

## “Sustainable Solutions in Concrete Technology- A Boon for Indian Constructions”

**PRECA**  <sup>TM</sup>  
PRESTRESSED CONCRETE PRODUCTS  
An ISO 9001: 2008 COMPANY

*“PRECA’s vision is, to build a sustainable business in India by bringing various proven technologies particularly in precast and pre stressed concrete elements to improve the construction methodology which would bring efficiency in construction industry”*

- Over the years the methods of building have necessarily been dictated by the availability of suitable materials and the level of technological advancement
- Certain fundamental values however remain constant, need to have a structure that stands the test of time, building materials that do not rot and have the ability to resist accidental damage such as fire. Storms etc..
- Since the beginning of time man has constantly upgraded the construction methods by using better materials and better technologies
- Buildings are now developed to sustain mild earthquakes leave alone rain and heat, infrastructure such as bridges, canals etc built to take huge loads for many many years.
- The change for the better has always been the way forward, with new technologies and innovative methods have made construction complex but yet quick and strong.
- This in turn has led to the development of structures that would stand tall for years to come.
- PRECA has been quick in realizing this need of the market and desires to bring in proven technologies into India for making phenomenal returns by servicing the construction industry be it Infrastructure or the real estate sectors.

# About Us

PRECA is engaged in the business of designing, manufacturing, supplying & erection of Precast and Prestressed Concrete Products of all ranges on turnkey execution, and providing solutions for executing various challenging structures using advanced and proven engineering technology.

## PRECA, an International JV:

PRECA is promoted by Mr. Satish Gottipati in joint venture partnership with Europe and Africa techno-commercial partners.

The Israeli managerial expertise and technical expertise are made available to the setting up of factory and for the operations of PRECA which is one of the unique advantages of this first of its kind Precast Prestressed Concrete Products Manufacturing Company in India.

# Our Turnkey Services

Preca delivers turnkey services  
from design to on-site installation

## **Enquire**

Evaluate preliminary design for the most efficient solution to suit the needs



## **Engineering and Design**

Study engineering to arrive at effective structural designs and quantities



## **Production Manufacture**

under rigorous quality standards as per schedules



## **Delivery**

Undertake on-site delivery as per erection schedule



## **Erection**

Carry out complete erection of precast elements, including grouting



# State of the Art Production Facility



- ✓ Located at Shankarpally, near Hyderabad.
- ✓ In 13 Acres of Land
- ✓ State of the Art Production Equipment Imported from Europe.
- ✓ In-House Fabrication Unit, Laboratory & Mechanized Bar Bending System
- ✓ 60,000 Square feet Built-Up Factory
- ✓ 100 % Power Backup

# Our Strength - Our Team

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## In-house Teams:

- Engineering & Design Dept.
- Project Planning Dept.
- Production Depts.
- QC Dept.
- Erection Depts.
- Maintenance Depts.
- Logistics Department.

Supported by Management Teams, Administration Teams, HRD Team, Procurement Team, Finance Team etc.

## Team Composition:

- Resident Foreign Technology Expert
- Foreign Returned Experienced Engineers
- Engineers with Masters Engineering (structural / Precast) Qualifications
- Decade plus experienced Engineering Experts
- Multi-Skilled and Multi-Qualified Professionals

# Why PRECAst



## High Quality & Durable

Precast concrete reinforces the quality of construction and extends the life span of a building. Research has proven that precast elements can ensure more than a 100 year life cycle thereby reducing the life cycle costs of projects. Factory-made products meaning rational and efficient manufacturing processes, skilled workers, repetition of actions, quality surveillance, etc.,



## Structural Efficiency

A hollow core slab offers the ideal structural section by reducing dead weight whilst providing the maximum structural efficiency with the minimum slab depth. This provides the means if longer spans there by reducing internal load bearing walls and foundation.



## Versatility of Design

Precast concrete buildings are not only functional but beautiful as well. Unlike conventional concrete developments, precast provide a structural platform which will give the architects and structural engineers greater freedom in designing virtually any layout .



## Cost Effective

With long spans, columns and beams requirements are minimized which minimize costs. With hollow core pre-stressed elements, structure weight will be reduced thus foundation requirement and costs.



## Rapid Construction

Precast concrete construction gets the job done sooner. The manufacturing of pre-stressed members and site preparation can proceed simultaneously. Early occupancy provides obvious benefits to the client.



## Conserves Energy

Pre-stressed concrete components can improve the thermal storage potential of a building. It effectively conserves energy required for heating and cooling.



# PRECAst a solution for many challenges

**Projects sizes  
have increased many folds**

Typical project sizes have increased making it impossible for conventional methods of constructions. Large scale projects need solutions which are innovative and are much faster.

**Non Availability  
of skilled labour**

The Indian real estate and infrastructure sectors have grown many folds over the past few years but the manpower in these sectors have not grown at the same pace, making alternative methods a necessity

**Cost effective solution**

PreCast model of development is much more cost effective as compared to conventional development methods

**Time is money**

Precast methods of development are much quicker than conventional method of construction. Hence payments are received much quicker not to mention saving in interest costs.

**Limited availability  
of centering materials**

Centering material have been at a shortage . More so as the number & size of projects are increasing.

**Single supplier takes many roles**

In the PreCast model of development there is a single point of contact while the conventional developments model would involve centering contractors, concrete suppliers, labour contractors etc,.

*Select Visuals  
of  
PRECAst Advantages*

# No Brick work



Past..



PRECAst..

# Less Steel



Past..



Precast..

# No Shuttering and Scaffolding



Past..



Precast..

# Safe Construction



Past..



PRECAst..

# Better Quality & Finishes



Past..



PRECAst..

# Better Site Conditions



Past..



PRECAst..



# Save Earth



# Save Energy



# Save Environment



# Human Safety



# Save Resources



# Key Applications

## Infrastructure:

Pre Cast Elements have been proven to be an effective ingredient in undertaking large scale projects .  
Some key areas have been mentioned below.



Roads



Airports



SeaPorts



Bridges



Dams



Canals



Stadium



Colleges & Hospitals

## Real Estate :

Real Estate is a strong demand generator for PreCast elements, and can be used in all forms of real estate developments.



Residential



Commercial & Retail



Hospitality



Warehouse & Industrial

# *PRECA Products*

# PRECA - Hollow Core Slab



## Function

- ✓ Available in standard width of 1200 mm and depths ranging from 150 to 300 mm.
- ✓ Ideal for all types of construction.
- ✓ Incredible speeds and high efficiency in completion of floor slabs.
- ✓ 30% lighter than conventional slabs covering long spans.
- ✓ The prestressed 300mm thick slab can span up to 16 m without intermediate beams and columns.

## PRECA Advantage

- ✓ Offers instant dry working surface and totally eliminates gangs of manpower and shuttering works at site.
- ✓ A typical 10 square metre area of building can be completed in a minute.
- ✓ Services like ducting and piping can easily be suspended on these slabs.
- ✓ Superior finish totally eliminates plastering at bottom of the slab.



# PRECA - Prestressed Beam



## Function

- ✓ Capable of spanning greater distance at required depths.
- ✓ Beams can be cast either precast or prestressed as per the design requirement.
- ✓ It covers wide spectrum with multitude of applications, e.g., Spine, Edge, Balcony, etc.
- ✓ Ideal for Commercial, Residential, Shopping malls bridges, Pedestrian bridges, etc.

## PRECA Advantage

- ✓ Reduction in size of beam and reinforcement because of higher grades of concrete.
- ✓ Factory controlled quality casting ensures Smooth finish totally eliminating plastering and shuttering works at site.

# PRECA - Precast Column



## Function

- ✓ Standard offerings are Rectangular and Circular with various finishes and sizes.
- ✓ Columns of wide variety, including lengths and shapes can also be offered according Customer requirements.

## PRECA Advantage

- ✓ Saving on cost and time as scaffolding and shuttering is eliminated.
- ✓ Production in factory controlled environment, better quality than In situ.
- ✓ Monolithic casting can be done for longer length.

# PRECA - Precast Staircase



## Function

- ✓ Most efficient and professional method of building stair cases in today's modern construction method.
- ✓ Eliminates expensive on-site scaffolding and shuttering.
- ✓ Ideal for Commercial, Residential, Shopping malls, Metro stations, etc.

## PRECA Advantage

- ✓ Unobstructed and safe access to building during construction time.
- ✓ Fast and easy to install.
- ✓ It can be utilized immediately after erection.
- ✓ Eliminates plastering and finishes.

# PRECA - Precast Wall Panel



## Function

- ✓ Wide variety of wall panels can be used in Residential, Commercial, Educational, and Office buildings.
- ✓ Can be used as Load bearing walls, internal walls, Cladding walls, Retaining walls, Lift shafts, and Boundary walls.
- ✓ Easy-to-maintain Architectural requirements in elevation.
- ✓ Wide variety of finishes can be produced according to requirement of the project.

## PRECA Advantage

- ✓ No form work is required to install and the process is faster.
- ✓ Factory controlled production helps in achieving better quality.
- ✓ Any size and shape of panels can be produced according to design requirement.
- ✓ It reduces construction time and maintenance cost.
- ✓ Services conduits can be concealed while casting as per MEP requirement.
- ✓ Logos and pictures can be embedded while casting as per requirement.

## *Our Experiences*

# Experience #1 - SEZ Project



## Project Description:

- ✓ Office Building, Stilt-2+G+7, 3,40,000 Square Foot

## Project Prime Challenge:

- ✓ 80% time spent - 20% work completed
- ✓ 20% time left - 80% work to complete

## Construction Methodology:

- ✓ In- situ Columns, Precast Prestressed Hollow core Slabs and Prestressed Beams

## Our Scope:

- ✓ Turnkey delivery - Prestressed Hollow core slabs & Prestressed Beams

## Result

- ✓ Client met his time lines set by his customer
- ✓ PRECA awarded with new Project by client

# Experience #1 - Visuals



# Experience #1 - Visuals





# Experience #1 - Visuals



# Experience#2 - IT Tower Project



## Project Description:

- ✓ IT office Building - Stair Cases - Stilt-2+G+14

## Project Prime Challenge:

- ✓ Complicated Shuttering, Shortage of skilled Mason
- ✓ Uneven Risers, additional plastering

## Construction Methodology:

- ✓ Precast Stair flights and Landings

## Our Scope:

- ✓ Turnkey delivery - Precast Stair flights & Precast landing slabs

## Result

- ✓ Erected in few hours as opposed to few weeks in conventional system
- ✓ PRECA awarded with additional works.

# Experience # 2 - Visuals



# Experience # 2 - Visuals



# Experience # 2 - Visuals



# Experience #3 - Office Building in City Center



## **Project Description:**

- ✓ Office Building, Stilt-2+G+4, 1,53,000 Square Foot

## **Project Prime Challenge:**

- ✓ Time line provided - 4 months

## **Construction Methodology:**

- ✓ In- situ Columns, Precast Prestressed Hollow Core Slabs, Prestressed Beams, Precast Retaining walls, Precast lift walls, Precast staircases.

## **Our Scope:**

- ✓ Turnkey delivery- Precast Prestressed Hollow Core Slabs, Prestressed Beams, Precast Retaining walls, Precast lift walls, Precast staircases.

## **Result**

- ✓ Client to met his customer time lines





## Recognitions:



Best in Class Manufacturing - Green Manufacturing Award in National Quality Excellence Awards 2013 from World CSR Day and Stars of the Industry, USA



## *Our Select Work Pictures*













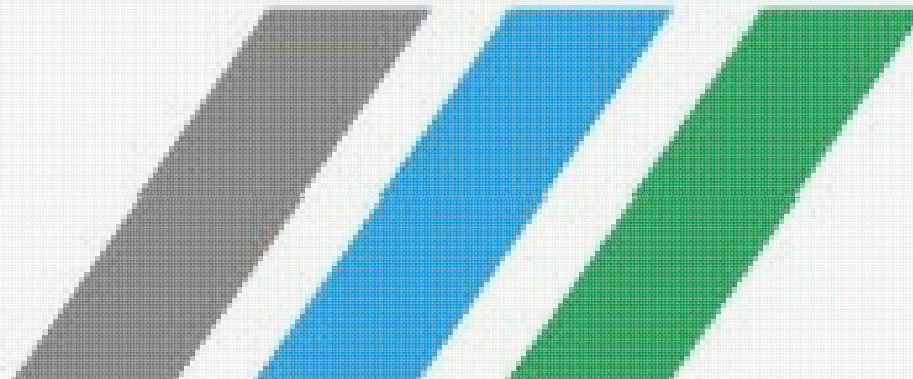












The Art of PRECAsting..

Thank you.