

## Urban Housing

REFERENCE CATEGORY  
KIND OF BUILDING



Structural and Economic Optimization of an Applied Precast Building System for the Construction of 12-Storey Residential Buildings and 22-Storey Student Residences

PROJECT NAME, LOCATION

Stubbe's Precast, Harley, Ontario, Canada

CLIENT, RESIDENCY

Engineering verification of the applied building system by Stubbe's (large panel construction) for the erection of multi-storey residential buildings with respect to analyze and evaluate possible structural and economic potentials for improvement.

PROJECT DESCRIPTION

- Structural optimization of the precast elements with regard to the geometrical shape and the used concrete and reinforcement.
- Optimization of the applied connecting systems for the used precast elements.
- Consideration of all requirements concerning the structural stability and the serviceability of the residential buildings as well as the local conditions at the construction site in Canada
- Preparation of structural calculations.
- Recommendations concerning commercial structural analysis software.

PERFORMED SERVICES