



Structural insight.
Built into every project.

Structural design.
Detailing.
Site supervision.

THE PRACTICE & CAPABILITIES

A clear structural vision.

Ghanaian expertise. Structural design, technical detailing and construction-stage insight.

PATCADS connects architectural ambition with the structural decisions needed to carry it forward.

Based in Accra and incorporated on 7 March 2017, PATCADS Structural Solutions Limited was founded by Ing. Patrick Oppong and Ing. Bernard Kwarteng. The portfolio spans reinforced concrete, steel and composite structures for residential, commercial and industrial projects.

SECTORS

Residential / Hospitality
Transport buildings / Offshore structures

01 Structural design & detailing

Schemes, analysis, drawings and technical details.

02 Construction supervision

Structural site supervision and QA/QC support.

03 Structural integrity assessment

Assessment to inform intervention and further investigation.

04 Structural design peer review

Independent review of analysis and design documentation.

05 Seismic & complex structures

Structural services for demanding geometry and behaviour.

06 Offshore structural solutions

Equipment supports and specialist steelwork.

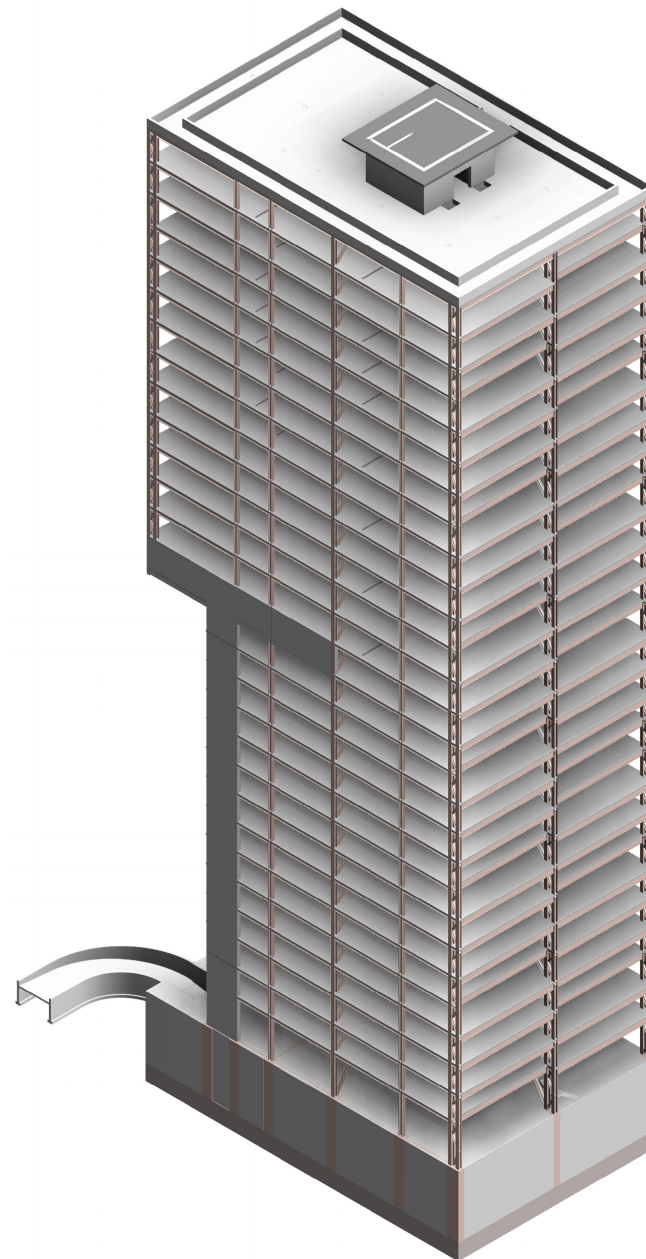
FLAGSHIP PROJECT

Villaggio Echo Tower

Airport North, Accra | Client: Halo Properties | 2024-present



ECHO TOWER & VILLAGGIO



ACTUAL STRUCTURAL MODEL

Engineering a hybrid tower

Design, fabrication and construction
Ongoing

The project combines a reinforced-concrete core, steel framing and composite floors. Major cantilevers at Level 15 extend 11 m and 7.5 m, creating a distinctive structural challenge.

PROJECT CONTRIBUTION

Structural engineering contribution by PATCADS Structural Solutions Ltd., led by Ing. Patrick Oppong, Lead Structural Engineer, undertaken within the Trasacco project team.

ECHO TOWER / CONSTRUCTION & COLLABORATION

From core to steel frame.

Airport North, Accra | Halo Properties | 2024-present: design, fabrication and construction



Reinforced-concrete core and advancing steel frame



Cantilever construction

Project team

Client	Halo Properties
Structural engineering	PATCADS / Trasacco Group
Lead structural engineer	Ing. Patrick Oppong
Architecture / design	AHMM; Symbolic Spaces; Trasacco Group
Peer review	Dnarda Africa Ltd.
Contractor / fabricator	TEDC / B5 Plus Ltd.
Structural drafting	Eprocon Ghana Ltd.

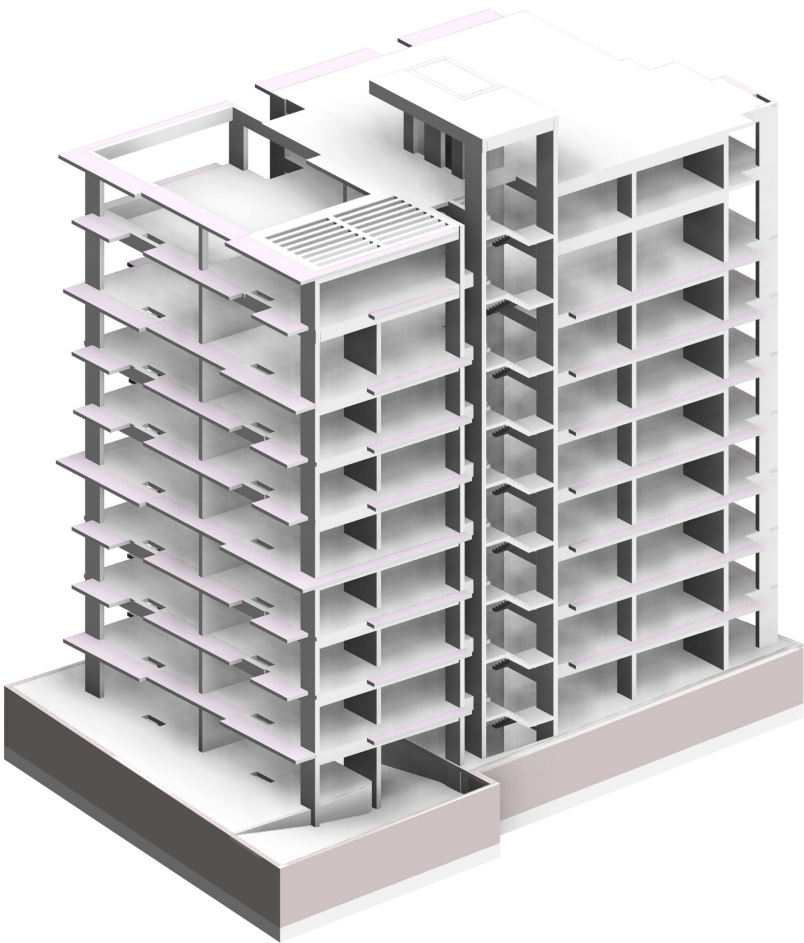
CURRENT RESIDENTIAL COMMISSION

Celestia Residence

North Ridge, Accra | Residential development



ARCHITECTURAL VISUALISATION / SWAMI INDIA GHANA LTD.



PATCADS STRUCTURAL MODEL

CLIENT

Swami India Ghana Ltd.

PROJECT DATES

2023-present

PATCADS ROLE

Structural design, detailing and site supervision

STATUS

Ongoing

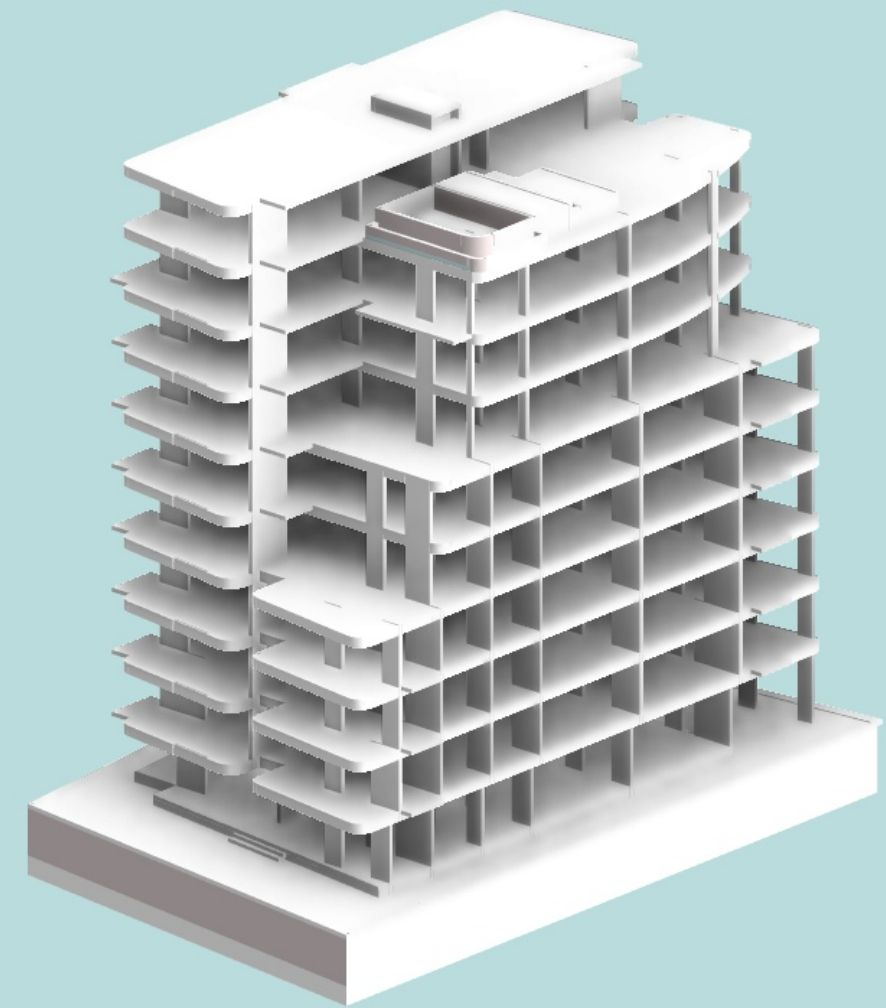
CURRENT RESIDENTIAL COMMISSION

The Chestnut

32 Quarcoo Lane, Airport Residential Area, Accra



ARCHITECTURAL VISUALISATION / SUPPLIED BY PATCADS



PATCADS STRUCTURAL MODEL

CLIENT

Myla Homes Ghana Ltd.

PROJECT DATES

2026-present

PATCADS ROLE

Structural design, detailing and site supervision

STATUS

Permit approved; shoring works and construction supervision ongoing

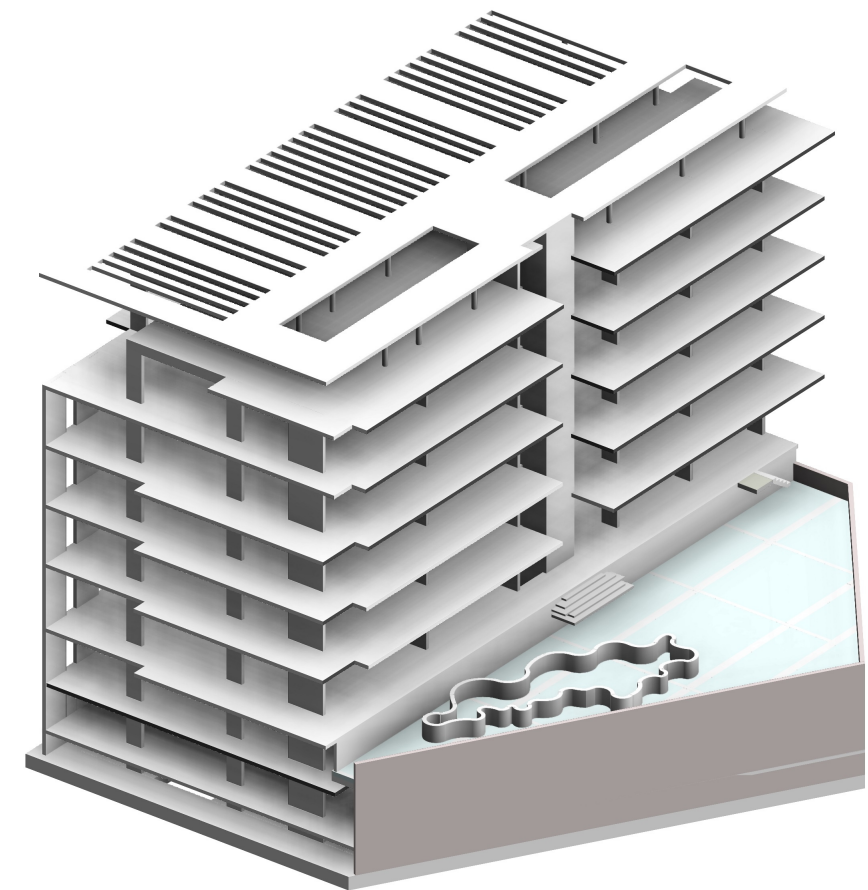
CURRENT RESIDENTIAL COMMISSION / MYLA HOMES

The Ruby

No. 5 Cantonment Road, Cantonments, Accra



ARCHITECTURAL VISUALISATION / THE RUBY



PATCADS STRUCTURAL MODEL

CLIENT

Myla Homes Ghana Ltd.
Award-winning developer

PROJECT DATES

2024-present

PATCADS ROLE

Structural design, detailing and site supervision

STATUS

Shell and core complete; finishing ongoing

SELECTED PROJECT / EXPOSED CONCRETE

Ghana Airways House

Ghana Airways Avenue, Airport, Accra | Private residence

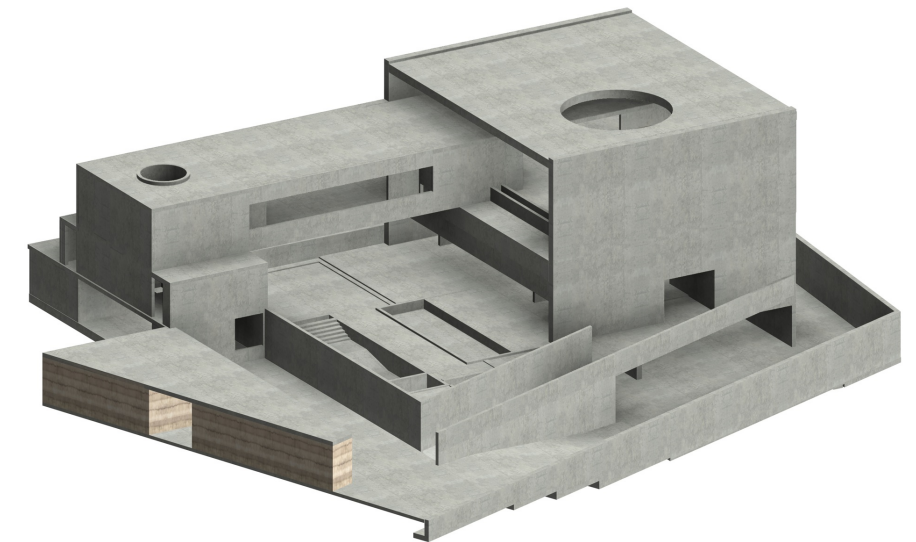
STREET VIEW



Adjaye Associates

GHANA AIRWAYS HOUSE | CONCEPT PRESENTATION

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ARCHITECTURAL CONCEPT / ADJAYE ASSOCIATES

STRUCTURAL VISUALISATION / PATCADS

ARCHITECT / CLIENT

Adjaye Associates

DESIGN COORDINATION

Dnarda Africa and Adjaye Associates

PROJECT DATES

2020-2022

STATUS

Completed

SELECTED RESIDENTIAL PROJECT

Belrose

No. 6 Blackberry Street, East Legon, Accra



ARCHITECTURAL VISUALISATION



PATCADS STRUCTURAL MODEL

CLIENT

Myla Homes Ghana Ltd.

LOCATION

East Legon, Accra

PROJECT DATES

2022-2024

STATUS

Completed

SELECTED BUILDING PORTFOLIO

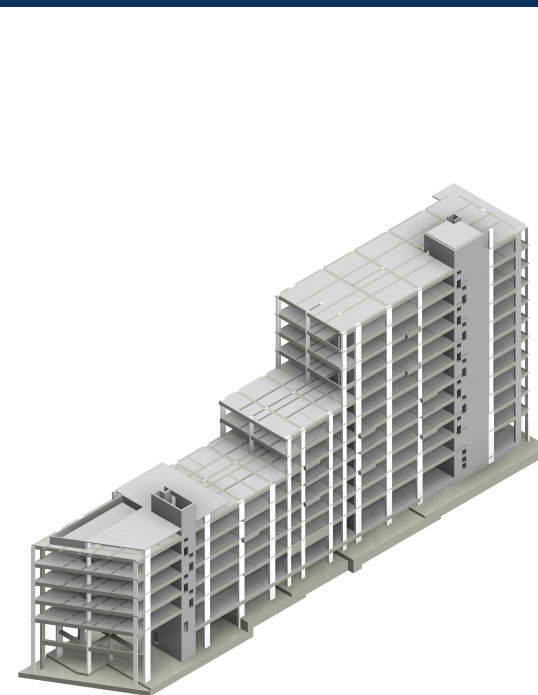
From structural model to built form.

Switchback Park

Opposite 37 Military Hospital, Accra



ARCHITECTURE



STRUCTURAL MODEL

Role: Value engineering with Structcon Ltd. and Trasacco Group.
Assignment: 2016-2017. Construction completed in 2022.

Chartfield Apartments

Tower and podium development



ARCHITECTURE



STRUCTURAL MODEL

A full-height structural model sets out the relationship between overall tower form and repeated floor framing.

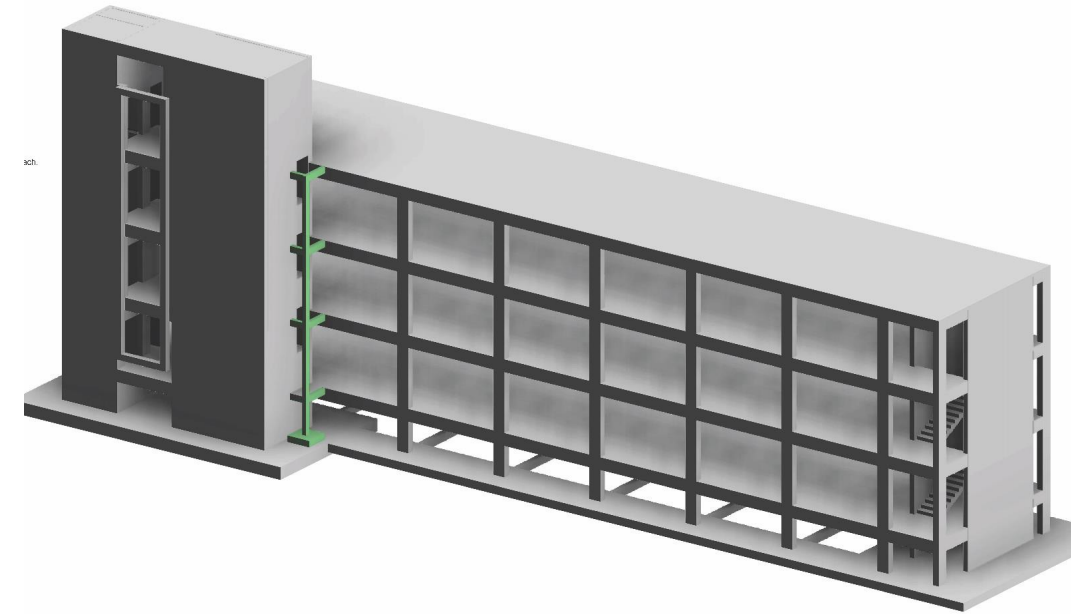
INFRASTRUCTURE / RAILWAY BUILDINGS

Tema-Akosombo Railway

Tema Harbour area | Station and associated buildings | 2019-2022



ARCHITECTURAL VISUALISATION



STRUCTURAL MODEL



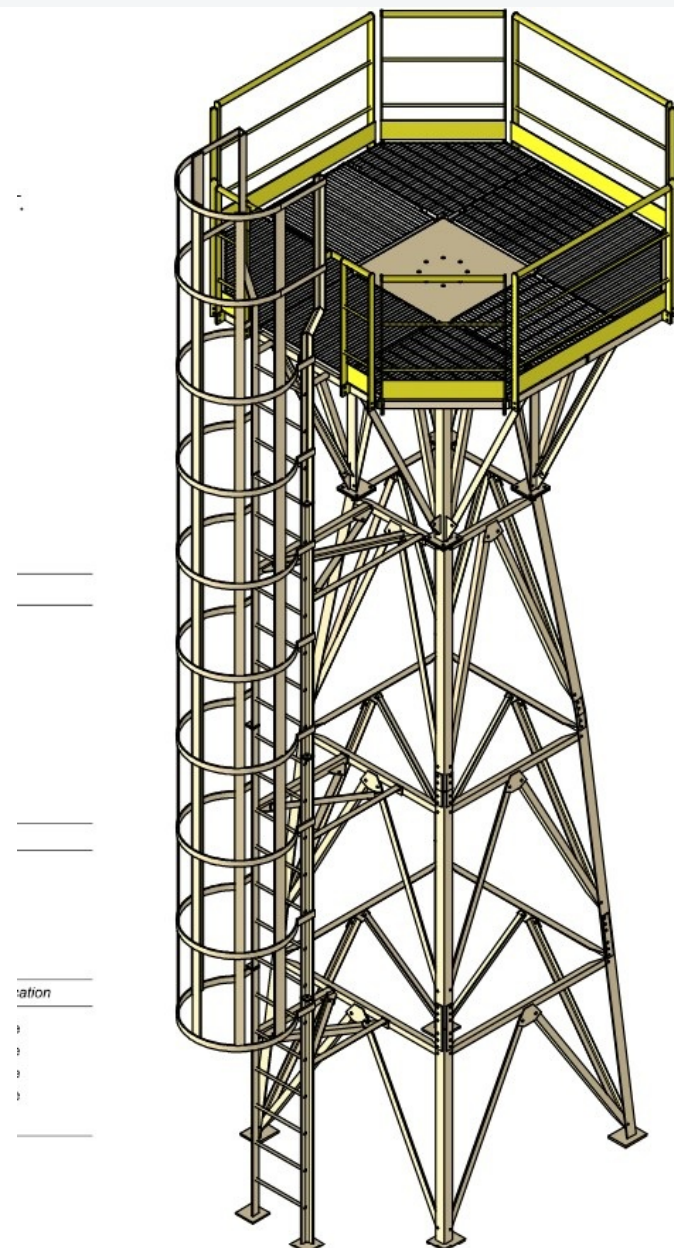
CONSTRUCTION PROGRESS

Client: Ghana Railway Development Corporation | Designed for: Afcons Infrastructure Ltd.
PATCADS role: Structural design of station buildings.

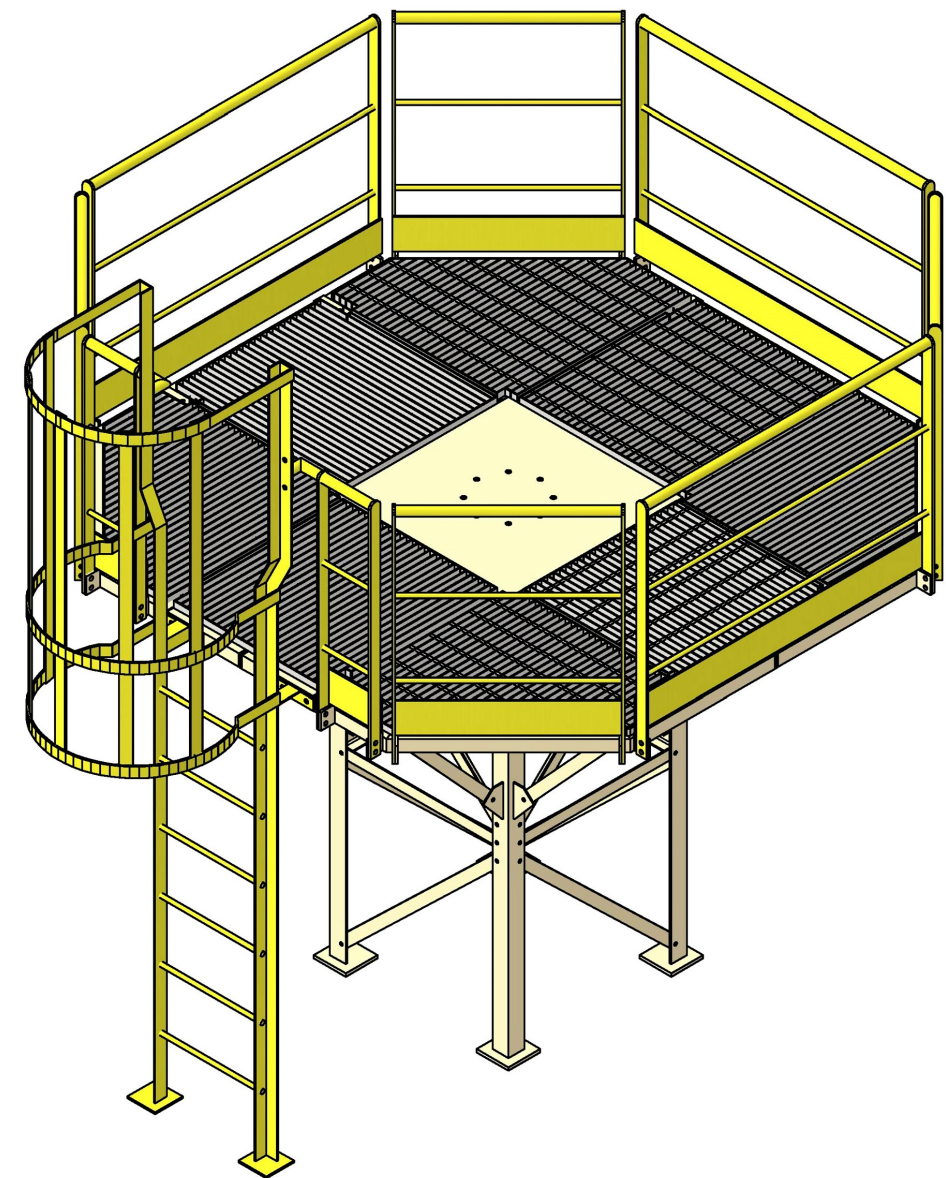
SPECIALIST STRUCTURES / OFFSHORE

Offshore support structures

Client: GRO Oilfield Alliance Ghana Ltd. | Tullow Ghana Limited | TEN FPSO



TVRO SUPPORT STRUCTURAL MODEL



MICROWAVE ANTENNA SUPPORT MODEL

TVRO and microwave antenna support models from the PATCADS project archive demonstrate specialist structural design and detailing.

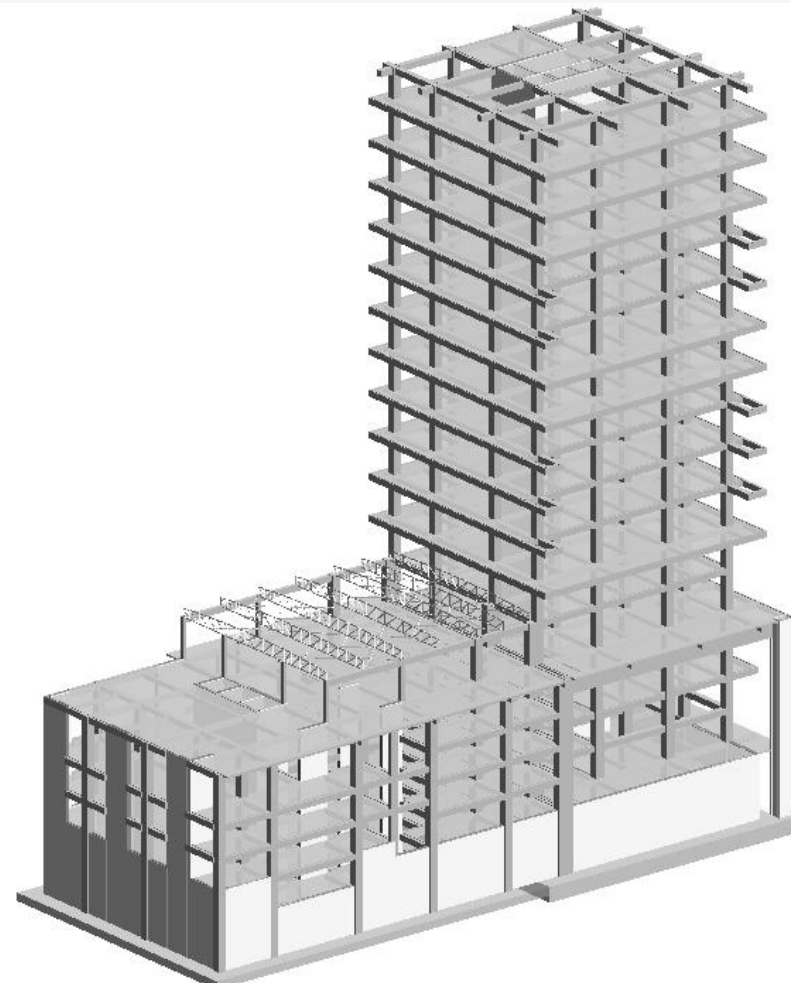
SELECTED PROJECT / INDEPENDENT STRUCTURAL PEER REVIEW

Wesley Tower

No. 3 Ambassadorial Enclave, Cruickshank Road, West Ridge, Accra | Peer review: 2020



ARCHITECTURAL MODEL



STRUCTURAL MODEL



CONSTRUCTION PROGRESS

Independent structural peer review

Client: Methodist Church Ghana

Architect / project manager: Albert Essamuah Associates

Principal Structural Engineer: Ing. Patrick Oppong

PATCADS undertook structural design appraisal supported by independent control analysis. The review addressed design loads, seismic and lateral stability, raft foundations, basement and geotechnical considerations, car-park ramps and structural drawing completeness.

Project scope and models: PATCADS peer review report, 2020. Construction photograph: project archive.

SELECTED RESIDENTIAL PORTFOLIO

Private residence, Trasacco

Architectural intent and construction progress

PERSPECTIVE OF MAIN HOUSE

02



ARCHITECTURAL VISUALISATION



CONSTRUCTION PHOTOGRAPH

Project imagery from the PATCADS reference archive pairs the architectural proposal with construction-stage documentation.

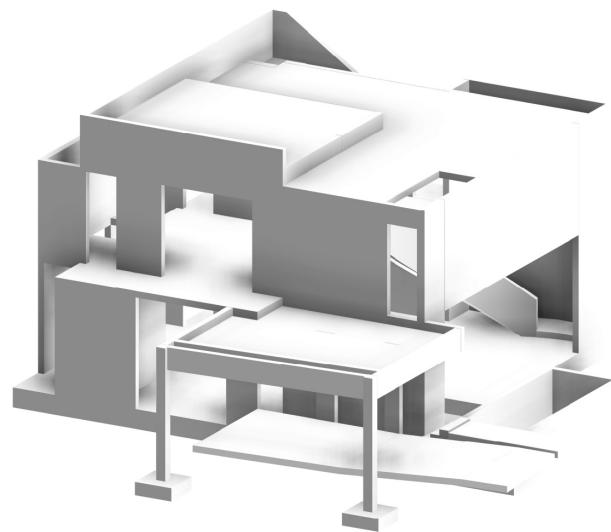
SELECTED DESIGN COMMISSIONS / WATERFRONT RESIDENCES

Waterfront residential design

Architectural client: Cent et Qoir | 2025-2026 | Design complete; awaiting construction tender

Sakumono Waterfront Residence

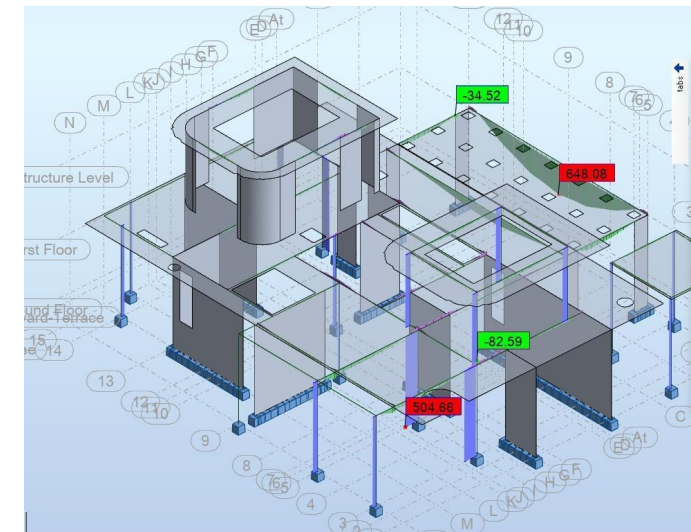
Sakumono, Greater Accra



ARCHITECTURAL VIEW + PATCADS STRUCTURAL MODEL

Maison Tawala

La-Tawala Beach, Accra



ARCHITECTURAL VIEW + STRUCTURAL ANALYSIS MODEL

RELATIONSHIPS ACROSS THE PORTFOLIO

Clients & Project Collaborators

Developers, architects, contractors and specialist project teams



Myla Homes Ghana Ltd.



Swami India Ghana Ltd.



GRO Oilfield Alliance Ghana Ltd.



Adjaye Associates



Trasacco Estates Development Company



Afcons Infrastructure Ltd.



Ghana Railway Development Authority



TEAM Engineering SpA

TRASACCO DEVELOPMENT BRANDS



Additional clients & collaborators: Halo Properties / Methodist Church Ghana / Cent et Qoir / Dnarda Africa / Albert Essamuah Associates / Structcon Ltd. / AHMM / Symbolic Spaces / B5 Plus / Eprocon Ghana

TEN FPSO: GRO Oilfield Alliance Ghana Ltd. was PATCADS' client; Tullow Ghana Limited was the project end client.

COMPANY REGISTRATION

Corporate registration documents

Reproduced from the PATCADS company profile, 2024

Incorporation

CS072382017 C0007961766

REPUBLIC OF GHANA

Certificate of Incorporation

I hereby certify that

PATCADS STRUCTURAL SOLUTIONS LIMITED

is this day incorporated under the Companies Act, 1963 (Act 179) and that the liability of its members is limited.

Given under my hand and official seal at Accra, this 7th day of March 2017

[Signature]
For: Registrar of Companies

Commencement of business

CS072382017 C0007961766

REPUBLIC OF GHANA

The Companies Act, 1963, Act 179

Certificate To Commence Business

I hereby certify that

PATCADS STRUCTURAL SOLUTIONS LIMITED

having complied with the provisions of Sections 27 and 28 of the Companies Act, 1963, Act 179 is entitled to commence business with effect from 7th day of **March 2017**

Given under my hand and official seal at Accra, this 7th day of March 2017

[Signature]
For: Registrar of Companies

VAT registration

DT21/ 0003438

GHANA REVENUE AUTHORITY

GRA

VALUE ADDED TAX

VAT

CERTIFICATE OF REGISTRATION

TIN **C0007961766**

This is to certify that

PATCADS STRUCTURAL SOLUTIONS LTD

has been duly registered as an agent for VAT collection under

THE VALUE ADDED TAX ACT 2013 (ACT 870)

Dated this **16TH** day of **SEPTEMBER, 2021.**

[Signature]
AMMISHADDAI OWUSU-AMOAH
COMMISSIONER-GENERAL

* TIN (Taxpayer Identification Number) should be quoted on all tax invoices, receipts and correspondence

WORK WITH PATCADS

Build the next conversation.

Bring us the project brief, architectural intent and the structural questions that need to be resolved.

01 Define the project

Location, use, architecture and delivery priorities.

02 Identify the support

Design, detailing, assessment, review or supervision.

03 Agree the scope

Responsibilities, programme and technical deliverables.

PATCADS

STRUCTURAL SOLUTIONS LTD.

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Visit the [PATCADS website](#)