



CAPABILITY

Digital Engineering - Specialists in Construction 3D Modelling and Detailing

JBD Vision

"We develop synergies with our valued clients complimenting the creative design process. Through well executed build simulation we lead the industry bringing design to reality, resulting in unique and significant construction efficiencies and design clarity."

JBD Mission

"Our strength as a team fosters global industry respect as we solve complex construction tasks. Our systems, technologies and expertise support a sustainable industry that is environmentally aware and future orientated."



Capability Statement

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JBD Group

Established in 1997, JBD Group is a privately-owned Australian organisation head quartered in Queensland with offices in Forest Glen, Cairns and New Zealand. JBD has undertaken projects across Australia and overseas providing specialist construction 3D modelling and detailing services to all parts of the building and construction sector.

Combining 200+ years of construction modelling and detailing experience, we are leaders in the development of 3D models, detailed drawings and Building Information Modelling (BIM) with the requisite skills and experience to overcome any challenge.

JBD, detailing through experience

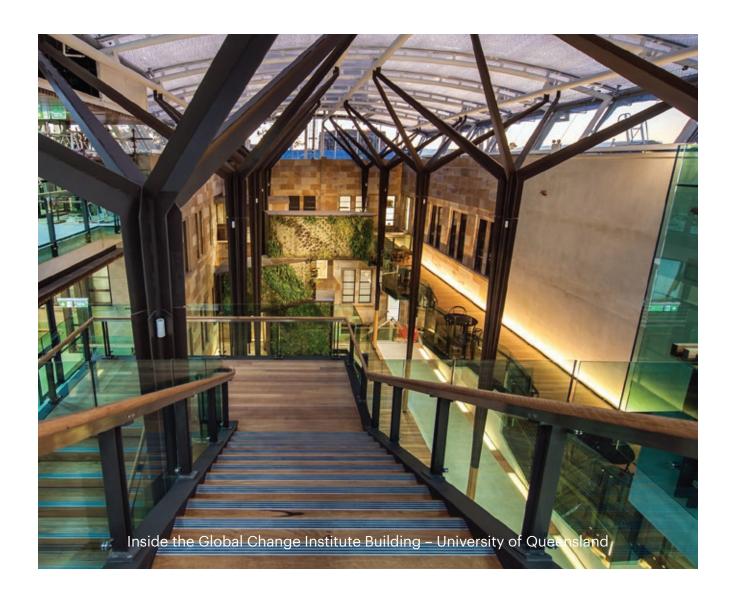
We work as one, collaboratively, with and throughout the architectural design & development phase, the structural engineering and fabrication phases, through to internal surface 3D modelling and fit out phases providing an end-to-end service.

To complement our 3D modelling and detailing teams, JBD has dedicated resources in Commercial Management, Contract Administration, Estimating and People & Culture all with extensive industry experience.





The JBD Difference



Construction Knowledge, Experience, 3D Modelling and Detailing Expertise defines the JBD Group.

By developing synergies with our clients, we compliment the creative design process through well executed build simulation modelling. JBD lead the industry bringing design to reality. This collaboration results in unique and significant construction efficiencies and design clarity.

JBD's strength as a team enables us to solve complex construction projects anywhere in the world. Our systems, technologies and expertise support a sustainable industry that is environmentally aware and future orientated.



People, The Heart of JBD

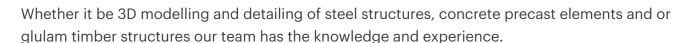
JBD's heart is its people. With a growing team of 30 people across three locations, JBD is well positioned to undertake any size project within short lead times.

Our people are diverse. From their country of origin, to their training and background through to their extensive experience across all aspects of digital engineering, 3D construction modelling and detailing.

Breadth and depth define our people. Their experience in modelling and detailing is second to none, for example, our team has worked on:



- Australian & International Airports
- Sports, Horse Racing & Leisure
- Hotel Resorts, Casinos & Convention Centres
- Mining, Oil / Gas Processing & Coal Distribution Terminals
- Distribution Hubs & Centres,
- Defence Infrastructure & Prisons
- Major Hospitals & Schools
- Speciality Exhibition Structures & Car Show Rooms
- Transport Infrastructure Rail & Bus
- Major Shopping Centres
- Cool Room & Storage Facility
- Multi-use Office / Residential Tower Buildings



Working across Australia, New Zealand, Malaysia, Milan, Middle East, New York, Saudi Arabia, United Kingdom and other parts of the globe, JBD have the capabilities and dedication to meet the challenge of any local or international project.





Digital Engineering - Specialist Construction Modelling, Detailing and 3D Scanning

With proven capability in digitally engineering highly complex construction projects, JBD is the right choice for your 3D modelling, detailing and BIM requirements. Let us take your project from concept through 3D virtual reality onto construction.

JBD delivers the following digital engineering services:

- Project Consultancy
- · Structural Steel Detailing
- · Concrete Precast Elements & Panel Detailing
- Structural Timber Detailing (Glulam)
- 3D Laser Scanning and 3D Setout







The Seeds, Malaysia Pavilion Milan Expo 2015



Project Consultancy



Utilising the latest in digital engineering technology, JBD works with the design team to develop simulated modelling of the proposed structure/asset to explore the possibilities and to digitally develop innovative construction solutions.

Design consultation with JBD can simplify your build, minimise under construction RFI's (saving both time and money), minimise risk and much more.

JBD's digital prototyping expertise provides valuable insight in the design process, can significantly streamline the construction process and aide in the assets future use and functionality.

JBD takes the 'virtual' world of Building Information Modelling ('BIM') into real world applications, simply and seamlessly.





Structural Steel Detailing

JBD has extensive experience in structural steel detailing across all industry sectors in Australia and overseas.

The list of services JBD provides:

- Detailed structural steel fabrication drawings
- Detailed mechanical components
- Site drawings for installation of hold-down bolts and erection of steelwork
- · Detailed materials and bolt lists
- Computer aided manufacturing ('CAM') and Computer numerical control ('CNC') data for automated manufacturing processes and material supply
- 1:1 Template supply

In addition to the services above, JBD can be engaged throughout the project from concept to construction, for example:

- To provide advice during the early phases of concept development and design
- · Connection and design advice buildability
- Develop building information modelling (BIM)

Combining our 3D site scanning and set out service the ability to identify variances on site is fully enhanced – this technology enables structures to be uniquely customised to suit the specific site conditions.



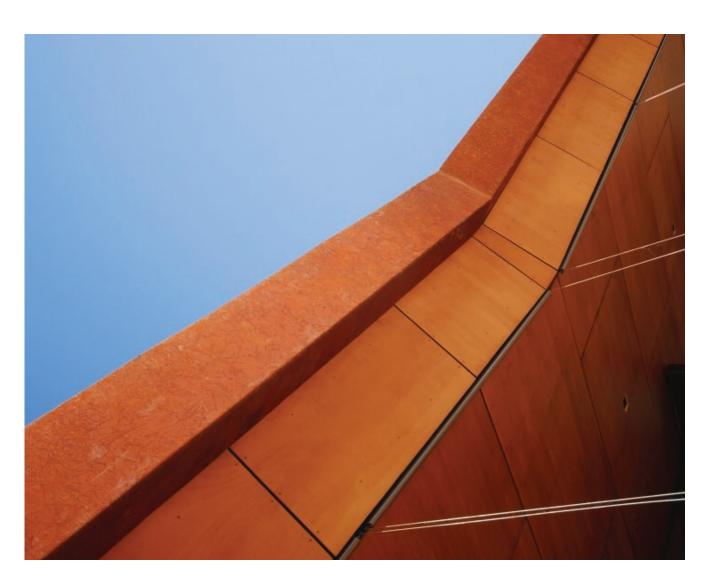


Concrete Precast Elements & Panel Detailing

Our vast experience encompasses domestic, commercial and industrial concrete structures. With proven expertise in the detailing of warehouses, hospitals, community centres, railway stations, units, houses and hotels, we're the right choice for your precast elements and panel detailing needs.

Key benefits:

- We offer full concrete tilt and precast panel modelling services from concept to completion.
- Complete 3D Modelling of tilt and precast panels for the design development phase, the construction phase, or both.
- Detailed wall elevations for design approval.
- Comprehensive individual panel drawings for manufacturing, complete with material data and details for the successful erection of your project.
- Lift and temporary brace design (via a partner engineering firm).



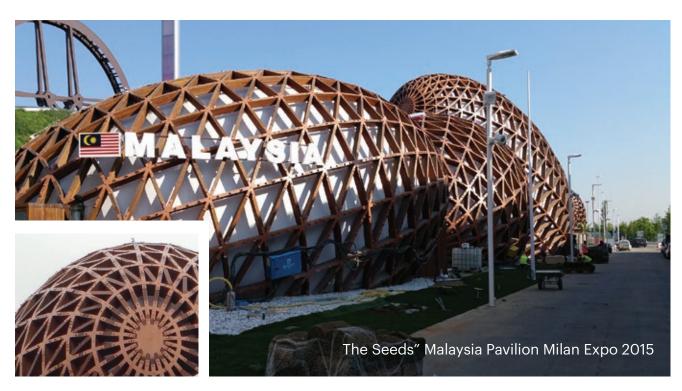
Structural Timber Detailing (Glue laminated)

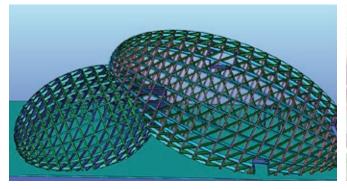
Our proven capability in highly complex and world iconic laminated timber projects is well established. We pride ourselves on our speed, accuracy and professionalism.

We collaborate closely with your consultant team to provide fully integrated building information modelling ('BIM') project delivery.

- · Detailed model building.
- · Detailed marking plans.
- Delivery of computer numerical control ('CNC') data for complex timber profiling.
- · Project advice on buildability and installation.
- Laminated timber connection design recommendations.

With our expert input, we will take your timber ideas through the design development phase and beyond – your Glulam timber will fit perfectly to any new or existing structures.









3D Laser Scanning

We use the latest in 3D technologies to survey scan the site / area to develop a 3D model showing all the conditions e.g. levels, contours, walls, ceilings, floors, penetrations, posts, structure, etc.

Whether it be a renovation to a large commercial warehouse or an extension to the family home, 3D scanning is a great tool as it provides as-is details and reduces the need for multiple trades to visit site to check measure, also, the architect can use the model to design with the facts, the exact conditions (the good, the bad, the ugly) ...

Our expertise gives you an accurate point cloud to model a new or retrofitted structure. We can capture the interior and exterior of your structures and create a precise 3D model with 2D asbuilt design drawings.

Other key benefits of 3D scanning are:

- Accurate 3D site information can be accessed 24/7 by the entire design team.
- Clashes with existing structures are eliminated.
- Virtually no check on site ('COS') dimensions are required.
- Variables in surfaces / structures are identified, e.g. sloping floor levels or out of plumb walls.
- Removes the guesswork and errors in site measurements.
- Minimises delays.
- Reduces waste.
- Increases build accuracy.



3D scan of an external eating area at Ipswich hospital. Shown with the proposed roof structure 3D model overlaid.

JBD's 3D scanning technology can also be used for reverse engineering, creating:

- As-constructed building information models ('BIM') on existing projects.
- As-constructed models, once the project is complete.

Our proven track record in laser scanning makes us the reliable choice for your building information modelling ('BIM') and renovation / extension needs. Let us work with your design and construction team to take your project from design planning through construction to completion.



Industry Sectors

JBD has extensive experience across all construction sectors in Australia and overseas.



Residential



Industrial



Commercial



Civil / Infrastructure

Projects

JBD Group has undertaken projects throughout Australia and across the globe, far too many to mention all of them. Following is an overview of projects JBD has undertaken.

- 50+ new Bunnings warehouses across Australia & NZ
- Flemington Racecourse Redevelopment,
- Hospitals
 Roma, Sunshine Coast University,
 Gold Coast, Nambour
- South Morang Rail Extension
- Dudley Street Rail Overpass
- The Landmark St Leonards, Sydney
- Military Vehicle Centre of Excellence ("MILVEHCOE")
- Global Change Institute Building University of Queensland
- Albury Library and Museum
- 150+ renovations of Bunnings warehouses across Australia and New Zealand,
- Home Co. renovations / alterations to previous Masters Stores – Australia Wide
- Harvey Norman Store Maroochydore QLD,
- Glulam Timber Projects:
 - "The Seeds" Malaysia Pavilion Milan Expo 2015
 - Multipurpose Hall Lumut
 - Beach Grill & Pool Bar Ritz Carlton Langkawi
 - Two Storey Restaurant @ Gravity Green, Bandar Seri Alam, Johor
 - Walkway shroud Taman Negara Johor, Kukup Island
 - Crops Research Centre, Selangor, Malaysia
- Balwyn High School (VIC)
- Qantas Maintenance Hanger Brisbane Airport
- IBIS Hotel Brisbane Airport
- Pullman Hotel Brisbane
- Target / TNT distribution centres

Bunnings stores Australia wide



Dudley Street Rail Overpass (VIC)



Global Change Institute Building University of Queensland



Albury Library and Museum



"The Seeds" Malaysia Pavilion



Projects













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