



struct rehab india
your challenge is our task

STRUCTURE REPAIR SOLUTIONS

- » Structural Strengthening & Rehabilitation
- » Corrosion Repair
- » All types of Grouting
- » Critical Construction
- » Water Proofing & Protective Coating
- » Under Water Repair
- » Structural Steel Fabrication





COMPANY OVERVIEW

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M/s **STRUCT REHAB INDIA PVT. LTD (SRI)** is the outcome of 19 years of extensive services on construction and rehabilitation works rendered by the parent company “**Om Shakthi Buildcon Pvt. Ltd**”(OSBC).

In the year 2003, **MR P M VELU** the founder, floated a company “**Om Shakthi Buildcon Pvt Ltd**” to handle concrete repair works. During its long service, it not only specialized expertise in repairs and rehabilitation of both steel and concrete structures, but also trained technicians to handle the site problems with care and confidence.

The company has successfully executed several major and minor repair projects related to residential, commercial, thermal, cement, hydraulic structures, etc. With an effective implementation of project management system, trained technicians augmented with the latest art-of-the equipment worth of 5 Crores of rupees and repair technology, the company is capable of handling any restoration jobs including under water works. It has a sound man power of 23 engineers including trained technicians and of about 150 workmen.

Keeping in view to serve customers from different parts of the country and neighboring countries the company was renamed as Struct Rehab India Pvt. Ltd. with branches in strategic locations.



SRI is an ISO – 9001 certified company. It has met all the requirements in ISO 9001: 2015, which is focused on meeting customer expectations and deliver up to their satisfaction. ISO 14000 is being applied soon.





To be a global premier organization devoted solely to repair and rehabilitation and engineering services to support the construction industry.



Quality is first engineered in terms of right selection of materials, methodology, post repair evaluation by trained and knowledgeable technicians. Special emphasis on OH&S.



We carry out the assigned jobs with honesty, dedication and respect for confidentiality. Our team work, proper communication, OH&S policy are additional attributes in our corporate culture.



Meeting customers' needs is fundamental to our success. We provide innovative solutions that are aligned with the changing requirements and expectations of our customers and build long term relationship with customers.



OUR STRENGTH

RENOWNED EXPERTS
IN ADVISORY COMMITTEE

QUALIFIED AND
TRAINED MAN POWER

STATE-OF-ART-OF
EQUIPMENT

EFFECTIVE
MANAGEMENT SYSTEM

OUR SPECIAL EMPHASIS

OH & S :

'No injuries to any one, any time' is our moto and action plan. We never compromise in implementing OH & S polices at site.

CONTINUOUS EDUCATION:

Continuous training to upgrade technology and its effective implementation is the plus point.

LEAN TECHNOLOGY :

Saving time, materials & energy are the key parameters for sustainability and profitability of the organization. We follow these principles at every site.

SERVICE EXPERTISE GROUPS

OUR SERVICES TO INDUSTRY

- » Structural Strengthening & Rehabilitation
- » Corrosion Repair
- » All types of Grouting
- » Critical Construction
- » Water Proofing & Protective Coating
- » Under Water Repair
- » Structural Steel Fabrication



Repair and Rehabilitation



PVC membrane



PU Coating



UV resistant coating



Critical Construction Solution



Corrosion Repair



Dam Repair



Structural Strengthening
Fabrication



OH & Safety

**OUR SERVICES ARE BEING PROVIDED BY SELECTIVE
EXPERTISE GROUPS BASED ON PROJECT REQUIREMENTS**

STRUCTURE REPAIR SOLUTIONS

Construction activity is a multi disciplinary dynamic activity and hence, alterations / modification / strengthening / demolition etc. Is always be associated with the main activity. Supporting these services play a pivotal role for timely completion and durable construction. Further, concrete is not always durable. Several factors influence its performance and deterioration is inevitable and so as repair and rehabilitation.

Our structure repair solution services include structural elements Strengthening, repair and rehabilitation, corrosion repair, water proofing & protective coating, industrial flooring and underwater repair. There are several repair techniques, methodologies are available for each of this activity. SRI has an expertise and experience in this regard. With all types of available tools SRI has been successfully providing the services at the most satisfaction of their customers. Each activity by different methodology is illustrated by site examples “**CARRIED OUT BY SRI**”.



Strengthening of Commercial Building – KCT, Bangalore



Silo Strengthening
– JSW Cement Plant, Bellary

STRUCTURAL STRENGTHENING

Many a times, construction industry requires to enhance the structural properties of elements like columns / beams / slabs/ walls / foundations etc. due to various causes such as environmental degradation, design inadequacies, poor construction practices, lack of regular maintenance, revisions in the code of practice, increase in loads due to changes in usage of structure or unexpected seismic conditions etc.

There are several traditional and latest methodologies available for strengthening of structural elements. SRI carried out many strengthening works. So far, more than 200 rehabilitation and about 150 water proofing works were carried out successfully. Some of the repairs carried out are highlighted as under:



Strengthening of Foundation

STRENGTHENING FOUNDATIONS

Generally, strengthening of the foundations might be needed due to the alterations in serviceability of the buildings and other reasons as mentioned earlier.

One method of strengthening can be carried out by constructing a concrete jacket to the existing footings. The new jacket should be properly anchored to the existing footing and column neck in order to guarantee proper transfer of loads. This can be accomplished by drilling holes into existing concrete of footing and epoxy grouting along the longitudinal reinforcement of jacket.



Column with Shear Connectors



Column with water tight shuttering



Micro-concrete Finished Column

STRENGTHENING RCC COLUMN

There are two standard techniques for strengthening reinforced concrete columns.

1. Concrete jacketing
2. Steel Jacketing

CONCRETE JACKETING METHODOLOGY

Adding steel connectors into the existing column in order to fasten the new stirrups of the jacket in both the vertical and horizontal directions at spaces with minimum 40mm to maximum 125mm.

Those connectors are added into the column by making holes 4mm larger than the diameter of the used steel connectors and depth as per the design specification. Filling the holes with an appropriate epoxy adhesive injectable / resin material and then inserting the connectors into the holes.

Adding vertical steel connectors to fasten the vertical steel bars of the jacket following the same procedure as described above. Installing the new vertical steel bars and stirrups of the jacket according to the designed dimensions and diameters.

Coating the existing column with an appropriate epoxy material that would guarantee the bond between the old and new concrete. Pouring the concrete of the jacket before the epoxy material dries. Micro-concrete is preferable for better performance as is free flowing and self compacting in nature.

RCC COLUMN STRENGTHENING BY STEEL JACKETING

1. Remove the concrete cover.
2. Clean the reinforcement steel bars using a wire brush or a sand compressor.
3. Coat the steel bars with an epoxy material that would prevent corrosion.
4. Install the steel jacket with the required size and thickness, according to the design, and making openings to pour through them the epoxy material that would guarantee the needed bond between the concrete column and the steel jacket.
5. Fill the space between the concrete column and the steel jacket with an appropriate epoxy material.



Steel Stirrup Jacketing
– Net Magic Data Center, Mumbai



Column Strengthening by Plate Jacketing
– Bagmane Tech Park, Bangalore



Columns Strengthening with Carbon Wrapping
– Net Magic Data Center, Mumbai



Glass Fibre Wrapping – KCT, Bangalore

RCC ELEMENTS STRENGTHENING BY FIBRE WRAP

The use of advanced composite fibre-wrap (ACW) is the new technique in the emerging market of structural rehabilitation industry. There are various types of fibres available for wrapping technique. The following 3 are the most commonly used: Carbon, Glass and Aramid

CARBON FIBRE WRAPPING

Carbon Fibre reinforced plastic has over the past two decades become an increasingly notable material used in structural engineering applications. Its use in industry can be either for retrofitting to strengthen an existing structure, or as an alternative reinforcing to steel from the outset of a project. There are several advantages.

GLASS FIBRE WRAPPING

Glass fibre wrapping is relatively cheaper than carbon wrapping. Studies indicate that glass fibre wrapping is recommended where marginal increase in structural properties is required.

COMPARISON OF FRP SYSTEM WITH CONVENTIONAL TECHNIQUES

Description	Concrete Jacketing	Steel Jacketing	FRP Wrapping / Laminate	Remarks
Mode of strengthening	Increase in concrete and steel area	Confinement	Confinement	
Preparation of column for strengthening	Significant dismantling of cover concrete. At least 40mm cover concrete to be removed. Epoxy bonding agents to be applied on exposed surface	Not major dismantling work involved. Mainly plaster to be removed and epoxy primer to be applied on exposed surface	Only plaster to be removed and epoxy primer saturant to be applied on exposed surface. For rectangular columns corners to be rounded off	FRP involves minimum surface preparation
Drilling of holes	Large amount of drilling is required	Large amount of drilling is required	No drilling required	FRP involves minimum work since no drilling is required
Additional weight	Extremely high (In example shown, the weight becomes 225% for just 50% increase in strength	Very high (In example shown, the weight becomes 169% for 50% increase in strength	Negligible. No increase in weight at all	FRP does not increase the dead weight of the structure
Size increase	Very high (In example shown, the diameter of column increases from 400mm to 600mm for 50% increase in strength	High (In example shown, the diameter of column increases from 400mm to 450mm for 50% increase in strength	Negligible. The total increase in diameter is less than 5mm	The size remains unaltered thus remaining the floor height area

RCC BEAM STRENGTHENING

Reinforced concrete beams need strengthening when the existing steel bars in the beam are unsafe or insufficient, or when the loads applied to the beam are increased.

When RCC beams are corroded severely, there required a need to strengthen after providing additional rebars and proper anti corrosion treatment to bars.



Beam Strengthening
– HCL, Bangalore



Existing Beam



Reinforcement work
with Shear Connectors



Beam shuttering



Finishing existing
Beam with micro concrete

Net Magic Data Center, Mumbai

RCC SLAB STRENGTHENING

In some cases, due to increasing the applied loads on slabs or their unsafe design, or corrosion of the reinforcing steel bars, or cracks in the slabs, one of the following solutions should be made: If the slab is unable to carry the negative moment and the lower steel is sufficient, upper steel mesh should be added with a new concrete layer.

If the slab is unable to carry the positive moment or when the dead load (that will be added to the slab) is much less than the live load carried by the slab, a new concrete layer on the bottom of the slab should be added. Slab can also be strengthened by providing carbon laminates at regular intervals. The cost benefit analysis to be worked out before selection of methodology.



MS Circular Column Supporting the Slab – KCT, Bangalore



Carbon Laminate – 50/100mm wide – Tulip Data Center, Bangalore



Floor Strengthening – AMR Tech Park, Bangalore



Slab Strengthening by ISMB Beam – HCL, Bangalore

WALL STRENGTHENING TECHNIQUES

- Strengthening of masonry walls is required to prevent failure and collapse during major earthquake or addition of extra load on buildings. Strengthening of masonry walls also may be required during rehabilitation of buildings.
- Selection of repair methodology depends upon the specific purpose of repair. The strength upgrade of masonry wall is influenced by walls layout, type of masonry unit, mortar, condition etc. ,
- **The common techniques followed are :**
Repair of cracked walls. Repointing the joints of brick/block masonry with cement mortar. Construction of reinforced cement/ concrete jacket on one or both the sides of wall. Partial construction of brick/block masonry walls. Construction of RC tie-columns for confining of bricks/block walls. Strengthening by fibre wrapping



Removing Existing Plaster



Wall strengthening



Applying 2.5 mm Weld Mesh

Net Magic Data Center, Mumbai



Silo Wall Strengthening
– JSW Cement Plant, Bellary

REPAIR & REHABILITATION OF STRUCTURES

Concrete is not durable always. It deteriorates with age. Several other factors like poor quality, improper maintenance, environment, industrial / natural / manmade calamities etc do affect concrete and make repair/ restoration/ rehabilitation /restoration a must.

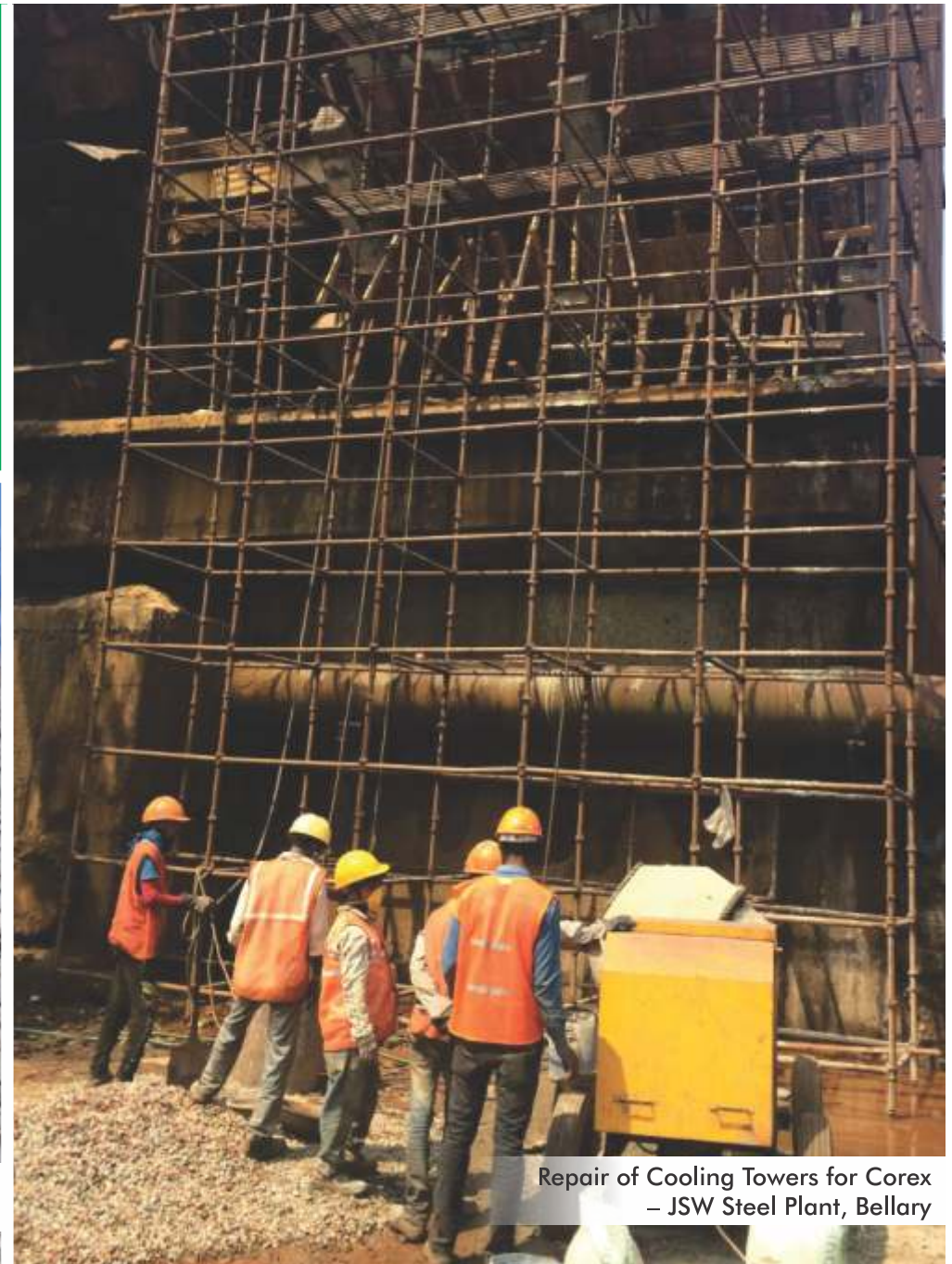
SRI carried out several rehabilitation and restoration works of major structures like dams, cement silos, condition towers, wind mill tower bases, commercial and residential complexes depending upon type of damages/ deterioration. Some are highlighted.



Rehabilitation of Water Tank



Rehabilitation of Commercial Complex – KCT, Bangalore



Repair of Cooling Towers for Corex – JSW Steel Plant, Bellary

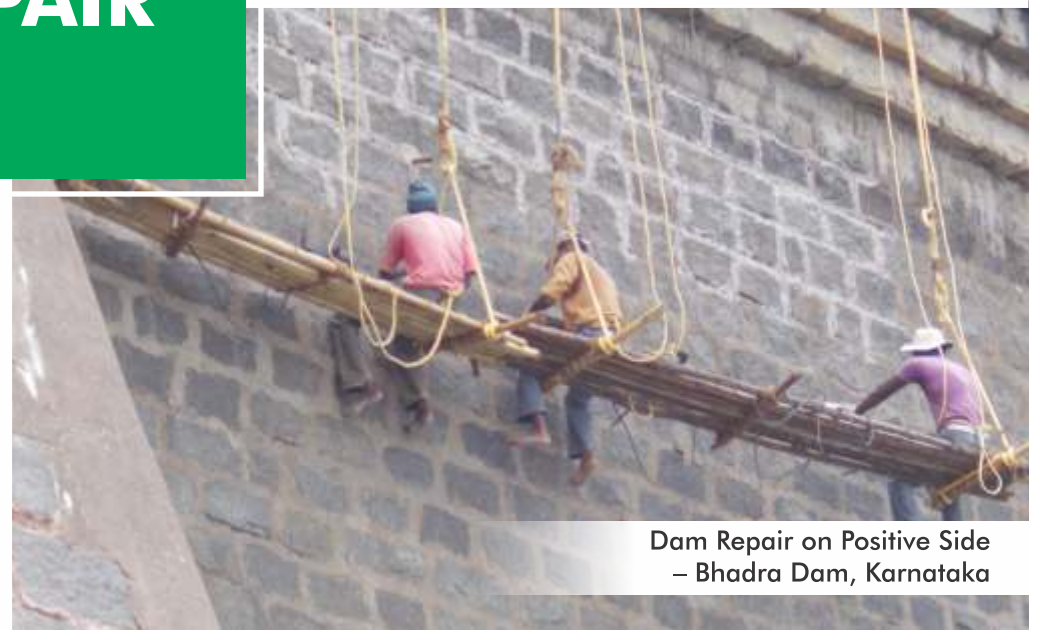
DAM REPAIR



Geo membranes for water proofing treatment on negative side of dam



Stone Masonry Grouting and Pointing – KRS Dam, Karnataka



Dam Repair on Positive Side – Bhadra Dam, Karnataka

CORROSION REPAIRS

In majority, deterioration in RCC structures is due to corrosion particularly in coastal and marine environment. Presence of moisture, salts, lack of enough cover thickness, poor quality of concrete etc further aggravate the situation.

The various steps involved in repairing such structures are:

1. Evaluate the cause and severity of deterioration
2. Proper chipping and cleaning of damaged concrete steel
3. Provide enough strength to the structure as per the design
4. Anticorrosive coating for both damaged concrete steel
5. If need be, additional steel to be added/cathodic provision
6. Application of bond coat
7. Place of new concrete
8. Apply finishing coat
9. Curing



Anti –corrosive / Epoxy Coating for MS Structure



Anti –corrosive / Epoxy Coating of Reinforcement in RC

CRITICAL CONSTRUCTION SOLUTIONS

SRI has always been in forefront to handle critical repair jobs and complete them successfully with their expertise and experienced team. At one of the projects, one column was removed on one side and on the other side extended further. Similarly, beam was shifted nearly half a meter. In another case, existing slab of 6000 sq mtrs (with 10 X 10m grid) was uplifted up to 50 mm by hydraulic shafts.



Up Lifting Existing Slab by Hydraulic Shafts
– Tulip Data Center, Bangalore

Elevating ISMB 600 Section steel double girder – KCT, Bangalore

Slab Strengthening and Upliftment
– KCT, Bangalore



Column and Beam Displacement
– KCT, Bangalore



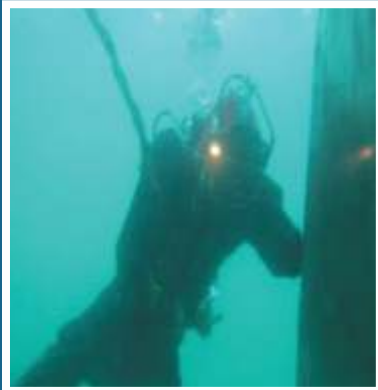
Tunnel Strengthening
– Hotel Leela Residence, Bangalore



Capital Strengthening,
AMR Tech Park, Bangalore

UNDER WATER REPAIRS

A new expertise group is being developed at SRI in association with divers consultancy, Chennai, keeping in view to support clients from port trust and dams. Although repair materials and methodology are more or less the same, special precautions in use of equipment to be taken care of besides trained divers involvement. International safety guide norms to be strictly followed.



Under Water Inspection of Wall
– Vizag Port, Andhra Pradesh



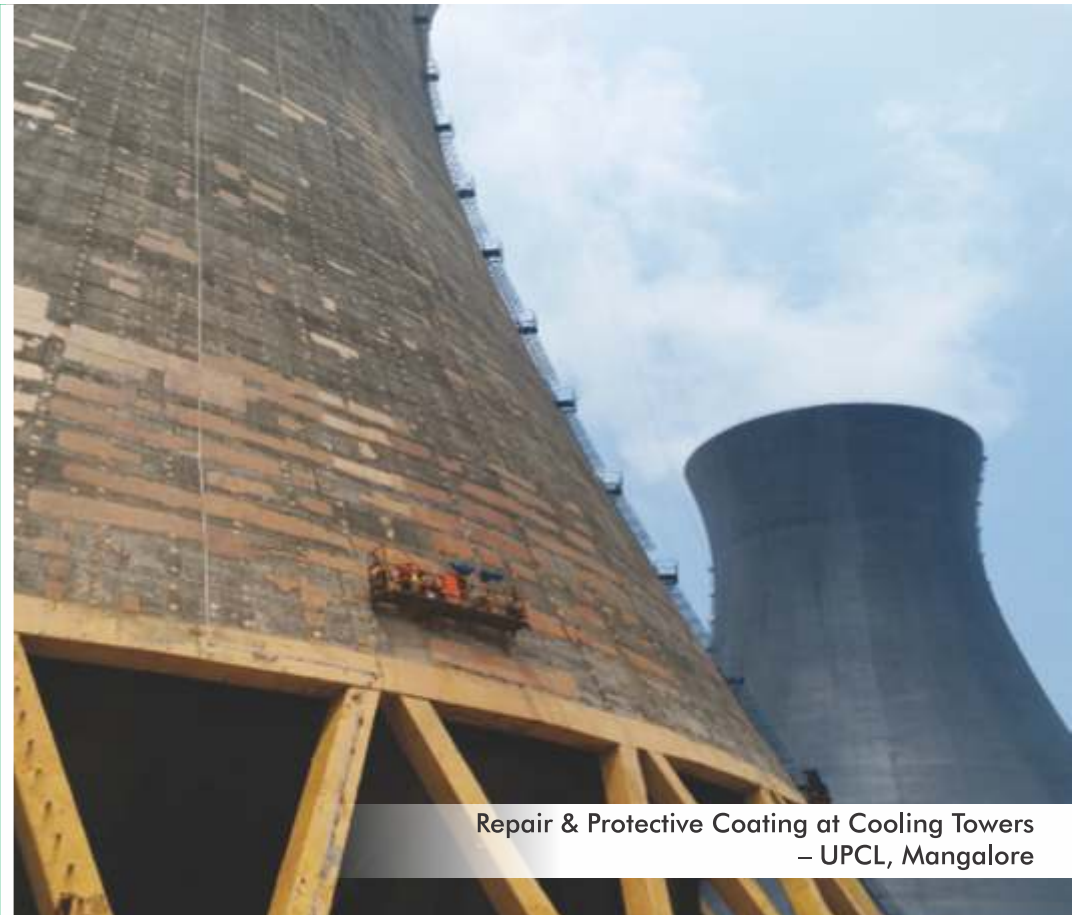
RCC Wall Under Water Repair
– Chennai Port, Tamilnadu

WATER PROOFING AND PROTECTIVE COATING

- Water proofing is common problem in all types of concrete structures. Several water proofing technologies and materials are available.
- A systematic approach is needed to explore the real cause for water seepage / leakage in structure.
- A holistic approach is to be adopted to select suitable methodology for water proofing treatment. Some of the methodologies are:

Cementitious water proofing
Liquid WP membrane
Bituminous coating
Bituminous membrane
Polyurethane Spray membrane
PU sheet membrane
Geomembranes etc

- SRI carried out water proofing treatments in a variety of structures like residential/commercial/swimming pools/water tanks/canals/ silo roofs/ dams and even in wind mill tower bases by judiciously selecting suitable methodology.



Repair & Protective Coating at Cooling Towers
– UPCL, Mangalore



Membrane Water Proofing
– KCT, Bangalore



Polyurea Coating – HCL, Bangalore

GROUTING

Grout is a dense fluid which is used to fill gaps or used as reinforcement in existing structures. Grout is generally a mixture of water, cement, and sand, and is employed in pressure grouting. There are different types of grouting namely tiling grout, flooring grout, resin grout, non-shrink grout, structural grout and thixotropic grout. SRI has an expertise in the field of grouting of industrial foundations



Epoxy Grouting
– AMR Tech Park, Bangalore



Cementitious Grouting
– MFAR Construction, Bangalore



Steel Base Fixation after Grouting
– ACC, Chickballapur



PU Grouting at Tunnel Below Ground Level Depth 21mtr
– NTPC, Bijapur

STRUCTURAL STEEL FABRICATION

Composite structure construction practices are becoming common in view of several advantages. Structural steel fabrication is a multifaceted process that requires specialized knowledge, skills, and resources to complete successfully.

To create structural steel beams, components, or equipment, a good metal fabricator follows a specific process. Correct design, right material and welding play a crucial role in the process.

SRI carried out several structural steel fabrication applications such as beams, slabs, tunnels, industrial structures etc.



Structural beam fixation
- KCT Site, Bangalore



HEM Section 600
Erection Work
- KCT, Bangalore



Chiller Platform,
Netmagic Data Center
- Bangalore



Circular Column Supporting
- Tulip Data Center,
Bangalore



Pre-Fabrication shed



Slab uplifting
and plate fixing,
- KCT.



Tunnel strengthening with steel fabrication
- Leela Palace.



Structural Steel Strengthening, ISMB 900
- Mantri, Jupiter

OUR ESTEEMED CLIENTS AND THEIR VIEWS

ACC

acciona
Energy

ACME
INDUSTRIES
discover perfection

adani

KCT
Group

Krishna
enterprises

Apollo
HOSPITALS

ASHOK LEYLAND

BHEL
Maharaja Company

Biocon

Bisleri

SELA ADE
WATER TREATMENT
PLANTS

BFW

SRM
INSTITUTES
OF TECHNOLOGY

Chettinad
cement

CHRIST
UNIVERSITY

CPWD

PREMA
CREATING HEALTHY FOR WELLBEING

GVK

GAMMON
Builders to the Nation

HCL

HAL

IRCL
IRCL Infrastructures & Projects Ltd.

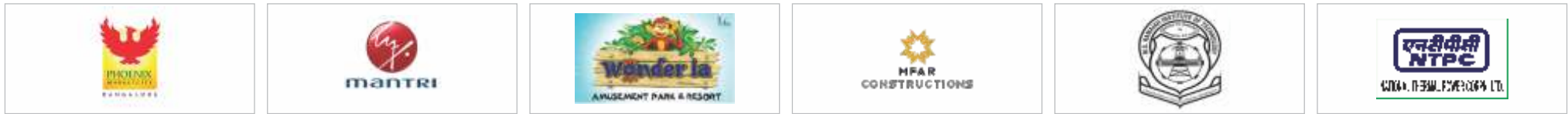
IMC Project (India) Ltd.

JSS HOSPITAL

JSW Steel

JSW Cement

JK Cement LTD.



Gmail
 Vendor Recommendation

From: Anil Kumar [mailto:anil.kumar@omshakthibuildcon.com]
 To: OM SHAKTHI BUILDCON PVT LTD [mailto:omshakthibuildcon@gmail.com]

TO WHOMSOEVER IT MAY CONCERN

We refer to above subject, we hereby wish to inform you that we have placed the order for retiling, water proofing & plaster work of 3C Factory at West, Marolli to M3 Damsada Building Plot 104, Bangalore.

In this regard we wish to inform that the vendor has got a very good knowledge about the works, the vendor understands the requirement of the client, the vendor coordinated with other dependent contractor with best program possible for the work.

We further wish to inform you that the vendor has got very capable site team's working with contractor (M3 Damsada) who the vendor takes complete program measures towards safety and when full's involved in the allocated work.

We are very happy and satisfied with the performance of the works, whole support as it is still in completion phase, we will be issuing the completion certificate upon completion of entire work as we are taking up the work in phase according to our business requirements.

Details of WORK with Value's released for the contractor

For the Completion for the value Rs. 1,02,16,100.00
 For the Completion for the value Rs. 25,29,100.00
 Total Value of the contract: Rs. 1,27,45,200.00

We request you to please provide us all the above details.

Regards,
 Anil Kumar
 General Manager
 3C Damsada Project,
 Marolli (An-N-T) Damsada,
 Bangalore
 (Company)
 Please refer to company Mobile No. 9845678901

Professional Consultants
 Consulting Structural Engineers

Vijay Kumar S.B. (M.Sc.Engg.)
 Vijay Kumar S.B. 23, 3rd Floor,
 6th Cross, West Street,
 Bangalore - 56 0025
 Email: vijaykumar@pcce.org

Ref: _____ Date: _____
 Date: 27.02.2017

TO WHOMSOEVER IT MAY CONCERN

THIS IS TO INFORM THAT **MR. OM SHAKTHI BUILDCON (P) LTD.** WHO WAS APPOINTED AS THE AGENCY TO TAKE UP THE REPAIR AND WATER PROOFING WORKS FOR THE DISTRESSED BUILDING AT AMR TECH PARK - IT BUILDING LOCATED AT SOMMANHALLI, BANGALORE.

THE WORKS ARE BEING CARRIED OUT BY **MR. OM SHAKTHI BUILDCON** USING MIX POLYSDC CHEMICALS FOR THE ENTIRE REPAIR AND WATER PROOFING WORKS.

IT WAS OBSERVED THAT **MR. OM SHAKTHI BUILDCON** WERE COMPETENT IN HANDLING THE WORKS BEING CARRIED OUT FOR THE DISTRESSED BUILDING USING SKILLED WORKERS.

THE WORKS CARRIED OUT WERE SATISFACTORY AND THEY COULD MEET THE DEADLINE AS PER QUANT AND THE PRODUCT QUALITY REQUIREMENT WITHIN STIPULATED TIME PERIOD AND THE QUALITY OF WORK WAS SATISFACTORY.

Vijay Kumar S.B.
 For Professional Consultants
 Authorized Signature

RAJ WHEEL FACTORY
 (Iron Rolling)

Office of the Chief Engineer
 Bangalore, Bangalore-560 004

200000 Provisional
 To Whomsoever It May Concern

Date: 27/02/2017

To Whomsoever It May Concern

WORK DONE CERTIFICATE

This is to Certify that Mr. Om Shakti Buildcon Pvt. Ltd. No. 12, 3rd Floor, 6th Main, Kundigudi Main Road, Near Tatanagar Chowk, Bangalore - 560024 has order under the following tender work in Raj Wheel Factory, Yeshwanthpur, Bangalore-44.

Sl. No.	Name of the work	Date of Completion of work	Agreement No. & Date & Value of the work awarded	Finalized amount (Rs.)
1.	Provision of heavy duty Industrial flooring in Iron Shop of Raj Wheel Factory	20/01/2017	CV/2009/00017/10400 Date: 14/05/2011 for Rs. 5.81 LAKH	Total bill amount is Rs. 7.30,000.00

UJA No. W-4000/W-19/0002/2015/000017

The contractor has completed the work satisfactorily.
 This certificate is issued at the request of the contractor.

Dr. Chait Engineer
 Chief Engineer
 Bangalore

Sandur Power Company Private Limited

To Whomsoever it may concern

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 For the Completion for the value Rs. 25,29,100.00
 Total Value of the contract: Rs. 1,27,45,200.00

We request you to please provide us all the above details.

Regards,
 Anil Kumar
 General Manager
 3C Damsada Project,
 Marolli (An-N-T) Damsada,
 Bangalore
 (Company)
 Please refer to company Mobile No. 9845678901

HILTI

Certificate of Hilti VIP

Hilti India Pvt. Ltd. is pleased to present this certificate to

**OM SHAKTHI BUILDCON PVT LTD,
 BANGALORE**

That has been selected as a Hilti VIP

VIP

Anil Kumar
 General Manager
 Hilti India Pvt. Ltd.

JSW Steel Limited

To Whomsoever it may concern

Date: 03.02.2017

This is to inform you that the Mr. Om Shakti Buildcon Pvt Ltd, have order under the "Cooling Tower Repair in Cooling Shed - 4 Cells" using heavy specification as JSW Steel Limited, Vijayanagar Works, P.O. Vijayanagar, Bellary, Karnataka. Value of contract is Rs. 4,00,00,000/-

We appreciate the fact that Mr. Om Shakti Buildcon Pvt Ltd completed all the repairs using Heavy concrete (Columns and Beams etc), PUMP, Dewatering (BMC Wall and sludge), Rebar etc etc etc, Protective coating, Removal and retiling of Windows etc, etc, etc, etc and their fine work utmost satisfaction of the client and project contractors.

Mr. Om Shakti Buildcon Pvt Ltd is highly competent in handling the repair, rehabilitation and protection of distressed structures/buildings as we have observed during the execution of their work done by the skilled workers.

FOR JSW STEEL LIMITED

A.V.R. Prasad
 Authorized Signatory
 A.V.R. Prasad Group,
 A.V.P. & M.T. 80

WE REHABILITATE AND PROTECT STRUCTURES



struct rehab india Pvt. Ltd.,

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R.M.V Extension, 2nd Stage Bengaluru-560094

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Pan India..!