



BESPOKE STAIRCASES & GLASSWORKS

THE CANTILEVER COLLECTION · VOLUME 01

Floating Staircases

Steel concealed within the wall. Oak suspended in mid-air. The floating staircase, engineered to the limit of what the form allows.

DUBAI & GCC

CAWORKS.CO





ABOUT CAWORKS

The people behind the precision.

CAworks is an architectural staircase company with dozens of floating-staircase projects completed across the UAE and UK. We run a single, end-to-end service — concept, engineering, fabrication and installation, all handled in-house and signed off with you at every stage.

Built on the most advanced engineering approach on the market, our aim is straightforward: to be the most reliable cantilever staircase company in the UAE.

UAE · UK

FLOATING STAIRCASES
DELIVERED

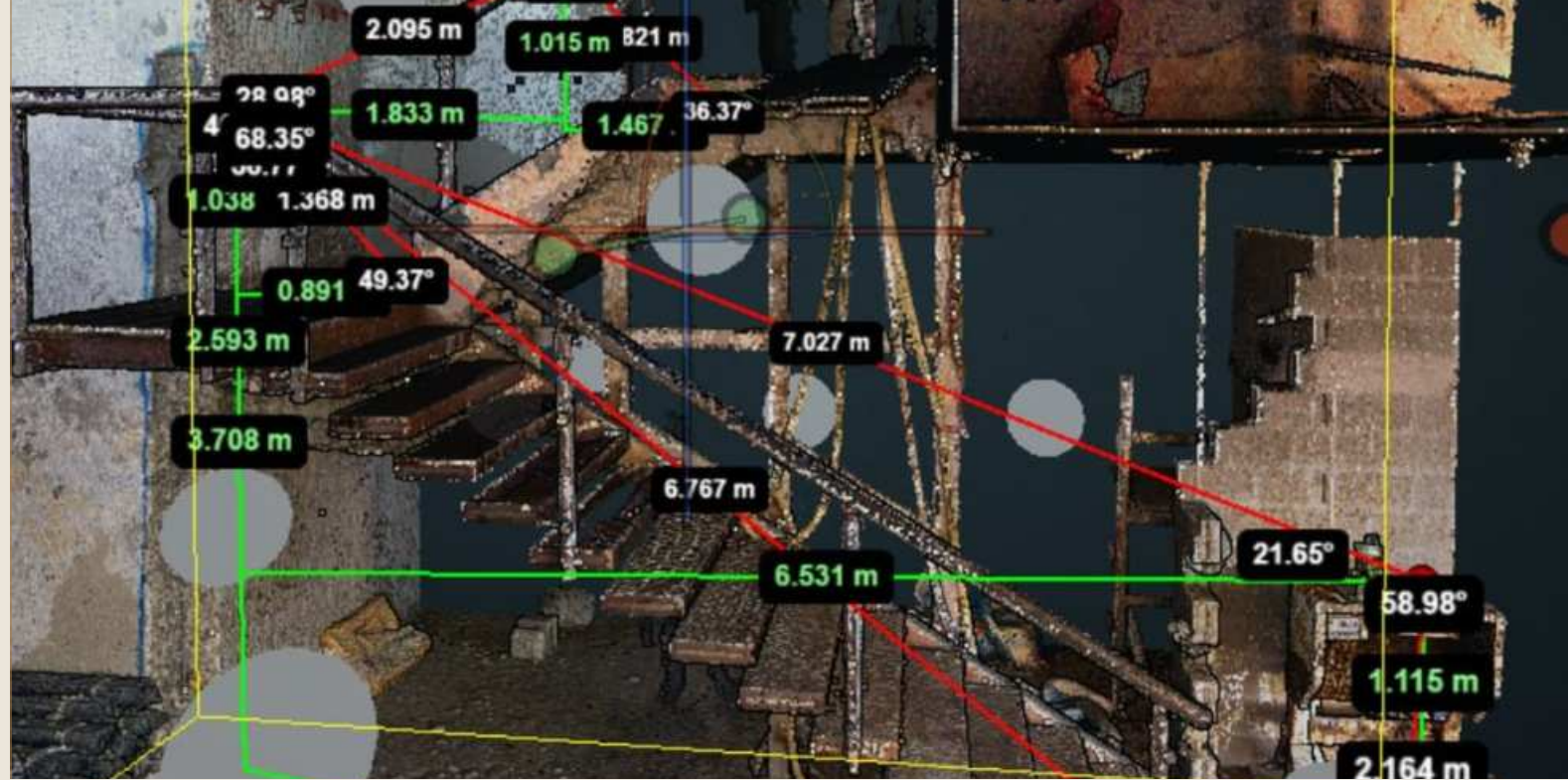
End-to-end

DESIGNED & INSTALLED
IN-HOUSE

FOUNDERS — EVGENY CHERNIKOV & ILJA ANDREJEVS

DUBAI & GCC

THE CANTILEVER COLLECTION



THE CAWORKS METHOD — SURVEY

Every staircase
begins as a point
cloud.

Most staircase errors are born in the survey, not the workshop — a single wrong measurement becomes a flight that breaks regulation or simply won't fit. So we take it out of human hands: a 360° laser scan records the space as a dense cloud of points, every dimension resolved to within half a millimetre, and archived for good.

MEASURED, NEVER ESTIMATED

360°

LASER CAPTURE

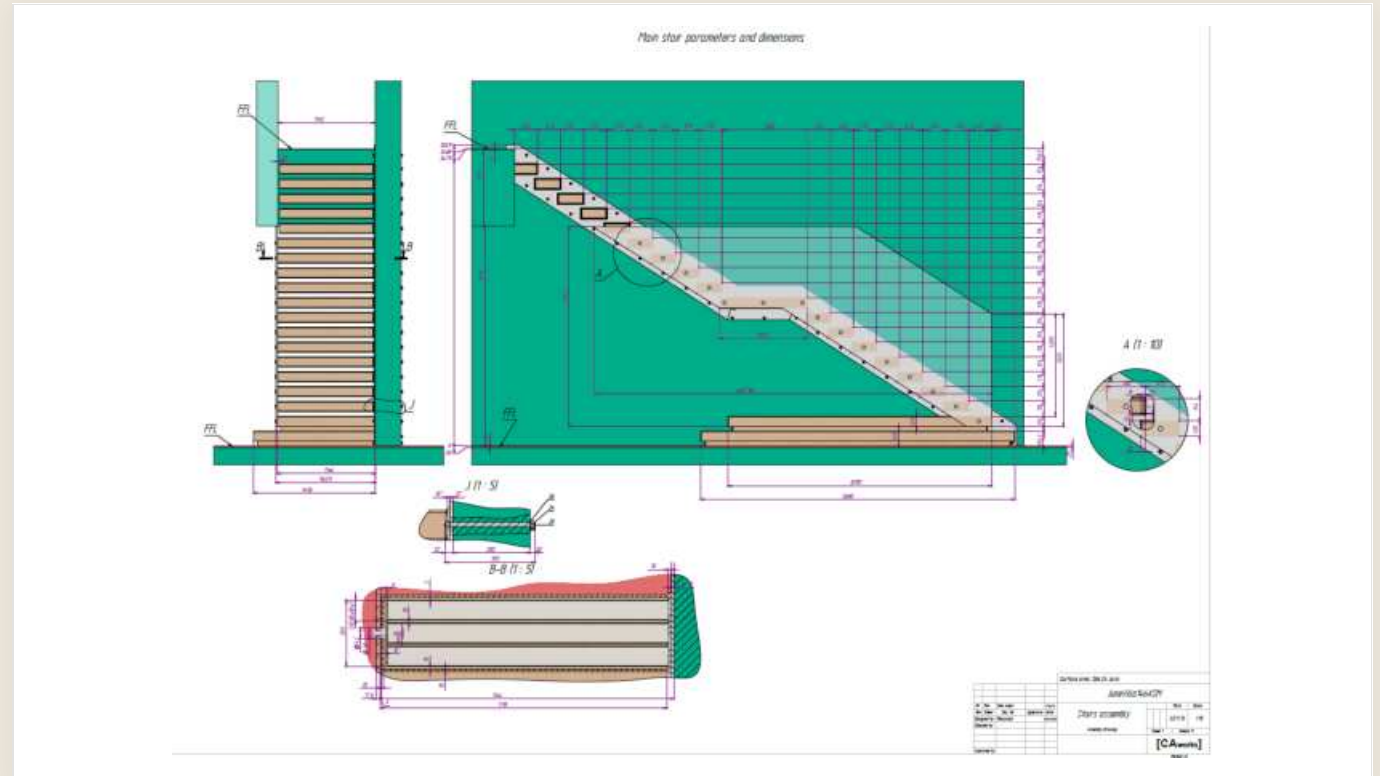
0.5mm

POINT-CLOUD PRECISION

THE CAWORKS METHOD — DESIGN & REGULATIONS

Every staircase is engineered to comply.

As specialty staircase contractors, we prepare a bespoke technical design for every project — a full 3D model and detailed drawings developed to the building regulations from the first line. Every part and every dimension is set to comply, and we issue the complete production drawings so any other fabricator on the project can build straight from them.



3D 100%

MODEL &
FULL
DRAWINGS

TO BUILDING
REGULATIONS

Assembly drawing • issued for construction. Dimensioned to finished floor levels and building regulations — released in full, so any other trade or fabricator on the project can build to the same set.

COMPLIANT BY DESIGN



THE CAWORKS METHOD — SIMULATION

Every staircase is proven under load.

Stability is never assumed — it is simulated. Before anything is fabricated, the whole structure is modelled and put under load: every tread, fixing and decorative material accounted for, stress mapped against the steel's yield, and deflection driven as close to zero as the physics allow.

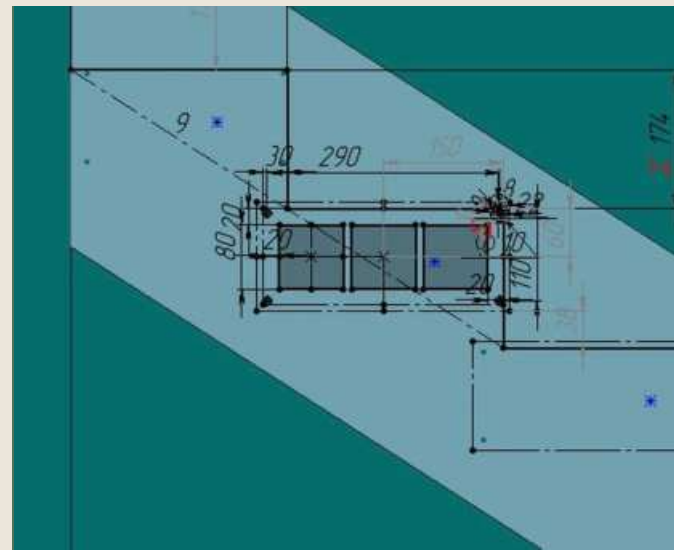
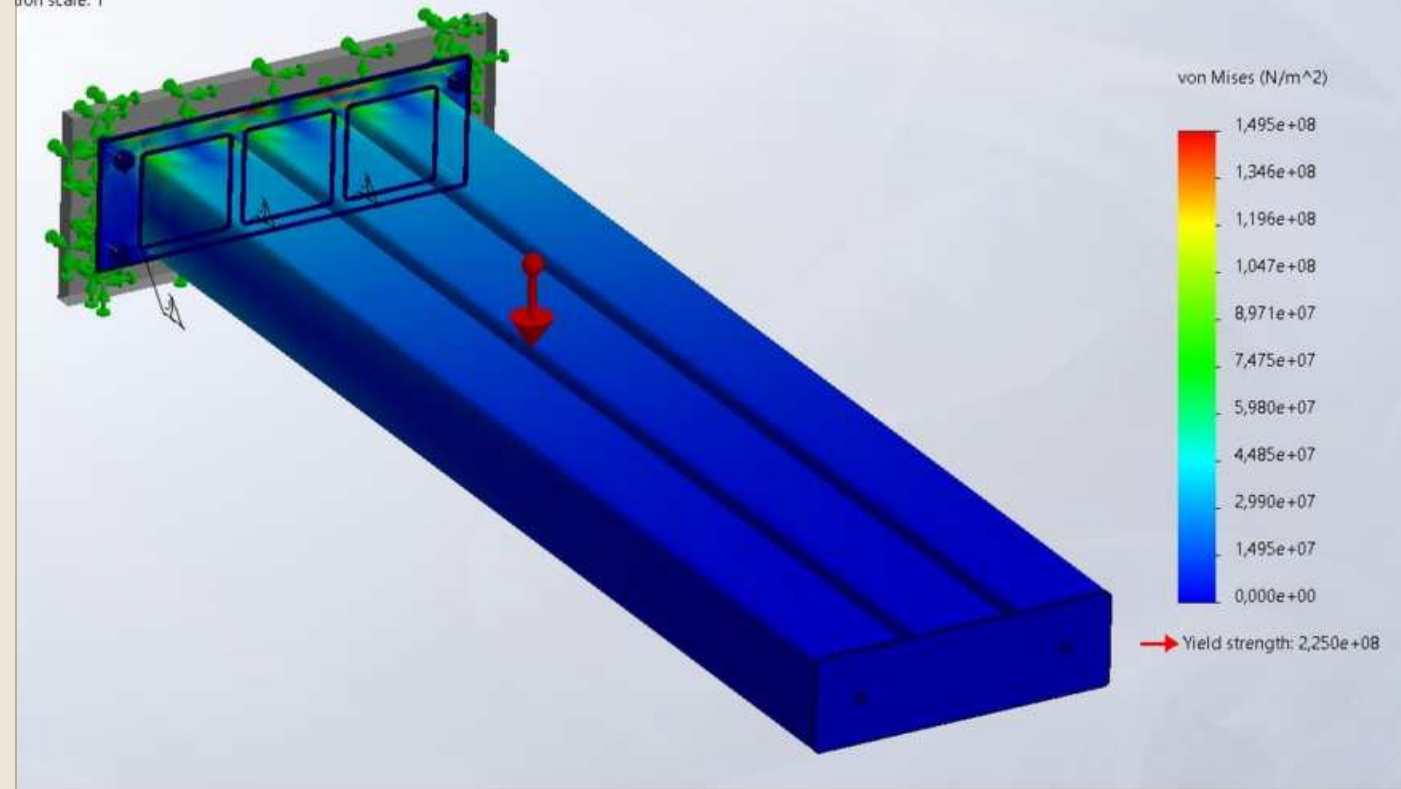
FEA Minimal

EVERY
STRUCTURE,
EVERY LOAD

DEFLECTION
BY DESIGN

PROVEN BEFORE IT'S BUILT

Static nodal stress Stress1
ion scale: 1



Static nodal stress · von Mises

Yield strength 2.25×10^8 N/m² — peak stress held well within margin across the full flight.

THE CAWORKS METHOD — FABRICATION

Every part is cut to the drawing.

Every structure is engineered as a set of CNC cutting files — each plate, hole and thread machined to the drawing within a fraction of a millimetre. Components reach site ready to assemble: less welding in place, less room for error, and a faster, more reliable installation.

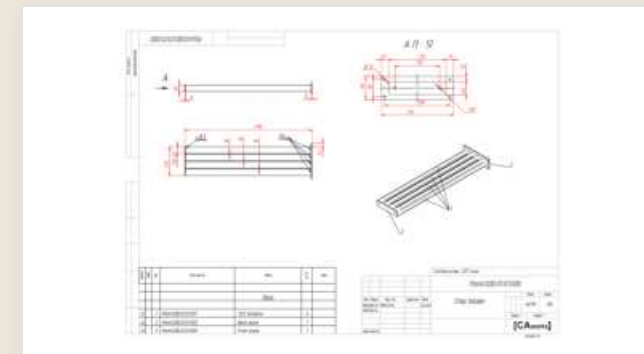
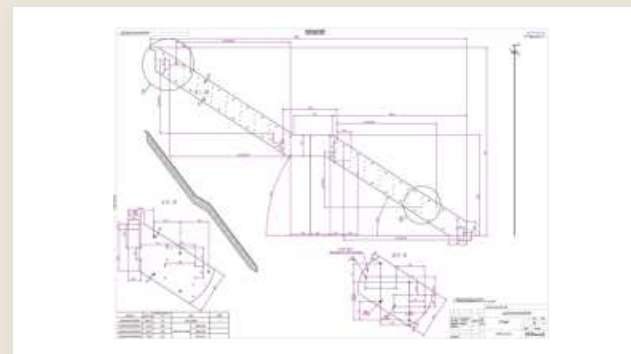
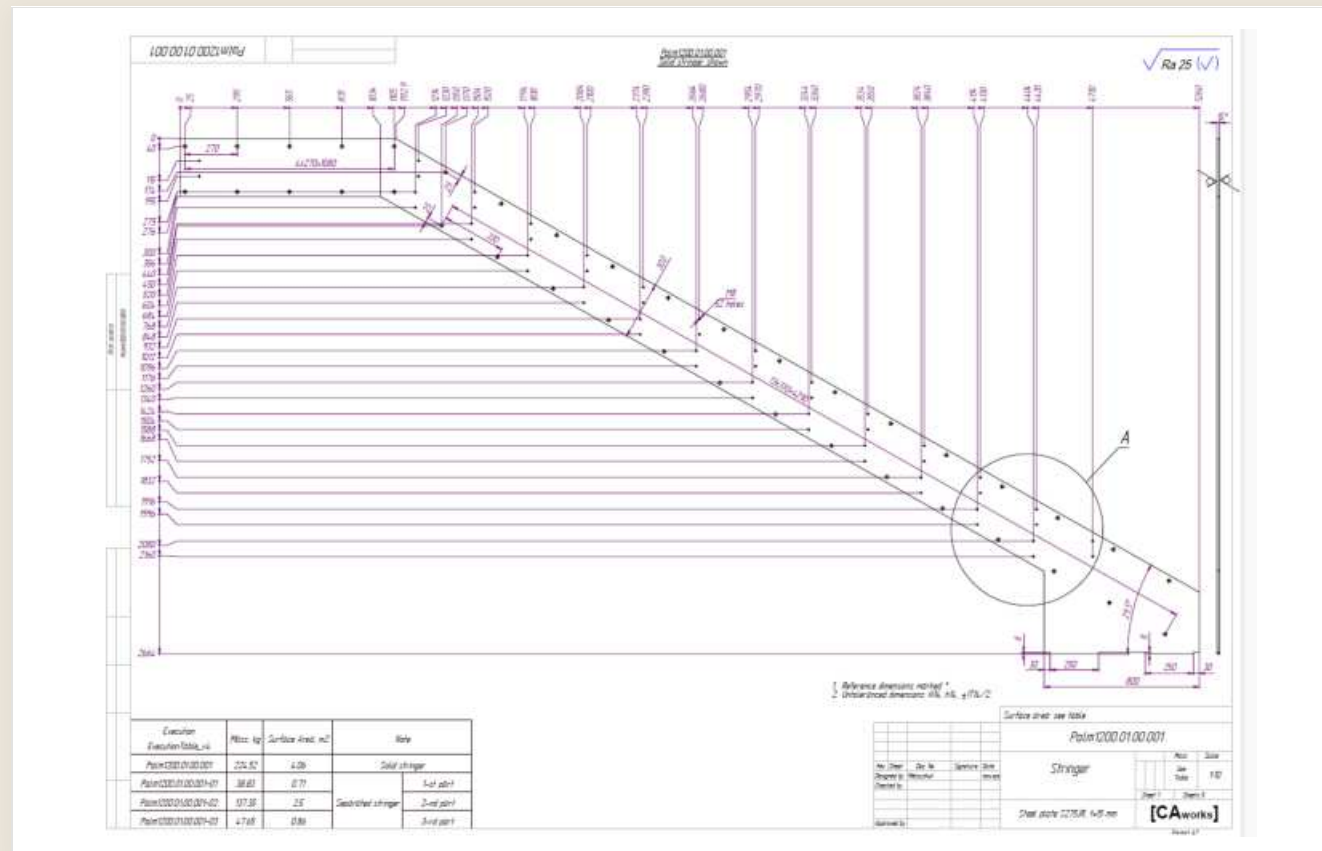
CNC Less

CUT FROM
THE 3D
MODEL

WELDING ON
SITE

Production drawings • CNC profile + drill pattern. Stringers in S275JR plate and step-holders in SHS 60×6 — every profile, hole and M8 thread taken straight from the 3D model, so parts arrive ready to bolt together.

MACHINED, NOT IMPROVISED





SECTION 01

Straight Floating Staircases

The cantilever reduced to a single straight line — treads carried clear of the wall, one above the next, with nothing beneath them. The floating idea at its most essential.

Private Residence

[LOCATION — TO CONFIRM]

A single straight flight, treads carried clear of the wall and washed from beneath with a continuous line of warm LED. Frameless glass on polished standoffs runs the full rise, set against a wall of glazing.

TYPE

Floating · cantilever

FLIGHT

Straight

BALUSTRADE

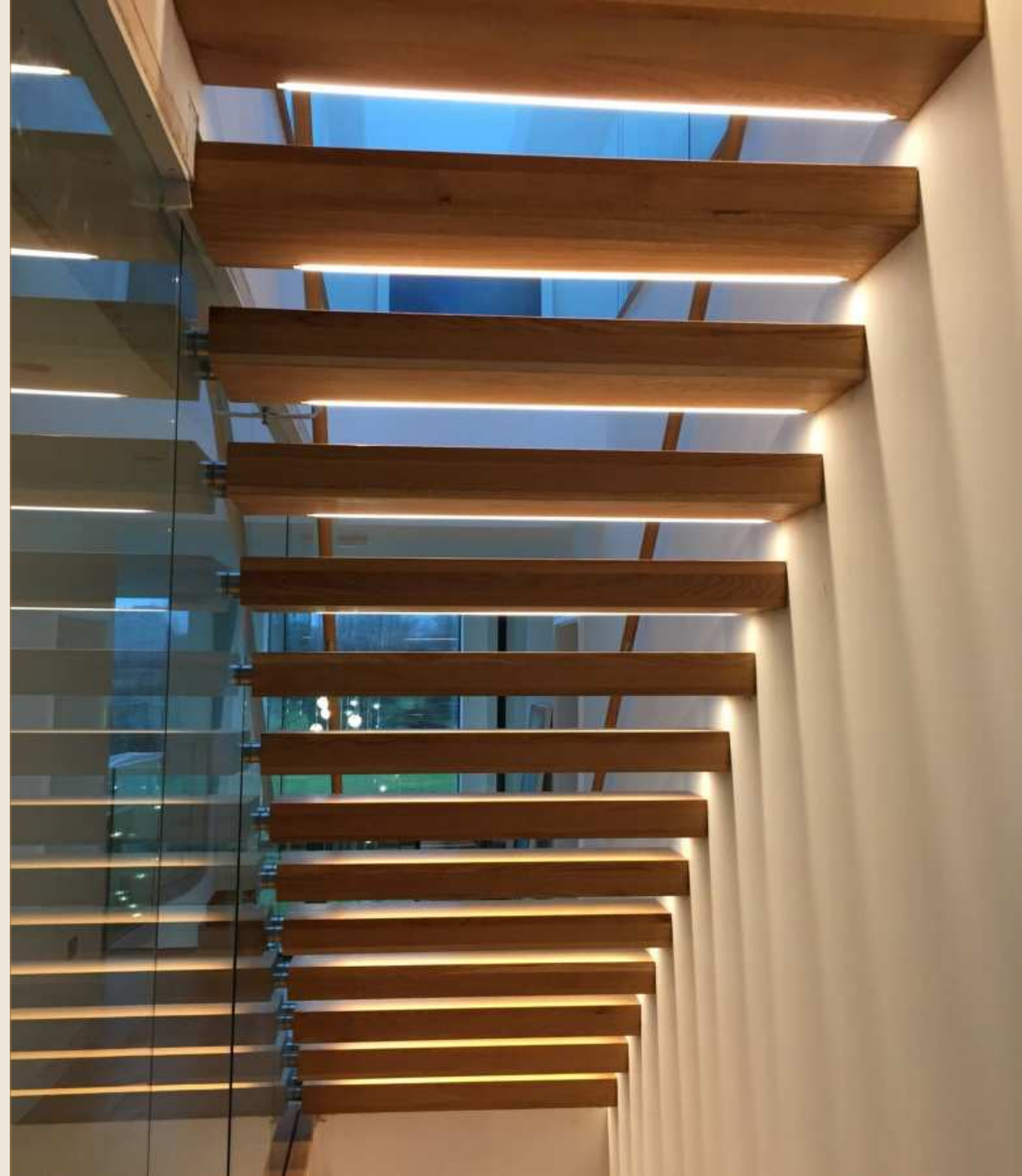
Frameless glass, standoff-fixed

TREADS

Natural oak, LED-lit



CANTILEVER TREAD & STANDOFF FIXINGS



STRAIGHT FLOATING STAIRCASES

PROJECT 02 · STRAIGHT FLOATING

Private Residence

[LOCATION — TO CONFIRM]

A straight flight in grey-toned oak, each tread cantilevered from the wall over a recessed line of LED. Frameless glass carries a slim oak handrail the length of the rise.

TYPE

Floating · cantilever

FLIGHT

Straight

BALUSTRADE

Frameless glass + oak handrail

TREADS

Grey oak, LED-lit



DOWN THE FLIGHT

STRAIGHT FLOATING STAIRCASES



THE STRAIGHT FLIGHT



CHUNKY CANTILEVER & GLASS

PROJECT 03 · STRAIGHT FLOATING

Private Residence

[LOCATION – TO CONFIRM]

A straight flight of solid oak box treads, each cantilevered from the wall in a clean horizontal line. Full-height frameless glass runs floor to landing, framing the rise without a single post.

TYPE

Floating · cantilever

FLIGHT

Straight

BALUSTRADE

Frameless glass, floor-fixed

TREADS

Solid oak

SECTION 02

Floating Staircase with Bottom Pyramid

The cantilever resolved into a sculptural stepped base — the configuration that grounds a floating flight, and quietly conceals storage within it.

Private Residence

[LOCATION — TO CONFIRM]

European oak treads cantilevered from a concealed steel spine, grounded by a stepped pyramid base — sculptural at the foot, with concealed storage on request.



DETAIL — PYRAMID BASE & STANDOFF-FIXED GLASS

FLOATING · PYRAMID BASE

TYPE

Floating · cantilever

FLIGHT

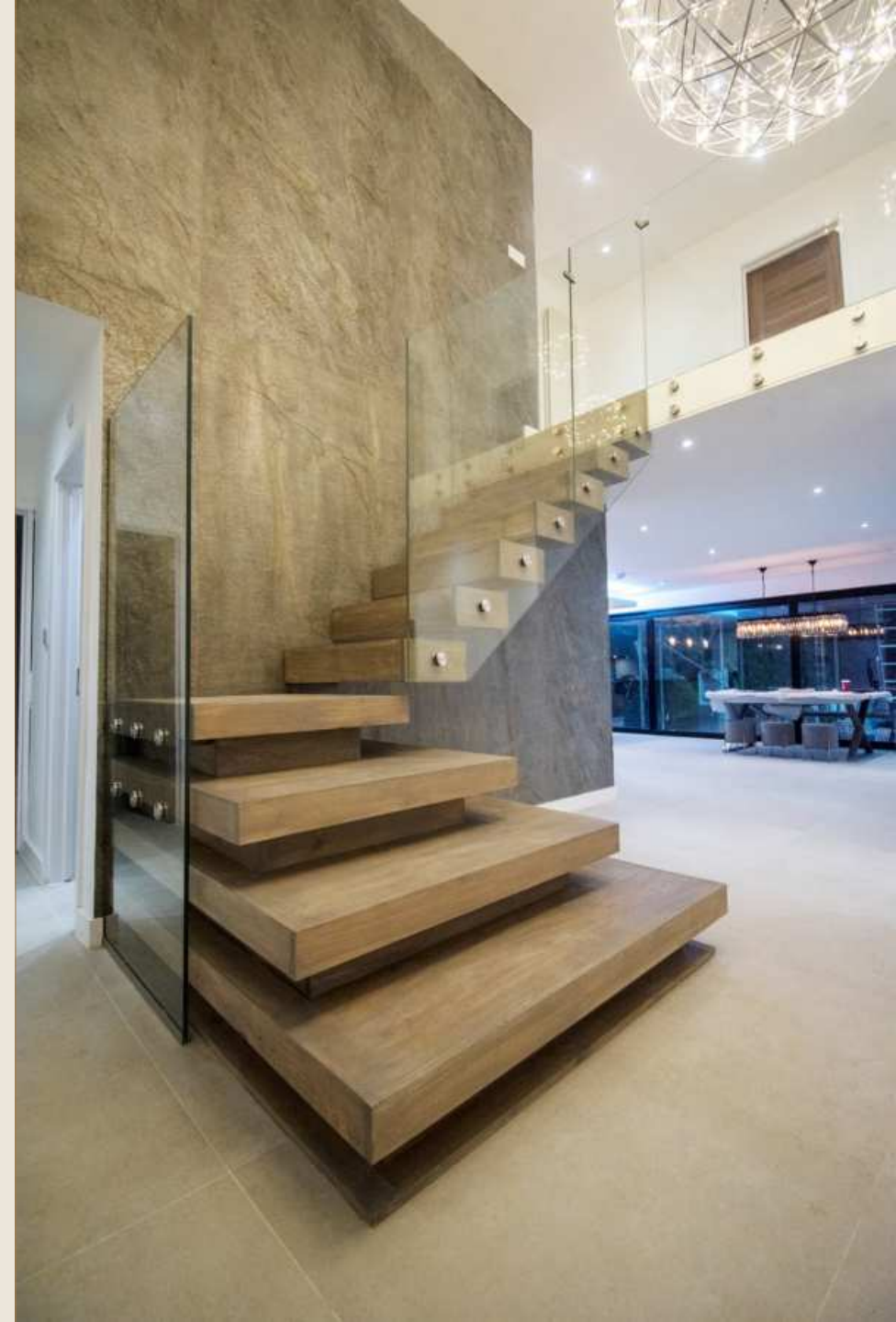
Straight, pyramid base

BALUSTRADE

Frameless, standoff-fixed

TREADS

European grade oak





PROJECT 02

Dental Clinic

[LOCATION — TO CONFIRM]

A turning flight for a dental practice — chunky walnut-stained oak cantilevered clear of the wall, winders easing the turn onto a stepped pyramid base.

TYPE

Floating · cantilever

FLIGHT

Winders + pyramid base

HANDRAIL

Wall-mounted stainless

BALUSTRADE

Frameless glass, standoff-fixed

DETAIL — WINDERS & CANTILEVERED TREAD

FLOATING · PYRAMID BASE



CAVOKS — FLOATING · PYRAMID BASE

PRIVATE RESIDENCE · PALE OAK ON DARK MARBLE

PROJECT 03

Private Residence

[LOCATION — TO CONFIRM]

Pale limed oak cantilevered against a dark marble wall — maximum contrast, grounded by a stepped pyramid base.

TYPE

Floating · cantilever

BALUSTRADE

Frameless, standoff-fixed

FLIGHT

Straight, pyramid base

TREADS

Pale oak



PROJECT 04

Private Residence

[LOCATION — TO CONFIRM]

Natural oak lit from beneath each tread, set against a copper-toned feature wall — bronze-tinted glass on standoffs, grounded by a pyramid base.

TYPE

Floating · cantilever

BALUSTRADE

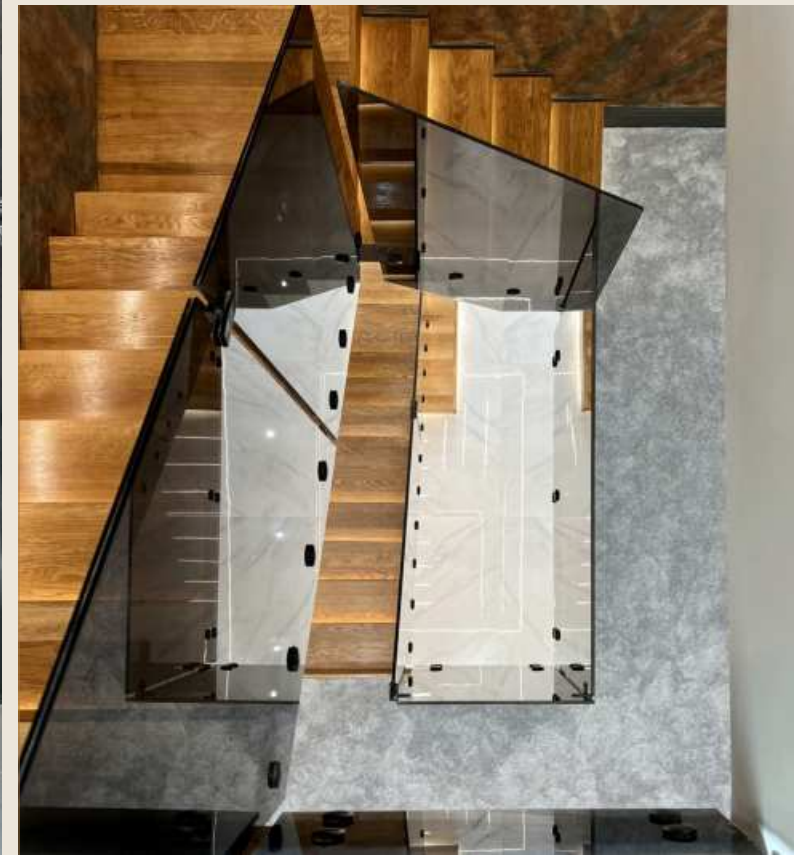
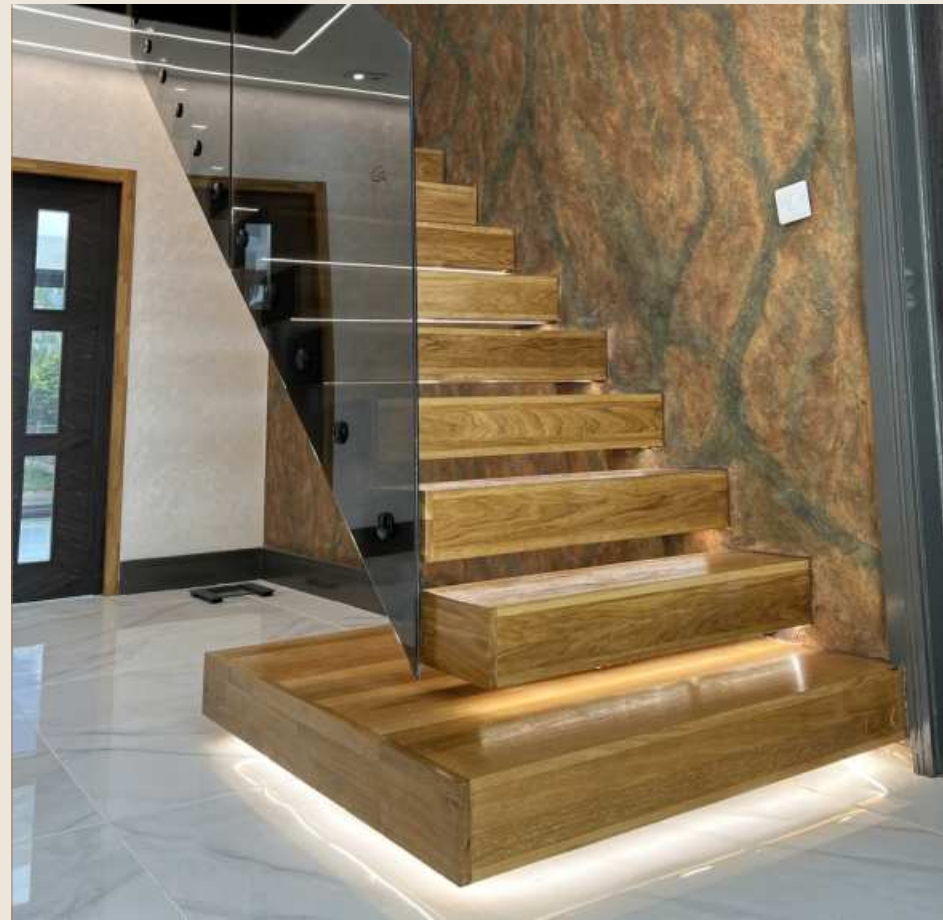
Bronze-tinted glass

FLIGHT

Multi-flight, pyramid base

LIGHTING

LED under-tread





PROJECT 05

Private Residence

[LOCATION — TO CONFIRM]

Walnut treads switching back up a double-height hall — frameless glass topped with a walnut handrail, grounded by a pyramid base.

TYPE

Floating · cantilever

FLIGHT

Switchback, pyramid base

BALUSTRADE

Glass + walnut handrail

TREADS

Walnut-stained oak

FLOATING · PYRAMID BASE



PROJECT 06 · FLOATING, PYRAMID BASE

Private Residence

[LOCATION — TO CONFIRM]

Grey-washed oak in thick cantilevered slabs against raw concrete — frameless glass on standoffs, descending to a broad stepped pyramid base.

TYPE

Floating · cantilever

FLIGHT

Straight, pyramid base

BALUSTRADE

Frameless, standoff-fixed

TREADS

Grey-washed oak





[CAWORKS]



PROJECT 07

Private Residence

[LOCATION — TO CONFIRM]

Whitewashed oak in a bright, pared-back hall — frameless glass on matte-black standoffs, grounded by a pyramid base.

TYPE

Floating · cantilever

FLIGHT

Straight, pyramid base

BALUSTRADE

Frameless, black standoffs

TREADS

Whitewashed oak

FLOATING · PYRAMID BASE





PROJECT 08 · FLOATING, PYRAMID BASE

Private Residence

[LOCATION — TO CONFIRM]

Charcoal-blackened oak treads with a continuous LED glow beneath — cantilevered from a gold-flecked plaster wall, grounded on an illuminated floating pyramid base.

TYPE

Floating · cantilever

FLIGHT

Switchback, pyramid base

BALUSTRADE

Frameless, standoff-fixed

TREADS

Blackened oak, LED-lit





SECTION 03

Flying Cantilever Staircases

Engineering meets innovation. Each tread is carried on structural stringers of tempered, laminated glass — leaving the steps to float in mid-air, with nothing solid to hold them.

PROJECT 01 · FLYING CANTILEVER

Private Residence

[LOCATION — TO CONFIRM]

Solid oak treads carried between structural stringers of tempered, laminated glass — no steel beam, the flight left to float clear of the floor.

TYPE

Flying · glass stringer

STRINGER

Tempered laminated glass

TREADS

Natural oak

FLIGHT

Multi-flight, switchback



PROJECT 02 · FLYING CANTILEVER

Private Residence

[LOCATION — TO CONFIRM]

Walnut treads on tempered, laminated glass stringers — a continuous walnut handrail traces the flight, with LED light washing beneath each tread.

TYPE

Flying · glass stringer

TREADS

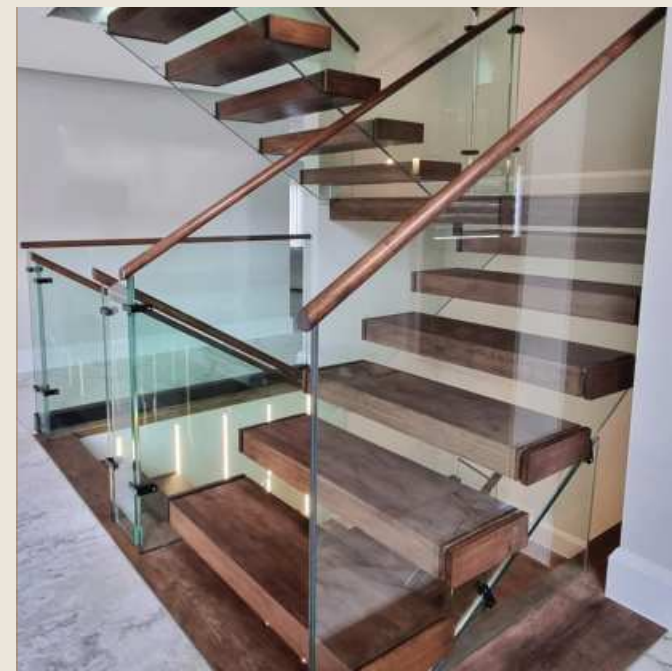
Walnut, LED-lit

STRINGER

Tempered laminated glass

HANDRAIL

Walnut on glass



PROJECT 03 · FLYING CANTILEVER

Private Residence

[LOCATION — TO CONFIRM]

European oak treads set between clear glass stringers on stainless fixings — a switchback flight reading as pure floating timber against white.

TYPE

Flying · glass stringer

STRINGER

Tempered laminated glass

TREADS

European oak

FLIGHT

Switchback

FLYING CANTILEVER



PROJECT 04 · FLYING CANTILEVER

Private Residence

[LOCATION — TO CONFIRM]

Blond oak treads in deep cantilevered blocks, suspended between frameless glass on stainless fixings — a switchback turning through a bright, wood-floored hall.

TYPE

Flying · glass stringer

STRINGER

Tempered laminated glass

TREADS

Blond oak

FLIGHT

Switchback (U-turn)



FLYING CANTILEVER





SECTION 04

Floating Staircase with Metal Rod Balustrade

Floating oak treads paired with a full-height screen of slender steel rods — a clean vertical rhythm drawn floor to ceiling, holding the line without a single panel of glass.

PROJECT 01 · METAL ROD BALUSTRADE

Private Residence

[LOCATION — TO CONFIRM]

A single floating flight in natural oak, held by a screen of slender steel rods drawn tight from floor to ceiling — structure and balustrade reduced to two clean lines.

TYPE

Floating · cantilever

BALUSTRADE

Steel rod, floor-to-ceiling

TREADS

Natural oak

FLIGHT

Single straight flight



PROJECT 02 · METAL ROD BALUSTRADE

Private Residence

[LOCATION — TO CONFIRM]

Blackened oak treads cantilever from a honed grey-marble wall, the structure concealed within it. A full-height screen of slender steel rods wraps the switchback floor to ceiling — a taut vertical rhythm that veils the flight without ever closing it in.

TYPE

Floating · cantilever

BALUSTRADE

Steel rod screen, full-height

TREADS

Blackened oak

FLIGHT

Switchback, winders

DETAIL — BLACKENED OAK & STEEL ROD





PROJECT 03 · METAL ROD BALUSTRADE

Private Residence

[LOCATION — TO CONFIRM]

Matte-black oak treads cascade from a white wall, met by a screen of slender steel rods rising to a recessed line of light. Monochrome and minimal — the flight set down on a single floating base.

METAL ROD BALUSTRADE

TYPE

Floating · cantilever

TREADS

Blackened oak

BALUSTRADE

Steel rod, ceiling-fixed

LIGHTING

Recessed LED cove



[CAWORKS]

SECTION 05

Cantilever Winders & Platforms

The cantilever taken around corners — pie-shaped winder treads turning a flight through the plan, and floating platforms where it pauses. Geometry resolved in oak, carried clear of the wall.

Private Residence

[LOCATION — TO CONFIRM]

Walnut treads cantilever clear of the wall and turn on winders — pie-shaped steps carrying the flight around the corner without a landing. Frameless glass on polished standoffs, with a line of LED washing beneath every tread.

TYPE

Floating · cantilever

FLIGHT

Switchback, winders

BALUSTRADE

Frameless glass, standoff-fixed

TREADS

Walnut, LED-lit

WINDER TURN & UNDER TREAD LED



PROJECT 02 · WINDERS & PLATFORMS

Private Residence

[LOCATION — TO CONFIRM]

Smoked-oak treads cantilever from a textured stone wall and double back on themselves — a full switchback turning the flight through 180°, read here from above. Frameless glass on polished standoffs throughout.

TYPE

Floating · cantilever

FLIGHT

Switchback (U-turn)

BALUSTRADE

Frameless glass, standoff-fixed

TREADS

Smoked oak



OVERHEAD — SWITCHBACK



LOWER FLIGHT & BASE

PROJECT 03 · WINDERS & PLATFORMS

Private Residence

[LOCATION — TO CONFIRM]

Blackened-oak treads cantilever clear of the wall and double back around a central core — a compact switchback that turns the flight within a tight footprint. Frameless glass on polished standoffs, the steps reading as a stack of dark, floating blocks.

TYPE

Floating · cantilever

FLIGHT

Switchback, central core

BALUSTRADE

Frameless glass, standoff-fixed

TREADS

Blackened oak

SWITCHBACK AROUND THE CORE



BLACKENED OAK, CANTILEVERED

Private Residence

[LOCATION — TO CONFIRM]

Blackened-oak treads rise to a generous half-landing — a floating platform that turns the flight and gives it pause. Frameless glass carries a slim stainless handrail, and every tread cantilevers clean from the wall.

TYPE

Floating · cantilever

FLIGHT

Switchback, half-landing

BALUSTRADE

Frameless glass + steel handrail

TREADS

Blackened oak



HALF-LANDING PLATFORM & HANDRAIL



Private Residence

[LOCATION — TO CONFIRM]

Blackened-oak treads cantilever from a white wall, each washed from beneath by a line of warm LED. The flight doubles back over an open well behind frameless laminated glass on polished standoffs.

TYPE

Floating · cantilever

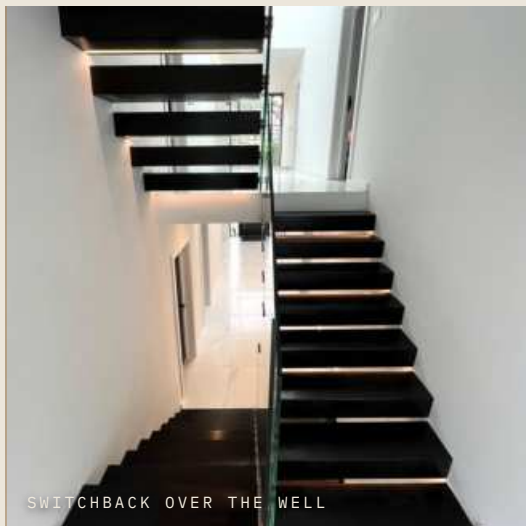
FLIGHT

Switchback, open well

BALUSTRADE

Frameless laminated glass

TREADS

Blackened oak, LED-lit

Private Residence

[LOCATION — TO CONFIRM]

Warm natural oak brings the cantilever to a characterful turn — winder treads carrying the flight past a stone feature wall and over the kitchen below. Frameless glass on polished standoffs throughout.

TYPE

Floating · cantilever

BALUSTRADE

Frameless glass, standoff-fixed

FLIGHT

Switchback, winders

TREADS

Natural oak



CLEAN CANTILEVER FLIGHT



TURN OVER THE KITCHEN



WINDER TURN & GLASS



GET IN TOUCH

Dubai's floating stair experts

The specialists behind hundreds of cantilever staircases across Dubai & the GCC — every flight surveyed, engineered and installed in-house. Contact us today.

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