



Comprehensive Facade Access
Solutions for Galaxy Macau:
Overcoming Challenges with
Innovation and Expertise

CoxGomyL completed a comprehensive facade access solution for the Galaxy Macau project, covering phases 3A, 3C, and 3D. Located in Macau, China, this project required various Building Maintenance Units (BMUs), monorail systems with bosun chairs, fall arrest systems, abseiling systems, and walkway platforms. The architects for the project were Aedas [3A and 3D] and Wong & Ouyang (HK) Ltd [3C], with BMU consultancy provided by Inhabit. This case study highlights the innovative solutions provided by CoxGomyL, detailing the challenges faced and the solutions provided.

Project Scope and Solutions

Galaxy Macau (Phase 3A)

Phase 3A features one BMU at the roof level and two sets of monorails with one cradle. CoxGomyL delivered a solution with a telescopic jib and telescopic mast twin-track unit alongside two Rostek monorails. This approach ensures comprehensive coverage and accessibility for maintenance operations, meeting the client's need for a cost-competitive solution.

Galaxy Macau (Phase 3C)

Phase 3C includes two towers (North and West) with a large podium. Each building is equipped with one BMU. CoxGomyL's solution included a wide cradle to navigate the complex facade, demonstrating superior technical competence. The roof BMUs use telescopic mast whilst the podium BMU uses a luffing jib on a fixed mast twin track parked below the parapet height to maintain the towers' aesthetic integrity.

Galaxy Macau (Phase 3D)

In Phase 3D, our team installed one BMU with a satellite type cradle at the roof level. Despite the Covid-19 pandemic, meticulous planning and coordination ensured a successful installation. SolidWorks for 3D design of BMU allowed precise customisation, facilitating access to difficult-to-reach areas.

Overcoming Challenges

Complex Facade Designs

The complex facade designs obstructed access from standard cradles. CoxGomyL addressed this by proposing alternative ideas that showcased our technical expertise. The wide cradle in Phase 3C and the unique satellite cradle in Phase 3D were tailored solutions that ensured efficient and safe facade access.

The Phase 3D installation occurred during the COVID-19 pandemic, presenting logistical challenges. Our project team developed detailed planning and method statements, ensuring smooth execution despite constraints. This highlights our commitment to delivering on time and within budget.





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Integration and Aesthetics

Maintaining the towers' visual appeal was crucial. CoxGomyl designed the BMUs to be parked below the parapet height, minimising visual impact. This careful consideration ensured the access solutions integrated seamlessly with the overall design.

CoxGomyl's involvement in the Galaxy Macau project exemplifies our ability to deliver advanced, cost-effective facade access solutions amid complex challenges. Leveraging innovative design tools such as SolidWorks and employing innovative engineering solutions, our team ensured that each phase was equipped with efficient and aesthetically considered access systems. This project underscores our technical competence and reputation as a trusted partner in large-scale construction projects.



Facts & Figures

	3A	3C	3D
Commencement	Jun 2019	Jun 2019	Feb 21
Completion	Feb 2023	Feb 2023	July 2023
Building Height	Tower 160m, Monorail 145m	Tower 100m, Podium 30m	Tower 100m
Number of BMUs	1 BMU	3 BMUs, 2 Monorails with Bosun Chair	1 BMU
Outreach:	14m	15m	19m
Building Type	Hotel	Hotel	Hotel