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## Hollow-Core Slabs Trump Rib-And-Block Systems In Limpopo

Demand for hollow-core slabs continues to outstrip rib-and-block sales in-and-around Polokwane, and the lion's share of this construction material is being supplied to the local residential construction market by precast concrete specialist, CoreSlab.

The company manufactures these quality precast concrete elements at its state-of-the-art factory, strategically located just outside the central-business district of this rapidly growing urban node in Limpopo.

Jaco de Bruin, managing director of CoreSlab, says that this trend has gained momentum since 2008 when the company initially established its operation to supply the domestic home-building market with quality precast concrete technologies.

"We mainly started off by servicing the very high demand for rib-and-block systems in the area. However, over time, we increasingly fielded more enquiries concerning our hollow-core slab offering. More than 10 years later, hollow-core slabs have become our main product offering, complementing our extensive range of other precast concrete systems for an array of applications," De Bruin says.

Both technologies provide a more cost-effective and faster means of constructing floors and roof slabs than traditional *in-situ* construction methods.

However, unlike rib-and-block systems, the installation of the hollow-core slabs is undertaken by CoreSlab's own skilled team of experts to ensure precise installation, while the process can also be quicker and safer when outsourced to an expert in the field.

As he points out, home builders and their professional teams want peace of mind by knowing that the installation will be done correctly the first time round to ensure the timely completion of the project, as well as a high quality final structure.

With their tubular voids extending the full length of the element, hollow-core slabs are significantly lighter than a large solid concrete floor slab of equal thickness or strength. This lowers the cost of manufacture by reducing raw materials, as well as their transportation to site where they are lifted and placed, levelled and grouted to complete the floor structure.

Conversely, the installation of rib-and-block systems is more labour intensive and therefore time consuming, while additional project costs are incurred in propping, as well as the procurement of raw material, such as the concrete, required in their installation.



These systems comprise lintels and hollow

placed between the walls, and the blocks span the ribs to complete the shutter. Steel lattices are then tied into a steel mesh and other supporting structural components, before the floor is cast with concrete.

Severe workload in an increasingly competitive and volatile industry, as well as widespread skills shortages in the construction sector continue to drive the uptake of hollow-core slabs by the home-building sector.

This includes those smaller architectural and structural-engineering firms, who are increasingly specifying the construction material in the early design stages of the project.

Offering a full project-management capability, CoreSlab has assisted them in the optimal layout of the slabs and then ensured the timely delivery of high quality slabs from the factory during the construction phases.

The company then oversees the safe and efficient lifting and placement of the concrete "planks" using its own seasoned operators and riggers during the installation phases. CoreSlab's large crane fleet comprises machines with varying capacities and reaches to ensure successful installation in highly built-up areas.

These skills and capabilities have also been harnessed by large property developers and their professional teams for prominent retail, leisure and commercial projects in the province and elsewhere. Working with these professionals, hundreds of square metres of flooring have been installed in record time to assist in the timely completion of quality malls, hotels and commercial office blocks.

On residential projects, an element is installed every six minutes to swiftly complete the floor structure, allowing building teams to commence work almost immediately on the next level. CoreSlab's teams then return to drill the holes for the services and place the thin grout topping.

De Bruin believes that demand for hollow-core slabs will continue to grow. This is considering the backlog in housing in-and-around Polokwane, which has led to many new entrants in the home-building sector. Similar to their more established counterparts, they are looking for a quicker and more efficient means of building to provide them a competitive edge!

Image & Caption:

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[Caption]: Hollow-core slabs have become CoreSlab's primary offering to the booming homebuilding market in Polokwane, outstripping rip-and-block sales.