



Data Center Solution

A Massive Structural Excellence Project in Progress

Dubai, United Arab Emirates

Dubai, UAE	3,35,000 Sq. Ft.	U-Flex Extreme	Mission-Critical Data Center Infrastructure	Successfully evaluated against a leading US-based structural ceiling system
Location	Covered Ceiling Area	Product	Application	Benchmark

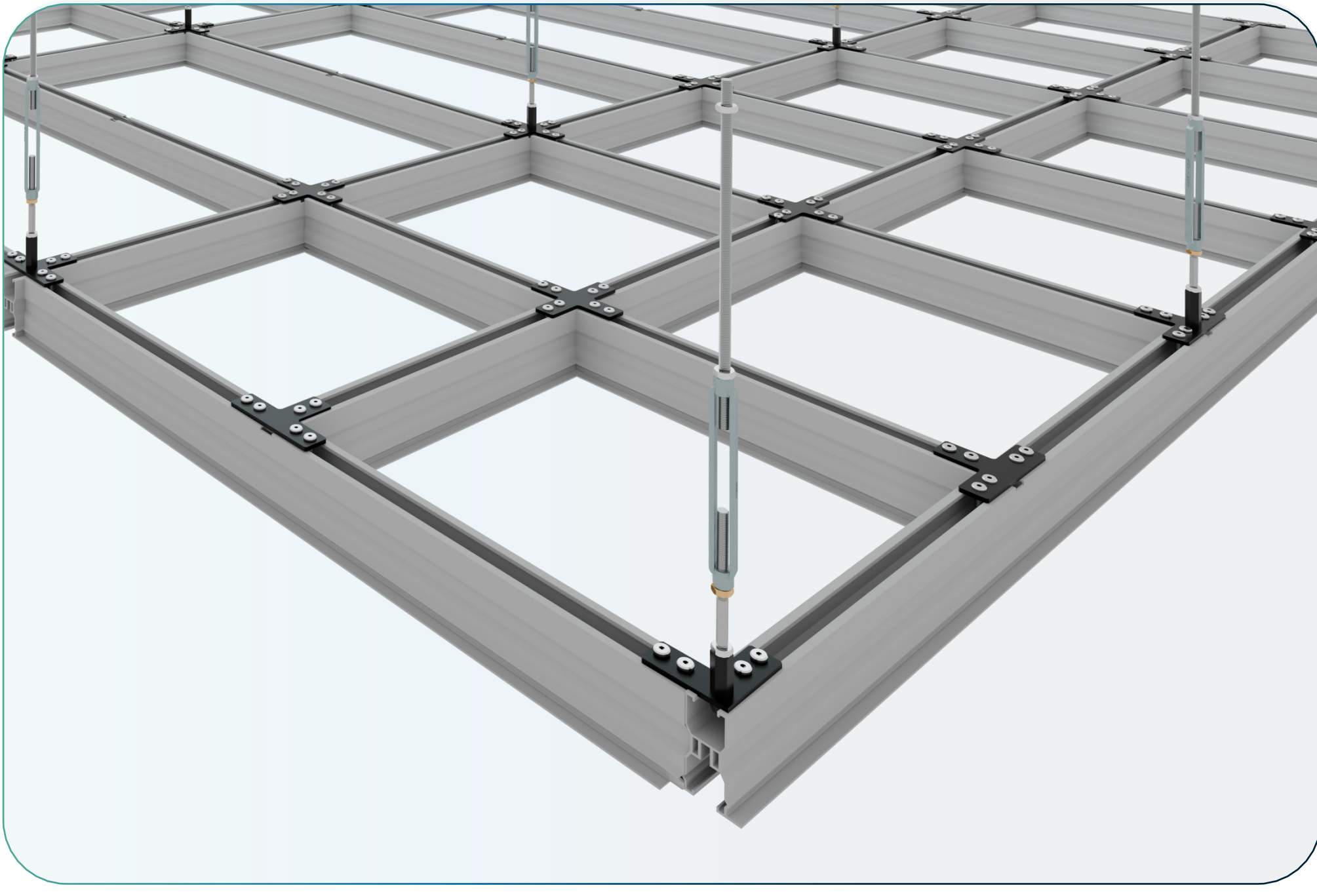
PROJECT SPECIFICATIONS

Location	Dubai, UAE
Product	U-Flex Extreme
Area Covered	335,000 sq. ft.
Facility Type	Mission-Critical Data Center
Validation	Dubai Elements Lab (Certified)
Infrastructure Classification	High-Performance Data Center Infrastructure
Competing Solution	Leading US-based Structural Ceiling System

PROJECT OVERVIEW

U-Flex deployed its **Engineered Structural Ceiling System** across a 335,000 sq. ft. mission-critical data center in Dubai, delivering a **future-ready data center infrastructure** designed to support continuous operations and evolving technology requirements.

Selected through a rigorous technical evaluation against a globally recognised US-based competitor, **U-Flex Extreme** demonstrated superior performance as a **Structural Ceiling System for Data Centers**, meeting demanding structural, operational and compliance requirements while providing a dependable foundation for **mission-critical infrastructure**.

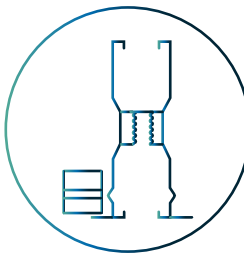
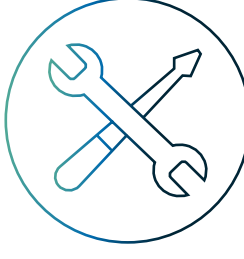
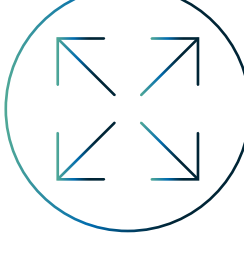


THE CHALLENGES

 Structural Load Requirements Supporting extensive HVAC systems, cable trays and equipment demanded a high load structural system capable of maintaining long-term structural integrity.	 Tight Project Timeline A fast-track construction schedule required rapid deployment without compromising engineering quality or installation consistency.	 Local Certification The project required independent local validation, with certified testing conducted within Dubai instead of relying on overseas reports.
 Scale & Consistency Delivering uniform performance across 335,000 sq. ft. required a highly engineered load-bearing ceiling system with exceptional dimensional accuracy.	 Environmental Demands The system needed to withstand thermal cycling, humidity and continuous operational loading expected in mission-critical environments.	 Competitive Pressure Performance was evaluated directly against an established global structural ceiling manufacturer across multiple technical parameters.

THE SOLUTION

U-Flex delivered a project-specific **Heavy-Duty Structural Ceiling System** engineered for data center environments, combining structural performance, modular flexibility and seamless integration with building services.

 U-Flex Extreme System An Engineered Structural Ceiling System designed to provide exceptional load-bearing capacity, modular grid flexibility and long-term reliability for high-performance data center infrastructure.
 Custom Engineering Structural calculations, span optimisation and grid configurations were specifically engineered to comply with Dubai building codes, international engineering standards and global data center standards.
 Integrated MEP Support The ceiling grid functions as an efficient MEP Load Support System, supporting mechanical, electrical and plumbing services while providing a flexible Equipment Support Ceiling Grid and organised Overhead Plenum Infrastructure.
 Modular Scalability The modular system enables future expansion, infrastructure upgrades and service reconfiguration without compromising structural continuity, making it ideal for future-ready data center infrastructure.
 Independent Certification Critical performance parameters were independently validated by Dubai Elements accredited laboratory, confirming compliance with regional requirements and reinforcing confidence in a locally certified structural solution.

RESULTS & KEY OUTCOMES

- Successfully deployed across **335,000 sq. ft.** with consistent structural performance.
- Outperformed a leading US-based structural ceiling system across key technical parameters.
- Independently certified by Dubai Elements accredited laboratory.
- Delivered within the planned construction schedule.
- Achieved compliance with local regulations and **global data center standards**.
- Maintained exceptional structural integrity and installation quality throughout the project.
- Delivered a modular, scalable and **future-ready structural ceiling system** for evolving infrastructure needs.
- Established a landmark GCC reference project for **mission-critical data center infrastructure**.

CONCLUSION

This project demonstrates how rigorous local validation, advanced engineering and a purpose-built Structural Ceiling System for Data Centers can outperform established global brands. By combining a high-performance structural ceiling system, integrated MEP load support, and independently certified performance, U-Flex has set a new benchmark for mission-critical infrastructure across the Middle East.