Tokyo Midtown Hibiya

Tokyo, Japan

Tokyo Midtown Hibiya was built on a corner facing Hibiya Park, on the site of old business buildings named “Sanshin Building” and “Hibiya Mitsui Building”. The lower part of the new building follows the wall image of "Sanshin Building" which was highly evaluated as the Art Deco style, and its west side façade is facing to the Hibiya Park which is known as a green oasis in urban Tokyo. Thus it was needed to have harmony and continuity between the green of the park and the façade in west part of building. In the concept of Tokyo Midtown, the Tokyo Midtown Hibiya is the second project of a series of the Roppongi project. The main subject is “Getting better as times passes”. It is the opposite image from the aging. With the characteristics of each city, it is considered the realization of remarkable exterior design.

The stainless steel mullion, which extends over 11 spans to the second floor part on the west side façade (park side), is a combination of stainless steel pipes (dia. 76.3 mm) and stainless steel plates (thickness 12 mm). The frame of the glass handrail is stainless steel. The designer has given a lot of emphasis to materials including stainless steel products in detail since the master plan stage. In order to realize the design, the consideration has been repeated in the quality controls and technical proposals from an early stage.

Stainless steel plate with three large long holes is an element of the shaft joining each rod, glass frame, and glass handrail frame; its accuracy directly leads to the quality of the whole unit as it is. In order to smartly connect the mullion and the rod while maintaining the accuracy, stainless steel lost wax casting was adopted for the joint member, and the mechanism inside the pipe was devised in order to bring out the street of the rod. As machining requires precision, Kikukawa Kogyo responded by making full use of the know-how of the latest equipment, such as using a 3D cutting laser cutter at the notch of the pipe.

The low-rise section border, drainage and eaves are located in a difficult place to maintain, therefore NSS445M2, which is a ferritic stainless steel and is more corrosion-resistant than grade 316, was adopted for the material. Among them, the eaves border panel, like a glass canopy, has a round-shaped design in the horizontal direction, and a Hair Line finish is adopted, and in order to suppress the reflection of lighting, the PHL finish was adopted, so it was a product with high processing difficulty to ensure quality.

Environment: urban
Material: 304 (NSS445M2) stainless steel
Finish: 304-HL (NSS445M2-HL+PHL) (vibration) with a thickness of 2.0 mm
Manufacturer: Kikukawa Kogyo Co., Ltd. / Nisshin Steel Co., Ltd.
Architects: Nikken Sekkei Ltd.
Photographs: Kikukawa Kogyo Co., Ltd.
More information: kikukawa.com or nisshin-steel.co.jp

Discover more possibilities with stainless steel in architecture