



NEXTUP EXPERT INTERVIEW



An interview with **Mourad Aabich**, Head of Application Development Construction, Coatings & Adhesives, Covestro

Building the cities of the future

Urbanization and climate change are reshaping the construction industry. In this interview, our expert Mourad Aabich discusses how the right material choices, resilient design, and open collaboration can keep cities running smoothly, create valuable communal spaces and reduce environmental impact.

Exploring the latest trends in urban development

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Question 1:

What challenges are currently impacting urban development projects?

More than 4 billion people, about 55% of the global population, live in cities,¹ and the UN predicts this could grow to 68% by 2050.² Clearly, urban living is here to stay, and is driving high demand for new developments. Plus, people's preference for multi-use spaces means there is not only demand for homes, but also for attractive, multifunctional leisure and community spaces that help to improve quality of life.

At the same time, the number of climate change-related natural disasters has increased fivefold over the last 50 years.³ With extreme weather becoming increasingly common, architects, developers, and builders are revisiting traditional designs to help new projects stand up to ever-changing environmental conditions. Developers, architects, and project managers also have a renewed focus on creating buildings that perform well throughout their life cycle, stay operational, support quick development, and offer a strong return on investment. That's why developers are putting extra effort into preventing damage and wear, which helps reduce repairs, avoid downtime, and minimize disruptions.

Sustainability is now also a key part of procurement. Cities are asking for proof of energy efficiency and overall operational performance, with EU and UK tenders often requiring data on both embodied and operational carbon footprints. There's also a growing focus on energy storage and efficiency, which has led to the increased use of thermal energy storage (TES) tanks.

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Question 2:

What role can materials play in realizing opportunities to increase productivity and sustainability?

Improving productivity and sustainability while maintaining excellent performance is always a key focus for our customers. That's why we offer materials that can help reduce downtime and extend the lifespan of projects, as well as lowering embodied and operational carbon footprints. For example, using our [Desmodur® CQ ultra](#) range can lower the product carbon footprint of the crosslinker component by up to 33% compared to fossil-based benchmark products. Plus, both our [Desmodur®](#) and [Desmoseal®](#) lines provide a range of raw materials for waterproofing membranes, coatings, adhesives and sealant systems that are not just designed to withstand heavy use and harsh weather, but also to cope well with the high temperatures often seen in southern Europe, the Middle East, and Africa.

¹ <https://ourworldindata.org/urbanization>

² <https://www.un.org/uk/desa/68-world-population-projected-live-urban-areas-2050-says-un>

³ <https://wmo.int/about-us/world-meteorological-day/wmd-2022/rising-risks>

Minimizing downtime is also an important goal, which is why we designed our **Pasquick®** range that helps get facilities back in operation faster thanks to quick curing and turnaround times. And for district energy systems, our polyurethane and polyurea membranes enable insulation and waterproofing respectively when it comes to coatings for efficient thermal energy storage (TES) tanks, which can help optimize peak load management and reduce operational costs.

As deadlines tighten and the complexity of projects increases, construction teams are paying even more attention to application times, curing profiles under local conditions, long-term durability, and, where relevant, how their choices impact the carbon footprint of buildings. Conversations about this help us to decide together which solutions can best help to address these needs.

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Question 3:

How can industry players partner to make more livable and future-proof cities?

Creating future-ready cities will require broad industry collaboration, data sharing, standards setting, and co-innovation. Open communication among manufacturers, architects, and suppliers about requirements such as mechanical properties, layer thickness, and application methods will also be essential. This collaboration will help us to tailor solutions to meet specific needs, whether optimizing performance, enhancing durability, or reducing environmental impact.

High-profile projects also often need to demonstrate durability and ROI. Collaborative pilots and benchmarks can reduce risks and establish trusted standards, especially when regional or national standards are still developing. In the growing Middle East and North Africa region, partnering with local innovators speeds up solution development, as we learned from our work with Delta Coatings when renovating the Dubai Fountain and building the city's District One artificial lagoons.

Ultimately, open partnerships enable us to better advise clients, helping to identify products with suitable mechanical properties, and turn innovative ideas into practical specifications. These collaborations can accelerate project timelines, improve carbon tracking, and extend infrastructure longevity. In short, partnerships will be essential for creating the urban environments of the future that are both enjoyable to live in and created with long-term environmental sustainability in mind.



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As cities grow and extreme weather becomes more frequent, built-up environments must perform reliably throughout their lifespan. Selecting the right coatings and adhesives early in the design process can help keep projects on track and extend their service life.

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Key drivers in urban development



Hover over the boxes below to read more:



Interested in learning more?

Contact Mourad and our other construction and architectural experts.



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¹ Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

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