

building cities for tomorrow

VAKAI



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**TACKLING
LANDSCAPING
FOR AESTHETICS**



VAKAI

A modern living room with a grey sectional sofa, blue and grey pillows, and a small round coffee table with a vase of flowers. Large windows and a black pendant light are visible in the background.

BUILD MODERN

BUILD FOR THE FUTURE

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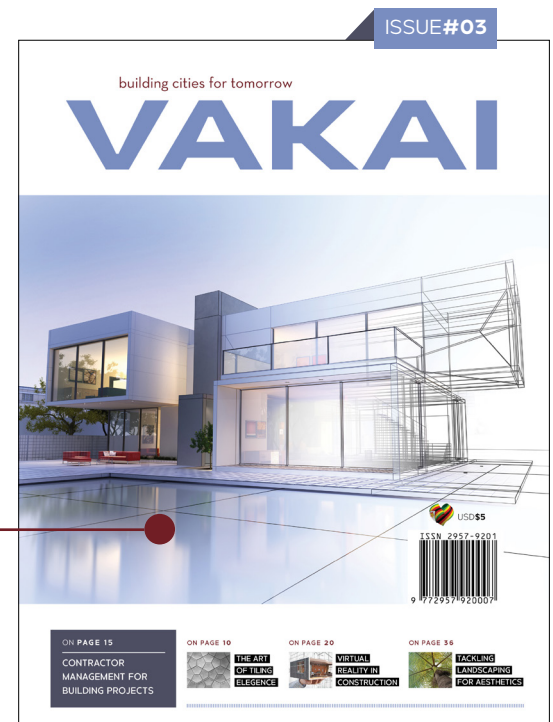
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building cities for tomorrow

VAKAI



COVER ILLUSTRATION

This cover represents the process of building from design to completion. We are inspired by global trends in modern construction.

FROM THE EDITOR'S DESK



VAKAI! Let's build! Welcome to our readers, both existing and new users. We are very much humbled by your support to the magazine, which is becoming a leader in the construction game. In this issue we look at how virtual reality is being incorporated into the construction sector.

We delve into stylish balustrading ideas, which are changing the landscape of building with decks, verandas and ornamental decks. Tiling your house is also one of the exciting expeditions. In this issue we talk about how tiling can be used to add style and sophisticate your home.

In this issue we warn against sub-standard timber that will end up warping, breaking and succumbing to the weight of the roofing tiles or other materials. Poor quality timber can cause fatalities and injuries. In this edition we continue to encourage the use of high-quality timber and also contractors who have a track record, in order to avoid disappointment.

More insights are provided with regard to the surge in the usage of aluminium for windows and doors. Greater appeal, lustre and aesthetic finishes are being made possible with aluminium. Watch out for our special feature on trellidoors and how they are being used to reinforce security.

As we build our homes, it is the pleasure of Vakai Editorial team to walk with you, the full cycle. Continue to create memories and spaces which are legendary. Brick by brick, we shall build. Until the next edition!

Tawanda Collins Muzamwese

EDITOR-IN-CHIEF

BALUSTRADE

Many buildings are designed with elevated positions, balconies and decks which may create open spaces prone to make people fall off. Balustrades can create barriers that protect people from exposed openings of buildings. In recent years, balustrades have become more sophisticated and stylish in their making.

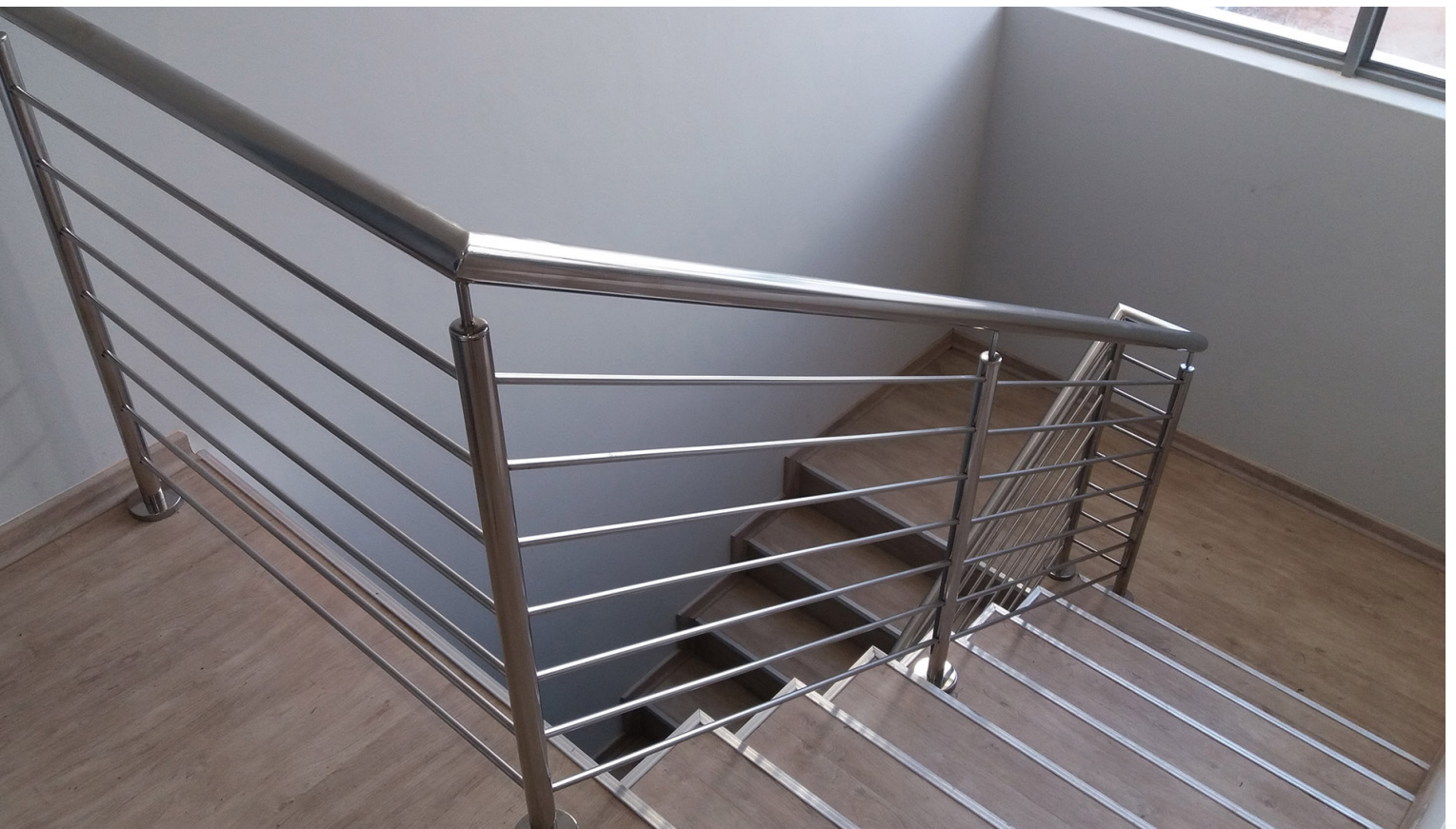
If your structure has got balconies or spaces where there is a risk of people falling, then balustrades are a must for your project. Modern designs of balustrades have emerged beyond the traditional ones which were casted. Balustrades come in different types and also add sophistication to building, balconies, ornamental parapets and open decks. A balustrade is made up of a group of balusters. Typical materials for making balusters included stainless steel, wood, ceramic, stone, plaster and wrought iron.

It is essential to ensure that balustrades are installed by competent people who have the capacity. There are now also variants of balustrades where there is a possibility of Doing it Yourself (DIY). Greater care and caution should be taken in installation whether contracted or DIY.



Not only will balustrades add a dimension of elegance, taste and sophistication – they can also offer protection from falling especially when we consider the adventures of our children. There is no guarantee of maximum protection with balustrades, but at least there is some level of barrier to avoid falling from heights.

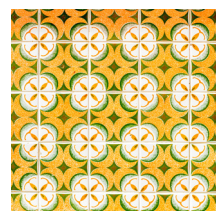
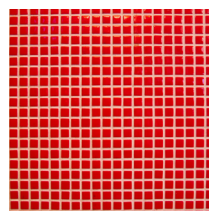
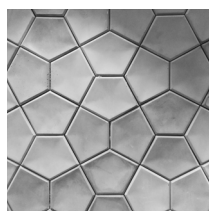
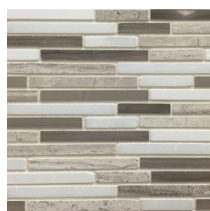
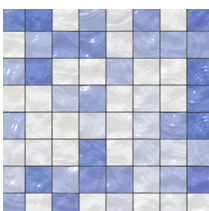
Balustrades are also common on flight of stairs on the siderails. These can be made in an intricate fashion with glamour and strength underlying them.



TILING WITH ELEGANCE



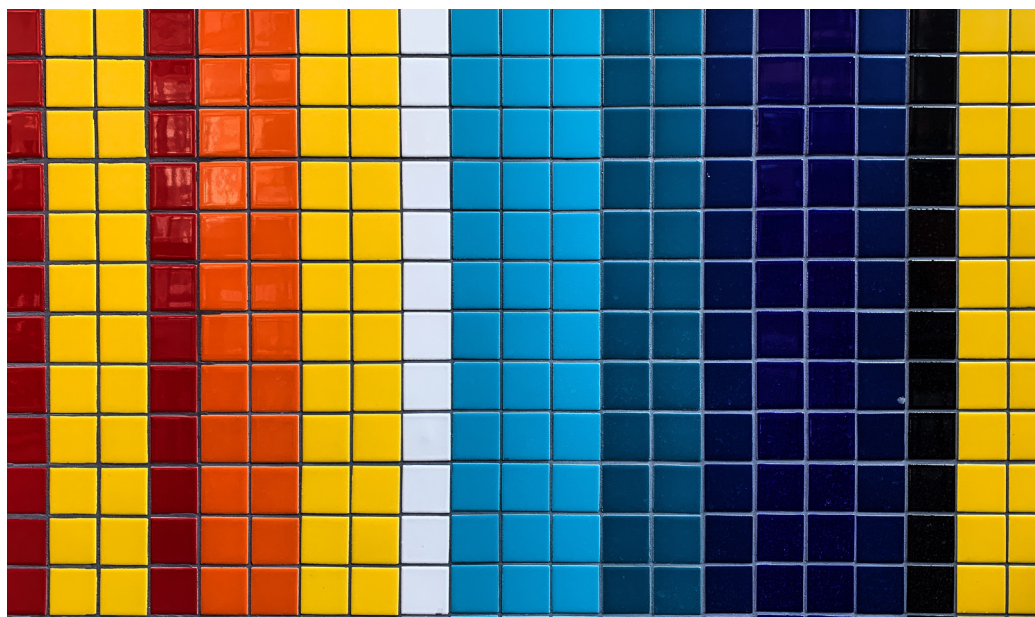
Building and construction is never complete without finishing the floors. Modern generations are favouring tiling including ceramic, porcelain and other variants. There are many issues that need to be considered before tiling your home. The colour of your furniture or your paint will play a key role in terms of determining the choice of the tile.





The purpose of the room is also critical as some rooms will require smoother tiles whereas other areas will require rougher tiles. It is always essential to do proper calculation of the area covered by tiles. In addition, proper selection of adhesives is essential in order to attain a long-lasting end-result.

Selecting competent tilers is a no-brainer. It is inevitable to clearly select competent tilers who are tried and tested in order to prevent making trials with your property. The ability to also craft unique styles and effectively use mosaics is a key emerging aspect adding sophistication and excellence to the finishing of houses.



With good tiling, we can transform our spaces into world class rendezvous for both family and corporate endeavours. Whether you acquire locally made or imported tiles, remember that this stage will ensure the success or failure of your project.





MANY HOMES EMBRACE RENEWABLE ENERGY

With the unreliable power supply affecting most developing countries, there is an increase in the number of people embracing solar. Rather than embracing solar when you have occupied the house and are experiencing power cuts, it is necessary to ensure that solar is embraced as art of construction.

Renewable energy ensures that there is power supply, even in times of unavailability of power. Installing solar for your newly built house requires careful consideration of the angle of their orientation in order to maximise solar output.

A few decades ago, there was some resistance towards solar, but now there is acceptance that solar is the most effective way to avert the energy crisis. A wide variety of installers are available on the market and they can assist in the installation.



The benefit of solar is that it is cleaner for the environment and also is available free of charge from the sun and you are not billed usage units like what happens with electricity. A number of financial institutions are also beginning to finance renewable energy.

Although initial costs of installation can be high for some, in the long run, the cost will be lower e.g. in a lifetime. Costs should be considered in the lifetime of the project and not only for a moment. It is also essential to note that care and maintenance.





CONTRACTOR MANAGEMENT FOR BUILDING PROJECTS

In order to avoid the hustle of running a building project, some people prefer to contract other parties better known as contractors. These individuals or firms are considered to have the skills to implement projects to completion. However, not all contractors are genuine. A number of times people have been disappointed by sub-standard work from contractors. If you are to engage contractors, the following should be managed:

- Ensure that the scope of work is defined
- Agree on a budget to avoid problems and ensure that any cost variances are agreed upon
- Supervise the contractors to avoid shoddy work
- Define timelines to avoid delays in your project timeline
- Be clear about the work and standards that you expect from the contractor
- Stress the importance of health and safety
- Clearly specify the responsibility of each part
- Assess the capacity and available equipment for undertaking the work
- Assess competency and beware of the deployment of sub-standard human resources to your project.



SCAFFOLDING

AT CONSTRUCTION SITES – A DEATH TRAP

Working at heights (WAH) is characteristic of building and construction work. If improperly managed, WAH can result in fatalities and injuries. One of the areas where injuries occur is during the scaffolding. Scaffolding is commonly used for access and egress to construction areas.





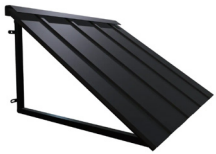
The proper erection of scaffolding is necessary from the sole plates, base plates, ledgers, standards, braces, toe-boards, work platforms, trap doors, ladders and other key components. A number of people work on scaffolds without adequate components. As a golden rule, scaffolding should be erected by people who are competent and qualified. Before each use scaffolding should be inspected.

In areas near electrical cables, scaffolds should not be erected. They should only be erected away from power lines. In extreme weather events, scaffolding work should be stopped. This prevents being struck by lightning and slipping from elevated positions.

Due to the need to finish projects early, scaffolding is being ignored in many parts of the world. This can cause injuries and even death. In this issue of the magazine, there is a strong call for safe scaffolding in building projects.



DOOR AWNINGS GAIN POPULARITY



In the past decade the deployment of door awnings has increased significantly. Awnings have always been used in construction for many years, but many people are becoming conscious about their use. They have the ability to add an aesthetic appeal and also to bring protection to the door in the case of harsh weather elements such as rainfall and temperature.

Door awnings should blend with colour of door and paint, to add sophistication and beauty to the structure. In addition, door awnings prevent deterioration of rugs mats and any floor accessories.



VIRTUAL FOR CONSTRUCTION



Virtual reality has grown significantly to a level where construction players are using it for various uses. Designers and architects can now take clients through virtual construction tours to view the project inside.

Many virtual reality sets can view construction project relates applications. This allows explanation of the project room by room and also in a situation that mimics reality. Sometimes explaining concepts and aspects of the design can better be done through.

Virtual reality can also be utilised in a wide range of applications. Training for occupational safety and health and guidance of occupational hazards. Just in case there are mistakes that may arise during the project, virtual reality can assist to identify them.



REALITY



CURTAIN RODS FOR EXQUISITE INTERIORS



After finishing construction, there is need for making interiors which create memories. Curtain rods or transverse rods can be used to create a platform for placing stylish curtains. Many homes are constructed well and only to lose their lustre through poor curtain rods and curtaining options.

Metal, wood and plastic are some of the variants used for curtain rods. Prices vary depending on material and sophistication. For some, these are considered as an after thought but for those who would like to create lasting memories with their houses, curtain rods are a key ingredient of getting that modern look.



SELECTING THE RIGHT SITE FOR YOUR CONSTRUCTION PROJECT



Many people have regretted ever starting their building projects because of wrong choices. It is essential that before setting out to build, you consider numerous factors. These factors can individually or collectively influence your project.

Location of the area

Consider the location of the area relative to services, business, schools and other conveniences that you may need.

Soil Type

Some projects are developed in areas with soils which are not suitable for building or those that are not strong to sustain buildings. If your location which you have been allocated is wet and soggy, it means you may require a special foundation. Special foundations may be costly to your budget and it may be advisable to avoid them where possible.

Access to basic services including water, sewer, power and connectivity

Many people have regretted settling in areas where there are no roads and are difficult to navigate. Others have suffered due to lack of water and unavailability of power. It is essential to avoid buying land in areas which are not services as it may take ages to service the area.

Property value and abutting properties

Consider areas where the value of the land will be preserved and will grow in value. It is essential to consider what abutting properties are involved in as their activities may affect the perception of the area.



AVOID SUB-STANDARD TIMBER

Roofing a house is one the most intriguing activities during the construction project. However, due to the urge to go and occupy the house, many people make short-cuts. One of the major short cuts is to get sub-standard timer. Some timber is not treated and some can even be rotten or mouldy.

Careful inspection of roofing material is a must for anyone who wants to build a long-lasting home. Many people try to save money when it comes to roofing. In this regard some even go for timber with very high moisture content and buy in haste and lightning speed. The end result is warped timer and bending roof. Some roofs even collapse and cause catastrophes.

Poorly constructed roofs have become a big challenge in Zimbabwe. A umber of people are disregarding standards and regulations pertaining to roofing materials. To the consumer, there is a trade-off between price and quality and more often than not, the preference is towards cheaper materials. Something cheap today, may be expensive tomorrow after losing property and evening losing a life.





LABOUR COSTS – THE INVISIBLE ASPECT OF YOUR CONSTRUCTION BUDGET

Many people focus on buying a stand, procuring materials for various stages of the building, acquiring permits and ignore the costs associated with labour. Materials don't build themselves. It is very essential to ensure that when building a home, labour costs are budgeted for. This could be in the form of a building contractor or an individual builder, plumber, electrician and other trades necessary to prepare a house for occupation. Labour rates vary from expertise to expertise and depending on experience of the contractor or institution. If labour costs are too high, you will end up with cost overruns. If labour is too low, you may also encounter sub-standard personnel.





CHOOSING A CONTRACTOR

When building infrastructure, many people consider hiring a contractor to do the construction on their behalf. Contractors can ease the burden greatly by taking charge of the hard labour of building.

However, a number of individuals have been disappointed by the conduct of selected contractors who have failed to deliver high quality products. Weak controls have also resulted in loss of materials to contractors who may have dishonest employees.

**WHEN CHOOSING A CONTRACTOR, IT IS NECESSARY
TO CONSIDER THE FOLLOWING 10 GOLDEN RULES:**

10 GOLDEN RULES OF CHOOSING A BUILDING CONTRACTOR

1. Never choose a contractor without checking previous work and doing site visits
2. Compare contractors in terms of price, quality, safety record and delivery time
3. Avoid contractors who have never built anything, even if they promise to deliver
4. Carry out reference checks on all contractors
5. Check the competence and qualifications of their contractor personnel
6. If contractor will need plant and equipment, check the availability of such equipment. Ignoring this will make charges for plant hire skyrocket on your side.
7. Consider specialists in certain building trades e.g. tiling, painting, bricklaying. Be careful with contractors who claim to do everything.
8. Choose a contractor who is able to read building plans accurately and is able to translate the information on the plan to the ground.
9. Consider contractors who are members of professional associations and are reputable in the industry.
10. Go for experience when choosing a contractor, not necessarily the cheapest. Some contractors are cheap but have no experience, hence produce sub-standard infrastructure.



BUYING A RESIDENTIAL STAND – AVOID **BOGUS FIRMS**

For most millennials, the choice of building vs buying is getting skewed towards building. As a result, most people favour buying their own stands and then building a house of their own choice. However, the inherent risk of buying land which is in dispute, contested or from a seller who does not have the mandate to sell is modern reality. What is meant to become a dream purchase can become a nightmare for life.

Before you buy a stand, consider due diligence, research and undertake critical checks. These checks are necessary in order to preserve value. Not all stands which are for sale are genuine. Criminals are also on the prowl to hoodwink unsuspecting buyers into being duped. At minimum, consider the following issues if you would like to undertake a hustle-free purchase of your stand.

- a) **Ask for Proof of Ownership e.g. Title Deeds for Private Property or Valid Offer Letters from government to the developer depending on the regulations of your country.**
- b) **Use reputable property developers**
- c) **Engage a lawyer to check with the Deeds Office whether or not the stand exists in the Registry of Deeds**
- d) **Confirm whether the seller has the mandate to sell**
- e) **Undertake a site visit to the actual site. Many people have bought stands only to know someone has already build on the same spot. Avoid purchasing stands without visiting the sites, lest you will discover someone occupying the land.**
- f) **Do not be rushed into a transaction before doing your due diligence**
- g) **Put all agreements in writing to ensure that there is a paper trail of all transactions**
- h) **Consider if Subdivision Permit, Development Permit, Dispensation Certificate and Certificate of Compliance has been issued just in case you have an intention to build without hustles.**
- i) **Do not be persuaded into making very quick agreements without cross-checking these.**



Due to the fact that raising money to buy a stand is not that easy, it becomes very painful to lose the hard earned cash. Scammers are on the prowl each and every day and we need to be properly advised and undertake due diligence.

Double sales are on the rise, fictitious stands and those that are occupied present intricate situations which buyers can fall into. If you are unsure, do not commit to the agreement.



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THE VALUE OF WATERPROOFING

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With the rise of technology and exposure, more sophisticated house designs are coming to the fore. A considerable number of individuals and firms are building multiple storey buildings with balconies, decks, basements as well as single storey houses with flat roofs. The number of houses that are constructing decks is also increasing and many individuals are trying flat concrete roofs. However, decks, basements and rooftops made of concrete require water proofing in order to prevent water entering into the building through the deck, walls or otherwise.

Waterproofing can assist in preventing water from entering the structure. It is a process of making objects and structures water resistant. If you build a house that has a balcony, it is most likely that the balcony may need waterproofing to avoid moisture entering the building.

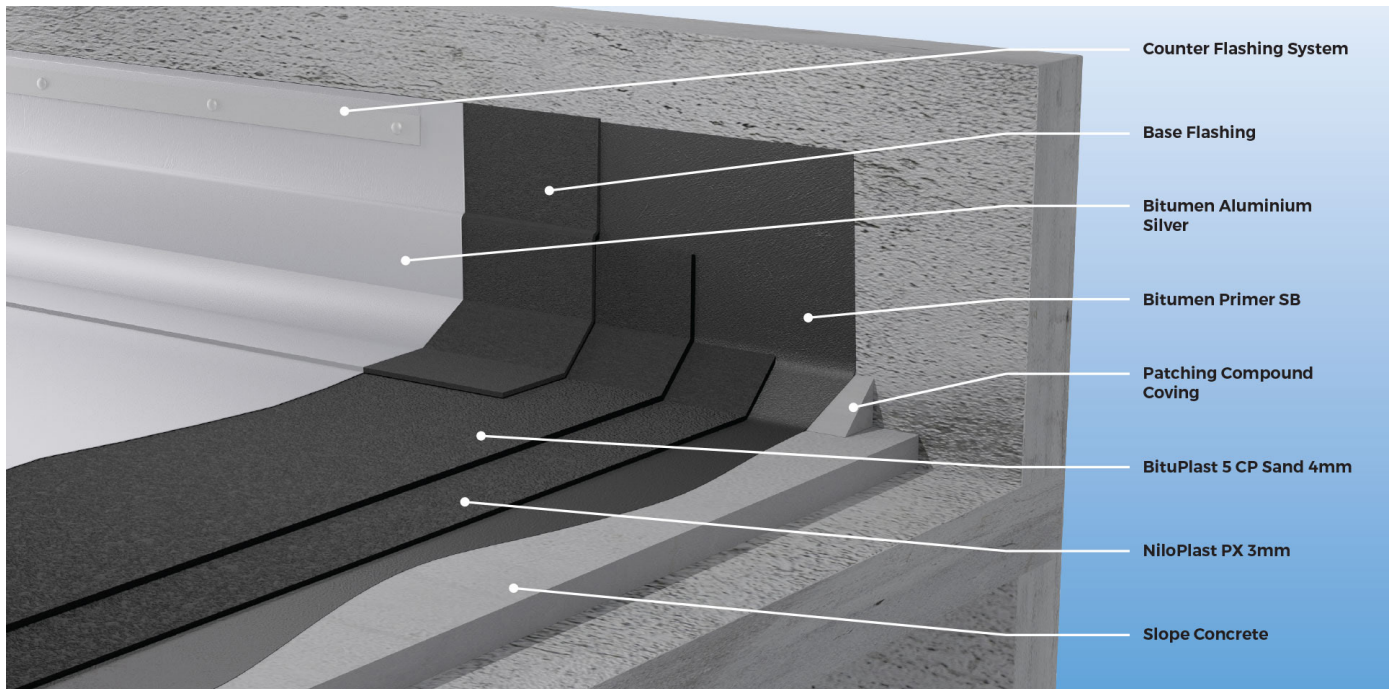
The least of things that one would be expecting is mouldy ceilings or else wetness around the inside walls of the house.

One of the most popular methods of waterproofing is torch-on waterproofing, which uses a method of membrane polymers and bitumen which are heated onto the surface to create an impervious layer. Due to its effectiveness, torch-on waterproofing can easily restrict movement and permeability of water into a structure.

The approach to waterproofing will differ depending on the structure and orientation of the building. What is key is ensuring that you get waterproofing experts before the building is damaged.

|||||





COMPACTION

– THE KEY
INGREDIENT TO
SUCCESSFUL
PROJECTS





Soil is a colloidal mass of inert materials upon which construction activities take place. Therefore, as building projects are undertaken, it is necessary to ensure that the soil is prepared adequately. Compaction is a process that increases the mechanical ability of the soils to hold a building or civil structure. Some soil structures are too weak to support buildings erected on them. Without good compaction, buildings can collapse and pavements can cave in.

Reducing the amount of voids and air in the soil can be removed through compaction. Depending on the construction project, compaction varies widely. Compaction can be done using plate compactors, tamping rammers and roller compactors. For smaller projects the need for compaction is still needed. If compaction is not done properly, buckling of pavements and cracks of buildings shall observed. In order to prevent inadequate compaction, it is essential to use the proper equipment and work with competent personnel such as engineers. Compaction tests also play a critical role to verify if the compaction has been done to satisfaction.

As early as the 20th century, compaction was widely used and is lately, it is undergoing improvement. Hand tampers were used at some point before the technological advancements. Tamping rammers work well in confined places such as in foundations and in trenches. Plate compactors work well in wider areas. More sophisticated compaction equipment including “drive-on” and automated compaction equipment is becoming very popular.

Soil compaction increases the ability of the soil to hold heavy loads that the soil will bear during the life cycle of the building or civil structure. Buildings, foundations, roads and pavements cannot be of a high quality if they skip compaction.



Examples of types of equipment for soil compaction includes some of the following:

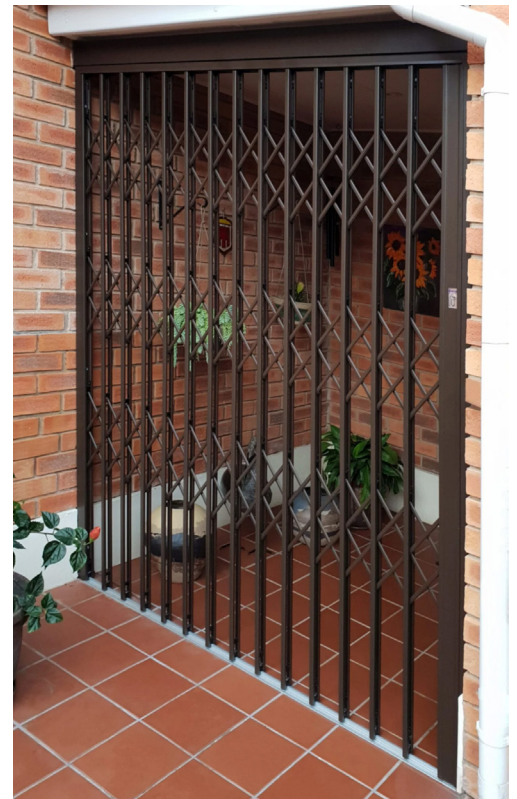
TYPICAL EXAMPLES OF COMPACTION EQUIPMENT

Roller Compactor
 Plate Compactor
 Tamping Rammer
 Vibratory Roller
 Hand Tamper (Available but rarely used nowadays)
 Drive-on compaction equipment



TRELLIDOORS GAIN POPULARITY

With the ever-changing security landscape, a number of people are considering trellidoors as a means of reinforcing security. They so come in various forms and shapes and there are a number of organisations that show potential in dealing with installing trellidoors. It is dangerous to wait for safety incidents and break-ins to occur before investing in trellidoors. Home-owners are also advised that Trellidoors on their own do not guarantee security. Therefore, it is essential to combine with other security measures.



LANDSCAPING FOR AESTHETICS

Now that the dream house has been built, a number of people struggle on what is the best way to landscape their property. Landscaping brings a lot of ambiance onto the site and ensures that your house becomes a home.

Do it Yourself (DIY) is an alternative that is cheap. Alternatively hiring landscaping experts can also facilitate a fast track method of landscaping as well as one which is also advanced.

Lawns should be considered, flowers, trees, rockeries, footpaths and water fountains. These days there is a possibility of buying instant lawn which will just be spread onto the ground and proliferate immediately. Why decide to live in a desert at your own premises when instant lawn is available for sale. Instant lawn saves you the hustle of going around trying to get seedlings and also preparing tender lawn from seeds. However, instant lawn can be a bit

costly for those who do not have a budget. Therefore, it is necessary to also do your landscaping with a good budget.

A good water supply for your home is necessary if you plan to create a garden of Eden in your own backyard. Water for irrigating plants is needed. Not all sites can have the luxury especially in the age of climate change.

If you have a borehole it will be easier to water some of the plants. Landscaping can also be done without major plants. This could be in the form of gabions, rockeries, terraces and rock cages.

Use the resources that you have in your journey towards landscaping. It may transform the aesthetic look of your property and even increase its value. When people are buying houses or properties, they also consider the outside environment.



**A KEY ELEMENT TO CONSIDER IS ESTABLISHING GOOD VEGETATION ON SITE
AND MANAGING ITS GROWTH**

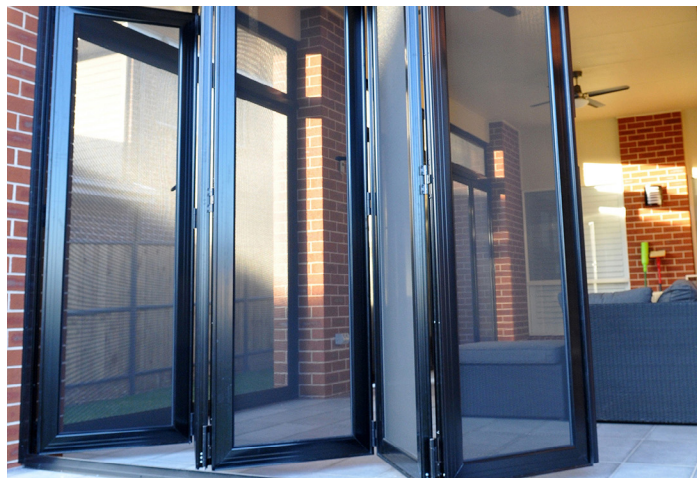
Palms are very much popular in the landscaping business and they also play a part in modifying the landscape. Building a dream house is not complete until you add a touch of landscaping. Begin to green your property today!





ALUMINIUM WINDOWS AND DOORS *TRENDING*

The revolution of construction continues to unfold and in the construction materials sector, there is a surge in the number of people using aluminium. One of the mostly used application of aluminium is on windows and doors. A number of aluminium fitting companies are working on installation. Aluminium is giving a new fresh look to windows and doors. Aluminium windows and aluminium doors are becoming widely accepted.

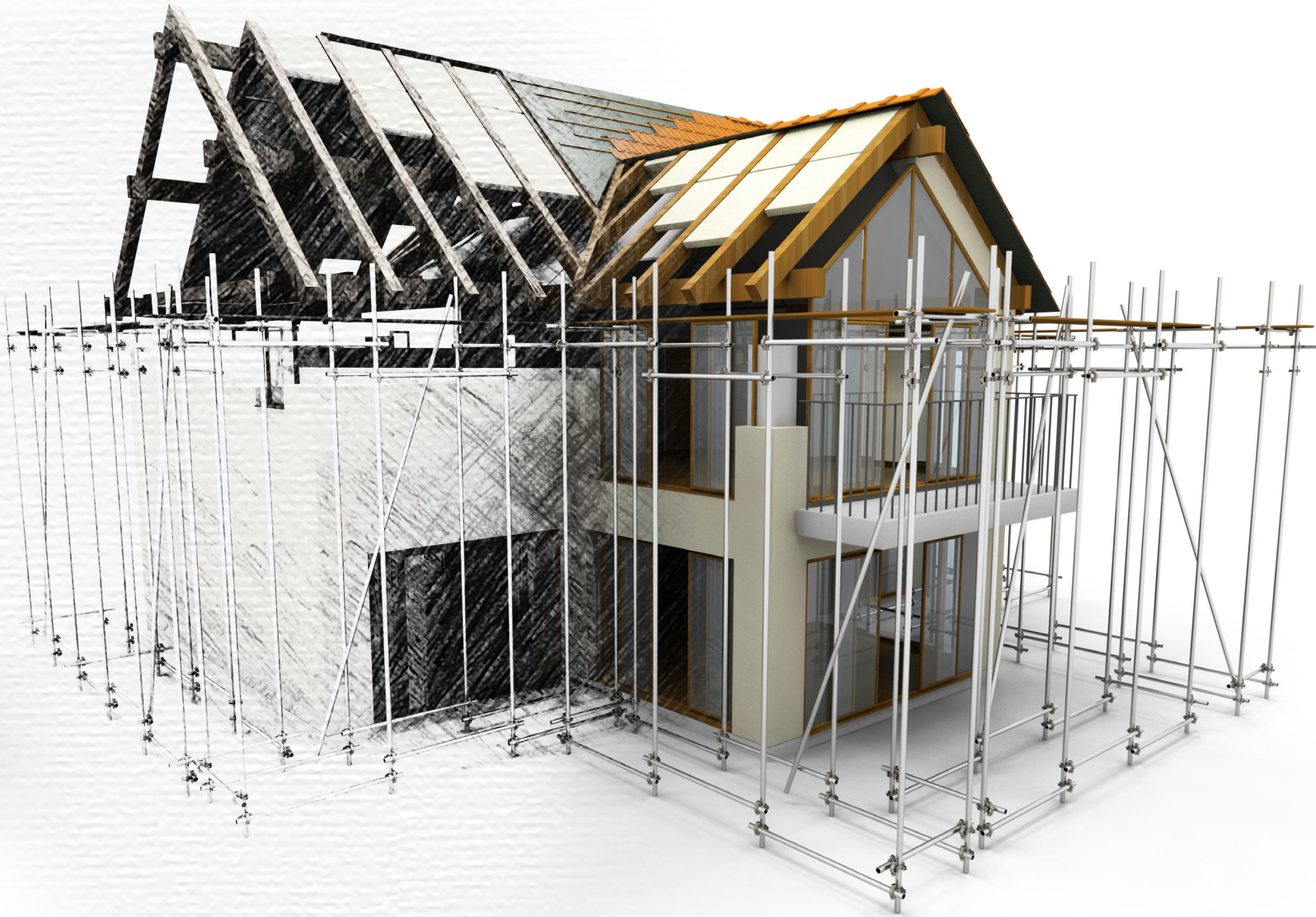


BUILD WITH THE FUTURE IN MIND



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