



Photography Anthony Browell

ATL Composites

Offering Innovative Material Solutions to the
Architectural and Building Industries



Designed by architect Richard Goodwin, the spectacular 17.5 m roof shape , with a cantilevered section, was modelled on the angular shapes of an F117 jet.

ATL Composites was established in 1977 manufacturing epoxy systems for the marine market.

While remaining a leading supplier to the high performance yachting industry, ATL has used it's knowledge and experience in the performance of composite materials to diversify into other industries where there is also a demand for lighter, stronger, stiffer structures.



Photography - Andrea Francolini

Materials that Cater to the Imagination

Composite materials have been supplied into numerous industries where design flexibility, performance and durability are critical, such as automotive components, wind turbine rotor blades, high performance sporting equipment , aircraft and exploration vessels.

With the increasing need for alternative materials that are lightweight and thermally insulating, and provide design flexibility, architects can incorporate composite materials to create stunning and durable structures.

Often associated with bold projects, both aesthetically and architecturally, composites are emerging as the leading building materials to replace timber, steel, aluminium and concrete.

Applications

- Building facades
- Structural cladding
- Doors, gates and window frames
- Long-span roofing and domes
- Acoustic insulation
- Pre-fabricated housing
- Composite decks and bridges



DuFLEX® composite panels cored with Select Grade® end grain balsa contributed structurally, while still meeting the weight and stiffness requirements.

The Benefits

Composite materials are now becoming accepted as an innovative alternative for the architectural and building industries, worldwide. Used alone or in conjunction with traditional building materials, composites can provide unique construction solutions.

Complex forms can be created easily and made to measure units can be manufactured to be adapted to existing structures, broadening design freedom and offering rapid processing and construction to significantly lower fabrication costs.

Composite's durability, weather resistance and inherent insulation properties mean less maintenance and life cycle costs.

- Design flexibility
- Stiffness with lightweight
- Impact resistance
- Corrosion resistance
- Structural insulation
- Off-site production
- Simplified transportation & handling
- Fast installation
- Low maintenance
- Recyclability & renewable resources



A distinctly organic shape, Hamilton Island Yacht Club, designed by renowned Australian architect Walter Borda, captures the essence of the Whitsundays.

The Product

DuFLEX® composite panels allow architects to solve design problems and provide new construction solutions.



DuFLEX panels, are available with rigid end-grain balsa, aramid honeycomb or structural foam cores laminated with a high performance epoxy resin and reinforced with multiaxial E-fibreglass.

The panels are manufactured under controlled temperature and humidity conditions, and products undergo quality assurance inspections at every step in production.

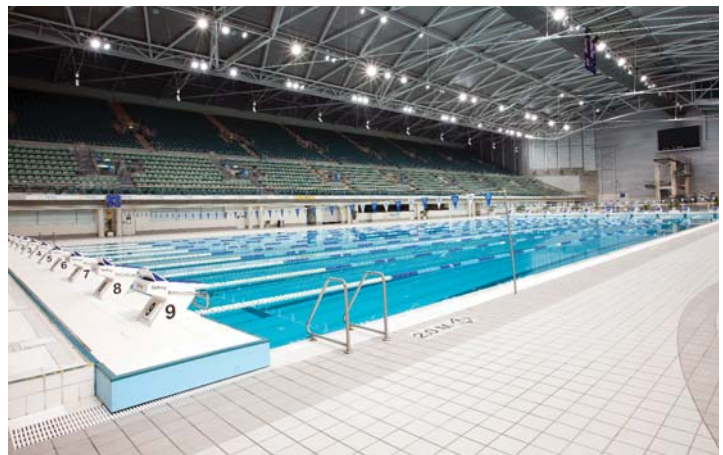


- Lightweight
- Dimensionally stable
- Easily sized, shaped and curved
- Code approved manufacture available

Support Services

Additional support services are available to provide guidance on how to utilise the structural advantages of composites and to ensure that projects meet design loadings and regulatory requirements.

- Consultation with architects and structural engineers for projects where traditional materials may under perform
- Composite engineering expertise including Finite Element Analysis
- Recommendations for approved fabricators
- Consultation and technical support for fabricators during construction process



Engineered by ATL Composites, the 25m moveable, all-composites starting-block structure of the Sydney Olympic Park Aquatic Centre Pool had an extremely challenging design criteria to meet minimal deflection requirements and maintain Olympic timing accuracy.