Mokuzai Kaikan

Mokuzai Kaikan: an office building in Tokyo as a calling card for the Japanese timber trade

Mokuzai Kaikan, une agence d'architecture leader conçoit à Tokyo un immeuble de bureau qui sert de carte de visite au négoce japonais du bois

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The purpose of this project was to display the various possibilities of wood in the hope of reviving its popularity as an urban construction material.

The 7582 square meter seven-story office building employs reinforced concrete for its structural frame to resist Japanese strong earthquakes, however, timber was specified wherever possible.

We paid close attention to detail in order to establish equivalence between the scale and prominence of the principal concrete frame with that of the secondary timber elements.

As a result, concrete was cast in slender cedar framework, maintaining the scale and grain of the timber. In terms of the timber elements themselves everything that can be seen is formed in 115 x 115 mm sections of Japanese cypress.

By using a computer numerical controlled [CNC] cutting machine, a process that would traditionally rely on expert craftsmanship can now be used on larger scale projects such as this, achieving a high degree of accuracy on complicated abstract designs.

We also overcame complicated fire safety issues by providing adequate ceiling height to allow smoke to accumulate.
02 All the lumber used in this project are based on Japanese traditional dimensional system

03 The combination of timber-made eaves and concrete pillars composes reasonable sun shade
04 A view of the entrance hall

05 A view of the tea-room-style meeting room
06 A view of the corridor and the balcony of the standard floor

07 A view of the balcony
08 A view of the balcony from the workplace

09 A view of the wooden conference hall
10 A close-up view of the wooden beams of the conference hall

11 Standard Floor Plan
12 North-South Section

13 West-East Section
14 Sample of wooden parts processed by CNC cutting machine

15 A view of a cutting process using CNC cutting machine
16 A night view