



FPA BULLETIN



Magazine from Flat Promoters Association
Chennai South

Year -1, Book -1

June 2021



For Private Circulation only

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Loan Quantum : A Maximum of 80% if the total cost of Property
Term : Professionals - 15 Years Non - Professionals - 10 Years
(Loan terms not exceeding 55 years of elder applicant)
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In Case of Salaried Person :

1. Photo 2
2. Six Month Salary Slips
3. Six Months Bank Statement
4. Residence Proof
5. Office ID.
6. Form 16 + Income Tax Return
7. Pan Card
8. Degree Xerox
9. LIC Policy Xerox
10. Latest Increment Letter with CTC
11. Old Company Reliving Order
12. Cheque Leaf 1
13. Any Other Loan Details

In Case of self employed Person

1. Latest 3 years IT Returns, Computation of Income Copies of TDS Certificates Tax Challans, Balance Sheet and Profit & Loss account with schedules
2. Bank Statements of last one year

PMJF Lion UR GANESHAN (Lion G THULASI)

Cell : 98400 49467 e-mail : thulasiganeshan@yahoo.

In Case of NRI :

1. Copy of Passport, Visa, Service contract Latest 6 months salary slips (All duly attested by indians Embossy / Notary)
2. General Powe of Attorney in LIC HFL format duly maised & adjudicated
3. Bank statements for the last 6 months reflecting salary credit & local (NRC/NRO) Bank Statement for 6 months
4. NRI annuex in LIC/HFL format duly completed

MY ACHIEVEMENTS - at LIC/HFL
with your Co-operation

1. No 1 Agent in Tambaram Area Office for the past 7 years
2. LIC/HFL has nominated me as ' HOME LOAN AGENT' which will help me for speedy and quick Processing
3. Business increase from 5 crore to 65 crore in Just 7 years
4. Continuously on Top 3 Agent in Business performance of the Region
5. Major Contributor for the Office in terms of Volumes
6. Chain of referrals from One Builder to Another Builder
7. More than 25000 satisfied Customers
8. More than 120 Builders are engaging my service

What Can I do for you

1. Ready on call to serve you and your Flat buyers
2. One Time information about our systems and procedures to your clients
3. Door Step Service with Smile as Cost
4. Effective After Sales Service like getting IT Certificates etc,
5. I can introduce customers to you from my Data Base
6. Honest, Efficient, Transparent Service to satisfy you and your clients
7. To facilitate approval of your project under APF, without any charges
8. Project Loan can be arranged



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Greetings to all my fellow FPA Members!



Please accept my sincere thanks for unanimously electing me as President of Our prestigious Association for the term 2021-2022. It is a great pleasure and privilege to work for the Association and for fellow beings with your support, co-operation and best wishes. I take this opportunity to assure you that I will endeavour to address your issues with support from our able team, which is a blend of experience and youth. I congratulate and compliment the entire team.

Our association is Marching towards its 25th year Celebration and hope this year would be a memorable one for all our members. Presently there are many challenges which industry is facing, but I am confident we shall overcome them, rise as an industry and will gain the respect we deserve. The Association shall endeavour to increase the compliance of regulations by the members and will ensure respecting their commitments made to the customers. Friends, I have some dreams to be achieved with your support to enhance the image of our community and brand of the Association which I am sharing with you for your input, suggestions and support separately.

I Shall be focusing more on

- ▶ Ease of Doing Business
- ▶ Image Building
- ▶ Optimisation of Construction Cost and Technology up-gradation through Research wing
- ▶ Promote more activities in the form of seminar / training sessions. study tour to update members in new technology, construction material / cost effective methods etc * Market date Analysis / research presentation periodically.
- ▶ Organising various skilled training for the construction Staff.
- ▶ To appoint additional consultant especially from legal and finance sector to help our members.
- ▶ Labour welfare activities.

My Best wishes for the year ahead and let us all enrich and enjoy our Professionalism in our esteemed association.

With regards,
S. WilsonRaj
President
(2021-22)



அன்பார்ந்த நண்பர்களே வணக்கம்,

நமது “அடுக்குமாடி கட்டிடம் கட்டுவோர் சங்கம் சென்னை தெற்கு” கடந்த 1997 ஆம் ஆண்டு சிறிய அளவில் குறைந்த உறுப்பினர்களை வைத்து தொடங்கப் பெற்று இன்று 150 உறுப்பினர்கள் உள்ள பெருமையான சங்கத்தின் தலைவராக (2020-21) பணியாற்றியதில் மிக்க மகிழ்ச்சி. நமது சங்கத்தின் மூத்த உறுப்பினர்கள் பலரோடு நானும் ஆரம்பகால உறுப்பினராக இருந்து வருகிறேன்.

தற்போது நமது சங்கம் 24 வருடம் கடந்து 25 ஆவது வருடத்தில் அடியெடுத்து வைக்கிறது என்பதை நினைவு கொள்வதில் மிகப் பெருமையாக உணர்கிறேன். கடந்த வருடங்களில் நமது சங்கம் பல தலைவர்களை சந்தித்து விட்டது. நமது சங்கத்தில் கருத்து வேறுபாடுகள் பல இருந்தாலும் ஒற்றுமையுடன் செல்வதில் நமது சங்கம் என்றும் முன்னோடியாக உள்ளது. வரும் காலங்களில் நமது சங்கம் மேலும் உயரும் என்பதில் எந்தவித ஐயப்பாடும் இல்லை.

மேலும் நமது சங்கத்திற்கான கட்டிடம் கட்டுவது சம்பந்தமான பேச்சுவார்த்தை கடந்த 2010 ஆம் ஆண்டு நடைபெற்ற போது நான் செயலாளராக பணிபுரிய எனக்கு வாய்ப்பு கிடைத்தது. மேலும் நமது சங்கத்திற்காக கட்டிடம் கட்டும் போது அது சம்பந்தமான கணக்கு வழக்குகளை நான் பொருளாளர் என்ற முறையில் கவனித்து வந்தேன். நமது சங்க கட்டிடம் நம் உறுப்பினர்கள் அனைவரின் பங்களிப்புடன் கட்டி முடிக்கப்பட்டு கடந்த 02.02.2014 அன்று திறப்பு விழா கண்டது இந்தத் தருணத்தில் அதற்காக நம் உறுப்பினர்கள் அனைவருக்கும் எனது நன்றியை தெரிவித்துக் கொள்கிறேன்.

நடப்பு ஆண்டு (2021-22) நமது சங்கத்தின் தலைவராக பொறுப்பை ஏற்கும் திரு எஸ் வில்சன் ராஜ் அவர்களை வாழ்த்துகிறேன். மேலும் இந்த புதிய நிர்வாக குழுவின் முயற்சியால் வெளியாகும் நமது சங்கத்தின் முதல் இதழை மிகவும் மகிழ்ச்சியுடன் வரவேற்கிறேன். இந்த இதழில் வெளியாகும் செய்திகள் அனைத்தும் நமது சங்கம் சார்ந்தவையாகவே இருக்கும் ஆகவே நம் உறுப்பினர்கள் அனைவரும் தங்களது கடந்த கால அனுபவங்கள், தெரிந்த நம்பகமாக தகவல்கள் போன்றவற்றை பகிர்ந்து கொள்ளலாம். இந்த இதழ் தொடர்ச்சியாக வெளிவந்து சிறப்பாக செயல்பட நமது உறுப்பினர்கள் அனைவரும் ஒத்துழைப்பு நலகுமாறு கேட்டுக்கொள்கிறேன்.

என்றும் அன்புடன்

S. சிவானந்தம்,

உடனடி முன்னாள் தலைவர்

PAST PRESIDENT'S DESK



This is great news for the Association as far as I'm concerned, The office bearers from our association are more energetic and talented among all. The release of this spectacular first issue of our technical magazine has added value to our constant efforts. Through this message. I wish them 'All the very Best' for their future endeavors and hope the members of the association bring more laurels to the industry on the whole.

Mr. S. Sivakumar



I have great pleasure in conveying my best wishes to our association for releasing the technical magazine 'FPA News' which brings the members of our association on a common platform to share and display their ideas and creative talents. I wish all the members who have involved in bringing out the magazine for their greater success and career ahead

Mr. R. Dorai Raj



I am gratified to know that, Flat Promoters Association, Chennai South. is bringing out the first issue of a technical magazine, titled 'FPA' News". in this presidential year 2021-22. I hope this magazine, will be a productive technical issue covering various areas of our business and will also be a subsidiary skill Enhancement tool for our esteemed members. I wish the Association continue to grow serving the needs of the members at all times. I further applaud the initiative and efforts of the new team of office bearers in bringing out this issue in record time. I also appreciate the services of the past office bearers, in making the Association as it stand today.

Dr. Ruby R. Manoharan.

நமது சங்கத்தின் 2021-22 ஆண்டுக்கான தலைவர் மற்றும் நிர்வாகிகள் பதவியேற்பு விழா தாஜ் விவாந்தாவில் ஏப்ரல் 9ம் தேதி இனிதே நடைபெற்றது





Monthly Tax Calendar for June'21 to August '21

June 2021

- 07 - TDS Payment for May
- 11 - GSTR 1 (Monthly) for May
(extended to 26th June)
- 13 - GSTR 1 IFF (Optional) (May 2021) for QRMP
- 15 - Advance tax Payment for April to June 2021
- 20 - 24 GSTR 3B for May for Monthly
- 25 - GST Challan Payment if no sufficient ITC
for May (for all Quarterly Filers)
- 30 - Quarterly TCS certificate
for the quarter ending June 30, 2021

July 2021

- 07 - TDS Payment for June
- 11 - GSTR 1 (Monthly) for June
- 13 - GSTR-1 (Apr- June, 2021) for QRMP
- 15 - TCS Payment for Apr-June 2021 Quarter
- 18 - CMP 08 for Jan to Mar (Composition)
- 20 - GSTR 3B for June for Monthly
- 22 - GSTR 3B (Apr-June, 2021) for South India
- 25 - GST Challan Payment if no sufficient ITC
for June
- 31 - Annual return of GST 20-21 (composition)

August 2021

- 07 - TDS Payment for July'21
- 11 - GSTR 1 (Monthly) for Aug
- 13 - GSTR 1 IFF (Optional) (Aug 2021) for QRMP
- 20 - GSTR 3B for July for Monthly
- 25 - GST Challan Payment if no sufficient ITC
for July

* Date may extended due to lockdown

Courtesy
Er.A.Ganesa Subramanian

NEED OF WATER MANAGEMENT IN DOMESTIC BUILDINGS

We all are aware that most of water in earth's atmosphere is available as sea water. The sea water covers 71% of the earth area. In the total water available, 96.5% is saline water and the remaining 3.5% will be the fresh water and in other source.

The fresh water sources are,

1. Rainfall
2. River
3. Lake
4. Ground water
5. Ice and others

The available fresh water will be used for domestic purpose (about 7-8%) agricultural purpose (about 70-71%) and for industrial use (about 21-22%)



Er. P. Jeyakodi

WATER REQUIREMENT FOR HUMAN BEING

As per World Health Organisation (WHO) norms, a common man requires 135 Its. per day for his domestic needs. In addition about 2000-3000 Its. of water is needed to produce 1 person's dietary and other needs per day.

In the year 2000, the world total population was 6.2 billion, which means, the water requirements was 83700 crore Its/day. It is estimated in the year 2050, the world population will be 10 billion and the water requirement will be 135000 crore Its/day. As on today, it is estimated about 7 billion people are in the earth and the water requirement will be 105000 crore Its/day. This quantity of water will fill a canal of 10 m deep 100m wide and 2100 km long, which means the length of the canal covering the distance from Delhi to Madurai distance approx.

The population is increasing gradually, but the available water source is slightly constant or gradually diminishing. The UN council estimate in the year 2050, in the world population, 1 in 4 may not get the fresh water for their survival. Therefore, it is need of the hour to treat the waste water generated and to reuse the same.

WASTE WATER GENERATION

As per the standards laid down by Central Public Health Environmental and Engineering Organisation (CPHEEO) for our country, the fresh water consumption per day per person should be between 135-150 Its/day (LPCD). From this fresh water supply, about 80-90% will the sewage generation, i.e. about 108-121 Its/day/capita is sewage generation

WHY SEWAGE HAS TO BE TREATED

In India, the population is increasing gradually and the available water sources remain constant or gradually diminishing India has no other additional source to supply fresh water, except to treat the sea water. The cost of treatment of sea water is not bearable for a Agrorrian country. Therefore, the water scarcity will be increasing day by day and the demand of assured availability of water for water for various secondary uses is also increasing. For the improved public health and to prevent the pollution due to untreated waste water and its discharge on the ground and water bodies, it is essential and to fulfill the statutory need, the waste water is to be treated.

Instead of letting out the treated waste water on the water bodies, it is suggested to reuse the treated waste water for the secondary uses for the human being, after disinfected properly.

DISINFECTION OF TREATED SEWAGE

Even though, the sewage is treated there may be a possibility of presence of micro organism like E-Coli bacteria, Virus etc., To destroy these types of micro organism, it is essential that the treated sewage is to be disinfected. The most common and simplest methods of disinfection are

1. Chlorination
2. Oceanation
3. UV radiation and others

But the common and wide spread method of disinfection will be chlorination.

HOW TREATED SEWAGE CAN BE USED

To reuse the treated sewage, the following norms will be adopted in the flats/ building.

This requires separate plumbing line to be laid, so as to serve two sets of storage tanks in the roofs of ay residential / commercial building.

One set of storage tanks will be used to receive and store fresh water which will flow through plumbing line laid to take it to bathrooms and kitchens where it can be used for drinking, cooking washing & bathing.

The second set of tanks will receive treated sewage which will be connected by plumbing to all the flush tanks in toilets and to other points where the water can be used for washing yards, floors and also for gardening.

The Various methods of treatment of raw sewage and its characteristics will be discussed in the next article.

TAMILNADU REAL ESTATE REGULATORY AUTHORITY (TNRERA) ACT

REAL ESTATE (REGULATION AND DEVELOPMENT) ACT, 2016

Government of India notified Real Estate (Regulation and Development) Act, 2016 on 26th March 2016.

The Objectives of the Act is for the Regulation and promotion of the Real Estate Sector and to Ensure sale of plots, apartment or commercial buildings in an efficient and transparent manner.

It protects the interest of home buyers in the Real Estate sector and establish on adjudicating mechanism for speedy dispute redressal and to establish the Appellate Tribunal to hear appeals from the decision or order of the Real Estate Regulatory Authority and the Adjudicating Officer.

RULES

Tamilnadu Real Estate (Regulation and Development) Rules, 2017 notified on 22.06.2017 vide G.O. Ms.No.112, H&UD Dept., to implement the provisions of the Central Act.

Tamilnadu Real Estate Regulatory Authority (General) Regulations, 2018 notified on 13.06.2018

Salient Features

- ▶ Shall not advertise, market, book, sell and plot, apartment or building without registering it with RERA.
- ▶ Registration is mandatory for plots, residential buildings and commercial buildings.
- ▶ All plots, residential and commercial building meant for sale with land extent of more than 500 square meters or more than eight apartments inclusive of all phases will have to be registered with RERA.

Impact of the RERA Act is beneficial both from the perspective of Home buyers as well as the Promoters.

Impact - Consumers

RERA is an exclusive Authority dealing with complaints of Home Buyers relating to Real Estate Sector.

- ▶ It is preventive rather than a curative.
It stipulates
- ▶ Promoter shall not give false statement and in correct information in the advertisement in any media.
- ▶ No disclaimer clause should be given in the Advertisement.
- ▶ Promoter shall furnish information relating to approved plan and other information buyer/allottee is entitled to.
- ▶ Promoter shall inform the allottee the stage -wise time schedule of completion including the provision of amenities.

Rules & Regulations



- ✦ Promoter while issuing advertisement or prospectus should mention prominently the website address of RERA and the Registration No. given by the RERA.
- ✦ Shall not accept more than 10% of the cost of the apartment on booking.
- ✦ Shall accept more than 10% of the cost of the apartment, plot or building after registering the Sale Agreement.
- ✦ Agreement for sale and construction agreement as per the format notified.
- ➔ Promoter shall complete the building in accordance with the terms of the agreement by the date specified.
- ✦ All common amenities / facilities as agreed in the terms of agreement / brochure to be completed and handed over.
- ✦ Building shall be completed as per the specifications committed in the agreement.
- ✦ Promoter Shall not transfer his majority rights, and liabilities to a third party without obtaining prior written consent from teh 2/3 rd allottees except the promoter and without the written approval of the Authority.
- ✦ Promoter is bound to rectify the structural defects with a period of 5 years from the date of handing over possession without any charge Within 30 days.
- ➔ Advertisement for sale of apartment shall be based on the Carpet Area only. The promoter shall sell flat on Carpet Area basis only.

Courtesy

Er.D.Gomathi Sankar

.... To be continued

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SOLID BLOCK



SIZE SIZE SIZE
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HOLLOW BLOCK



SIZE SIZE SIZE
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Area / Tiles : 0.347 Sq. Ft.
 100 Sq. Ft : 288 Pcs
 Height : 60 / 80 mm

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 Height : 50 mm

I PIN - PAVER BLOCK



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 100 Sq. Ft : 303 Pcs
 Height : 60 mm

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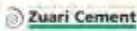
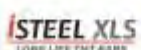
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என்றும் சமாதானமில்லை!
கற்று தரும் பாடத்தில்
கனிவுக்கு இடமில்லை!
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ஆறடி இடைவெளி அவசியமானது!
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விடை தெரியும் வரை விலகியிருப்போம்!
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வாழ்க இயற்கை! வாழ்க வையகம்!! 🙏



-கணேஷ் ✍️





Mr. S. Annamalai

Glass Fibre Reinforced Gypsum (GFRG)

Panel also known as Rapidwall. These panels are made up of high-strength, resistant, glass fibres bonded with high-density gypsum cement. The panel was originally developed by GFRG Building System Australia and used since 1990 in Australia for mass scale building construction. Now, these panels are being produced in India and the technology is being used in India. Panel also known as Rapidwall.



Advantages of Using the GFRG Panel:

1. High - speed construction because the GFRG panels are already manufactured.
2. Minimize the usage of conventional building material such as cement, steel and sand.
3. GFRG panels can help in keeping the building cooler by up to 4 degrees.
4. Lifespan of a house built using GFRG panels is around 80-90 years.
5. In case of fire, GFRG panels release 15-20% moisture of their own weight, which considerably decreases the surface temperature and fire damage.
6. GFRG panels have been found to be earthquake resistant.
7. GFRG panels are also used in shear wall construction which is important for high-rise buildings.
8. GFRG panels are said to be five times stronger and durable than conventional construction materials.
9. During the manufacture of GFRG panels, several chemical are added to the mix. Thus, it makes it water resistant.
10. GFRG weighs nearly 1 kg per square foot which is lighter when compared with conventional building materials. Hence, it decreases the load on supporting beams and pillars of the building.
11. There are no beams or columns required for the installation of these panels.
12. The use of cement and sand is reduced if you opt for these panels and it also reduces the carbon footprint so you can opt for this material if you are searching for environment- friendly material for the construction.

The GFRG panels come with a few limitations:

1. GFRG panels need to be neatly stacked in order to avoid distortion, damage, and abrasion. Hence, it should be stacked vertically for support extending the full length of the panel.
2. Movement of the panel must be slow with caution so as to prevent excessive sagging, cracking or damage to a panel at the sides, edges. and corners.
3. Cutting the GFRG panel should be handled with special tools.
4. It is fragile, so it should be handled carefully while loading, transportation, and unloading.
5. Need skilled workers to handle the installation and working with these panels as it is a bit more complicated than all the other materials.
6. Designing: There is quite a bit of detailing and designing is required in the GFRG Panel.
7. These panels can not be used for the walls that have higher or circular curvature.
8. The cranes need more space for movement while installing these panels.

Example Building: House in IIT Chennai, Student Hostel in SPA Vijayawada.

Precast Concrete

The form of construction where concrete is casted in a re-usable mould and then cured in a controlled environment (precast plant) is called precast concrete. The casted structural member is then transported to the construction site and then erected. Structural members such as concrete frame, concrete wall and concrete floors etc., can be constructed using precast concrete.



Mr. AN. Muthukumar

Advantages of Precast Concrete

1. Precast Concrete construction saves time, the risk of project delay is also less and can be carried out simultaneously with other works on site such as earthwork, survey, etc.,
2. The key factors which regulate the quality of construction such as curing, temperature, mix design, form work, etc., can be monitored for Precast Concrete that improves quality of construction.
3. By using pre-stressed precast, structural materials of high strength and load-bearing capacity can be achieved, which can result in greater clear span, reduced size of the cross-section of structural members, etc.,
4. The simplified construction process reduces the time, increases the productivity, quality and safety and thus the cost is reduced.
5. Precast Concrete structure has a longer service time period and minimal maintenance. The high density Precast Concrete is more durable to acid attack, corrosion, impact, reduces surface voids and resists the accumulation of dust.
6. As the structures are prefabricated in a controlled factory environment, several combinations of colour and textures can be used.
7. A wide range of shapes and sizes are available to choose from with smooth finishing and thus the aesthetic value of products are increased.
8. No raw materials have to be stocked in site for Precast Concrete construction.

Limitations of Precast Concrete

1. For installing a Precast Concrete plant, heavy and sophisticated machines are necessary which requires a high initial investment.
2. The construction site can be at a distant location from the Precast Concrete Plant, in that case, the precast members must be carried to the site using trailers.
3. Precast members are heavy and large which makes it difficult to handle without damage. Generally, portable or tower cranes are used to handle precast members.
4. It is difficult to modify the structure once built.
5. Assembling of the precast members is one of the key points for ensuring strong structural behavior. Connection between several structural members must be supervised and done properly to ensure the intended behavior of the connection such as simple, semi-rigid or rigid connections. Besides this, faulty connections may lead to water leakage and fail sound insulation.

Building Examples : Chennai Skills at Chrompet and Velacherry

அன்புடையூர் வணக்கம்

கட்டுமான சங்கத்தின் தலைமைக்கும் மற்றும் உறுப்பினர்களுக்கும் இந்த வாய்ப்பு அளித்தமைக்கு என் நெஞ்சார்ந்த நன்றிகளை தெரிவித்துக் கொள்கின்றேன். நீர் இன்றி அமையாது உலகு என்ற திருவள்ளுவரின் வாக்கியத்திற்கு ஏற்ப நம் கட்டுமானதுறையில் நீரின் பங்கு இன்றியமையாதது. நிலத்தடி நீரின் வேறுபாடுகள் பல நிலத்தின் நீர் அளவுகோள், உப்பின் தன்மை, பழுப்பு நிறத்தின் தன்மை, நீரின் தூய்மை, நீரின் சுவை என பல உண்டு என்பவை நாம் அறிந்ததே.

நீரின் முக்கியத்துவம் அறிந்தே பொறியியல் படிப்புகளில் **fluid mechanics, hydraulics** போன்ற சிறப்புமுதுகலை படிப்புகளும் உண்டு. இதே நீர் மேலாண்மை குறைபாடு காரணமாக சிலசமயம் கட்டுமானத்தில் மட்டுமல்லாமல் நாட்டில் மழைகாலத்தில் பெரு வெள்ளமும் வெயில் காலத்தில் நீர் பஞ்சமும் ஏற்படுகிறது.

நாம் கட்டுமானத்திற்கு என்று உபயோகிக்கும் பைப்புகள் மூன்று விதம். **PVC (Poly Vinyl Chloride UPVC (Un Plasticized Poly Vinyl Chloride) CPVC (Chlorinated Poly Chloride)**. மேற்கண்ட எல்லா பைப்புகளும் **Chloride and Carbon** இரண்டு வேதிப் பொருட்களும் கலந்து செய்ததே. **CPVC** பைப்ஸ் **90+** டிகிரி வெப்பத்தன்மை தாங்கக் கூடியது. **UPVC 60+** டிகிரி வரை வெப்பத்தன்மை தாங்கக் கூடியது. மேற்கண்ட பைப்புகளில் **CPVC** யில் **chloride content** அதிகமாக இருப்பதால் உப்பு படிவதற்கான வாய்ப்பு மிகக் குறைவு ஆகவே இது பாத்தூறில் கன்சீல்டு பைப்பாக உபயோகிக்கின்றனர்.

நம் கட்டுமானத் தொழிலில் **Structural Defect** க்கு அடுத்ததாக **water seepage** பெரும் தலைவலியாக அமைகிறது. இதற்கு **sunken slab** இல் செய்யப்படும் சிறு தவறுகளே பிற்காலத்தில் பெருந்தலைவலியாக அமைகிறது. இந்த சிறு தவறுகளினால் ஏற்படும் நீர் கசிவு என்பது ஒட்டு மொத்த கட்டிடத்தையே பாதித்து விடுகிறது.

1. Proper core Cutting and Packing
2. Water Proofing
3. Small Drain Pipe Bottom of Sunken

Epoxy / Grout Filling மேற்கண்ட விஷயங்கள் நீர் கசிவரை தடுக்க உதவுகிறது. மேற்கண்ட **Water Leakage** களை கண்டறிய **Water leakage Detection System, acoustic water leak detector** போன்ற நவீன கருவிகளும் வந்து விட்டன.

Courtesy : Mr. I. VINOTH SINGH (VINOTH CONSTRUCTION)



Water Leak Detection Equipment



Water Leak Detector Systems



Water Leakage Detection System

News about the neighbouring states - Maharashtra

The Rising Tide of Real Estate in Mumbai

Buyers are no longer hesitant to pay a premium for property units constructed by some of the leading names in the business. as they don't want to compromise on quality and delivery time.

As business and economic activities resume, there have been positive market developments in the real estate sector in Mumbai "The markets are moved by animal spirits, and not reason." John Maynard Keynes If the noted economist had been alive, he would've definitely noted how a coastal city in India is defying this assumption. While the real estate sector



Mr.S. Essakinathan

in many regions of the world is still reeling with the market slowdown caused by the coronavirus pandemic, Mumbai- one of the most expensive cities in the world- has recorded significant growth in housing. Myriad factors in the market, both generic and specific, have made this is a propitious time for anyone wanting to invest in the real estate sector.

As business and economic activities resume, there have been positive market developments in the last few months The momentum has been particularly strong in Mumbai being one of the most preferred locations in India. In Mumbai, the appetite for real estate is almost unquenchable. The city's real estate market has bounced back from the brief slump with a roar owing to sharp sales jumps and afford ability showing an improvement by 32% since 2010.

The Bounce Back

As per a survey conducted by ANAROCK Property Consultants and Confederation of Indian Industry (CII) almost 62% of Indians believe that the post coronavirus pandemic period is the right one to invest in real estate. The coronavirus pandemic and its ramifications have convinced them that having one's own roof is imperative.

With new cultures like work-from-home and online education permeating almost every household triggering the need for more space, the demand for homes is rising at breakneck speed. It is forecasted that the industry is set to deliver 140 million units in the next 10 years. growing at 19% CAGR.

With the suspension of all travel restrictions and the economy gradually inching towards its earlier path, the demand for real estate is robust. Registrations have witnessed an almost three-fold increase in a spa of 60 days, with sales growing from 7,635 in the third quarter of 2020 to 22,407 in the last quarter, Marking a whopping growth of 147% adding to this growing demand was the structural fillip provided by the government. The nudge has come in the form of affordable bank loans, stamp duty relaxation and tax benefits pertaining to real estate. The mixing of this troika, with the booming real estate demand in Mumbai, has brewed the cocktail of exponential growth.

Bank Loans

Reserve Bank of India has been making accommodative policy changes since the beginning of the ongoing health crisis. It introduced adequate liquidity into the market, and also provided the soft cushion of a loan moratorium, Notable among one the steps taken by the RBI is the slashing down of bank loan rates. Presently, loans are disbursed on a historically low 7% rate which was achieved via a 120 basis point cut over the fiscal year. With fixed income returns at all-time low and extremely low mortgage rates, real estate has quickly become a viable alternative long-term investment option for those looking to be on the safe side of the market. As such, this is the right time to turn the dream of living in South Mumbai into reality.

Shifting Preferences

Consumer preferences have drastically changed with a noticeable shift towards the preference of Tier I builders. Buyers are no longer hesitant to pay a premium for property units constructed by some of the leading names in the business, as they don't want to compromise on quality and delivery time: things which the real estate market in India is infamous for. Aiding this shift is the exit of Tier II builders, who have been cash-strapped since the IL & FS fiasco, losing consumer trust in the process. Housing finance providers are paying the utmost attention to moral hazards and avoiding adverse selection.

Mumbai Market

The Mumbai Metropolitan Region (MMR) is by far one of the biggest real estate markets in the country, Its share of real estate absorption is almost 32% which is tantamount to more the 50% of absorption when considered in terms of value. As per a draft document by Macrotech developers Limited filed with SEBI, the top seven markets in India witnessed a cumulative sales of Rs. 11,881 billion of organised residential developments in the past six years. MMR continued to dominate with the highest contribution of approximately 32% to 46% in the overall sales value in the last six years. Lodha Group is the largest real estate developer in India by residential sales value for the financial years 2014 to 2020. Even amid a pandemic in 2020, Lodha group accounted for the highest sales value, collections and revenue from operations among real estate developers in India. This is further proof, that legacy builders like Lodha are here to stay and consistently delivering exclusive residences of exceptional quality.

Demand for real estate in Mumbai has already outpaced the supply of houses in the city for the past 3 years. Now with the virus and the favourable policy changes. the market is set to be inundated with buyers. and as a result of this shortage of houses, prices are set to shoot up.

Stamp Duty + Tax Benefits + Low interest rates

Supplementing low- interest rates was the Maharashtra government's decision to reduce the stamp duty on registered property. The stamp duty is a revenue source for replenishing the state coffers, but here, the Maharashtra government played the field strategically, opting for growth via volume, The stamp duty cuts (300 basis points cut till December 31, 2020 and 200 basis points cut till March, 31, 2021) catalysed the revival of the residential market and assisted in taking fence-sitters over the edge and resulted in huge growth. On International Women's Day this year, the Maharashtra government announce 1% concession o stamp duty over the prevailing rates: further boosting sales from women home buyers.

The Demand for home is inherent, the sentiment has grown positively and COVID has made the fence sitter move towards decision making. While the market in Mumbai is currently riding the high wave, the recently delivered budget plans to further boost the real estate demand in the country by providing tax benefits. The Finance Ministry had permitted a deduction of upto 1.5 lakhs for home loans pertinent to affordable housing till march 31. 2022 Moreover, tax exemptions have rendered Real Estate Investment Trusts and Infrastructure Investment Trusts more desirable to investors.

Mivan Formwork

Mivan technology uses an aluminum formwork structure which helps us constructing various structural elements simultaneously. Mivan Technology is named after a European construction firm, Mivan Company Ltd. which came up with this method. Formworks of mivan consists of strong and robust aluminum components that are durable and easy to install and is used for large sized construction within less time. It is very popular in Gulf countries, Europe, and some parts of Asia.



Mr. AN. Muthukumar

Components of Mivan Formwork are

1. Wall Components : Wall Panel, Rocker, Kickers & Stub Pin
2. Beam Components : Beam Side Panel, Prop Head, Panel for Soffit Beam & Beam Soffit Bulkhead
3. Deck Components : Deck Panels, Deck Prop, Prop Length, Soffit Length, Deck Mid Beam
4. Other Components: External Corner, Internal Corner, Internal Soffit, Corner, External Soffit Corner.

Advantages:

- ▶ It requires comparatively less labour.
- ▶ Rapid construction and less time consuming
- ▶ Reduced number of joints.
- ▶ Panels can be reused 250 times.
- ▶ It can carry heavy loads (7-8 tonnes per Sqm)
- ▶ Even finishing of wall and slab. No need for Plastering. It gives smooth finishing.
- ▶ Vertical formwork can be strike down after 1 hours of concreting.
- ▶ Less maintenance, because it is made up of high quality concrete which do not require frequent repair work.
- ▶ Very durable
- ▶ More seismic resistance.

Limitations:

- ▶ Its initial cost is high because formwork is more expensive than conventional formwork.
- ▶ The formwork can be cost effective only if it is used in Typical type of floor plans.
- ▶ Initial setup is time consuming
- ▶ Alignment of formworks needs skilled laborers.
- ▶ Holes caused by wall tie should be grouted properly with GP2 else there will be problem of leakage in column.
- ▶ Construction joints should be set meticulously.

Project Example : Olympia Apartment at Pallavaram, Sriram Apartment at Perugalathur

தஞ்சை பெரிய கோயில்



நமது தஞ்சை பெரிய கோயில், நம் தமிழர்களின் கட்டுமான கலையை உலகிற்கு எடுத்துக் காட்டக்கூடிய, மிகச்சிறந்த தொழில்நுட்பத்தையும், கணக்கீடு முறைகளையும், நிதி மேலாண்மை, நிர்வாகத் திறமையும், இதற்கு மேலாக கட்டிடக்கலையின் மதி நுட்பத்தையும் உலகிற்கு இன்றும் பறைசாற்றிக் கொண்டு இருக்கிறது. ஆயிரம் வருட பழமையான, நமது தஞ்சை பெரிய கோயில் உலகத்தின் முதல் நுட்பமான கட்டுமானம் ஆகும்.

தஞ்சை பெரிய கோயிலுக்கு இணையான கட்டுமானங்கள் எதுவுமே இந்த உலகத்தில் கிடையாது. நமது சங்கத்தின் முதல் இதழில் ஆரம்பித்து இனிவரும் தொடர்ச்சியான இதழ்களிலும் நாம் தஞ்சை பெரிய கோயிலின் கட்டுமானத்தின் சிறப்பை பற்றி அறியப் போகிறோம்.

ஏனென்றால் எத்தனை ஆயிரம் பக்கங்களிலும் நமது தஞ்சை பெரிய கோயிலின் பெருமைகளையும், சிறப்புகளையும், எழுதி முடிக்க முடியாது. ஒவ்வொரு பொறியாளரும் ஒவ்வொரு கட்டுமான கலைஞரும், ஒவ்வொரு கட்டுமான வல்லுனரும், முக்கியமாக அறிந்திருக்கக் கூடிய, வாழ்வில் கட்டாயமாக ஒரு முறையேனும் நேரில் சென்று பார்த்து தெரிந்து கொள்ள வேண்டிய தமிழரின் மிகப் பாரம்பரியமான வியத்தகு கட்டுமான கலையே தஞ்சை பெரிய கோயில் ஆகும்.

உலகிலேயே நம் தென்னக தமிழகமே, மிகுந்த பெருமைகளையும், பொருளாதார நிலைமையையும், நதி நீர் மேலாண்மையும் கொண்டிருந்தது, இன்றைய காலகட்டங்களில் நாமும், நமது இளைய தலைமுறையும், படித்துக்கொண்டிருக்கும் பொறியியல் துறையை அன்று மிக எளிதாக அனைத்து விதமான உட்பிரிவுகளையும் உள்ளடக்கிய ஒரு தொழில்நுட்பம் தான் நமது தஞ்சை பெரிய கோயில். அதன் சிறப்புகளை அறியாமல் போய்விட்டது நம் அறியாமை. ஆனால் 1000 வருடத்திற்கு மேலாக மழை, வெள்ளம், புயல், சுனாமி, நிலநடுக்கம், என்ற அனைத்தையும் தாண்டி ஒரு சிறிய கல் கூட வெளியேறாமல், சிதையாமல் இன்றும் உலகிற்கு நமது கட்டுமான கலையை பெருமையுடன் பறைசாற்றிக் கொண்டிருக்க கூடிய தமிழனின் சிறப்பான கட்டுமானத்தை நாம் இனிவரும் இதழ்களில் தொடர்ச்சியாக காண்போம்.

அளப்பறிய பொறியியல் கலையை, அக்காலத் தமிழர்கள் தன்னகத்தே கொண்டு இருந்தனர். அதன் வாயிலாகவே இவ்வளவு பெரிய ஒரு கட்டுமானத்தை நேர்த்தியாக நுட்பமாக, அழகியியல் உடன் கட்டி முடிக்க முடிந்தது. ஏனென்றால் இன்றைய மிகச் சிறந்த பொறியியல் கல்லூரிகளில் கற்பிக்கப்படும் நதி நீர் மேலாண்மை, போக்குவரத்து மேலாண்மை, பொறியியல் மேலாண்மை, அறிவியல், நிதி நிர்வாகம், என்ற அனைத்தையுமே அக்காலத் தமிழர்கள் தன்னகத்தே பெற்றிருந்தனர்.

அடுத்து வந்த காலங்களில் மெல்ல, மெல்ல, வழக்கொழிந்து, நாம் நம்முடைய பெருமைகளை மறந்து விட்டோம். சுமார் 1000 ஆண்டிற்கு முன்பாக தமிழகமே உலகின் மிகப்பெரிய பொருளாதார வல்லரசாகவும், படைபலத்தில் வல்லரசாகவும், தொழில்நுட்ப வல்லரசாகவும் இந்த உலகிற்கே எடுத்துக்காட்டாக விளங்கியது.

அதனின் மிகப்பெரிய எடுத்துக்காட்டு நம்முடைய தஞ்சை பெரிய கோயிலாகும். அக்கால சோழர்கள் உலகத்திற்கு அனைத்துத் துறைகளுக்கும் வழிகாட்டியாக இருந்தனர். மிகப்பெரிய கடல் பிரயாணங்களை மேற்கொண்டனர். கடல்நீரை நன்னிராக்கும் மிகப்பெரிய அறிவும் அவர்கள் கொண்டிருந்தனர்.

அதனாலேயே அவர்கள் கடல் கடந்து பல கீழை, மற்றும் மேலை, நாடுகளுக்கு சென்று தங்களுடைய ஆட்சியின் கீழ் அனைத்து நாடுகளையும் கொண்டு வந்தனர். சோழர்கள் ஆட்சியில் மிக முக்கியமான அரசனான ராஜ ராஜ சோழனால் கட்டப்பட்டது இந்த தஞ்சை பெரிய கோயில் ஆகும்.

மிக நீண்ட நெடுங்காலமாக இந்த கோவிலின் பெருமைகளை உணராமலேயே நாம் இருந்துவிட்டோம். இது பல தொல்லியல் நிபுணர்களால், பல கட்டிடக்கலை அறிவியல் ஆர்வம் உடையவர்களால் நம்முடைய தொன்மையான இந்த கட்டுமானத்தின் பெருமைகள் உலகிற்கு தெரியவந்துள்ளது. 1010 ஆம் வருடம் கட்டி முடிக்கப்பட்ட தஞ்சை பெரிய கோயிலில் மிகப்பெரிய பொறியியல் சிறப்பு என்னவென்றால் அந்தக் கோவில் கட்டுமானத்தில் சுடு செங்கல், மரம், ஆணி, இரும்பு, சொறிகல் என்ற பூராங்கல் இல்லை. மேலும் சிமெண்ட், சுண்ணாம்பு போன்ற எந்த விதமான ஒட்டு பொருளும் பயன்படுத்தப்படவில்லை.

வெறும் வண்டல் மண் நிறைந்த அந்தப் பகுதிக்கு இத்தனை கற்கள் எங்கிருந்து வந்தன, எதில் ஏற்றி இறக்கினர், எத்தனை பேர் வேலை செய்தனர் என்ற பொறியியல் நுட்பத் தன்மை தற்போது மிகப்பெரிய புதிராக உள்ளது. தற்போழுது மிக பெரும் பிரச்சினையாக இருக்கக்கூடிய பூகம்ப பாதிப்பில் இருந்து, இந்த கோயிலில் முழுமையாக காக்கக்கூடிய பூகம்ப எதிர்ப்பு தொழில்நுட்பம் பயன்படுத்தப்பட்டுள்ளது. இதை பற்றிய மிகப் பெரிய புரிதல் இன்று வரை எந்த கட்டிடக்கலைஞருக்கும் புரியாத மிகப் பெரிய புதிராக உள்ளது.

சோழ நாடு என்றும் சோழ மண்டலம் என்றும் அழைக்கப்பட்ட ஒரு பரந்த நாட்டின் தலைநகராக விளங்கிய ஊர் தஞ்சை ஆகும். தன் செய் என்பது தஞ்சை ஆயிற்று. இந்த தஞ்சை பெரிய கோவிலை கட்டியமைத்து நம்முடைய பெருமைகளை உலகறிய செய்த ராஜராஜ சோழன் என்ற மாபெரும் மண்ணளின் பாதம் பதிந்து, நாம் இந்த இதழை தொடங்குகிறோம்.

இனி வரும் இதழ்களில் தஞ்சை பெரியகோயிலின் பெருமைகளை தொடராக காண்போம்.

Mr. K. Raju, M.Arch., M.L

Sir M Visvesvaraya - An Excellent Statesman and Eminent Engineer



Sir M Visvesvaraya popularly known as Sri MV, was an engineer, statesman, and a scholar. Sri MV served as the Diwan of Mysore during the period of 1912-1918. In 1955, he was honoured with Bharat Ratna. For his contributions to the public good, he was bestowed as Knight Commander, by King George V, during the British Indian Empire.

Sir M Visvesvaraya An art student turned engineer Mokshagundam Visvesvaraya was born on 15th September 1861 in Muddenahalli village in Chikkaballapur District. His parents were Mokshagundam Srinivasa Shastry and Venkatalakshamma, Mokshagundam Srinivasa Shastry was a renowned Sanskrit Scholar. At the age of 12, Visvesvaraya lost his father.

Sir MV enrolled for his early education in Chikballapur, where he completed his primary education. Then for his high school education, Sir MV came to Bangalore. In 1881, after receiving a bachelor's degree in Arts from the Central College in Bangalore, affiliated to the Madras University, he pursued civil engineering from the reputed College of Engineering, Pune.



Mr. K. Raju
M.Arch., M.L.,

Types of Soil & Importance of Soil Testing before Construction Work

Construction is a lively activity where the safety of occupant & the environments around are to be considered. Before beginning the construction on a site, it is suggested to test the soil from the site. This is one of the primary things to be done after buying a plot or before constructing a building. But a lot of people are still not aware of why soil testing is important before construction. Soil is the uppermost layer of Earth's crust. Soil is the medium in which plants grow and thus it supports the lives on earth. The soils of India on the Basis of their formation are divided in the following two broad categorie.



Mr. Sridhar Jagadeesan

1. Residual Soil - which from at the plae of their origin. Like- black soils
2. Transported Soil - which are transported from place of their formation. Lime alluvial soils

As far as the Tamilnadu State is concerned. Broadly, there are five types of soils:

1. ALLUVIAL SOIL
2. BLACK SOIL
3. RED SOIL
4. LATERITE SOIL
5. SALINE SOIL

Factors that control the formation of Soil:

1. Parent rocks
2. Climate
3. Slope
4. Time
5. Various forces of nature such as change in temperature, actions of running water, wind and glaciers, activities of decomposers etc., contribute to the formation of soil.
6. Chemical and organic changes.

Types of Soil Tests for Building Construction.

1. The water content of soil Tests -

In almost all soil tests natural moisture content of the soil is to be determined. Natural moisture content influences load bearing capacity of soil.

2. Unit weight of Soil test -

The Unit weight of a soil mass is defined as its weight per unit volume

3. Shear strength of cohesive soil - The shear resistance of soil is a result of friction and interlocking of particles, and possibly cementation or bonding at particle contacts.

4. Permeability test - This test is used to assess drainage characteristics of soil. rate of consolidation and to predict rete of settlement of soil bed.

5. Bearing capacity of soil by plate load test - (Load bearing capacity of Soil)

Foundation is one of the essential stages in the construction of a building. A small mistake in laying the Foundation can result in the collapse of the whole building. It is the foundation of the building which protects it from the sudden emerging forces in the soil/subsoil. It ensures that the load-bearing function is being performed smoothly. The soil should have all the chemical and physical qualities which are necessary to bear the weight of the building. The depth and length of the pillars, which are to be laid in the foundation are also determined based on soil test results.

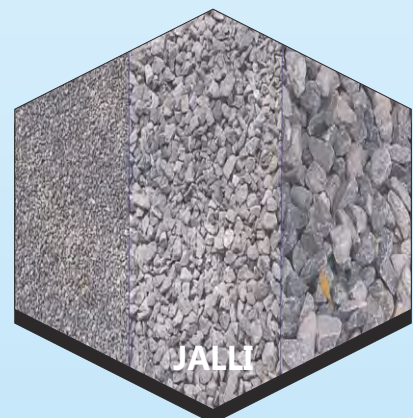
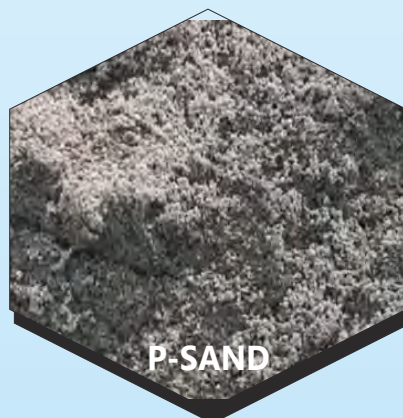
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Thickness
60 mm, 80mm
Size: 247mm x 123mm
Area: 0.30sqft.



Thickness
60 mm
Size: 260mm x 190mm
Area: 0.34sqft.



Thickness
Size: 12" x 12"
Area: 1sqft.



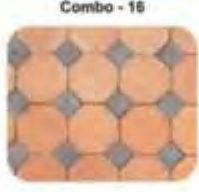
Thickness
60 mm, 80mm
Size: 247mm x 123mm
Area: 0.30sqft.



Thickness
60 mm
Size: 204mm x 127mm
Area: 0.45sqft.



Thickness
Size:
Area: Sqft.



Combo - 18



Grass Paver



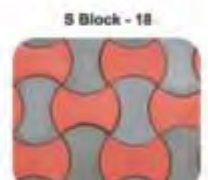
Zig Zag - 18



Zig Zag - 18



Tri-Hex - 20



S Block - 18

RUBY READY MIX CONCRETE
 No.116, Agaramthen Road, Selaiyur, Chennai -600 045
 Call: 2229 2695, 2229 2696, 98410 73366

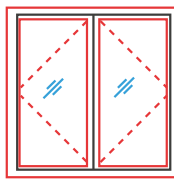
**TRANSFORMING
HOMES WITH EASE
USING SUPERIOR &
SUSTAINABLE
TECHNOLOGY**



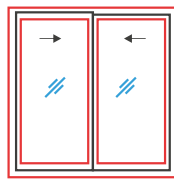
A WIDE RANGE OF DESIGNS TO CHOOSE FROM



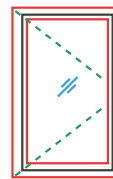
Fixed



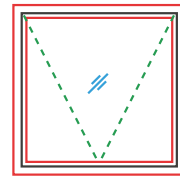
French Window



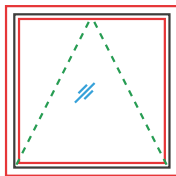
Sliding Window



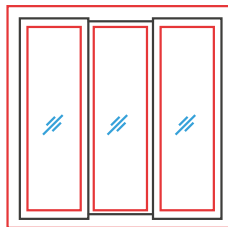
Right Inward Casement



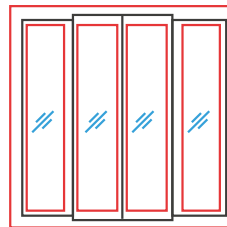
Bottom Hung Tilt In



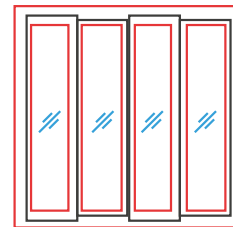
Top Hung Tilt In



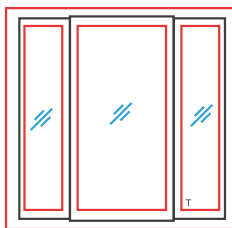
Horizontal Slider OXX



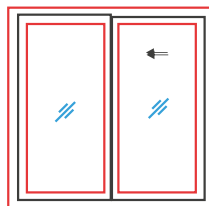
Horizontal Slider XOOX



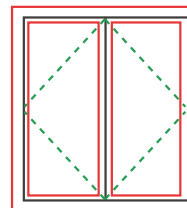
Horizontal Slider OXXO



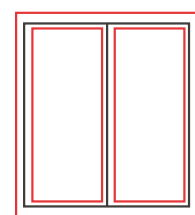
Horizontal Slider XO



Horizontal Slider OX



French Door



Sliding Door

RUBY DOORS & WINDOWS

No.19/1,20 Pulikoradu Village, West Tambaram, Chennai -600 045
Call: 78240 13570 / 78248 07588 / 78240 14310 / 044 6009 6009

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