Manufacturing systems and Software solutions

Rapid construction the smart way

framecad.com

FRAMECAD®
The way the world constructs™

Advanced steel framing automation

FRAMECAD® has been successfully serving the world's steel building industry for more than 30 years. That means you have the advantage of over 500 years' worth of our expert staff knowledge. Plus, with a growing number of international offices in USA, Latin America, China, Hong Kong, Middle East, Africa, Australia and New Zealand, with customers in 120 countries, we're able to deliver the local expertise you need to serve your market.

Years of continuous R&D investment has led to one thing:
FRAMECAD® is now the world's most advanced end-to-end steel frame design-and-build manufacturing system.
Our customers can now mass produce cold formed steel frames with the precision and accuracy that is determined by the system, not the skill of the factory workers or on-site assemblers.

The FRAMECAD® Software Suite	3
FRAMECAD® Software Integration	4
FRAMECAD® Structure	5
FRAMECAD® Detailer	6
FRAMECAD® Factory 2	7
FRAMECAD Certifications	8
FRAMECAD Manufacturing System	9
FRAMECAD® F325iT & F325iT -L	10
FRAMECAD® P325iT	11
FRAMECAD® F450iT	12
FRAMECAD® TF550H	13
FRAMECAD® ST825iT	14
FRAMECAD® ST925iT	15
FRAMECAD® ST950H	16
FRAMECAD® Mobile Factory	17
MyFRAMECAD Cloud-based customer portal	18
FRAMECAD® Services	19

Our solutions work because we have all the knowledge we need within our team. We have building system researchers, software developers, CAD designers, engineers, mechanical designers & engineers, machine control experts, technicians and on-site construction experts. We also have people who are good at listening to customers – we've always been driven by market needs, because a solution is only worthwhile if it delivers better productivity and quality to our customers.

Mark Taylor

Mark Taylor
CEO/President

Welcome to the FRAMECAD® Software Suite

Building design, engineering calculations, structural analysis, detailing and machine control have all been fully integrated by FRAMECAD® into one comprehensive software suite.

The result:

Our programs provide the end-to-end integration of all processes involved in the design and building of Cold Formed Steel frame with FRAMECAD® manufacturing solutions.
By using our software you can improve design efficiency and minimize project delays anywhere in the world.

The software:

The FRAMECAD® Software Suite comprises of FRAMECAD® Structure, FRAMECAD® Detailer, FRAMECAD® Factory 2 and MyFRAMECAD which are all available in multiple languages, and complying with many regional building codes, ensuring you have full access to all upgrades and improvements the moment they're released.

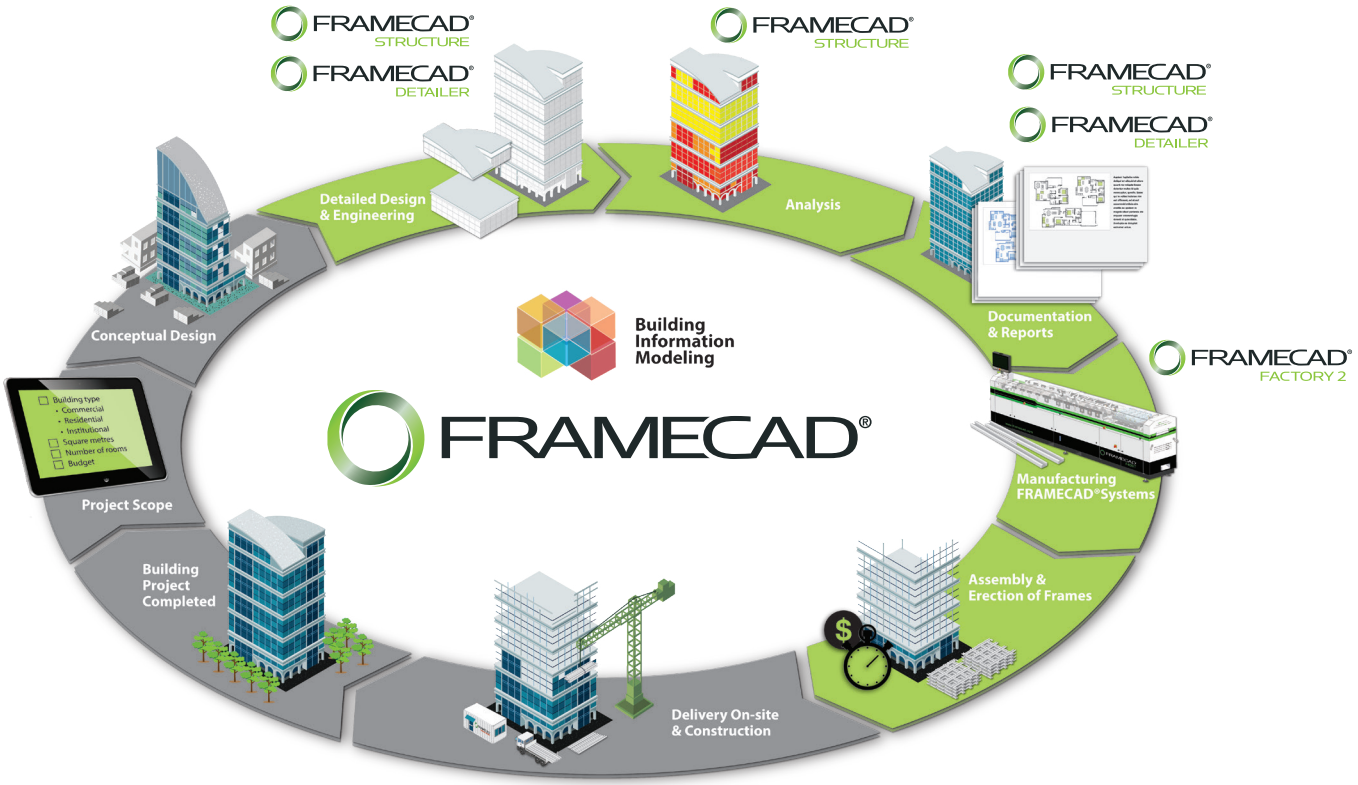
Interested in purchasing any product from the FRAMECAD® Software suite? Please contact us at framecad.com/en/contact-us and we'll arrange a time to discuss your needs and work out the best software package for your business.

FRAMECAD® Integration

Reduce cold-formed steel detailing by 80% with FRAMECAD Software

Benefits

- 100% accuracy on the architect job using FRAMECAD® Value Engineering
- Minimize clashes through efficient detection reports
- Create a total BIM estimate
- Bring your 3D model directly into FRAMECAD Structure
- Faster conversion of your architectural files
- Complete integration from your engineering files to Revit and your existing BIM model
- Better detailing capabilities
- Reduce material wastage with Value Engineering function
- Meet greater compliance requirements (eg: IBS, IRC, AISI)
- Enhance team collaboration



BIM Software Integration

The FRAMECAD software suite offers full integration between Revit & other BIM Software, meaning the design system and the sharing of building information via BIM is now easier, faster and safer than ever before.

How it works

By Developing BIM compatibility functions (IFC and ACSI (SAT) file formats), the FRAMECAD Structure offers a direct interface developed to Revit and other BIM software such as Archicad, Vector Works, Solid Works, TEKLA and many CAD packages.

Any model can now be handled from FRAMECAD Structure to the Revit or BIM model as controlled by the main contractor and owner/operator. From there, each professional involved in the design and build process adds discipline-specific data to the single shared model thus speeding up and lowering the cost of construction as well as reducing the risk of rework due to design oversights. Simply share model files between FRAMECAD Structure, Revit and SolidWorks using IFC and ACSI (SAT) file formats.

Our simple plug-in (FRAMECAD Revlink) allows seamless building design exchange between Revit and FRAMECAD Detailer. This maximizes efficiency ensuring you save time and money in the design, manufacturing and construction processes.

FRAMECAD® Structure

A comprehensive detailing and design software package with the advanced ability of computer aided engineering.

Universal Design Format

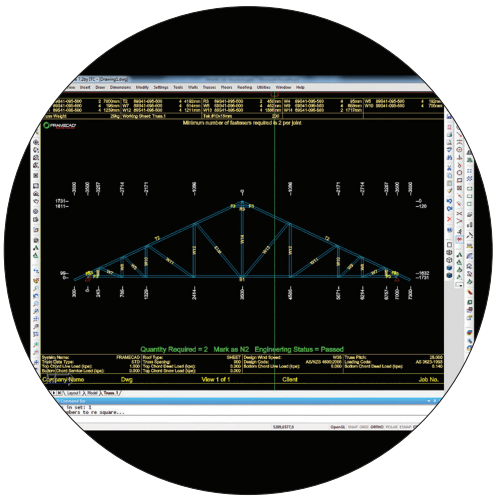
Structure is based on the IntelliCAD v8 platform, and is simple to use and easy to navigate. Automated template drawings speed up the design process and lets you keep track of every detail, including Bill of Materials reporting and assembly weight.

Instant Engineering Analysis

FRAMECAD® Structure makes real time engineering calculations as the designs are created, analysing loads, deflections and other forces, making it an easy process to check for compliant engineering.

Structure then creates a design checklist which is automatically generated based on the building code and other factors.

The enhanced 3D view shows you all components of the framing and the package has interactive joist, truss and wall builders.



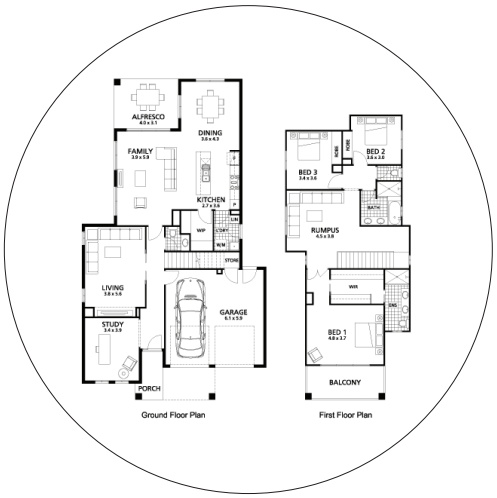
Fast, And Customised To Your Needs

With 64 bit processing power, FRAMECAD® Structure is fast, and can be easily customized to suit your production facility.

Default settings can be modified simply and the programme can be loaded with multiple building codes. It comes with a range of loading standards, as well as metric and imperial options.

Benefits

- **Based on Intellicad version 8**
- **Compatible with AutoCad 2013**
- **Supports visualization**
- **Imperial and metric options**
- **Design Codes available are USA, China, Euro, Canada, South Africa, Australia /New Zealand, Russia, and Brazil**
- **Language options: English, French, Spanish and Chinese**
- **Compatible with BIM (incl Revit and Tekla) and other design software**



Easy Layout Speeds Up Designing

FRAMECAD® Structure lets you design and detail all the steel components together.

All layouts and detail drawings are linked and contained in one file, reducing the risk of error due to switching between multiple files. Any changes to individual drawings automatically change the layout and 3D drawings.

Comprehensive Reporting

Generating comprehensive reports is fast and easy. Simply select the information you require for code compliance, engineering sign off, materials costings, scheduling, production planning and analysis.

FRAMECAD® Detailer

A versatile multilingual CAD application which offers world-leading design flexibility.

FRAMECAD® Detailer flexibility allows adherence to local building codes, standards and practices. It enables you to automatically transfer design information from architectural detail into framing layout, then on to production.

The core function of FRAMECAD® Detailer is to specify and allocate tooling functions for each framing component to the FRAMECAD® Factory 2 control system - integrating the design and manufacturing process seamlessly thereby minimizing any conflicts or incompatibilities.

Simple & intuitive design

Easy to use and flexible, allowing simple and complex custom framing designs. Advanced wall & truss layout methods that are flexible.

Roof / Truss layout tools are designed to make the process very easy & straightforward. User interface and printing capabilities are in multiple languages and characters.

Fast & accurate

Advanced and automated tooling engine which apply the tooling required to the frame in the right location every time. The auto dimension function increases your productivity, reduces errors and speed up design turnaround.

Intelligent frame editing tools, simplifying and speeding up any manual changes when required. Design checks identify common errors in designs, reducing problems during production and erection.

Integration

FRAMECAD Structure, FRAMECAD Factory 2, Strucsoft, Tekla, Solidworks, SAP2000, and IFC export command.

The 3D view

The framing can be shown in a virtual walk-through format to check for design errors and eliminates onsite correction time and makes it easy to review your design and share with the client and builder.

Application

Allows detailing of anything from a midrise structure to a pod single room

Detailer makes the process of designing simple and straightforward through its intuitive setup, it offers a very flexible approach to design whatever you require. With FRAMECAD® Detailer's advanced functions, the automation of the design process makes it simple.

FRAMECAD® Factory 2

FRAMECAD® Factory 2 offers a unique set of advanced and intuitive manufacturing control functions.

Logging

The event log function will be saved to disk.

Events include stick completions, alarms, machine resets, pauses, switches into semi-auto etc. Machines with analogue sensors can be configured to log average hydraulic pressure or temperature at intervals. Can be filtered according to operator or event type. Machine can be configured to ask operator for a reason when the machine is paused or reset; these are saved into the event log.

Sensor Readout

All sensors and I/O on the machine can be graphed in real-time with high resolution. e.g. hydraulic temperature and duty cycle to diagnose hydraulic system maintenance, or drive motor current to confirm roller gapping, or tool valve operation and proximity sensors to check tool adjustment.

Improved efficiency

Developed to improve manufacturing and production efficiency, FRAMECAD® Factory 2 is unmatched in its user capability.

Get the synergy you need to operate smoothly by benefiting from a fully integrated process where your factory control systems and machinery are made by the same company.

Languages available

English, Spanish, Chinese, French, Portuguese, Russian and German

Advanced Printing Options

The multi-line inkjet printer provide the ability to print information on both sides of the profile with full international script support. Multi language printing is embedded to improve staff assembly rates.

Assembly Drawings

High-contrast frame view showing status of sticks. Frame drawings viewable at any time by selecting frames from list.

Schedule Management With Easy-To Handle Screen

Single press functionality allows operators to view any frame in the schedule with just one press.

The easy on-screen configuration eliminates the need for a keyboard and the high contrast display provides better daylight viewing, making it easier, faster and more cost effective to use.

Multiple Operator Login

Multiple users with login and logout are recorded to support analysis and reduce machine downtime. Shift logging is available for managers to gain a better understanding of staff and production rates.

Network Connection

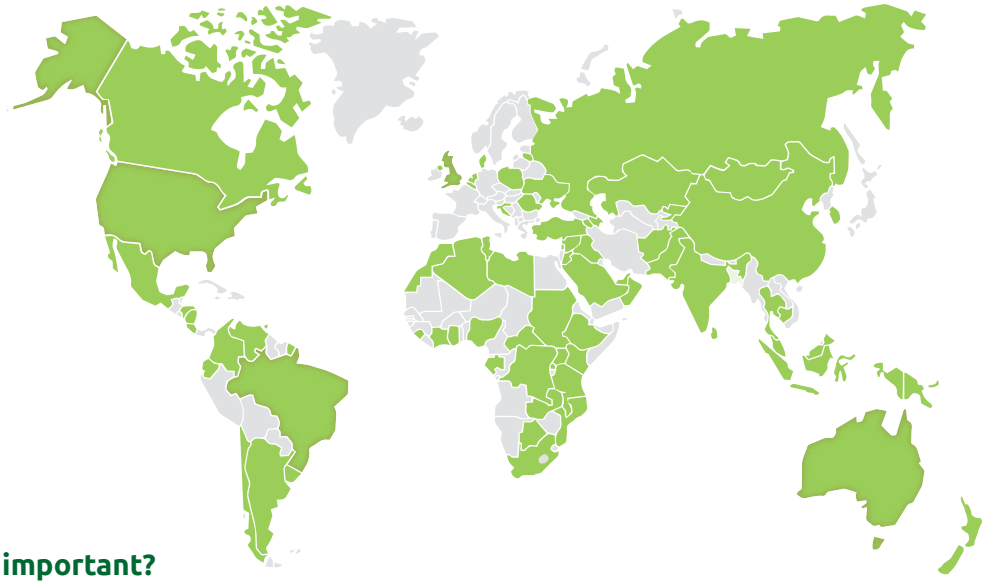
For ease of support and for loading jobs from a shared network drive, the equipment can be put online.
The priority-based connection manager ensures continuous uptime. When connectivity is lost, it will try a new connection method to ensure uptime.

Connection options include:
Ethernet (DHCP and Static IP),
WiFi (WEP/WPA1/WPA2 PSK),
Wireless modem: 2G/3G/4G (GSM/HSPA+/LTE).

FRAMECAD Certifications

Tested and certified for buildings all around the world.

The construction market worldwide demands certified and code compliant products. FRAMECAD continuously ensures that we introduce innovative solutions with certifications to satisfy our international clients located in over 118 countries.



Why is this important?

Building industry experts and government authorities in many regions around the world have collaborated to develop common standards for building products and construction techniques. Construction standards have now become so important that in many countries, it is not possible to build with products that have not been independently verified and carry a recognized certification mark.

Global Certifications

FRAMECAD technology, manufacturing cold-formed steel system, and component parts can be confidently used for buildings anywhere in the world because they have been independently certified by the world's most recognized and accredited quality assurance systems and organizations.

In addition to the certifications, noted below, a FRAMECAD webbed floor joist assembly is UL certified.

Associations and affiliations

FRAMECAD actively participates in key industry organizations. Through this active involvement, we stay up to date with trends, technological advances and industry best practice, in addition to strengthening trade relationships and developing industry standards.

FRAMECAD Manufacturing Systems

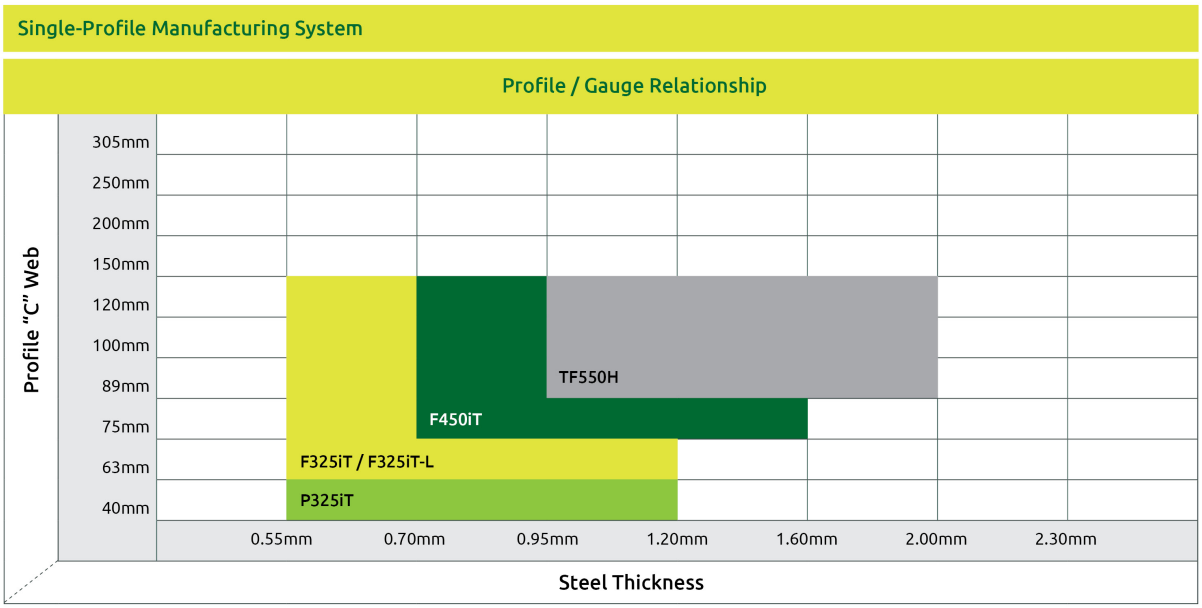
Leading Innovation

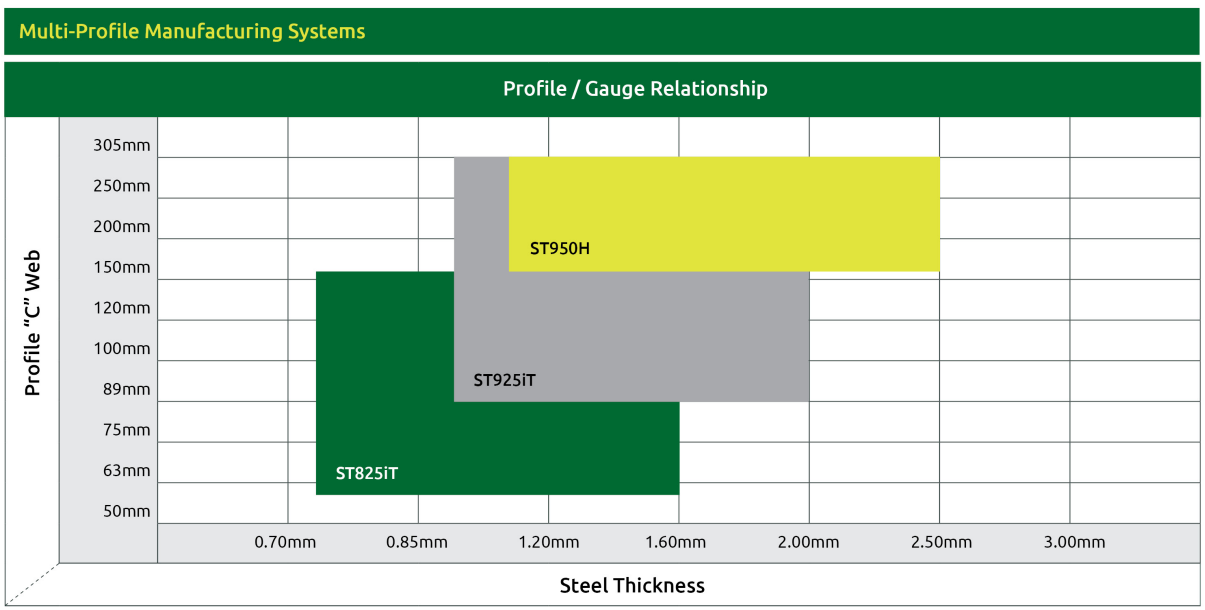
FRAMECAD® has created the world's most efficient design and manufacturing technology for steel trusses, joists and frames. FRAMECAD Systems are the intelligent choice for organizations desiring to deliver large scale production and projects. It is fully optimized using patented technology, to give a smart lean production process.

Advanced Computer Aided Engineering

The FRAMECAD® system integrates with BIM Design software including REVIT and TEKLA. Intelligence built into FRAMECAD® Structure software enables value engineered design to maximize both profitability and robust buildings.

Choosing the right FRAMECAD® manufacturing system for your requirements





Single-Profile Manufacturing System

FRAMECAD®
F325iT
F325iT-L

Innovative, compact, fast, reliable & versatile manufacturing system

Ideal system for:

- Residential
- Affordable housing
- Light commercial
- Roof truss system
- Floor truss / Joist system
- Facades
- Transportable & modular
- Low rise buildings

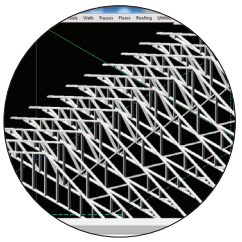
Watch F325iT Video Here

Benefits:

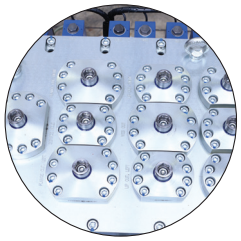
Web width range: 63mm - 150mm, one dedicated profile. Gauge range from 24 to 18 gauge (0.55mm - 1.20mm).

Automated high line speed of up to 2,880m/hr results the industry's best framing and truss manufacturing output.

Auto gauging system automatically adjusts gauge range for improved overall production and quality.



Fully integrated with FRAMECAD® Structure, our value engineering software performs real time calculation with multiple building codes.



F325iT: 12 punching functions
F325iT-L: up to 20 punching functions
This allows walls, truss and floors to be constructed using a steel profile.

Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic, and interactive engineering tools to your business.

"Hot climate hydraulic cooling system" performs in all operating environments and large scale production facilities.

Can be included as part of FRAMECAD® mobile factory.

Single-Profile Manufacturing System

FRAMECAD®
P325iT

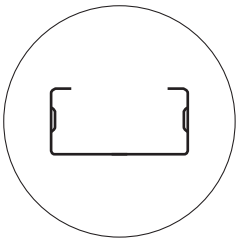
Efficient modular, pod & steel truss construction system

Ideal system for:

- Transportable & modular
- Pod construction
- Residential
- Affordable housing
- Roof truss system
- Wall frames

Watch P325iT Video Here

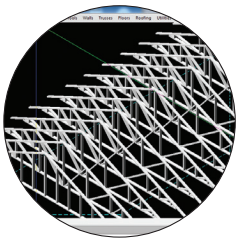
Benefits:



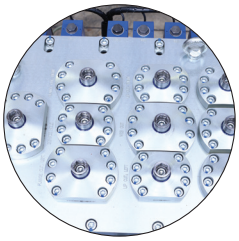
Web width range from 40mm to 63mm, one dedicated profile. Gauge range from 24 to 18 gauge (0.55mm - 1.20mm) .

Automated high line speed of up to 2,880m/hr results the industry's best framing and truss manufacturing output.

Auto gauging system automatically adjusts gauge range for improved overall production and quality.



Fully integrated with FRAMECAD Structure, our value engineering software performing real time calculation with multiple building codes.



Unrivalled versatility with 12 punching functions that allows walls, truss and floors to be constructed using a single steel profile.

Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic and interactive engineering tools to your business.

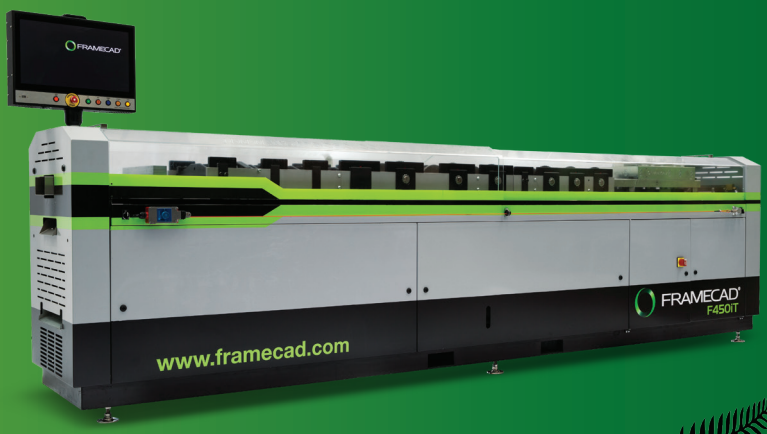
"Hot climate hydraulic cooling system" performs in all operating environments and large scale production facilities.

Can be included as part of FRAMECAD® mobile factory.

Single-Profile Manufacturing System

FRAMECAD®
F450iT

Heavy duty, fast, integrated & precision manufacturing system

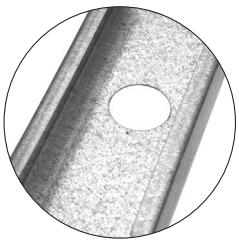


Ideal system for:

- Residential buildings
- Light industrial buildings
- Mid rise buildings
- Heavy trusses
- Heavy high walls
- Short span flooring

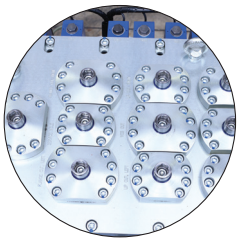
Watch F450iT Video Here

Benefits:

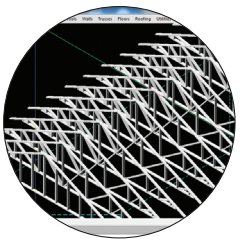


Web width range from 75mm to 150mm, one dedicated profile. Gauge range from 22 to 16 gauge (0.75mm-1.60mm) .

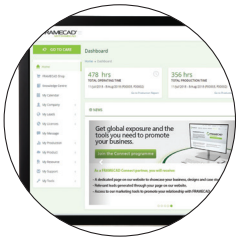
Auto gauging system automatically adjusts gauge range for improved overall production and quality.



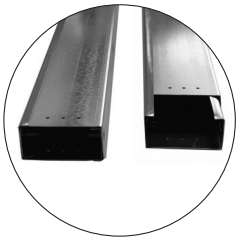
Unrivalled versatility with a 12 punching functions that allows walls, truss and floors to be constructed using a single steel profile.



Fully integrated with FRAMECAD Structure, our value engineering software performing real time calculation with multiple building codes.



Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic and interactive engineering tools to your business.



Framing product is a boxable section, providing easy assembly for heavy building requirements. Specially designed flanges make boxing in heavy gauge material easy.

Can be included as part of FRAMECAD® mobile factory.

Patented 'Quick Access' dimple punch, which provides increased serviceability and improved general operation.

Single-Profile Manufacturing System

FRAMECAD®
TF550H

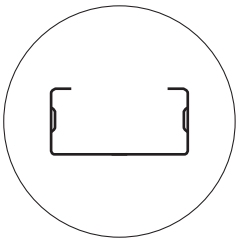
Heavy duty, fast, integrated & precision manufacturing system

Ideal system for:

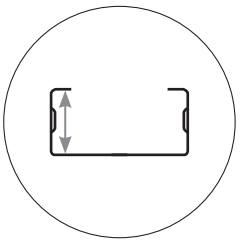
- Multi family buildings
- Commercial
- Warehouses / storage
- Low & mid-rise buildings
- Transportable & modular
- High wind regions

Watch TF550H Video Here

Benefits:



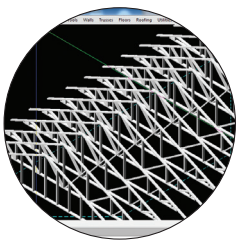
Web width range from 89mm - 150mm, one dedicated profile. Gauge range from 20 to 14 gauge (0.95mm - 2.0mm).



Flange height range: 34mm - 63mm.
(multiple flange height option). Variable flange height enbles a more efficient building design.

Higher production speeds and greater quality product with 13 roll forming stations.

Unrivalled versatility with 12 punching functions that allows walls, truss and floors to be constructed using a single steel profile.



Fully integrated with FRAMECAD Structure, our value engineering software performing real time calculation with multiple building codes.

Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic and interactive engineering tools to your business.

Power swage enables easier and more efficient assembly of 14 gauge (2.0mm).

Heavy duty 3T decoiler with pneumatic snubber arm for improved safety.

Multi-Profile Manufacturing System

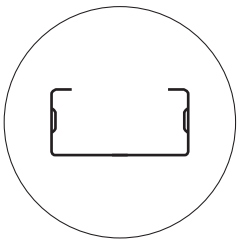
FRAMECAD®
ST825iT

Multi-profile solution for mid-rise, residential, and light commercial buildings

Ideal system for:

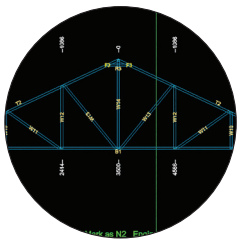
- Residential
- Light commercial
- Low and mid rise buildings
- Heavy high walls
- Heavy trusses
- Heavy flooring
- Short span flooring
- High wind regions

Benefits:



Web width range from 60mm - 152mm, up to 4+ profile sizes. Gauge range from 22 - 16 gauge (0.75mm - 1.60mm).

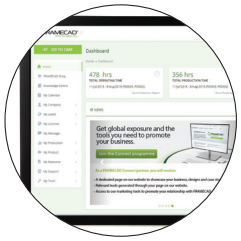
Offers full framing capabilities, with 10 frame and truss tooling punches.



Fully integrated with FRAMECAD engineering and detailing software. Greater value engineering & cost efficiencies with optimized profiles.

Flexible building system with four profiles which enable a wide range of construction options.

Designed for optimized on-site constructibility.



Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic and interactive engineering tools to your business.

An automated servo driven raft to quickly and easily change web width, flange height and automatically adjust the tooling to match the new profile.

Heavy duty 3T decoiler with pneumatic snubber arm for improve safety.

Multi-Profile Manufacturing System

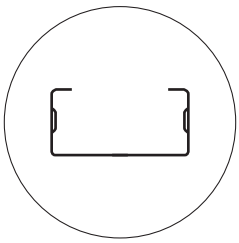
FRAMECAD®
ST925iT

Multi-profile solution for mid-rise, commercial, and residential buildings

Ideal system for:

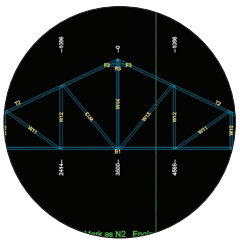
- Residential
- Commercial
- Low and mid rise buildings
- Heavy high walls
- Heavy trusses
- Heavy flooring
- Short span flooring
- High wind regions

Benefits:



Web width range from 89mm - 305mm, up to 4+ profile sizes. Gauge range from 20 - 14 gauge (0.5mm - 2.0mm).

Offers full framing capabilities, with 10 frame and truss tooling punches.



Fully integrated with FRAMECAD engineering and detailing software. Greater value engineering & cost efficiencies with optimized profiles.

Flexible building system with four profiles which enable a wide range of construction options.

Designed for optimized on-site constructibility.

Equipped with Internet and WiFi capabilities designed to deliver production reports and remote diagnostic and interactive engineering tools to your business.

An automated servo driven raft to quickly and easily change web width, flange height and automatically adjust the tooling to match the new profile.

Heavy duty 3T decoiler with pneumatic snubber arm for improve safety.

Multi-Profile Manufacturing System

FRAMECAD® ST950H

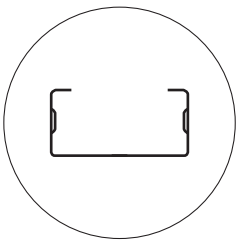
Multi-profile solution for mid-rise, industrial, commercial, and residential buildings

Ideal system for:

- Residential / Commercial
- Mid rise buildings
- Large scale flooring projects
- Load-bearing wall frames
- Long span trusses
- C floor Joist
- Heavy Flooring

Watch ST950H Video Here

Benefits:



Web width range from 150mm to 305mm, up to 4+ profile sizes. Gauge range from 18 - 12 gauge (1.20mm - 2.5mm) .

Up to 15 advanced precision punching functions for high productivity and versatile components production.

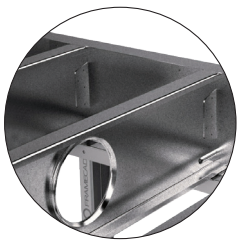
Dynamic punch tools provide unlimited connection options for design flexibility.

It's ideal for the manufacture of load-bearing wall frames, wide spanning roof trusses or long spanning floor joists.

Smart Internet connectivity provides cloud-based data reporting to enable real-time production management and technical diagnostics to improve efficiency.

An automated servo driven raft to quickly and easily change web width, flange height and automatically adjust the tooling to match the new profile.

Heavy duty 5T decoiler with pneumatic snubber arm for improved safety.



Accurate production of steel floor joists, pre-punched fixing tabs and service holes.

FRAMECAD® Mobile Factory

With mobile on-site factory options, FRAMECAD® offers flexibility for high volume projects with transportable manufacturing capability – anywhere in the world.

The FRAMECAD® Mobile Factory is a complete, secure, self-contained steel frame production factory that can be easily located anywhere, even in remote areas with little or no infrastructure.

The FRAMECAD® Mobile Factory can easily be fitted with either the FRAMECAD® F325iT, F450iT or FRAMECAD® TM300iT machines.

Ideal system for:

- **Rapid deployment projects**
- **Projects in remote locations**
- **On-site construction**
- **Disaster relief and reconstruction**

Benefits:

- **Rapid & easy deployment. Typically into production within 4-6 hours from arrival with fully self-contained factory with all functioning components housed within the container**
- **Optimized material handling & flow with customized layout & designer container**
- **Dedicated power supply with built-in, self-contained diesel generator**
- **Ability to transport internationally with ISO certified container**
- **Safe transport & fast set-up time with machine and decoiler securely mounted**
- **Reduced noise & better temperature control with insulated walls and roof**
- **Optimal working environment with air-conditioning (heating & cooling) along with plastic curtains for front and side doors**
- **Various existing configurations to serve your needs**

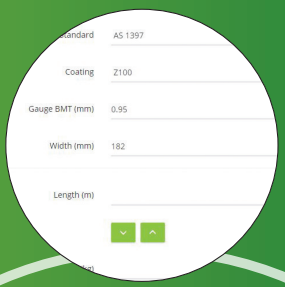
MyFRAMECAD

Cloud-based customer portal

MyFRAMECAD is available to all of our customers and can be accessed anywhere in the world.

What's included

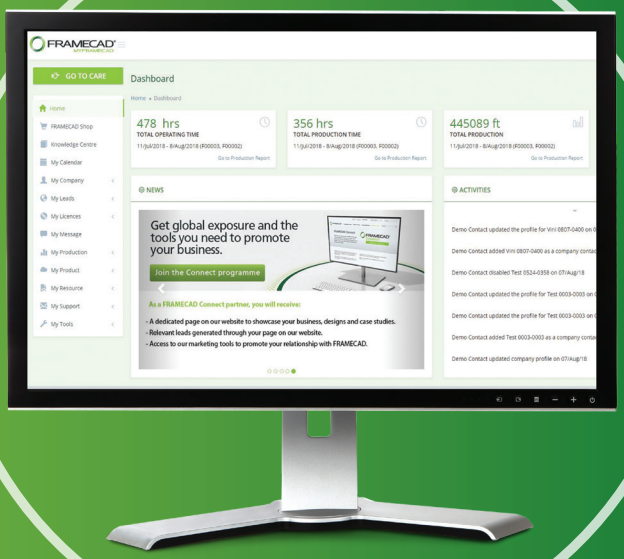
- Account and product management apps
- Useful design and marketing resources
- Interactive engineering tools
- Knowledge Centre



My Tools

Interactive Engineering Toolkit

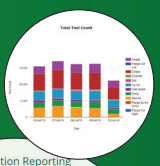
Get instant access to design tools and tables for accurate structural design calculations quickly and easily.



Knowledge Centre

Resource Hub

A unique online valuable source of information and learning material to support your business growth



My Production

Production Reporting App

Monitor key production metrics for powerful business insights.

- Increase production output
- Reduce downtime
- Improve workforce productivity
- Boost efficiency

My Support

Global Support Centre

Receive instant support, manage tickets and request spare parts.

Watch Overview Video Here

All the tools and applications you'll need to better manage your business and improve productivity.

FRAMECAD® services

Commissioning

All FRAMECAD® manufacturing systems are commissioned on-site by our technicians ensuring our client a perfect start. FRAMECAD® will ensure the client is fully operational and confident to use FRAMECAD® system at the commissioning stage.

Scheduled Equipment Servicing

FRAMECAD® has a global team of highly skilled technicians who service FRAMECAD® equipment. You can choose to have FRAMECAD® technicians service your equipment through one of two ways:

Scheduled Equipment Servicing Contracts - Available in 1 to 5 year plans, this plan means that expert FRAMECAD® technicians come on to your site and carry out our scheduled servicing, when your equipment needs it most.

Fixed Price Equipment Servicing - FRAMECAD® offers one-off fixed price equipment servicing. Your FRAMECAD® technician or FRAMECAD® staff can quote you a fixed price today for your equipment, regardless of its servicing history.

Training Programmes

FRAMECAD® has developed a series of valuable training courses ranging from software, manufacturing, to erecting light steel frame construction projects. FRAMECAD® training can be delivered in- house or on-site depending on your needs.

FRAMECAD® care

Behind FRAMECAD® leading combination of software, production and building products is a support team of worldwide leaders in their respective fields, providing you with the knowledge and advice you need for success, as well as the technology required to enable your business to perform.

FRAMECAD® supports our customers with a proven training system, consultants and around-the-clock access to technical expertise. Our unique combination of award-winning technology and personal services gives our customers confidence that using FRAMECAD® for construction around the world is the right choice.

FRAMECAD® believes strongly in the principles of continuous improvement and reinvests substantially into on-going research and development. Regular customer interaction is an essential component to our future development.

My Notes:

Watch the FRAMECAD Systems Overview Video

This document is current as at March 2022 and supersedes all previous versions.

The material in this document is provided for general information purposes only. Although all reasonable efforts have been made to ensure that the information is current and accurate as at the date of issue, the information provided is selective and may not be complete or suitable for your intended use or jurisdiction.
No information in this document constitutes, or shall be relied upon as constituting, the giving of advice of any nature. Nor is any such information to be used as a substitute for specific advice from appropriate independent professional advisors in your jurisdiction regarding your particular facts and circumstances or as a substitute for compliance with the requirements of applicable regulatory authorities or laws. You should not act (or refrain from acting) based upon information provided by FRAMECAD® without independently verifying the original source information and, making your own independent assessment, with the assistance of appropriate independent professional advisors, regarding your particular facts and circumstances. FRAMECAD® makes no representation or warranty, express or implied, as to the accuracy, completeness or suitability for purpose, of any information in this document. To the extent permitted by law, FRAMECAD® accepts no responsibility to the recipient or any other person for any loss, damage, cost or expense (whether direct or indirect) incurred and arising out of or in connection with any use or reliance by any of them on the information in this document including, but not limited to, as a result of any error, omission or misrepresentation in any information or statement in this document. This limitation of liability includes but is not limited to incidental, special or consequential damages, damages for loss of business or other profits. Liability which cannot legally be excluded is limited to the maximum extent possible.

FRAMECAD® Ltd, logos and Trademarks are the property of Framecad Licensing Ltd
Copyright 2021 Framecad Licensing Ltd.

Reproduction of any part of this document is prohibited, except with the prior written consent of Framecad Licensing Ltd.

We have offices in:

Auckland, New Zealand (Head Office) | Las Vegas, NV, USA
Dubai, UAE | Melbourne, Australia | Johannesburg, South Africa

FRAMECAD®
The way the world constructs™

framecad.com