

Trosifol® SentryGlas®

Beijing Sub-Center Library, Beijing, China

The Beijing City Library stands out in this digital era, changing the way libraries are perceived and used. Conceived as more than just a library, this Beijing institution has evolved into a dynamic hub for community participation, learning, and connectivity, all within the bustling sub-center. An astounding commitment to promoting human connections is central to this architectural wonder. It's a vibrant hub where people come together, spark ideas, and build relationships.

This groundbreaking project's extraordinary glass infrastructure serves as its focal point. A remarkable feat of engineering, the library's front is made up of 276 enormous glass panels, each measuring 2.5 meters in width and 15.3 meters in height, with 138 pieces of laminated glass each section reinforced with SentryGlas Xtra® (SGX®). Each of these enormous panels weighs an incredible 11.5 tons, and their seven layers of high-performance glass add up to an impressive 133mm in thickness.

The Beijing City Library is a noteworthy example of architectural brilliance, yet its vastness and spectacle aren't the only things worth praising. As the highest self-supporting glass curtain wall structure in the world, its four uninterrupted glass walls, cleverly folded into new lines, pose a threat to conventional support systems.

Beyond mere form, the library's design philosophy is an ode to eco-friendliness. With its glass façade that brings nature indoors while presenting an elegant, modern façade, the Beijing City Library has achieved China's most prestigious environmental award, the GBEL Three Star certification. A new benchmark for ecologically conscious design, it reduces carbon in both its embodied and operational forms.

Owner: Beijing Municipal Commission of Planning and Natural Resources

Architect: Snøhetta

Façade & BMU engineer: Eckersley O'Callaghan, Meinhardt,

General contractor: China Railway Construction Engineering Group

Laminator: NorthGlass

Interlayer: SentryGlas Xtra® (SGX®) Maximum panel height: 15.3 meters

Year: 2024