

Extreme Heat Construction

CASE STUDY

CHARLES TAYLOR SUPPORTS MIDWESTERN UNIVERSITY'S STUDENT HOUSING EXPANSION

To meet the growing demand for student housing at Midwestern University's Glendale, Arizona campus, the university launched the Student Housing Phase 6 project. Recognized as a trusted partner, Charles Taylor was selected to ensure that the construction meets the highest standards of structural integrity and energy efficiency.

Challenge

Arizona's intense summer heat presents significant challenges for construction, especially during the peak summer months. Extreme heat can lead to a variety of issues, including accelerated concrete curing, and increased stress on critical components within the envelope of the building, potentially compromising the integrity of the buildings.



This photo (left) was taken at 1:30 AM at Midwestern University in Glendale, Arizona. Despite 90 degree temperatures with intermittent rain, the team successfully managed the pour, keeping the student housing project on track and ensuring both quality and efficiency in the middle of summer. Completed student housing building (right).

Solution

Charles Taylor conducted comprehensive inspections of the building envelope at all stages to ensure components like the vapor barrier met installation standards. By adhering to the American Concrete Institute's (ACI) best practices for hot weather, the team strategically scheduled construction activities during cooler nighttime hours to mitigate the effects of extreme heat. This approach ensured that construction processes occurred under optimal conditions, contributing to the quality and durability of the structures.



Charles Taylor's involvement in the Student Housing project underscores the importance of meticulous planning and execution when facing extreme environmental conditions. By adhering to established guidelines and leveraging past experience, the new buildings not only meet stringent energy compliance standards but also contribute to a more sustainable campus for Midwestern University.

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