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CONTRACTORS ASSOCIATION

# THE Contractor

TRINIDAD & TOBAGO

QUARTERLY E-MAGAZINE JANUARY - MARCH 2025

ISSUE NO.11



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2025

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# THE Contractor

Quarterly e-Magazine January-March 2025 Issue No.11

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**CONTACT US**

Professional Centre Building,  
2nd Floor, Unit 203B 11-13  
Fitzblackman Drive,  
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## President's Message



Glenn Mahabirsingh  
TTCA PRESIDENT

# Building a Stronger Future Together

As we conclude another year and embark on the journey into 2025, I wish to convey my heartfelt gratitude to the members of the Trinidad and Tobago Contractors Association (TTCA). Your unwavering support, dedication, and resilience have been the cornerstone of our organisation's accomplishments. Your commitment to excellence has propelled the TTCA forward, and for this, I extend my profound thanks.

The construction sector in Trinidad and Tobago continues to play a pivotal role in our nation's economic development. As we transition into 2025, the industry stands poised to confront challenges and opportunities. The forthcoming year promises growth driven by infrastructure development, housing initiatives, and the modernisation of essential facilities. Sustainable construction practices are gaining momentum as more companies embrace green technologies and environmentally responsible design principles. Furthermore, digital transformation is taking centre stage, empowering construction firms to harness tools like Building Information Modeling (BIM) and advanced project management software to enhance operational efficiency

and accuracy. There is also a significant emphasis on workforce development aimed at equipping the personnel with the skills necessary to meet contemporary demands, highlighting safety, productivity, and innovation. Public-private partnerships will continue to serve as a vital force in advancing major projects, fostering collaboration and shared growth within the sector.

While these developments are encouraging, we remain aware of the obstacles that lie ahead. Supply chain disruptions, inflationary pressures, and personnel shortages present significant challenges that call for our collective attention. Nevertheless, the resilience and adaptability embedded in our industry provide a solid foundation for navigating these challenges and achieving success.

Looking into 2025, the TTCA envisions a construction sector that is more robust and future ready. To realise this vision, we aspire to establish enhanced policy frameworks that provide clear and supportive guidelines, encouraging investment and innovation within the sector.

Training and development initiatives must be prioritised, with expanded programs designed to cultivate a highly skilled workforce and sustain the sector's global competitiveness. Strengthened collaboration among contractors, suppliers, and stakeholders is essential to promote operational efficiency and shared triumph across the industry. Additionally, we must maintain an accelerated focus on resilience and sustainability, championing practices and materials that



prioritize climate readiness and long-term environmental stewardship.

As we strive toward these goals, let us hold fast to the belief that collaboration is our greatest asset. The TTCA is dedicated to advocating for the interests of our members and the broader industry, ensuring that we collectively build a brighter future.

In conclusion, I extend my warmest wishes to you and your families for a prosperous and fulfilling 2025. May the coming year bring growth, success, and new opportunities for all. Together, we are laying the foundation for a stronger, more dynamic construction sector.

Thank you for your unwavering support and let us endeavor to construct a better tomorrow.

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# Raising The Bar on Concrete Quality Control in Trinidad and Tobago

by Lisa Ramoutar  
TTCA Vice President | CARIRI Laboratory Manager

To the average person outside of the construction industry, the term “concrete” refers to that hard, grey construction material that makes up buildings, it is seen as an uncomplex mixture of cement, stone and water that is combined to achieve some level of visible consistency.

In reality, concrete is a designed construction material that like most other things that are designed, has rules to follow and performance requirements to meet. Further to this, concrete is one of the most widely used construction materials in Trinidad and Tobago whether hand-mixed, ransom mixed or ready-mixed. It plays a critical role in infrastructure development and both commercial and residential construction. This article explores concrete within the local context and the standards and regulations that govern its quality and application, in particular the recently released TTCS 16:2023 that governs ready-mixed concrete where the purchaser does not specify the mix proportions for the concrete.



## Why is concrete preferred?

The history and evolution of concrete globally, dates back to hundreds and even thousands of years B.C. Roman concrete for instance dates back to 300 B.C. or earlier and can still be seen in structures standing today such as the Pantheon Dome and the Colosseum in Rome, Italy. Looking back into the construction history of Trinidad and Tobago, there was unreinforced concrete, concrete where river stone was used as aggregate as well as unreinforced mass concrete members in buildings. Today reinforced concrete using quarzitic material is most common and while structures locally may be designed today with a lifespan of 80-100 years there are structures that have already crossed the 100-year mark locally having withstood earthquakes, hurricanes and the like and are still in use, albeit with maintenance and renovation work.

Now there are several reasons why concrete is the preferred construction material:

### 1. Climate resilience

Trinidad and Tobago experiences a tropical climate with high humidity, seasonal rains, and the threat of hurricanes. Concrete's ability to withstand these harsh conditions makes it a favored construction material. Unlike wood, which is prone to rot in humid conditions, or steel, which can corrode, concrete resists weather damage and corrosion, providing long-lasting structures.

### 2. Seismic Safety

Located near the Caribbean tectonic zone, Trinidad and Tobago experiences periodic seismic activity. Concrete structures, when reinforced properly, can offer better protection against earthquakes compared to other



materials. Reinforced concrete construction provides a combination of strength and flexibility needed to withstand seismic forces.

### 3. Accessibility and local production

The material inputs for concrete, specifically cement, sand, gravel, and water are readily available locally. There is the added benefit of having local production of aggregates and cement readily available. This accessibility makes concrete an economical and practical choice for builders across the country.

### Key Applications of Concrete in Trinidad and Tobago

Concrete is integral to the development of both public infrastructure and private properties. Here are some common applications:

- 1. Residential Buildings:** Homes are predominantly made of reinforced concrete and blocks, offering protection against hurricanes, termites, and earthquakes.
- 2. Road Infrastructure:** Concrete is used in the construction of highway overpasses and interchanges, bridges, retaining structures, roadside barriers and sidewalks, providing durable and low-maintenance surfaces.
- 3. Commercial Projects:** Shopping malls, office buildings, and hotels rely on concrete for structural integrity and aesthetic appeal.
- 4. Public Facilities:** Schools, hospitals, and government buildings use concrete to ensure safety, longevity, and functionality.
- 5. Industrial Structures:** Process plants, factories and warehouses benefit from concrete's strength and durability.

### The new local standard for ready-mixed concrete

The Trinidad and Tobago Bureau of Standards (TTBS) has established a compulsory standard for Ready-Mixed Concrete (TTCS 16:2023, Ready-mixed concrete – Compulsory Requirements) which legally became



compulsory in 2024. This was done with the following three aims:

1. Protecting the consumer or user against danger to health or safety
2. Protecting public or industrial health, welfare or safety
3. Requiring adequate information to be given to the consumer or user



If we consider each system to comprise at a basic level 3Ps – Plant, Process and Personnel, this standard covers a wide range of activities across plant and process such as ensuring that:

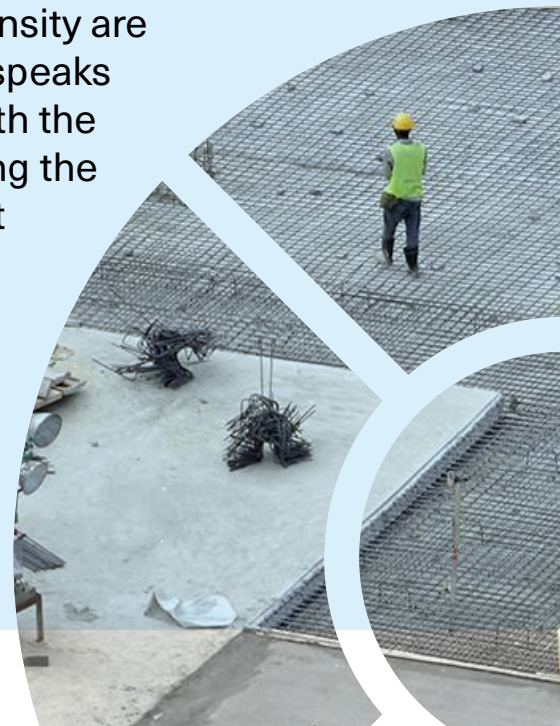
1. The constituent materials – cement, aggregates, chemical admixtures and water - conform to relevant established standards
2. Equipment used for measuring and testing, batching and dispensing, and mixing and agitating of the materials conform to relevant established standards
3. The producer maintains a production control system for the production of ready-mixed concrete
4. A delivery ticket bearing details of the concrete mix accompanies the delivery of ready-mixed concrete
5. There is guidance on how to treat with the addition of water to the ready-mixed concrete batch and a note strongly advising that extra water not be added to the concrete mix as this may adversely affect the final compressive strength.

Note: It is imperative that purchasers appreciate that insisting on the addition of extra water and signing to authorize same, absolves the producer of responsibility for the quality of the batch. Chemical admixtures may instead be considered to ensure properties of the fresh concrete are maintained for an adequate time to allow for discharge and proper placement of the concrete into formwork on site. While the addition of chemical admixtures may incur a fee, the quality of the concrete can be maintained.

The standard in summary goes from prescribing conformance of materials used in the manufacture of concrete, to mandating a system of control and documentation, having records and control to ensure traceability throughout the process for each batch of concrete leaving the plant and arriving at the consumer's/purchaser's site. In the absence of formal locally enforced and monitored building codes to address the domestic and informal construction sectors, this compulsory standard is perhaps the next best thing for ensuring quality, transparency and accountability in the supply of ready-mixed concrete.

So the question then is how does this affect the end user purchasing the concrete? Essentially each ready-mixed concrete manufacturer locally is now legally required to register with the TTBS as a manufacturer of ready-mixed concrete which is done via a process of audits and inspections. These manufacturers are required to demonstrate their ability to meet the minimum requirements of the standard as well as to demonstrate that the concrete being sold meets the requirements of their mix design. Therefore the certification process adds credibility to the manufacturing process outputs and the manufacturer which should give the end user more confidence in the product. With product referring to the ready-mixed concrete.

Oddly enough this is not your typical product monitoring and certification scheme as fresh concrete is sold to the client, but it is the cured and "hardened" concrete that will confirm whether the compressive strength and hardened density are attained at the required age. The standard speaks to assessment of the concrete quality in both the fresh and hardened states. Roughly speaking the conduct of a slump tests at site could assist with assessing workability from one truck to the next for concrete being delivered and should be compared to the design as recorded on the batch ticket. On the other hand cylinder and cube compressive strength tests are the main means of ensuring that the strength is being met.



## Sustainability and Future Trends

As global emphasis on sustainability grows, Trinidad and Tobago's construction industry must seek to explore and integrate greener concrete solutions, some of which include:

- 1. Recycled Concrete:** Incorporating recycled aggregates from demolitions reduces waste and conserves natural resources.
- 2. Low-Carbon Cement:** Innovations in cement production aim to reduce carbon emissions associated with traditional Portland cement.
- 3. Green Building Practices:** Combining concrete with sustainable building methods, such as energy-efficient designs and eco-friendly materials, is becoming more common globally.
- 4. Innovative Technologies:** The use of self-healing concrete; a concrete which repairs its own cracks, is being researched and could revolutionize the industry

## Conclusion

Concrete has earned its place as one of the most widely used construction materials in Trinidad and Tobago due to its durability, adaptability, and local availability. It provides the structural backbone for a wide range of projects, from residential homes to major infrastructural developments. By adhering to rigorous quality standards and embracing new technologies, Trinidad and Tobago continues to benefit from the resilience and versatility of concrete, ensuring sustainable development for future generations.



Author  
**Lisa Ramoutar**

**TTCA VICE PRESIDENT**

Lisa Ramoutar is the TTCA Vice President and the Laboratory Manager at Caribbean Industrial Research Institute (CARIRI). Mrs. Ramoutar is a Civil Engineer with over 10 years experience in investigating materials in construction. She supervises an experienced and knowledgeable team at CARIRI. Their goal is to improve quality in construction.



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## TTCA MEMBER FEATURE

# FUSO Trucks: Driving the Future of Caribbean Construction

**Reliable, Innovative,  
and Built for the  
Caribbean Terrain**

## A Legacy of Excellence and Innovation

In the world of commercial vehicles, few brands have the storied reputation and forward-thinking approach that FUSO embodies. Established in 1932, FUSO, a subsidiary of Daimler AG, has cemented itself as a leader in truck manufacturing. With a history spanning over nine decades, the brand is known for its commitment to innovation, sustainability, and producing trucks that deliver unmatched performance. For businesses in the Caribbean—particularly in the construction industry—FUSO's rugged, reliable vehicles are more than just trucks; they are trusted partners in the drive toward progress and development.

In Trinidad and Tobago and Guyana, the availability of FUSO trucks is made seamless by Ansa Motors Commercial Division, the official FUSO dealer for these regions. With a dedication to excellent customer service, reliable maintenance support, and a keen understanding of local business needs, Ansa Motors Commercial Division ensures that FUSO trucks remain a vital asset for companies across industries.

## FUSO's Unwavering Commitment to Quality and Sustainability

FUSO's success is rooted in its ability to adapt to the needs of modern businesses while maintaining a strong emphasis on sustainability. As environmental concerns continue to shape the way industries operate, FUSO has emerged as a leader in offering eco-friendly transportation solutions. This commitment to sustainability helps businesses reduce their carbon footprint without compromising on efficiency or power.

Whether it's the light-duty Canter series or the more robust models designed for heavy hauling, every FUSO truck is built with high standards of durability, performance, and fuel efficiency. This makes them especially well-suited for businesses looking to balance profitability with environmental responsibility.

## **FUSO trucks are known for:**

**Fuel Efficiency:** Advanced engine technology helps reduce fuel consumption, saving businesses money on operational costs.

**Durability:** Engineered to endure tough conditions, FUSO trucks have a long lifespan, even when subjected to heavy use.

**Innovation:** From driver-assistance features to advanced braking systems, FUSO continually integrates the latest technology to enhance performance and safety.

**Ansa Motors Commercial Division:** Trusted Partners for the Caribbean FUSO's global reach is complemented by strong regional networks, and Ansa Motors Commercial Division is at the forefront of bringing FUSO trucks to businesses in Trinidad and Tobago and Guyana. Ansa Motors Commercial Division, a subsidiary of the ANSA McAL Group, has a long-standing reputation for excellence in the automotive industry. Their commitment to providing exceptional service, support, and expertise makes them the ideal dealer for FUSO trucks in these regions.

## **Why Choose Ansa Motors Commercial Division?**

**Expertise:** Ansa Motors Commercial Division's experienced staff understand the specific needs of Caribbean industries, particularly the construction sector.

**Comprehensive Support:** From financing options to routine maintenance and repairs, Ansa Motors Commercial Division ensures that businesses get the support they need to keep their trucks running smoothly.

**Accessibility:** With strategically located service centers and parts availability, downtime is minimized, and efficiency is maximized.



Ansa Motors Commercial Division goes beyond simply selling trucks; they build relationships. Their commitment to customer satisfaction ensures that businesses using FUSO trucks enjoy reliable support throughout the lifecycle of their vehicles.

## Why FUSO Trucks are Perfect for the Caribbean Terrain

The Caribbean, with its unique landscape, offers both challenges and opportunities for the construction industry. From mountainous regions and winding coastal roads to the rugged paths of construction sites, the terrain demands vehicles that can handle it all. This is where FUSO trucks shine.

### Rugged Durability for Tough Conditions

FUSO trucks are built to withstand the harshest conditions. Whether navigating the steep hills of Trinidad's Northern Range or the rough, unpaved roads of Guyana's interior, these trucks deliver reliable performance. Their robust chassis and high-torque engines ensure that heavy loads can be transported efficiently, regardless of the challenges posed by the terrain.

### Key features that make FUSO trucks ideal for Caribbean roads include:

**High Ground Clearance:** Essential for avoiding damage on uneven or unpaved roads.

**Strong Suspension Systems:** Designed to handle heavy loads while providing stability and comfort.

**Durable Construction:** Built with materials that resist wear and tear, extending the life of the truck.

### Fuel Efficiency for Long Hauls

Fuel costs can be a significant burden for businesses in the Caribbean. FUSO trucks, known for their fuel-efficient engines, help mitigate these costs. The Canter series, for example, offers light-duty efficiency without sacrificing power. This makes them ideal for transporting materials over long distances, whether within a single island or across borders in the region.

### Safety and Comfort for Drivers

The safety and comfort of drivers are crucial, particularly for long hours on the road or in challenging work environments. FUSO trucks are designed with the driver in mind, offering features such as:



## TTCA MEMBER FEATURE

**Ergonomic Seating:** Reduces driver fatigue, improving safety and productivity.

**Advanced Braking Systems:** Provide better control and stopping power, essential for hilly or winding roads.

**Modern Cabin Design:** Offers comfort, visibility, and ease of use, making long drives less strenuous.

### FUSO in the Construction Industry: Building the Caribbean

The construction industry is a pillar of economic development in the Caribbean. From infrastructure projects to residential developments, the need for reliable and efficient transportation is critical. FUSO trucks are particularly well-suited for construction tasks due to their versatility, strength, and durability.

#### Applications in Construction

**Material Transport:** FUSO's heavy-duty trucks can transport building materials such as concrete, steel, and lumber, ensuring timely delivery to construction sites.

**Equipment Hauling:** Their durability and power make them capable of carrying heavy machinery to and from worksites.

**Site Preparation:** FUSO dump trucks are perfect for clearing debris, hauling dirt, and managing site preparation tasks.

The construction industry thrives on reliability and efficiency. Downtime can result in significant financial losses, which is why businesses trust FUSO trucks. With Ansa Motors Commercial Division providing exceptional service and support, construction companies can operate with confidence, knowing their fleet is in good hands.

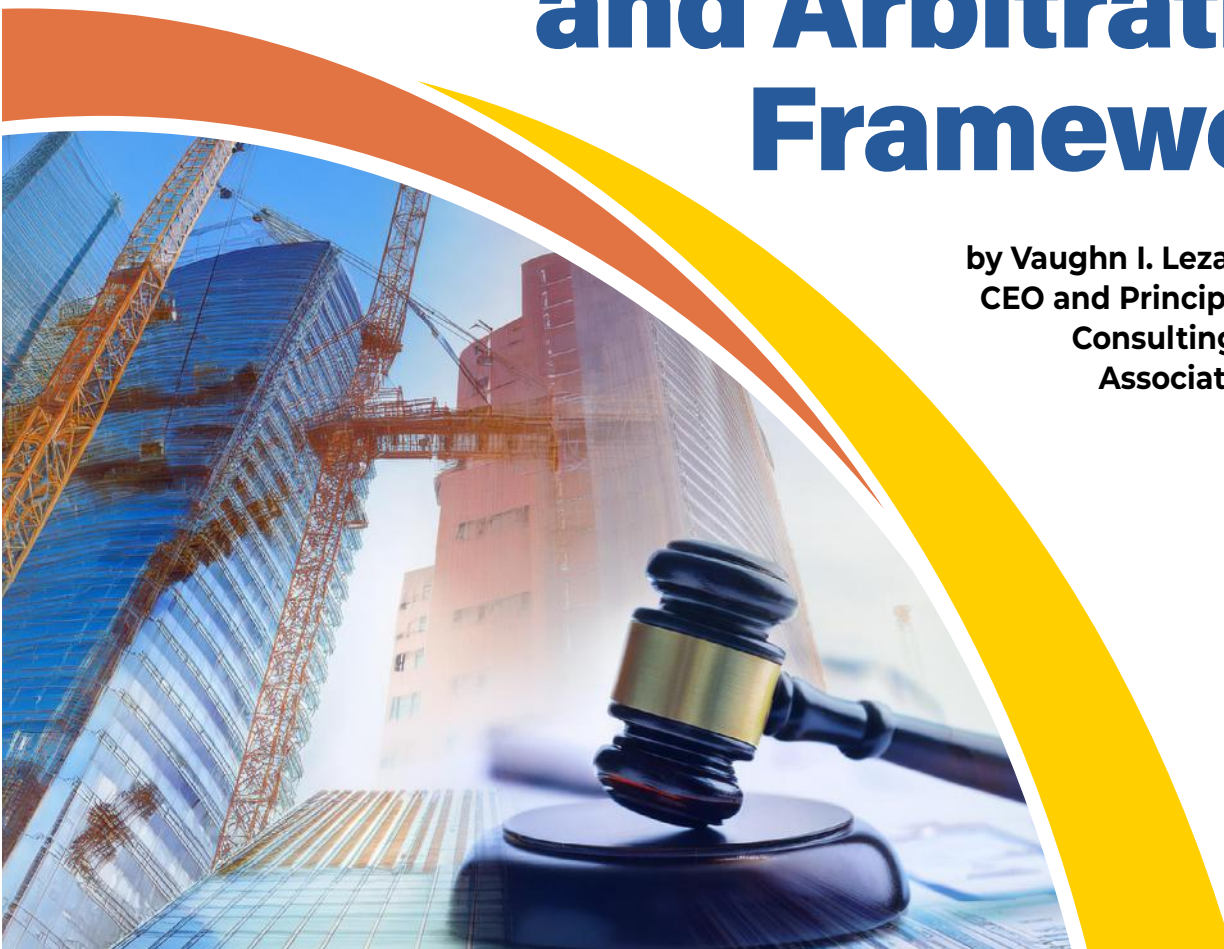
#### Driving Progress in the Caribbean

FUSO trucks, with their legacy of innovation, sustainability, and durability, are an invaluable asset for Caribbean businesses, especially in the construction sector. Their ability to handle tough terrain, coupled with the exceptional support provided by Ansa Motors Commercial Division, ensures that businesses in Trinidad and Tobago and Guyana have the tools they need to thrive. As the region continues to grow and develop, FUSO and Ansa Motors Commercial Division stand ready to drive progress forward—one reliable truck at a time.



# Navigating the Best Path for Efficient Dispute Resolution in Construction Contracts in Trinidad and Tobago: Choosing the Right Dispute Resolution and Arbitration Framework

by Vaughn I. Lezama, R. Eng.  
CEO and Principal Engineer  
Consulting Engineers  
Associates 2005 Ltd



## Introduction

Creating a robust mediation, dispute resolution, or arbitration clause in a construction contract is crucial to ensure that conflicts are resolved efficiently and fairly. Dispute resolution in the construction sector is therefore a critical component for ensuring that project timelines, budgets, and relationships are preserved. In construction contracts, dispute avoidance and dispute resolution are critical components that help manage and mitigate conflicts that can arise between parties, while arbitration is the ultimate stage of dispute resolution where a dispute has not been prior resolved as final and binding.



There are several well-known International Arbitral Institutions for resolving cross-border disputes, with London, Singapore, Hong Kong, Paris and Geneva topping the list as the most preferred seats for arbitration, and the International Chamber of Commerce (ICC), being the most popular of such institutions. What is little known or appreciated in Trinidad and Tobago is the fact that while the Rules of Arbitration of the ICC is the default arbitration rules in the FIDIC Suite of Contracts, the very FIDIC Forms of Contract, which is widely use in the local construction industry, suggest the use of the Rules of Arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as an alternative non-ICC rules.

## UNCITRAL Rules of Arbitration

UNCITRAL, or the United Nations Commission on International Trade Law, is a body of the United Nations established in 1966 to promote the harmonization and unification of international trade law. Its primary purpose is to create a more predictable and stable legal framework that can facilitate international trade, investment, and commerce across borders. One of UNCITRAL's notable contributions is in the area of dispute resolution, particularly arbitration and conciliation. It developed the UNCITRAL Arbitration Rules which have become a widely accepted framework for resolving international commercial disputes and is internationally the most popular regime for ad-hoc arbitration.



UNCITRAL, as a United Nations Institution is therefore a non-profit organization. It plays a key role in developing a consistent and coherent legal structure that reduces the complexity and risk involved in international commerce. The UNCITRAL Rules of Arbitration, in my view, represents a most suitable, simple and inexpensive alternative to the ICC as an arbitration framework that would serve the local Construction Industry.

I have referenced the UNCITRAL Rules of Arbitration in Contracts for private sector Clients, but I am yet to see it referenced in any local State Contract. Instead, we have seen State Contracts referencing the Arbitration Act of T&T, which prior to its revision in 2023, I have argued, was not worth the paper it's written on. Also, frequently referenced for the resolution of disputes by some state agencies is the Mediation Act of Trinidad and Tobago. This Act in its current incarnation may be well suited for resolving community and family disputes but is of no value in resolving construction disputes.

### **The Arbitration Act No. 11 of 2023 of the Laws of T&T**

In Trinidad and Tobago, Arbitration Act No. 11 of 2023, which repeals and replaces the prior useless Arbitration Act, Chap 5:01, introduces a significant advancement in arbitration by adopting the UNCITRAL Arbitration Rules, providing a robust legal framework for efficient dispute resolution and the conduct of arbitration. This article explores the relevance of the UNCITRAL Rules for ad hoc arbitration in Trinidad and Tobago (T&T), it compares these rules with the ICC Arbitration Rules, and evaluates the role of institutional support provided by the Dispute Resolution Centre (DRC). I will also examine the limitations of the Mediation Act for resolving construction disputes and assess the most advantageous frameworks for local arbitration in the construction sector.

### **The UNCITRAL Arbitration Rules under the Arbitration Act No. 11 of 2023**

Arbitration Act No. 11 of 2023 marks a progressive shift for arbitration in T&T, aligning the local legal framework with



international best practices. Furthermore, this Act modernizes the legal framework for arbitration in Trinidad and Tobago and aligns the country's arbitration laws with international standards. The Act facilitates both domestic and international arbitration, offering a modernized and efficient dispute resolution mechanism to businesses and the construction sector. By incorporating the UNCITRAL Arbitration Rules, the Act enhances the flexibility and efficiency of ad hoc arbitration, a common choice for resolving disputes in the local construction industry.

## Value of the UNCITRAL Rules in Ad Hoc Arbitration

### Flexibility and Party Autonomy:

The UNCITRAL Rules allow parties significant autonomy to design the arbitration process, including appointing arbitrators and agreeing on procedural details. This flexibility is particularly advantageous in construction disputes, which often involve technical issues requiring industry-specific expertise.

### Neutrality:

The UNCITRAL Rules are widely regarded as neutral and internationally accepted, ensuring that parties from diverse jurisdictions perceive the process as fair and balanced.

### Cost-Effectiveness:

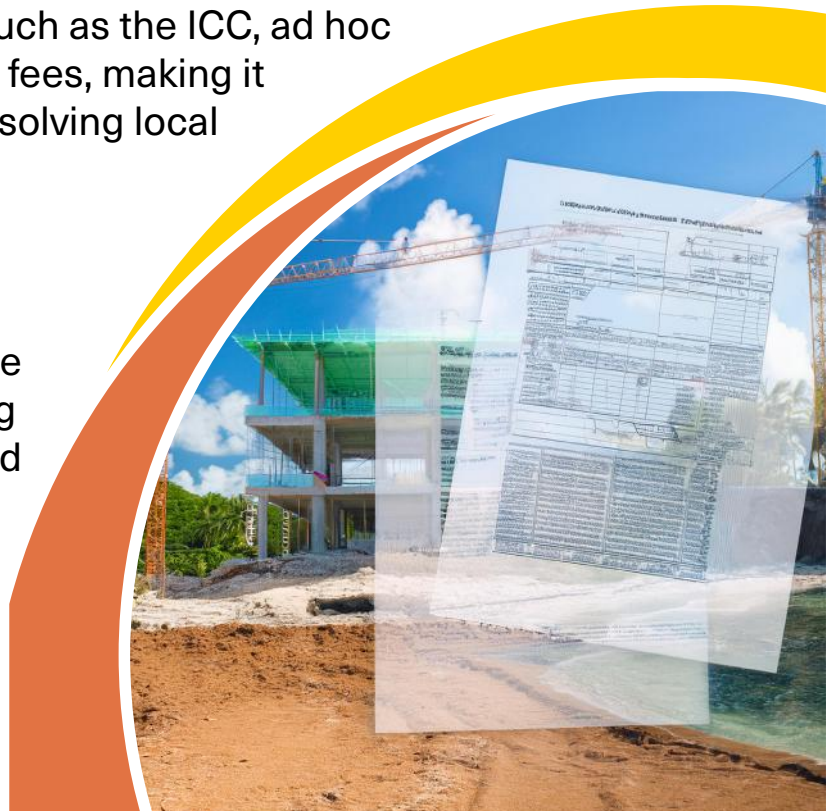
Unlike institutional arbitration, such as the ICC, ad hoc arbitration avoids administrative fees, making it a more economical option for resolving local disputes.

### Streamlined Procedure:

The UNCITRAL Rules provide clear procedural guidelines while allowing customization, ensuring the process remains efficient and focused.

## UNCITRAL Rules vs. ICC Rules of Arbitration

The choice between UNCITRAL and ICC Rules of Arbitration hinges on the





nature of the dispute, the relationship between the parties, and the resources available.

### **Pros and Cons of UNCITRAL Rules**

#### **Pros:**

- Flexible and customizable.
- Lower administrative costs.
- Neutral and internationally recognized.

#### **Cons:**

- Lack of institutional support can lead to procedural delays if parties fail to agree on critical aspects, such as arbitrator selection.
- Heavily reliant on the competence and cooperation of the parties and their legal representatives.

### **Pros and Cons of ICC Rules**

#### **Pros:**

- Institutional support from the ICC ensures streamlined administration, even in complex cases.
- Pre-established procedures reduce uncertainty and potential delays.
- Globally respected, making them suitable for international disputes.

#### **Cons:**

- Higher costs due to administrative fees.
- Less flexibility compared to the UNCITRAL Rules, as parties must adhere to ICC's procedural framework.

### **Institutional Support for Arbitration in T&T: The Role of the Dispute Resolution Centre (DRC)**

The Dispute Resolution Centre (DRC) in Trinidad and Tobago is the primary organization offering ADR services, including arbitration, mediation, and conciliation. It provides facilities, administrative support, and a roster of qualified arbitrators and mediators and serves as a critical pillar for arbitration and mediation. The Trinidad and Tobago Chamber of Industry and Commerce (TTCIC) initially created the DRC. However, the TTCIC has since operationalized the DRC through an NGO known as Dialogue Solutions Limited.

**Features:**

- Promotes ADR for both domestic and international disputes.
- Offers training and certification in ADR practices.
- Provides a neutral venue for arbitration hearings.

**Advantages:**

- Ensures professionalism and adherence to established arbitration standards.
- Offers access to a panel of qualified arbitrators with expertise in construction and related fields.
- Acts as a neutral and reliable venue for arbitration proceedings.

**Limitations:**

- Limited experience in handling high-value, complex international construction disputes.
- Heavy reliance on ad hoc arbitration rather than institutional frameworks may reduce consistency.

**Inadequacy of the Mediation Act of T&T for Construction Disputes**

The Mediation Act of T&T provides a framework for resolving disputes through mediation, emphasizing voluntary participation and collaborative problem-solving. While this Act is referenced in the Contract of some state agencies as the framework for dispute resolution, it is ill-suited for resolving construction disputes due to several limitations:

**Technical Complexity:** Mediation does not provide binding decisions or the technical expertise often required in construction disputes.

**Power Imbalances:** Mediation can exacerbate power imbalances between parties, particularly in disputes involving small contractors and large corporations.

**Termination of Mediation:**

The mediation process may be terminated by agreement of the parties, by the mediator if they believe further mediation is unlikely to resolve the



dispute, or by any party who wishes to withdraw from the process, without penalty.

**Lack of Enforceability:** Mediated agreements are not automatically enforceable, necessitating further legal action in case of non-compliance.

### **Choosing the Right Framework: Local vs. International Arbitration**

Local and international arbitration differ in scope, rules, and procedural considerations, as they are tailored to address disputes of varying complexity and cross-border implications. Local arbitration involves disputes between parties based within the same country and may be governed by the domestic arbitration laws of the country.

International arbitration involves parties from different countries or disputes with significant international elements (e.g., performance of the contract in a foreign jurisdiction). International arbitrations are typically conducted under the rules of prominent international arbitration institutions such as the ICC with specific arbitration rules.

#### **Local Arbitration**

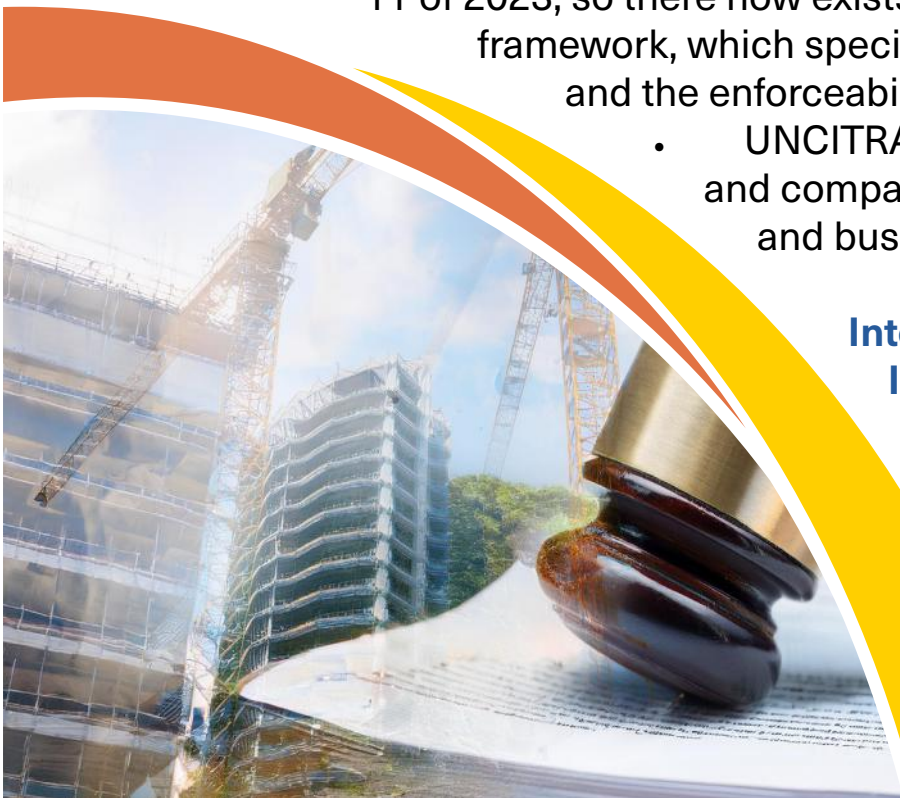
##### **UNCITRAL Rules:**

- More cost-effective and flexible for local disputes.
- Tailored to meet specific project needs without unnecessary administrative overhead.
- The UNCITRAL Rules are referenced in the Arbitration Act No 11 of 2023, so there now exists a sound domestic legal framework, which specifies arbitration procedures and the enforceability of awards.
  - UNCITRAL procedures are simple and compatible with local legal norms and business practices.

#### **International Arbitration**

##### **ICC Rules:**

- Preferable for international disputes due to institutional support and global recognition.
  - The ICC's administrative oversight ensures



consistency and reduces risks of procedural inefficiencies, which are critical in cross-border disputes.

- Enforceability of ICC awards under the New York Convention adds a layer of reliability for international parties.
- Facilitates cross-border recognition and enforcement of awards.

## Conclusions and Recommendations

Efficient dispute resolution is vital to the success of construction projects, and selecting the appropriate arbitration framework is a critical decision. The UNCITRAL Arbitration Rules, as provided for in the Arbitration Act No. 11 of 2023, offer significant advantages for ad hoc arbitration in Trinidad and Tobago. However, the ICC Rules are better suited for international arbitration, where institutional support and global enforceability are paramount.

The support for arbitration provided by the DRC through the organization known as Dispute Solution Limited (DSL) is now well established in Trinidad and Tobago. Furthermore, this organization utilizes the UNCITRAL Rules of Arbitration. As such, the DSL is a creditable institution which can be identified in local construction contracts as the Appointing Entity for a Dispute Adjudication Board (DAB) or Arbitrator.

Given the limitations of the current Mediation Act, Contractors are well advised to stay clear of any effort by any state agency to reference this Act as the framework for the resolution of construction disputes.



**Author**  
**Vaughn I. Lezama**  
BSc., R. Eng. MASCE, FAPETT

**Consulting Engineers  
Associates 2005 Ltd**

Vaughn Lezama is a Civil Engineer with over 44 years of engineering practice. He is the Chairman and Principal Engineer at Consulting Engineers Associates 2005 Ltd. Eng. Lezama is registered with the Board of Engineering of Trinidad and Tobago and is a Fellow and Past President of the Association of Professional Engineers of Trinidad and Tobago. He is also a Member of the American Society of Civil Engineers. Eng. Lezama has extensive experience in Engineering Designs, Technical Studies, Construction Supervision, and Contract Administration. He is highly trained in the use of the FIDIC suite of Contracts. Currently, Eng. Lezama serves as the Registrar of the Board of Engineering of Trinidad and Tobago (BOETT) and is responsible for maintaining the Register of Engineers in accordance with the Engineering Profession Act No. 34 of 1985.



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# Breaking Ground, Breaking Silence

by Environmental  
Management  
Authority

Construction sites are among the most fast-paced hubs of activity — bustling with workers, machinery, and equipment, all contributing to the development of our urban landscapes. While these efforts bring economic progress and development, they also create one unavoidable consequence: noise.

**Noise pollution** - defined as excessive or harmful sound levels that interfere with normal activities—remains an often-overlooked environmental issue, but it significantly impacts our quality of life. From the droning of machinery to the clattering of steel, the echoing of construction noise is a significant concern — it can affect not only workers but also nearby communities, wildlife, and the environment. Recognising and managing these impacts is essential for improving the quality of life for everyone.

## The Health Risks of Construction Noise

From the first hammer strike to the final touches of a building's detail, the noise produced on building sites is continuous. This noise can be divided into intermittent noise from equipment such as pneumatic drills or hammers, and continuous noise from engines, compressors, or the operation of large machinery. The consequences are more than just a nuisance; prolonged exposure to loud construction noise can cause a variety of both immediate and long-term health risks.

## Hearing Loss and Impairment

The most direct impact of loud construction noise is the damage to one's hearing. The World Health Organisation (WHO) recommends that



sound levels should not exceed 85 decibels over an eight-hour period — the threshold where noise becomes damaging to hearing over extended exposure (WHO, 2023). However, construction machinery, such as jackhammers, cranes, and heavy-duty trucks, can produce noise levels upwards of 120 dB — similar to the noise of a jet engine during takeoff.



Prolonged exposure to noise above 85 decibels can lead to permanent hearing impairment. In construction, workers often face prolonged periods of exposure, which increases the risk of noise-induced hearing loss. Tinnitus, a condition characterised by constant ringing in the ears, can also result from such exposure and negatively affect sleep, concentration, and overall well-being.

### **Cardiovascular Health**

Studies have shown a direct correlation between chronic exposure to high levels of noise and elevated heart rates and higher blood pressure (Kalantary, et al., 2015). The constant exposure to noise can keep an individual in a heightened state of alertness which, over time, can take a toll on the heart. The continuous noise from construction zones can increase the risk of cardiovascular problems, including hypertension (high blood pressure), heart disease, and stroke.

### **Sleep Disruption**

Construction noise, especially during night hours, can disturb residents living near active construction sites, particularly families with children and the elderly. Chronically disrupted sleep patterns can cause poor-quality sleep, which, in turn can lead to fatigue, reduced cognitive functioning, and a weakened immune system.

### **Mental Health**

Noise pollution, and a noisy environment, are well-known causes of stress and irritability. The constant noise can be

overwhelming, especially for those who can't escape it due to their living situations and can make it hard to relax or concentrate on everyday tasks. Over time, noise can lead to depression, anxiety disorders, and an overall decline in mental well-being.

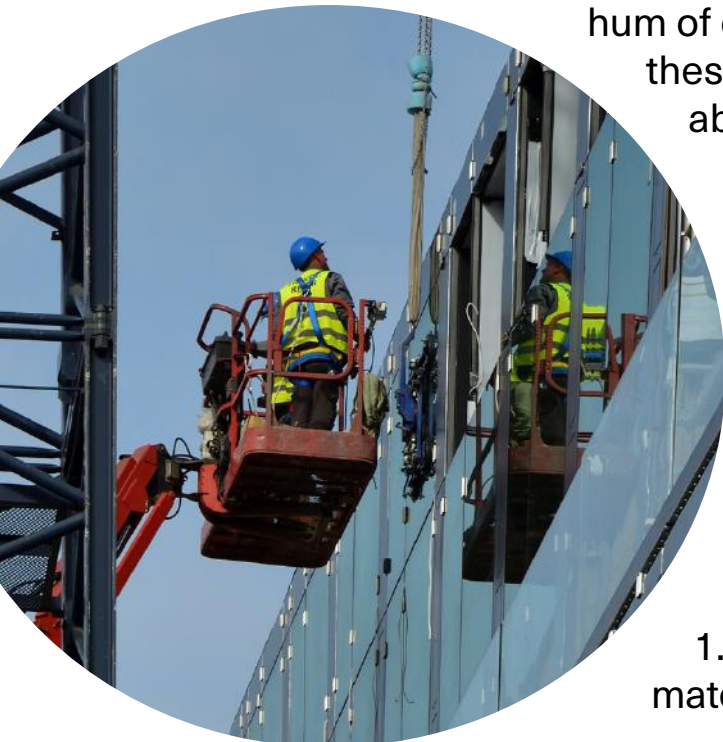
### Effects of Construction Noise on Wildlife and Ecosystems

While construction noise is often viewed as a problem for just humans, it's important to remember that wildlife can also be impacted. Construction activities can disrupt natural habitats, leading to long-lasting effects on local ecosystems:

**Hearing loss:** Noise from construction can cause temporary or permanent hearing loss in animals.

**Displacement from habitats:** The noise and vibrations from construction can disturb local wildlife, driving animals away from their natural habitats. This displacement can have significant ecological effects, as animals are pushed into less ideal areas. For migratory species, constant noise can interfere with their migration patterns, causing them to spend less time foraging, which increases their risk of starvation.

**Difficulty navigating their environment:** Many species use sound to communicate and navigate — using distinctive sounds to attract mates, warn others of danger, and to detect prey or predators. However, man-made noises, like the constant hum of construction machinery, can drown out these natural sounds, which can disrupt their ability to communicate.



### Mitigating the Impacts of Construction Noise

To effectively manage noise pollution on construction sites, solutions must consider the well-being of workers, nearby communities, as well as preserving wildlife and the environment. Construction sites can consider the following:

1. Use movable walls made of heavy materials (such as thick plywood or acoustical



barriers) to shield construction activities and reduce noise from spreading to surrounding areas.

2. Planting dense vegetation, such as shrubs and trees, along the perimeter of the site can help reduce noise transmission.

3. Reserve the noisiest tasks (e.g., demolition, pile driving, or heavy machinery operation) for daytime hours.

4 If night work is unavoidable due to project timelines, use quieter equipment and reduce the intensity of noise-generating tasks during nighttime hours.

5. Train workers on the importance of noise reduction and safe practices for minimising noise impact.

6. Investing in and using equipment with noise-suppression attachments, or machinery designed to operate at decibel levels lower than the authorised decibel limits.



Raising public awareness and implementing regulatory measures are crucial in controlling noise levels on construction sites, ensuring that health and environmental protection are not compromised due to development. The Noise Pollution Control Rules, 2001 (NPCR) is legislation that sets prescribed standards for sound levels. The NPCR outlines three zones that are applicable throughout Trinidad and Tobago, with each zone having a designated noise level which should not be exceeded. There are different levels of Continuous Sound, which occurs over a long period, and Instantaneous Sound, which occurs in an instant:

Zone	Duration	Daytime (8am – 8pm)	Nighttime (8pm – 8am)
Industrial Areas	Continuous	75 dBA	
	Instantaneous	130 dB	
Environmentally Sensitive Areas	Continuous	60 dBA	
	Instantaneous	120 dB	115 dB
General Areas	Continuous	80 dBA	65 dBA
	Instantaneous	120 Db	115 dB

There are a few exemptions to these standards, such as:

- Sound associated with the installation, repair or replacement of public utilities in a public place between 7.00 a.m. and 11.00 p.m.,
- Motor-operated garden equipment, such as lawn mowers, brush cutters, hedge trimmers, mist-blowers, leaf-blowers and power tools, between 7.00 a.m. and 7.00 p.m. and.,
- Construction activity when conducted on a construction site, between 7.00 a.m. and 7.00 p.m.

If anyone wishes to exceed these standard noise levels, such as for a construction project, they must apply for and receive a Noise Variation — a permit that allows a deviation from the prescribed standards of the NPCR, but also limits the level of sounds that can be emitted —from the Environmental Management Authority (EMA).

In applying for a Noise Variation, one must:

- Place a notice in any one of the daily newspapers for two (2) consecutive days, at least thirty-five (35) days before the event or activity.
- Pay an application fee of \$250 to the EMA's FCB account.
- Submit to the EMA a copy of the application form (in duplicate), with an event location map, at least twenty-eight (28) days prior to event or activity. Visit [www.ema.co.tt](http://www.ema.co.tt) for further information.

However, even with a Noise Variation, measures must be taken to minimise the noise impact to the surrounding area and communities.

While construction is vital for urban development, the noise it generates can have serious impacts on health, wildlife, and the environment. Managing this noise is critical. By addressing noise pollution, construction sites can ensure that the progression of projects is achieved, whilst protecting the well-being of people, animals, and the surrounding environment.

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#### ARTICLE BY



#### TRINIDAD:

#8 Elizabeth Street,  
St. Clair, Port of Spain  
(868) 226 4362

#### TOBAGO:

Tobago Water and General Supplies  
Building,  
Carnbee Main Road, Carnbee, Tobago  
(868) 238 6717

Email: [ema@ema.co.tt](mailto:ema@ema.co.tt)

[www.ema.co.tt](http://www.ema.co.tt)

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# The Top 7 Tools to Build Better, Faster, and Smarter Productivity

## “Why is it important to you?”

by Mikey Thackoor  
Author - Begin At The End



We grapple with a distinct set of challenges in the construction world, particularly in the Caribbean. Unpredictable weather patterns, from sudden downpours to hurricane threats, can halt work at any moment, necessitating agility and meticulous planning. Resource constraints are another constant obstacle; on many projects, we face limited availability of skilled labor, long lead times for materials, and the logistical complexities of island life where even the most straightforward supply chain issue can cause delays.

In the construction industry, meeting high-stakes timelines is not a matter of negotiation. A single delay can reverberate through every project stage, impacting costs, client satisfaction, and future opportunities. This underscores the criticality of every decision and action we take as project managers.

As a seasoned project manager, I bear the scars to prove it; I've seen firsthand how structured productivity strategies can transform our operations on these dynamic sites. They aren't just about moving tasks along; they create a framework that helps us navigate uncertainty, adapt to obstacles, and keep everyone on the same

page. These methods have been invaluable to me and my team, allowing us to consistently manage complexity, uphold quality, and drive efficiency from day one through completion.

With the unique challenges of Caribbean construction in mind, I'm sharing seven proven methods that have worked wonders on my projects. These strategies are tailored to help overcome the daily hurdles, ensuring we stay on track, keep standards high, and deliver measurable results.

### 1. Eisenhower Matrix:

Focusing on What Truly Matters

The Eisenhower Matrix is a straightforward yet powerful prioritization tool, especially when juggling multiple demands. In construction, urgent issues arise daily, but not all are crucial to the project's success. You can make swift, strategic decisions by categorizing tasks into four types: urgent-important, important-not urgent, urgent-not important, and not urgent-not important. For instance, an on-site issue affecting project safety (urgent-important) demands immediate attention. On the other hand, a decision regarding future phases of the project (important and urgent) can be planned carefully. This matrix has allowed me to delegate less critical tasks and focus on high-priority issues, providing control and preventing delays, ensuring the team's energy is spent wisely.

### 2. 4Ds (Do, Defer, Delegate, Delete): Managing Tasks Efficiently

The 4D method is invaluable when you're inundated with tasks and decisions. As construction managers, we can't afford to let every minor task distract us from project milestones. The 4Ds allow you to streamline tasks by categorizing them: Do it now, Defer it, Delegate it, or Delete it. When a task comes across my desk, I ask, "Is this something I need to do immediately, or can it wait?" For instance, minor site updates might be



deferred until I have time while I delegate tasks like material inspections to reliable team members. By embracing this method, I focus on activities that genuinely drive progress, feeling more efficient and less burdened by non-essentials, which brings a sense of relief from stress.

### 3. Kanban Boards: Visualizing Progress and Accountability

A Kanban board brings incredible clarity and transparency to construction projects, especially when coordinating teams working on different aspects. Whether digital or physical, a Kanban board visually represents project stages, tracking tasks from “To Do” to “In Progress” to “Completed.”

For instance, on a project with multiple subcontractors, the board can track which team is responsible for each stage, ensuring everyone knows the project’s current status. The visual layout lets us spot bottlenecks, align teams quickly, and avoid costly delays. I encourage everyone to use it—on-site with a physical board or digitally—to keep accountability front and center, feeling more organized and less stressed.

### 4. 80/20 Rule (Pareto Principle): Prioritizing High-Impact Activities:

The 80/20 Rule is as relevant in Caribbean construction as anywhere else: 20% of activities yield 80% of results. This approach has been crucial in keeping projects within scope and budget. This means focusing on high-value activities both in time and cost, critical path tasks, quality control measures, and resource allocation.

For example, during the initial phase of a project, I prioritize



design reviews, scheduling, and resource planning, knowing these are high-impact activities that lay the foundation for everything that follows. By identifying which 20% of tasks will drive most of the project's success, I ensure that resources are applied where they count the most, leading to a sense of accomplishment and success.



### **5. Time Blocking: Maximizing Focus and Minimizing Interruptions**

Construction projects demand multitasking, but specific tasks require undivided attention. Time blocking involves setting aside time slots for critical functions like site visits, financial reviews, or design adjustments. By reserving blocks in my day, I prevent distractions and ensure my focus remains on high-priority work.

In the Caribbean context, where unexpected delays can arise, time blocking provides structure and flexibility. For example, I'll block off the first hour of my day for planning and team briefings and the last hour for reviewing progress. This way, I maximize productivity and manage my time effectively despite day-to-day uncertainties.

### **6. Daily Huddles: Staying Aligned with the Team**

A quick, focused team huddle every morning keeps everyone on the same page. These huddles have been invaluable for setting daily goals, highlighting immediate priorities, and addressing roadblocks. With the fast pace of construction, the whole team needs to know the day's objectives and be ready to adapt. In the Caribbean, where site conditions can change quickly due to weather or resource availability, huddles create a forum for immediate updates and rapid adjustments. For example, if a

supplier delay affects material availability, we address it during the huddle and realign the day's tasks. These short meetings are among the best ways to keep the team motivated, informed, and efficient.

## 7. Pomodoro Technique: Boosting Focus for Detailed Tasks

The Pomodoro Technique is a lifesaver for tasks requiring deep focus, like reviewing designs or schedule reviews. This method involves working in 25-minute intervals, followed by short breaks. In a construction setting, this technique can be applied to tasks requiring detailed attention, such as reviewing complex blueprints or planning intricate work sequences. It's beneficial for detailed, time-consuming work where distractions can lead to costly errors.

While construction is an active and on-the-go field, there are times when we need to sit down and immerse ourselves in a specific task. Using the Pomodoro Technique, I've managed my focus, maintained energy, and avoided mental fatigue, all crucial aspects of making precise decisions.

## Final Thoughts

In Caribbean construction, each day brings its own set of unique and often unpredictable challenges. Weather shifts, resource delays, and sudden changes in project demands mean that the ability to adapt is as crucial as the ability to plan. This isn't a field where you can

afford to work on autopilot; every day requires strategic decisions to navigate time constraints, manage resources, and align priorities.

Here, productivity techniques become more than tools, they create a robust framework that anchors our work, helping us stay focused, efficient, and resilient, regardless of what the day throws at us.



The fast-paced and variable nature of construction demands practical,



flexible methods that can evolve with the shifting landscape of each project. This is especially true in the Caribbean, where these methods provide a safety net of structure. They're not just about squeezing out more efficiency; they lay the groundwork for disciplined project management, fostering a culture of accountability, precision, and focus among the team. The challenges we face here require us to think not only about the tasks at hand but also about the long-term health and momentum of the project. Structured productivity strategies help us set that vision into motion and sustain it.

Implementing these methods on your project isn't just a box to check for productivity. It's about embedding a mindset and culture into the team's fabric where everyone understands the value of disciplined work, clear priorities, and shared accountability. Using the Eisenhower Matrix, 4Ds, Kanban boards, the 80/20 rule, time blocking, daily huddles, and the Pomodoro Technique, you empower yourself and your team to work smarter and more consistently. Combining these techniques allows for a streamlined flow of tasks, immediate problem-solving, and resilience that helps us keep moving forward, no matter the obstacles.

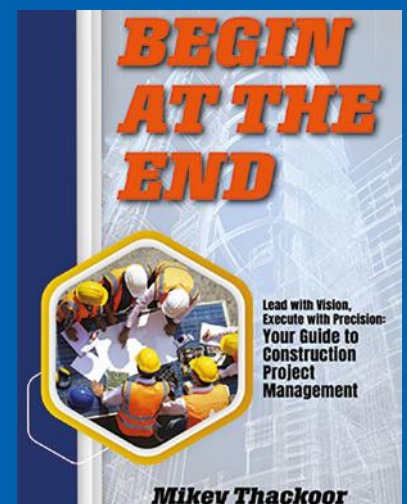
Success in construction is built on more than bricks and mortar; it's shaped by every decision, process, and minute dedicated to realizing the project's vision. These productivity methods help us reinforce that foundation with purpose, allowing us to build with confidence and reliability, meeting our clients' high demands in the ever-evolving Caribbean landscape. With these strategies in place, we're managing projects and creating a legacy of excellence, one well-executed decision at a time.



Author  
**Mikey Thackoor**

NH International  
Caribbean Ltd

Mr. Mikey Thackoor is an experienced professional in the construction industry with a track record of over 25 years working across the globe. Presently, he holds the position of Head of Operations (Eastern Caribbean) at NH International Caribbean Ltd. In this role, Mr. Thackoor provides expert leadership in project development, design, implementation, and execution to ensure optimal results are achieved.



Mikey Thackoor is the author of  
Begin At The End.

[www.mikeythackoor.com](http://www.mikeythackoor.com)

# Safety: The Cornerstone of Construction



The construction sector is one of the most dynamic and rapidly growing sectors in the Caribbean. From towering commercial buildings to essential infrastructure projects, the sector fuels regional development. However, with its undeniable significance comes inherent risks. Construction sites are among the most hazardous workplaces, and prioritizing safety is not just an ethical imperative but a legal and economic necessity. This article explores why “safety first” must be more than a mantra on Caribbean construction sites, weaving together practical, legal, and moral perspectives.

## **The Cost of Complacency: A Grim Reality**

In the Caribbean, construction accidents account for a significant proportion of workplace injuries and

fatalities. Falls from heights, improper handling of machinery, and inadequate protective measures are recurring issues. These incidents devastate families, disrupt projects, and tarnish reputations, leading to substantial human and financial costs.

But beyond these consequences lies the often-overlooked cost of non-compliance with safety laws. Employers who neglect safety standards risk hefty fines, lawsuits, and even imprisonment, depending on the severity of violations. For example, the Occupational Safety and Health Act (OSHA), adopted in various forms across the Caribbean, mandates strict adherence to safety protocols to mitigate risks and ensure worker welfare.

### **The Legal Perspective: Safety Is Not Optional**

Each Caribbean nation enforces its own occupational health and safety regulations, tailored to local contexts. A few prominent legal frameworks include:

#### **The Occupational Safety and Health Act (OSHA) – Trinidad and Tobago**

- Relevant Section: Section 6 of the OSHA mandates employers to provide a safe working environment, ensuring that employees are not exposed to hazards.
- Penalties for Non-Compliance: Fines up to TT\$100,000 and imprisonment for up to five years for severe violations.

#### **The Factories Act – Jamaica**

- Relevant Section: Part V addresses measures to protect workers from machinery-related risks, mandating regular equipment maintenance and proper training.
- Penalties for Non-Compliance: Imprisonment and fines depending on the infraction's gravity.

#### **The Labour Act – Barbados**

- Relevant Section: Provisions under this act emphasize





risk assessments and safety planning, holding employers accountable for accidents caused by negligence.

- Penalties for Non-Compliance: Substantial financial penalties and potential project shutdowns.

These laws underscore that safety is not merely good practice—it is a legal obligation. Failure to comply can lead to severe repercussions, including project delays, penalties, and reputational damage.

## Practical Steps to Enhance Safety on Construction Sites

### 1. Establish a Safety Culture

A culture of safety starts at the top. Employers and project managers must lead by example, consistently demonstrating a commitment to safe practices.

### 2. Invest in Training and Education

Workers should be well-trained to handle equipment, recognize hazards, and respond to emergencies. Regular refresher courses are essential to keep safety top-of-mind.

### 3. Use Personal Protective Equipment (PPE)

Helmets, gloves, harnesses, and other PPE are the last line of defense against injuries. Ensure that all workers are equipped with and trained to use PPE appropriately.

### 4. Conduct Regular Inspections

Regular site audits and inspections help identify and address hazards before they lead to accidents. Document findings and ensure corrective measures are implemented promptly.

### 5. Engage with Authorities

Collaborate with local labor ministries or safety authorities to stay updated on legal requirements and industry best practices.

### The Moral Imperative: Protecting Lives

Beyond legal and financial considerations, prioritizing safety reflects a commitment to humanity. Construction workers are fathers, mothers, sons, and daughters. Their lives and livelihoods depend on a safe working environment. Employers who fail to prioritize safety risk not only compliance penalties but also the lives of those who contribute to the industry’s success.

### Looking Ahead: A Safer Future

Safety is not a one-time effort—it is a continuous process that demands vigilance, education, and enforcement. The Caribbean construction sector must rise to the challenge, embracing safety as the cornerstone of its operations. By adhering to legal mandates and fostering a proactive safety culture, the industry can reduce accidents, save lives, and build a future where development and worker welfare go hand in hand.

When safety is the first priority, everyone wins—the workers, the companies, and the communities they serve.

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# Challenges Facing the Roofing Industry in Trinidad and Tobago

The roofing industry in Trinidad and Tobago is a vital part of the construction sector, integral to residential and commercial projects across the country. As urban development expands and infrastructure needs grow, the industry has experienced increased demand. However, this growth is accompanied by a series of challenges that hinder its ability to operate efficiently and sustainably. From supply chain disruptions to environmental pressures, the roofing industry faces numerous obstacles that require urgent attention.

One of the most significant issues is the disruption of supply chains. Roofing materials such as steel, aluminum, and roofing membranes are often imported, making the industry vulnerable to global market fluctuations. Events such as the COVID-19 pandemic and ongoing geopolitical tensions have exacerbated these challenges, leading to shortages, delays, and price volatility. This has caused a ripple effect on local projects, with rising material costs increasing the financial burden on contractors and clients alike. Furthermore, extended lead times for critical materials have led to project delays, straining relationships between contractors and their customers. To address this, local production of roofing materials should be explored as a way to reduce dependency on imports, while cultivating partnerships with alternative suppliers in less affected regions.



Another major challenge is the shortage of skilled labor. Roofing requires specialized skills, yet there is an ongoing gap between the demand for experienced workers and the available talent pool. Compounding this problem is the lack of sufficient training and apprenticeship programs to bring new talent into the industry. The consequences are evident: a limited workforce often results in substandard installations, which can lead to roof failures or costly repairs. Additionally, the scarcity of skilled roofers drives up labor costs, further inflating project budgets. Investing in vocational training tailored to the roofing industry could help close this gap, while government and private sector partnerships could provide certifications and incentives to attract more workers to this vital trade.

The tropical climate of Trinidad and Tobago presents its own set of challenges. Heavy rainfall, high humidity, and strong winds during the rainy season and hurricane periods place significant stress on roofing materials and designs.

These conditions accelerate the wear and tear of roofs, making premature deterioration a common issue. Property owners often face the added financial burden of frequent maintenance to prevent leaks, corrosion, and structural damage. To combat these challenges, builders and contractors should prioritize the use of weather-resistant materials, such as corrosion-resistant metals and high-quality membranes, and adopt innovative roofing designs that enhance durability and performance in the local climate.

Regulatory and safety issues also weigh heavily on the roofing industry. Although Trinidad and Tobago has established building codes, enforcement is often inconsistent, leading to substandard installations and unsafe practices.

Contractors sometimes use inferior materials or fail to comply with safety protocols, which not only compromise the quality of roofs but also increase



the risk of accidents for workers. Strengthening the enforcement of regulations and promoting industry-wide standards for materials and installations could improve outcomes. Furthermore, contractors should ensure that workers have access to proper training and safety equipment, fostering a safer work environment.

Sustainability is an emerging concern as the construction sector worldwide shifts toward greener practices, the demand for environmentally friendly roofing materials and designs is growing. In Trinidad and Tobago, however, this transition is still in its infancy. Eco-friendly materials like solar roofing and recycled components are not widely available in the local market, and their higher costs deter many clients from adopting them. Nonetheless, increasing awareness of the long-term benefits of sustainable roofing, such as energy efficiency and reduced environmental impact, could encourage broader adoption. Incentives for homeowners and contractors who choose sustainable options would also help advance this movement.

The roofing industry in Trinidad and Tobago is at a critical juncture. While the challenges it faces are considerable, they are not insurmountable. Addressing issues such as

supply chain vulnerabilities, labor shortages, environmental stressors, regulatory gaps, and sustainability concerns will

require collaborative efforts from all stakeholders, including government authorities, industry professionals, and educational institutions. By fostering innovation, investing in training, and strengthening regulatory frameworks, the roofing industry can overcome its obstacles and continue to play a pivotal role in the nation's development. The future of the industry depends on its ability to adapt, innovate, and build resilient solutions that meet the evolving needs of Trinidad and Tobago.





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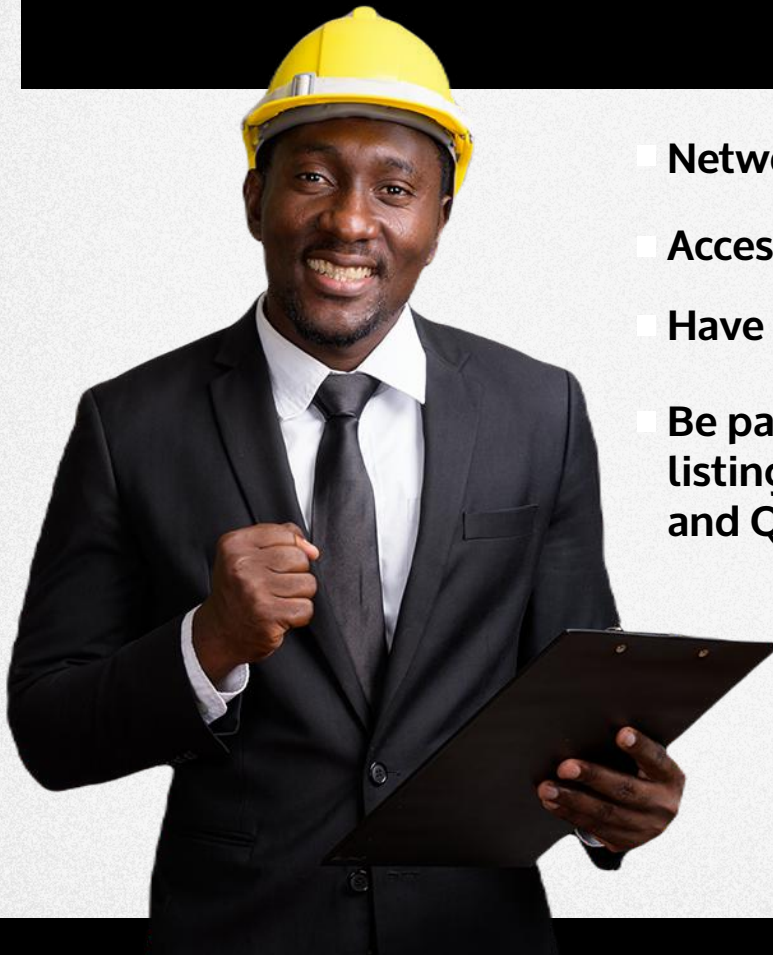
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- Flags – TC International Limited
- Francis-Lau Construction Co. Ltd
- F.T. Farfan Limited
- Gardiner & Associated Engineering Services Ltd
- General Earth Movers Limited
- GML Contractors Ltd.
- Haniff Mohammed & Son Ltd.
- HEVI-QUIP Company Ltd
- Home Solutions
- Hookmally Ali Ltd.
- International Interiors Ltd.
- Junior Sammy Contractors Ltd.
- Kall Co Ltd
- KEE-CHANONA Limited
- LAING Sandblasting & Painting Co. Ltd.
- Lifetime Solutions
- Logan Contracting & Transport Services Ltd.
- Massy Machinery Limited
- Mecalfab Limited
- Namalco Construction Services Ltd
- National Quarries Company Ltd
- New Wave Marketing
- NH International (Caribbean) Ltd.
- Online General Contractors Ltd
- Pres-T- Con 2021 Ltd.
- Prindi Contractors T&T Limited
- Ramkaran Contracting Services Ltd
- R.B.P Lifts Ltd
- Roof Systems Ltd
- Rosscon Limited
- SAMCOLL Construction Co. Ltd.
- Sammy's Multilift Services Ltd.
- SCL (Trinidad) Limited
- Seereeram Bros. Ltd.
- Soar Construction Services Ltd
- Stages Building Group
- Syne's Contracting & Industries (1988) Ltd.
- T&Z Home Improvement Centre
- The Paramount Transport and Trading Co. Ltd
- TN Ramnauth And Company Ltd
- Total Housing Ltd
- Trinidad Cement Limited
- Trinidad Pro Construction Ltd
- Trinmesh Limited
- Unicom Limited
- Weathershield Systems Caribbean Ltd.
- Weldfab Ltd
- Woodgreen Construction Services Ltd
- Zaftraxx Ltd

# TTCA

TRINIDAD AND TOBAGO  
CONTRACTORS ASSOCIATION




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 627-1266 /8020

 [generalmanager@ttca.com](mailto:generalmanager@ttca.com)