

3D CONCRETE PRINTING & TURNKEY CONSTRUCTION

TECHNOLOGY BY CRETEBOTS. PROJECT DEVELOPMENT BY RENU LANDSCAPES.

An Authorised Channel Partnership for 3D Concrete Printing Solutions

Renu Landscapes is pleased to introduce **3D Concrete Printing & Turnkey Construction** as a new technology-driven service vertical through our association with **CRETEBOTS**, an innovative 3D Concrete Printing technology company.

As an **Authorised Channel Partner of CRETEBOTS**, Renu Landscapes brings CRETEBOTS' 3D Concrete Printing technology and technical expertise to clients, together with our capabilities in **project development, construction coordination, landscape development and turnkey execution.**

This partnership brings together two complementary strengths:

CRETEBOTS

3D Concrete Printing Technology, Equipment & Technical Expertise

RENU LANDSCAPES

Client Interface, Project Development, Construction, Landscape & Turnkey Execution

TECHNOLOGY + EXECUTION = COMPLETE SOLUTION

The client approaches **Renu Landscapes** for the project.

Renu Landscapes understands the requirement, develops the project and coordinates the overall execution. Through our authorised channel partnership, **CRETEBOTS' technology and technical expertise provide the 3D Concrete Printing capability.**

One project. Two specialised capabilities. One coordinated approach.

WHY THIS TECHNOLOGY, WHY NOW?

The construction industry is changing.

Shortage of skilled labour, availability of resources, repetitive construction activities and increasing project-coordination challenges can contribute to delays in completing projects.

3D Concrete Printing offers an opportunity to automate a significant part of the repetitive printing process and introduce a more technology-driven approach to construction.

The objective is not to replace the entire construction process or eliminate skilled people.

It is about using technology to save time, improve efficiency and use skilled resources more effectively.

And this leads to one of our most important USPs:

TIME

TIME SAVED IS VALUE CREATED

The biggest advantage of 3D Concrete Printing is the potential to **reduce the time required for the printing portion of suitable structures.**

CRETEBOTS' project experience includes reported or estimated printing periods such as:

1,700 sq. ft. 2BHK Villa – approximately 15 days

930 sq. ft. 1BHK Weekend Home – approximately 10 days

3,600 sq. ft. Z.P. School – approximately 25 days

2,200 sq. ft. Sales Office – approximately 12 days

750 sq. ft. Office – approximately 4 days

These figures refer to the 3D printing activity and not complete project-completion periods. Foundations, roofing, services, finishing and other associated works remain project-specific.

The objective is to use this technology as part of a coordinated project programme to help bring the complete project towards completion sooner.

CONVENTIONAL CONSTRUCTION vs. 3D CONCRETE PRINTING

Conventional Construction	3D Concrete Printing
Repetitive masonry activities are largely manual	Printing is digitally controlled
Brick/block laying is repeated course by course	Concrete is deposited layer by layer
Greater dependence on repetitive masonry work	Automation of the printing activity
Conventional forms are generally easier to execute	Greater freedom to explore customised forms
Repetitive activities can affect construction schedules	Suitable printing activities can potentially be completed faster
Project activities are coordinated around conventional construction	Other activities can potentially be planned alongside printing

The difference is not only how we build.

IT IS HOW SOON YOU CAN START USING WHAT YOU BUILD.

FOR A HOME

TIME SAVED = DREAM REALISED SOONER

A home is not simply a structure.

It is a dream.

It is where families live, celebrate, grow and create memories.

Build sooner. Live sooner. Create memories sooner.

FOR A COMMERCIAL PROJECT

TIME SAVED = EARLIER BUSINESS

For a shop, showroom, office, resort or commercial property:

Construction Completed - Fit-Out Completed- Doors Open - Business Begins -

REVENUE OPPORTUNITY

Every day saved in reaching operational readiness can have commercial value.

Complete sooner. Open sooner. Start business sooner.

FOR AN INDUSTRIAL PROJECT

TIME SAVED = EARLIER OPERATIONS

Earlier completion can potentially allow:

Equipment Installation - Commissioning - Production / Operations -

EARLIER REVENUE OPPORTUNITY

The actual financial benefit depends on the individual project, but the principle remains:

In business, time is money.

DESIGN WITHOUT BEING LIMITED TO THE CONVENTIONAL

Another major advantage of 3D Concrete Printing is **design freedom**.

Subject to structural and printing feasibility, digitally prepared designs can explore:

- Curved walls
- Circular forms
- Organic forms
- Fluid geometry
- Parametric designs
- Sculptural forms
- Customised architectural forms
- Non-conventional geometries
- Feature walls
- Landscape structures

Your dream does not always have to fit into a conventional box.

CRETEBOTS TECHNOLOGY

THE TECHNOLOGY BEHIND THE PRINT

CRETEBOTS brings expertise in:

- 3D Concrete Printing
- Printing technology
- Printing equipment
- Digital construction
- Printing methodology
- Technical project support
- Innovative construction solutions

The CRETEBOTS project portfolio demonstrates applications across residential, institutional, commercial and other construction projects.

Selected Project Experience

1,700 sq. ft. 2BHK Villa

Approximately 15 days printing

930 sq. ft. Weekend Home

Approximately 10 days printing

3,600 sq. ft. Z.P. School

Approximately 25 days printing

2,200 sq. ft. Sales Office

Approximately 12 days printing

750 sq. ft. Office

Approximately 4 days printing

Printing periods refer to reported or estimated 3D printing activity and not necessarily complete project-completion periods.

RENU LANDSCAPES

TURNING TECHNOLOGY INTO COMPLETE PROJECTS

The strength of the partnership lies in what Renu Landscapes can build **around the technology**.

Renu Landscapes brings experience in:

- Construction
- Landscape Development

- Farm Development
- Site Development
- Hardscape & Softscape
- Irrigation
- Water Bodies
- Outdoor Lighting
- External Development
- Turnkey Project Execution

This enables us to take a 3D Concrete Printing opportunity and develop it into a **complete construction and property-development project**.

FROM YOUR LAND TO YOUR COMPLETE PROPERTY

A client purchasing land for a farmhouse or private property may require:

- Compound wall
- Entrance gate
- Site development
- Internal roads
- Parking
- Farmhouse
- Guest accommodation
- Utility structures
- Landscape
- Plantation
- Irrigation
- Swimming pool
- Koi pond
- Water bodies
- Waterfalls
- Rainwater harvesting
- Outdoor lighting
- Hardscape
- Softscape
- External infrastructure

Renu Landscapes can coordinate these requirements as one integrated project.

The **CRETEBOTS 3D Concrete Printing technology** can form an integral part of the main construction solution.

EVERYTHING CAN GO HAND IN HAND

Land - Site Development -Compound & Access - 3D Concrete Printed Structure - Landscape

-Irrigation & Water - External Development - COMPLETE PROPERTY

The objective is to minimise unnecessary waiting between different activities and move the property towards completion efficiently.

ONE CLIENT. ONE COORDINATED APPROACH.

The client does not need to independently coordinate multiple specialists for every component.

RENU LANDSCAPES

Client Interface + Project Development + Construction + Landscape + Turnkey Execution

CRETEBOTS

3D Concrete Printing Technology + Technical Expertise

TOGETHER

TECHNOLOGY + EXECUTION + COMPLETE PROPERTY DEVELOPMENT

TECHNICAL PERFORMANCE

The 3D printed concrete and raw material mix associated with CRETEBOTS has undergone laboratory testing.

For the particular material/sample tested, CRETEBOTS has indicated the following key performance figures:

Compressive Strength – 25–30 MPa

Flexural Strength – 7.99 MPa

Adhesion – 2.60 MPa

Water Absorption – 5.45%

Capillary Water Absorption – 0.015 kg/m²

These figures relate to the **specific material/sample tested** and are not a blanket structural rating for every 3D-printed structure. Project-specific engineering, structural design, materials, site conditions and applicable requirements determine suitability.

OUR VISION

BUILD FASTER. DESIGN FREELY. LIVE SOONER.

Our vision is to combine **CRETEBOTS' advanced 3D Concrete Printing technology** with **Renu Landscapes' construction, landscape and turnkey project capabilities**.

For a homeowner:

TIME SAVED = DREAM REALISED SOONER

For a commercial client:

TIME SAVED = EARLIER BUSINESS

For an industrial client:

TIME SAVED = EARLIER OPERATIONS

For everyone:

TIME SAVED = VALUE CREATED

Because sometimes the value of time is measured in money.

And sometimes it is measured in **memories**.

BUILD FASTER. DESIGN FREELY. DEVELOP COMPLETELY.

RENU LANDSCAPES

Authorised Channel Partner of CRETEBOTS

**3D Concrete Printing | Turnkey Construction | Farmhouse Development | Villa Construction |
Landscape Development | Complete Property Development**

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Technology Partner

CRETEBOTS

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HAVE LAND? HAVE A DREAM?

LET RENU LANDSCAPES HELP TURN IT INTO REALITY.

From your land to your structure.

From your structure to your landscape.

From your vision to your complete property.

Build faster. Save time. Create value. Create memories.

SUBMITTED FOR APPROVAL

The above website content is respectfully submitted to **CRETEBOTS** for approval for use on the Renu Landscapes website and related promotional material.

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