SUNTECH

STRUCTURAL SYSTEMS Pvt Ltd

(YOUR SPECIALIZED PARTNER)

Post Tensioning
Ground Anchoring and
Rebar Coupler

SUNTECH STRUCTURAL SYSTEMS

COMPANYPROFILE

The Suntech Post - tensioning Structural system is developed with features to meet application requirements of simplicity, efficiency and meet market demands of cost competitiveness. The mission is to design the Suntech Structural systems which will be efficiently applied in all buildings and Civil engineering works.

We as a specialist agency in post tensioning, Ground Anchor and Rebar threading works to offer efficient structural solution to building works. We involve in exploring appropriate Engineering systems and construction, optimized design for Post tensioning and Ground Anchoring works in Buildings.

Suntech has a core team of passionate management staff supported by Potential design team to provide appropriate structural solution to client. We are having an experienced execution team of engineers and supervisors with trade-skilled work force to deliver the scope of works without leaving any hassles to our clients.

In addition to the efficiency of systems design, all product of Suntech are also designed and manufactured under a quality control program to meet international standards thus ensuring that all clients would achieve the best value at a competitive cost.

Regardless of time constraints, Suntech is always committed to be the leading business partner of all clients and continue to commit to high quality products and services.

OUR SERVICES:

Supply of Parallel Threaded Rebar Coupler

- Commercial Buildings
- Residential Buildings
- Bridges

Ground Anchors

- Commercial Buildings
- Residential Buildings

Post Tensioning Works in Buildings & Bridges

- Commercial Buildings
- Residential Buildings
- Bridges
- Multilevel Car Parking
- Hospital & Factory Buildings

SUNTECH STRUCTURAL SYSTEMS

REBAR COUPLERS

Rebar Couplers replaces overlapping of Rebar in structures with advantages of Cost saving, reducing process time, increased strength of joints and adding immense strength to the structure comparatively.

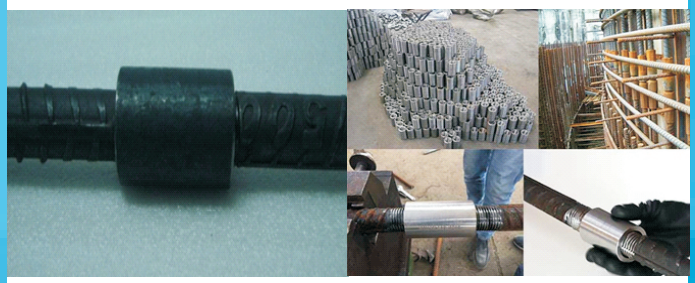
Our activities include,

Threading of Rebar at site

Splicing of Rebar Couplers

Rebar Couplers Variants from 16mm to 40mm

Rebar Coupler Joint



BENEFITS OF REBAR COUPLER

- Cost saving against overlapping
- Continuity of reinforcing bars
- No congestion of bars in structure
- Reduction of construction cycle time
- Reduction of steel wastage
- Staggering of bars is not required
- Dowels avoided, enabling reuse of form work
- Allows full ductile elongation of bars
- Easy to install because no torque wrenching required
- Bar Cross section area is not reduced

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MANUFACTURING PROCESS

Cutting

The end of reinforcing bar is cut by cutting machine for perpendicularity.

Thread Rolling

The thread is rolled at the forged end of the bar.

Assembling

The Suntech system coupler is fixed to the threaded rebar.

REBAR COUPLER THREADING MACHINE

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STRUCTURAL SYSTEMS

POST TENSIONING SLABS

ADVANTAGES OF POST-TENSIONED BUILDING CONSTRUCTION

- Longer Spans are achieved with lesser beam/slab depth.
- Reduction in construction time and cost.
- Reduction in manpower requirement.
- The overall self-weight of the buildings is reduced.
- Reduction of foundation depth and reinforcement.
- Number of columns will be reduced.
- It reduces or eliminates shrinkage cracks

DESIGN OF POST TENSIONING SLABS:

- To perform an independent evaluation of the Slab system with an objective to identify possible improvements especially from implementation of architectural features and client requirements.

- Review the available information on slab system proposed by the main designer / structural consultant including the appropriateness, amount and tendon profile, material suitability and their key specifications, practical problems and cost aspects

- Re-design the post-tensioning system if the ones proposed by third party need major modifications or improvements and submit it to the main designer, QA team or any other party authorized by the client.

- Evaluate and propose the appropriate solution to account the secondary effects of P-T work in other components of the slabs.

- Prepare comprehensive design review or re-design calculation report and submit the concern party.

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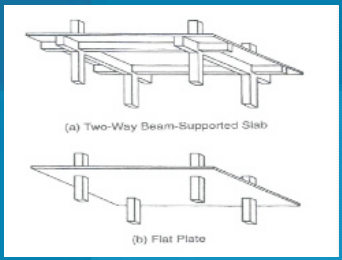
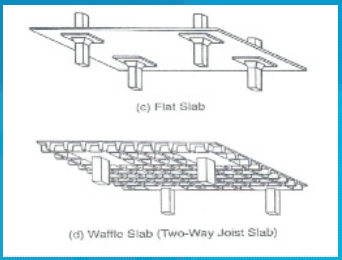
TYPES OF SLABS



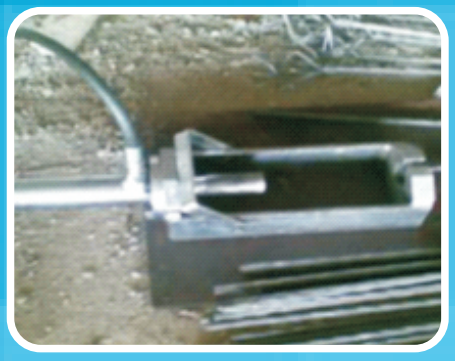


POST TENSIONING SLAB CONSTRUCTION PROCEDURE

SLAB BOTTOM MESH REINFORCEMENT

FABRICATION OF DEAD ENDS

FIXING OF LIVE END - ANCHORAGES



LAYING & PROFILING OF TENDONS

FIXING OF BURSTING LINKS

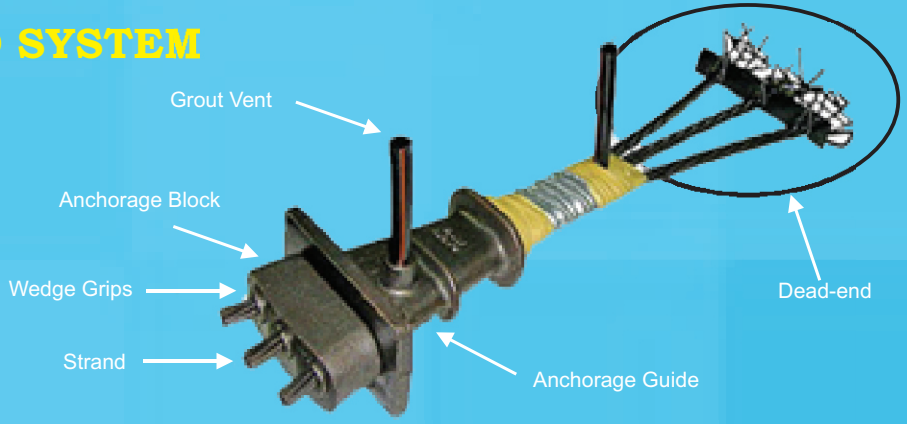
FIXING OF GROUT VENTS

STRESSING OF TENDONS

GROUTING OF TENDONS

POST TENSIONING SYSTEMS & COMPONENTS

BONDED SYSTEM



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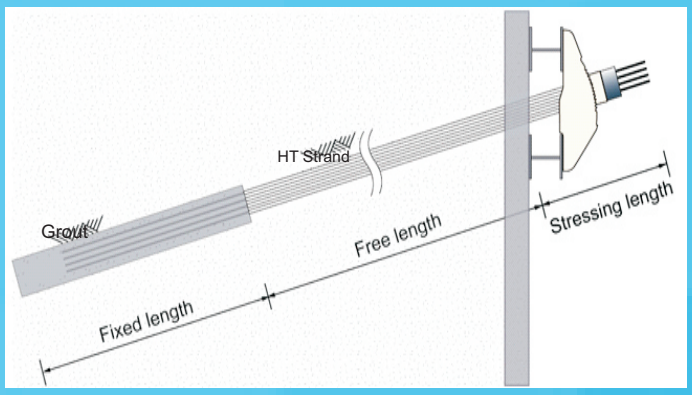
GROUND ANCHORS

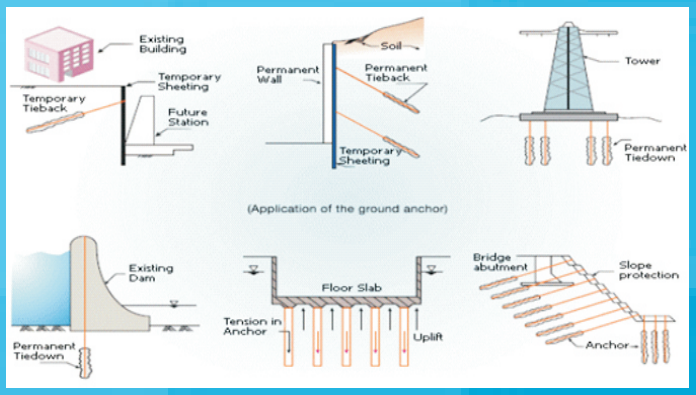
INTRODUCTION

GROUND ANCHORS

- **PASSIVE ANCHORS (REBAR ANCHORS)**
- **ACTIVE ANCHORS (PRESTRESSED ANCHORS INCLINED & VERTICAL)**

TYPICAL ANCHOR SYSTEM





GROUND ANCHOR SEQUENCE

DRILLING OF BORE HOLES

INSTALLATION OF ANCHOR

FABRICATION OF ANCHORS

GROUTING OF ANCHORS

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