflected in the project’s bottom line. It allows tile contractors to be more aggressive in the bidding process, and anytime a product can cut down on labor hours it’s going to make a lot of people happy.”

The application of LATICRETE Hydro Ban was completed for the cafeteria flooring just below the take-off point. For the adhesive mortar used to install 20x20cm (8" x 8") porcelain tiles from Villeroy & Boch, LATICRETE 4237 Latex Additive mixed with LATICRETE 211 Powder was selected for its superior bond strength and globally proven performance. LATICRETE 4237 Latex Additive mixed with LATICRETE 211 Powder also provides superior weather and frost resistance for fixing tile and stone inside or out, and is rated “extra-heavy” for demanding installations.

The cafeteria tiling was completed with LATICRETE SpectraLOCK® PRO Grout for its high performance, superior color uniformity and durability, bolstered by its unmatched ability to resist staining and harsh chemicals. Very easy to use, LATICRETE SpectraLOCK PRO Grout is ideal for floors and walls in wet areas or high-traffic installations, and was without question the right choice for one of Oslo’s most cherished possessions.

For the other two brand new buildings created for the event and located adjacent from the main ski jump’s superstructure, LATICRETE products were used to install all of the tiles in each building. LATICRETE materials and methods were used in the locker room and showers for the athletes in the first building, as well as for the bathrooms in the second structure, which houses officials of the WSC. The LATICRETE product system was used to install the 12.5x25cm (5" x 10") tiles from Vitra on the walls. For the floors, the tiles were manufactured by Grespor and used in a 30x30cm (12" x 12") format. For one of most visible bathrooms for visitors, Bad & Flis AS installed a full-wall penny-round mosaics application with tiles from Vitra in alternating bands of color. With the constant presence of moisture, LATICRETE Hydro Ban was used on the floors and walls, and the tiles were installed with LATICRETE 4237 Latex Additive and LATICRETE 211 Powder to produce a high-strength, flexible adhesive mortar. Like all tile at Holmenkollen, LATICRETE SpectraLOCK PRO Grout was again specified for its proven capabilities, which also made it possible for Bad & Flis AS to use just one tile grout that performs as effectively and easily in narrow wall grout joint applications as it does on floors.

For the tiles in the WSC officials building Bad & Flis AS used LATICRETE 254 Platinum for the 12.5x25cm (5" x 10") porcelain tiles from Vitra on both floors and walls. LATICRETE 254 Platinum provides unsurpassed strength and is very much respected for its performance and workability by tile contractors in the field. LATICRETE 254 Platinum helped increase productivity and produce a permanent bond. The WSC facility tile work also used LATICRETE SpectraLOCK PRO Grout as part of the environmentally friendly event promoted as “Hvit Vinter,” the most eco-conscious FIS World Ski Championship event of all time.

See Data Sheets 663.0 and 663.5 for complete product information
1 United States Patent No. 6881768 (and other Patents).