

Wood Frame Construction Code in Chile

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CORMA's Wood Technology Transfer Center CTT has developed a **Code** and a **Guide** for building up to three stories – six hundred square meters wood structured homes, with the purpose of proposing its inclusion in the Chilean General Urban and Construction Ordinance, aimed at promoting wood construction as it is done in other countries.

The project has been carried out over the past two years, led by Corporación Chilena de la Madera, CORMA with the support of and CORFO.

In this task, CORMA will request the leading role of the Instituto Nacional de Normalización (INN) (National Standards Institute) and the Housing and Urban Ministry.

The task performed by the Canadian specialists consisted in preparing a wood framed Home Construction Code proposal for individual or couplet homes not higher than three stories with not exceeding 600 square meters, which can be either assembled in the field or industrialized. A graphic guide was also prepared to be jointly used with the Code.

This means to incorporate suggestions with regards to matters such as floor structures, exit ways, fire control, acoustic insulation, roofs and chimneys. Seismic and wind resistance has also been considered, termites control and moisture management, all of them relevant variables in a wood home.

The current Chilean General Urban and Construction Ordinance considers wood construction requirements, but these are old fashioned and incomplete; the lack of an updating has prevented incorporating present technologies used around the world, that allow quality homes construction and a suitable habitability.

Founded on April 15, 1952 the Corporación Chilena de la Madera, CORMA, is the country's most important forest and wood industries entrepreneurial association. It gathers nearly three hundred professionals, entrepreneurs and Chilean forest sector companies. In CORMA, the leading pulp and paper, wood based panels; sawmilling, remanufacturing and silvicultural companies are represented.

A fundamental factor in the Canadian success has been their ability to work in a cultural diversified framework. In this task, as a matter of fact, the British Columbia Institute of Technology (BCIT) which has consulted for the Russian, Chinese, Taiwanese and Brunei Governments, in the development of construction ordinances and codes, has allowed them to extend the multiple wood construction advantages way beyond the Canadian borders. This Institute centers its endeavors in an area which is critical for our country's development: human resources education at a technical level, in an excellence and competences certification framework.

CORMA's Wood Technology Transfer Center CTT has established an alliance along these lines with BCIT, task that has been backed up with the ample support of universities, and technical formation institutes. During this time we have discovered that our similarities go beyond our coincidences in forest resources wealth.

BCIT's proposal stated the necessity of incorporating Chilean product standards and construction procedures, that was achieved by a Technical Committee in which Chilean universities, professionals, construction material suppliers and the Ministry of Housing and Urbanism participated.

The challenges that we face along with our Canadian technology partners are the formation of constructors, supervisors and workers with the ability of wood construction, along with the development of a construction code allowing the introduction of wood intensive technologies in our General Urban and Construction Ordinance, and participating the Chilean Construction Chamber (Cámara Chilena de la Construcción) and the Ministry of Housing and Urbanism. For these tasks, BCIT has put together a multicultural working group, in agreement with the well known Canadian expertise in the administration of cultural diversity.

CTT's (CORMA's Wood Technology Transfer Center) has submitted a wood construction code and an updated ordinance to the Presidency of the Republic Bicentennial Commission, with a favourable response¹. This will ensure, by 2010, the availability of professionals and technicians with reliable abilities to build, and design with wood frame construction techniques in Chile.

¹ www.chilebicentenario.cl; Engineering, Architecture and Wood
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