

Metropolitan Miami 2 Relies on STRUX® 90/40 Macro Fibers

A towering opportunity for innovative concrete construction

Project	Metropolitan Miami 2
Owner	MDM Development and O'Neil Group
Contractor	Baker Concrete Construction, Fort Lauderdale, FL
Ready Mix Supplier	CEMEX USA, Miami, FL
GCP Solutions	STRUX® 90/40 macro fibers



Project

A sky high construction project

Located in the heart of bustling Miami, Florida, the Metropolitan Miami 2 development includes a 47-story tower with 700,000 square feet of office space linked to a 22-story hotel. The tapered towers rise from a 14-story podium that includes office and hotel lobbies, a ballroom, meeting space, retail shops, and a restaurant and lounge. The project also includes 29 floors of composite metal decks that were specified to be constructed with welded wire mesh.

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Exceeding performance of welded wire mesh

While welded wire mesh is a traditional construction technique that adds durability, using it is also time consuming. With 29 floors to cover and a total of one day per floor to weld down wire mesh, a solution that could cut down on time while providing the same durability and performance was needed. Additionally, wire mesh represents a trip hazard, and prevents workers from getting a foothold on the edge of a building. Working with technical services experts from CEMEX and GCP, representatives from Baker Concrete Construction determined that STRUX®90/40 synthetic macro fiber reinforcement was the best option from a time, safety, and budget standpoint.

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Leveraging STRUX® macro fibers for maximum performance

Using STRUX®90/40 instead of welded wire mesh eliminated mesh trip hazards, storage concerns, costly crane time, materials movement, and the many hours required to place the mesh. It was a complete success. Baker Concrete Construction pumped the STRUX®mixture up 29 floors, representing a 640-foot vertical rise, without any issues.

"We were able to show Baker Concrete a seven-inch water slump to achieve the consistency and pumpability they were looking for," said Albert Romanach, CEMEX's area manager of Technical Services. "We also showed them that with the type and high quality of the fibers we were using from GCP would achieve the quality finish they wanted."

The use of STRUX®macro fibers immediately eliminated the safety hazards inherent with the use of welded wire mesh, while delivering improvements in both cost, speed, and safety. Baker Concrete Construction was able to save the cost of the wire itself, plus the cost of shipping, hoisting, and installation.

Lastly, the project was able to save an immense amount of time. "We saved 38 days on the job," said Hans Rowland, Project Manager at Baker Concrete Construction. "It would have taken one day to install the welded wire mesh for each of the 38 pours. That adds up to real dollars saved and a value add for our customers."

By switching from welded wire mesh to STRUX®90/40, the designers of the Metropolitan Miami project saved time and money while achieving a product with superior performance.

BLUE360™ Product Performance Advantage.

Because every project, large or small, deserves the best level of protection.

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