



# AKSHAR PT

BUILD THE FUTURE TODAY



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

## Site Photos



CENTRAL VISTA



ALPHA GOLD



PRAGATI INSPIRE



PARAMOUNT



PP MANIYA HOSPITAL



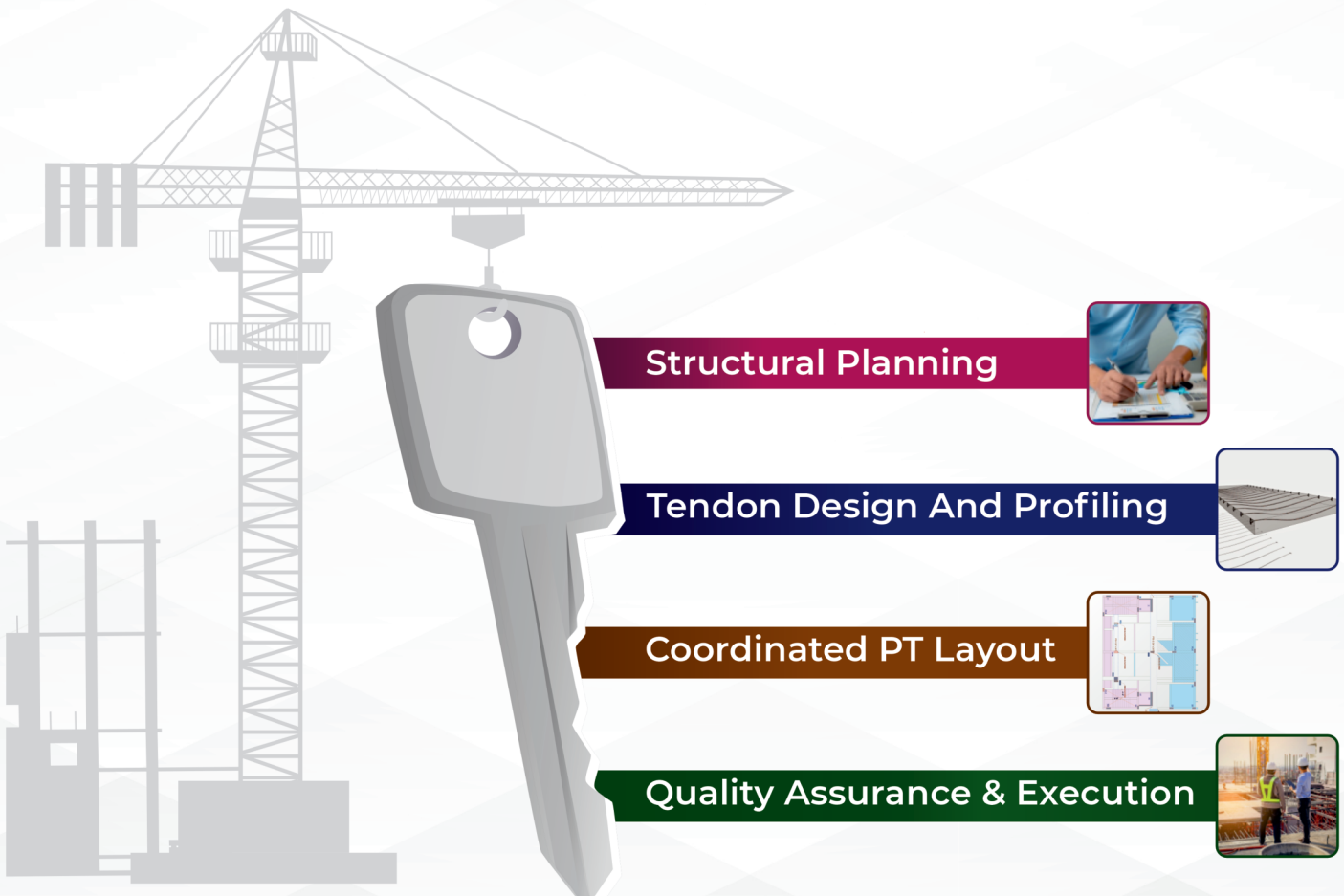
KALP RESIDENCY

## Company Profile

Akshar PT is a renowned post-tension civil engineering firm established in Gujarat, recognized for its expertise and reliability. Our executive team shares over 17 years of combined experience and proudly stands at the forefront of post-tensioning in the Indian development and construction industry. With a highly qualified team of engineers and professionals, we deliver comprehensive post-tensioning solutions from design and supply to supervision and execution ensuring precision, efficiency, and strict adherence to international standards.

We specialize in advanced post-tensioning systems for residential, commercial, and industrial structures across the world. We ensure structural strength, cost efficiency, and long-term durability for projects of any scale.

At Akshar PT, we pride ourselves on continuous improvement, timely delivery, and uncompromised quality. Backed by a strong supply chain and in-house engineering capabilities, we work closely with consultants and contractors to achieve seamless project execution. With experience across residential, commercial, and infrastructure projects in INDIA, AKSHAR PT combines precision engineering, certified quality, and innovative design to deliver results you can trust.



# Bonded Post Tension System



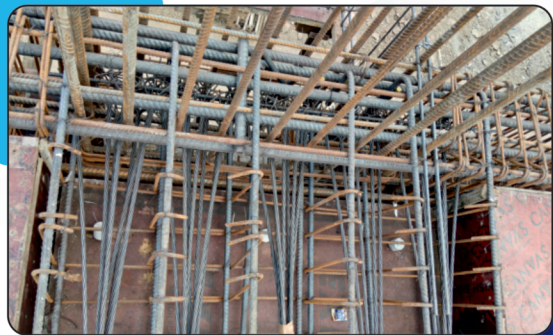
LRPC Strand



Installation of Bonded PT System



Live End of Bonded PT System



Dead End of Bonded PT System



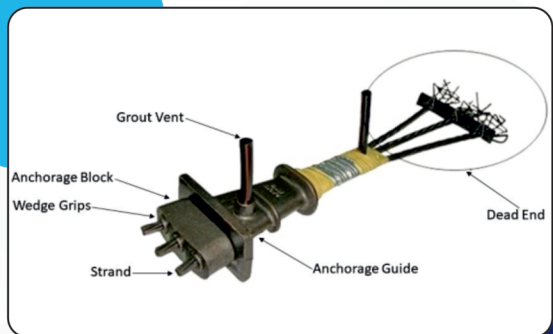
After concreting of Bonded PT System



Stressing



Grouting



Bonded PT System

# Unbonded Post Tension System



LRPC Strand With Plastic sheathing



Installation of Unbonded PT System



Live End of Unbonded PT System



Dead End of Unbonded PT System



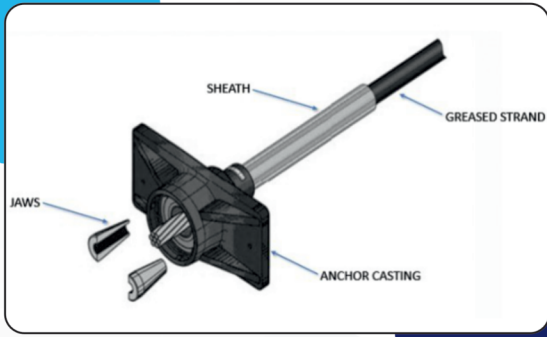
After Concreting



Stressing

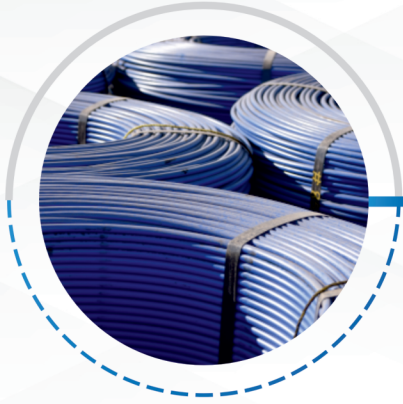


Beam After PT Cable Cutting



Unbonded PT System

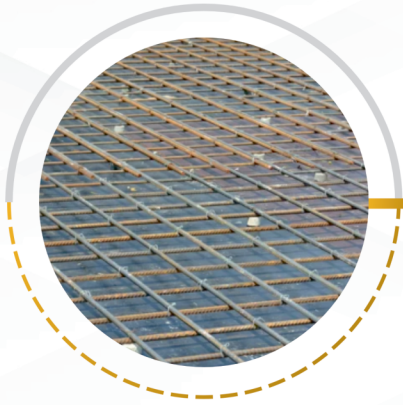
## Working Sequence



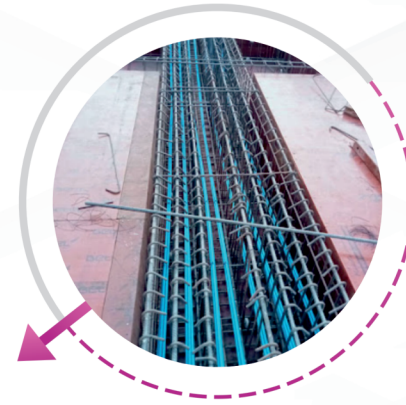
1. Material Procurement



2. Material Dispatch



3. shuttering & bar binding



4. PT Cable Laying



5. Extra Top Steel Placement

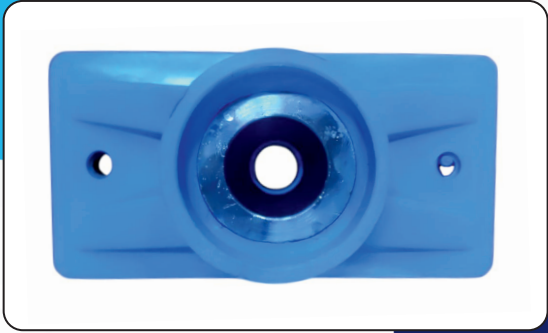


6. Concrete Pouring



7. PT Cable Stressing

# Post Tension Accessories



Standard Anchor Plate Mono-Block



Pocket Former & End Cap



Wedges



Stressing Jack



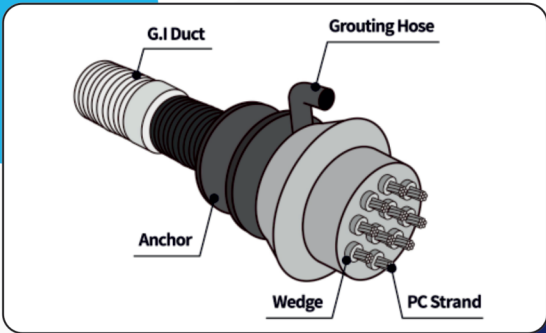
Anchor Block & Casting



Anchor Head



Duct



Typical Section of Bonded System

# Material Specification of PT System

## Unbonded PT Cable

### 7 Ply Steel Cable :

- Low-Relaxation 7 wire Strand of Class II (Grade 270) with 12.7 mm diameter shall confirm to the requirements of IS 14268: 1995
- Sectional steel area of Strand: 98.7 mm<sup>2</sup>
- Modulus of Elasticity: At least 196,500 N/mm<sup>2</sup>
- Weight of Strand: More than 0.775 kg/m
- Yield Load: Not less than 180 kN
- Ultimate Strength: Not less than 1860 N/mm<sup>2</sup>
- Minimum Breaking Strength: Not less than 183.7 kN
- Minimum elongation: 3.5% for gage length of 600 mm Relaxation at 1000 hours: Less than 2.5% @ 70% Minimum Ultimate Tensile Strength

## Plastic Sheathing Specification :

- Sheathing material: polyethylene or polypropylene
- Minimum Thickness: 1.27 mm
- Inside diameter: At least 0.76 mm greater than the maximum diameter of the strand.
- Minimum Density: 0.941 gram/cm<sup>3</sup>

## Grease Specification :

- Protect against corrosion to the unbonded strand
- Provide continuous non-brittle coating.
- Resist flow within temperature range.
- Non-reactive with Pre-stressing steel, reinforcing steel concrete.
- Minimum weight of the grease coating on the
- Pre-stressing strand shall not be less than 1.14 kg per 30.5 m for 12.7 mm

## Anchor Plate :

### 1. Microstructure :

- Nodularity: 90-95 %
- Carbide: Less than 3 %
- Pearlite 35-40 %

## 2. Mechanical Property :

- Hardness Number (BHN):170-230

## 3. Material Property :

- Grade SG500/7 (ASTM 536 Grade 805506 OR IS 1865)

## Pocket Former

- Material: Plastic or P.E. (Polyethylene) coated. Capacity: 500kg is an example specification.
- Color: Blue is an example, but it can also be galvanized golden.
- Head Shape: Round.
- Diameter: 2 inches is a common example.

## Duct

### Materials and Properties

- Bonded ducts are generally made from corrugated metal (usually galvanized steel) or corrugated plastic (HDPE or PP).
- Corrosion Protection: -Ducts must provide excellent corrosion protection for the tendons, often achieved through galvanization or the inherent properties of plastic.
- Strength and Flexibility:- They need high impact and compression strength to withstand concreting without damage, yet must be flexible enough to conform to the required tendon profiles.
- Chemical Inertness:- Materials should be chemically inert and compatible with the surrounding concrete and grout.
- Leak Tightness: -All connections, splices, and anchorages must be air and water-tight to prevent contamination and ensure proper grouting

## Master Wedges :

### 1. Chemical Composition :

- Carbon:0.18-0.24 %
- Manganese:0.85-1.24 %
- Phosphorus:0.005-0.035 %
- Silicon:0.23-0.30 %

### 2. Mechanical Property :

- Hardness
- 60-65 HRC at Surface
- 44-48 HRC at Core

### 3. Material Property :

- 20MnCr5 or 20CrMnTiH

# Site Photos



Navkar Bastion



Imphal Airport



Elvee Jewels



Kalista Jewels



The Park



Vida 360



BR Square



The Future Corner

## Our Most Significant Projects Highlight

PROJECT NAME	STATE	CITY	SCOPE OF WORK	WORK AREA
KALISTA JEWEL	GUJARAT	SURAT	PT BEAM	20775 MTR
NEON JEWEL	GUJARAT	SURAT	PT BEAM	6144 MTR
PRAGATI CELESTIA	GUJARAT	SURAT	PT BEAM / SLAB	15600 MTR / 5300 SQF
SMC LIABRARY KATARGAM	GUJARAT	SURAT	PT BEAM	27503 MTR
BRAHMAKUMARI BHAVAN	GUJARAT	BARDOLI	PT BEAM	6060 MTR
CENTRAL VISTA	GUJARAT	SURAT	PT BEAM	53248 MTR
GREEN FUSION	GUJARAT	SURAT	PT BEAM	6966 MTR
SHREE PAD PARAMOUNT	GUJARAT	SURAT	PT BEAM	60000 MTR
SIKAR AUDITORIUM	RAJASTHAN	JAIPUR	PT BEAM	7877 MTR
IMPHAL AIRPORT	MANIPUR	MANIPUR	PT BEAM	7877 MTR
RR METAL INDUSTRIES	GUJARAT	SILVASA	PT BEAM	9388 MTR
SATDHAM	GUJARAT	AHMEDABAD	PT BEAM	4478 MTR
NAMSKAR DHARMSHALA	GUJARAT	PALITANA	PT BEAM	5180 MTR
THE PARK	GUJARAT	VAPI	PT BEAM	3356 MTR
VIDA 360	GUJARAT	VAPI	PT BEAM	2830 MTR
VALSAD CROSS ROAD	GUJARAT	VALSAD	PT BEAM	34206 MTR
EURO FOOD	GUJARAT	CHIKHLI	PT BEAM	4388 MTR
HOSPITAL	MAHARASHTRA	NANDURBAR	PT SLAB	3055 SQF
BR SQUARE	GUJARAT	BARDOLI	PT BEAM	7527 MTR
SAHIL STAR	GUJARAT	SURAT	PT BEAM	8398 MTR
NARESHBHAI FACTORY	GUJARAT	SURAT	PT BEAM	4920 MTR
SUMAN SCHOOL	GUJARAT	SURAT	PT BEAM	10872 MTR
BLUE BIRD RESORT	GUJARAT	NAVSARI	PT BEAM	7770 MTR
RAM KRISHNA BUILDING	GUJARAT	SURAT	PT BEAM	39692 MTR
KRISHNA INFRA	GUJARAT	SURAT	PT BEAM	6444 MTR
OM SAI HOSPITAL	GUJARAT	BARDOLI	PT BEAM	5850 MTR
MAUNI SCHOOL YOGICHOCK	GUJARAT	SURAT	PT BEAM	20619 MTR
PRAGTI ELITE	GUJARAT	SURAT	PT BEAM	13226 MTR
THE FUTURE CORNER	GUJARAT	SURAT	PT BEAM	4930 MTR
SARVASVA	GUJARAT	SARANGPUR	PT BEAM	9667 MTR
MAPLE WOOD SCHOOL	GUJARAT	SURAT	PT BEAM	2893 MTR
KALP RESIDENCY	GUJARAT	SURAT	PT SLAB	143884 SQF
APPLE CREATION	GUJARAT	SURAT	PT BEAM	18284 MTR
SEZ	GUJARAT	GANDHINAGAR	PT BEAM	5400 SQF
WHITE HOUSE	GUJARAT	SURAT	PT BEAM	41288 MTR
BAPS AKSHARDHAM	GUJARAT	SURAT	PT BEAM	16774 MTR
MAUNI SCHOOL KATARGAM	GUJARAT	SURAT	PT BEAM	48582 MTR
VIJAY SINGNATURE	GUJARAT	SURAT	PT BEAM	22070 MTR
PRAGATI INSPIRE	GUJARAT	SURAT	PT BEAM / SLAB	30680 MTR / 42656 SQF
SHIVOHUM HOUSE	GUJARAT	SURAT	PT BEAM	9958 MTR
DOBARIYA ESTATE	GUJARAT	SURAT	PT BEAM	63841 MTR
VAKHARIYA BUILDING	GUJARAT	SURAT	PT BEAM	27623 MTR
GANESH IMPEX	GUJARAT	SURAT	PT BEAM	8844 MTR
RNGPIT COLLAGE	GUJARAT	BARDOLI	PT BEAM / SLAB	4832 MTR / 8760 SQF
SUMAN PRIMARY SCHOOL	GUJARAT	SURAT	PT BEAM	13120 MTR
SSSCN COLLAGE	GUJARAT	VAPI	PT BEAM	4341 MTR



# Akshar Post Tensioning The Future of Structural Strength

## GET IN TOUCH



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Strength in Concrete



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