VRUSHALI LIVE INNOVATION WITH BAMBOO

V.LIV.IN

- BAMBOO CONSTRUCTION
- BAMBOO FURNITURE
- MUD WALLS
- RAMMED EARTH WALLS

Sravan Kumar

Founder

9703(Bamboo)-9703226266

Vlivinbamboo@gmail.com

5-2/2,Apparel Park Road,
Gundlapochampally,Medchal,
Hyderabad,Telangana-500014.

www.timesvlivin.com

WE ARE THE RESULT OF OUR HARD WORK.

PASSION FOR WHAT WE DO.

LOVE FOR WHAT WE STAND FOR.

Why Choose Us

We stand out by offering a holistic approach to the design of your project; ensuring your design aspirations are perfectly suited to your project environment.

- Professional Designers
- Add Quality & Value to the Projects
- Have Peace of Mind @Designing Stage
- Smart Energy Efficient Design
- Each of our designs is unique
- On Time and on Budget

OUR HISOTRY

V Livin bamboo founded in summer of 2020, is a company built on a friendly and professional team that only delivers the highest quality of Natural buildings.

ABOUT US

EARTH AND BAMBOO CONSULTANTS

'V Liv In Bamboo' is a consulting firm started with an aim to bring the goodness of naturally built houses on everyone's wish list , having spread our thought in the minds of hundreds of land owners who wish to feel the refreshing aroma of natural material for their residences and farmhouse/resort projects since 2020.

V LIV IN specializes in building all things natural, It's what we do, and we do it really well...Our expertise in helping clients with the dream of having contemporary structures contributing to the evergreen sustainable housing sector who understand its unique thermal and aesthetic benefits.

V LIV IN team brings a combined unaged earth building experience to every project. Our forming system, mix design, soil characterization, mixing-delivery methods, composite construction techniques are refined with years of experience, resulting in the most efficient, precise, and beautiful installations available worldwide.

We are India's most innovative and Reliable Earth and bamboo consultants, designers and educators. Natural ways of construction using sustainable products is one of the oldest approaches to building homes in India. Living in a traditionally designed, naturally ventilated, vernacular house means your home will be built to last, is seriously energy efficient and it's naturally healthy for your family.

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

OUR SERVICE

Looking for a consultant to answer all your sustainable housing needs?

We are India's most innovative and trusted sustainable house consultants we take up turnkey projects in giving you the house of your dream house. Eco friendly house construction is one of the oldest approaches to building houses in India. Living in a traditionally designed natural house means your home will be built to last, is seriously energy efficient and it is inherently healthy for your family.

V LIV IN builds one of the highest carbon efficient Mud houses for Indian Home owners, Resorts, Retreats and Farmhouses. You can be rest assured that you are working with the most creative, connoisseur in the construction industry. We offer a full range of services, from site inspection and architectural design, testing and analysis of your structure to executing and ensuring the quality of promised finishes.

OUR MISSION

To rejuvenate natural material and methods of construction in the current scenario brings so much sense to our existence. We garner the offerings of ancient building techniques combined with the urban needs to create chic and hybrid elements which contribute generously towards a healthy and healing stay for our clients. We tirelessly walk towards creating a global reputation aiding to promote our research, refine technologies, disseminate information and build the credibility that makes natural buildings one of the most environment friendly building systems.

"In the current situation, revitalising natural materials and construction processes makes a lot of sense.

We blend the benefits of traditional construction processes with the demands of modern life to produce stylish and hybrid components that contribute significantly to our clients' health and healing.

We work diligently to establish a global reputation that will help us advertise our products.

"Revitalizing natural materials and construction techniques makes a lot of sense in the current circumstances. We combine the advantages of ancient building methods with the needs of modern living to create beautiful and hybrid components that help our clients' health and recovery. We strive hard to build a global reputation that will aid in the promotion of our products."

We have a close-knit team and an experience of over 10 years in working closely with international clients and architects, taking pride in delivering unmatched timelines and quality delivery.

TEAM MEMBERS

Together we work as a team to make V LIV IN a great company with strong core values. We have been fortunate to have been surrounded by great individuals.

Pooja bandhavi

Business operations
& strategy Manager

Anubha Jain

Architect

Sravan Kumar

Founder

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

TABLE OF CONTENT

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

TABLE OF CONTENT

06

JOINERY

WOOD

STONE

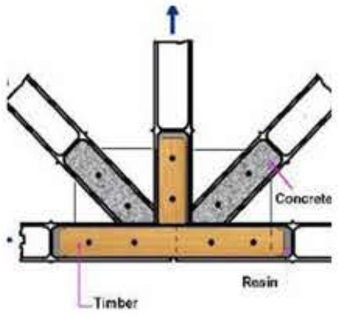
ALUMINIUM

IRON

LIGHT WEIGHT STEEL

STRUCTURE

BAMBOO



07

DOOR/WINDOW

TRADITIONAL

MODERN

DESIGNER

SIMPLE

BAMBOO

UPVC

08

FLOORING

EARTHEN

STONE

WOODEN

OXIDE

BAMBOO FLOORING

BOARDS

LVT FLOORING

IVC WATERPROOF

VINYL FLOORING

09

ROOFING

THATCHED

GREEN VEGGY

SHRINGLES

BAMBOO

MUD

10

CEILING

BAMBOO

REED

WOOD

GYPSUM

TABLE OF CONTENT

PROJECT

01

RESI HOUSE

COMMERCIAL

TINY COTTAGES

FARMHOUSE

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

ARCHITECTURE

02

TRADITIONAL

MODERN

CONTEMPORARY

FUTURISTIC

PREFAB

RESIDENTIAL PLOT

FARMHOUSE

RESORT

HOMESTAY

PROPERTY TYPE

03

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

FOUNDATION

04

STONE

CONCRETE

EARTHBAG

BURNT BRICKS

Advantages of Rammed Earth Walls

It's not entirely the walls' doing. Earthe home design should factor in the natural elements that will affect the warming and cooling properties of the home.

Thermal mass is abundant in rammed earth walls.

- Buildings built of rammed earth have a longer lifespan.
- It has a high level of fire resistance.
- Rammed soil is non-toxic by its own nature.
- The material may be used to soundproof a room.
- Rammed soil is non-toxic by its own nature.

How Rammed Earth Homes Work?

Building a rammed earth home is similar to constructing a sand castle, but without the hard step of flipping the bucket. Instead, the home's shape, which is often a plywood construction that serves as a wall's outline, is already in place. By hand or machine, a cross-grade, or mix, of soils is pushed into the walls. When everything is densely compacted, the shapes are eliminated, leaving a solid, dense mass, a solid wall Until the entire home is constructed, the builders ram and repeat.

Rammed Earth Constructions uses 300mm rammed earth walls that are load bearing.

Buildings are also braced with rammed earth, which is generally far more than the minimal needed for most dwellings.

Even in the worst weather circumstances, it offers a sense of stability and security.

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

RAMMED EARTH

V Liv In builds most of the mud house construction projects with rammed earth technique. Given here are Frequently Asked Questions relevant to mud house construction.

Whats the durability of Mud house walls?

Our built mud walls have an unlimited life as these walls are immune to the destructive action of fire, termites and the weather.

What about the maintenance of Mud houses?

The walls need very little maintenance and they are solid right through. The walls won't need
repainting or touching up over the years ahead..

Is it expensive to build rammed earth walls?

Yes, but incase the required soil could be digged from the very site, the project would be labour
sensitive only, which saves, 30% of the total construction cost.

What are the Health benefits of Mud houses?

Rammed Earth is non-toxic, non-polluting and breathes, making healthy, more people-friendly buildings. It is very low in embodied energy and
extremely comfortable to live in.

Mud building techniques have been around for thousands of years. Since before our recorded
history, people have been using the earth to build with. That's why I tell people that earth building techniques are nothing new. In fact, they are very ancient. Through history, earth architecture has traveled all around the world.

RAMMED EARTH WALLS

Rammed earth buildings are environment friendly and water, fire, and termite resistant. It is naturally sound- and mold-resistant. Thick earthen walls create a sense of solidity and security.

RAMMED EARTH TECHNIQUE

Rammed earth is a method of building walls on site by compacting a selected mixture of earth, sand and aggregate in layers between the forms. Each layer is approximately 15cm deep. As each form is filled another form is placed above it, and the process begins again. This is continued until the desired wall height is reached. A wider range of soils are suitable when a small amount of cement is added to the mix. The result, known as 'stabilized rammed earth', is an
extremely durable and attractive masonry product with numerous benefits.

Reducing or removing Portland cement is beneficial to the environment since it reduces the amount of energy embodied in the
finished product. For the same reason, using soils directly from the site has an environmental benefit. Cement production accounts for more than 7% of worldwide CO_2 emissions. From country cottages to suburban houses to art galleries and schools, there's something for everyone.

Stabilized rammed earth builds beautiful, one-of-a-kind structures while also
delivering a wide range of benefits to satisfy the needs of homeowners, artists, industry, architects, and engineers.

WALLS

05

EARTHBAG STRUCTURES

Earthbag building uses polypropylene rice bags or feed bags filled with soil or insulation that are stacked like masonry and tamped flat. Barbed wire between courses keeps bags from slipping.
Earthbag construction is a low-cost construction technology that uses primarily local dirt to produce structures that are both sturdy and rapid to construct. It's a natural construction approach that evolved from past military bunker construction methods and temporary flood-control dike construction methods. The approach calls for only the most basic building materials: strong bags filled with organic stuff.

Standard earthbag fill material has internal stability. Either moist subsoil that contains enough clay to become cohesive when tamped, or a water-resistant angular gravel or crushed volcanic rock is used. Walls are gradually built up by laying the bags in courses—forming a staggered pattern similar to bricklaying.

The walls can be curved or straight, domed with earth or topped with conventional roofs. Curved walls provide good lateral stability, forming round rooms and/or domed ceilings like an igloo. The structure is typically finished with plaster, either cement stucco on a strong mesh layer or an adobe or lime plaster, to shed water and prevent fabric UV damage.

Environment Friendly Technique

Earthbag construction uses very little energy compared to other durable construction methods. Unlike concrete, brick or wood, no energy is needed to produce the earthen fill other than gathering soil. If on-site soil is used, little energy is needed for transportation. Unlike rammed earth construction, only human labor energy is required to tamp the soil lightly. The energy-intensive materials that are used – plastic (for bags & twine), steel wire, and perhaps the outer shell of plaster or stucco – are used in relatively small quantities compared to other types of construction, often totaling less than 5% of the building materials. Buildings last a long time when maintained. However, if "raw" or un-stabilized soil is used as fill, when the building is no longer useful the earthen fill can be recycled into either garden areas, backfill, or new earthen buildings.

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

Use in Disaster Areas

Earthbag building techniques were also explored in Sri Lanka after the 2004 tsunami.[20] Multiple earthbag construction projects have been completed in Haiti, most of these after the earthquake.[21] First Steps Himalaya[22] and other charities had built more than 50 earthbag buildings in Nepal prior to the April 2015 earthquake. Since then, local builders flocked to ongoing earthbag training opportunities,including those by Good Earth Global, which have led to official Nepal building code acceptance of this technique for residences. International NPOs have built hundreds of contained earth or earthbag buildings in Nepal as well, more residences than larger clinics or schools. NPOs are asking for more structural information to be better able to choose reinforcement types and intensity appropriate to local soil strength and seismic risk. University testing has begun but more is needed.

COB

Also known as cobb, is a easy to build technique with local building material that comprises subsoil, straw (or another fibrous organic material), water, and occasionally lime.

COB TECHNIQUE

Cob is an earth building technique based on a mixture of clay, sand, straw and water. The mixture is kneaded with hands, feet or simple tools, subsequently lumps are made, that are then compressed together and shaped by hand forming foundations and walls. The contents of subsoil naturally vary, and if it does not contain the right mixture it can be modified with sand or clay. Cob is fireproof, resistant to seismic activity and uses low-cost materials, although it is very labour intensive.

The contents of subsoil naturally vary, and if it does not contain the right mixture it can be modified with sand or clay. Cob is fireproof, resistant to seismic activity,[2] and uses low-cost materials, although it is very labour intensive. It can be used to create artistic and sculptural forms, and its use has been revived in recent years by the natural building and sustainability movements.

The walls of a cob house are generally about 24 inches (61 cm) thick, and windows were correspondingly deep-set, giving the homes a characteristic internal appearance.

Low Cost Housing Option

Cob homes are made of. Low-cost and natural materials. In fact the four main materials used in building Cob homes are made of clay, water, straw and earth. Though some individuals may think that this is a primitive form of living, the truth is that this low-cost building has higher durability than more traditional homes and offers an increasing amount of comfort for the owner.

Energy Efficiency of Cob Houses

Cob homes fall under a geothermal energy efficiency category. For example, a Cob home will naturally heat the home during the winter and cooler home during the summer. This means that there is virtually no electric bill. In fact, the individuals who do have electric bills for their Cob homes generally used electric to run small appliances, Internet capabilities and kitchen area appliances.

ADOBE BRICKS

These are unfired, sun-dried building blocks, made of earth with a fairly high clay content and straw. If produced manually the earth mix is cast in open moulds onto the ground and then left to dry out.

Traditional Methods of Construction

Adobe brick walls, once in place, are usually protected by applying a variety of substances. Before an exterior siding is applied, some contractors may spray on insulation for added thermal protection—a dubious practice in the long term if it allows the bricks to retain moisture. Worldwide use of adobe is mainly in rural areas, where houses are typically one story, 3 m high, with wall thicknesses ranging from 0.25 m to 0.80 m. In mountainous regions with steep hillsides, such as the Andes, houses can be up to three stories high. In parts of the Middle East, one finds that the roof of one house is used as the floor of the house above.

Earthquake Performance

In addition to its low cost and simple construction technology, adobe construction has other advantages, such as excellent thermal and acoustic properties. However, most traditional adobe construction responds very poorly to earthquake ground shaking, suffering serious structural damage or collapse and causing a significant loss of life and property. During strong earthquakes, due to their large mass, these structures develop high levels of seismic forces, which they are unable to resist, and therefore they fail abruptly. Typical modes of failure during earthquakes are severe cracking and disintegration of walls, separation of walls at the corners, and separation of roofs from the walls, which can lead to collapse

ADOBE TECHNIQUE

Adobe is essentially a dried mud brick, combining the natural elements of earth, water, and sun. It is an ancient building material usually made with tightly compacted sand, clay, and straw or grass mixed with moisture, formed into bricks, and naturally dried or baked in the sun without an oven or kiln. It is used today but also found in primitive architecture: mud bricks were used even before the grand ancient stone temples of Greece and Rome. Construction methods and the composition of adobe—the recipe—vary according to climate, local customs, and the historical era.

Adobe's strength and resilience vary with its water content: too much water weakens the brick. Today's adobe is sometimes made with an asphalt emulsion added to help with water-proofing properties. A mixture of Port-land cement and lime may also be added. In parts of several states in India,

fermented cactus juice is used for waterproofing. Today's commercial adobe is sometimes kiln-dried, although purists may call these "clay bricks." Traditional adobe bricks need about a month of drying in the sun before they can be used.

COMPRESSED EARTH BLOCKS

If the blocks are stabilized with a chemical binder such as Portland cement they are called compressed stabilized earth blocks (CSEB) or stabilized earth blocks.

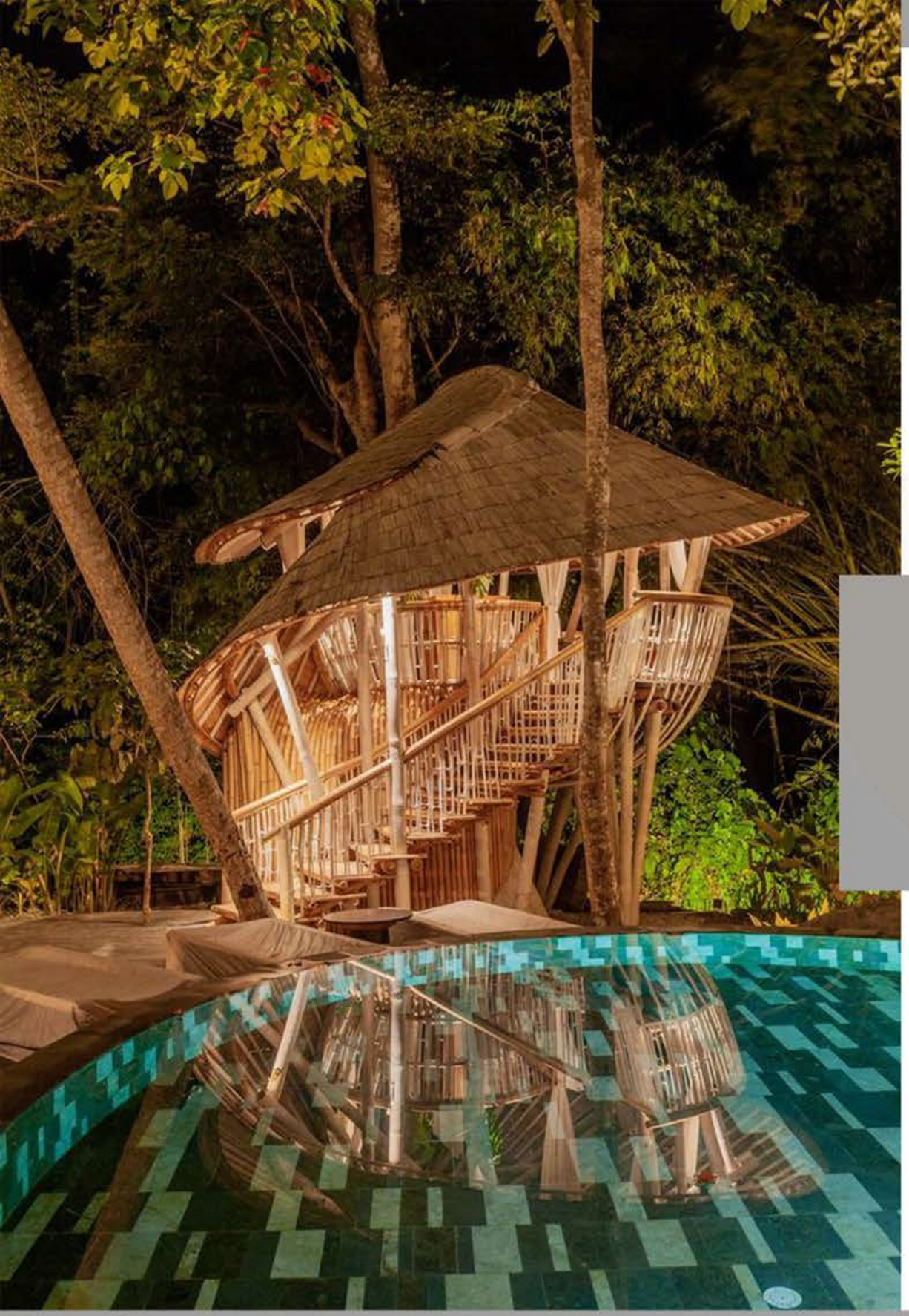
A compressed earth block (CEB), also known as a pressed earth block or a compressed soil block, is a building material made primarily from damp soil compressed at high pressure to form blocks. Compressed earth blocks use a mechanical press to form blocks out of an appropriate mix of fairly dry inorganic subsoil, non-expansive clay and aggregate. If the blocks are stabilized with a chemical binder such as Portland cement they are called compressed stabilized earth block (CSEB) or stabilized earth block (SEB). Typically, around 3,000 psi (21 MPa) is applied in compression, and the original soil volume is reduced by about half.CEBs are assembled onto walls using standard brick-laying and masonry techniques. The mortar may be a simple slurry made of the same soil/clay mix without aggregate, spread or brushed very thinly between the blocks for bonding, or cement mortar may also be used for high strength, or when construction during freeze-thaw cycles causes stability issues. Hydraform blocks are shaped to be interlocking. The compression strength of properly made CEB can meet or exceed that of typical cement or mud brick. Building standards have been developed for CEB.
.

Advantages of CEB

There are many advantages of the CEB system. On-site materials can be used, which reduces cost, minimizes shipping costs for materials, and increases efficiency and sustainability. The wait-time required to obtain materials is minimal, because after the blocks are pressed, materials are available very soon after a short drying period. The uniformity of the blocks simplifies construction, and minimizes or eliminates the need for mortar, thus reducing both the labor and materials costs. The blocks are strong, stable, water-resistant and long-lasting.

Finishing of CEB Walls

Completed walls require either a reinforced bond beam or a ring beam on top or between floors and if the blocks are not stabilized, a plaster finish, usually stucco wire/stucco cement and/or lime plaster. Stabilized blocks can be left exposed with no outer plaster finish. In tropical environments, polycarbonate varnish is often used to provide an additional layer of wet-weather protection. This also provides the contractor the option of making the exteriors look like conventional stucco houses.



BAMBOO BOARDS

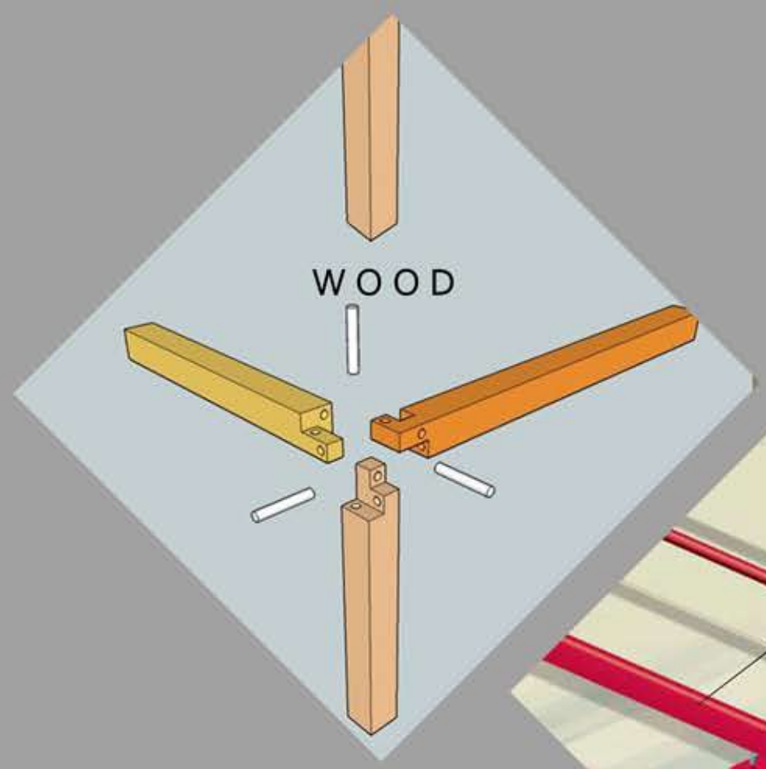
PREFAB PANELS

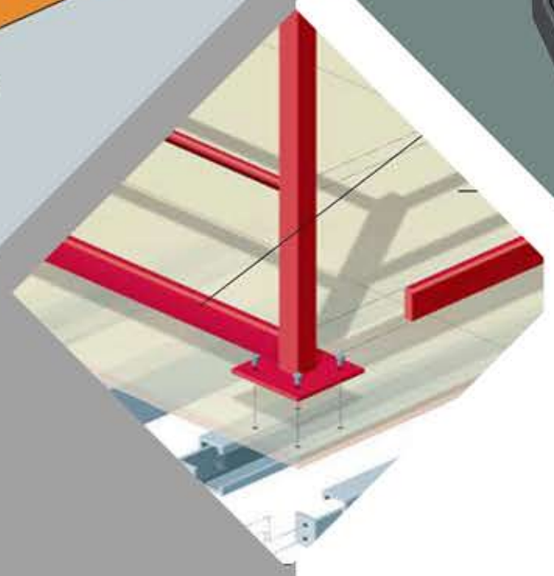
BAMBOO

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com





LIGHT WEIGHT STEEL
STRUCTURE

JOINERY

06

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

DOOR/WINDOW

07

TRADITIONAL

DESIGNER

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

BAMBOO

MODERN

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

FLOORING

08

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

FLOORING

EARTHEN

STONE

WOODEN

OXIDE

BAMBOO FLOORING

BOARDS

LVT FLOORING

IVC WATERPROOF

VINYL FLOORING

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

ROOFING

09

THATCHED

SHRINGLES

GREEN VEGGY

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

CEILING

10

WOOD

BAMBOO

GYPSUM

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

PLASTERS

11

EARTHEN

LIME

GYPSUM

OXIDE

COWDUNG

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

WALL FINISH

12

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

WE DESIGN
YOUR DREAMS

BAMBOO
FURNITURE

13

9703(Bamboo)-9703226266 www.timesvlivin.com Vlivinbamboo@gmail.com

BED

SITTOUTS

WARDROBE

TABLES

INDOOR FURNITURE

OUTDOOR FURNITURE

9703(Bamboo)-9703226266

www.timesvlivin.com

Vlivinbamboo@gmail.com

BED

SITTOUTS

TABLES

MUD FURNITURE

14