



WBK Engineering Services Pvt. Ltd. **WBK**



Precast design and detailing
outsourcing services

Introduction

Company: WBK Engineering Services Pvt. Ltd.

Location: Gurgaon, India

Activities: Structural design and engineering
Precast concrete design and detailing
BIM

Website: www.wbkengineering.in

Email: info@wbkengineering.in

WBK Engineering Services is a privately held structural engineering firm based in Gurgaon, India. The main business activities of the company are structural engineering, design and detailing of reinforced concrete and precast concrete building structures. The structural design and detailing services are provided to clients within India as well as international clients located all over the world. Our client base mainly consists of real estate developers, construction companies, architectural firms, structural engineering firms, precast concrete manufacturers and government agencies.



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 BV

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 design and detailing

We specialize in providing consultancy services in the field of structural 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 detailing outsourcing services offered:

- ▶ Erection drawings and details
- ▶ Piece tickets
- ▶ Reinforcement detailing
- ▶ Bar bending schedules
- ▶ Erection material take-off

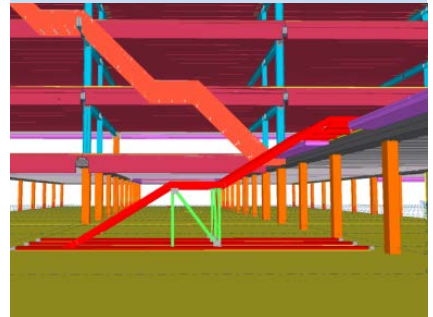
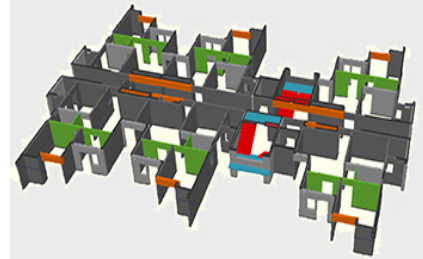


BIM with Tekla Structures

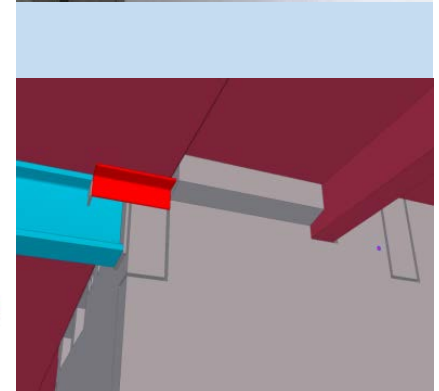
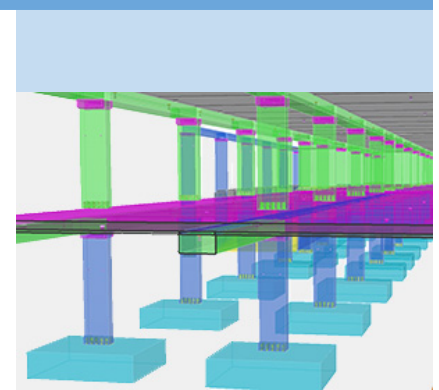
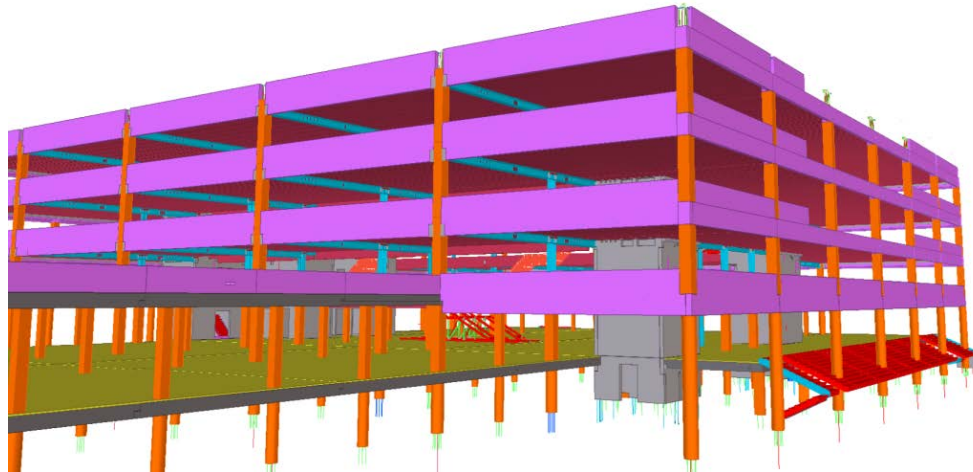
Building Information Modeling (BIM) is a relatively new and innovative technology for generating and managing building data. All information is stored in one digital 3D building model. The 3D model is made with objects that contain information. We are using the latest version of TEKLA Structures software to prepare three-dimensional building models.

Our capabilities in BIM with Tekla software:

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



BIM with Tekla Structures



Advantages of outsourcing

We are having a team of experienced and dedicated engineers and draughtsman, who are working out of a modern office in India. With a vast knowledge and experience in every aspect of precast design we can offer huge advantages to our clients in terms of quality services at a competitive price.

Advantages of outsourcing:

- ▶ Substantial cost benefit
- ▶ Increase capacity without investing
- ▶ Faster turnaround time
- ▶ Create flexibility
- ▶ Improve competitiveness and efficiency
- ▶ Focus on core business



Our core strength

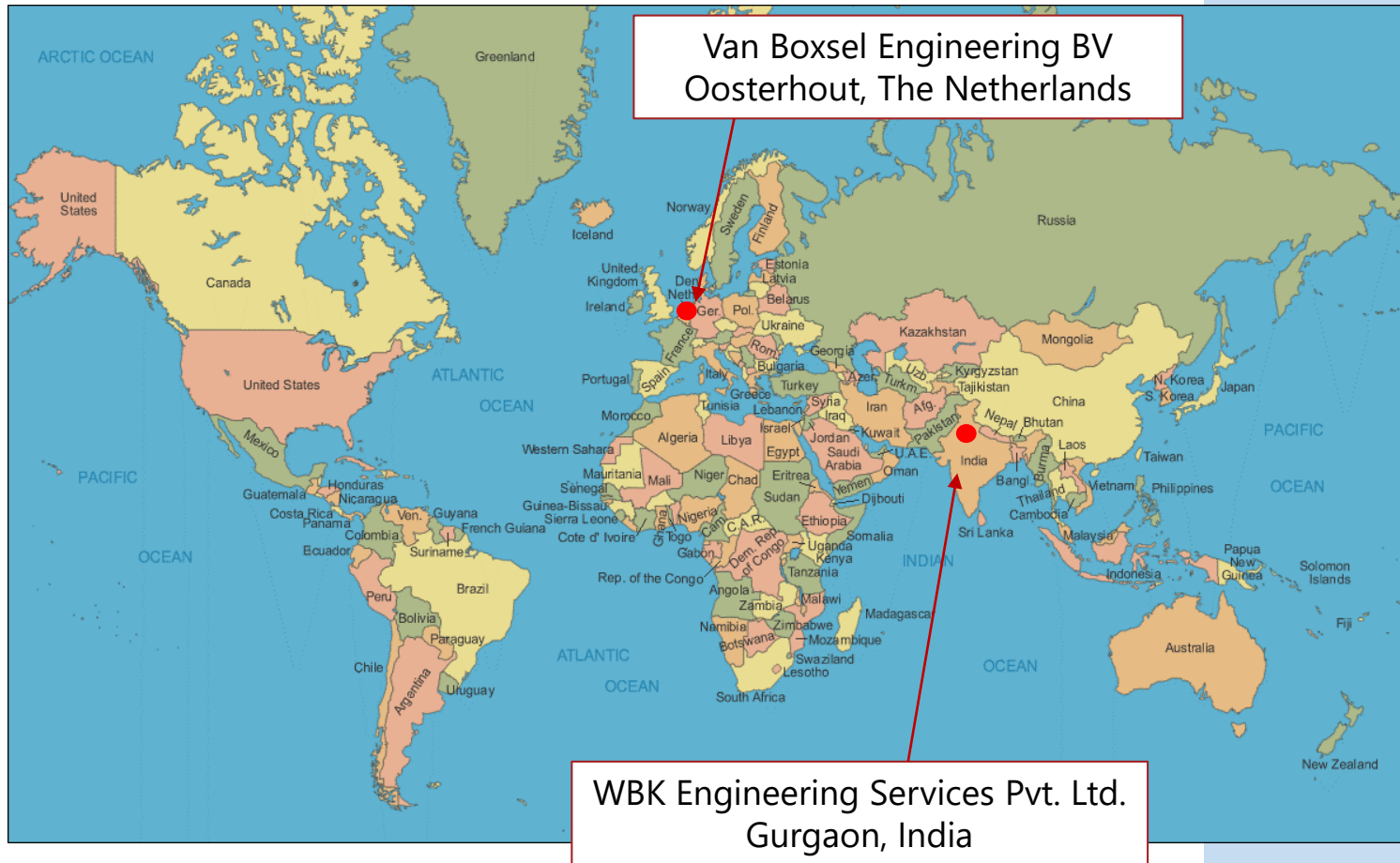
We are a reliable engineering firm with a European background and with an in-house design team which is fully focused on delivering high quality precast design and detailing services.

Our core strength:

- ▶ Independent consultancy firm with extensive precast design experience.
- ▶ In-house dedicated technical team.
- ▶ Capable to deliver high quality services related to every aspect of precast design and detailing.
- ▶ Proven track record for highly reputed precast manufacturers.
- ▶ Exclusive design partner to several precast manufacturers in Europe
- ▶ We are actively involved in the domestic precast construction markets of the Netherlands and India.



Office locations



Team and training

It is our core objective to train and build our team to the highest degree of technical competence related to all the aspects of precast concrete design and detailing services. Therefore each and every employee is given a compulsory training during the induction phase and a constant up gradation through on job training pertaining to the new technologies and systems in the respective fields.

For every client we prepare a customized training program. In this training program the team members will learn about the specific details, standards and working methods of the client.

The team members are regularly visiting our clients' precast plants in Europe and India for better understanding of the precast production processes and developing practical detailing solutions.



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
- ▶ Directly inform the client about problems
- ▶ 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
- ▶ CAD and Tekla libraries



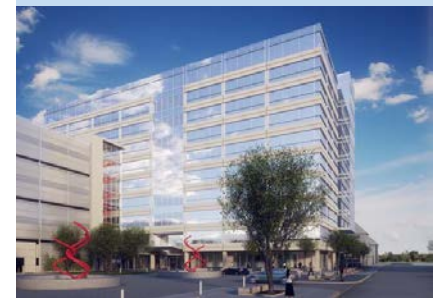
Energy Centre Three parking garage

Location: USA
Year completed: 2013
Scope of work: Preparation of precast erection drawings and erection details.
Preparation of piece tickets.
Preparation of erection take-off



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.



3700 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



Leeds University - Laidlaw Library

Location: United Kingdom
Year completed: 2014
Scope of work: Preparation of shop drawings and bar bending schedules for precast architectural cladding panels.



St. Dunstons House

Location: United Kingdom
Year completed: 2014
Scope of work: Preparation of shop drawings and bar bending schedules for precast architectural cladding panels.



Apex Mega Centre

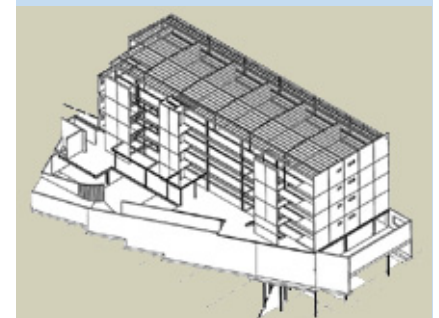
Location: New Zealand
Year completed: 2011
Scope of work: Preparation of shop drawings of precast elements

- Precast wall panels
- Precast columns
- Precast beams
- Precast staircase
- Precast floor slabs



Tawari Mews

Location: New Zealand
Year completed: 2011
Scope of work: Preparation of shop drawings of precast concrete wall panels, staircase, balconies and floor slabs.



Fitland Suytkade

Location: Helmond, the Netherlands
Precast factory: Bruil Prefab Beton, Weert
Architect: Povse en Timmermans Architecten, Sittard
Contractor: Van Wijnen
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.



Lidl Huizen

Location: Huizen, the Netherlands
Precast factory: Oudenallen Beton, Geertruidenberg
Architect: Verplancke Goethals Architecten Ingenieurs
Contractor: Van Kerckhoven Bouw, Kloosterzande
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.



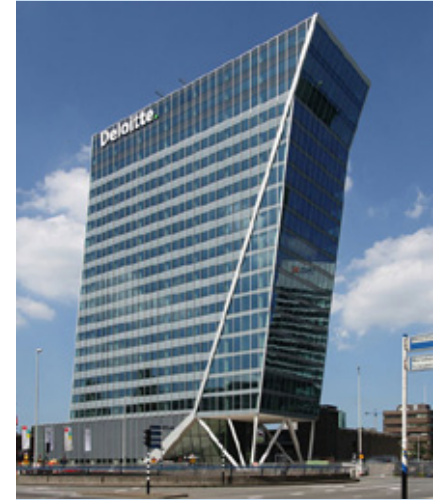
ROC Amsterdam

Location: Amsterdam, the Netherlands
Precast factory: Oudenallen Beton, Geertruidenberg,
Bruil Prefab Beton, Weert
Architect: Ector Hoogstad Architects, Rotterdam
Contractor: Bruil Bouwbedrijf Ede BV
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.



Haagsche Zwaan

Location: The Hague, the Netherlands
Precast factory: Oudenallen Beton, Geertruidenberg
Architect: ZZDP Architects, Amsterdam
Contractor: Visser & Smit Bouw, Papendrecht
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



Bharat City phase 2

Location:	Ghaziabad, India
Precast factory:	BCC Infrastructures Pvt. Ltd.
Architect:	Anuj Agarwal Architects Pvt. Ltd.
Contractor:	BCC Infrastructures Pvt. Ltd.
Year completed:	Ongoing
Scope of work:	<ul style="list-style-type: none">• Structural analysis and design• Structural design drawings and detailing• Quantity estimation• Precast shop and erection drawings• Periodic site inspections



Sobha Dream Acres

Location: Bangalore, India
Precast factory: Sobha Ltd. Bangalore
Architect: Sobha Ltd. Bangalore
Contractor: Sobha Ltd. Bangalore
Year completed: 2016
Scope of work:

- Wings 7 – 8 – 12 – 13
- Structural analysis and design
- Structural design drawings and detailing
- BIM modeling in TEKLA
- Precast shop and erection drawings
- Periodic site inspections



Precast plant BCC Infrastructure

Location: Ghaziabad, India
Client: BCC Infrastructure Pvt. Ltd.
Precast supplier: Weckenmann, Germany
Year completed: 2014
Scope of work:

- Structural design of foundation for battery moulds
- Structural drawings of foundation for battery mould system



Supertech UpCountry villas

Location: Greater Noida, India
Client: Supertech Precast Technologies Pvt. Ltd.
Architect: Space Designers, Ghaziabad
Contractor: Supertech Precast Technologies Pvt. Ltd.
Year completed: 2014
Scope of work:

- Structural analysis and design
- Structural drawings of complete structure
- Precast shop drawings and erection dwgs
- Periodic site inspections



Supertech Precast office

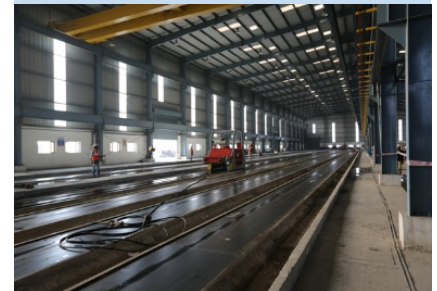
Location: Greater Noida, India
Client: Supertech Precast Technologies Pvt. Ltd.
Architect: Harish Tripathi & associates, New Delhi
Contractor: Supertech Precast Technologies Pvt. Ltd.
Year completed: 2013
Scope of work:

- Structural analysis, design and detailing
- Quantity estimation
- Precast shop drawings and erection drawings
- Periodic site inspections

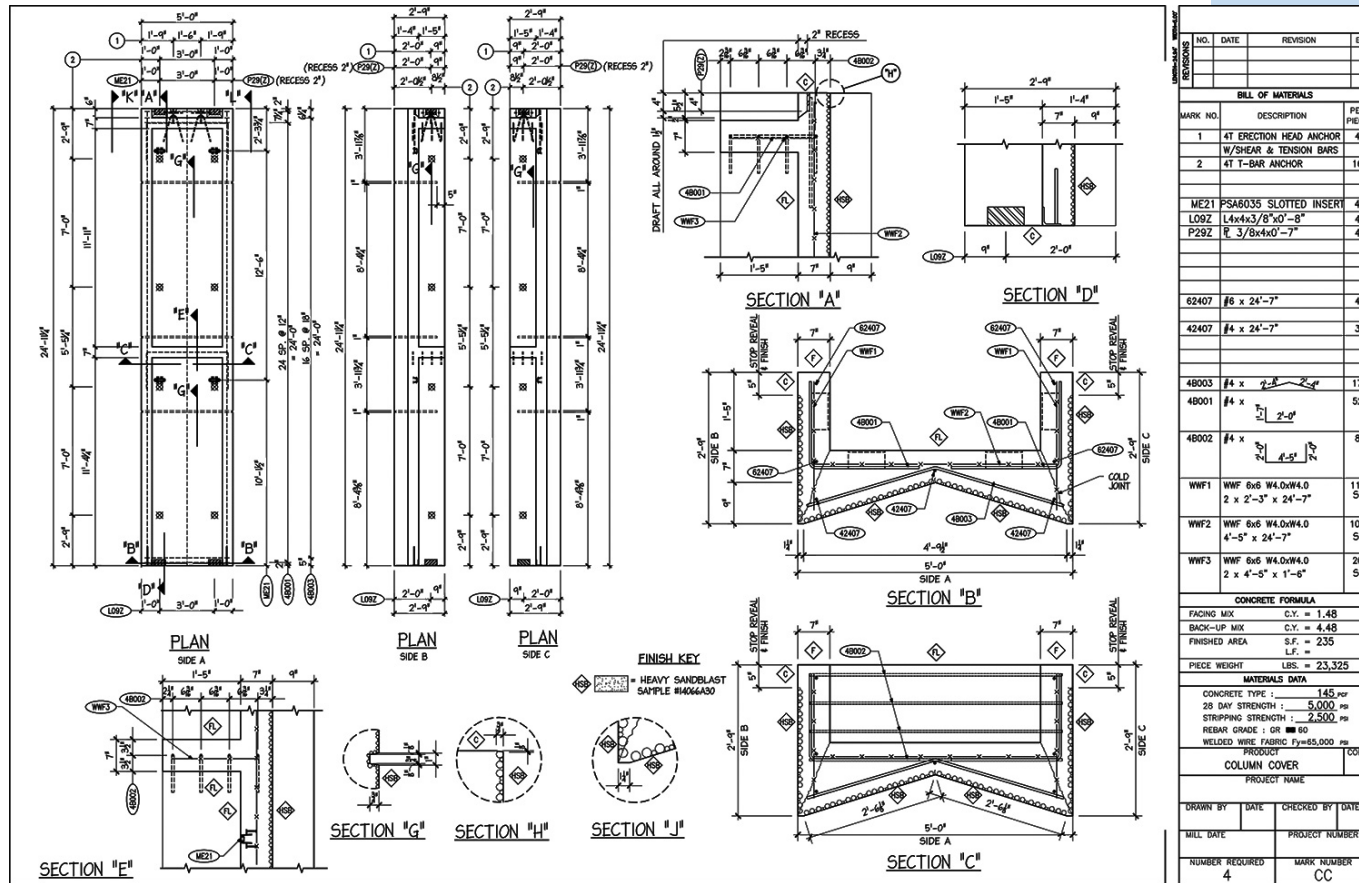


Supertech Precast plants

Location:	Greater Noida, India
Client:	Supertech Precast Technologies Pvt. Ltd.
Architect:	Harish Tripathi & Associates, New Delhi
Contractor:	Supertech Precast Technologies Pvt. Ltd.
Year completed:	2012
Scope of work:	<ul style="list-style-type: none">• Structural design and detailing foundation and civil works• Structural design and detailing abutments for prestressing• Structural drawings of foundation and civil works• Quantity estimation• Periodic site inspections

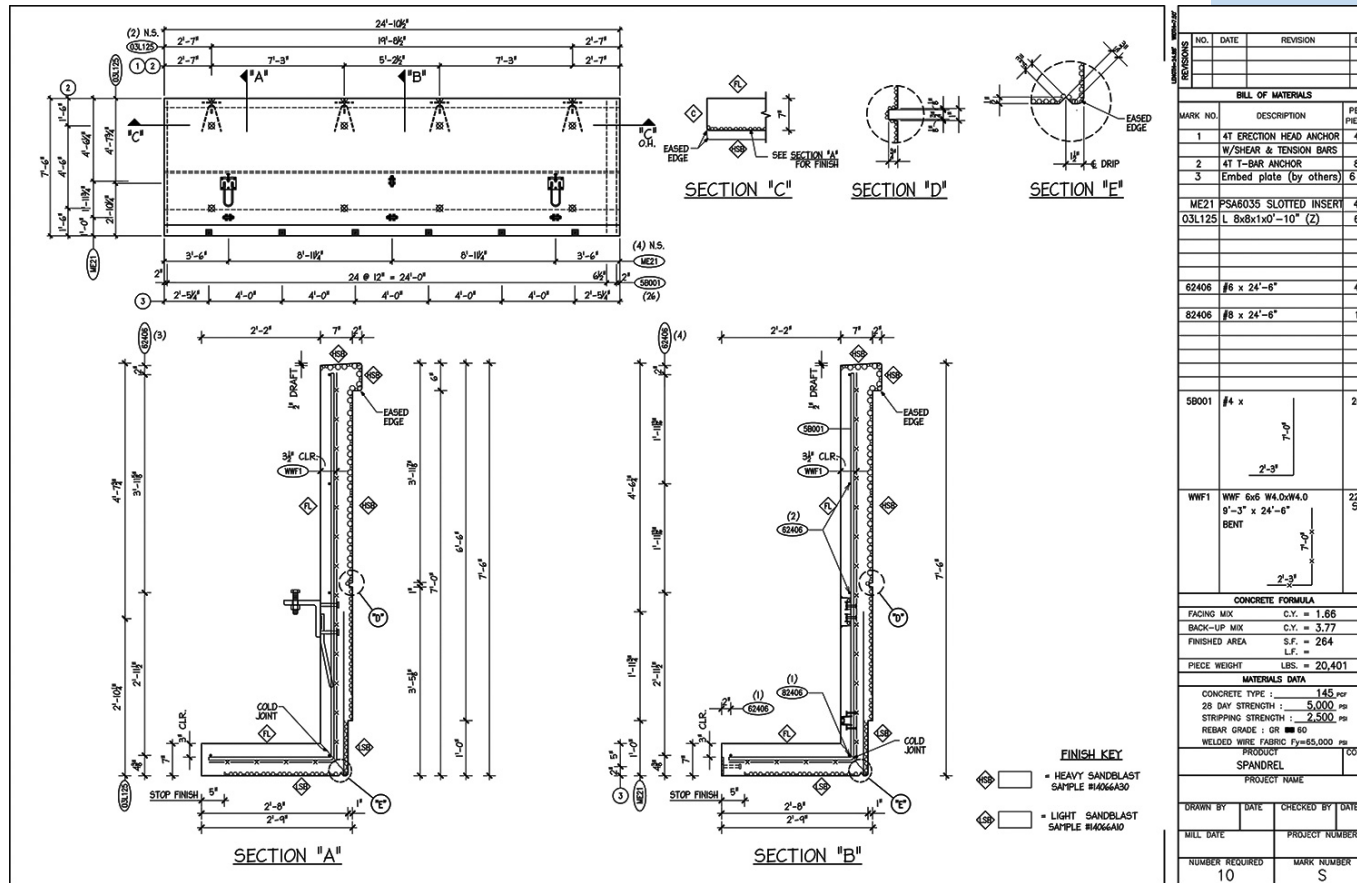


Sample piece tickets

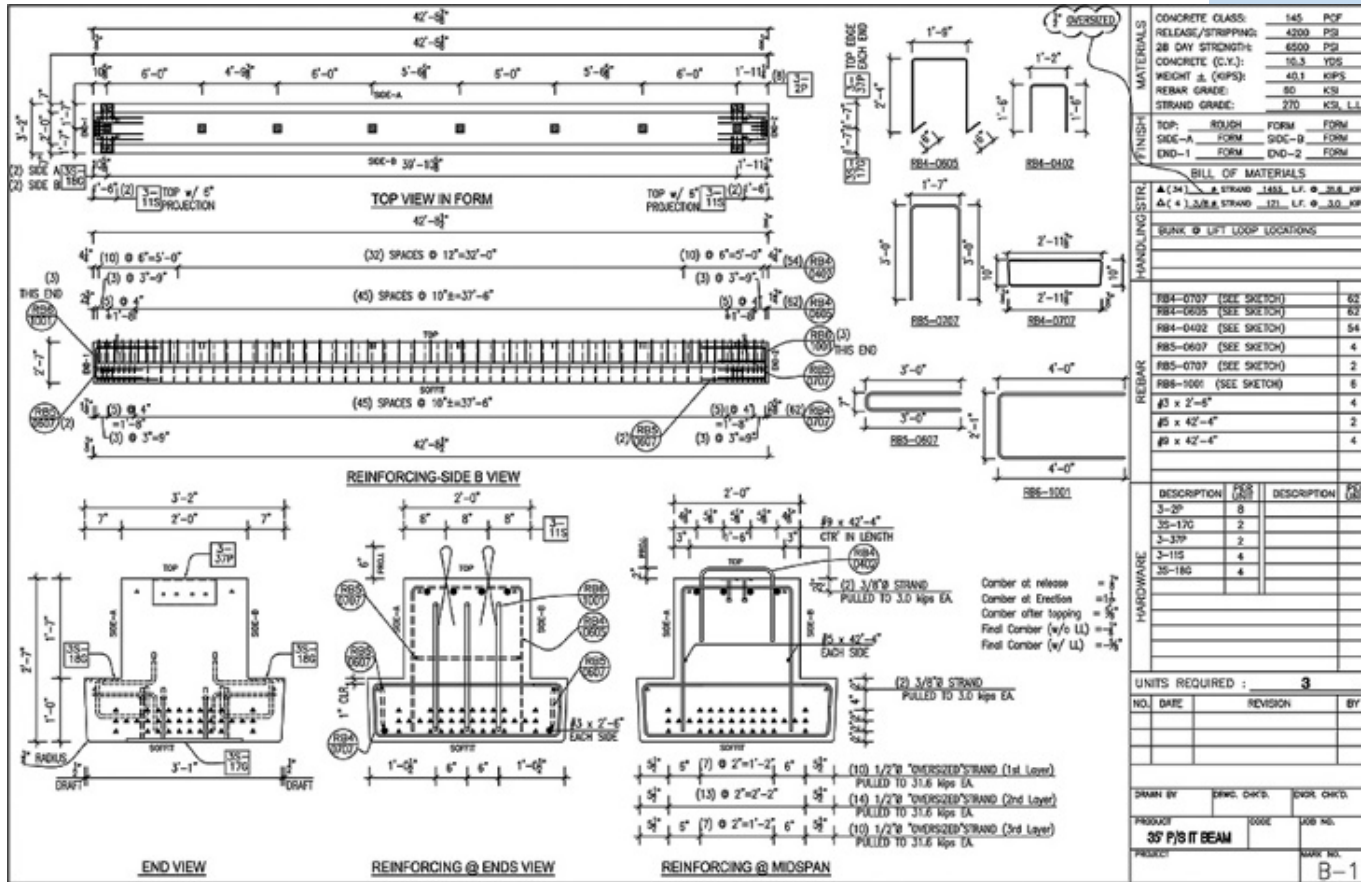


Precast column covers

Sample piece tickets

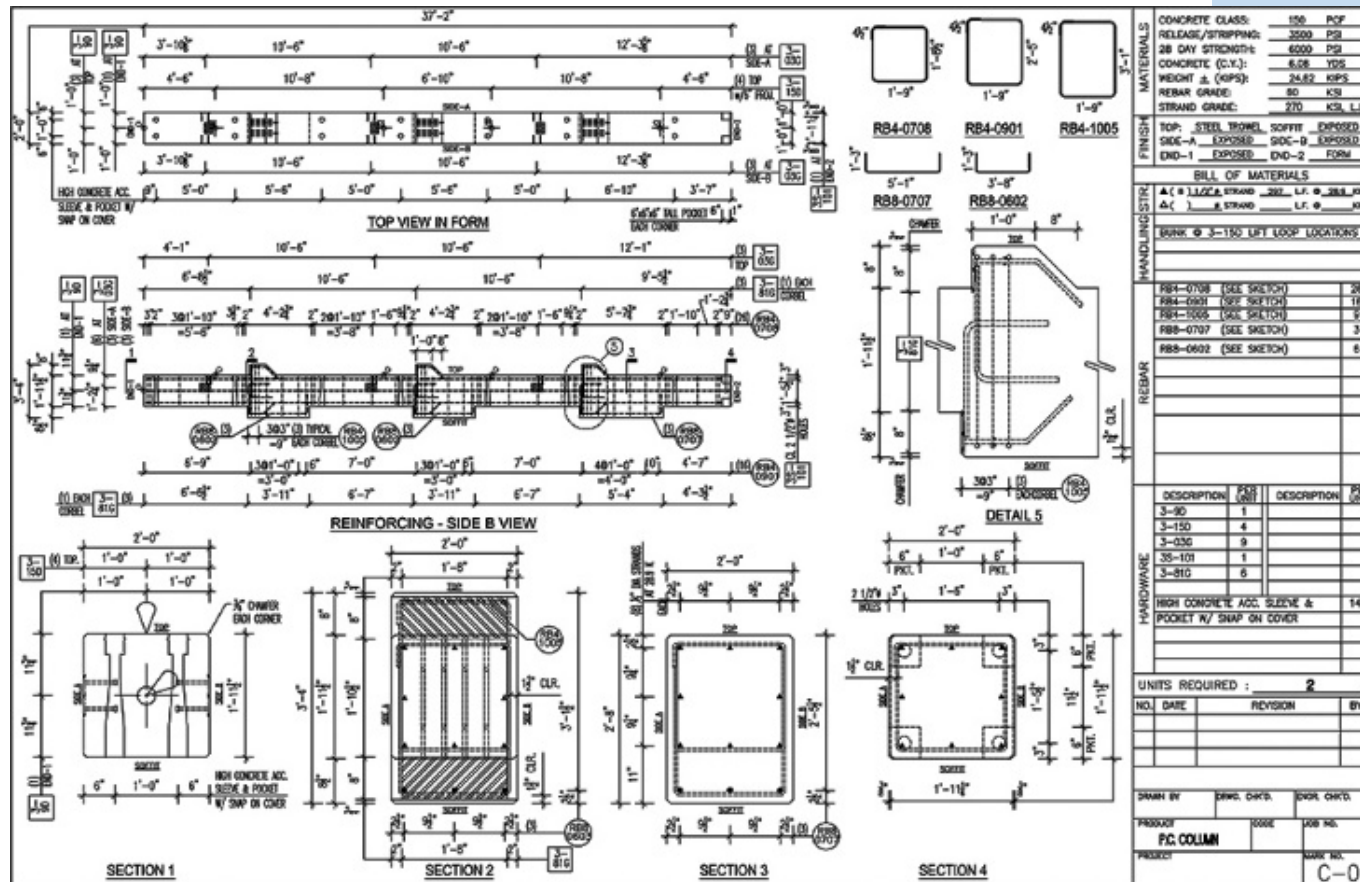


Precast spandrels



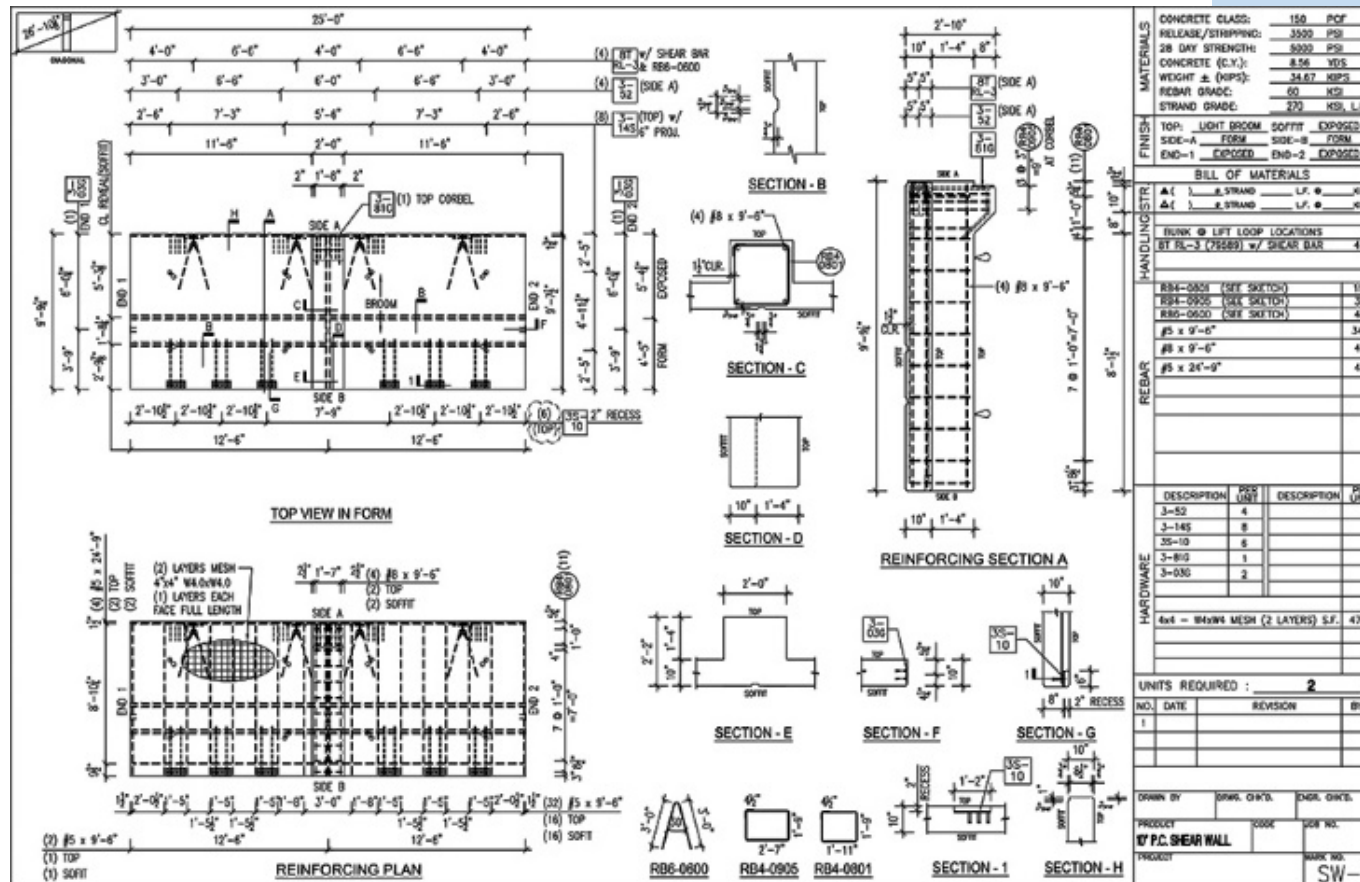
Precast beams

Sample piece tickets



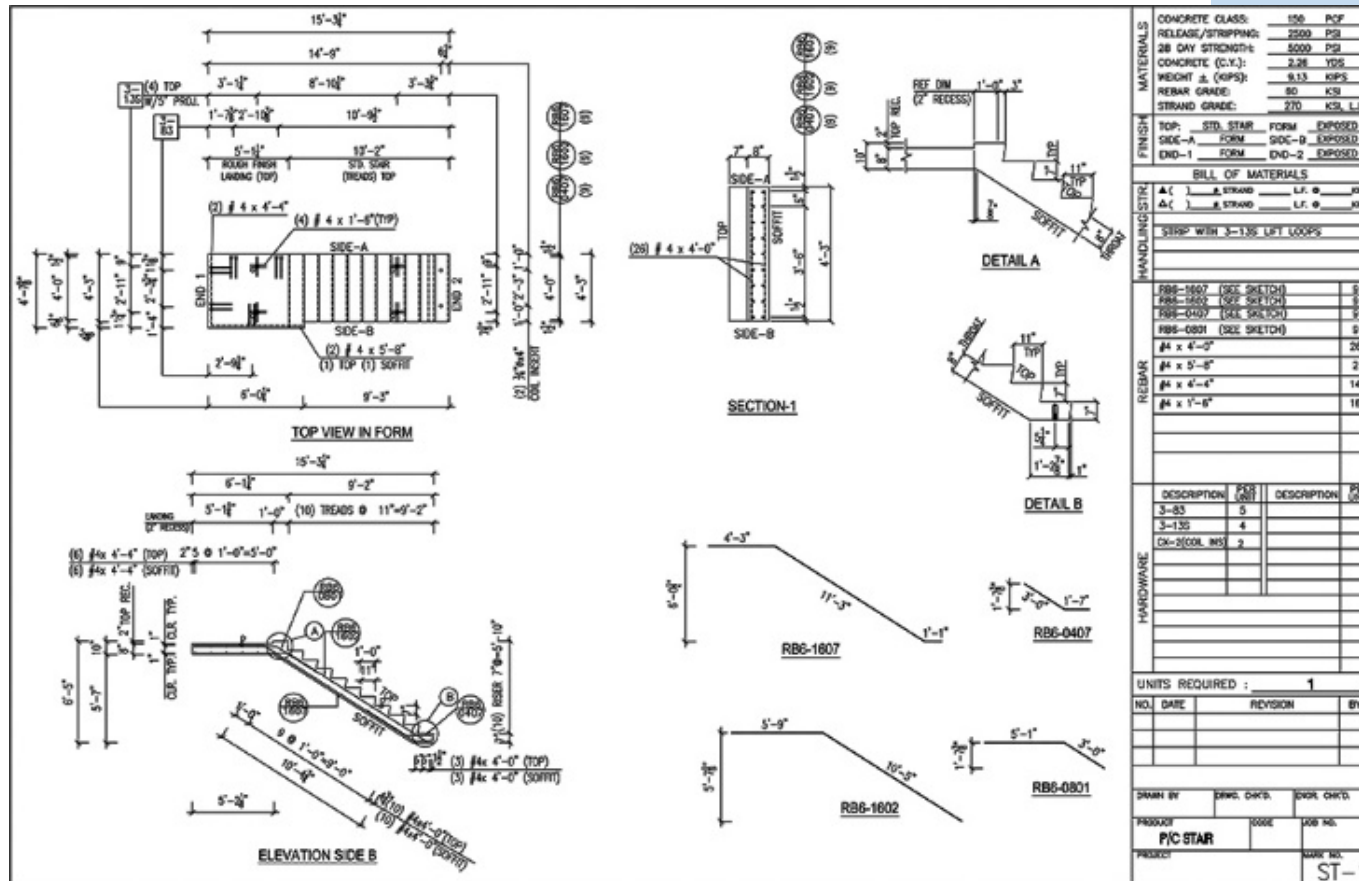
Precast columns

Sample piece tickets



Precast beam-wall

Sample piece tickets



Precast stair

Other projects

Project	Year	Building type	Project details / scope
Remington Square phase 2 Houston USA	2014	Parking garage	Preparation of precast erection drawings, details and precast piece tickets.
CitizenM Hotel Trinity Square, London UK	2014	Hotel building	Preparation of precast shop drawings and bar bending schedules.
Gujarat Housing India	2014	Government housing project in Gujarat India	Structural analysis, design and detailing of complete RCC structures.
San Clemente Houston, USA	2014	Office building	Preparation of precast erection drawings, details and precast piece tickets.
Dr. Oetker Bhiwadi, India	2014	Industrial building	Preparation of precast shop drawings and bar bending schedules.
Glasgow Concert Hall Glasgow UK	2014	Concert Hall	Preparation of precast shop drawings and bar bending schedules.
Town Centre One Houston, USA	2014	Office building	Preparation of precast erection drawings, details and precast piece tickets.
Leeds University Library, UK	2014	Library	Preparation of precast shop drawings and bar bending schedules.
Asaph Street New Zealand	2013	Commercial building	Detailing of precast concrete elements.
DB Schenker Warehouse, Australia	2013	Warehouse	Detailing of precast concrete elements.
St. Dunstons House London UK	2013	Apartment building	Preparation of precast shop drawings and bar bending schedules.



Gujarat Housing India



Glasgow concert hall



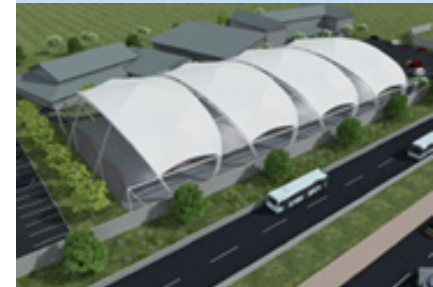
St. Dunstons House

Other projects

Project	Year	Building type	Project details / scope
Tauranga Substation New Zealand	2012	Substation	Detailing of precast concrete elements.
Jindal Global city Villa 67D India	2012	Precast villa	Structural analysis, design and detailing of precast structure and foundation.
Meadowbank Primary School New Zealand	2012	School building	Detailing of precast concrete wall panels and stairs.
Supertech Admin building India	2012	Office building	Structural analysis, design and detailing of precast structure and foundation.
Topmaq Pavillion Drive New Zealand	2012	Office building	Detailing of precast concrete elements.
DDA Delhi Precast housing India	2012	Mass Housing 40.000 precast houses	Pre bid design support to building contractor.
Eden Assisted Living village New Zealand	2012	Apartment building Old age home	Detailing of precast concrete elements.
Westlake Girls School New Zealand	2012	Outdoor Courts	Detailing of precast wall panels.
Supertech Precast plant India	2012	Precast plant for hollow core slabs and precast wall panels	Structural design of foundation and abutments. Design of ancillary buildings.
Tata Peenya India	2012	Group housing project using precast building technology	Pre bid design support to building contractor.
Tauranga Substation New Zealand	2012	Substation	Detailing of precast concrete elements.



Asaph Street



Westlake Girls School



Eden Assisted Living Village

Other projects

Project	Year	Building type	Project details / scope
Office Church str. Onehunga New Zealand	2011	Office building	Detailing of precast concrete wall panels.
Lagoon House New Zealand	2011	Villa	Detailing of precast concrete elements.
Office Half Moon Bay New Zealand	2011	Office building	Detailing of precast concrete elements.
Apex Mega Centre New Zealand	2011	Shopping Centre	Detailing of precast concrete elements.
CMG Electric New Zealand	2011	Warehouse and office building	Detailing of precast concrete elements.
Office Buy Albert Road New Zealand	2011	Office building	Detailing of precast concrete elements.
Santushti Homes India	2011	Precast affordable housing	Concept precast design.
Auckland Hospital car park New Zealand	2011	Car parking	Detailing of precast concrete elements.
Tawari Mews New Zealand	2010	Apartment building	Detailing of precast concrete elements.
Pakuranga Substation New Zealand	2010	Substation	Detailing of precast concrete elements.
Bert Henham Reserve New Zealand	2010	Changing Rooms	Detailing of precast concrete elements.



CMG Electric



Auckland Hospital car park



Office Buy Albert Road

Other projects

Project	Year	Building type	Project details / scope
Fitland Suytkade Helmond	2013	Wellness Centre	Columns, beams, walls, stairs, landings, façade panels and parapet walls. 1007 precast elements.
Lidl Huizen	2012	Office building	Columns, beams, walls, stairs, landings, façade panels and roof slabs. 902 precast elements.
Grote Rivieren Sliedrecht	2012	Office building	Columns, stairs, landings, walls and roof slabs. 400 precast elements.
CSG Calvijn Barendrecht	2012	School building	Walls, beams and parapet walls. 236 precast elements.
Alfa College Groningen	2012	School building	Columns, walls, stairs and landings. 442 precast elements.
Mediapark Hilversum	2012	Office building	Columns, beams, walls and parapet walls. 128 precast elements.
ROC Amsterdam	2012	School building	Columns, beams, stairs, landings, walls, lintels, floor slabs and roof slabs. 1360 precast elements.
Nieuwe Voorstad Paladijn Nijmegen	2011	Apartment building	Columns, galleries, balconies, walls, stairs, landings and parapet walls. 849 precast elements.
Wagenerplein Tilburg	2011	Sports complex	Columns, beams, walls and parapet walls. 128 precast elements.
Dudokhaken Amsterdam	2011	Apartment building	Precast columns, beams and lift walls. 516 precast elements.
Haagsche Zwaan The Hague	2011	Office building	Columns, beams, walls, floor slabs, stairs and landings. 910 precast elements.



Alfa College



Paulinesymfonie



Vlietwijk

Other projects

Project	Year	Building type	Project details / scope
Paulinesymfonie Rijswijk	2011	Apartment building	Façade elements, columns, walls, beams, galleries, balconies, copings, stairs and landings. 2300 precast elements.
Sancta Maria Zevenbergen	2011	Health care building	Columns, beams, walls, balconies, canopies. 91 precast elements.
Dataplace Alblasserdam	2011	Office building	Columns, beams, walls, stairs and landings. 156 precast elements.
Vlietwijk Voorschoten	2010	Apartment building	Columns, stairs, landings, walls and roof slabs. 216 precast elements.
Unic Utrecht	2010	School building	Columns, beams, stairs, landings, walls & steps. 263 precast elements.
Esprit Amstelveen	2010	Office building	Columns, walls, parapet walls, stairs and landings. 250 precast elements.
Varias College The Hague	2009	School building	Columns, beams, and walls. 126 precast elements.
Pascal School Zaandam	2009	School building	Columns, beams, walls, stairs and landings. 311 precast elements.
De Biechten 's-Hertogenbosch	2009	Apartment building	Façade elements, galleries, balconies, stairs and landings. 1200 precast elements.
Slotermeerhof Amsterdam	2009	Apartment building	Façade elements, galleries, balconies, stairs and landings. 1200 precast elements.
Singelveste Breda	2009	Office building	Columns, beams, walls, floor slabs, stairs and landings. 200 precast elements.



Esprit



De Biechten



Singelveste

Other projects

Project	Year	Building type	Project details / scope
Kantoor N19 Papendorp	2009	Office building	Columns, beams, walls, floor slabs, stairs and landings. 221 precast elements.
SG De Rede Terneuzen	2009	School building	columns, beams, walls, stairs and landings. 190 precast elements.
Hillfresh Barendrecht	2009	Industrial building	columns, beams, walls, stairs and landings. 218 precast elements.
Raakspoort Haarlem	2009	Office building	Precast walls, stairs and landings. 440 precast elements.
ColignY Katwijk	2009	Apartment building	Precast walls, beams, columns, galleries, balconies, stairs and landings. 374 precast elements.
Brabantse Delta Breda	2009	Office building	Columns, beams, walls, façade elements and copings. 522 precast elements.
Hoge School Leiden	2009	School building	Columns, walls, façade elements. 400 precast elements.
Dura Vermeer Cruquius	2008	Office building	Precast columns, beams, walls, stairs and landings. 209 precast elements.
Park Lindenburg Breda	2008	Office building	Precast columns, beams, walls, stairs and landings. 420 precast elements.
RMPI Barendrecht	2008	Health care building	Precast columns, beams, walls, stairs and landings. 450 precast elements.
Coneco Alblasserdam	2009	Office building	Precast columns, beams, and walls. 300 precast elements.



Kantoor N19



ColignY



Van Wijnen

Other projects

Project	Year	Building type	Project details / scope
Wings Capelle a/d IJssel	2008	Office building	Precast columns, beams, walls, stairs and landings. 212 precast elements.
Eurobox Eindhoven	2008	Office building	Columns, beams, walls, canopies, stairs and landings. 400 precast elements.
Hoge Veen Leidschenveen	2008	Apartment building	Precast walls, beams and lintel beams. 705 precast elements.
Hendriks Oss	2008	Office building	Precast columns, beams, walls, stairs and landings. 241 precast elements.
PGGM Zeist	2008	Apartment building	Stairs and landings. 108 precast elements
Beeklaan The Hague	2008	Apartment building	Façade elements, balconies, galleries, walls, columns, stairs and landings. 527 precast elements.
Merford Gorinchem	2008	Office building	Walls, columns and beams. 177 precast elements.
Berg Toys Ede	2008	Office building	Walls, columns and beams. 139 precast elements.
Dolium Eersel	2008	Apartment buildings Health care centre	Galleries, balconies, stairs, landings and façade elements. 288 precast elements.
Panorama Ridderkerk	2008	Apartment building	Walls, columns, balconies, stairs and landings. 322 precast elements.
Ronald Mc Donald Rotterdam	2007	Care centre	Walls, stairs and landings. 150 precast elements



Park Lindenburg



Dolium



Ronald Mc Donald