TOM ALDER

Industrial designer focused on design for manufacturing (DFM) of rugged, outdoor hardware: from CAD and material choice, through fabrication, to installed and in use.

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BASED IN **Amsterdam, NL** | RIGHT TO WORK **Dutch WHV + BSN valid to 08/2027, no sponsorship needed to start**
PORTFOLIO **tomalderdesign.framer.website**

PROFILE

Industrial designer with 3+ years of design for manufacturing on hardware that lives outdoors and takes abuse: shade structures, playgrounds, facades and public art. I take parts from CAD through material and process selection, fabrication documentation and prototyping to on-site installation, working directly with fabricators and suppliers to challenge process, tolerance and finish choices. Trained in product design, including injection-moulded part design in SolidWorks. Motivated to apply that practical DFM judgement to agricultural technology that eases the economic pressure on farmers and makes grazing more sustainable.

WORK EXPERIENCE

Industrial Designer / Installer, Tilt Industrial Design

06/2023 – 06/2026 | Sydney, AU

– Led detailed design and DFM across structural steel, aluminium fabrication, concrete casting and metal casting, producing full fabrication documentation packages.
– Worked directly with fabricators and subcontractors to question and resolve manufacturing constraints, tolerances and finishes. Reduced rework and improved build accuracy.
– Delivered 20+ projects end-to-end (public art, architectural facades, shade structures, playgrounds and architectural features) from design brief to installed outcome, designed to hold up to weather and public use outdoors.
– Installed my own designs on site across industrial, commercial, residential and public-realm settings, seeing first-hand how details perform in real conditions.
– Managed procurement of materials and components, weighing cost and lead time against fabrication schedules to avoid project delays.

Carpe Diem Pavilion, Barangaroo

CLIENT International Towers Sydney | ARCHITECT Collins & Turner | VALUE $4M

– Led detailed design, fabrication coordination and installation of structural components for a 200 sq m mixed-material outdoor shade structure.
– Resolved tolerances, materials and assembly with fabricators for ten structural steel "triangles" on three columns, wrapped in 4.5km of aluminium cladding.

Cabravale Club Resort Redevelopment

CLIENT Wardan Group | ARCHITECT Altis Architecture | VALUE $1.3M

– Delivered detailed design, fabrication coordination and installation across two scopes, including eight 6m GRC and steel canopy structures and suspended feature elements.
– Resolved complex manufacturing and installation constraints while holding the architect's design intent.

Research Assistant & Tutor (part-time), University of Technology Sydney

2022 – 2024 | Sydney, AU

– Supported research including robotic 3D printing test pieces and hands-on workshop fabrication.
– Lectured a module of the third-year elective Generative Design Principles (nTopology, topology-optimised design).

Human-Centred Design Consultant (internship), Nous Group

2022 | Sydney, AU

– User research and service-design strategy for the City of Greater Dandenong (200+ spoken languages).

Labourer & Tiler (part-time), C.S. Pools

2014 – 2022 | Sydney, AU

– Hands-on construction, site problem-solving and a working understanding of material and finishing standards.

EXPERTISE

DESIGN & MANUFACTURING
Design for manufacturing (DFM)
Material & process selection
Supplier & fabricator coordination
Prototyping & design iteration
Fabrication documentation & QC
Procurement & cost trade-offs

SOFTWARE
SolidWorks
Onshape
Rhino
nTopology
KeyShot · Twinmotion
Adobe Suite

MAKING & SITE
Sketching & model-making
Workshop fabrication
Woodworking · Tiling
Forklift & EWP licences (NSW)
Working at heights (NSW)
White Card

EDUCATION

Bachelor of Design, Product Design, University of Technology Sydney

2019 – 2021 | Sydney, AU | WAM 77.35 · GPA 5.85

– Key projects: injection-moulded part design (SolidWorks); topology-optimised golf club set (parametric modelling); furniture design.

Bachelor of Design (Hons), Social Innovation, First Class Honours, University of Technology Sydney

2022 | Sydney, AU | WAM 85.75 · GPA 6.5

– Honours project: accessible urban heat-mitigation strategies for disadvantaged communities, exploring climate-responsive design as infrastructure during heat-stress events.

ADDITIONAL

LANGUAGES **English (native)** | CITIZENSHIP **Australian · British**
RIGHT TO WORK **Dutch working holiday visa and BSN, valid to mid-August 2027; seeking highly skilled migrant visa afterwards**
INTERESTS **Ultra running · Cycling · Woodworking · Cooking**

References available on request.