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Accessibility

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Cover: Kew Primary School Harwyn



INTRODUCTION

Victorian construction companies, manufacturers and supply chain businesses are world leaders in creating, making and adopting prefabricated buildings and infrastructure.

Prefabricated construction is evolving and growing. It extends across a wide array of sectors extending beyond single housing developments to schools, hospitals, train stations, sport buildings and the commercial building market.

As part of our Construction Technologies Sector Strategy, the Victorian Government continues to work with industry to encourage and stimulate off-site construction and market growth using locally manufactured products.

New opportunities continue to emerge, with the Victorian industry delivering into more projects that are increasingly becoming accessible to the Victorian prefabricated construction industry.

This directory showcases the breadth of capabilities of our innovative companies and its supply chain in the Victorian prefabrication industry, along with case studies where prefabrication has delivered outstanding projects across the nation.

This directory is an important resource for those with plans to use skilled, efficient and innovative partners in future building projects.



Picture: Altona Primary School, Victorian School Building Authority with ARKit and Sensum Group

VICTORIA IS AUSTRALIA'S LEADER IN PREFABRICATED CONSTRUCTION

Victoria is the home of innovative prefabrication manufacturers, with demonstrated ability to deliver high quality prefabricated buildings.

Prefabricated manufacturers are supported by Victoria's strong supply chain capabilities in design and engineering, project management, building component manufacturing, and transport and logistics.

Rapid technological advances are enabling prefabrication manufacturers to efficiently deliver affordable and high-quality housing and other built structures. A strong focus on innovation and streamlining the supply chain is creating significant opportunities for prefabricated manufacturers across the broader construction industry.

Victoria's strengths

- Well-established prefabricated construction ecosystem, with the largest number of prefabricated manufactures and industry organisations in Australia
- World class prefabricated construction research hub
- Leading developer of global standards and guides, including the Handbook for the Design of Modular Structures
- Exceptional advanced manufacturing capabilities
- Highly-skilled workforce
- Leading edge design and engineering expertise
- · Well-developed freight and logistics systems
- Competitive business costs

- Enabling regulatory system
- Leader in Building Information Modelling (BIM) and other digital technologies
- · Agile supply chain businesses.

What is prefabricated and modular construction?

Prefabricated construction (also known as off-site fabrication, modular construction or prefab) refers to the manufacture of buildings or other construction components in a workshop or a factory. Elements are then transported to the construction site, where they are incorporated into the building or infrastructure project.

Prefabrication can involve a range of systems with varying levels of complexity.

In Victoria simple structural systems, for example, include roof trusses and wall frames.

Prefabricated panels are more complex and are typically used for wall and floor systems. They can include elements added to the simple structure such as insulation, electrical points, waterproofing and cladding.

Modular systems represent further complex product development, and may be in the form of modules, or a suite of models that make up a structure, or specialised pods such as for wet or technically complex areas with advanced thermal, acoustic and durability properties.

Prefabrication technologies are rapidly advancing, with Victorian supply chain companies are playing a lead role.

WHY PREFABRICATED CONSTRUCTION IS BECOMING MORE POPULAR IN VICTORIA

There is a high demand for housing and public buildings, infrastructure in Victoria. Prefabricated and modular construction present an opportunity to significantly decrease the time required to deliver on this demand and improve the safety of construction.

Significant opportunities in prefabrication

5%



of homes were prefabricated in Victoria in 2016

(Australian Research Council Centre for Advanced Manufacturing of Prefabricated Housing, 2018) >50%

>40%



of prefabrication companies are based in Victoria (prefabAUS, 2015)

3%



of homes were prefabricated in Australia in 2016

(Domain, 2017)

Ti

Decrease in waste compared to insitu building

(Australian Research Council Centre for Advanced Manufacturing of Prefabricated Housing)

80%



\$6.5 billion



contribution of the manufactured modular housing sector to the Australian construction industry. (Built Offsite, prefabAUS, 2017)

ADVANTAGES OF PREFABRICATED CONSTRUCTION

Prefabricated construction has consistently shown proven benefits over the lifecycle of an asset in terms of costs, time, quality, health and safety.

Productivity and predictability



- Time efficiencies in overall project delivery
- Improved quality and consistency of product
- Improved productivity from economies of scale
- Less rework

Safety and reduced • disruptions •



- Structures are assembled quickly on-site
- Safer working conditions due to controlled environments
- Less disruption in and around construction sites, including to local communities

Environment



- More efficient use of materials
- Less waste
- Greater scope for recycling

HANDBOOK FOR THE DESIGN OF MODULAR STRUCTURES

A Modular Construction Codes Board initiative

The Handbook provides guidance on the design, construction, commissioning and replacement of modular structures. The aim of the Handbook is to share the experience and knowledge of advances in modular manufacturing and construction for improving safety, productivity and quality in industrial practices.

The Handbook references standards relevant to the design of built structures, including international and Australian standards. It is the first of its kind in the world.

It provides solutions for modular construction in areas including:

- Design for performance
- Design for manufacture and assembly (DfMA)
- Regulatory compliance.

The handbook can be accessed at mccb.org.au

A strong collaboration from leading experts

The first edition of the Handbook was released in 2017 by Monash University as a result of a collaborative project developed with key industrial and university partners, and with support from the Victorian Government.



Victoria is home to leading prefabrication organisations

prefabAUS



prefabAUS is the peak body for Australia's off site construction industry and exists to showcase and advance Australia's off site, prefabricated and modular construction industry. Created in Melbourne in 2013, prefabAUS represents 200 organisations across Australia. prefabAUS holds an annual conference, hosts guest speakers and networking events and arranges international study tours. www.preafaus.org.au

ARC Centre for Advanced Manufacturing of Prefabricated Housing



The ARC Training Centre for Advanced Manufacturing of Prefabricated Housing is focussed on collaborative, eco-friendly, prefabricated housing research in Australia. It strives to deliver breakthrough product and process innovations that will enable the Australian housing industry to compete on a global stage.

Modular Construction Codes Board



The Handbook for the Design of Modular Structures has been developed by a group of industry and technical experts through the Modular Construction Codes Board (MCCB), Monash University and with Victorian Government support. The Handbook provides technical guidance' on the design and construction of modular structures along the entire lifecyle of a structure. The Handbook is the first best practice guide for modular construction in the world, leading the way in enabling new construction technologies.

DIRECTORY OVERVIEW MANUFACTURERS

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DIRECTORY OVERVIEW PREFABRICATED CONSTRUCTION SUPPLY CHAIN

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ANCHOR HOMES

anchorhomes.com.au

Lester Raikes, Director lester@anchorhomes.com.au +61 408 055 231 55 Industrial Road Stratford VIC 3862

About

For more than 25 years, Anchor Homes has been providing high-quality, cuttingedge, sustainable and innovative building solutions to Australian families.

Their transportable homes are built at their 12,000 square metre manufacturing facility in Stratford and then transported to the client's site. Anchor Homes allow reduced wastage and stringent supervision, passing all quality standards.

200+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

In-house services

Engineering
Architecture
Manufacture
Assembly
Project Management
Construction

Capabilities

Commercial Buildings up to \$20 million House and Apartment Construction

Key projects

Residential homes Holiday homes Dental Surgery projects









Architecture

Manufacture

Assembly

Project Management

Construction

Capabilities

Commercial Buildings up to \$20 million

House Construction

Public Building Construction (hospitals, schools)

Key projects

Residential homes

Accommodation

Child care centres

Community centres

Infrastructure projects

Pop-up spaces

Schools

ARCHIBLOX

archiblox.com.au

Bill McCorkell, Director bill@archiblox.com.au +61 404 096 188 5/151 Barkly Avenue Burnley VIC 3121

About

Archiblox is a team of skilled architects, interior designers, project managers, builders and finishing trades, with a focus on balancing beauty and technology.

Archiblox provides end-to-end services to meet unique demands of clients whether residential or commercial.

40+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units) Pods (multipurpose space)

ARKIT

arkit.com.au

Craig Chatman, Director craig@arkit.com.au +61 411 453 480 6/2 Tube Street Sunshine North VIC 3020

About

ARKit is an architect-led, design and build group specialising in the delivery of custom designed, high quality, sustainable building solutions for a variety of residential, commercial, and educational applications.

ARKit offers a fully integrated, in-house design and construction service that combines architectural expertise with the efficiencies of prefabrication to carefully translate project requirements from brief to built form.

30+ employees in Victoria.

Focus area

Timber framed construction Modular building systems (including sectional, volumetric, or unitised structural units) Panelised building systems

(non-volumetric systems, open or closed panel systems)

Hybrid building systems

In-house services

Architectural design/consultancy Off-site construction Installation/assembly, on-site construction Project Management Passive House consultancy

Capabilities

Commercial Buildings up to \$20 million Housing and Apartment Construction Public Building Construction (hospitals, schools)

Key projects

Phoenix College Early Learning Centre (pictured)

Melbourne Water Office, Silvan - Winner (Commercial), Melbourne Design Awards 2014 Altona North Primary School South Cres (pictured) - Highly Commended, Sustainability Awards 2019; Shortlisted, Houses Awards 2019 Beaumaris North Primary School -Winner, Sustainability Awards 2019;

Shortlisted, Houses Awards 2019









Engineering

Architecture

Manufacture

Assembly

Project Management

Construction

Capabilities

Commercial Buildings up to \$200 million

House Construction

Public Building Construction

(hospitals, schools)

Engineering Construction/Infrastructure

Key projects

Department of Education Relocatable Program

Wheatstone Blast Rated buildings and Construction Village

NSW Correctional Facilities High

Security Prison Cells

Department of Immigration and Border Protection Detention facilities

Melbourne Immigration Centre high security pods

ATCO STRUCTURES AND LOGISTICS

atco.com/en-au/for-business.html

Elliot McCarthy, Manager – Victoria elliot.mccarthy@atco.com +613 8765 8200 128 Hallam Valley Road Dandenong South VIC 3175

About

ATCO specialises in workforce and construction villages, both temporary and permanent. They also provide project management solutions, from initial design and engineering stage through to logistics management.

25+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

FLEETWOOD AUSTRALIA

fleetwood.com.au

Eric Chandler, General Manager Sales & Marketing ericc@fleetwood.com.au +61 498 009 080 Level 3, 246 Bourke Street Melbourne VIC 3000

About

Fleetwood has leveraged advances in technology and prefabrication and work with government departments, owners, architects and engineers to design and build custom modular buildings. They provide pre-construction assistance, project schedule development as well as construction management services.

130+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

In-house services

Architecture
Manufacture
Assembly
Project Management
Construction

Capabilities

House Construction
Public Building Construction
Engineering Construction/Infrastructure

Key projects

Relocatable Building Program

Victorian School Building Authority Permanent Modular Building Program

Department of Education & Training
(QLD) - Preferred Supplier Agreement

Department of Justice (NSW) Minimum Security Program Units (HIPU)

Department of Education & Training -

Carey Baptist Grammar- Double Storey Decanting Solution

Ilim College- Four campuses across Victoria









Engineering

Architecture

Manufacture

Assembly

Project Management

Construction

Onsite Infrastructure

Capabilities

Commercial Buildings up to \$20 million Public Building Construction (hospitals, schools)

Key projects

2006 Melbourne Commonwealth
Games Athlete Village
Carlton Gardens Primary School
South Yarra Primary School
Strathmore Secondary College
North Melbourne Primary School
Toorak Primary School
Yarraville West Primary School
Mount Waverley Heights Primary School
Glengala Sunshine West Primary School

GROVE GROUP

grovegroup.com.au

Stephen Grove, Chief Executive Officer stephen@grovegroup.com.au +613 5942 0700 5 Mega Rise Pakenham VIC 3810

About

The Grove Group offers a full turn-key service. The company manages all aspects of the project, from feasibility through to design, manufacture and installation of furniture and other accessories. The Grove Group is a privately owned, proudly Australian company. 60+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

HABITECH SYSTEMS

habitechsystems.com.au

Chris Barnett, Managing Director info@habitechsystems.com.au +61 415 380 374 Level 3, 372 Albert Street, East Melbourne VIC 3002

About

Habitech Systems designs and delivers high quality, highly insulated and air-sealed homes using a modular, panelised building system.

They focus on the design and performance of the building fabric.

10+ employees in Victoria.

Focus area

Components (pre-cut, pre-sized, pre-moulded or pre-shaped elements that are assembled or installed on site)
Panels (Panelised, or non-volumetric systems, open or closed panel systems, precast concrete panels or other panel types)

In-house services

Architecture Manufacture

Capabilities

House Construction
Public Building Construction
(hospitals, schools)

Key projects

Mornington Beachhouses Hawthorn Solar Extension









Engineering

Architecture

Manufacture

Assembly

Project Management

Construction

Capabilities

Commercial Buildings up to \$20 million

House Construction

Public Building Construction (hospitals, schools)

Key projects

Camberwell Girls Grammar

Mentone Grammar

Hutingdale Primary School

McKinnon Secondary College

Kew Primary School

Bacchus Marsh Grammar

Lauriston Girls' School

Yarra Valley Grammar

Kilvington Grammar

Huntingtower School

Souther Cross Grammar

Presbyterian Ladies' College

St Michaels Grammar

Lowther Hall Anglican Grammar

HARWYN

harwyn.com.au

Jason Fremder, Managing Director

jason@harwyn.com.au

+61 422 925 592

43 Cubitt Street

Richmond VIC 3121

About

Harwyn pods are designed as permanent structures that have the ability to be easily relocated and repurposed.

The pods are multi award winning spaces.

8+ employees in Victoria.

Focus area

Modular of any size and configuration including multi storey. Completed projects range in size with buildings from 8m2 to 240m2 including multi storey.

Pods which are single purpose rooms up to 30m2

HICKORY BUILDING SYSTEMS

hickory.com.au

George Argyrou, Managing Director info@hickory.com.au +613 8329 4111 55 Leakes Road Laverton North VIC 3026

About

Hickory's patented building technology delivers an innovative, technological alternative to the construction of high-rise projects and modular bathroom pods production.

The Hickory Building System blends the best of manufacturing and construction technology, processes and personnel with Hickory's selfperformance capabilities to deliver clients a turn-key building solution. 100+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units) Pods (bathrooms)

In-house services

Engineering Manufacture Assembly Project Management Construction

Capabilities

Commercial Buildings up to \$500 million Public Building Construction (hospitals, schools) **Apartments**

Key projects

Collins House, Melbourne La Trobe Tower, Melbourne Atira Student Accommodation, Melbourne V by Crown, Paramatta (Sync Bathroom Pods) Ryde Gardens, Sydney (Sync Bathroom Pods)





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Engineering
Manufacture
Assembly
Project Management
Construction

Capabilities

Commercial Buildings up to \$20 million
Public Building Construction
(hospitals, schools)
Engineering Construction/Infrastructure

Key projects

Bacchus Marsh Grammar School Catholic Regional College Sydenham Christian College Geelong, Surf Coast Campus

K.L. MODULAR SYSTEMS

klmodular.com.au

Sue Rolland, Director sue@klmodular.com.au +61 413 152 490 12 Margaret Steet Kinglake West VIC 3757

About

Modular construction to client specifications offered in a design and construct option, specialising in schools, office/administration and service buildings.

20+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

MODSCAPE

modscape.com.au

Jan Gyrn, Director jan@modscape.com.au +613 9316 6000 430 Francis Street Brooklyn VIC 3012

About

Modscape values design, innovation and sustainability. The company designs and builds beautiful and functional modular homes and commercial projects across a range of industries – from healthcare and education to hospitality and transport – delivering and installing Australia-wide.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

45+ employees in Victoria.

In-house services

Architecture
Manufacture
Assembly
Project Management
Construction

Capabilities

Commercial Buildings up to \$20 million
House & Apartment Construction
Public Building Construction
(hospitals, schools)
Engineering Construction/Infrastructure

Key projects

Department of Education Permanent Modular School Buildings Program Australian Catholic University Waverley Private Hospital Melbourne Zoo Office St Kilda Apartments Monash College Learning Village Mitcham Railway Station









Engineering Manufacture Assembly

Capabilities

Commercial Buildings up to \$20 million Public Building Construction (hospitals, schools) Houses

Key projects

Youth Centre
Student Camp Accommodation
Staff Accommodation
Office Space
Holidays Homes
Classrooms

MOPOD AUSTRALIA

mopod.com.au e-soltec.com.au

Alexander (Sam) Scales, Managing Director info@mopod.com.au +613 425 741 914 1/145 Wimble Street Seymour VIC 3660

About

Mopod provides a practical, contemporary, readily transportable, high quality yet affordable alternative. Every project is tailored to suit the client's specific needs and budget.

The company's modular building system is highly engineered, lightweight and robust portal frame structures for permanent, temporary, commercial and domestic structures.

10+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units) Panels

Pods (bathrooms)

ORTECH INDUSTRIES

www.ortech.com.au

Steve Layfield steve@ortech.com.au +613 9580 7766 91 Allingham St Golden Square VIC 3555

About

Ortech Industries has been operating in Victoria for over 30 years supplying many landmark projects throughout Australia and the world with panelised ceiling and wall systems

Modular housing systems are constructed from Durra Panel® and Durra Steel sections, providing noise control, thermal insulation and impact resistance. Durra Panel is made from recycled wheat straw in Bendigo, providing a sustainable building solution. 45+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

Panels (Panelised, or non-volumetric systems, e.g. internal load bearing walls or lighter partitions, open or closed panel systems, precast concrete panels or other panel types)

Components – (pre-cut, pre-sized, pre-moulded or pre-shaped elements that are assembled or installed on site)

In-house services

Engineering
Architecture
Manufacture
Assembly
Construction

Capabilities

Commercial Buildings up to \$4 million House Construction

Key projects

Shiraz Republic Winery Gisborne Peak Winery Anglicare

Supplied over 800 1 and 2 bedroom studios to Kids Under Cover

Village 21

Low cost housing for disaster relief in East Timor









Engineering
Manufacture
Assembly
Project Management
Construction

Capabilities

Commercial Buildings up to \$20 million House & Apartment Construction Public Building Construction (hospitals, schools)

Key projects

Sydenham's Catholic Regional College
Caufield Grammar School
Public Primary Schools
Morisset Police Station
Defence Accommodation
Folkestone Childcare Centre,
South Morang
Wesley College Boarding School
Train Stations

PREBUILT COMMERCIAL

commercial.prebuilt.com.au

Rob Colquhoun, Managing Director rob@prebuilt.com.au +613 9761 5544 33-35 Garden Street Kilsyth VIC 3137

About

Prebuilt started in 2003 with a focus on bringing quality architectural design to modular buildings. The company focuses on high end homes from \$1 to \$3 million. Commercial sales are education, sales suites, and transport related spaces. Prebuilt owns a 40,000 sqm site.

70+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

RENDINE CONSTRUCTIONS

rendine.com.au

Greg Mills, Managing Director greg.mills@rendine.com.au +613 5248 2542 18-30 Point Henry Road Moolap VIC 3224

About

Established in 1973, Rendine Constructions delivers a holistic suite of Commercial and Modular services.

Embracing forward thinking principles Rendine combines traditional building methods with efficient manufacturing techniques to deliver bespoke modular outcomes intelligently, cleaner, faster and to an exceptional standard.

35+ employees in Victoria.

Focus area

Modular construction of education, recreation, public housing, retail, medical and aged care facilities.

In-house services

Modular Manufacturing
Commercial Construction
Design and Construct
Structural and Civil Engineering
Project Management

Capabilities

Projects up to \$10m

Building Information Modelling (BIM)

Site Investigation

Service Connection with Existing

Interfacing with Existing

Flexible Customised Designs

Sustainable Designs

Key projects

Tate St Primary School
Ainslie Parklands Primary School
Regency Park Primary School
Warrnambool Primary School









Engineering
Architecture
Manufacture
Assembly
Construction

Capabilities

House Construction
Public Building Construction
(hospitals, schools)

Key projects

Towards Home Unit developments Community Care Units

SUPERIOR GRANNY FLATS/BETNALE

superiorgrannyflats.com.au

Shane Bray, Director info@superiorgrannyflats.com.au +61 419 540 393 Factory 2/874 Mountain Highway Bayswater VIC 3153

About

Betnale has supplied prefabricated granny flats throughout Victoria and has been building granny flats, sleepouts, relocatable homes and cabins since 1990. Betnale is an approved builder for the Department of Human Services, holding current contracts to relocate granny flats state wide.

25+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

SWANBUILD/PRETECT

swanbuild.com.au pretect.com.au

Craig Perryman, General Manager sales@swanbuild.com.au 1800 008 024 210/214 Karinie Street Swan Hill VIC 3585

About

Swanbuild is a family owned modular building company, operating for over 30 years from its purpose built manufacturing complex, in regional Victoria.

Swanbuild's 2 divisions: Swanbuild Homes and Pretect Commercial Modular Buildings provide innovative volumetric modular solutions in all aspects of Residential and Commercial Construction. Projects across regional and metro Victoria, South Australia and Southern NSW.

A member of prefabAUS, Swanbuild enjoys industry recognition as recent finalists in the Victorian Manufacturing Hall of Fame and Victorian School Design Awards.

Swanbuild has DTF Construction Supply Registration and is a member of the VSBA, SADE and DHHS Modular Building panels.

60+ employees in Victoria.

Focus area

Modular Construction including: Multi-level, Sectional, Volumetric and Unitised Structural Units.

In-house services

Architecture
Manufacture
Assembly
Project Management
Construction

Capabilities

Commercial Buildings up to \$20 million
House Construction
Public Buildings, Education,
Health and Recreational Facilities

Key projects

Residential homes, investment and holiday houses

Kindergarten, Primary and Secondary Schools

Public Housing and Specialised Accommodation

Health and Medical Facilities
Recreational Facilities

Commercial Office Space

Retirement and Holiday Village Housing









Engineering Manufacture Assembly

Capabilities

Commercial Buildings up to \$20 million Public Building Construction (hospitals, schools) Houses

Key projects

Two story office building, St Marys, Sydney Meyer Timber NSW Office Residential Apartments Toorak, Melbourne 12 Apartments in four three-story blocks in Auckland for Kāinga Ora.

TIMBER BUILDING SYSTEMS

tbsaus.com.au

Tim Newman, General Manager info@tbsaus.com.au +613 8710 6941 PO Box 4375 Dandenong South VIC 3164

About

Timber Building Systems has developed a revolutionary post tensioned building system for modern construction methods destined for multi-level residential apartments, hotels, student accommodation, senior housing facilities and commercial office buildings.

TBS's patented building assembly system provides wood-based integrated flat pack panels that include structural as well as plumbing and electrical service elements.

Focus area

Modular (Including sectional, volumetric or unitised structural units) Panels





Engineering Manufacture Assembly Project Management Construction

Capabilities

Commercial Buildings over \$200 million Engineering Construction/Infrastructure Public Building Construction (hospitals, schools)

Key projects

Royal Children's Hospital Royal Melbourne Hospital Box Hill Hospital New Bendigo Hospital Monash Children's Hospital Peter Doherty Institute Crown Casino Melbourne Markets Commonwealth Post Entry Quarantine Facility

Collins Square 839 Collins Street

Rod Laver Arena Redevelopment

A.G. COOMBS GROUP

agcoombs.com.au

Bryon Price, Strategic Development Director bprice@agcoombs.com.au +61 3 9248 2700 26 Cochranes Road Moorabbin VIC 3189

About

A.G. Coombs uses large-scale prefabricated services methods to construct vertical and horizontal services modules, and plant rooms in whole or in sections, are constructed in A.G. Coombs' integrated prefabrication facility and transported to site for installation. All system components including HVAC, mechanical, electrical, controls and fire protection elements can be installed, pre-tested and pre-commissioned, reducing site time and improving quality, program, safety and performance outcomes. 425 employees in Victoria.

Pods

Focus area

Components (pre-cut, pre-sized, pre-moulded or pre-shaped elements that are assembled or installed on site)

APEX WIRING SOLUTIONS

apexwiringsolutions.com

info@apexwiringsolutions.com +611300 865 871 Unit 3/739a Main Road Eltham VIC 3095

About

APEX modular wiring systems provides for electrical installations of small power and lighting sub-circuits in healthcare, commercial, hotels and student accompagations.

Apex Wiring Solutions has introduced a Flexible Cabling System which replaces the traditional wiring of electrical sub-circuits, with a rapid and easily installed range of advanced prefabricated connector and cable assemblies, reducing installation time by up to 70%.

10+ employees in Victoria.

Focus area

Components (wires)
Panels (wires)
Pods (wires)
Modular

In-house services

Assembly Manufacture Design

Capabilities

Commercial Buildings above \$20 million Public Building Construction (hospitals, schools)

Key projects

Westmead Hospital (NSW)
Sunshine Coast Uni Hospital (QLD)
Holiday Inn Express (VIC)
Fragrance Hotel (WA)
Union Square (ACT)









Manufacture

Capabilities

Manufacturer and supplier of commercial vinyl flooring to:
Commercial Buildings
House Construction
Apartment Construction

Public Building Construction (hospitals, schools)

Key projects

Bannockburn State School
Carey Baptist Grammar
Yallourn Primary School
Preston North East Primary School
Dame Phyllis Frost Correctional Facility
Royal Children's Hospital Melbourne
Tune Hotel Melbourne

ARMSTRONG FLOORING

armstrongflooring.com.au

Stephen Rando, State Sales Manager VIC & TAS

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Braeside VIC 3195

About

Armstrong Flooring is Australia's only remaining manufacturer of commercial vinyl flooring, employing over 100 people to produce durable high-performance products for domestic and export markets.

The company supplies floor and wall solutions across a broad range of applications – from retail and education to health care, modular housing, commercial interiors and public spaces.

Armstrong Flooring's products meet the Green Building Council of Australia (GBCA) best practice PVC guidelines and offer a range of durable, low maintenance floor and wall solutions where environmentally sustainable materials are required.

Focus area

Components – Flooring and other installation and maintenance materials

CAPRAL ALUMINIUM

capral.com.au

csscampbellfield@capral.com.au 1800 ALUMINIUM (258 646) 151 Barry Road Campbellfield VIC 3061

About

Capral is publicly listed on the ASX. It is Australia's largest manufacturer and distributor of aluminium profiles.

Capral has a national footprint of world class aluminium extrusion plants, with 8 operating presses with annual capacity of 60kT.

Capral is a market leader in supply to fabricators and distributors, focusing on the residential, commercial and industrial segments.

160+ employees in Victoria.

Focus area

Aluminium Extrusion & Distribution

In-house services

Manufacture

Capabilities

Commercial Buildings over \$200 million
House and Apartment Construction
Public Building Construction
(hospitals, schools)
Engineering Construction/Infrastructure
Transport
Marine

Key projects

General Engineering

University Hospital Geelong Expansion
Commonwealth Offshore
Patrol Vessels
International Commercial
Passenger Ferries
Australian Road Transport
Adagio Apartments (WA)
ANZAC Bridge Fencing (NSW)
Moonah Arts Centre (TAS)









Engineering Manufacture Assembly

Capabilities

Commercial Buildings up to \$20 million House & Apartment Construction

Key projects

Residential Housing, Medium Density Housing, Commercial Projects and Age Care Projects.

72 Double Storey unit development in Keysborough

59 combination Double and Triple unit Development in Craigieburn

500 m2 Double Storey Resident house in McCrae

Multiple Triple Storey project in Doncaster

5x4 Project Featured on Grand Design Australia in Melbourne

Prototype Fully Closed Wall Panel Project in the Hunter Valley

DROUIN WEST TIMBER AND TRUSS

dwtt.com.au

Dean Urwin, General Manager info@dwtt.com.au +613 5625 2537 100 Old Sale Road Drouin West VIC 3818

About

DWTT has been manufacturing prefabricated roof trusses, wall frames and longreach floor trusses since 1980.

In 2014 DWTT introduced Panelised Building Methods by launching FutureFit. DWTT supply state-of-the-art wall panels and floor cassette systems with external claddings, windows and sheet flooring pre-installed offsite then craned into position onsite with significantly greater speed and quality.

Focus area

Components – pre-cut, pre-sized, pre-moulded or pre-shaped elements that are assembled or installed on site

Panels – Panelised, or non-volumetric systems, open or closed panel systems, precast concrete panels or other panel types

Modular - Including sectional, volumetric or unitised structural units

DYNAMIC STEEL FRAME/ DYNAMIC STEEL PODS

dynamicsteelframe.com.au

Peter Blythe, Managing Director sales@dynamicsteelframe.com.au +613 9701 7342 34-36 Evolution Drive Dandenong South VIC 3175

About

Supplier of light gauge steel frames. Design, prefabricate and deliver wall frames, roof trusses, floor joists, flooring cassettes, panels, facades and balustrades.

Their subsidiary, Dynamic Steel Pods manufactures fully integrated and customised bathroom pods 30+ employees in Victoria.

Focus area

Components (steel frames, joists, trusses, cassettes)
Panels (steel)

In-house services

Assembly Manufacture

Capabilities

Commercial Buildings up to \$200 million Apartment & House Construction Public Building Construction

Key projects

Australia's first 4 story LGS apartment building

34 Townhouses for Hutchinson Builders Curved Balustrades for Tip Top Bakery Redevelopment site in Brunswick Emerald Primary School 200+ frames for Victorian schools









Engineering Manufacture Assembly Construction

Capabilities

Commercial Buildings ranging from \$1 million to over \$20 million Apartment Construction Engineering Construction

Key projects

Aged Care Student Accommodation Residential Hotel

SCHIAVELLO MODULAR SOLUTIONS

schiavello.com

Damien Crough, Technical Leader -Advanced Building Manufacturing info@schiavello.com

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1 Sharps Road

Tullamarine VIC 3043

About

Schiavello is a manufacturer of high quality products, operating since 1966. Schiavello bathroom pods are manufactured in a modern 70,000 square metre factory in Tullamarine, Victoria, incorporating timber, glass, aluminium, steel, metal, plastic, solid surface, upholstery fabrication and electrical. Schiavello is able to design, fabricate and fitout bathroom pods in the shortest timeframes.

Focus area

Modular – Including sectional, volumetric or unitised structural units

Pods – generally not structural modules, e.g. bathroom or kitchen pods

Panels – Panelised, or non-volumetric systems, e.g. internal load bearing walls or lighter partitions, open or closed panel systems, precast concrete panels or other panel types

Components – pre-cut, pre-sized, pre-moulded or pre-shaped elements that are assembled or installed on site

SENSUM GROUP

sensum.com.au

Nick Strongman, CEO nick@sensum.com.au +614 3436 9440 Level 1/2 Adelaide Street Cremorne VIC 3121

About

Sensum is a construction consultant firm with experience in traditional capital works, specialising in off-site construction methodologies.

Sensum services the public and private sector in residential, health and education projects.

25+ employees in Victoria.

Focus area

Consultancy firm that specialises in the delivery of prefabrication and modular projects

In-house services

Engineering
Architecture
Project Management

Capabilities

Commercial Buildings up to \$20 million House Construction Engineering Construction/Infrastructure Public Building Construction (hospitals, schools)

Key projects

Tullamarine Primary School
Highton Primary School
Thomastown East Primary School
Dandenong DHHS House
Corio DHHS House Croydon
DHHS House Altona Primary School
Frankston Heights Primary School
Mount Waverley Heights Primary School
Yallourn North Primary School









Engineering

Manufacture

Assembly

Project Management

Capabilities

Commercial Buildings up to \$20 million

Apartment Construction

Public Building Construction (hospitals, schools)

Key projects

Age Care Facility (Sawn Hill)

Hotels

Apartment buildings

Hospitals

Aged care projects

Boarding house (QLD)

SKYPOD SYSTEMS

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Campbellfield VIC 3061

About

Skypod Systems manufactures affordable high quality prefabricated bathroom pods off-site and tailor made to precise architectural specifications.

65+ employees in Victoria.

Focus area

Modular (Including sectional, volumetric or unitised structural units)

Pods (bathroom)

SPEEDPANEL SYSTEMS

speedpanel.com.au

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About

Speedpanel manufactures cutting-edge fire and acoustic rated non-load bearing wall systems. Speedpanel products have undergone continuous development including testing and certification for a wide range of fire and acoustic applications. Currently, Speedpanel is one of the most certified products in these markets within Australia.

Speedpanel continues to drive excellence throughout all aspects of manufacturing and product development with a focus on innovation and environmentally sustainable practices.

120+ employees in Victoria.

Focus area

Panels (Panelised, or non-volumetric systems, lighter partitions, open or closed panel systems, precast concrete panels or other panel types)

Components – (pre-cut, pre-sized, premoulded or preshaped elements that are assembled or installed on site)

In-house services

Manufacture

Capabilities

Commercial Buildings over \$20 million
Apartment construction
Public Building Construction
Engineering Construction
Infrastructure

Key projects

Supplied wall systems for the following:
Australia 108
Collins Square
Melbourne Park Redevelopment
Victorian Comprehensive Cancer Centre
Fiona Stanley Hospital
MCG Redevelopment
Midland Hospital
Sunshine Coast University Hospital









Engineering
Manufacture
Assembly
Project Management
Installation

Capabilities

Roll formed steel roof battens

Key projects

House & Retirement Village Construction
Engineered light gauge steel framing
and roof trusses
Individual houses and
multi-unit developments

STEEL FRAME SOLUTIONS

steelframesolutions.com.au

Wendouree VIC 3355

John Shayler, Business Development Manager johns@steelframesolutions.com.au +613 5338 4800 9 Caravan Street

About

Steel Frame Solutions manufactures prefabricated steel wall frames and roof trusses for the commercial and residential building industries. They also provide support right from the start to completion.

They manufacture and supply steel wall frames, roof trusses, structural steel, floor systems, roof battens and ceiling battens.

50+ employees in Victoria.

Focus area

Pods

Modular (Including sectional, volumetric or unitised structural units)

Panels (walls, roofs)

Components (steel)

WESTKON PRECAST

westkon.com.au

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About

Westkon Precast has developed a reputation for providing highly innovative precast concrete structures and products for some of Victoria's most prominent and largest landmarks, sporting stadiums and road developments. As one of the largest and most diverse precast producers in Victoria, they are at the forefront of concrete technology that meet the requirements of the ISO standards, current OHS acts, regulations and Australian Standards.

200+ employees in Victoria.

Focus area

Pods (Precast Structures & Hollowcore Planks)

Modular (Including sectional, volumetric or unitised structural units)

Panels (bridge beams, barriers, parapets)

In-house services

Assembly

Manufacture

Engineering

Project Management

Construction

Capabilities

Apartment Construction

Public Building Construction

Engineering Construction/Infrastructure

Key projects

Caulfield to Dandenong Skyrail

City-Tulla Widening

Ravenhall Prison

Melbourne Airport Carpark

& Infrastructure

Simonds Stadium Geelong

Melbourne Cricket Ground

Australis Tower & Upper West Side

AAMI Park

Victorian Comprehensive Cancer Centre

Royal Children's Hospital





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CASE STUDY 1 Sunbury Lawn Tennis Club

With over 400 members, updating the tired clubroom at the Sunbury Lawn Tennis Club was an important step in the Club's future. In 2017, the Sports and Recreation division of Hume City Council sought tenders for a new modular clubroom with a total floor area of 363.5m². The modular building was manufactured 80km away from Sunbury in Kinglake.

The Council decided on a modular construction solution, following a feasibility study and consideration of similar projects such as the Eltham Bowls Club.

With four major constraints, the Council found that off-site construction was the right building solution. The project was successfully delivered by a Victorian company, KL Modular Systems, with impressive results that will benefit the Sunbury community for many years to come.

The Project Delivery Team was very happy with the result. The project delivery was seamless, there were less safety issues, the site was very clean at all times and the building encountered minimum defects.

Modular building is something that the procurer can almost buy off the shelf.

Challenges	Modular Building Solution	Outcomes
Limited budget	Saved up to 30% compared to conventional building	Total project costs were lower than full budget, resulted in savings for the Council.
Need to minimise the disruption of the centre	Minimum impact on the club operation	 31 weeks delivery from contract signing to full completion of the project. The club was without a facility for only three months.
Need to have a long-lasting building	Solid and steady steel frame and quality materials were used	Building life span expected to be same as a conventional building.
Need to secure the site	Very quick lock up for a limited exposed building to vandalism and thefts	 On-site installation of the prefabricated structures was completed. Just another six weeks were required to finalise the building.

Things to know if you want to go "off-site"

- Develop concept designs, rather than full design documentation, so as to make the most of prefabricated construction
- 2. Use an architect or designer, and project manager with modular manufacturing and Victorian supply chain capabilities
- 3. Choose a builder which is able to create your favourite visual lines as each builder has its own visual identity
- 4. Make sure that fire services are part of the handover process.
- 5. Allow a few weeks for site connection with external utilities (e.g., electricity, plumbing, fire services)



CASE STUDY 2 Prefabricated Schools

In Victoria, there are currently more than 1500 government schools educating more than 600,000 students. As Victoria's population is forecast to grow from 6.4 million in 2017 to around 10 million people by 2050, cost effective solutions are required to deliver more, better quality and high performing school facilities.

Through the modular schools program, new schools are being delivered across Victoria using modular construction technologies.

The wide-ranging benefits of modular construction creates a natural fit for school projects. Modular construction significantly reduces issues raised when classrooms are constructed on school grounds. This include disruption from excess noise and dust, and safety concerns from site construction activities.



Southmoor Primary School, Grove Group, K20 Architects and Sensum (2018)









With up to 95 per cent of construction occurring off-site, on-site activities have been reduced to weeks rather than months. Demolition, site preparation, delivery and installation can happen during the narrow window of a school-term break or during school holidays, minimising disruption to lessons.

'There were lots of things that surprised me about the building process, how quickly the modulars arrived at our school, and how quickly it actually came together from that point in time and to have this beautiful new building in the background... it was quite extraordinary. The quality of the new building is fantastic. I couldn't be happier with not only the end product, but the design process and the actual design of creating amazing flexible spaces for our students'

Principal, Mount Waverley Heights Primary School

VICTORIAN GOVERNMENT CONNECTS BUSINESSES TOGETHER

The Victorian Government makes it easy for businesses to connect and grow.

With metropolitan and regional offices located across Victoria, Victorian Government Business Offices (VGBO) and Regional Development Victoria (RDV) can support your business to grow.

Business facilitation services provided in Victoria include:

- Introduction to local supply chain companies
- Navigating government services, programs and regulations
- Introduction to research and development providers, universities, education providers, industry associations and government departments
- Site identification services to investors seeking properties in Melbourne and regional Victoria.

Global offices are located in key international markets such as Asia, the Americas, Europe and the Middle East, which can assist Victorian businesses with market access, while providing market advice and analysis.

business.vic.gov.au

rdv.vic.gov.au

invest.vic.gov.au



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