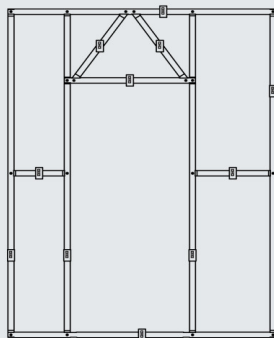
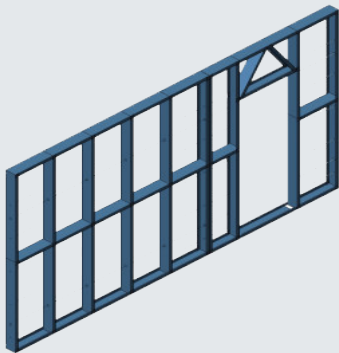
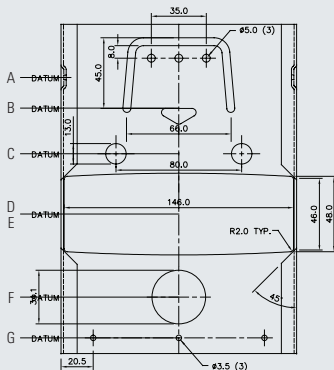




Product	Lengths Available	kg per m
FR150x45/43x0.75mm G550 Z275 Galv	Run to order	1.576
FR150x45/43x0.95mm G550 Z275 Galv	Run to order	1.970
FR150x45/43x1.1.5mm G550 Z275 Galv	Run to order	2.364

Available Tools

- A. Dimple
- B. Tab
- C. Bolt
- D. Lip Cut
- E. Notch
- F. Service Hole
- G. Web



Rollforming Services 150mm Framing is run from **AXXIS® Steel for Framing** using the latest Howick Framing H600 framing machine. So you know your framing is strong, straight and built to last.

APPLICATIONS

150mm framing is perfect for residential high stud walls, mid floors and roof panels. Commercial internal and external walls, mid floors, inter tenancy and fire rated walls. It also allows for higher R Value to be achieved where energy efficiency or extreme temperatures are a factor.

DESIGN

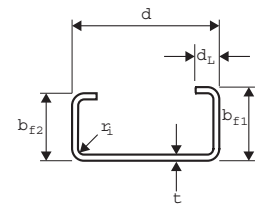
- Frames can be designed using the following software Vertex, Revit, Sketch Up, Framebuilder MRD, Truss D&E, Tekla and Howick Panel Software. Our preferred partners choose Vertex Software.
- If you have a small project and want to have a go yourself, request a download of our free Howick Panel Software.
- Alternatively for projects large or small send your plans through via our, enquire now section for a free quote. One of our detailers will be in touch with a budget price and to discuss your project.
- 150mm framing is designed to be used with all other frame, joist and truss profiles. We partner up with providers of these across New Zealand to deliver you a complete package.

As of May 2019 The NASH Standard Part 2 has been made an Acceptable Solution by MBIE and is available from the following link <http://nashnz.org.nz/publications/> along with NASH's other publications. Now is a great time to start your journey in light weight steel construction.

- NASH Standard for Residential and Low-rise Steel Framing Part 1: Design Criteria
- NASH Standard Part 2: 2019 Light Steel Framed Buildings
- NASH Building Envelope Solutions
- Building Basics - Lightweight Steel Framing 2nd Edition

MANUFACTURE

- 150mm framing is supplied pre punched and cut to length in our machine using machine files generated by the design software specifically for your project.
- It arrives on site either pre-assembled in our factory or flat pack cut to length ready for your builder to assemble.
- We provide an easy to follow plan and the fasteners required to screw the pieces together.
- All you need is an impact driver and driver bit.
- We recommend maximum wall dimensions of 3m x 6m for pre-assembled walls, for flat pack bundles the longest length is only limited by the available transport and handling equipment on site.
- Standard track and stud lengths can be run for commercial interior type walls if required, but we do recommend taking advantage of our design software.

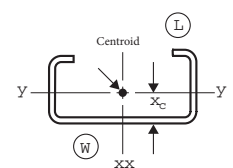


DIMENSIONS & SECTION PROPERTIES

Designation	DIMENSIONS							SECTION PROPERTIES								
	Depth	Large Flange Width	Small Flange Width	Lip Depth	Thick.	Inside Corner Radius	Co-ord. of Centroid	Mass per metre	Gross Section Area	About x-axis			About y-axis			
	d	b _{f1}	b _{f2}	d _L	t	r _i	x _c	kg/m	A _g	I _x	Z _x	r _x	I _y	Z _{yL}	Z _{yW}	r _y
mm	mm	mm	mm	mm	mm	mm	mm	mm ²	10 ⁶ mm ⁴	10 ³ mm ³	mm	10 ² mm ⁴	10 ³ mm ³	10 ³ mm ³	mm	
150 x 45 x 1.55 LC - G450	150.0	45.0	45.0	10.0	1.55	1.5	11.2	3.04	387	1.27	16.9	57.3	0.0910	2.69	8.12	15.3
150 x 45 x 1.15 LCN - G500	150.0	45.0	44.0	10.0	1.15	1.5	11.0	2.26	288	0.951	12.7	57.4	0.0679	2.03	6.16	15.3
150 x 45 x 0.95 LCN - G550	150.0	45.0	44.0	10.0	0.95	1.5	11.0	1.88	239	0.792	10.6	57.5	0.0570	1.70	5.18	15.4
150 x 45 x 0.75 LCN - G550	150.0	45.0	44.0	10.0	0.75	1.5	11.0	1.49	190	0.630	8.40	57.7	0.0458	1.37	4.16	15.5

NOTES:

- Calculations of section properties are in accordance with AS/NZS 4600.
- Thickness refers to the base metal thickness (BMT).
- Properties are calculated for an equal flange lipped channel using the average flange width.



WALL STUD DESIGN CAPACITIES - Clad Both Sides

Designation	Mass per metre	Design Properties and Capacities									NASH Wall Stud Classification	
		Lateral Actions				Compression		Tension	Combined	Actions	Australia	New Zealand
		I _x	Φ _b M _{bx}	Φ _b M _{by}	Φ _v V _{vx}	Φ _c N _z	Φ _c N _c	Φ _t N _t	Φ _b M _{bx}	N _{ex}		
kg/m	10 ⁶ mm ⁴	kNm	kNm	kN	kN	kN	kN	kNm	kN			
Stud Height 2440 mm												
150 x 45 x 1.55 LC - G450	3.04	1.27	6.42	5.23	22.5	77.9	66.4	121	6.86	201	SC	SD
150 x 45 x 1.15 LCN - G500	2.26	0.951	4.24	3.66	9.14	49.9	42.0	97.5	5.71	149	SC	SD
150 x 45 x 0.95 LCN - G550	1.88	0.792	3.29	2.94	5.14	38.0	32.0	85.6	5.23	124	SC	SD
150 x 45 x 0.75 LCN - G550	1.49	0.630	2.07	1.97	2.52	23.6	20.7	61.0	3.74	98.2	SC	SD
Stud Height 2740 mm												
150 x 45 x 1.55 LC - G450	3.04	1.27	6.42	5.23	22.5	77.9	66.4	121	6.86	159	SC	SD
150 x 45 x 1.15 LCN - G500	2.26	0.951	4.24	3.66	9.14	49.9	42.0	97.5	5.71	119	SC	SD
150 x 45 x 0.95 LCN - G550	1.88	0.792	3.29	2.94	5.14	38.0	32.0	85.6	5.23	98.3	SC	SD
150 x 45 x 0.75 LCN - G550	1.49	0.630	2.07	1.97	2.52	23.6	20.6	61.0	3.74	77.9	SC	SD
Stud Height 3040 mm												
150 x 45 x 1.55 LC - G450	3.04	1.27	6.42	5.23	22.5	77.9	66.4	121	6.86	129	SC	SD
150 x 45 x 1.15 LCN - G500	2.26	0.951	4.24	3.66	9.14	49.9	42.0	97.5	5.71	96.3	SC	SD
150 x 45 x 0.95 LCN - G550	1.88	0.792	3.29	2.94	5.14	38.0	32.0	85.6	5.23	79.8	SC	SD
150 x 45 x 0.75 LCN - G550	1.49	0.630	2.07	1.97	2.52	23.6	20.3	61.0	3.74	63.3	SC	SD

REFERENCES:

- AS/NZS 4600 Cold-Formed Steel Structures.
 NASH Standard (NZ), Residential and Low-Rise Steel Framing, Part 1: Design Criteria.
 NASH Standard (Aust.), Residential and Low-Rise Steel Framing, Part 2: Design Solutions.
 NASH Standard (Aust.), Residential and Low-Rise Steel Framing, Part 2: Design Solutions.

NASH Handbook (Aust.), Best Practice for Design and Construction of Residential and Low-Rise Steel Framing, Chapter 3.

For full design Tables please request a copy of our Full Design Capacity Tables Document.

DURABILITY

150mm framing is manufactured from AXXIS® Steel for Framing and backed by New Zealand Steels 50 year durability Statement. It is a hot dipped galvanised steel with a coating weight of 275gram/sqm, in line with other common lightweight steel structural building products.

Run off from, or contact with, materials which are incompatible with zinc should be avoided.

HANDLING AND STORAGE

150mm framing should be kept dry during storage as water present between close stacked sections will cause premature corrosion. Once

the frames have been stood up on site and the building is wrapped a quick blow down of the upper frames to remove loose swarf and excess moisture as well as vacuuming out of the bottom track is all you need before organising a pre line inspection.

CUTTING

- Cutting onsite is preferably done by tin snips, hacksaw or cold cut saw.
- When using abrasive disc blades care must be taken to ensure the swarf produced does not affect other materials and the burred edge should be cleaned off at the completion of cutting, followed by a coat of zinc rich cold galv spray.