AI 工具箱

資料分析及處理

PYRAMID AI

When 10,000 Documents Read and Check Themselves

AI+ Civil Services Technology Forum

Eva Li, Co-founder, Pyramid AI
18 June 2026

Pyramid AI “understands” 80,000+ documents

~4M pages of knowledge

Vision

A smarter way to construct — Where **documents write themselves, compliance is built-in on day one**, and project teams are free from admin work

PYRAMID AI

PYRAMID AI

Founded in 2023 to transform the Architecture, Engineering & Construction (AEC) industry with AI, empowering engineers build it right the first time.

Backed by

HKSTP

HK AI LAB

CityU 香港城市大學 City University of Hong Kong

HK TECH 300

Key clients & partners

Development Bureau
The Government of the Hong Kong Special Administrative Region of the People's Republic of China

CONSTRUCTION INDUSTRY COUNCIL 建造業議會

ESL HONG KONG
LAND, ENGINEERING, AND HYDROGRAPHIC SURVEYORS

asia infrastructure solutions
a GISI Consulting Group company

ACCENTRIX

AI rollout in weeks for GovHK

Development Bureau
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China

Revolutionizing Hong Kong's Construction Industry with AI

Users

500+

engineer users using

Documents

4,000+

Engineering documents embedded in AI

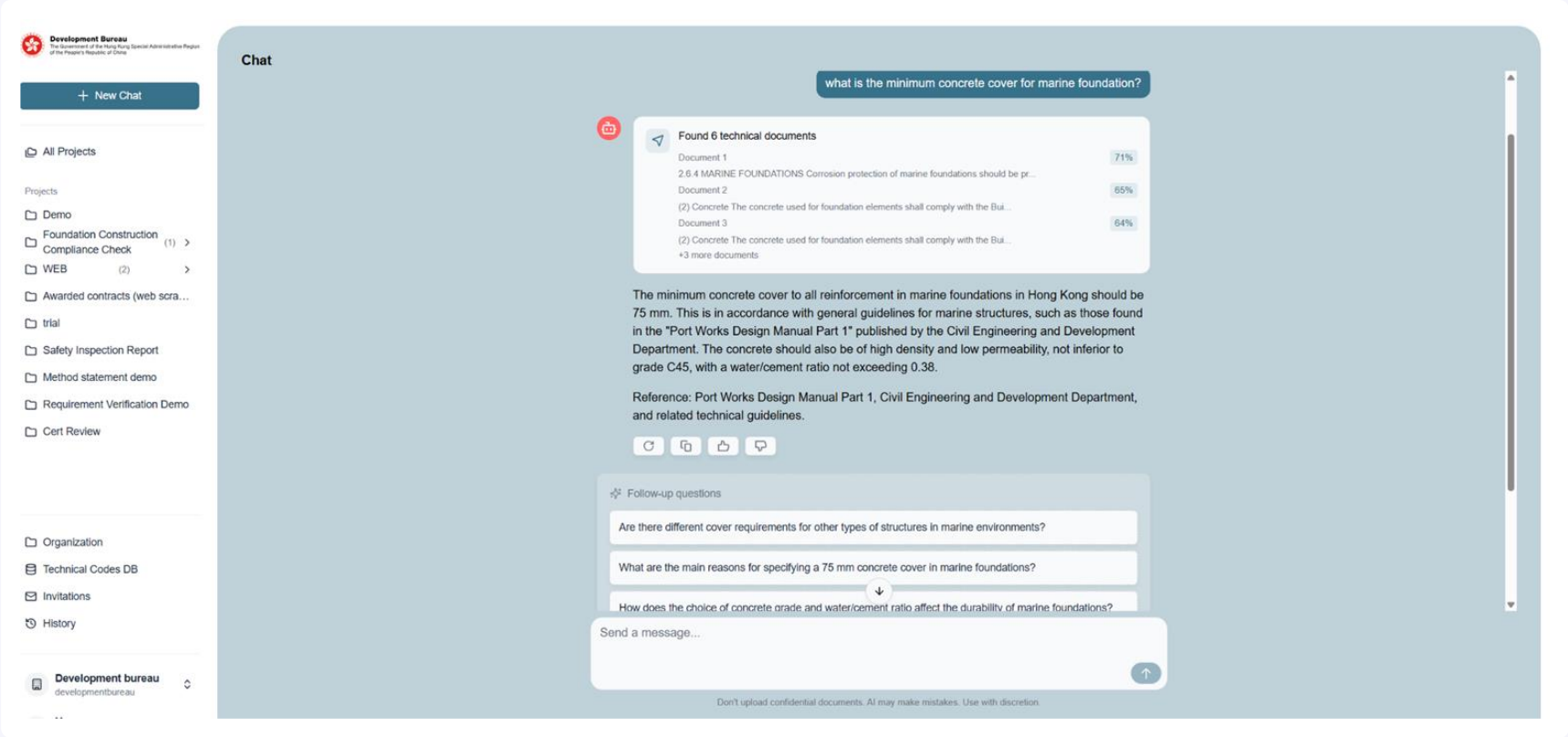
Time-saved

90%+

in retrieving relevant engineering requirements

Customer stories
Revolutionizing Hong Kong's Construction Industry with AI

Engineering AI Agent platform for Development Bureau.



Case Study

PSGO

Development Bureau

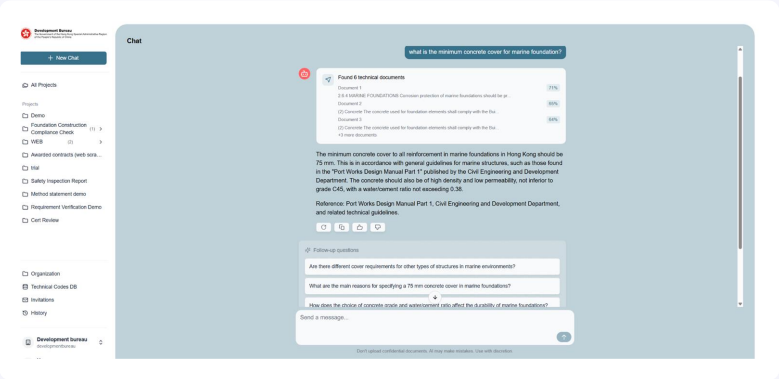
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China

Nov 2025

First working group formed

Dec 2025

Released to team
@devb.gov.hk

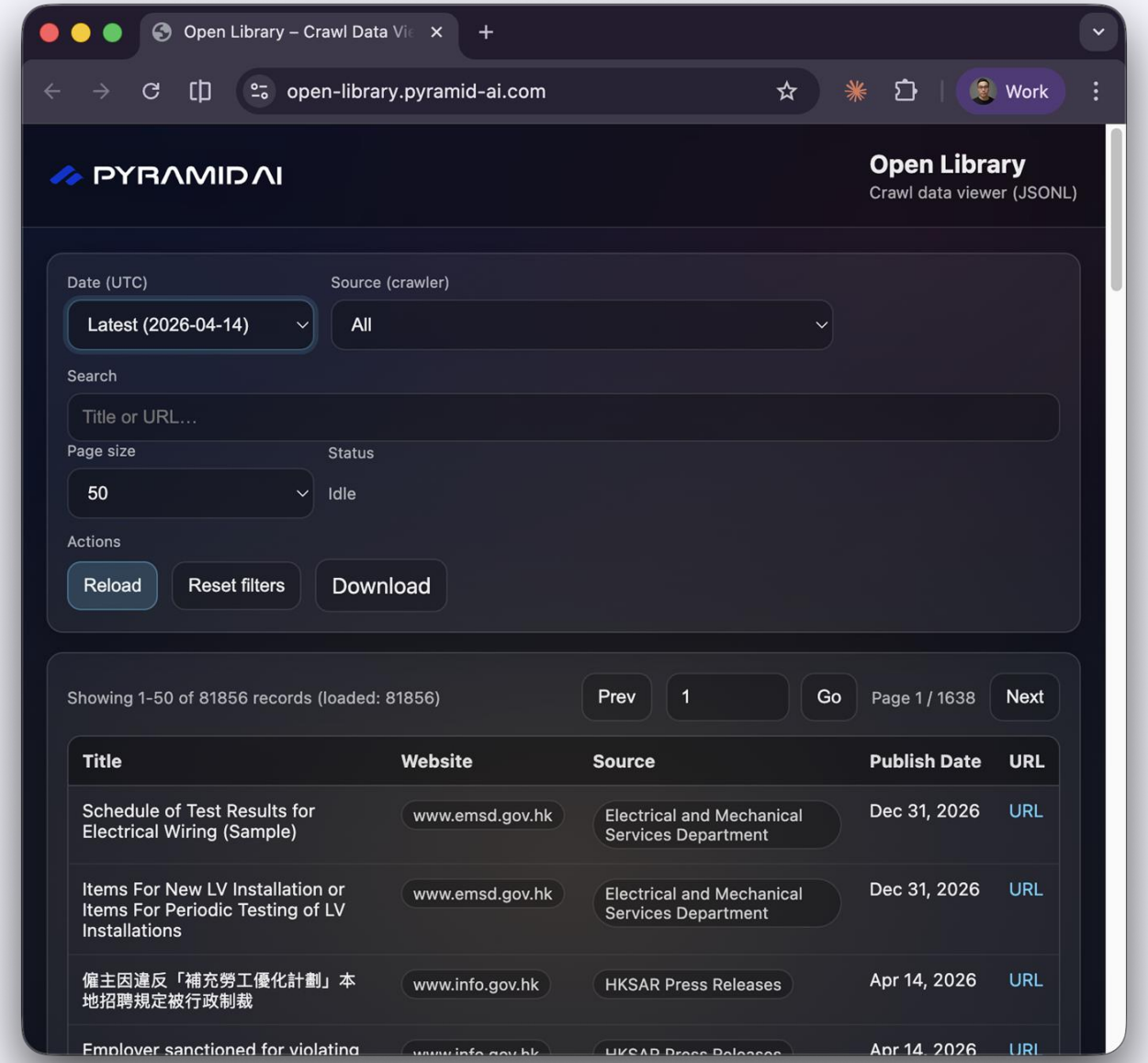


Jan 2026

Released to works branch
@archsd.gov.hk
@cedd.gov.hk
@dsd.gov.hk
@emsd.gov.hk
@epd.gov.hk
@hyd.gov.hk
@wsd.gov.hk

Pyramid Open Library

80,000+ live, daily-updated public industry codes, standards, safety, engineering, and government data, curated by engineers.



OPEN LIBRARY · PUBLIC

Public read-only · daily refresh

The crawled HK construction corpus, open to everyone.

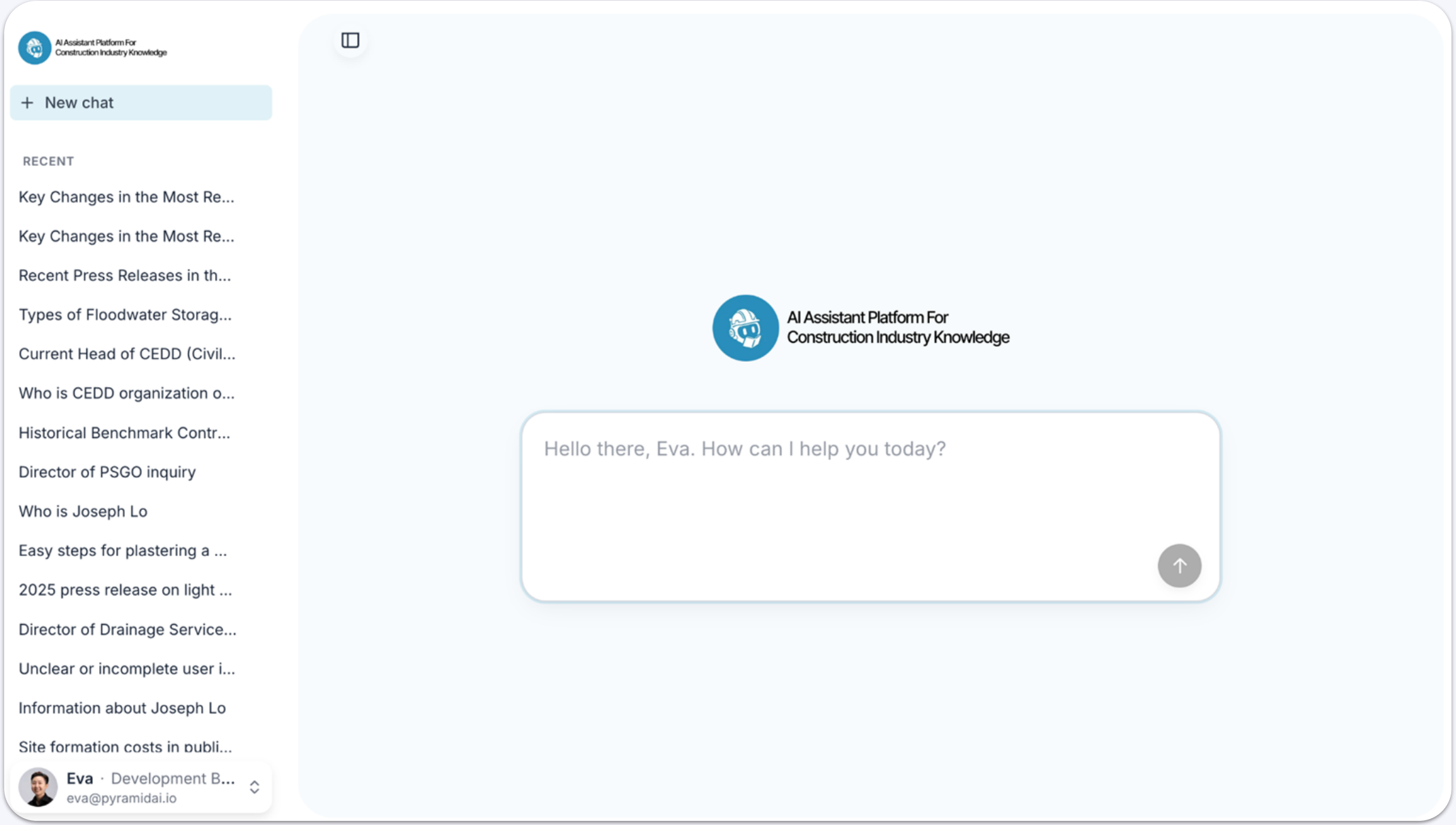
The same engineer-supervised crawler that feeds Check and Ask is mirrored to a public read-only library. Browse, filter and link to every source we ingest — daily-refreshed, attribution-preserved.

82,099	18	24h
RECORDS · ALL SOURCES	HKSAR DEPARTMENTS & BODIES	REFRESH CADENCE

SOURCES · LIVE COUNTS

HKSAR Press Releases	45,114	Telephone Directory	16,026	The Development Bureau	5,718
Legislative Council	5,150	Hong Kong Herbarium	3,348	Environmental Protection Dept	1,924
Civil Engineering & Development	1,464	Building Department	926	Electrical & Mechanical Services	593
Highways Department	351	Labour Department	338	Water Supplies Department	319
Transport Department	255	Architectural Services Dept	184	Drainage Services Department	182
Lands Department	156	Planning Department	31	Fire Services Department	20

New Brand


AI Assistant Platform For Construction Industry Knowledge
New chat
RECENT
Key Changes in the Most Re...
Key Changes in the Most Re...
Recent Press Releases in th...
Types of Floodwater Storag...
Current Head of CEDD (Civil...
Who is CEDD organization o...
Historical Benchmark Contr...
Director of PSGO inquiry
Who is Joseph Lo
Easy steps for plastering a ...
2025 press release on light ...
Director of Drainage Service...
Unclear or incomplete user i...
Information about Joseph Lo
Site formation costs in publi...
Eva · Development B...
eva@pyramidai.io
AI Assistant Platform For Construction Industry Knowledge
Hello there, Eva. How can I help you today?

Latest technical circular mandate & press release

List out all key changes on the most recently published codes, standards, and Technical Circulars.

Answered by **Project Assistant**

Below are the key changes from the most recently published Hong Kong codes, standards, and Technical Circulars:

1. Adoption of Artificial Intelligence (AI) Technology (DEVB TC(W) No. 3/2026)

- **Mandatory AI Adoption:** Requires AI technology in consultancies (pre-tender estimate > $15M) and works contracts (> $30M) invited/tendered on or after 1 June 2026.
- **Scope of AI Applications:** Includes design optimisation (e.g., for foundations and earth retaining structures), automated tender document checking, and information retrieval/reporting from Digital Works Supervision System (DWSS).
- **Baseline Requirements:** Detailed in the "Inventory of Adopting AI in Capital Works Projects," covering generative design, parametric algorithms, automated documentation, and integration with BIM.
- **Data Security:** Compliance with IT security policies and Personal Data (Privacy) Ordinance is required.
- **Exemptions:** Possible on exceptional grounds by a D2 or above officer.
- **Living Document:** The AI Inventory will be updated as technology evolves [1] [2] [4] [3].

Send a message...

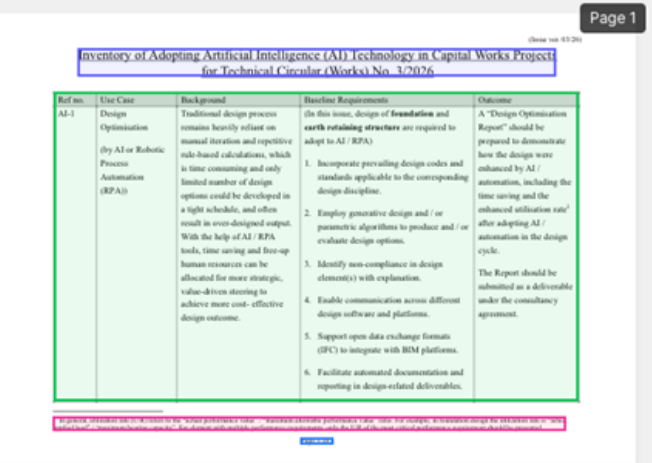
Don't upload confidential documents. AI may make mistakes. Use with discretion.

Back to Sources

Inventory of Adopting Artificial Intelligence (AI) Technology in Capital Works Projects for Technical Circular (Works) No. 3/2026

ID: bf0ea753-1118-4d4c-9a89-8bb21387c74e

Page 1



Page 2

Page 1

Inventory of Adopting Artificial Intelligence (AI) Technology in Capital Works Projects

for Technical Circular (Works) No. 3/2026

Page 1

Ref no.	Use Case	Background	Baseline Requirements	Outcome
AI-1	Design Optimisation (by AI or Robotic Process Automation (RPA))	Traditional design process remains heavily reliant on manual iteration and repetitive rule-based calculations, which is time consuming and only limited number of design options could be developed in a tight schedule, and often result in over-designed output. With the help of AI / RPA tools, time saving and free-up human resources can be allocated for more strategic, value-driven steering to achieve more	(In this issue, design of **foundation** and **earth retaining structure** are required to adopt to AI / RPA) 1. Incorporate prevailing design codes and standards applicable to the corresponding design discipline. 2. Employ generative design and / or parametric algorithms to produce and / or evaluate design options.	A "Design Optimisation Report" should be prepared to demonstrate how the design were enhanced by AI / automation, including the time saving and the enhanced utilisation rate[1] after adopting AI / automation in the design cycle. The Report should be submitted as a deliverable under the consultancy agreement.

Delightful use case

AI Assistant Platform For Construction Industry Knowledge

+ New chat

RECENT

- Permanent Secretary for De...
- 有限空間內行人坡道坡度及中...
- 最新發展局相關新聞更新
- 行車道設計的最小轉彎半徑標...
- 行人坡道的最大允许坡度是多少
- 特定建築類型如學校和長者設...
- Differences in riser height re...
- Bearing Capacity of Catego...
- Concrete Requirements for ...
- Difference Between Propos...
- Latest DEVB Policy Priorities...
- Standard height of a stairca...
- Latest Proposed Penalties a...
- Minimum turning radius req...
- Maximum Gradient Allowed ...
- Bearing Capacity of Catego...
- Concrete requirements for ...

Eva · Development B...
eva@pyramidai.io

Who is the permanent secretary for DevB?

Answered by **Project Assistant**

HK Government Directory (5 candidates)

Ms. LINN Hon Ho, Bernadette, JP
Secretary for Development
2810 3961 sdev@devb.gov.hk

Ms. HO Pui Ling, Doris, JP
Permanent Secretary for Development (Planning & Lands)
3509 8803 pspl@devb.gov.hk

Ms. LO Shan Shan, Sandy
Personal Assistant to Permanent Secretary for Development (Planning & Lands)
3509 7803 pa_pspl@devb.gov.hk

Mrs. CHAN NG Ting Ting, Elina
Deputy Secretary for Development (Planning & Lands)2
3509 8818 dspl_2@devb.gov.hk

Mr. TSANG Chun Man, Frank, JP

Send a message...

Don't upload confidential documents. AI may make mistakes. Use with discretion.

Government Telephone Directory
Telephone Directory of the Government of the HKSAR And Related Organisations

中文 A A A Search by Name Search by Nature of Enquiry Full List

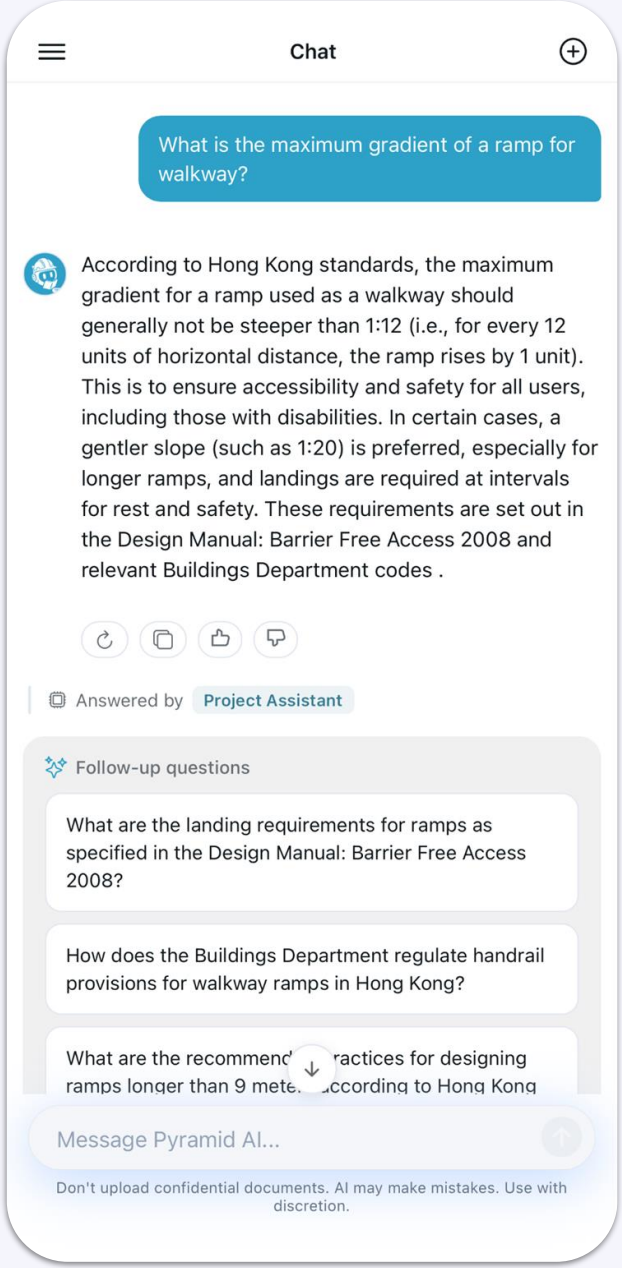
This is a website where you can search for most of the telephone numbers of officers and hotlines in respect of government bureaux / departments and related organisations.

Full Name	Ms. LINN Hon Ho, Bernadette, JP
Post Title	Secretary for Development
Bureau / Department / Related Organisation	Development Bureau
Office Tel	2810 3961
Fax	2151 5303
Email	sdev@devb.gov.hk
Office Address	18/F, West Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong

Remarks:

For those calling from places outside Hong Kong, please dial the area code "852" before the telephone number (not applicable to overseas offices).

Mobile app


Chat
What is the maximum gradient of a ramp for walkway?
According to Hong Kong standards, the maximum gradient for a ramp used as a walkway should generally not be steeper than 1:12 (i.e., for every 12 units of horizontal distance, the ramp rises by 1 unit). This is to ensure accessibility and safety for all users, including those with disabilities. In certain cases, a gentler slope (such as 1:20) is preferred, especially for longer ramps, and landings are required at intervals for rest and safety. These requirements are set out in the Design Manual: Barrier Free Access 2008 and relevant Buildings Department codes .
Answered by Project Assistant
Follow-up questions
What are the landing requirements for ramps as specified in the Design Manual: Barrier Free Access 2008?
How does the Buildings Department regulate handrail provisions for walkway ramps in Hong Kong?
Message Pyramid AI...
Don't upload confidential documents. AI may make mistakes. Use with discretion.

Empower your team

With AI workflow

understands

Specific requirements and organisation standards

checks

any non-compliance in works documents and records

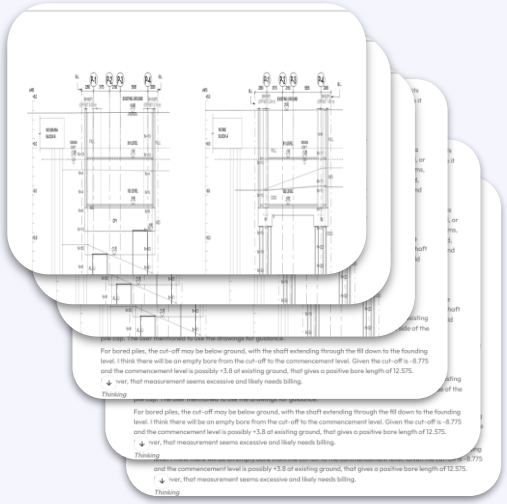
generates

works documents

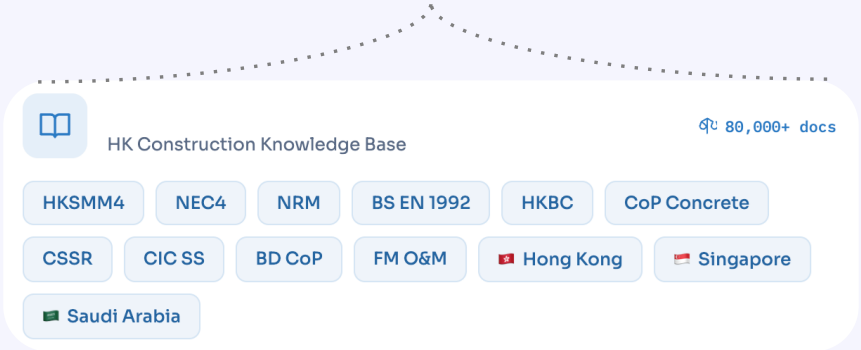
Agentic construction specialists
Catch non-compliance before it becomes risk or dispute

Pyramid AI reads every document and flags non-compliance before you submit, like a tireless expert who never misses a thing.

Upload or connect

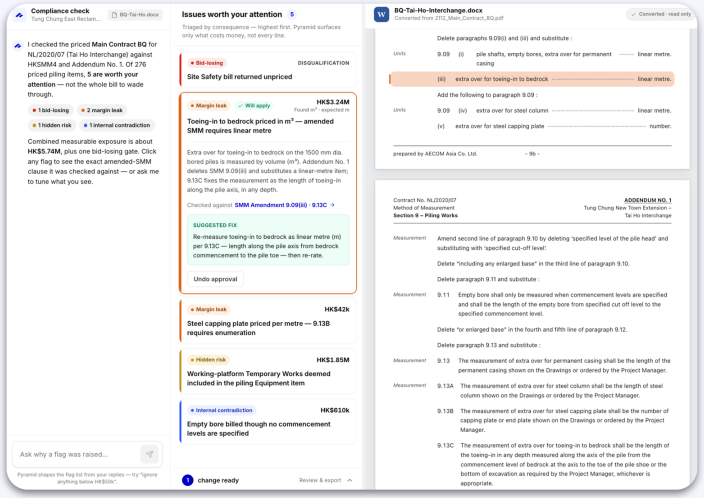


AI



AI

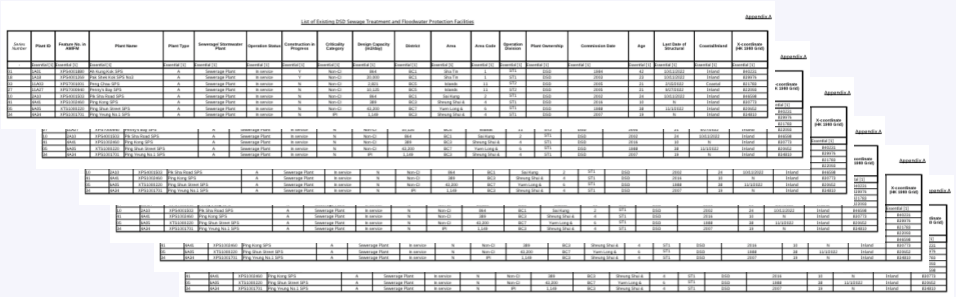
Flag risks & re-draft



What other AI is brewing

AI-powered Asset Management Assistant

3,000+ asset data



Self-checking assets

Return asset condition

Scheduled checking on assets for inspections & assessment

asia infrastructure solutions

AIS is a leader in delivering sustainable design, engineering, project & programme management, cost management, business advisory and consultancy solutions for the infrastructure, buildings and environmental markets.

Compliance Checking for Tree Preservations and Removal Proposal

Documents

500+

Ingested under Pyramid AI engineers supervision

Accuracy

85%+

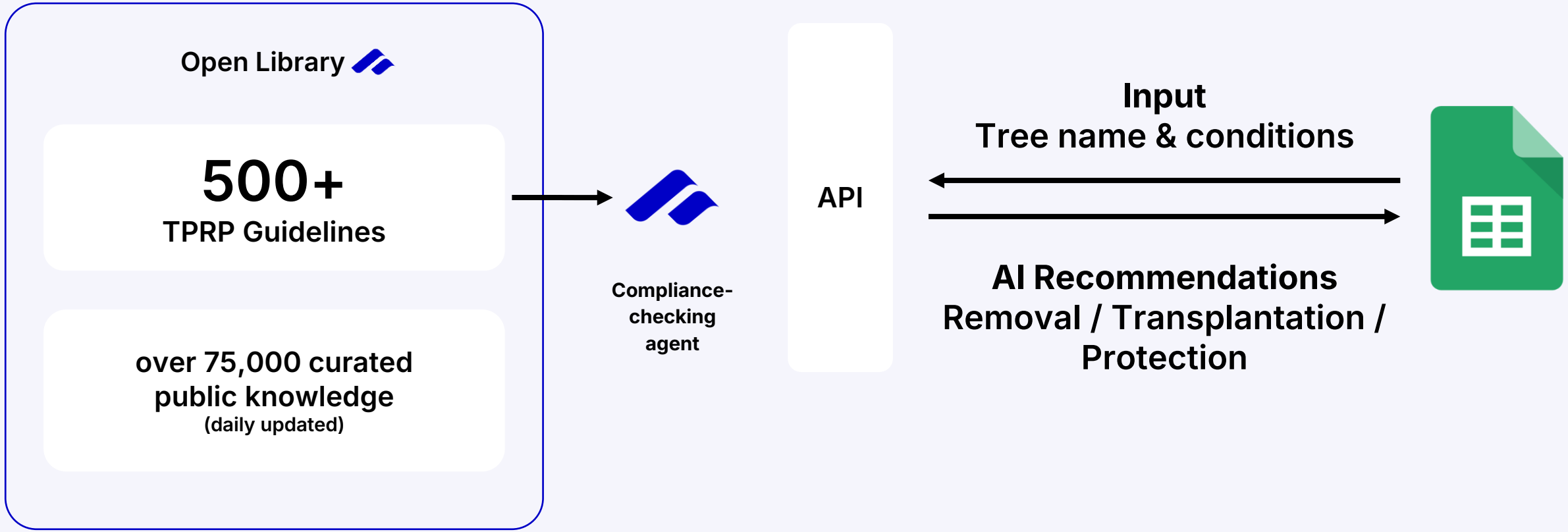
Accuracy of answers retrieved

Time-saved

hrs -> mins

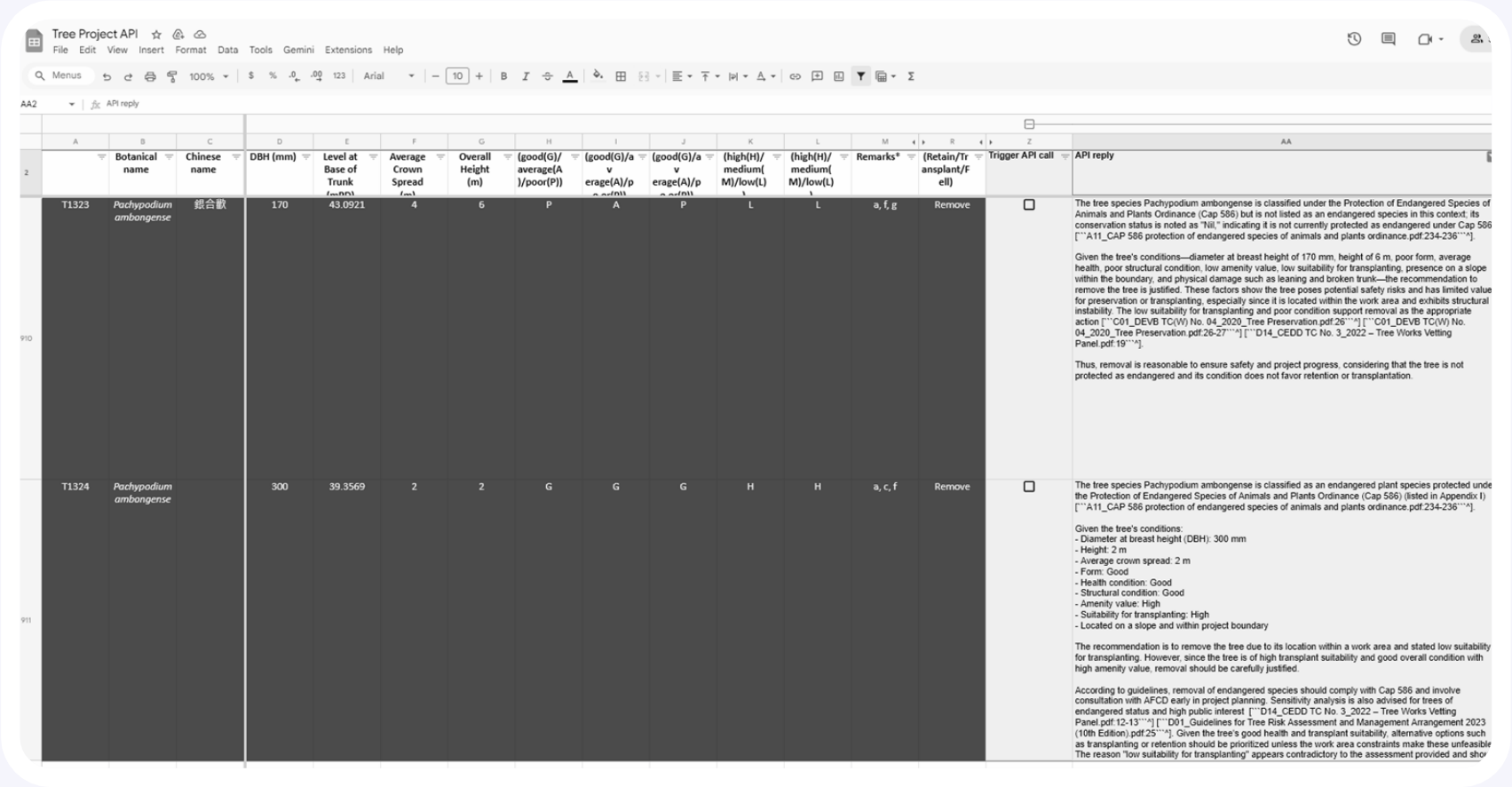
Reduction of time for checking

Compliance Checking for Tree Preservations and Removal Proposal



Compliance Checking for Tree Preservations and Removal Proposal

API connection to the tree assessment schedule (comprising hundreds of trees) allows for automated checking with a single click.



Tree Project API

File Edit View Insert Format Data Tools Gemini Extensions Help

AA2 | API reply

	Botanical name	Chinese name	DBH (mm)	Level at Base of Trunk	Average Crown Spread	Overall Height (m)	(good(G)/average(A)/poor(P))	(good(G)/av erage(A)/p	(good(G)/av erage(A)/p	(high(H)/medium(M)/low(L)	(high(H)/medium(M)/low(L)	Remarks*	(Retain/Transplant/Fell)	Trigger API call	API reply
T1323	*Pachypodium ambongense*	銀合歡	170	43.0921	4	6	P	A	P	L	L	a, f, g	Remove	☐	The tree species Pachypodium ambongense is classified under the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586) but is not listed as an endangered species in this context; its conservation status is noted as "Nil," indicating it is not currently protected as endangered under Cap 586 [```A11_CAP 586 protection of endangered species of animals and plants ordinance.pdf:234-236```^]. Given the tree's conditions—diameter at breast height of 170 mm, height of 6 m, poor form, average health, poor structural condition, low amenity value, low suitability for transplanting, presence on a slope within the boundary, and physical damage such as leaning and broken trunk—the recommendation to remove the tree is justified. These factors show the tree poses potential safety risks and has limited value for preservation or transplanting, especially since it is located within the work area and exhibits structural instability. The low suitability for transplanting and poor condition support removal as the appropriate action [```C01_DEVB TC(W) No. 04_2020_Tree Preservation.pdf:26```^] [```C01_DEVB TC(W) No. 04_2020_Tree Preservation.pdf:26-27```^] [```D14_CEDD TC No. 3_2022 – Tree Works Vetting Panel.pdf:19```^]. Thus, removal is reasonable to ensure safety and project progress, considering that the tree is not protected as endangered and its condition does not favor retention or transplantation.
T1324	*Pachypodium ambongense*		300	39.3569	2	2	G	G	G	H	H	a, c, f	Remove	☐	The tree species Pachypodium ambongense is classified as an endangered plant species protected unde the Protection of Endangered Species of Animals and Plants Ordinance (Cap 586) (listed in Appendix I) [```A11_CAP 586 protection of endangered species of animals and plants ordinance.pdf:234-236```^]. Given the tree's conditions: - Diameter at breast height (DBH): 300 mm - Height: 2 m - Average crown spread: 2 m - Form: Good - Health condition: Good - Structural condition: Good - Amenity value: High - Suitability for transplanting: High - Located on a slope and within project boundary The recommendation is to remove the tree due to its location within a work area and stated low suitability for transplanting. However, since the tree is of high transplant suitability and good overall condition with high amenity value, removal should be carefully justified. According to guidelines, removal of endangered species should comply with Cap 586 and involve consultation with AFCD early in project planning. Sensitivity analysis is also advised for trees of endangered status and high public interest [```D14_CEDD TC No. 3_2022 – Tree Works Vetting Panel.pdf:12-13```^] [```D01_Guidelines for Tree Risk Assessment and Management Arrangement 2023 (10th Edition).pdf:25```^]. Given the tree's good health and transplant suitability, alternative options such as transplanting or retention should be prioritized unless the work area constraints make these unfeasible. The reason "low suitability for transplanting" appears contradictory to the assessment provided and show

Automated Condition Survey Report Agent

Report with executive summary, analysed image of the potential issues highlighted.

PYRAMID AI

STRUCTURAL SURVEY REPORT: Podium Substructure

Location:

Project: Podium Structure Survey

Date: December 19, 2025

Reference ID: AMC-XXXXX

1. EXECUTIVE SUMMARY

This report details the findings of a structural condition survey of the podium substructure at the XXX. The inspection focused on the reinforced concrete support system located within the marine splash zone. The survey identifies significant progressive deterioration characterized by chloride-induced corrosion, longitudinal cracking, and concrete spalling. Immediate remedial action is recommended for critical zones to maintain structural integrity.

2. DAMAGE VISUALIZATION

Compliance Checking for Tree Preservations and Removal Proposal

ESL HONG KONG
LAND, ENGINEERING AND HYDROGRAPHIC SURVEYORS

Input
raw survey imagery

Condition Survey Report Agent

Result
structural risks & quantitative analysis

Repair estimation

Automated Condition Survey Report Agent

Generates a condition report with quantitative analysis and recommendations.

PYRAMIDAI

3. QUANTITATIVE ANALYSIS

Based on a reference column width of 400mm, the following damages have been quantified:

Criteria	Visual Marker	Quantity	Severity
Total Crack Length	Blue Lines	**4.50 Linear Meters**	**High**
Missing Plaster/Render	Yellow Zones	**0.75 sq/m**	Moderate
Potential Issue Areas	Orange Zones	**1.95 sq/m**	**Critical**

4. DETAILED FINDINGS

- **Cracking (Blue):** Approximately 4.5m of longitudinal cracking is present. This is a primary indicator of "concrete bursting" caused by the expansion of internal rusted rebar. These are most prevalent at the diagonal bracing nodes.
- **Surface Failure (Yellow):** 0.75 sq/m of protective render has detached. While currently a surface issue, this allows saltwater to penetrate the porous structural concrete more rapidly.
- **Corrosion Zones (Orange):** 1.95 sq/m of "Potential Issue" areas show heavy rust staining. These areas likely contain delaminated concrete (hollow zones) that require removal and patching.

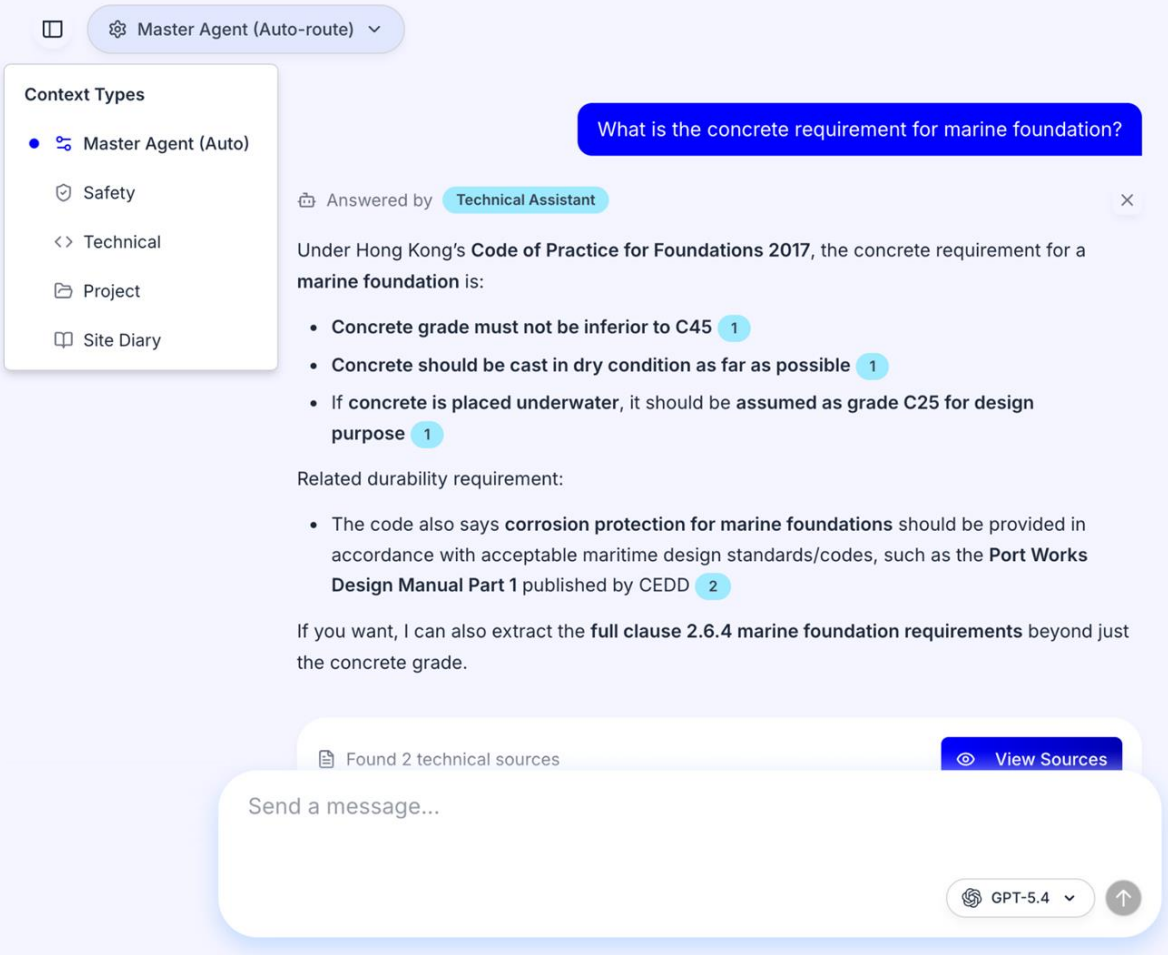
5. RECOMMENDATIONS

1. **Immediate:** Conduct a hammer-sounding survey to identify the full extent of delamination in the "Orange" zones.
2. **Short Term:** Clean exposed rebar to bright metal and apply a zinc-rich anti-corrosion primer.
3. **Long Term:** Apply marine-grade high-strength repair mortar and consider a silane-based water repellent coating or a Cathodic Protection system to arrest future salt-ingress.

What else can AI do for me?

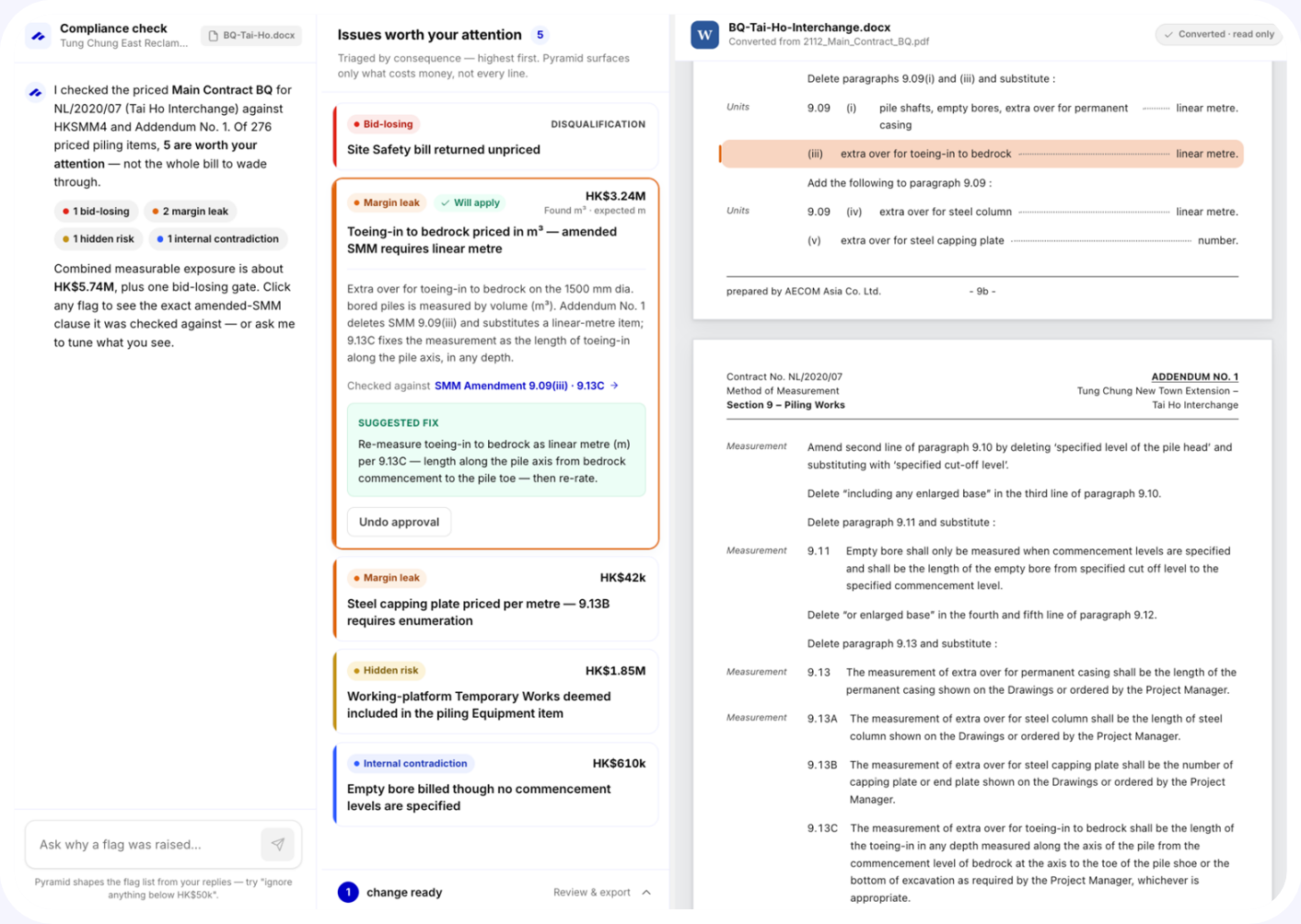
Ask
Get answers about your project with references

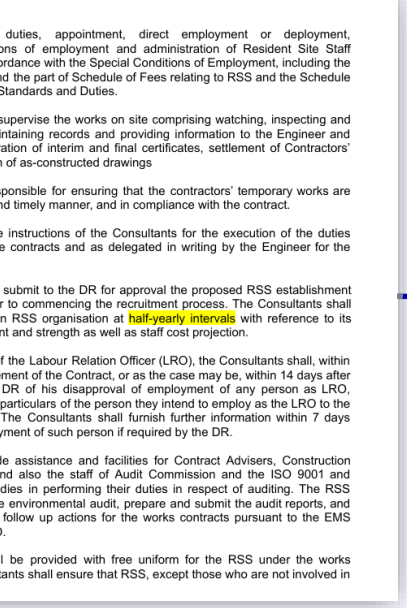
Every answer is grounded in your documents



Check
Catch non-compliance before it becomes risk or dispute

Review tenders, requirement specifications & construction documents

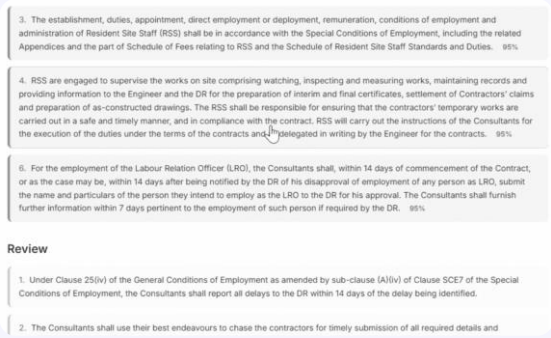




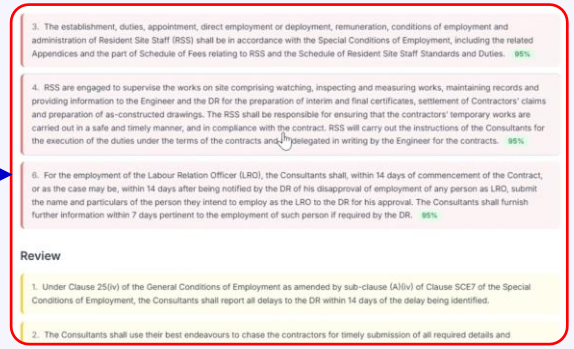
Your tender

hundreds of pages

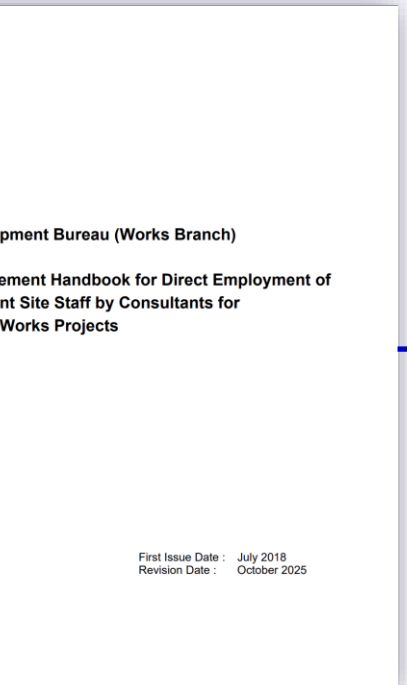
AI



AI



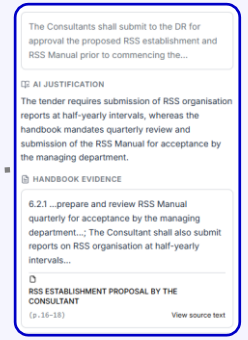
Reads your documents and retrieves the exact codes, standards, and clauses that govern this specific project.



Governing corpus

80,000+ codes

AI



Reasons like an engineer — then re-checks its own work before surfacing a flag, so only what survives reaches you. Returns the five flags that matter, each with a confidence score, justification, and cited source.

Construction Engineer check the certificate, design and layout

Certificates Checking Agent

Choose file No file chosen

Check Compliance

Compliance Report

Certificate is issued by an accredited laboratory: Compliant

Laboratory 'NUTEK SYSTEMS, LTD.' is on the accredited list.

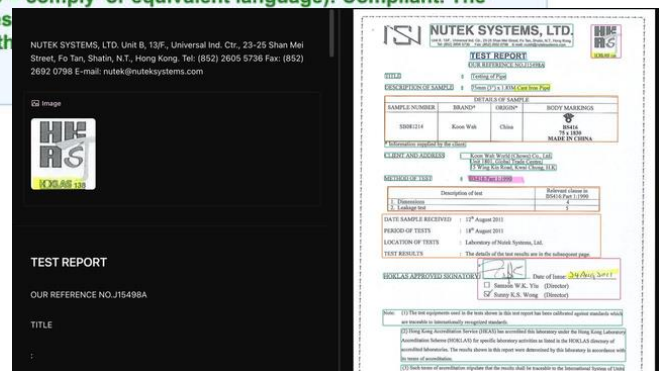
Compliance check on required criteria in the certificate/document:

- The standards required for compliance are clearly stated (e.g., BS or EN standards): Compliant. The BS416:Part 1:1990 standard is explicitly stated as the standard used.

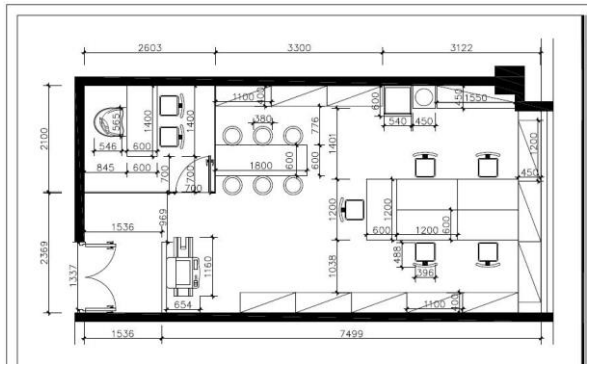
- Date of issue and validity period for the certificate are present and valid (not expired): Non-Compliant. Date of issue is stated, but the validity period is not provided. A certificate should generally include the duration of validity or an expiry date.

- Information about the testing materials and/or criteria of compliance is included: Compliant. Details about the tested pipe are provided, including its size and origin. The testing methods (Dimensions, Leakage test) are clearly documented with corresponding clauses of the standards.

- The certificate explicitly states that the material complies with the standards (e.g., 'C = comply' or equivalent language): Compliant. The document includes (C/NC)', meaning th



Design and Layout Checking Agents



MOE CALCULATION REPORT dwg_set_1.pdf — preliminary MOE assess...

18	1	750	750	4–30 persons
PERSONS	EXITS	MM/DOOR	MM TOTAL	B2 BAND

Hong Kong

Preliminary MOE sizing for the office suite falls within the Table B2 4–30 persons band: 1 exit door minimum, 750 mm minimum door width, and 1050 mm minimum exit route width.

Sizing | Checks | Assumptions | Citations

Assessment unit	Fire Compartment
Use classification	Use Classification 4a – general office
Occupancy factor basis	Table B1 office basis: 9 m²/person adopted for general office / board room / conference / other office areas
Usable floor area	160.3 m²
Seats	0
Bedspaces	0
Occupant capacity	**18 persons**
Min. exit doors / routes	1
Min. width — each door	≥ 750 mm
Min. width — each route	≥ 1050 mm
Min. total door width	≥ 750 mm
Min. total route width	≥ 1050 mm

Show preliminary-only limitation

Open MOE Case

Checking compliance against FSD Means of Escape requirement

Checking compliance against FSD FS installation requirement

FS TAKE-OFF REPORT Office layout preliminary FS take-off

Updated preliminary HKFSD take-off based on your confirmed sprinkler criteria for the Viking VK3021 standard coverage pendent head: maximum spacing 15 ft (4.6 m) between sprinklers, maximum coverage 225 ft² (20.6 m²) per sprinkler, minimum spacing 6 ft (1.8 m), maximum distance from wall generally 7.5 ft, and minimum distance from wall 102 mm. The office has a ceiling void requiring above-ceiling devices, and partitions extend full height to slab, so above-ceiling sprinklers and detectors are mirrored by room/compartment. Fire hose reel and break-glass MCP allowance remains based on HK COPN Clause 5.14 for hose reel reach and MCP near hose reel, together with Clause 5.11 for MCP placement adjacent to exits within 2 m. Using the confirmed sprinkler spacing/coverage data, the open-office sprinkler count reduces from the earlier conservative allowance.

26	18	1	1	7	160
SPRINKLERS	DETECTORS	FHR	MCP	ROOMS	M²

Hong Kong

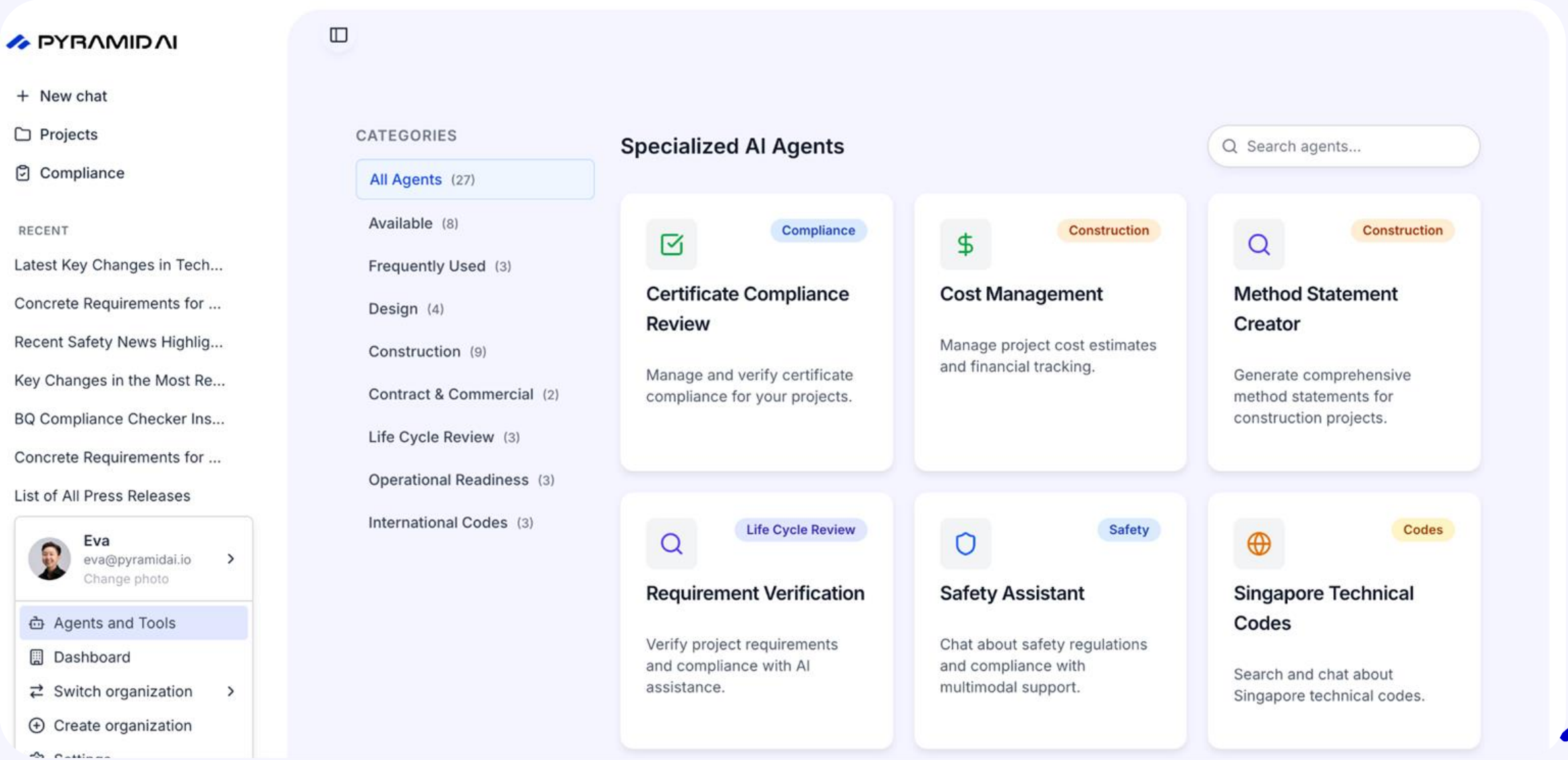
Rooms | Summary | Density | Assumptions | Follow-Up

SPACE	M²	SPR BLW	SPR VOID	DET BLW	DET VOID	FHR	MCP
Manager office Single enclosed room; area well below 20.6 m² maximum coverage. · 1 sprinkler remains acceptable subject to final reflected ceiling / obstruction check.	9	1	1	1	1	0	0
Large meeting room Room exceeds 20.6 m² per head, so minimum 2 sprinklers required. · Two heads assumed arranged along the longer room dimension within 4.6 m max spacing.	24	2	2	1	1	0	0
General office including printing area and internal circulation Open office treated as one main compartment including printing niche and circulation; sprinkler layout assumed as an approximate 3 x 2 distribution adjusted to suit the irregular plan. · Updated from 8 to 6 sprinklers using the confirmed 225 ft²/head and 15 ft spacing limit. Final RCP / bulkhead / duct / beam coordination may still shift exact locations or increase count if obstructions occur.	85	6	6	3	3	0	0
Small meeting room Single enclosed room; area below maximum coverage per sprinkler. · 1 sprinkler remains acceptable subject to final room geometry check.	12	1	1	1	1	0	0
Server room Small enclosed IT room. · Enhanced detection / special suppression may still be required depending on final IT risk criteria.	7	1	1	1	1	0	0
Wet pantry No commercial cooking hazard assumed. · Detector likely to be heat type at final design stage rather than smoke, subject to fire alarm strategy.	12	1	1	1	1	0	0
Waiting area / main entrance lobby Entrance zone used for tenancy hose reel and MCP allocation. · 1 hose reel and 1 MCP retained	12	1	1	1	1	1	1

Show preliminary-only limitation

Open FS Take-off Case

Agents
Construction specific agents



Beyond checking, AI further GENERATES compliant works document for your team

PYRAMID AI

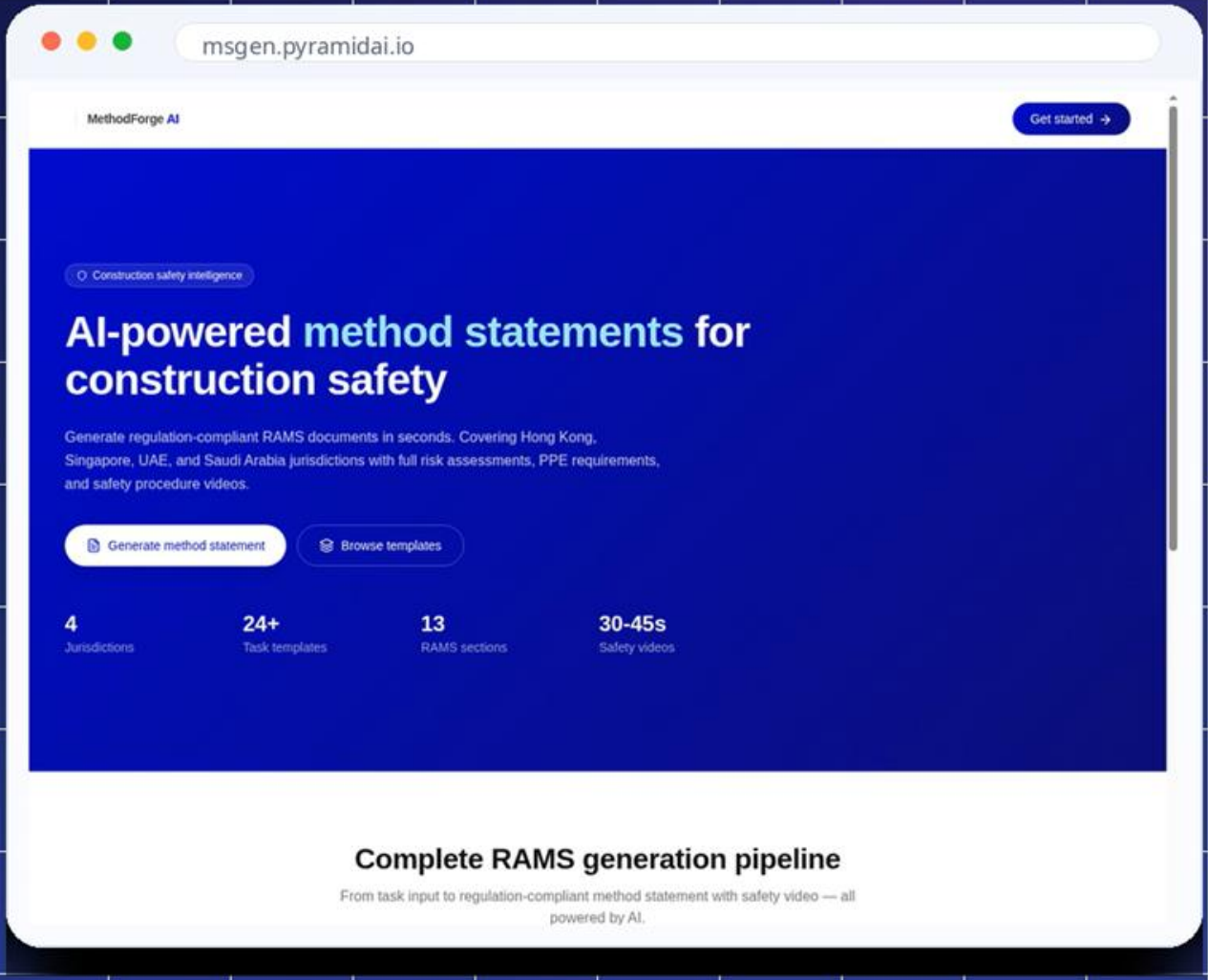
msgen.pyramidai.io

MethodForge AI

AI-powered method statement generation

Built for Hong Kong construction teams
msgen.pyramidai.io

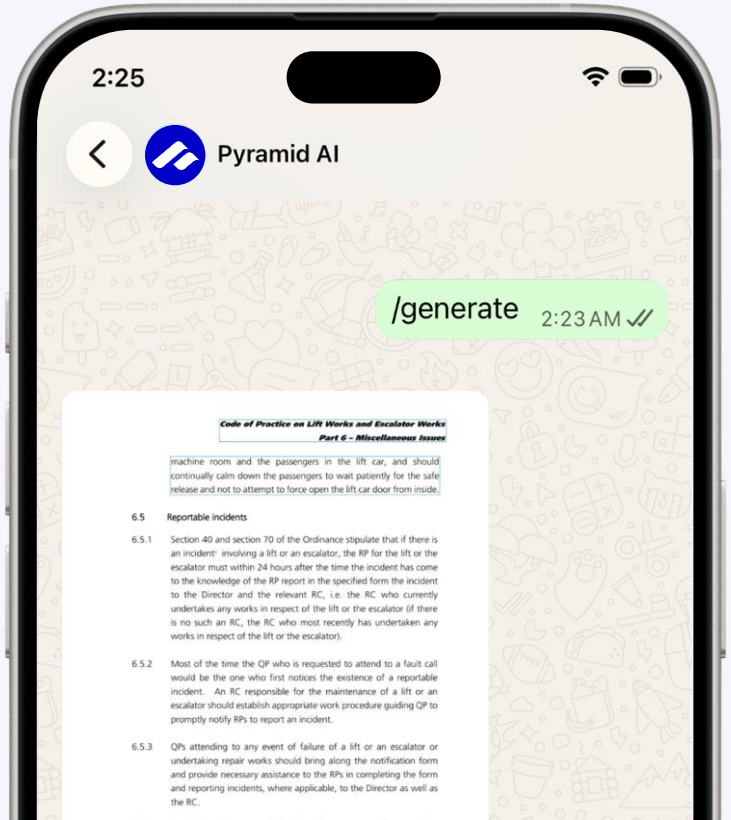
Hong Kong | RAMS | AI Workflow



toolbox-talk generator

Enhancing workforce safety knowledge with ease.

Safety officers



Toolbox Talks

Preventing Struck-by Object Incidents

This topic is chosen due to the medium risk associated with unstable stacking of metal rods and planks can lead to serious injuries if they fall or move unexpectedly.

Key Points:

- Unstable stacking of metal rods and planks can lead to falling objects.
- Falling objects pose a risk of injury to workers below.
- Improper securing of materials increases the risk of movement and accidents.

Safety Procedures:

- Ensure all materials are stacked in a stable manner.
- Use appropriate securing devices like straps or nets to prevent movement.
- Regularly inspect stacked materials for stability and adjust as necessary.
- Train workers on proper stacking techniques and the importance of securing materials.

Preventing struck-by object incidents is crucial for worker safety. By ensuring stable stacking and prope of materials, we can significantly reduce the risk of injuries from falling objects. Regular inspections and are key to maintaining a safe work environment.

Enhancing Barrier Stability

This topic addresses the medium risk of inadequate temporary barriers, which may fail to protect agains elements or debris, posing a safety risk to workers.

Key Points:

- Temporary barriers may be too lightweight to withstand external forces.
- Inadequate barriers can lead to debris entering work areas, risking injury.
- Regular checks are necessary to ensure barrier stability and effectiveness.

Safety Procedures:

- Reinforce barriers with more robust materials to ensure stability.
- Conduct regular inspections to check the integrity and stability of barriers.
- Ensure barriers are properly anchored to withstand wind and other forces.
- Educate workers on the importance of maintaining barrier integrity.

Enhancing barrier stability is essential to protect workers from external elements and debris. By reinforc barriers and conducting regular inspections, we can ensure a safer work environment. Proper anchorin worker education are vital components of this safety measure.

Your department has a version of this.

Drainage Services Department

Finding relevant technical information instantly across thousands of documents

Hospital Authority

Auditing documents against occupational safety & health regulations

Labour Department

Checking form submissions and running analysis at scale

Early conversations. Different domains. **The pattern is identical** — too much knowledge, too little time, too much at stake to get it wrong.

Deployment

Two ways to roll out - works in parallel

Ready

Deploy in days

Publicly available documents (e.g. policy, regulations)

Get internal user feedback. Perfect the workflow with quick iterations

Successfully deployed

DCI / on-prem

Sensitive documents

Protected confidential data

Empower your team with AI that reads, checks, and clears documents on its own

chat with eva@pyramid-ai.com