

By Dermot Mack

# Fast Steel Framing

## The potential of super-fast erection opens market for Power MBS

Speed of construction can be vital when building a new condominium or townhouse project, especially in these days of labour shortages, liability and a high demand for housing. So, when a company claims it can deliver a pre-engineered, pre-cut building envelope that can be put up in a matter of days and still keep insurance companies happy, it gets some attention.

That has been the experience of **Power MBS Structures Inc.**, which is providing light steel and concrete superstructures for medium-rise residential buildings of up to eight storeys.

The pre-cut steel concept has been slow to catch on the West Coast, where MBS manufacturing is based in a new Langley plant, but has proved something of a hit in Ontario, according to **Vic SEMONOV**, MBS vice-president and general manager.

An example of MBS is to be found just north of Toronto in the Parklane Condominiums at Woodbridge, an 85-unit project for Windleigh Holdings Corp. The project comprises an H-shaped 4-storey complex with brick veneer and stucco exterior walls and a built-up roof. The MBS system in the project involves wall panel assemblies incorporating **Dofasco's** 12- to 20-gauge galvanized steel. It also incorporates an open web steel joist (OWSJ) floor system.

"Power MBS offers a strong yet lightweight alternative to masonry and cast concrete construction without sacrificing strength and long-term durability," Semonov explained. "We do so at a significant saving in construction time and often with a favourable impact on the project's budget. As well, we are proven to be highly competitive with wood frame construction."

MBS may be the first to offer complete multi-family structures in a single, engineered turnkey package including design-assist, supply and install.

MBS's patented Isolation Beam involves framing a channel atop each party and corridor wall so that when the minimum 2-1/2" lift of concrete is poured for the floor topping, an



**Power MBS pre-formed system erects the Sydney condo project in Vancouver for Bastion Developments.**

POWER MBS STRUCTURES INC.

additional depth of concrete is poured over those walls to provide a fire and smoke barrier between units and between units and hallways. The MBS system meets or exceeds building code, including fire rating, in all Canadian jurisdictions. The floor system achieves a one- or two-hour fire rating by combining with the concrete topping.

While MBS can be used for single-family houses, Semonov explained the engineering, design and manufacturing economies make it most efficient in multi-family projects. Key selling points, he noted, are the reduction in on-site labour, the speed of erection and potential savings in insurance costs because of steel's inherent fire resistance. As well, the steel structure can be put up fast in virtually any weather conditions.

Completion on site — once the foundation is ready to accept the pre-cut MBS walls, floor and ceiling members — involves finishing dry-wall, insulation, siding and roofing materials.

Power MBS Structures usually supply the wall panel assemblies for exterior, corridor, and party walls using 8", 6" or 3-5/8" light steel framing. Wall panels are built to rigid tolerances on semi-automated panellizing tables designed by the company.

The distribution angle atop the walls allows the location of a joist to be moved in the field, without special engineering approval, to facilitate a minor design change or assist another trade. Overall, the MBS system offers builders the advantage of a single party supplying and installing the entire superstructure for low-rise residential projects.

"It's pretty amazing," said **GREGG LOWES**, of the B.C. Wall and Ceiling Association, who watched the MBS system in action on a Vancouver condo project. "You drive by one day and the site is vacant. Drive by a week later and the walls are up."

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