

PEB DESIGN & BUILD · THAILAND

From empty land to a ready-to-operate building.

Turnkey PEB design & build for warehouses, factories and distribution centers.

One accountable team of architects and licensed engineers — from site study and budget to construction, quality control and handover.

Contents

What this profile covers — from who we are to how to start your project.



01	About PRIME BUILD Who we are, purpose and business lines	Pages 03–07
02	Services & Solutions PEB solutions, industries, Design-BOQ-QC, solar, renovation	Pages 08–15
03	Delivery & Engineering Process, schedule, team, PEB, cost and quality	Pages 16–25
04	Completed Projects Portfolio, five case studies, site gallery, concepts	Pages 26–34
05	Knowledge & Getting Started E-books, FAQ, next steps and contact	Pages 35–39

01

About PRIME BUILD

Who we are

- Who we are
- Company at a glance
- Vision, mission and values
- Four business lines



We build more than buildings

We engineer facilities that are ready for the business inside.

PRIME BUILD turns business requirements, site constraints, budgets and growth plans into industrial buildings that are buildable, cost-controlled and handed over ready to operate — all under one design-and-build team.

Owners work with one accountable team of architects, licensed engineers, quantity surveyors and site supervisors — from empty land to handover.



Design

Planned around how your business actually operates



Engineering

Cost-effective, code-compliant PEB structures



Construction

Built, quality-checked and handed over on time



Completed project · Warehouse + 2-storey office, 20 × 40 m

PRIME BUILD at a glance

One team. One coordinated path from feasibility to operation.

9,000+ m²

Industrial space delivered across completed references

4–6 months

Typical build time mid-size warehouse or factory

5 roles

Specialist disciplines coordinated on every project

±20%

Preliminary budget range before detailed design

20+ guides

Free e-books & guides published for project owners

Company	PRIME BUILD CO., LTD.
Head office	37/237 Moo 7, Khlong Song, Khlong Luang, Pathum Thani 12120
Coverage	Nationwide — Greater Bangkok, EEC and regional provinces
Core business	Design & build of PEB steel buildings: warehouses, factories, DCs
Other lines	Design + BOQ + QC · Solar rooftop · Extension & renovation
Engineer of record	Mr. Chaiyapat Sangkham · Professional Engineer (Civil) · สย.11818
Standards	EIT codes · DPT regulations · Building Control Act 1979



Vision, mission and values

The purpose and principles behind every building we deliver.



VISION

To be Thailand's most trusted engineering-led partner for business-ready industrial buildings.

Measured by what owners value most: cost certainty, an on-time opening and buildings that grow with the business.



MISSION



Design around the operation

Start from how goods, people and trucks move — not just floor area.



Make cost visible early

Transparent BOQ and value engineering before costs harden on site.



Verify quality at every stage

Licensed engineers check each stage before payment is released.



Design for growth, share knowledge

Plan expansion early and publish free guides for owners.

VALUES



Engineering integrity

Safe, code-compliant design



Transparency

Clear scope, BOQ and records



One-team accountability

A single point of responsibility



Future-ready thinking

Buildings that adapt as you grow



Knowledge sharing

Helping owners decide well

Four service lines, one engineering team

One licensed architect-and-engineer team behind every service line.

 01	 02	 03	 04
CORE BUSINESS PEB Warehouses & Factories Core business Turnkey design and construction of PEB warehouses, factories and DCs — from empty land to operation. • Clear-span PEB structures • Drawings, permits & build • Designed for expansion	Design · BOQ · QC Design, cost benchmark, QC Premium-looking design, a fair independent price benchmark and an inspector at every payment stage. • Architectural & structural design • Independent BOQ benchmark • Stage-by-stage QC	Solar Rooftop Engineer-checked solar Rooftop solar with a structural engineer checking your roof before every quote. • On-Grid · Hybrid · Off-Grid • PEA / MEA permit support • Payback analysis	Extension & Renovation Homes & existing buildings Extensions and repairs that start with an inspection of the existing structure and setback rules. • Crack & foundation checks • Setback-rule compliance • Budget ranges by work type

02

Services & Solutions

What we design and build

- PEB solutions by building type
- Industries we serve
- Why PRIME BUILD
- Design · BOQ · QC · Solar rooftop · Renovation



PEB solutions built around your operation

We design around how your business works — not just the building size.

จัด Layout – ศูนย์กระจายสินค้า PEB ที่คิดจาก “การไหลของสินค้า” เป็นท



Warehouses & DCs

Storage, distribution and logistics

Column-free clear spans use the whole floor, with heights planned for racking, forklifts and conveyors.

Wide clear span

Expandable bays

Racking loads



Manufacturing facilities

Production lines, cranes, mezzanines

Machine layout, material flow and loading bays planned around the real production line, with a front office.

Crane-ready

Ventilation design

Future mezzanine



Office & showroom on PEB

Front offices and showrooms

Modern office or showroom facades on a PEB frame — less heavy concrete, the same professional image.

Modern facade

Structural efficiency

MEP-ready

Industries and specialist applications

Proven references at the core — specialist requirements engineered project by project.

PROVEN REFERENCES



Logistics & distribution

Warehousing and DCs
Two PEB distribution centers



Manufacturing

Furniture components
Factory + 2-storey office



Food supplements & health

Production facility
GMP/HACCP-ready layout



Heavy equipment

Rental and maintenance
Concrete yard + workshop

PROJECT-DEPENDENT CAPABILITIES



Cold storage
Insulation, doors and energy efficiency



Clean room / GMP
Rooms added without altering the frame



Cranes & mezzanines
Crane and deck loads built into the frame



Integrated factory office
Workspace combined with production

Illustrations are conceptual. Scope, performance and certification are defined and verified for each project.

Why owners choose PRIME BUILD

Engineering plus business thinking — not just a price per square meter.



PEB-specialist engineers

Optimised steel use without compromising code safety.



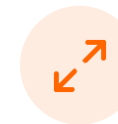
One-stop service

Design, permits and construction through one team.



Licensed supervision

Professional Engineer (Civil), สย.11818, with stage QC checklists.



Designed for expansion

Future bays planned early — no costly rebuilds.



Transparent BOQ & contract

Itemised scope with no surprise costs later.



On-time handover

Clear milestones protect your opening date.

Reduce risk before it becomes site cost

Where owners usually lose money — and how one coordinated team prevents it.

Owner risk	PRIME BUILD approach	Business value
Layout does not fit the operation	Business and site study before detailed design	Better operational fit
Budget changes late	Concept, quantities, BOQ and VE up front	Earlier cost visibility
Too many interfaces	Single-point design & build coordination	Clear accountability
Opening date at risk	Milestones + parallel foundation and steel fabrication	Critical-sequence control
Growth forces a rebuild	Expansion interfaces designed early	Lifecycle flexibility
Hidden specification drift	Stage QC inspection before every payment	Pay only for verified work

Design + cost estimate + construction QC

Design, an independent cost benchmark and stage-by-stage QC — one connected process.



Design



Architects and engineers plan usable space that looks premium without inflating the budget, and prepare permit submissions.



Independent BOQ (price benchmark)



A detailed quantity take-off priced into an auditable benchmark to compare every contractor's bid.



Construction QC



Our supervisor inspects every stage against the drawings and BOQ before each payment is approved.

15–30%

Potential overpayment against the market when owners have no independent price benchmark.

This is the gap an independent BOQ is designed to close.

RED FLAGS BEFORE YOU SIGN

-  A price far below market with no clear explanation
-  More than 30–40% requested upfront before work starts
-  No complete working drawings before construction
-  Refusing independent inspection on site

Each service can also be hired on its own — BOQ only or QC only.

Solar rooftop that starts with a roof check

A structural engineer checks your roof before every quote — not just an installer.



On-Grid

Connected directly to the grid; best for daytime use and the fastest payback.

Fastest payback



Hybrid

Partial battery backup for outage-prone sites or critical machinery.

Outage backup



Off-Grid

Fully battery-based for sites without reliable grid power.

Remote sites

4-POINT ROOF CHECK

- ✓ Roof frame can carry the added panel load — calculated, not eyeballed
- ✓ Remaining roof life vs. a 25+ year solar system
- ✓ Mounting penetrations detailed against long-term leaks
- ✓ Wind uplift and pressure checked for the site location

Estimated payback period

Years — illustrative examples from our online calculator



	Typical home	Factory / office
Average bill / month	THB 6,000	THB 40,000
Daytime usage	~60%	~90%
Est. savings / month	~THB 3,240	~THB 32,400

Estimate = bill × daytime share × 0.9 system efficiency. Actual figures follow a site survey.

Extensions that start with a structural check

Most cracks after an extension come from an unchecked existing structure — so we inspect first.



Cracks

Separate surface cracks from structural cracks in beams and columns before work starts.



Foundation

Check existing footings: can they take more load, or is a separate foundation needed?



Settlement

Survey floor and beam levels; detail independent expansion joints between old and new.

SETBACK RULES OWNERS OFTEN MISS

2 m

Minimum setback from the boundary for walls with windows or doors

50 cm

Minimum setback for solid walls (or the neighbour's written consent)

Non-compliant extensions can be suspended or ordered demolished — even after completion and payment. Check before you design.

INDICATIVE BUDGET RANGES	
Kitchen extension Incl. foundation, structure and services	THB 150,000 – 400,000
Bedroom or study Single storey with en-suite bathroom	THB 300,000 – 800,000
Structural repair Foundation strengthening, crack repair	THB 80,000 – 500,000+
Planning ranges only — accurate pricing follows a site survey and BOQ.	

03

Delivery & Engineering

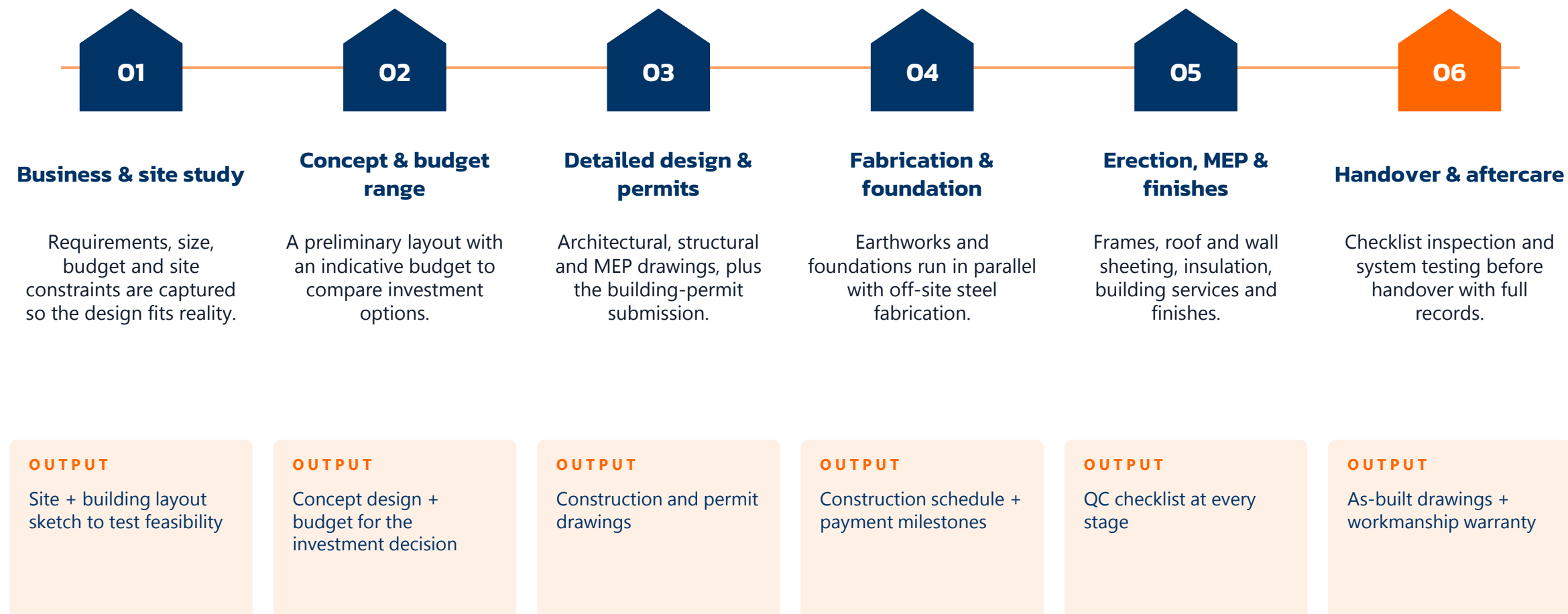
How we deliver

- Six-step process and parallel schedule
- Multi-disciplinary team and standards
- PEB engineering · layout · cost
- Quality and sustainability



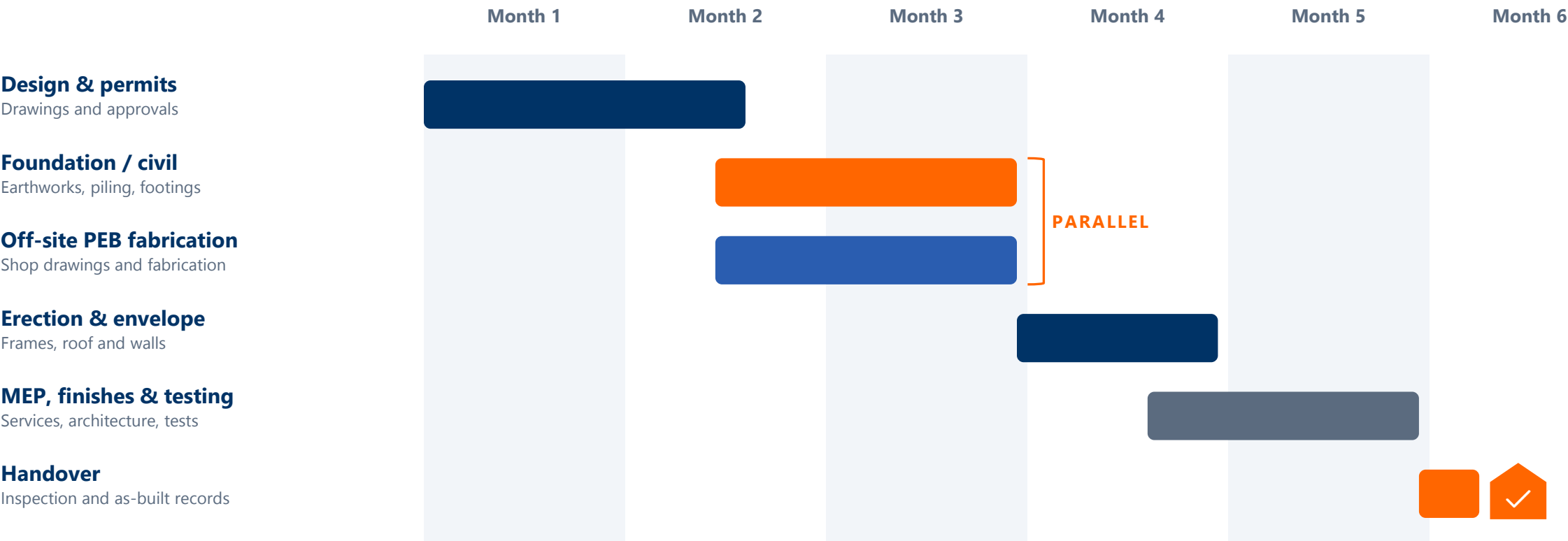
Six steps from business brief to operation

A clear step-by-step process — with a tangible output at every step.



Parallel work protects your opening date

A mid-size warehouse or factory typically takes 4–6 months from design to handover.



 **Real example:** a 20 × 40 m warehouse with a 2-storey office took about 5 months from foundation to handover.

Conceptual sequence — actual duration depends on size, scope, approvals, weather and site conditions.

Five specialist roles on every project

Every project is covered by five disciplines, coordinated from start to finish.



01

Architect

Space planning & design

Plans usable space, building layout and aesthetics around real operations.



02

Structural Engineer

Licensed Professional Engineer

Calculates and certifies structural safety; supervises to engineering standards.



03

MEP Engineer

Building services

Designs and checks electrical, plumbing-sanitary and air-conditioning systems.



04

Quantity Surveyor

BOQ & cost benchmark

Prepares detailed BOQs and price benchmarks to keep the budget accurate.



05

Site Supervisor

On-site quality control

Inspects every stage against drawings and standards before payment.



ENGINEER OF RECORD

Mr. Chaipayat Sangkham

Professional Engineer (Civil)

License No. **สข.11818**

Council of Engineers Thailand · valid to 13 Jun 2031 · coe.or.th

STANDARDS WE WORK TO



EIT codes

Steel and concrete structural design standards



DPT regulations

Ministerial regulations, building codes and zoning

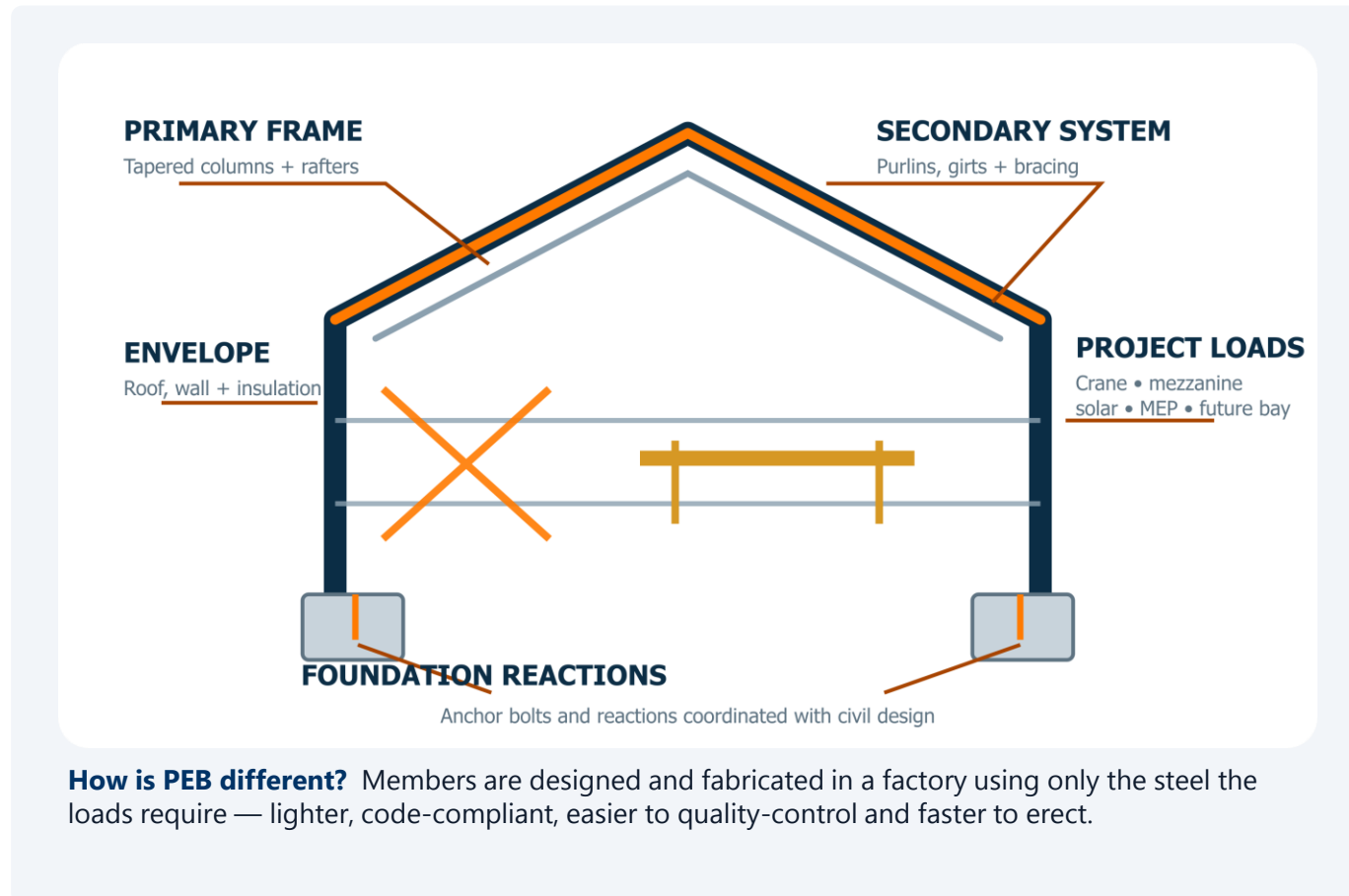


Building Control Act 1979

Permits for construction, extension and alteration

PEB is a coordinated load path

A pre-engineered building is an engineered system — not just a steel package.



01

Primary frame

Tapered columns and rafters follow the actual load path.

02

Secondary system

Frame spacing, purlins, girts and bracing work together.

03

Envelope & erection

Roof, walls, insulation, access and erection sequence are coordinated early.

04

Loads & interfaces

Foundation reactions, cranes, mezzanines, solar, MEP and future bays.

PEB creates value when the system fits

We choose the structural system by span, loads, use, schedule and life cycle — not by habit.



Column-free clear span

Free layout for racking and production lines.



Optimised members

Steel sized to actual loads — no excess weight.



Factory fabrication

Members quality-controlled before reaching site.



Fast bolted erection

Assembled once foundations and access are ready.



Flexible envelope

Roof, walls, insulation and daylight work as one.



Expandable bays

Expansion and service interfaces planned from day one.

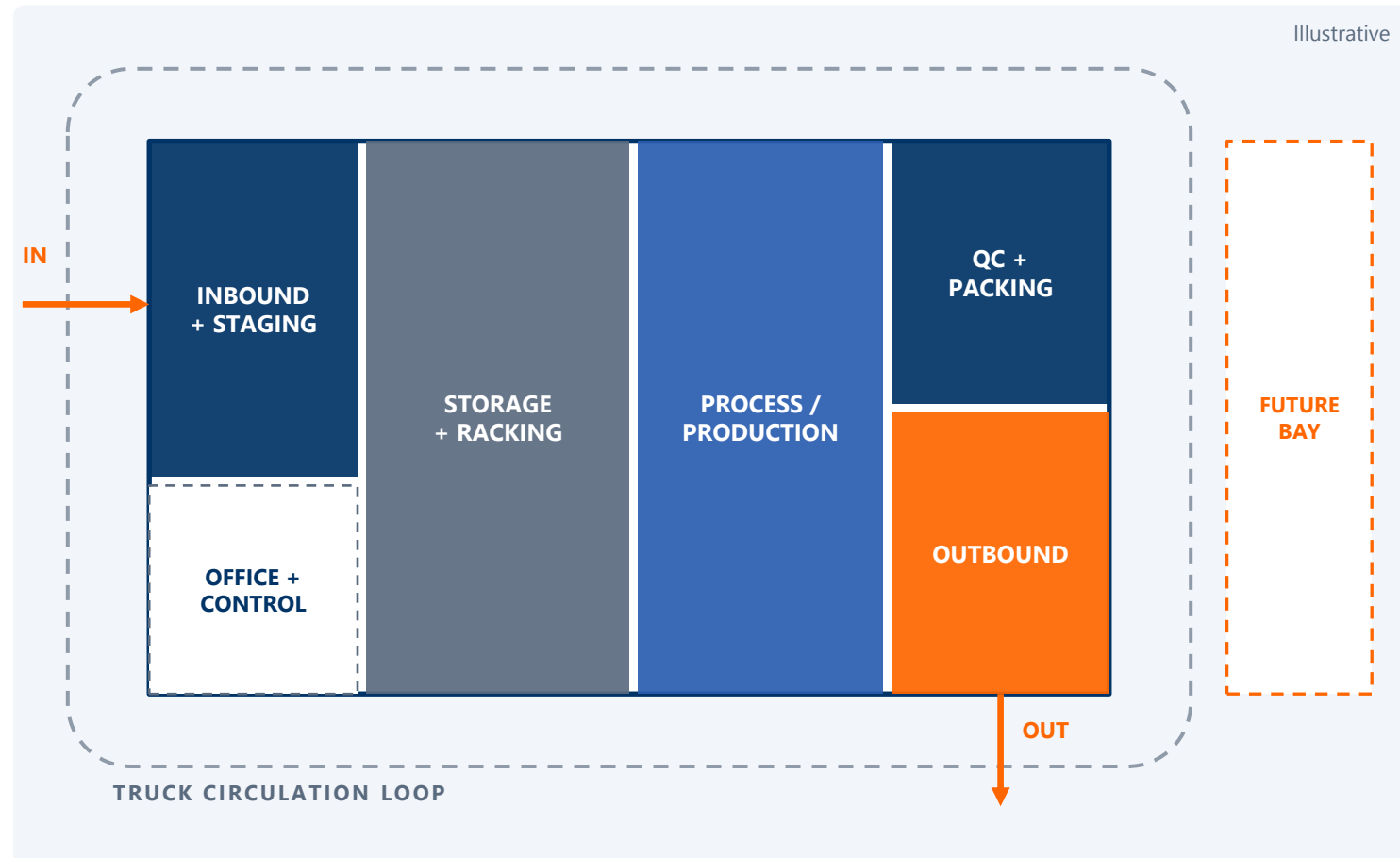


PEB is not the answer for every project.

We compare it with reinforced concrete on span, loads, use, site, schedule and life-cycle cost — see e-book V.4, "PEB vs Concrete".

A building plan starts with the flow of work

Layouts are planned around the movement of goods, people and trucks.



One-way flow

Raw material → production → QC → storage → dispatch.



Separate people and trucks

Fewer conflict points, safer operations.



Drive-through truck yard

Load and leave — no reversing back.



Dock office by the bays

Clear sight of every loading operation.



Future expansion bay

Walls and connections specified from the start.

Cost control starts when scope is visible

Budgets stay on track when scope, specifications and changes are visible — not after the quotation.



Value engineering ≠ cutting spec

Compare options while protecting function, safety and long-term value.



A BOQ makes scope discussable

Clear assumptions and quantities, comparable bids and controlled changes.



Not just price per m²

Budgets depend on function, height, loads and the specifications chosen.

Preliminary Price Estimate

Free online tool with three price tiers — a ±20% budget range before detailed design.

±20%

01

Standard

Best value: all core functions with quality standard materials.

02

Business

A better image, higher-spec materials and long-term flexibility.

03

Premium

Image, technology, indoor comfort and future expansion first.

Inputs: building type · width × length × height · office share · location zone (Greater Bangkok / EEC / regional) · system complexity

Quality is checked at every stage

Every stage and interface is verified before each payment is released.



Foundation & structure
Stage inspection 1

- ✓ Pile and footing level and position match drawings
- ✓ Rebar size and spacing checked before pouring
- ✓ Concrete strength meets spec (test certificates)

Main frame & roof
Stage inspection 2

- ✓ Columns, beams and roof frame level and plumb
- ✓ Welds and bolted connections free of defects
- ✓ Installed materials match the BOQ specification

MEP & finishes
Stage inspection 3

- ✓ Pipes and cables per drawings, tested before ceilings close
- ✓ Waterproofing passes a flood test
- ✓ Payment claims match the work actually done



Energy-efficient and ready to grow

Energy and resource criteria, engineered project by project.



PU insulation + Isowall
Sandwich panels and light-coloured sheeting keep interiors cooler.



Daylight + LED high-bay
Lower lighting energy in work and storage areas.



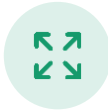
Solar-ready roof
Roof structure checked in advance for PV panels.



Drainage + oil interceptors
Graded yards and perimeter drains; contamination control.



Only the steel you need
Members sized to real loads — less excess material.



Expand without demolition
Bay and service connections planned before detailed design.

Criteria depend on each project's use and specification; no certification or quantified saving is implied.

04

Completed Projects

Selected references

- Portfolio overview
- Five case studies
- On-site gallery
- Conceptual design capability

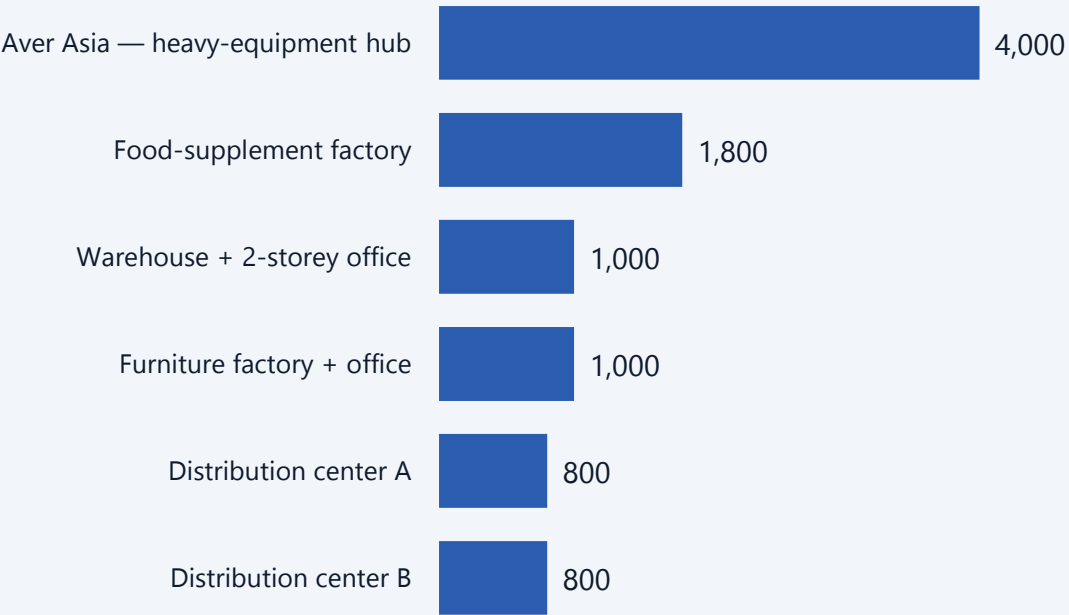


Six references, over 9,000 m² delivered

Completed work across warehousing, manufacturing, distribution and heavy-equipment services.

Project area (m²)

Published areas — Aver Asia combines a 3,500 m² yard + 500 m² workshop



Case 01 · Warehouse + office



Case 02 · Furniture factory



Case 03 · Supplement factory



Case 04 · Distribution center A



Case 04 · Distribution center B



Case 05 · Aver Asia Thailand



Warehouse + 2-storey office

Storage efficiency with a customer-facing front office.

20 × 40 m

Footprint

9 m

Clear height

~1,000 m²

Usable area

~5 months

Foundation →
handover

CHALLENGE

A furniture business needed storage plus a two-storey front office on a narrow plot, with 10-wheel trucks moving all day, separate receiving, storage and dispatch zones, and room to expand.

SOLUTION

- 20 m clear-span PEB frame for flexible racking
- RC slab for racking and forklifts; insulated roof and walls
- Glass facade with steel fins for a modern image
- Structural provision for one more bay at the rear

RESULTS

- Storage capacity matches the plan 100%
- Smoother truck access, shorter loading queues
- Expansion-ready without demolishing the building



Furniture-parts factory + office

Production, stock and administration on one coordinated site.

20 × 40 m

Footprint

8 m

Clear height

~1,000 m²

Usable area

2 storeys

Front office

CHALLENGE

The existing plant had run out of capacity. The owner wanted production, stock and offices on one plot, with a clear flow, less handling and no disruption to logistics.

SOLUTION

- Line layout: receiving → production → QC → storage
- Roller doors and loading separated from pedestrians
- Two-storey front office overlooking production
- Crane-ready PEB frame with room to expand at the rear

RESULTS

- Shorter cycle time through less double-handling
- Orderly storage of materials and finished goods
- Room to grow output without relocating again



Food-supplement factory

More usable, cleaner production space within limited land.

25 × 40 m

Footprint

9 m

+ mezzanine

~1,800 m²

Usable area

+500%

Demand to support

CHALLENGE

Several product lines had to run at once without crossing flows, with space for a QC lab and capacity for demand growth of more than 500% — on a short construction timeline.

SOLUTION

- One-way flow from raw material to finished goods
- Frame ready for added clean rooms without structural change
- Separate routes for people and material trolleys
- Insulation, LED lighting and a solar-ready roof

RESULTS

- Layout makes GMP/HACCP certification easier to pursue
- A clean, modern and "green" factory image
- Layout can change without stopping the main lines



Two PEB distribution centers

Compact DCs shaped around loading speed and truck flow.

25 × 30 m

Each building

9 m

Clear height

~800 m² × 2

Usable area

6-wheel

Trucks along the frontage

CHALLENGE

A fast-growing supplement maker and distributor needed DCs for the next 5–10 years: high racking, day-and-night truck movements and readiness for a future WMS.

SOLUTION

- Wide spans for multiple high-bay racking aisles
- Loading along the full frontage; yard opens to the road
- Light sheeting, PU insulation and Isowall walls
- Solar-ready roof; graded yard with perimeter drains

RESULTS

- Faster loading and shorter average truck waits
- Peak season handled without renting extra space
- Safer work with separated people and truck routes



Aver Asia Thailand

A fast-build, relocatable service facility on leased land.

3,500 m²

Concrete yard

500 m²

Workshop & store

Washing bay

+ oil interceptor

Relocatable

Modular buildings

CHALLENGE

A construction-equipment rental, sales and maintenance business on leased land needed a fast build, a yard for daily heavy loads, good drainage — and facilities that can move when the lease ends.

SOLUTION

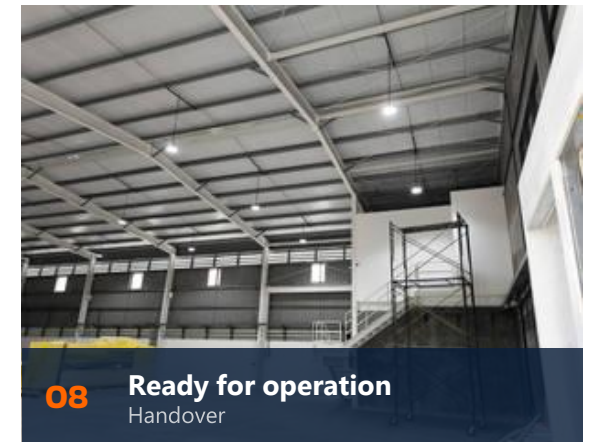
- Industrial concrete yard sized to real equipment loads
- Workshop and store built from demountable containers
- Washing bay with oil interceptor and perimeter drainage
- Demountable roof structure ready for relocation

RESULTS

- Opened quickly with no "build-and-abandon" risk
- Tidy site with controlled wash-water contamination
- Handed over with yard and drainage care guidance

Built on site, step by step

Selected construction photos from delivered projects.



See the building before detailed design

Sample layouts and 3D concepts help owners visualise, compare and decide earlier.

CONCEPTUAL DESIGN — NOT COMPLETED PROJECTS



01 Warehouse 20 × 40 m + front office

- Column-free PEB storage area
- Receiving · storage · dispatch zones
- Two-storey front office



02 Factory with overhead crane

- Raw material → production → finished goods
- Crane bay along the building
- Production-control office at the front



03 Distribution center layout

- 4–6 loading bays for 6–10-wheel trucks
- Sized for high-bay racking
- Loop road — no reversing

 Send your land plan (or a Google Maps screenshot) and target size — we adapt a concept to your site with an indicative budget.

05

Knowledge & Getting Started

Resources and next steps

- Knowledge center: e-books and tools
- Frequently asked questions
- Getting started
- Contact



Better decisions start before the quotation

Free e-books, guides and tools that help owners ask the right questions about budget, timeline and risk.



The 11-volume series (published in Thai): budget & BOQ · timeline · choosing a contractor · PEB vs concrete · permits · warehouse/DC layout · industrial floors · heavy-duty hubs · cold storage · clean rooms · factory offices

TOOLS & GUIDES



Preliminary Price Estimate

Three tiers, ±20% budget range



Solar payback calculator

Quick rooftop-solar payback check



Three full guides

Design+BOQ+QC · Solar · Renovation



Conceptual Design Pack

Warehouse, factory and DC layouts



primebuildplus.com

Read online on any device

Questions owners ask most

Straight answers to the questions owners ask before they build.



How is PEB different from conventional steel?

Members are designed and fabricated in a factory using only the steel the loads require — lighter yet code-compliant, and faster to erect.



How is a warehouse budget estimated?

Not by price per m² alone: function, height, loads and material specifications all drive cost. With basic requirements we give a realistic range.



How long does construction take?

A mid-size warehouse or factory typically takes 4–6 months, depending on size, MEP complexity and local permit conditions.



Do you handle building permits?

Yes. Our team works with municipalities, SAOs and industrial-estate authorities, coordinating to suit the building's use.



Can I hire BOQ or QC only?

Yes — each service can be used on its own, even if your design or contractor comes from elsewhere. Fees follow the scope.

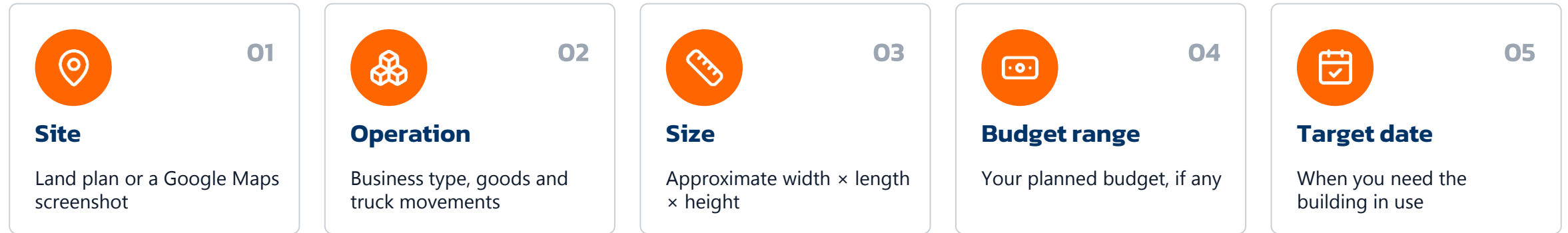


Is a roof check always needed for solar?

Always, before we quote. It is our standard step, and the initial assessment is free of charge.

Starting a project with PRIME BUILD

Five inputs are enough for a first conversation with our engineers.



HOW WE ENGAGE



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START THE CONVERSATION

Talk to an engineer before you build.

Planning a warehouse, factory or distribution center? Share your site, size and timeline — we'll reply with practical next steps.



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SITE · OPERATION · SIZE · BUDGET RANGE · TARGET DATE