



Precast Concrete Columns

Precision-Engineered Support & Accelerated Frame Construction

Key Features

High-Load Capacity: Engineered to provide superior vertical support for multi-storey residential, commercial, and industrial structures.

Integrated Connections: Features built-in base plate assemblies or corbels for seamless integration with beams and foundations.

High-Performance Concrete: Cast using \$C40/50\$ to \$C60/75\$ grade concrete for maximum compressive strength.

Reinforcement Precision: High-tensile steel rebar cages are precisely positioned in factory molds for optimal structural safety.

Superior Surface Finish: Smooth, off-form finish eliminates the need for plastering,

Technical Specifications

Parameter	Details
Profile Shapes	Square, Rectangular, or Circular
Standard Sizes	300 mm x 300 mm up to 800mm x 800 mm
Height Range	Up to 12.0 m (Single lift or spliced for multi-storey)
Concrete Grade	\$C40/50\$ to \$C60/75\$ (High-strength)
Reinforcement	High-tensile steel rebar (Grade 500)
Fire Rating	1 to 4 hours (depending on concrete cover)
Connection Type	Bolted base, Grout sleeves, or Corbel supports

Benefits

Rapid Installation: Eliminates the need for on-site shuttering and curing time; columns can be loaded immediately after grouting.

Consistency: Factory-controlled environment ensures consistent strength and dimensional accuracy across all units.

Reduced Labor: Significantly lowers the number of on-site workers required for framing and reinforcement.

Weather Resistance: Unaffected by on-site weather conditions during the curing phase, preventing structural weaknesses.

Applications

Multi-Storey Frames: Primary structural support for apartments and office buildings.

Warehouses & Factories: Fast-track construction for large-scale industrial portals.

Parking Structures: Durable, fire-resistant support systems for heavy vehicle loads.

Infrastructure Projects: Support piers for bridges and elevated walkways.

Why Choose WEB Housing Pre-stressed Beams?

Custom Engineering: We design reinforcement and connection details based on your structural engineer's load requirements.

Quality Assurance: Every column is batch-tested for compressive strength before leaving our Kilifi factory.

Precision Fit: Our modular system ensures that beams and columns align perfectly, reducing on-site adjustments.on schedule