

Build Once. Build Right.

Protect Your Budget, Your Family,
and Your Resale Value.

Professional Engineering + UCPCL
Prefabrication = Predictable Cost,
Faster Delivery, Safer Homes



LAURISTON LEWIS ASSOCIATES LTD.
CONSULTING ENGINEERS

Whether building your first home or your first development, the risks are the same.

For the First-Time Homeowner



You have one home, one budget, and no margin for error. This is your family's safety and your single largest financial asset on the line.

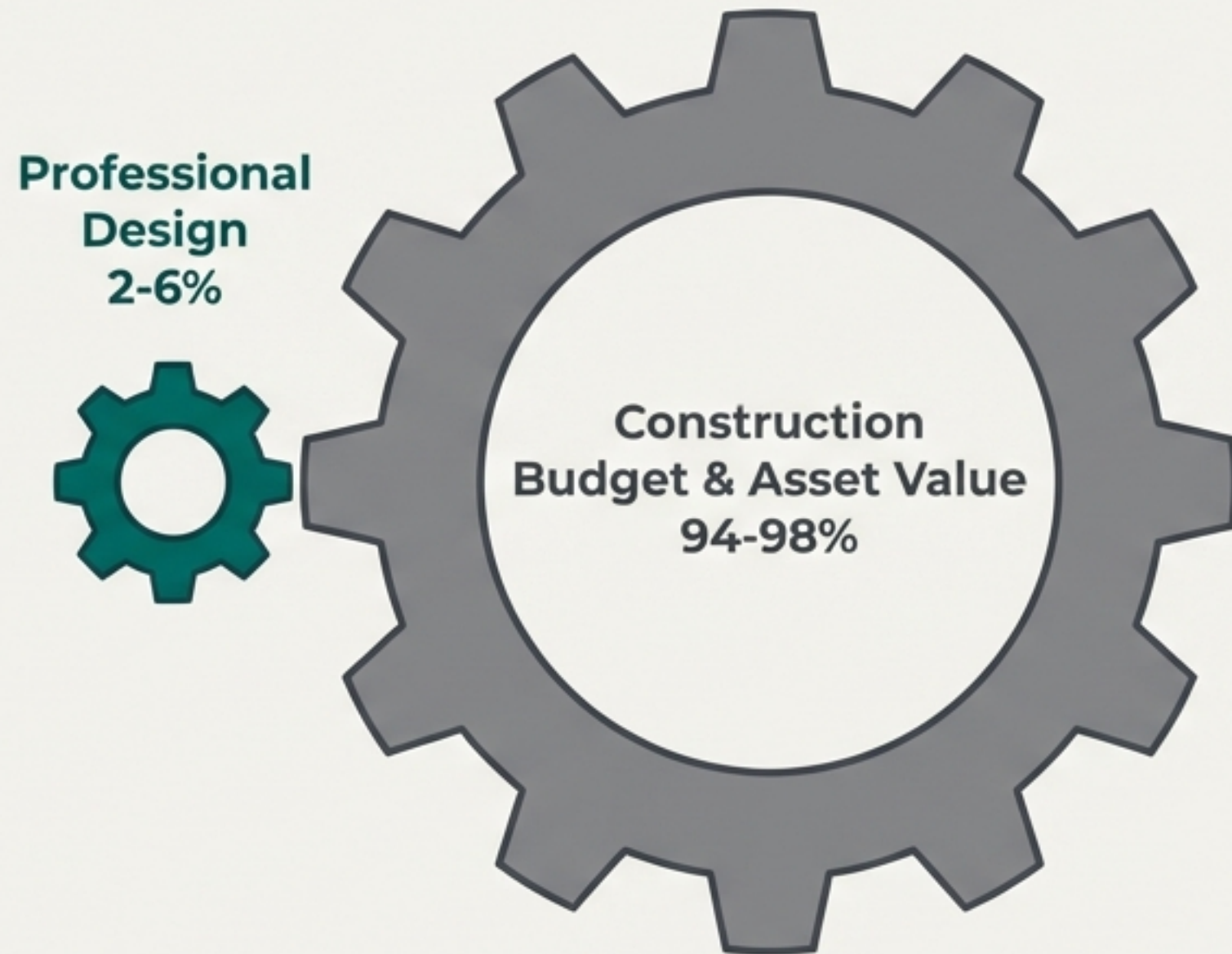


For the First-Time Developer



You are managing investor risk across multiple units. Success depends on scalable design, predictable cash flows, and securing regulatory approvals without friction.

The most common mistake in construction is based on a single myth.



THE MYTH

I can save money by cutting professional design fees.

THE REALITY

Professional design is only 2-6% of your total budget—and it's the single best investment you can make to protect the other 94-98%.

The Silent Budget-Killer: Rework can cost you up to 20% of your entire project.

Industry research shows that rework and variations due to design issues commonly cost **5% to 20%** of the total project budget. In contrast, professionally managed projects can limit cost growth from design errors to **less than 3%**.

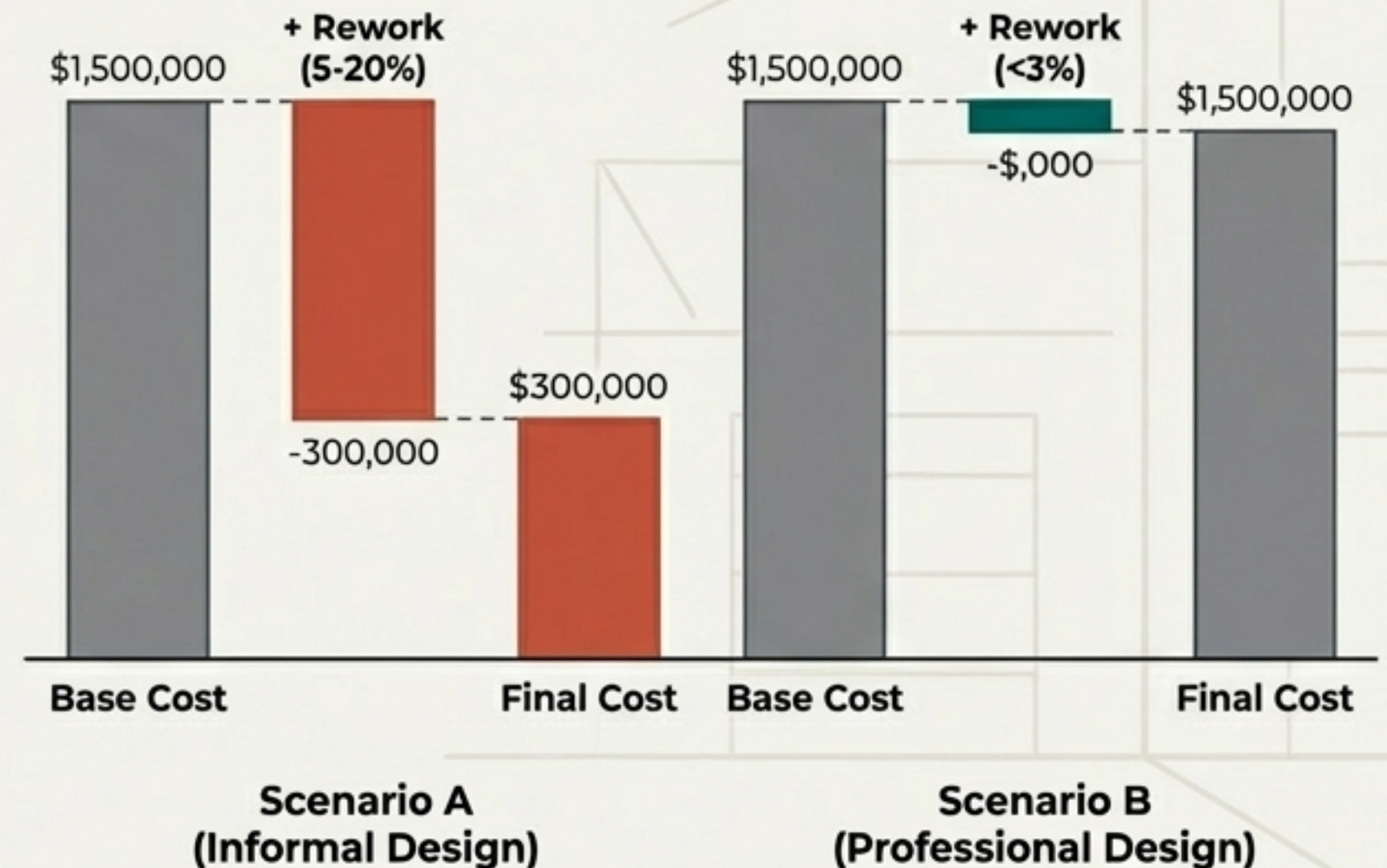
The Dollar Translation

On a TTD 1,500,000 Home:

Rework Risk (5%-20%): TTD 75,000 to 300,000 in unforeseen costs.

The cost of “saving” on design fees is **exposure to budget overruns that are 5x to 10x larger.**

Cost Impact of Rework on a TTD 1,500,000 Project



Every dollar invested in quality design
pays for itself more than 7 times over.

\$1.00 = \$7.40

INVESTED IN DESIGN QUALITY
& DOCUMENTATION

Source: Hwang et al. (2014), Construction
Industry Research

SAVED IN AVOIDED
REWORK & DELAYS



The Dollar Translation

For a TTD 1,500,000 Home:

A 3% design fee (TTD 45,000) protects you from up to **TTD 333,000** in potential rework and delay costs.

For a TTD 10,800,000 Townhouse Development (6 units):

A 3% design fee (TTD 324,000) protects your project from up to **TTD 2,397,600** in exposure to margin-eroding rework across all units.

In the Caribbean, building for resilience isn't an upgrade—it's the highest-return investment you can make.



Benefit of Modern Codes

Adopting up-to-date building codes adds roughly **1%** to construction costs but yields a benefit-cost ratio as high as **11 to 1** in reduced damage.

Source: National Institute of Building Sciences (NIBS)



ROI of Resilient Measures

Adding **1.5%** to costs for specific measures (like hurricane straps and roof clips) yields an expected ROI of up to **21 times (2100%)** for homes in the Caribbean.

Source: Inter-American Development Bank (IDB), 2024

The Dollar Translation (On a TTD 1,500,000 home)

Code Investment: A TTD 15,000 investment (+1%) can prevent **TTD 165,000** in future losses.

Resilience Investment: A TTD 22,500 investment (+1.5%) can prevent up to **TTD 472,500** in hurricane-related damages.

The difference between professional design and "good enough" is often revealed only when disaster strikes.

Case Study: Hurricane Maria, Dominica (2017)

Damages were equivalent to **226% of the nation's GDP**.

Over **90% of homes** were damaged or destroyed.

Primary Cause: "The main cause of excessive damage was underestimation of wind loads and lack of enforcement of building codes." – *Source: Post-disaster assessments.*



Your home isn't just designed for sunny days. It must be engineered with a continuous load path—from roof to foundation—to survive the extreme forces that are a reality in our region. Non-professionals often miss these critical details.

Your home's value isn't just in its walls. It's in its legitimacy.

The Unseen Financial Hurdles of Non-Professional Design



Financing: Banks and mortgage lenders require approved plans and professional certification to release funds, viewing uncertified homes as higher-risk assets.



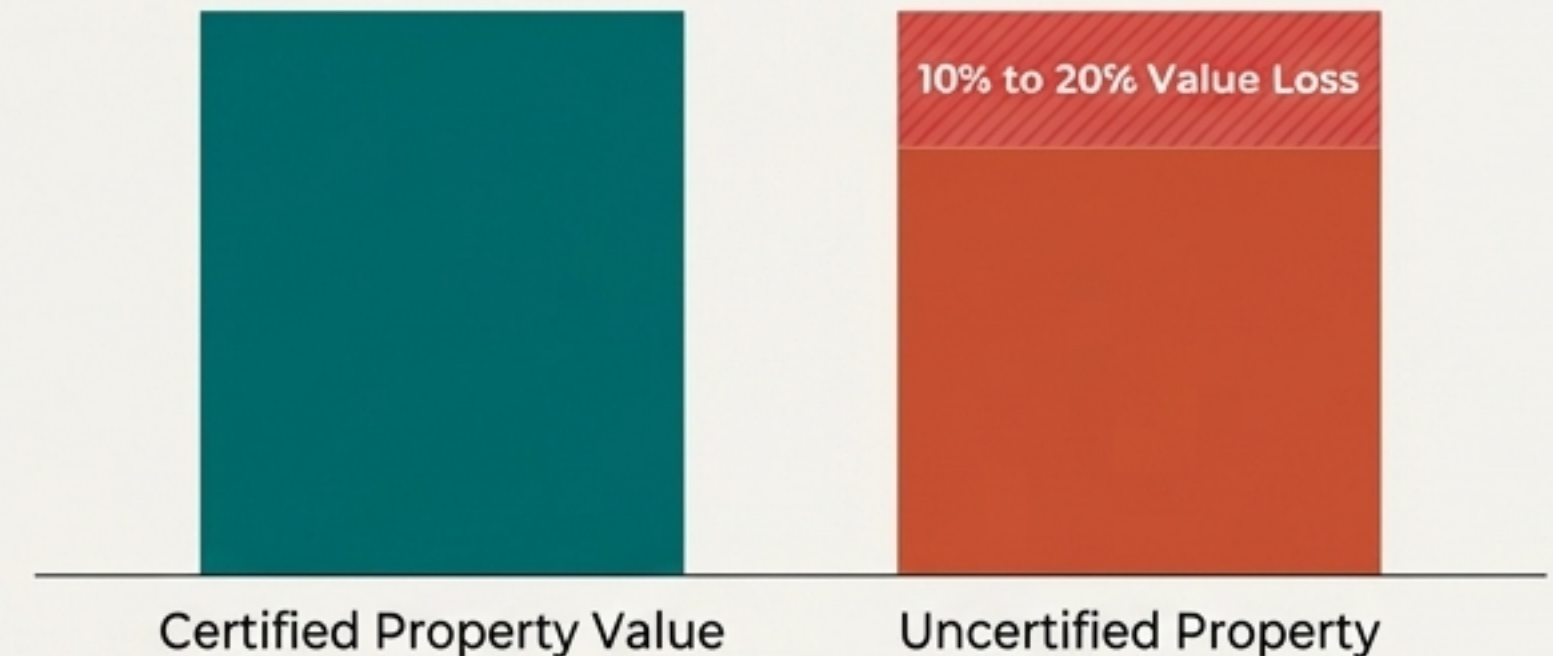
Insurance: Insurers may charge higher premiums or even deny coverage for homes not certified by a registered professional.



Approvals: The trend across the Caribbean is toward stricter enforcement. In Trinidad & Tobago, regulations increasingly require a 'listed professional' for plan submissions.

The Resale Value Penalty

Realtors in Trinidad report that uncertified homes often suffer a price discount of 10% to 20% due to the perceived risk to buyers.



The Dollar Translation (On a TTD 1,500,000 property)

A 10-20% loss in value means risking TTD 150,000 to TTD 300,000 at resale—all to “save” a fraction of that amount on upfront professional fees.

Great design doesn't just prevent problems—it creates long-term value and flexibility.

Key Benefits of Professional Planning



Spatial Efficiency: A skilled architect can make a 1500 sq. ft. home feel as functional as a 1700 sq. ft. one by eliminating dead space and improving flow. This means building less while getting more.



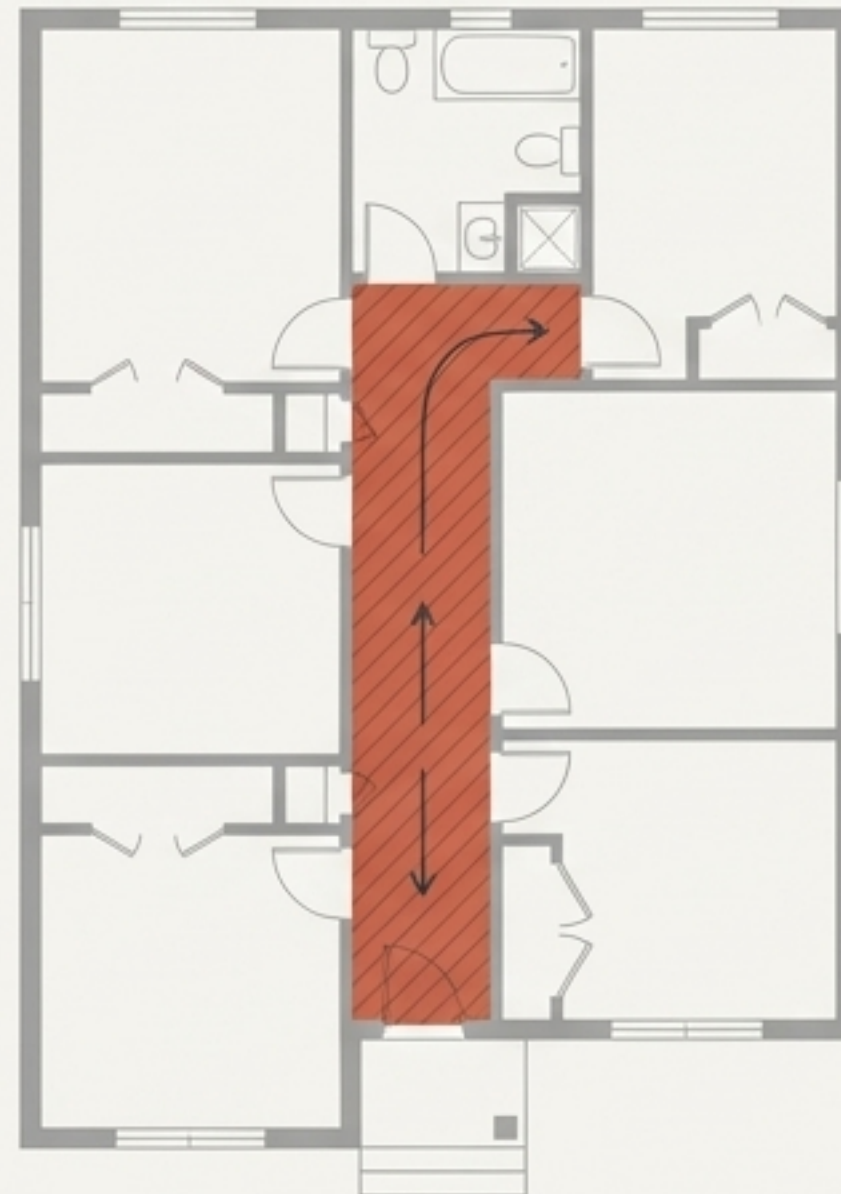
Future-Proofing: Professionals design with adaptability in mind—structuring the foundation for a future second story, planning for a rental unit, or orienting the home for future solar panel installation.



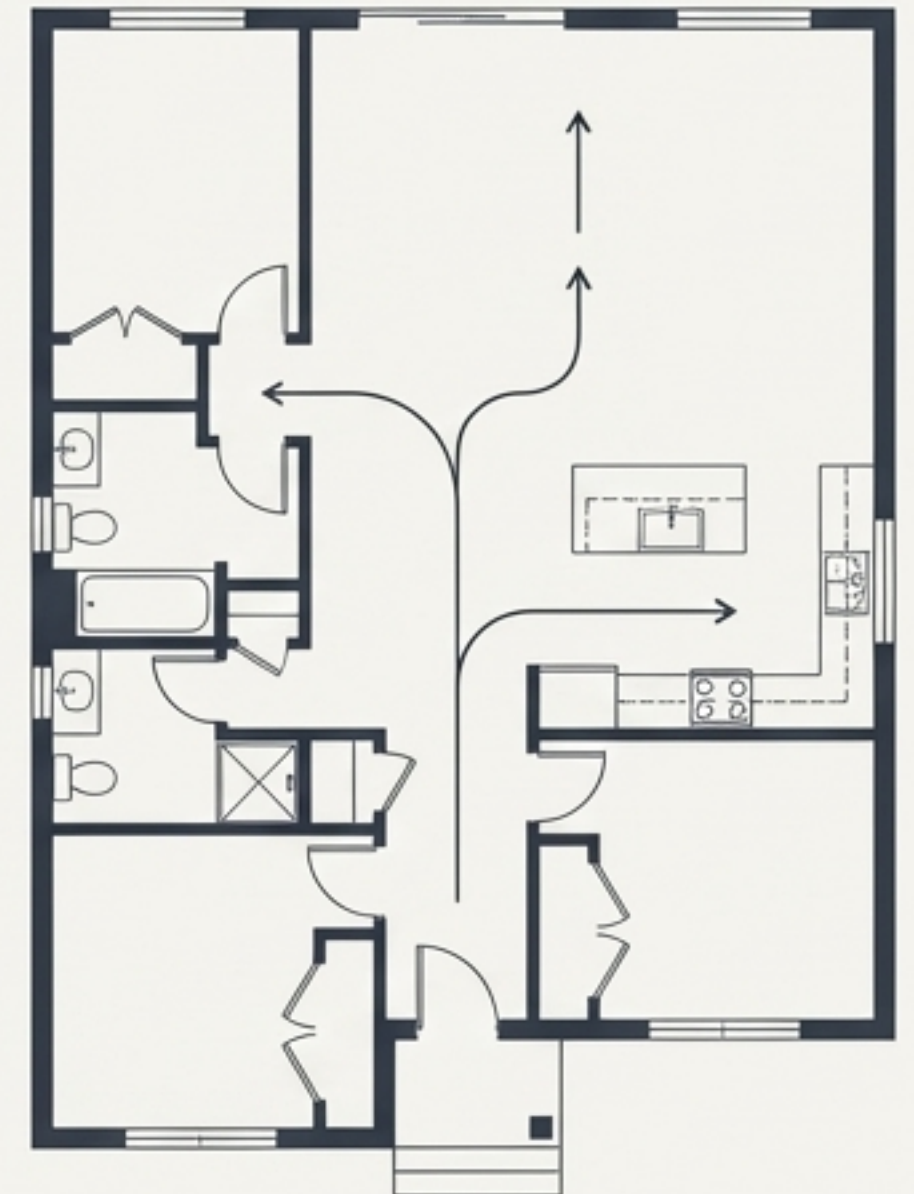
Life-Cycle Performance: Proper material specification and detailing for weather-tightness and durability reduce long-term maintenance costs, saving money for decades.

Spatial Efficiency in Practice

BEFORE (Non-Professional):
1700 sq. ft. - Inefficient.



AFTER (Professional):
1500 sq. ft. - Efficient & Cost-Effective.

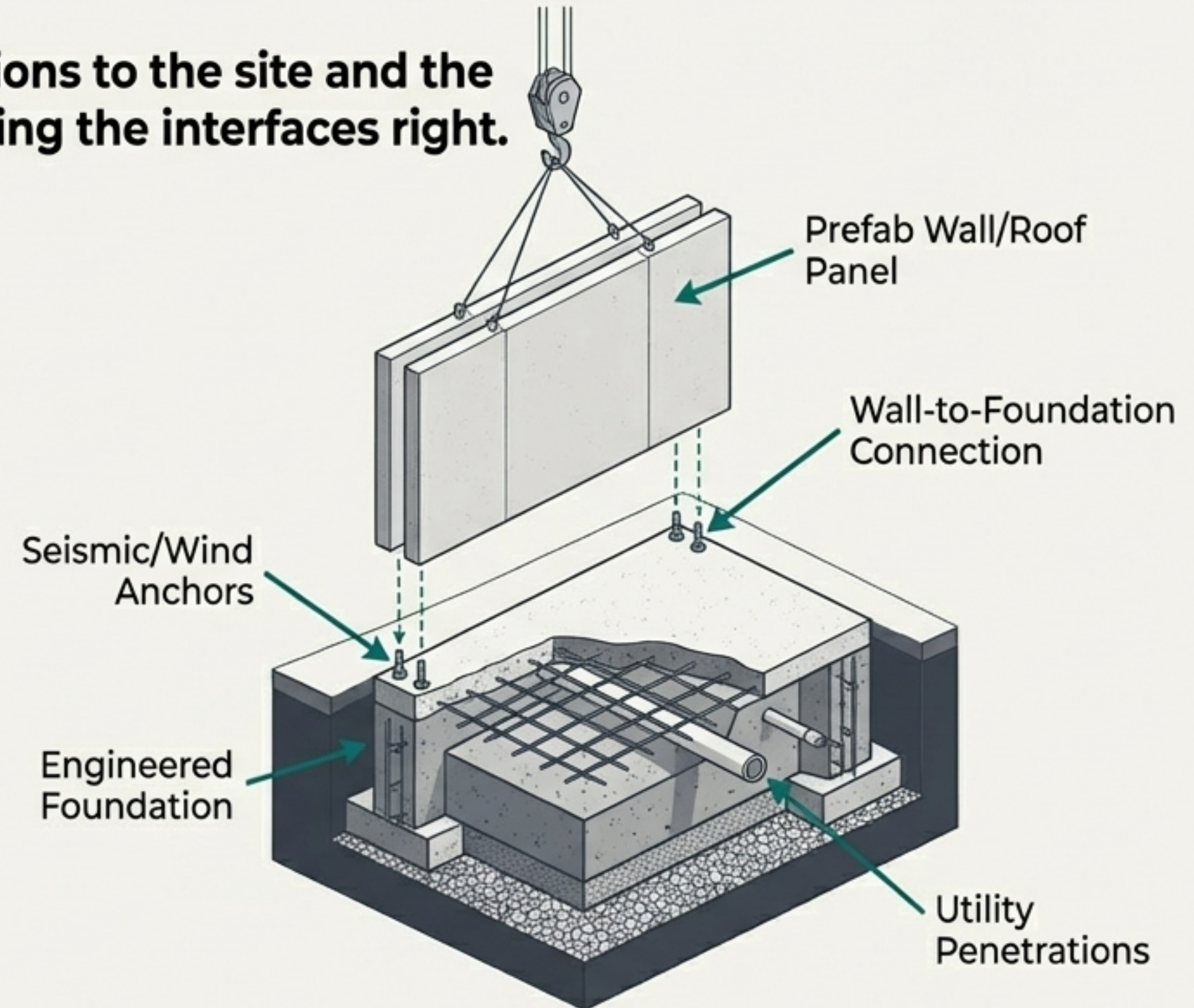


Prefabrication provides precision and speed. Professional engineering ensures it performs.

A prefab system is only as strong as its connections to the site and the foundation it rests on. Success depends on getting the interfaces right.

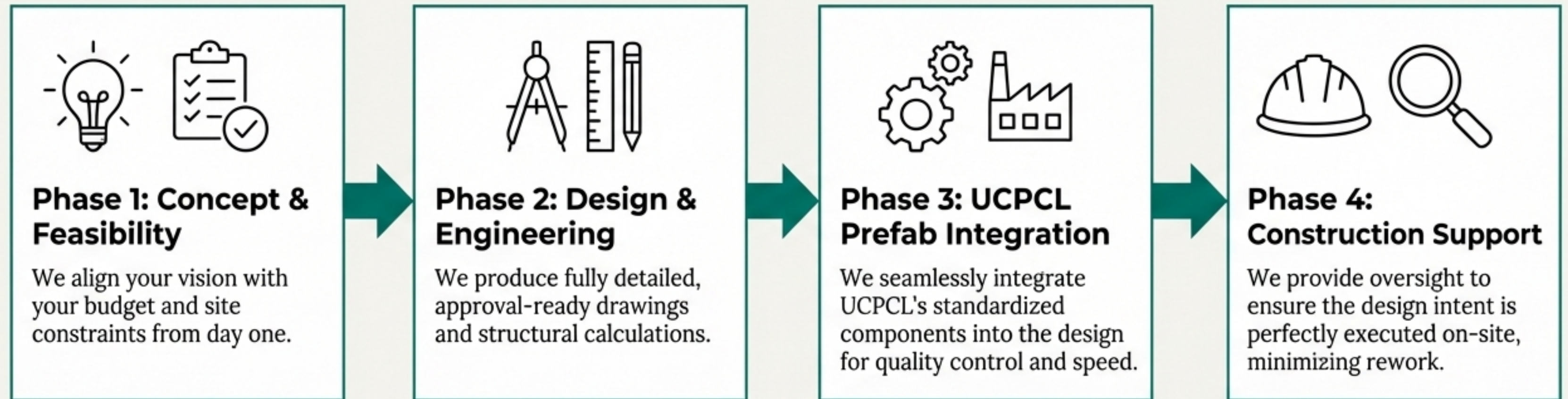
Where Professional Engineering is Essential for Prefab:

1. **Foundation Design:** Designing the correct foundation and anchorage system for your specific soil conditions and seismic zone.
2. **Connection Detailing:** Ensuring a continuous load path from the roof to the foundation to resist hurricane winds and earthquake forces.
3. **MEP & Systems Integration:** Coordinating plumbing, electrical, and mechanical systems to prevent clashes and ensure seamless installation on site.
4. **Compliance & Approvals:** Producing the detailed engineering calculations and drawings required by local authorities for building permits.



The Smart Solution: A Single, Coordinated System for a Predictable Outcome.

We've combined expert engineering with UCPCL's proven prefab system to eliminate the friction points that cause budget overruns and delays.



This system is purpose-built to deliver on the ROI of good design, resilience, and long-term value.

For Developers: Turn a High-Risk Process into a Scalable, Profitable System.

The biggest threats to a developer's margin are unforeseen variations and delays. Our system attacks these risks head-on.

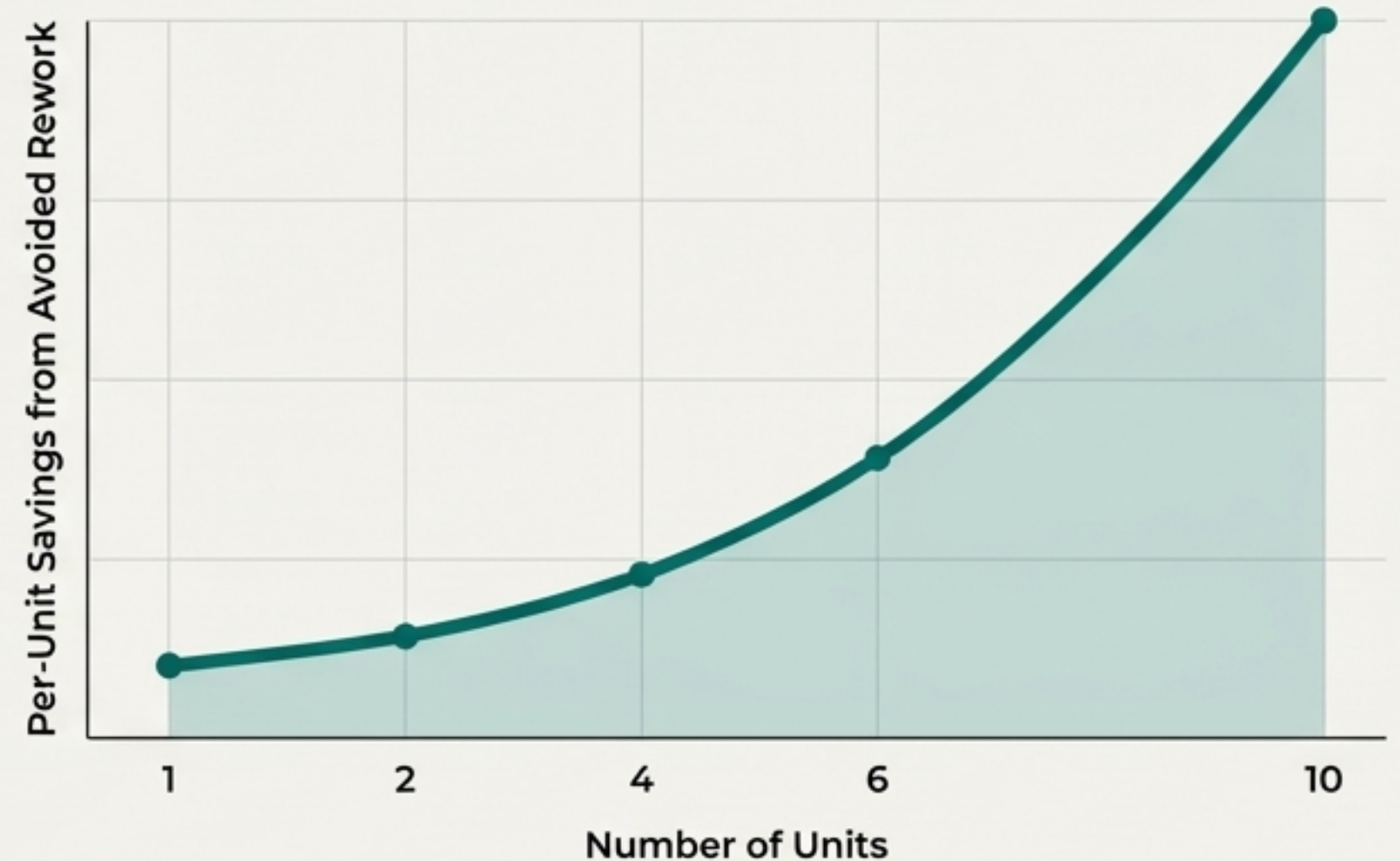
How the System Protects Your Margin

Repeatability: A proven, pre-engineered unit design eliminates design errors on subsequent units.

Predictable Approvals: A standardized, compliant drawing package smooths the permitting process for the entire development.

Controlled Schedules: Prefabrication reduces on-site labor variability and weather delays, leading to more predictable cash flow.

The Power of Repetition: Cumulative Savings



The Financial Case for Building Right: A Summary

The Smart Investment vs. The Hidden Costs			
Metric (from Industry Research)	Typical % of Budget	Cost/Risk on TTD 1.5M Project	What It Means in Plain Language
Your Investment			
Professional Design Fee	2 – 6%	TTD 30,000 – 90,000	A small, fixed investment to protect your entire budget.
Your Risks (Without It)			
Rework Exposure	5 – 20%	TTD 75,000 – 300,000	Paying twice for mistakes that could have been avoided.
Resale Value Discount	10 – 20%	TTD 150,000 – 300,000	Losing a huge piece of your equity when you sell.
Your Return			
Code Uplift Payback	~1% Cost for 11:1 Benefit	Invest TTD 15,000 -> Save ~TTD 165,000	Small upgrades that prevent massive losses.
Resilience ROI	~1.5% Cost for up to 21x ROI	Invest TTD 22,500 -> Save up to ~TTD 472,500	Storm protection that pays for itself many times over.

Start with the right plan. Let's define the safest, most cost-effective path for your project.

Choose the service package that best fits your project's stage and needs.

1. Plan Review & Risk Report

If you already have drawings from a draughtsman, we'll provide a professional engineering review to identify potential risks to your budget, safety, and approvals before you build.

2. Full Design & Approval Package

For first-time homeowners. We'll take your project from concept to approved, ready-to-build plans, incorporating the UCPCL prefab system.

3. Developer System Package

For first-time developers. We'll provide a standardized townhouse design set, site coordination, and a repeatable package for multiple builds.

Book a 30-Minute Feasibility Call



Remember, the fee for professional design is small. The value it protects is enormous.