



WellBAC® Cushion Backing: A Game-Changing Feature Standard

How a catastrophic plant fire ushered in a new era of flooring innovation for Milliken

In the early 1990s, Milliken carpet tiles could be seen in action across domestic airports, including the William B. Hartsfield Atlanta International Airport. The Hartsfield Atlanta International Airport, now known as the **Hartsfield-Jackson International Airport**, was preparing to be the gateway for the 1996 Olympic Games, as Atlanta was the host city. The airport was undergoing substantial renovations to accommodate the influx of athletes and visitors—which tallied more than 2 million visitors by the end of the games^[1].

Airport officials observed first-hand that its Milliken carpet tile, which incorporated a proprietary cushion backing as a unique feature, had a longer usable life than comparable hardback carpet tiles. Knowing that flooring appearance would enhance travelers' initial experience of the city, the airport was eager to source Milliken carpet tiles to support terminal and gateway renovation projects.

A huge order for the Milliken team—and a significant opportunity to support the U.S.-hosted games with an American-made product—the project was almost derailed entirely one day in January 1995. The Live Oak Plant, Milliken's primary flooring manufacturing facility at the time, was engulfed by a building fire. While, thankfully, this accident did not injure any Milliken associates, the Live Oak Plant fire was devastating. Producing this sizable order with the specified add-on cushion backing would have stretch capacity constraints in any circumstance and seemed to be nearly impossible now.

Milliken

WellBAC® CUSHION



THE SOLUTION

The Live Oak Plant rebuilding began in the spring of 1995 and the first production run occurred August 1, 1995. With the production lines in place, Milliken could launch its cushion-backing system fully across its carpet tile portfolio at the beginning of 1996.

The **WellBAC® cushion-back system** was a multi-layer cushion backing incorporating comfort and wear layers directly into the carpet tile. WellBAC was compatible with Milliken's proprietary PrintWorks technology, which allowed its Millitron carpet printing machinery to create vivid colors, crisp patterns, and luxurious designs on the surface of the tiles. Underneath, more than five additional layers created a comprehensive, open-cell solution.

WellBAC was the foundation of Milliken carpet tiles and offered enhanced stability and less rippling. It was easy to handle and trim when laying the tile, and the engineered backing condensed prep time and costs significantly because it could be installed directly over old adhesives. WellBAC did not react to residual floor adhesive, and installers rarely needed to scarify or seal the subfloor. In addition, WellBAC's backing curtailed any telegraphing due to poor subfloor conditions.

With the right manufacturing footprint in place, Milliken fulfilled the Hartsfield-Jackson International Airport project with WellBAC included—just in time for the 1996 Olympics. Since then, Milliken's carpet tiles with WellBAC cushion have come to define performance-driven flooring solutions.

THE CHALLENGE

"How would you rebuild this plant?"

That exact question was posed to the Live Oak Plant team as plans were drawn up to rebuild after the fire. The extensive damage from the fire meant the entire plant would be rebuilt with very little time to waste. New and existing orders had to be filled, and the Hartsfield-Jackson International Airport installation was looming on the horizon.

However, a complete plant overhaul offered a chance to ask "what if?" during the rebuilding process. Airport use cases showed that cushion backing could significantly increase the wearability and longevity of carpet tiles, among other performance benefits. What if Milliken's cushion-backing system could be a standard feature of the company's carpet tile portfolio? The old Live Oak Plant did not have the mechanical infrastructure to support an ask like that; however, as new plans were drawn, the new plant could be built to accommodate that feature.



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There were so many customers affected by the fire, but this one in particular was extra sensitive due to the high-profile nature of the project in general. This carpet order was a critical component of the airport refresh ahead of the Olympics. We were diligent in our rebuilding efforts, and true to his word, Mr. Milliken had the Live Oak Plant back up and running in six months. In late August of 1995, we were actually printing the carpeting for this project—even if we only had three walls and a roof on the facility at the time!”

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Tammy Harris

Senior Manager, Design Services, Milliken's Flooring Business

Milliken

THE RESULTS

Milliken's work with the Hartsfield-Jackson International Airport made a compelling use case for incorporating WellBAC as a standard feature in the 1990s, and more than 30 years later, WellBAC continues to be an industry-defining differentiator.

The WellBAC system draws on Milliken's materials science expertise to engineer a wide range of benefits directly into the tile. No matter the collection, colorway, or aesthetic, WellBAC is supporting the performance and functionality of Milliken carpet tile with long-term benefits like:

- Alleviating muscle strain by as much as 24% compared to hardback carpet—a feature many sit-to-stand workplaces and standing environments leverage each day.
- **Reducing in-room and through-floor noise by up to 50%** compared to other flooring.
- **Supporting moisture management programs** with an open-cell backing structure that allows the floor to breathe and moisture to evaporate.
- Surpassing wearability of hardback carpet by up to 50%, thanks to its impact-absorbing open-cell structure.

WellBAC has evolved with the times, too. As sustainability considerations rose to the forefront of the architecture and design world, WellBAC plays an instrumental role in creating healthier, more mindful spaces:

- The entire cushion system is **PVC-free and third-party verified free from Red List materials.**
- All Milliken WellBAC cushion carpet tiles are **Cradle to Cradle certified.** Milliken's global flooring portfolio achieved a silver rating across Cradle to Cradle's five sustainability performance categories.
- With extended wearability, WellBAC helps extend the usable life of carpet tiles beyond expected. In some cases, Milliken carpet can be reinstalled in new projects upon removal from the initial installation site, thanks to **Milliken's N/XT Life circularity program.**

Taking an engineered solution from a value-add to a standard feature elevated Milliken carpet tiles for the better. More than 30 years ago, customers like the Hartsfield-Jackson International Airport leveraged Milliken carpet tiles to address critical performance needs, and since then, WellBAC continues to provide game-changing performance with sustainable benefits in mind.



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