

# Modern **CONCRETE**

All Products



*Building your Dream ...*

[www.modern4concrete.com](http://www.modern4concrete.com)

# ABOUT US

Modern for concrete is a manufacture of a full range of precast building components including the provision of all services from conceptualization and design to installation and after sales service.

Modern for concrete was established since 2009 with the aim of leading the way in Egypt towards highly industrialized construction practices.

Modern for concrete factory is located in El-Sadat city; Industrial zone on total area (175,000) , this factory truly was born a giant, because we hired a professional staff of engineers and technicians for each department, looking after the business in all stages: Production, Quality control and Erection.

Modern for concrete has the capability to deal with the all types of projects : Housing, Office buildings, Mosques, Hospitals, Car Parking, Commercial buildings and all sorts of miscellaneous precast products using our different variety of precast concrete building systems products:-

1. Precast prestressed concrete flooring & roofing systems (hollow core slabs, single & double tee slabs).
2. Full wall frame system (load bearing walls & hollow core slabs).
3. Full structure frames (plinth foundation, columns & beams).
4. Solid and insulated cladding panels with wide range of different shapes and finishes.
5. Standard and non-standard boundary walls.
6. Miscellaneous precast concrete products (stair cases, culverts, manholes, planters, street furniture.....etc.)
7. Landscape & construction products : Curbstones, Interlock & Cement Block (Solid, Hollow & Insulated).
8. Ready Mix concrete .

## 2

## OUR MISSION

We believe that innovative, industrially produced construction solutions will further continue their breakthrough in Egypt. Together with our strong local Know-how and international back ground. MODERN for concrete will be an important contributor in this development as the country continues its rapid expansion. We focus on precast concrete construction methods as a technical support for all consultant offices in Egypt to develop our urban renaissance.



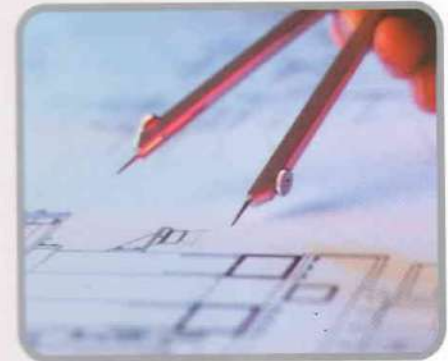
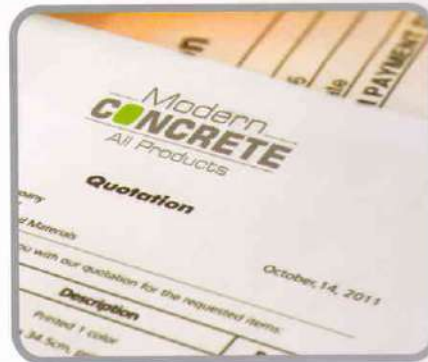
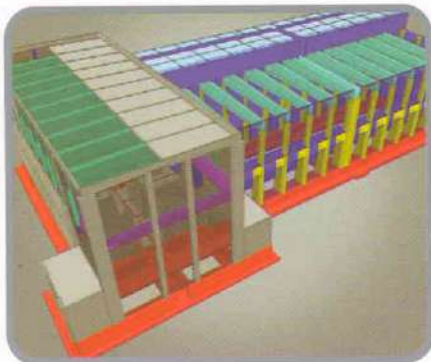


## ***OUR VISION***

Our Vision is to create a better every day life for many people in Egypt. We make this possible by offering a wide range of well-designed, functional concrete products.

3

# THE FIRM



**Conceptual Design  
& Planning**

**Estimation & Costing**

**Engineering**

# 4

Whatever your project, even you have your final design or just the preliminary idea, our professional technical staff can perform to you the most economical design of pre-cast system or composite structure (cast on site & precast elements) which using the advantages of each system to exceed your satisfaction.

After your approval of the architectural concept, we confirm our precast structural system of design and the main idea of general arrangement drawings of the project so, estimating office can decide his cost from the information of mould cost, materials, period of production & installation.





***Manufacturing I***

***Manufacturing II***

***Transportation  
& Installation***

Technical department will start their homework when the contract signed, so they will finalize the manufacturing shop drawings required to produce buildings elements under the supervision of Quality control department.

Installation & Erection of pre-cast elements at site usually required detailed scheduling, therefore, it is necessary that all site works should be coordinated with operation management of MODERN Concrete.

# OUR PRODUCTS

## Block Factory



6

### **Block, Curbstones & Inter-lock Factories:**

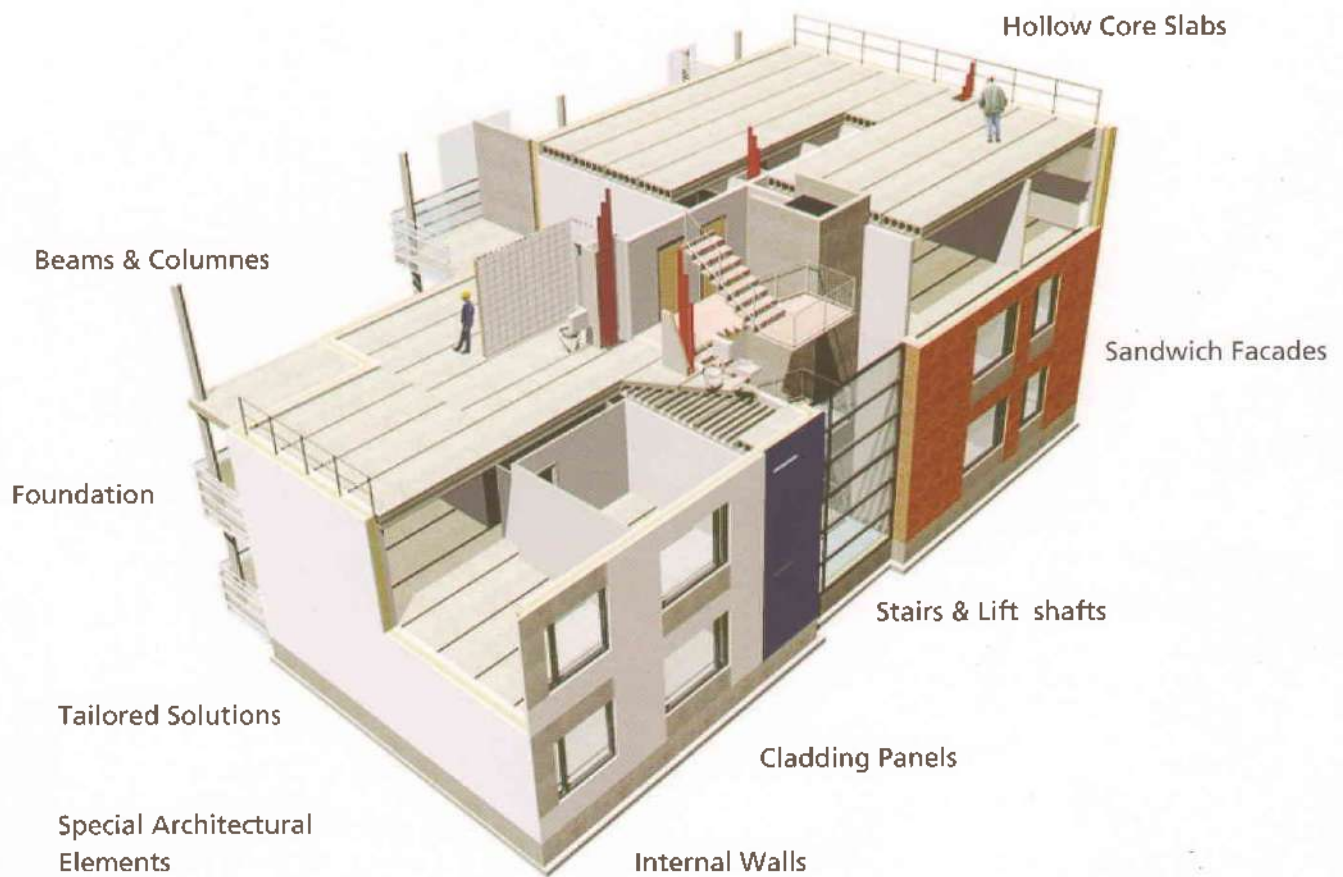
We are producing our Block, inter-lock & curbstones by the latest methods of technology on the world using an integrated production line operating at full levels automatically imported from MASA International company from Germany which is specialized on this field. In addition we have a complete system of curing chamber for all products.

Our production stages are running on precision steel moulds to produce high quality elements for all types of Block, curbstones & inter-lock, also for any other elements with different thicknesses (from 40mm up to 400 mm).

Our factories and plants are comply to achieve the requirements and technical terms & conditions of related international specifications of (ICPI – ASTM) also with Egyptian Code.



# Residential Buildings



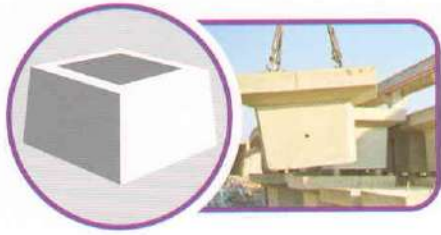
Residential buildings constitute an important activity. A construction system has been developed for villas, low-rise and high-rise apartment buildings. The total structure includes complete external walls, internal walls, hollow core slabs, stair cases & balconies if required.

Within the industry, systems for housing and apartment buildings are normally designed as load bearing panels framing. The walls support vertical loads from floors and upper structure. Central stair cases and lift shafts are constructed with precast walls also.

As a variant, vertical structure of the buildings can also be made with skeleton frames (columns, beams & hollow core or solid slabs) and cladding panels.

Floors are usually made of hollow core slabs. The latest tendency is to span the floors over the full width of the apartment. In this way one obtains not only more flexibility for the internal lay-out, but also, the possibility to modify it later without major costs.

Cladding Panels are normally sandwich or composite panels to perform the sound and thermal insulation (U-Value) with required external finish (Sandblast - washed aggregate - smooth) and internal panels may be load-bearing or solid panels.



### **Bucket Foundation:**

Precast Bucket foundations realize the site-work faster and cheaper. Indeed, cast on site buckets need rather complex molding and reinforcement, and working conditions are more unfavorable.

It may be used only in conditions of firm and level ground. Buckets sometimes have dowels and base plate is cast on site or whole unit can also be precast.



### **Columns:**

Precast columns are manufactured in a variety of sizes, shapes and lengths. The concrete surface is smooth and the edges are chamfered. Columns generally required a minimum cross-sectional dimension of 30\*30 cm up to 100\*100cm (with corbels) or more as per structural design requirements.

Columns with a maximum length up to 20m can be manufactured and erected in one piece, although a common practice is to work also with single-storey columns which both can be grouted to bucket foundations (on good soil) or holding down by base plate and bolts (on weak soil).



### **Beams:**

Precast & pre-stressed beams types:

- R-Beam: Rectangular roof or floor beams for moderate spans or composite action with floor slabs.
- L-Beam: for carrying edge floors from one side only.
- Inverted T Beam: for carrying floors both sides of middle to large spans.
- Beams: for roofs and large floor-beam spans.
- Rafters : for roof beams with sloped pans for large spans.



### **Hollow Core:**

Nominal width of hollow core pre-stressed slab units is 1200mm, inclusive of the longitudinal joint. The standard profiles have a fire resistance of 60 to 120 minutes. Our standard thicknesses: 160, 200, 265, 320, 400, 500 mm which can reach 20m spans on roofs.

Main advantage of our hollow core slabs is the smooth of finish on slab's bottom, which you can paint directly.





### **Double T Slabs (TT):**

TT floor slab units in pre-stressed concrete have a ribbed cross-section and a smooth under face. The units are mainly used for greater spans and imposed loading. Our standard maximum width = 3000mm which can be smaller (mini. = 1500mm) to meet a particular project requirements. Also, cross-section depth can be confirmed according to structural span (Standard depth including flange thickness = 40, 50,60, 70, 80, 90 & 100 cm) to produce up to 30m span long.



### **Frame Structure:**

Precast frame structure system is very suitable for buildings which need a high degree of flexibility, because of the possibility of using large spans and achieving open spaces without internal walls.

This is very important in most of buildings such as industrial buildings, shopping halls, parking structures, sporting facilities and also in large office buildings.



### **Rafter:**

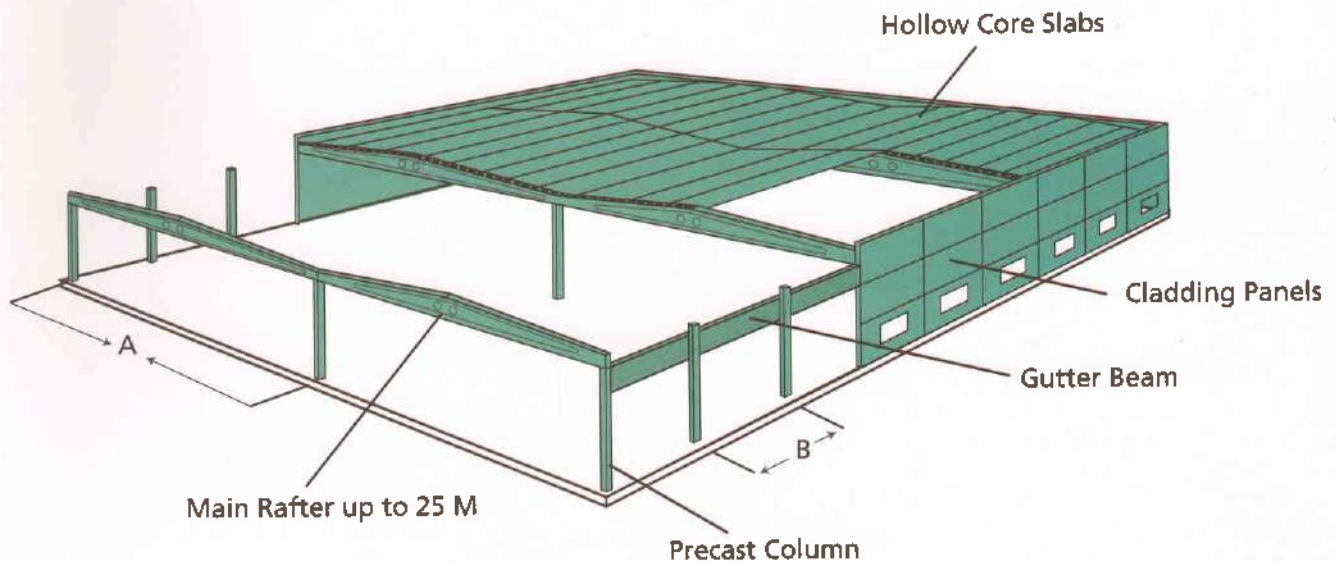
Rafters are roof beams with sloped pans for large spans. MODERN concrete have two main standardized precast rafter beams, both have a slim cross-section for span (20 -25 up to 32m). They are provided with details and inserts for connections and other specific purposes like fixings with roof slabs.



### **Stairs:**

Precast stairs are very interesting products because of the quality of finishing and cost efficiency. MODERN concrete is producing various types of stair flights or landings as per required shape, width & standard tread and risers.

# Industrial Buildings



Industrial buildings basically, constructed as single-storey structures and it may be necessary to insert intermediate floors in some parts of the building which commonly achieved by adding a partly separate beam/column assembly to carry the intermediate floor slabs.

Span A –as indicated in the figure above- will normally be between 15m and 25m. A good module for span B is 6m to 9m.

Multi-storey Buildings commonly composed of square or rectangular columns of one or more storeys in height (up to four storeys). Beams are normally rectangular, L-shaped or inverted T beams. They are single span or cantilever beams, simply supported and pin-connected to columns.

Hollow core or double T slabs are the most common type of slabs in this type of structure.



# OUR PRODUCTS

## Ready Mix



MODERN for concrete represents unlimited support to the construction activities in El-Sadat City, having the ability to pass the critical situations without annoying the customer.

With the success granted by God, we started the production of ready mix concrete since 2009.

Our factories supplied ready mix concrete for significant number of projects and works according to international specifications (ACI - ASTM).

11



# Our Scope of Work

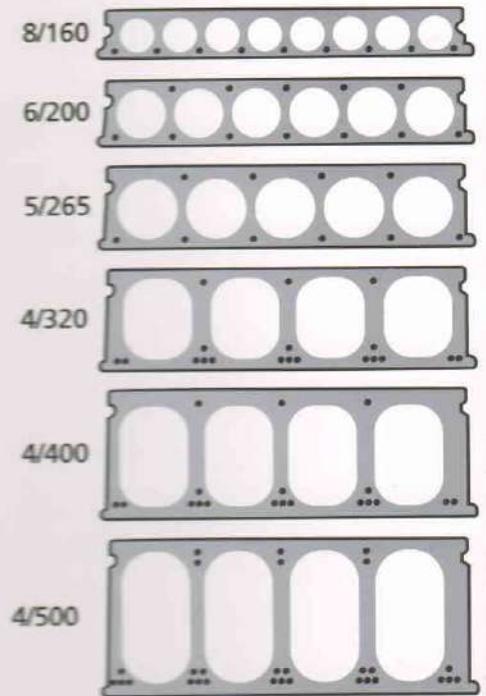
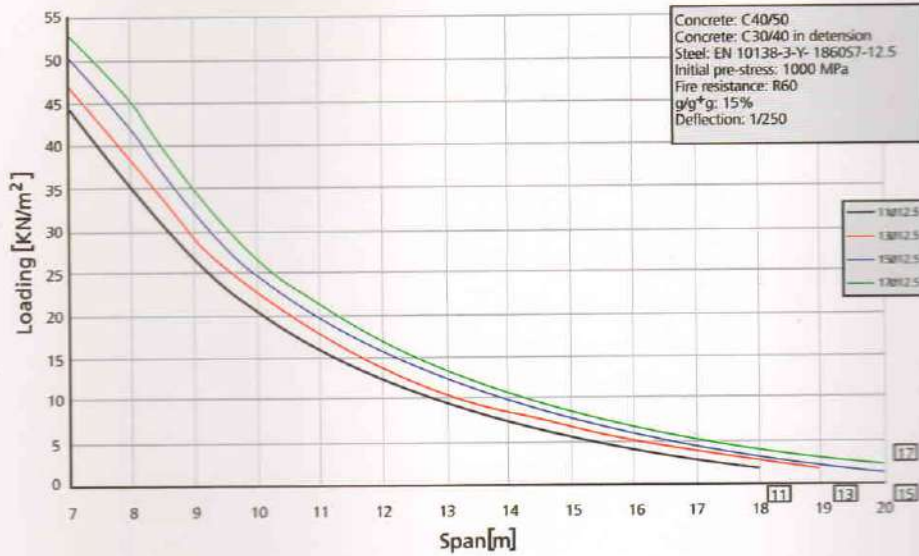




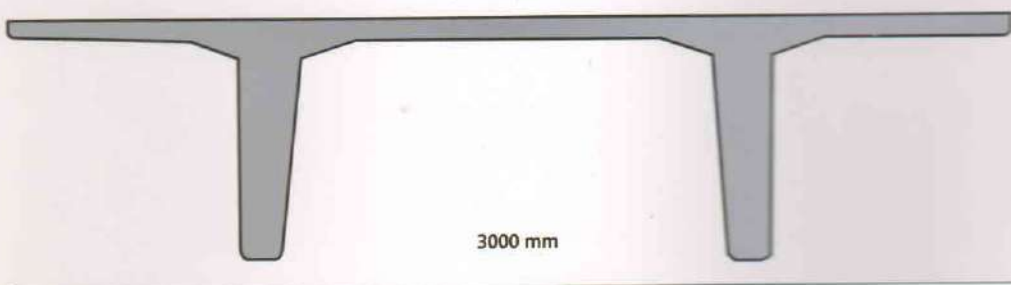
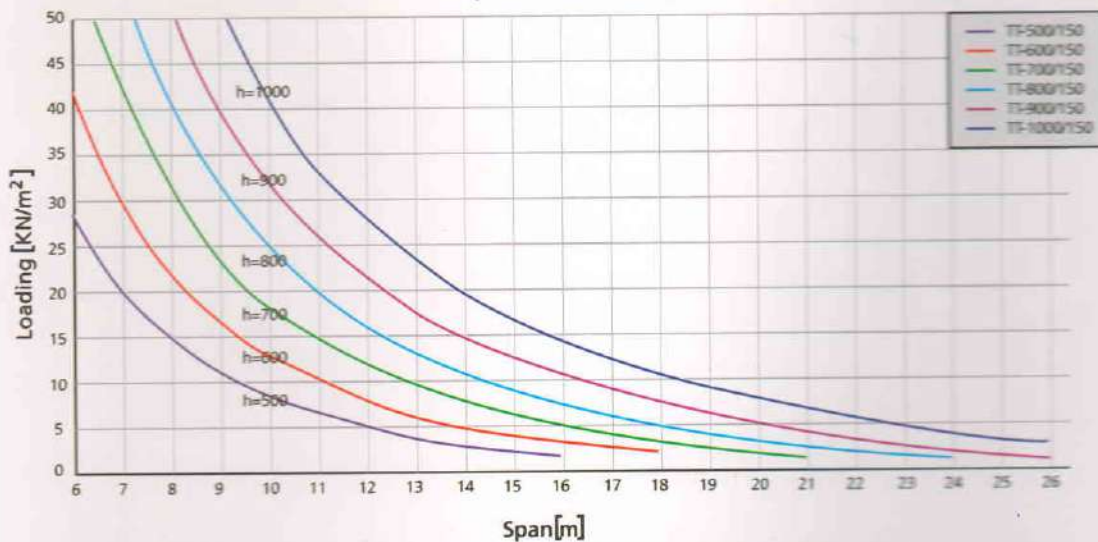


# Hollow Core & Double T Slabs

Capacity curves hce 500  
according to EC2 dwg P65346



Capacities of TT-3000/150



h= 400\* up to 1000 mm



# Our Location





**Hollow Core Slabs**



**Double T Slabs**



**Beams**



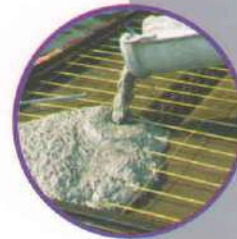
**Columnnes**



**Walls**



**Foundations**



**Ready Mix**



**Block**



**Lintel Block**



**Insulated Thermo Block**



**Kerbstone**



**Rectangular Paving Block**



**Uni Block**



**Grass Block**

**Modern**  
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All Products

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