

The roof structural design of Fukui Prefectural Gymnasium located in heavy snow fall region

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Abstract

This paper describes the structural design of Fukui Prefectural Gymnasium which has the 53m span length. Fukui City is located in one of the heaviest snow fall region of Japan. That's falling snow depth/ design load should be calculated as 2.0m/6,000N/m² by the Japanese Building Standards of Act. The roof structure has the arched truss beam that is not only enough stiffness, but also simple and light-weight by reducing the depth of center to 400mm.

