香港工程裝飾商會
Hong Kong Decoration & Engineering Association

Reinforcing Safety on Repair, Maintenance, Alteration and Addition (RMAA) Works

提升裝飾及維修工作安全

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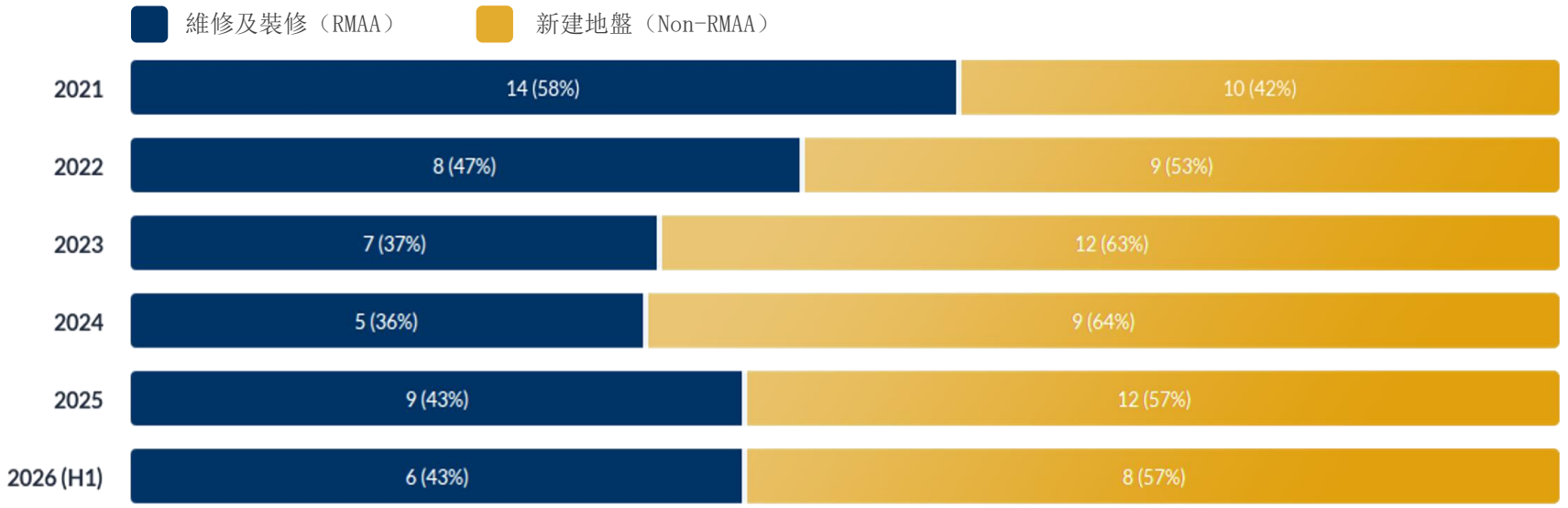
30+ 年 RMAA 工程經驗：秉持「 生命第一，安全至上 」

30+ years in RMAA. Guided by "Life First, Safety Foremost"

01 RMAA與非RMAA致命意外對比

RMAA vs. Non-RMAA Fatal Accident Comparison



	致命總數	RMAA 佔比趨勢
2021	24 宗	58%
2022	17 宗	47% （↑9%）
2023	19 宗	37% （↓10%）
2024	14 宗	36% （↓1%）
2025	21 宗	43% （↑7%）
2026 (H1)	14 宗	43% （–）

2025年（截止12月31日）與 2026年（截止6月30日）主要事故成因

Major Accident Causes between 2025-2026

- 4宗人體從高處墮下，比起2025年1宗 多3宗 (Fall from Height)
- 5宗火警燒傷 (Fire/Burn – 2025 宏福苑事故)
- 2025及2026年各1宗遭墜下物件擊中(Struck by falling objects)

分析觀察

Strategic Observations

儘管 RMAA 規模較小，但致命人數連年佔建造業約 40% – 53% (5年19宗個案，平均 44%)。2025年因火警意外導致傷亡激增；2026年僅上半年人體從高處墜下數字顯著增加，凸顯裝修工程安全監管亟需加強。

RMAA consistently accounts for 40-53% of fatalities. The 2025 surge highlights a critical need for tighter maintenance safety oversight.

資料來源：勞工處

02 安全的重要性
The Importance of Safety

裝飾及維修行業是高風險行業，每一宗意外背後，都是可預防的疏忽
RMAA is a high-risk industry; behind every incident lies a preventable oversight.

離地工作
Fall Prevention

- 使用合格安全帶與獨立繫穩點
- 搭建合規工作平台與護欄

- Certified safety harnesses & anchor points
- Proper working platforms & guardrails

高空墮物
Falling Objects

- 進入工地必須正確佩戴安全帽
- 設置防墜網與踢腳板

- Always wear safety helmets properly
- Set up debris netting & toe-boards

電力安全
Electrical Safety

- 嚴格執行「上鎖掛牌」斷電程序
- 定期檢查電線並加裝斷路器

- Certified safety harnesses & anchor points
- Proper working platforms &
- guardrails

粉塵質防護
Hazardous Substances

- 吸入粉塵化學品可導致職業病
- 配戴合規格防塵及防護口罩

- Dust & chemical risks cause diseases
- Wear appropriate respirators & masks

03 RMAA工程現狀與管理挑戰
RMAA Status & Management Challenges

RMAA 高風險工程特徵
High-Risk Features of RMAA Works

分散且工期短
工地數量龐大，作業地點頻繁轉移。

Scattered & Short Duration: Large number of sites, frequent relocation.

高空離地作業多
大量涉及外牆吊棚、流動工作台及高處施工。

Frequent Work-at-Height: Involves external scaffolds & elevated platforms.

多工種交叉作業
空間狹小，電氣、打磨、油漆等多工種同時施工。

Multi-trade Cross-working: Confined space with simultaneous works.

RMAA核心監管挑戰
Core Regulatory Challenges of RMAA

前線安全意識參差
工友習慣依賴經驗，輕視違規危害。

Varying Safety Awareness: Workers rely on experience and ignore risks.

分判商管理斷層
安全指令無法有效貫徹至前線人員。

Subcontractor Management Gap: Safety instructions fail to reach end frontliners.

04 管理層在安全中的角色
Management's Role in Safety

由上而下建立安全文化
Build a safety culture from top to bottom

資源保障
Resource Assurance

確保足夠安全預算，主動引進先進安全裝備。

Ensure sufficient safety budget and proactively introduce advanced safety equipment.

制度落實
Policy Implementation

推行嚴格的分判商安全審查機制與獎懲制度。

Enforce strict subcontractor safety vetting mechanisms and reward/penalty systems.

科技應用
Technology Empowerment

積極採納 CIC 推薦之智慧安全工地系統（4S）。

Proactively adopt the Smart Site Safety System (4S) recommended by CIC.

05 核心升級方向 CORE STRATEGY

結合 CIC 推行「 4S安全智慧工地系統」

Key Directions in Implementing CIC Safety 4S

全面導入智慧安全工地系統（Smart Site Safety System）
實現實時動態風險監控

Comprehensively implement Smart Site Safety System (4S)
to achieve real-time dynamic risk monitoring.

06 結合 CIC 推行 4S 在大型裝修維修應用

4 Major Applications of CIC 4S in RMAA

AI 影像監測 AI Video Monitoring

運用 AI 鏡頭即時辨識未佩戴安全帽/帶、進入高危邊緣及未授權區域，自動發出警告。
Real-time AI detection of missing helmets/harnesses & boundary breach with alarms.

Smart PPE 智能裝備

配備跌倒感應智能帽，及具備獨立鎖定感應之安全帶，確保高空扣妥安全繩。
Smart helmets with fall sensors and harnesses with lanyard tie-off sensors.

數字化許可與門禁 Digital PTW & Access

推行無紙化電子許可證（PTW），配合人臉辨識門禁，確保僅持證人員進入高危工地。
Paperless e-PTW and facial recognition access control for licensed personnel.

中央管理平台（CMP）Central Management

將分散 RMAA 工地數據匯聚至中央儀表板，管理層遠程即時掌握全盤風險並快速處理。
Central dashboard consolidating site data for real-time remote risk management.

07 實行 5S 小型工地安全整理準則 及 受註冊專門行業承造商制度規管

5S Site Safety Guidelines & Registered Specialist Trade Contractors Scheme

1S 整理 (Sort)

清理無用雜物，保持通道暢通

Clear unnecessary debris and maintain clear access ways.

2S 整頓 (Set in Order)

物各有位，妥善標籤分類

A place for everything with proper labeling & categorization.

3S 清潔 (Shine)

打掃整潔，點檢設備隱患

Keep clean and inspect equipment for hidden hazards.

4S 標準 (Standardise)

制定整理規範，制度化執行

Establish housekeeping standards and execute systematically.

5S 修養 (Sustain)

培養自律習慣，提升安全文化

Cultivate self-discipline and elevate safety culture.

若未能遵守註冊專門行業承造商制度規則及程序中的任何條文，專責委員會或會向註冊專門行業承造商發出書面警告；在一段期間暫停註冊專門行業承造商的註冊；吊銷註冊專門行業承造商的註冊。

08 政策支持與 CITF 資金補助

Policy Support & CITF Funding Subsidies

建造業創科基金

HK$ 1.5M

CITF 基金最高購買4S資助額

Maximum CITF Subsidy Grant Amount

管理層善用政策資源降低成本

Management Leverages Policy Resources to Reduce Costs

香港政府及 CIC 大力推動 4S 普及，企業可申請 CITF 獲得高達 70% 費用資助，涵蓋 4S 設備採購、網絡升級及技術維護。

HK Government & CIC actively promote 4S; enterprises can apply for CITF subsidies up to 80% covering equipment, network, and maintenance.

CIC「4S 標籤計劃」

CIC "4S Label Scheme"

成功通過評估的工地獲頒 4S 標籤，有助提升企業專業形象、競投政府及大型機構項目，並享有保費優惠。

Sites passing evaluation receive the 4S Label, boosting corporate image, public/institutional tender scores, and insurance premium discounts.

09 推動 CIC 4S 安全升級路線圖

Roadmap for Implementing CIC 4S Upgrades

1

階段一：現狀評估

Stage 1: Assessment

盤點 RMAA 高危工序，選定適用 4S 預批核套件，向 CITF 遞交資助申請。

Identify high-risk processes, select pre-approved 4S packages, and apply for CITF funding.

2

階段二：系統部署

Stage 2: Deployment

於試點工地搭建 AI 鏡頭、Smart PPE 及 CMP 中央管理平台。

Deploy AI cameras, Smart PPE, and CMP central platform at pilot sites.

3

階段三：全員培訓

Stage 3: Full Training

組織工友參加 CIC 4S 實操課程，實施電子 PTW 無紙化工作流程。

Organize workers for CIC 4S practical courses and implement paperless e-PTW.

4

階段四：標籤認證

Stage 4: Certification

申請 CIC「4S 標籤」，檢討運行數據，推廣至公司所有 RMAA 項目。

Apply for CIC "4S Label", review operational data, and roll out to all projects.

10 提升RMAA安全四大關鍵要素

4 Key Elements for Enhancing RMAA Safety

科技與人性結合
Tech & Human Touch

4S 系統為輔助工具，管理層需維持「以人為本」關懷，避免將系統僅用於懲罰工友。

4S is an assistive tool; management must maintain a human-centric approach rather than using systems purely for punishment.

簡化操作介面
Simplified User Interface

為前線工人提供中文和英文介面簡易化 App，降低數位工具使用門檻。

Provide Traditional Chinese UI and intuitive mobile apps for frontliners to lower digital adoption barriers.

分判商支持
Subcontractor Governance

將 4S 設備採納要求寫入外判合約，並為配合良好的分判商提供安全獎金。

Incorporate 4S adoption requirements into subcontracts and offer safety bonuses for compliant subcontractors.

建立獎勵機制
Sustainable Incentives

設立「安全之星」獎勵，對主動報告隱患及規範佩戴 Smart PPE 的工友予以表彰。

Establish "Safety Star" awards to honor workers who report hazards and properly wear Smart PPE.

11 員工培訓與溝通：建立安全文化

Employee Training and Communication: Building a Safety Culture

安全不是口號，而是每個人每天的實踐。培訓與溝通是建立安全文化的核心

Safety is not a slogan, but a daily practice for everyone. Training & communication are the core of building a safety culture.

入職培訓 Induction Training

新員工須完成安全培訓方可進入工地。

New workers must complete safety training before entering jobsite.

開工前簡報 Pre-work Briefing

每日工作前進行風險提示及任務分配。

Conduct daily risk reminders and task allocation before work.

定期重溫 Refresher Training

每年進行安全知識更新及演習。

Conduct annual safety knowledge updates and drills.

持續改進 Continuous Improvement

鼓勵員工報告隱患，共同提升安全。

Encourage employees to report hazards and collectively enhance safety.

12 總結與展望：持續改進，保障安全

Summary and Outlook: Continuous improvement to ensure safety

安全是沒有終點的，需要每個人持續的承諾與行動

Safety has no finish line; it requires everyone's continuous commitment and action.

評估風險

Risk Assessment

工程前系統性識別所有潛在危害。

Systematically identify potential hazards before works start.

遵守規程

Compliance

嚴格執行法例要求及公司安全政策。

Strictly enforce legal regulations and safety policies.

持續培訓

Continuous Training

定期更新知識，提升全員安全意識。

Regularly update knowledge to enhance safety awareness.

加強溝通

Communication

建立開放匯報文化，共同守護安全。

Establish an open reporting culture to safeguard site safety.

香港工程裝飾商會
Hong Kong Decoration & Engineering Association

攜手打造零事故 RMAA 工地

Hand in Hand to Create Zero-Accident RMAA Jobsites

感謝聆聽！ 歡迎交流與討論

Thank You for Listening! Q&A & Discussion Welcome