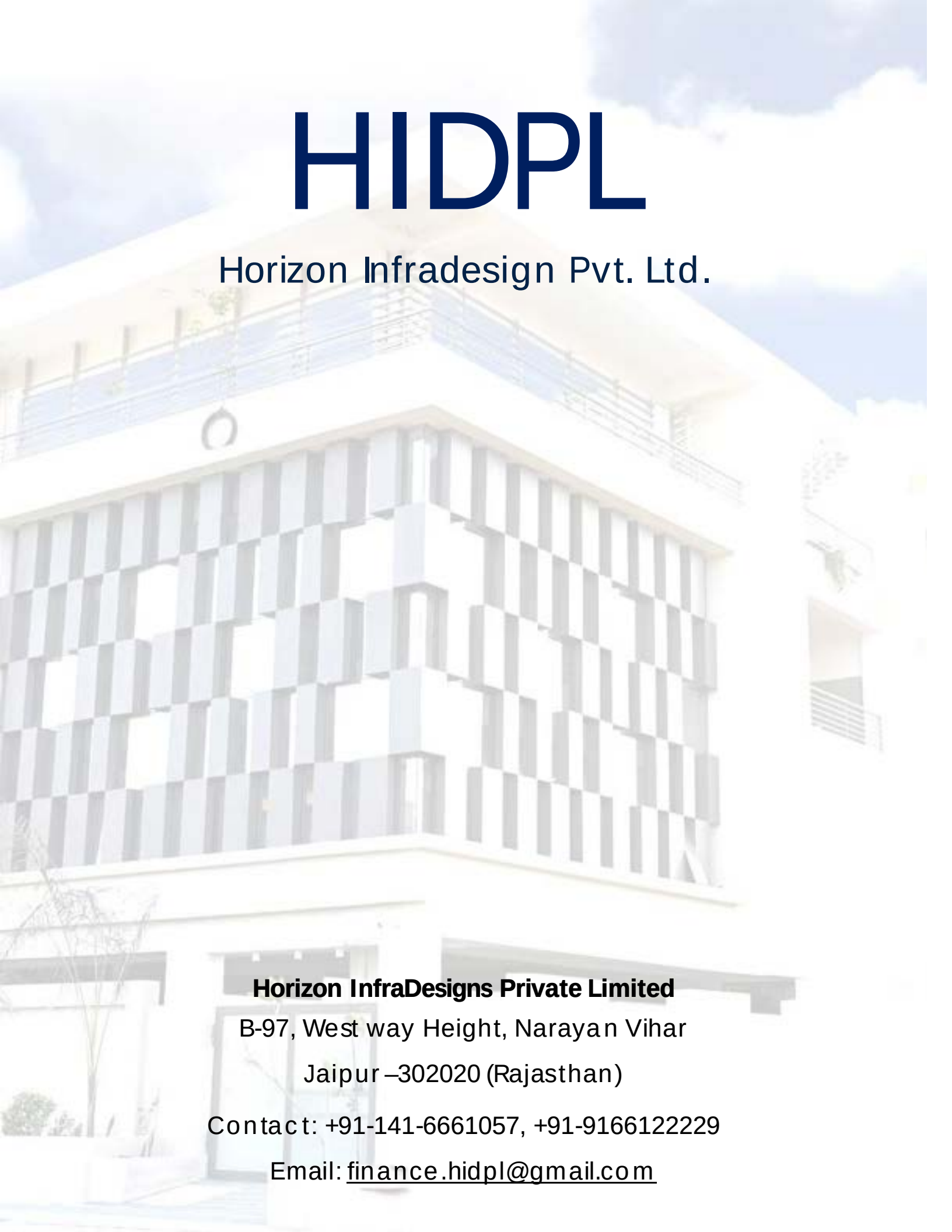
HIDPL

Horizon Infradesign Pvt. Ltd.



Horizon InfraDesigns Private Limited

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1. Introduction to HiDPL :

Horizon Infradesigns Pvt. Ltd. (HIDPL) is among India's top structural and industrial & commercial architectural consulting and construction (RCC, Steel Structure and PEB) firm, providing services to architects, owners, contractors and developers.

Since our establishment in 1997, we have designed countless landmarks with projects spread across myriad geographies and built environment, thereby establishing our reputation for excellence in Consulting and design and the ability to respond quickly to the demands of every project.

Over three decades, HIDPL is providing unique solutions in the field of Structural & Architectural consultancy and construction in both rcc and steel structure division. Our strategic approach towards planning, designing & implementations has led to the successful completion of a large number of projects.

We have also established a well-equipped NABL accredited laboratory in 2017 for Geo-technical investigations & material testing.

Some Specialties –Infrastructures viz. High Rise Buildings (20 storied), Steel Structure Long Span Trusses up to 40 m, EPC, PEB AND RCC Structure projects, RCC Monuments having largest diameter dome in the country, Telecom Tower Design up to 45 m, Geo–Technical Investigations, Storm Water Canal Design etc.

2. Company Features:

HIDPL offers a range of features and services that cater to various aspects of design, fabrication, and construction. Here are some key features:

Design and Engineering Services

Custom Design Solutions: Tailored designs to meet specific project requirements.
Advanced CAD Software: Use of sophisticated computer-aided design (CAD), building information modelling (BIM) tools like TEKLA.
Structural Analysis: Comprehensive analysis to ensure safety, stability, and compliance with building codes.

Fabrication Capabilities

Fabrication Facilities: Modern machinery for cutting, welding, and assembling steel components.
Quality Control: Rigorous quality assurance processes to ensure precision and durability.
Pre-fabrication Services: Pre-fabricated components for faster and more efficient on-site assembly.

Construction and Installation

Project Management: Experienced pro  managers to oversee the construction process from start to finish.
Skilled Workforce: Trained and certified personnel for on-site erection and assembly.
Safety Standards: Adherence to stringent safety protocols to ensure the well-being of workers and the integrity of the structure.

Product Range and Expertise

Diverse Structure Types: Capability to construct various types of steel structures such as commercial buildings, industrial facilities, and high-rise buildings.
Expertise in Different Steel Grades: Knowledge and use of different steel grades and types depending on the project requirements.

Client Services

Consultation and Support: Providing consultation services from the initial concept to the completion of the project.

3. Understanding RCC Construction & Structural Loads :

One of the most common and widely used structure in construction is the concrete or RCC frame structure. Made from a Skelton of re-enforced concrete, this structure is a framework of vertical members- columns and horizontal members- beams. Flat members called slabs make up the floor and the sections on which we walk. With this basic information in mind, it is time to understand two major aspects about RCC structures- what exactly is re-enforced concrete or RCC made of and what is the importance of beams, columns and slabs?

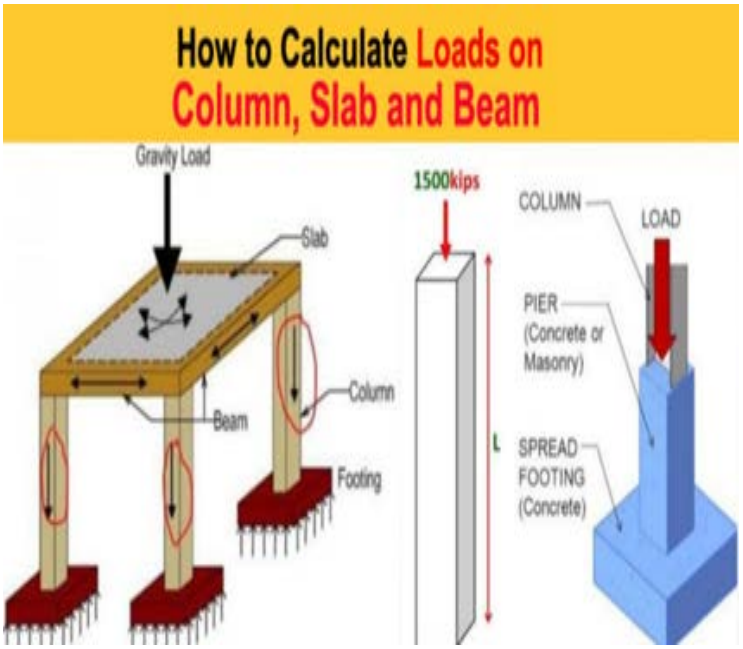
A. Re-Enforced Concrete (RCC)

What is referred to as ‘concrete’ in the world of building is actually re-enforced concrete or re-enforced cement concrete (RCC) which is a combination of concrete and steel re-enforcement bars known as rebar's. Ductile, tensile and elongated, steel rebar's impart strength to the framework and re-enforces it against wear & tear and threats to structural integrity.

The concrete used in any RCC framework is a combination of varying proportions of cement (Portland or hydrophobic), gravel, sand and water. This mixture in itself needs to be exact and suitable depending on the type of construction, for eg: a 2 storey home, a high-rise building, etc. Easy to mix on-site, this concrete liquid is poured into a mould called ‘formwork’ till it hardens, which is usually in a few short hours but may require up to a month to be at its strongest. It is easy for the concrete to crack as it hardens, which is why it is necessary to cure the concrete and prop up the structure as it hardens.

B. Beams, Columns & Slabs

As stated above, beams are horizontal sections, columns are vertical and slabs are the horizontal sections that make up the flooring. While columns are the primary load bearing element of the framework, beams & slabs are the secondary elements. If a beam or slab is under stress, only a part of the structure is affected. However, if a column is damaged or under stress, it can affect the entire building and cause it to collapse!



In order to understand the RCC structure better, it is also important to understand the different kind of forces or structural loads that act upon a building:

-Dead Loads

Known as dead loads, structural elements like walls & facades are permanent forces that act downwards on the building and come from the weight of the building itself.

-Live Loads

Live loads are those variable downward forces that depend on the weight of the structure's occupants, furniture and more. As live loads can vary with time, it is important for the design to account for their effect on a building's structural integrity & strength.

-Dynamic Loads

A common occurrence on structures like bridges or parking lots, dynamic loads are those variable forces that come from foot & vehicular traffic, including both accelerating & braking loads.

4. RCC Structural and Architectural Consultancy and Construction :

Several iconic buildings, malls to monuments, high-rises to hospitals, statues, institutional spaces, office buildings, industrial warehouses, places to stay, pray or play bear the signature of excellence of our Buildings business. With an enviable track record, the business offers expertise across some well-defined infrastructure segments like Residential, IT & Office Spaces, Public Spaces, Factories, Warehouses and Hospitals

Over three decades, Horizon InfraDesigns Pvt. Ltd. (HiDPL), a structural engineering consultancy and turnkey project construction firm, has stayed true to the meticulously selected tenets of professional practice, while combining superior design and quality standards with stringent compliance. In recent times, Horizon InfraDesigns Pvt. Ltd. (HiDPL) has delivered more than 5 million square Feet of space, in terms of structure and architectural designs and turnkey project construction.

With excellent architectural and structural designs, optimal interior systems, high-strength concrete and other office automation systems, Our Buildings business has built several commercial complexes and educational institutions while their expertise in 'design-and-build' has given expression to several high-end homes, villas and mass housing complexes. Our Buildings business offers ‘turnkey solutions’ from ‘concept to commissioning’ with the help of advanced systems like Building Information Modelling, a global supply chain and unrivalled project management expertise. The advent of precast concrete construction has given the business a decisive edge with faster, more controlled, better quality construction.

RCC STRUCTURE PHOTO GALLEEY :

A. Residential Buildings

Fathebaad Flat

Paras Sky, Bhilwara

Group Housing, Vishal Nagar, Jaipur

The Times, Jagatpura, Jaipur

Samurai Apartment, Nirman Nagar, Jaipur

Residential Apartment, Hanumangarh

Paras Air, Bhilwara

B. Commercial Buildings

Ananta Jagat, Bhilwara

Abhinandan Tower

C. Institutional and Educational Buildings

Mahila College, Deedwana

Basketball Court at GSIS

D. Hospital and Healthcare Buildings

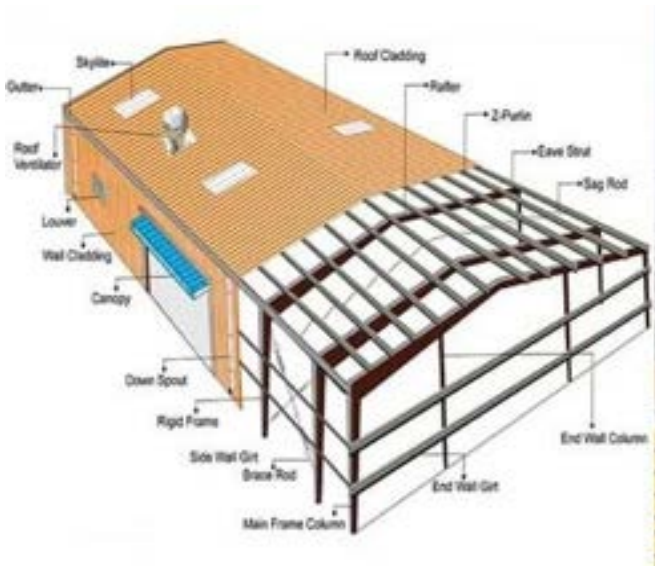
SMCT Hospital, Bikaner

Marble City Hospital, Kishangarh

5. Steel Structure (PEB) Consultancy & Construction :

PEB (Pre-Engineered Building) structures are efficient, versatile construction solutions involving pre-engineered components, suitable for industrial, commercial, and institutional uses. These lightweight yet durable buildings can include skylights, wall lights, vents, louvers, roof monitors, doors, and windows as per customer requirements. PEBs offer longevity, factory-controlled quality, quick construction, and cost efficiency.

Horizon Infradesigns pvt. Ltd. (HIDPL) excels in PEBs, providing customized engineering, fabrication, and construction for diverse applications, including factories, warehouses, showrooms, supermarkets, hangars, metro stations, offices, malls, schools, and hospitals, with a proven track record of success.



Structural systems are the primary load-bearing components of pre-engineered buildings, varying in shape and size based on application and requirements. The main frame members, including columns, end wall posts, rafters, and other support members, are crucial for load support.

All structural steel sections and welded plate members must be designed per the latest American Institute of Steel Construction (AISC) specifications, covering design requirements and allowable stresses for building structures.

I. Materials and Technology

At HIDPL we employ various techniques in terms of material and technology to enhance the efficiency, strength, and sustainability of their projects.

Here are some of the key techniques used:

Materials

High-Strength Steel:

➢Use of high-strength steel which provides better mechanical properties and greater resistance to corrosion.

➢Advanced high-strength steel for applications requiring exceptional strength and reduced weight.

Weathering Steel:

➢Use of weathering steel (such as COR-TEN steel) that forms a stable rust-like appearance after exposure to weather, eliminating the need for painting and reducing maintenance costs.

Stainless Steel:

➢Use of stainless steel for its excellent corrosion resistance, especially in environments exposed to moisture or chemicals.

Composite Materials:

➢ Combining steel with other materials such as concrete in composite structures to take advantage of the strengths of both materials.

II. Steel Structure (PEB) Photo Gallery

A. Commercial Buildings

Gud Mishri, Vaishali Nagar, Jaipur

Jaipur 135 Hotel, Behror

B. Factories and Warehouses

NBC Warehouse, Bagru

Oxylink, Pratappura

C. Hotels, Resorts & Hospitality

Karni Resort, Kumbhalgarh

Maya Hills, Udaipur (Holy Mount)

6. Associates :

A team of 50+ dedicated professionals

For any organization, its skilled professionals are its biggest asset. On this parameter, the team at Horizon InfraDesigns Pvt. Ltd. is exceptional and forms the foundation of its success. In recent years, the technical team has grown multifold with a solid base of strong fundamentals and evolving industry knowledge.

This team is guided by Horizon InfraDesigns Pvt. Ltd. Principal Associates, who bring to the table, unique perspectives about design and an extensive experience in the field of structural consultancy.

Key Employees of Horizon InfraDesigns

Sr. No.	Name	Qualification	Designation	Particular of work done	Experience (Years)
1	Kapil Sarawagi	M.Tech (MNIT)	Director	Experience of RCC and Steel Design	27
2	Mahaveer Chouhan	B.Arch (MNIT)	Director (Sr.Architect)	Senior Architect	27
3	Pawan Singhania	M. Tech (MNIT)	Mentor in Designing	RCC & Steel Designer (Staad & Etabs)	27
4	Abhinay Jain	M. Tech (IIT, Guwahati)	Design Engineer	RCC & Steel Designer (Staad & Etabs)	3
5	Shubham Khandelwal	M. Tech	Sr. Design Engineer	Steel Structure Designing (Etabs)	6
6	Diptanshu Sharma	B. Tech	Design Engineer	Expert inn RCC Design	5
7	Nishant Sarshwat	B. Tech	Sr. Design Engineer	RCC & Steel Structure	5
8	Sohail Ushmani	B. Tech	Draughtsman (Steel Structure)	Expert in Steel Structures	5
9	Mukesh Bohra	Diploma	Draughtsman (Structure)	Expert in Steel Detailing	18

Key Employees of Horizon InfraDesign

Sr. No.	Name	Qualification	Experience	Particulars of work done	Total Experience (Years)
10	Raman Bhojak	B.Tech	Design Engineer	RCC Design (Staad Pro & Etabs)	3
11	Nahar Singh	B. Tech	Project Manager	RCC Structure	25
12	Anil Lamba	ITI	Draughtsman (Structure)	Expert in RCC Structures	18
13	Dinesh Choudhary	B. Tech	Quantity Surveyor	RCC & Steel Project (Qty. Surveyor)	4
14	Pushpendra Singh Parihar	B. Arch	Architect	Architectural design	4
15	Govinda Verma	B. Tech	Site Engineer	Expert in RCC Structures	4
16	Radhika Chouhan	B. Arch	Architect	Architectural design	4
17	Ankit Kumawat	B. Tech	Quantity Surveyor	RCC & Steel Project (Qty. Surveyor)	3
18	Yogesh Saini	B. Tech	Design Engineer	Expert in Staad Pro	4
19	Pinky Shekhawat	Diploma	RCC Drawings & Detailing	Expert in Autocad	18
20	Ashok Kumar	B. Tech	RCC Drawings & Detailing	Expert in Autocad	4

7. Our Clients:

The best and most productive relationships are synergistic and goal-oriented, and a long-term relationship has the value add of deep-rooted industry and company knowledge and relationships. we've been devoting our hearts and minds to our clients, achieving great successes and building lasting relationships. Our client list speaks for itself.

At HiDPL, we take pride in our uncompromising integrity in customer engagement and quality assurance, and throughout our 27-year legacy, we have made it our core mission to provide Engineering Consultancy, real-estate development, management, and services of the highest caliber.