



Innovative Tile and Stone  
Installation Systems

## New Dallas Cowboys Stadium Project Spotlight: May 2010



**LOCATION:**

Dallas Cowboys Stadium  
Arlington, Texas

**ARCHITECT:**

HKS Sports & Entertainment Group  
Dallas, Texas

**TILE AND STONE CONTRACTORS:**

**Modern Tile Co.**  
Dallas, Texas

**Texas Stone & Tile**  
Carrollton, Texas

**All Commercial Floors, Inc**  
Grand Prairie, Texas

**LATICRETE DISTRIBUTORS:**

**Daltile**  
Plano, Texas

**Daltile**  
Carrollton, Texas

**BPI**  
Dallas, Texas

**TILE INSTALLATION SYSTEM:**

LATICRETE International Inc., Bethany, CT, USA



## LATICRETE Made in the USA Products at New Stadium for “America’s Team”

By Eric Carson

Architecturally specified and endorsed by professional tile and stone contractors from all four corners of the globe, LATICRETE® installation products have found another permanent address “Deep in the Heart” of Texas.

HKS Sports & Entertainment Group, a division of HKS Inc., considered quality backed by peace of mind and included LATICRETE in the materials specification at the ambitious new pro football stadium in Arlington for the Dallas Cowboys.

Provided with the opportunity to secure single-source responsibility and world-class materials backed by the LATICRETE System Warranty, HKS selected the 50-plus year manufacturer to supply the tile and stone installation materials for three primary bid packages.

“To get the warranty on the system was great,” said Kevin Taylor, lead architect for HKS on the project. “Single-source supply is always best. We’ve used LATICRETE before and the feedback has always been great. The structural engineer was happy. When that happens — I’m happy.”

LATICRETE installation products are “Made in the USA” at seven locations centered on major metropolitan areas around the country. For the Cowboys’ stadium project, the largest pro football venue ever built, many of the LATICRETE materials were manufactured in Grand Prairie, Dallas County, just six miles down the road from this spectacular new home for “America’s Team.”

The new Cowboys Stadium has the capacity to hold over 100,000 fans with three-million square feet of space, meaning a great deal of tile and stone was installed with LATICRETE products by the three tile and stone contractor firms awarded contracts.

The “luxury suites” package was handled by All Commercial Floors, also located in Grand Prairie, TX. The Dallas-based Modern Tile Company was

contracted for the “club” package, with the “back of the house” work going to Texas Stone & Tile out of Carrollton, TX.

The Cowboys’ new facility features one of the most innovative products ever developed by LATICRETE installed below all of the stone and tile floors in the numerous wet areas. LATICRETE Hydro Ban™ is a thin, load-bearing, waterproofing and anti-fracture membrane that does not require the use of fabric in the field, coves, corners or other transitions, including metal and PVC plumbing fixtures.

The fast-cure formula of LATICRETE Hydro Ban allows for flood testing in just two hours at 70°F (21°C) or higher. This short time-frame is in stark contrast to the 24 hours or longer it might take for more traditional membranes to cure.

For all of these reasons, LATICRETE Hydro Ban dramatically speeds up productivity while slashing labor costs, allowing tile and stone contractors to submit far more competitive bids. This efficiency also produces far greater profit margins, particularly on large-scale projects like pro football stadiums.

In addition, the high-end luxury and owner suites were grouted with the latest development from LATICRETE relative to cement-based technology. LATICRETE PermaColor™ Grout<sup>^</sup> offers the maximum performance available for the cement-based assembly of tile and stone surfaces. Kevlar<sup>®</sup> reinforced for superior strength, LATICRETE PermaColor Grout provides unmatched color consistency and is equipped with Microban<sup>®</sup> antimicrobial protection to inhibit the growth of stain-causing mold and mildew in the grout joint.

Mixed in one step with water, LATICRETE PermaColor Grout can be used for interior and exterior installations on both floors and walls in grout joint widths ranging from 1/16" to 1/2" (1.5 mm — 12 mm).

For the luxury suites, All Commercial Floors, led by owner Kevin Jones, was tasked with installing natural stone tiles imported from Italy in the bathrooms, hallways and kitchen areas of over 300 suites. There were a number of suites at the stadium, which were installed with Riviera Biege, Brilliant and Calacutta marble tiles, with the majority of the other suites installed with 16" x 16" Serpeggiante Ondagata limestone marble tiles. In total, All Commercial Floors installed 121,740 square feet tiles with LATICRETE® materials for the flooring.

These expansive luxury suites required a self-leveling product to provide a uniform, flat and level substrate, utilizing LATICRETE 86 LatiLevel™ to produce a smooth and durable surface. This self-leveling product is a cementitious powder mixed with water to produce a free-flowing, pumpable underlayment mortar that can be poured from 1-1/2" (38 mm) to feather-edge in one application.

The bathrooms in each suite were treated by All Commercial Floors with LATICRETE Hydro Ban™ for waterproofing and anti-fracture protection up to 1/8" (3 mm), the industry standard. LATICRETE Hydro Ban contains Microban for added protection, and can easily be roller, brush, trowel or air-sprayer applied with no special techniques.

"LATICRETE Hydro Ban speeds up the process," said Jones. "There's no doubt about it. It's certainly more economical. It's an easier, quicker application and the labor required is tremendously less. It's the right product for fast-paced projects like this."

The Italian stone for the luxury suites was installed in all three areas with a premium multipurpose adhesive offering superior bond strength. Kevlar® reinforced, LATICRETE 255 MultiMax™ features unmatched non-sag or slump performance, and is suitable for virtually any installation over any approved substrate. This three-in-1 multipurpose adhesive replaces mastic, thin-bed and medium-bed mortars on floors and walls. Jones and his team back buttered the large-format tiles and set them in a medium bed of LATICRETE 255 MultiMax.

LATICRETE SpectraLOCK® PRO Grout† could not be used in the luxury suites due to the nature of the stone, so All Commercial Floors upgraded the spec with great success after LATICRETE PermaColor™ Grout^ was launched during construction of the stadium.

"Everyone was really happy with the grout," Jones said. "The color looked great and it was very beneficial to us dealing with 1/16" or less grout joints. You don't see much grout, but what you do looks great."

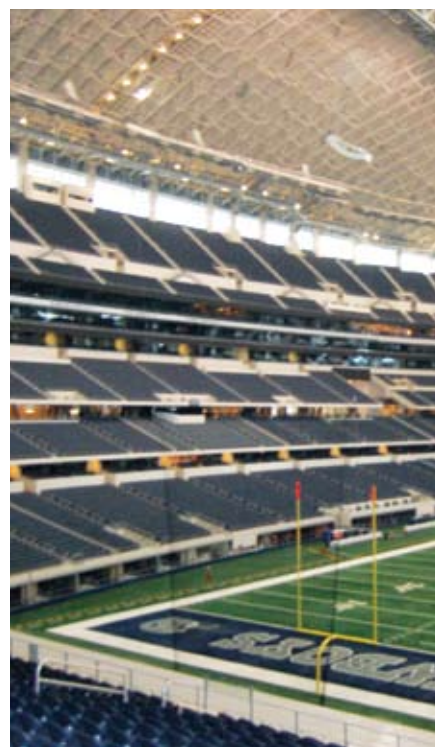
Texas Stone & Tile was awarded the stone flooring installation for the main entrance to the stadium, and all five locker rooms, both the arena league football teams, and the Dallas Cowboys Cheerleaders.

Don Fleming, project manager for Texas Stone & Tile, utilized the original LATICRETE system specified by HKS for all three packages. Besides the grout upgrade for the luxury suites, the spec included LATICRETE 1500 Sanded Grout fortified with LATICRETE 1776 Grout Enhancer.

For the venues upscale "365" entry, the main lobby open year-round to purchase tickets or visit the pro shop, Texas Stone & Tile installed 2,500 square feet of 12" x 24" Basaltina limestone as the flooring for the two-level lobby.

With a crew that swelled to 40 at its peak, Texas Stone & Tile applied LATICRETE Hydro Ban for waterproofing and anti-fracture protection, then troweled on a medium-bed of LATICRETE 255 MultiMax. Each tile was back buttered, set in place and grouted with LATICRETE 1500 Sanded Grout mixed with LATICRETE 1776 Grout Enhancer.

Texas Stone & Tile moved on to the five locker rooms, including the more spacious area for the Cowboys' players. The very same lineup of LATICRETE products was used to install 12" x 12" porcelain tile for the entrance way walls. Passed the entrance and the carpeted main room, Techno Quartz, unique stone-look tumbled porcelain, was used in a 6" x 6" format for the floors in the toilet and vanity areas. The same Techno Quartz tile in





a 3" x 3" format was used for the floors in the showers. All the walls in this section were installed with 4.5" x 4.5" Arctic White porcelain tiles from the Daltile Semi-Gloss series, with stainless steel tile accent bands.

Texas Stone & Tile applied LATICRETE® Hydro Ban™ on all the shower walls and floors, as well as the floors in the toilet and vanity areas. This innovative product allowed Fleming's crew to quickly address the many pipe penetrations and plumbing fixtures in all the locker rooms, without having to wrangle with fabric.

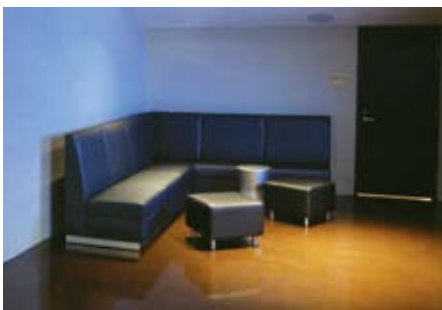
LATICRETE 255 MultiMax™<sup>^</sup> was used as the adhesive for the entire installation by Texas Stone & Tile, which was grouted with LATICRETE 1500 Sanded Grout and LATICRETE 1776 Grout Enhancer.

"LATICRETE has quality products," Fleming said. "They are some of the best around. LATICRETE Hydro Ban is not as fluid as traditional membranes of its kind and it doesn't need to be re-worked. It increases our efficiency and allows us to bid more competitively when we price with it."

Modern Tile Co., led by Clint Bunch, president, was selected for the club area package and went to work with LATICRETE products on the concession area walls and the 38 public restrooms on this level of Cowboys' stadium.

For the concession walls, Modern Tile installed 7,000 square feet of 12" x 12" glass tiles over a fiber reinforced backer board. This piece of the project highlights the versatility of LATICRETE 255 MultiMax, which was still the right product for this section with its unmatched non-sag capabilities and bond strength, even with non-porous glass tiles.

The club section stretches from one 20-yard line to the other, where Bunch and his crew completed the tile work in all public restrooms. The concrete substrate for each bathroom floor needed to be brought within tolerance, and LATICRETE 86 LatilLevel™ was poured to ensure a smooth and level base for tiling.



With the threat of water intrusion, LATICRETE Hydro Ban was applied to protect the installation, and 12" x 12" porcelain field tiles were set in a medium bed with LATICRETE 255 MultiMax.

For the walls, 12" x 12" porcelain tiles were installed with 1" x 2" glass and stainless steel tiles used as feature straps near eye-level.

"It would have been extremely difficult for a standard thin-set to work in that area," said Bunch. "I've been doing this for 35 years and I think it was the right system for the job."

The walls and floors in each common restroom on the club level at the new Dallas Cowboys stadium were grouted with the same LATICRETE grout system specified by HKS back in 2006 when this project began.

The Dallas Cowboys joined professional football in 1960, four years after LATICRETE began marketing entirely new materials and methods for the installation of tile and stone. The long history of both organizations has been marked with great success, realized through the development of winning formulas that have allowed each to endure.

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<sup>^</sup> United States Patent No. 6784229 B2 (and other Patents).

\* United States Patent No. 688768 (and other Patents).

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