



Precast detailing outsourcing services









#### Introduction

Company: WBK Engineering Services Pvt. Ltd.

Gurgaon, India Location:

Activities: Precast concrete design and detailing

Precast 3D modeling and BIM

Precast detailing outsourcing services

Website: www.wbkengineers.com Email: info@wbkengineers.com

WBK Engineering Services is a specialty precast design, detailing and engineering firm that has been operating in the engineering services outsourcing business since 2005. The company is based in India and is offering precast detailing services to clients around the globe. Our in-house precast detailing team is utilizing CAD and BIM software to prepare precast drawings from concept design to production stage. Building Information Modeling software like Revit and Tekla is used by our team to prepare 3D precast models and precast Bim models including all details for fabrication, installation and erection. Over the years we have been involved in some of the state-of-the-art precast concrete building projects in Europe, USA, Asia, Australia and New Zealand.









## 📤 Management



**Bob van Gils** Co-founder and Director WBK Engineering Services Pvt. Ltd.

Mr. Bob van Gils is a Dutch national and was educated as a structural engineer in the Netherlands where he completed his bachelor degree with a specialization in structural engineering. He started his career in the Netherlands in 2001 with Van Boxsel Engineering BV as a structural engineer mainly working on design of reinforced concrete and precast concrete building structures.

He is vastly experienced in reinforced concrete, steel and precast concrete design and he has worked on a large number of building projects throughout his career. He is also a regular speaker/panelist at conferences, published author, licensed structural engineer, and chartered engineer of the Institution of Engineers India. He relocated to India in 2005 to establish Van Boxsel Engineering Pvt. Ltd. which is a subsidiary of the Netherlands company.

In 2010 together with Mr. Willem van Boxsel he co-founded WBK Engineering Services Pvt. Ltd. Mr. Bob van Gils is in charge of the WBK India office and is involved in office management, project management, human resources, strategic management, business development and financial affairs of the company.









#### 📤 Management



#### Willem van Boxsel

Co-founder and Director WBK Engineering Services Pvt. Ltd.

Owner and Director Van Boxsel Engineering, the Netherlands

Mr. Willem van Boxsel is a Dutch national and was educated as a civil engineer in the Netherlands where he completed his master degree at Delft University. He started his career in the Netherlands with Spanbeton, part of the Consolis Group, as the design manager of the precast design and engineering department. In 1999 he became owner and director of BV Bouwtechnisch Adviesburo Ir. W.A. van Boxsel c.i. which was founded by his father in 1969. Under his guidance the company expanded and in January 2005 an office in India was opened. He is actively involved in the Dutch business and engineering society for many

years. For six and a half years he was a board member of VNconstructeurs which is the professional association of structural engineers in the Netherlands.

In 2010 together with Mr. Bob van Gils he co-founded WBK Engineering Services Pvt. Ltd. Mr. Willem van Boxsel is involved in the strategic management, business development and financial affairs of the company. He frequently visits the WBK India office to discuss and implement new business strategies.









### Precast detailing outsourcing services

We specialize in providing consultancy services in the field of design and detailing of precast concrete elements and precast concrete buildings. With a proven track record we have completed a large number of precast projects according to the highest quality standards.



- Precast panel detailing (mould / form details)
- Precast shop drawings
- Precast fabrication drawings
- Precast erection drawings and details
- Precast connection details
- Precast rebar detailing and bending schedules
- Bill of materials









### 📤 Software used by our team

Our team of precast detailers works with various precast drafting software as per the requirements of our clients. For 2D design projects our team utilizes CAD software for the preparation of precast shop drawings and rebar detailing. Bar bending schedules and precast material take off calculations are prepared in Excel spreadsheets.

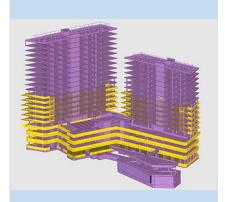
In case of 3D design or BIM projects we have the capabilities to prepare the 3D precast models in Tekla and Revit software. Our team can prepare accurate 3D models of precast components as well as the connections and 3D rebar modeling and detailing. Precast erection drawings and shop tickets can be generated from the 3D precast models.

#### Software:

- **Autocad**
- Tekla Structures
- Revit







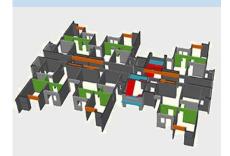


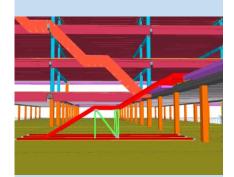
## 📤 3D precast modeling and BIM

Building Information Modeling (BIM) is still a relatively new and innovative technology for generating and managing building data. All information is stored in one digital 3D building model. The 3D model is made with objects that contain information. Our team is using Revit and TEKLA Structures software to prepare threedimensional building models.

#### Our capabilities in 3D precast modeling and BIM:

- Create 3D structural BIM models
- Reinforced concrete modeling and detailing
- Precast concrete modeling and detailing
- Quantity estimation from BIM models
- Generate and edit drawings from BIM models
- Generate and edit precast shop drawings
- Generate bar bending schedules









#### Communication

We remain in close communication with our clients throughout the span of the project. Our intention is to deliver the project not as an outsourced company but as an extended part of the clients project team. We achieve this by focusing on the following aspects:

#### Communication aspects

- Exchange important information
- Listen to our clients and discuss things to the point
- Weekly conference calls with our clients
- Understand the difficulties that our clients experience
- Organize frequent planning meetings
- Use standard 'request for information' (RFI) forms for questions









### 📤 Quality control

As technical service provider it is our foremost priority to ensure the highest level of quality to our clients. To accomplish this global standard we have in place our quality control process where multi level checking guarantees the screening required for zero error output.

#### Quality assurance

- Self checking procedures
- Check by senior detailer and project manager
- Quality discussion meetings
- Quality improvement program
- Sharing information across the organization
- Drafting/detailing standards for every client
- Standardized CAD and BIM libraries









## Our specialties and projects

Our company has been working for many years for clients all over the world.

We specialize in the following kind of precast building projects.

#### Specializations:

- Structural precast
- Architectural precast
- Precast parking garages
- Precast wall panel structures
- Precast façade / precast cladding / precast panels
- Precast housing









## 📤 The Broadway

Location: **United Kingdom** 

Year completed: 2020

Scope of work: Preparation of precast architectural cladding shop drawings

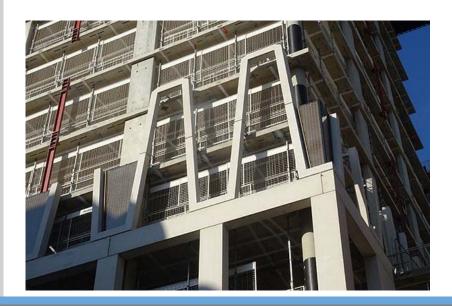
3D rebar modeling in Tekla Structures software

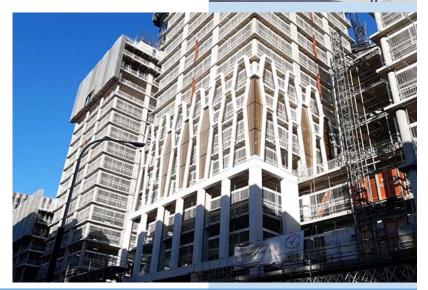
Preparation of reinforcement drawings and details

Preparation of rebar bending schedules











## Zadok parking garage

Location: USA

Year completed: 2020

Scope of work: Preparation of precast erection drawings and erection details

Preparation of piece tickets

Preparation of hardware details

Preparation of erection material lists











## Durham

**United Kingdom** Location:

Year completed: 2020

Scope of work: Preparation of precast architectural cladding shop drawings

3D rebar modeling in Tekla Structures software

Preparation of reinforcement drawings and details

Preparation of rebar bending schedules











## Reverie parking garage

Location: USA

Year completed: 2019

Scope of work: Preparation of precast erection drawings and erection details

Preparation of piece tickets

Preparation of hardware details

Preparation of erection material lists











## 📤 Bharat City township - phase 2

Location: Ghaziabad, India

Year completed: 2019

Scope of work: • Structural analysis and design

Structural design drawings and detailing

Quantity estimation

Precast shop drawings

Precast erection drawings

• Periodic site inspections











## A HP Plaza parking garage

Location: USA

Year completed: 2018

Scope of work: Preparation of precast erection drawings and erection details

> Preparation of piece tickets Preparation of hardware details Preparation of erection material lists









#### Duncan House

**United Kingdom** Location:

Year completed: 2018

Scope of work: Preparation of shop drawings and bar bending schedules for

precast architectural cladding panels.















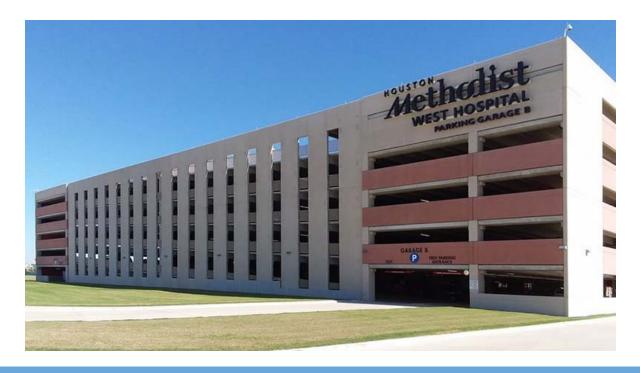
## Methodist parking garage

Location: USA

Year completed: 2017

Scope of work: Preparation of precast erection drawings and erection details

> Preparation of piece tickets Preparation of hardware details Preparation of erection material lists













### Strand East R1

**United Kingdom** Location:

Year completed: 2018

Scope of work: Preparation of shop drawings and bar bending schedules for

precast architectural cladding panels.











## Sobha Dream Acres township

Location: Bangalore, India

Year completed: 2016

Scope of work: • Wings 7 - 8 - 12 - 13

• Structural analysis and design

Structural design drawings and detailing

BIM in TEKLA

Precast shop and erection drawings

Bar bending schedules

• Periodic site inspections











## A St. Peter Square

**United Kingdom** Location:

Year completed: 2016

Scope of work: Preparation of shop drawings and bar bending schedules for

precast architectural cladding panels.















## Westfield

**United Kingdom** Location:

Year completed: 2016

Scope of work: Preparation of shop drawings and bar bending schedules for

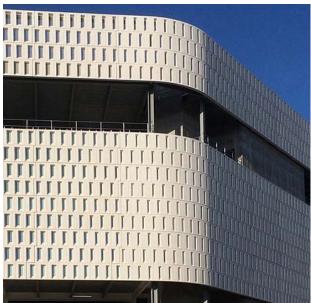
precast architectural cladding panels.













#### ★ Town Centre One

Location: USA

Year completed: 2014

Scope of work: Preparation of precast erection drawings and erection details.

Preparation of piece tickets of precast spandrel beams and wall

panels.













### **A** San Clemente

Location: USA

Year completed: 2014

Scope of work: Preparation of precast erection drawings and erection details.

Preparation of piece tickets of precast architectural cladding

panels











## **A** Energy Centre parking garage

Location: USA

Year completed: 2013

Scope of work: Preparation of precast erection drawings and erection details

> Preparation of piece tickets Preparation of hardware details Preparation of erection material lists











## Leeds University library

Location: **United Kingdom** 

Year completed: 2014

Preparation of shop drawings and bar bending schedules for Scope of work:

precast architectural cladding panels.













## Supertech UpCountry villas

Location: Greater Noida, India

Year completed: 2014

Scope of work: • Structural analysis and design

• Structural drawings of complete structure

Precast shop drawings

Precast erection drawings and details

• Periodic site inspections













#### A St. Dunstans House

**United Kingdom** Location:

Year completed: 2014

Scope of work: Preparation of shop drawings and bar bending schedules for

precast architectural cladding panels.











# A Fitland Suytkade

Location: The Netherlands

Year completed: 2013

Scope of work: Preparation of shop drawings for precast columns, beams,

walls, floor slabs, stairs and landings. 1007 precast elements.

Preparation of erection drawings and details for the precast elements together with hollow core floor slabs and steel

structure.













### ROC Amsterdam

Location: Amsterdam, the Netherlands

Year completed: 2012

Scope of work: Shop drawings for precast columns, beams, walls, floor slabs,

stairs, landings, floor slabs and roof slabs.

Erection drawings for the precast elements together with

hollow core floor slabs and steel structure.











## Apex Mega Centre

Location: New Zealand

Year completed: 2011

Scope of work: Preparation of shop drawings of precast elements

Precast wall panels

Precast columns

Precast beams

Precast staircase

• Precast floor slabs











# A Haagsche Zwaan

Location: The Netherlands

Year completed: 2011

Scope of work: Shop drawings for precast columns, beams, walls, floor slabs,

stairs and landings.

Total 910 precast elements.

Erection drawings for the precast elements together with

hollow core and steel structure











### ★ Tawari Mews

New Zealand Location:

Year completed: 2011

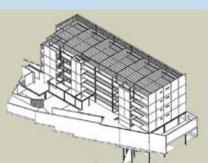
Scope of work: Preparation of shop drawings of precast concrete wall panels,

staircase, balconies and floor slabs.











### ★ Lidl Huizen

Location: The Netherlands

Year completed: 2009

Scope of work: Shop drawings for precast columns, beams,

walls, stairs, façade elements and roof slabs.

902 precast elements.

Erection drawings and details for the complete precast

structure.







