Lightweight EIFS Panels are High on Steel and Low on Environmental Impact

Lido Wall Systems Vice President Oscar Chiarotto says the exterior walls are approximately 79 mm (3.125") thinner than standard pre-cast, thanks to the pre-fabricated panels, also known as ‘Exterior Insulated acrylic stucco wall Finish Systems’ or EIFS. ""You end up gaining floor space because our panels bypass the commonly used exterior pre-cast concrete slab. Builders can put the drywall right on the back side of the panel," explains Chiarotto. The largest panel spans 2.74m x 8.23m (9' x 27'). Bailey Metal Products provided the light steel framing for the panels, using 96.4mm (.3.625") studs in 1.22mm, 1.52mm and 1.9mm (.048", .060", .075").

"The lightweight panels can be transported to the site much more easily, with less expensive equipment and the panels can be hoisted up on site with simpler equipment," says John Rice, Bailey Metal Products Manager of Product Development. "With Lido’s panel, the structural stud also forms the cavity for the interior insulation, the wiring, and the services and carries the inside finishes."

Rice adds, "Both the steel and gypsum can be removed from the panel and recycled at the end of the panel’s life."

Steel is also featured in the building’s 93m² (1,000 sq. ft.) curved roof system, installed by Vixman Construction Ltd. The curved roof panels are .61mm (.0239") thick, pre-painted galvanized steel, coloured QC16073 Dark Green in the Tradition 100 profile, manufactured by Vicwest. The roof is supported by a horizontally installed section of 76.2mm (3") deep, .61mm (.0239") thick, Z275 (G90) galvanized roof deck.

Marel Contractors installed the interior partitions and the gorgeous, 232m² (2,500 sq. ft.) carriageway ceiling, which covers a portion of the driveway adjacent to the main lobby - connecting the streets on the north and south sides of the building. "The ceiling is definitely a nice feature. It is 7.62m (25’) in the air, two lanes of traffic wide and 21.3m (70’) long," says site supervisor Martin Orbanic of Toddglen Construction. The ceiling’s supporting frame and grid pattern were fabricated using heavy gauge steel stud. The steel framing for the curved roof is custom bent 76.2mm (3") HSS.
The structural stud also forms the cavity for the interior insulation, the wiring and the services, and it carries the inside finishes.

Pre-assembled light steel panels assemblies with a Terraneo finish (dryvit) are easily transported to the site and hoisted in place with simple equipment.

South-west view. For Toronto’s 349-unit Bloor Street Neighbourhood, the exterior envelope consists of pre-assembled light steel framed panel assemblies, with an attractive Dryvit exterior, also known as “Exterior Insulated acrylic stucco wall Finish Systems” or EIFS.