8. Projects Reference

Kami, ROII Innovation Industries (M) Sdn Bhd, sebelum ini bernama Kina Roof Industries (S) Sdn Bhd merupakan Salah satu Pembekal IBS utama yang diperakukan oleh CIDB dan Pelan sudah diperiksa oleh KPLBS, sejak bulan Julai 2023, kami telah membekal lebih daripada 100 units Rangka IBS Rumah Mesra ke pelbagai dearah seperti Ranau, Kota Belud, Tuaran, Paitan, Pitas, Inanam, Sipitang, Keningau dan banyak lagi.

Kami mempunyai Kilang tapak penghasilan di KKIP ,yang dirancang dengan baik, dilengkapi dengan Mesin IBS yang moden dan cekap, ahli pasukan yang terlatih dan mampu buat Rangka Berkualiti, servis dan penghantaran yang konsisten. Begitu juga Pelan untuk Projek Giatmara sudah diperiksa dan juga kami banyak bekal kepada projek Ladang dan Penginapan Homestay terutama di tempat Bentuk muka bumi yang curam di Sabah.

1. Rumah Mesra SMJ, Ranau, Sabah.





2. QL Worker Quarters, Kinabatangan, Sabah.




3. Villa Resort, Semporna.



4. Worker Quarters, Mesilau, Sabah.





Website:

Join us at Facebook:

ROII Group

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SABAH INDUSTRY EXCELLENCE AWARD 2009 — **2009**
GOLDEN BULL AWARD 2012 — **2012**
WINNER OF THE BEST MANUFACTURER MALAYSIA 2012 — **2012**
THE MEMBER OF MPC MALAYSIA — **2013**
TOP 5 SME100 2014 — **2014**

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Rofo Intelligent Building System

1) General/ Overall Info

RIBS is the world's leading Global Steel Framing Technology with integrated intelligent structural calculation software, 3D modeling & details analysis software, production and Machine Readable file, and produce steel web by using Intelligent Robotic Machine. It is also performing the most unique Punching Operation and dynamic Automatic Marking System to every single member.

1) The most advance Robotic machines integrates 70mm to 160mm of Rofo Intelligent Channel (RIC), now available in RIC 75 (3"), RIC 89 (3.5"), RIC 100 (4"), RIC 125 (5"), RIC 150 (6") it can optimized into a Framing design.

2) Not only that, it is the first that is able to integrates with another Robotic machine to produce Rofo Intelligent Floor Joist Beam (RIFB) Size 300mm for floor truss which provide another better option instead of web truss framing. This RIFB not only can span wider, it also is also a timer saver and a less complicated method.



CIDB MALAYSIA
IBS Status Manufacturer
No. 8218
Registration
No. 0120101203-SB131898

ISO 9001:2015
Cert No: QMS 03329

Rofo Intelligent Building System



Rofo Intelligent Floor Joist Beam (RIFB) 300mm







7. Installation Guideline

7.1 Preparation:



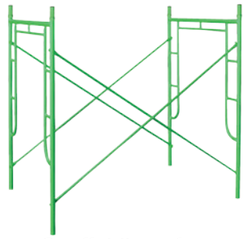
Minimum 3-5 Construction Workers



Impact / Hammer Drill for Screws and Anchoring Bolts



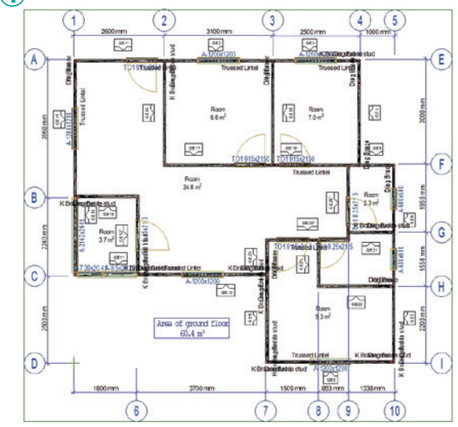
Angle Grinder or Metal Shears to Cut off temporary door lintels or extruded connections



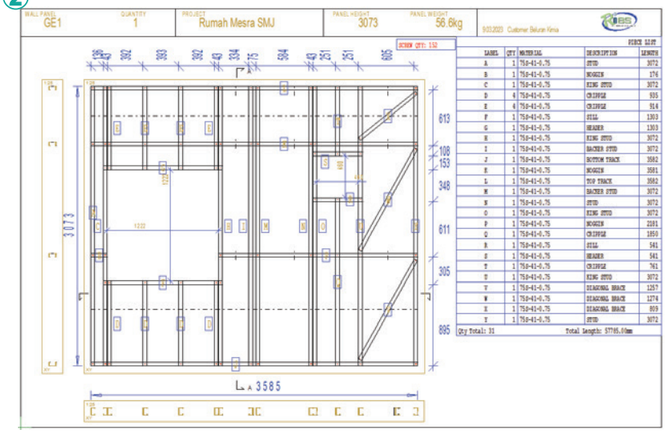
Scaffoldings for Walls and Roof installations

7.2 Installation:

①



②



③



Step ①

Understanding the "Ground Floor Plan" to plan on sequence of installation of panels.

Step ②

Identify the panel bundle with the correct panel drawing to assemble the steel frame.

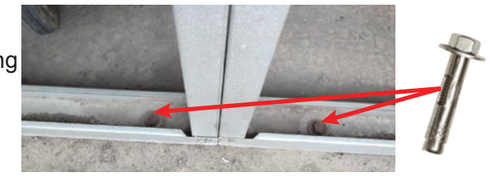
Step ③

Assemble wall panel by arrange and orientate each panel member using the marking by referring to the panel drawings. Connect them using the supplied screws.



Step ④

Arrange assembled wall according to Floor Plan. Do anchoring and installation of connectors after confirmed position.

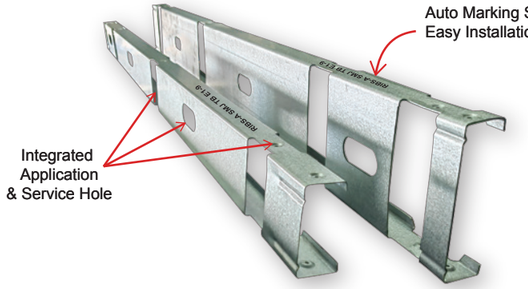


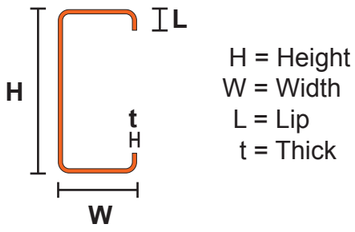
1. Introduction

IBS is defined as a method of construction that has manufacturing properties integrated within. Similar to the paradigm shift in manufacturing during industrial revolution. IBS has reduced the cost, labour and time of construction of buildings in Malaysia and along, setting new standards for the industry. Rofo-Intelligent Building System (RIBS) is a structural building technique that uses light gauge steel for the construction of IBS buildings.

2. Product Diagram

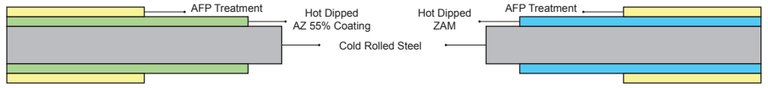
Rofo Intelligent Channel





NO	Product Code (RIC)	Thickness (mm)	Dimension (H, W, L) mm
1	75060 75075 7510 7512 7516	0.60 0.75 1.0 1.2 1.6	75 x 41 x 10
2	89060 89075 8910 8912 8916	0.60 0.75 1.0 1.2 1.6	89 x 38 x 10 or 89 x 41 x 10
3	10060 10075 10010 10015 10016	0.60 0.75 1.0 1.2 1.6	100 x 41 x 10
4	125075 12510 12512 12516	0.75 1.0 1.2 1.6	125 x 41 x 10
5	15075 15010 15012 15016	0.75 1.0 1.2 1.6	150 x 41 x 10

3. Material Specification



Gafolume (AZ 55%) ZAM (Zn93.5%, Al 5%, Mg 1.5%)

No	Type of Material (Galvanized Coating)	AZ 55% (Al 55%, Zn 43.5%, Si 1.58%)	ZAM (Zn 93.5%, Al 5%, Mg 1.5%)
1	Total Coating Thickness (±0.02mm)	0.60mm, 0.75mm, 1.00mm, 1.20mm & 1.60mm	0.75mm, 1.00mm & 1.20mm **(UR)**
2	Steel Grade	High Tensile Grade E	High Tensile Grade E
3	Tensile Strength (mPa)	G550 (550 mPa) or SGL 570 G450 for 1.60mm	G550 (550 mPa) or SGL 570
4	Galvanized Coating Mass	Usually Below or same - 1.20mm with 100g/m² 1.60mm with 150g/m²	ZAM 120 / 120g/m²
5	Accordance standard	MS 1196 SIRIM	MS 2657 SIRIM
		OSHAS 18001 Verified By Registered firm 'Occupational Safety Officer Management'	**IATF 16949** Verified by Registered Firm 'Quanlity Management System'
		QC 0800000 **IECQ HSPM** HSPM Verified by Registered Firm 'Hazardous Subtance Process Management System'	**ISO 50001** Verified by Registered Firm 'Energy Management System'
		ISO 9001 Verified by Registered Firm 'Quality Management System'	**G3302 G3312 G3317 G318 G3321 G3322 CRCN15001** **JIS Mark** Qualified Factory JIS Mark, South Korean KTR Inspection and Certification Qualified
		ISO 14001 Verified by Registered Firm 'Environmental Management System'	

6. RIBS Advantages

1. World Major Building Codes: AISI, ASD, Eurocode
2. Design, Integrated, Machine, Web, & Assemble
3. Intelligent Way: - Faster Setting
4. Intelligent way: - Efficient + No Wastage
5. Durable & Consistency of Web
6. Seismic Factor
7. Value in LEED
8. Fewer Worker Are Required
9. Simple and Quick Setup
10. Simple and Quick Setup
11. Superior in term of Quality
12. Eco-Friendly Construction Method

RIBS™ RoFo Intelligent Building System

13. Lightweight
Lightweight & Easy for Handle
14. Lightweight & Easy for Footing
15. Mega Achor - Advanced Building Foundation System
16. Cutting of temporay extruded connections
17. Cutting of temporary door lintel
18. Easy & No Secondary Cutting



Strongly recommended for Sabah & Sarawak Rough & Difficult Accessibility Area

5. Packing, Handling & Storage



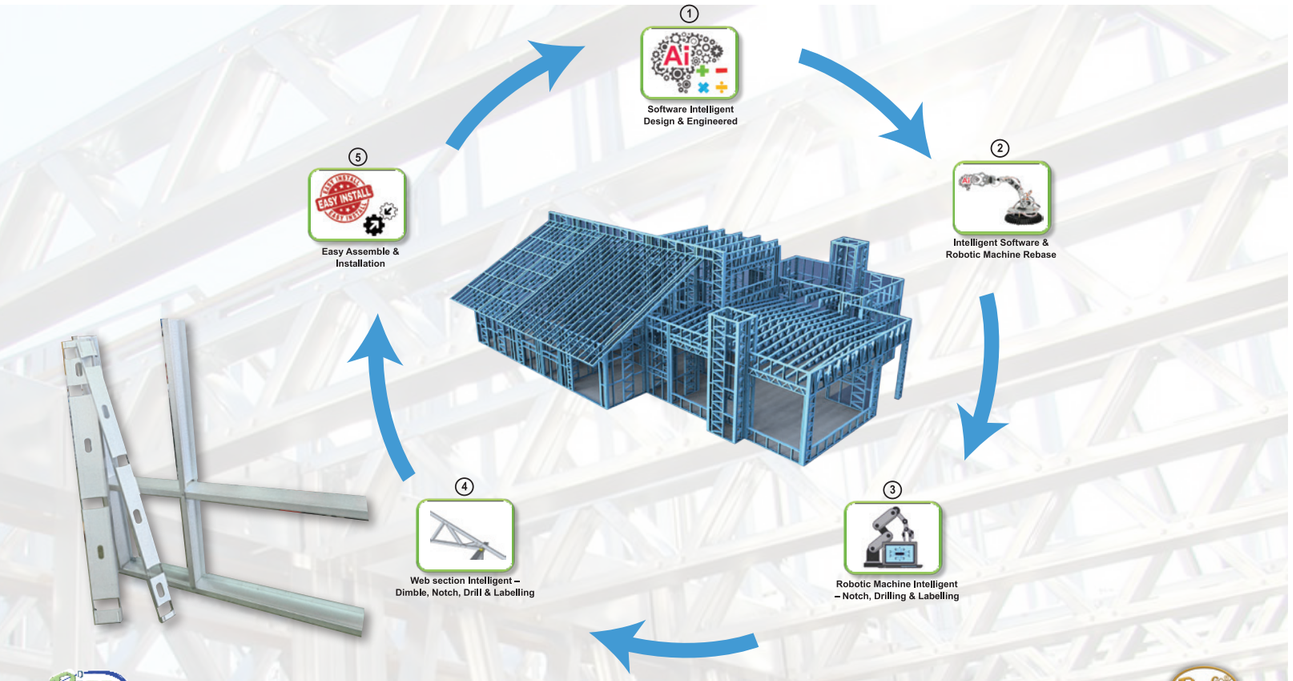
Rofo-Intelligent Channels (RIC) are Marked Systemically and packed in strapped bundles according to **wall panels**.

Strong Reminder:

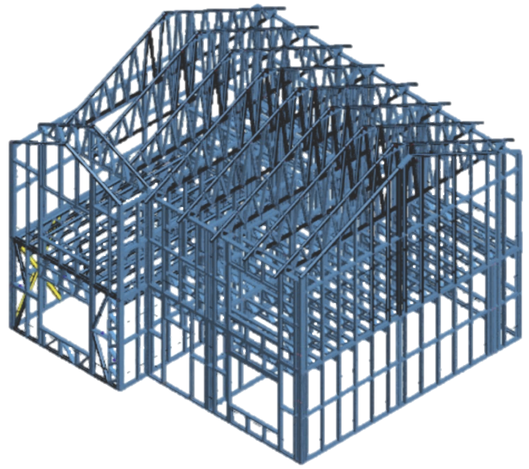
i. If having difficulties on handling **Big Bundle**, Big Bundle Strap can be Cut off for handling of each Small Bundles. Avoiding cutting down ***Small Bundle Strap during handling!!***

ii. **Do not cut down all Small Bundles** at once for installation and mixing up every RIC which will cause difficulties on Panel Installation Process. Recommended to only cut one small bundle and install one Panel at a time, Panel by Panel.

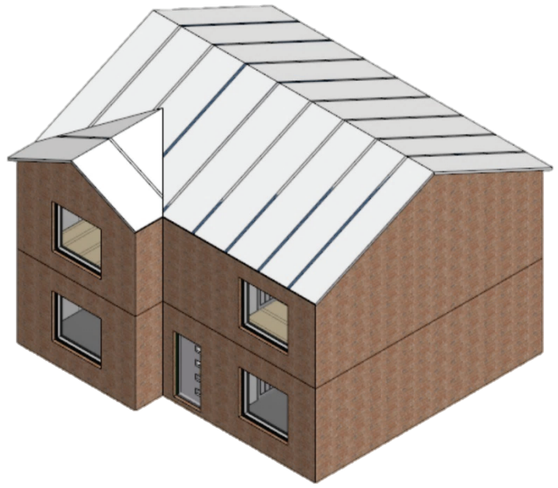
Bundles of RIC should be kept in a covered and well-ventilated dry environment and lifted above the ground to prevent any stagnant water condensations or moisture ingress into or in contact with surface of material.







RIBS framing from roof, wall and floor.



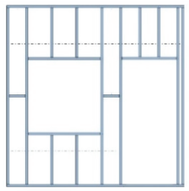
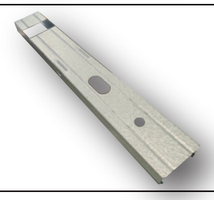
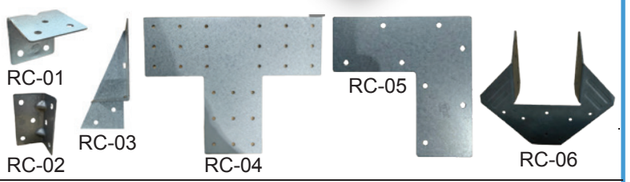
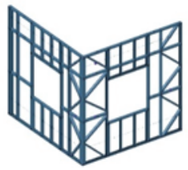
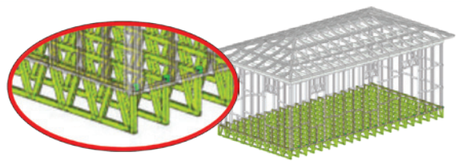
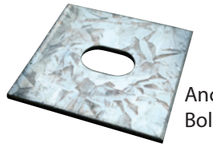




RIBS
Rofo

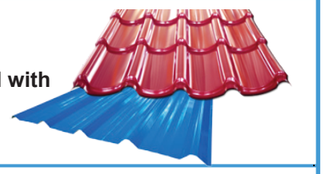
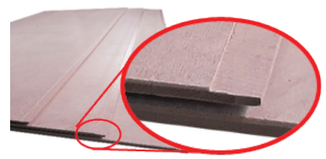
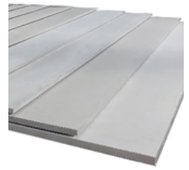
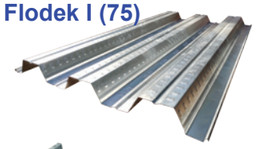
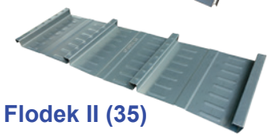
4. RIBS-I Components

4.1 Structural

Roof A	**RIBS Roof Truss System**	 Automatic Marking System RIBS-C SMJ TB -E13-2 (Machine Type For Future recognition; Project Name; Section Marking)
Wall B	**Windows & Doors Openings**	
	Service Holes	
	Connectors Conet	 RC-01, RC-02, RC-03, RC-04, RC-05, RC-06
	Bracing	
Floor C	**Web Joist** Recommended for: Span < 6m or Floor area < 100m²	
	Joist Beam Recommended for: Span < 6m or Floor area < 100m²	 **New Technology!** Simple & Easy to incorporable in analysis and design NEW
Fastener D	**Screws & Anchoring Bolts**	 AS 3566 Class 2 or 3  Anchoring Bolt Washer

4. RIBS-I Components

4.2 Suggested Finishing

Roof E	**Rofo Roofing Series**	Numerous roof products and accessories can be integrated with the RIBS-I structural Unit 
Wall Finishing F G	**Vapor Barrier Sheet**	
	OSB	
	Cement Board	 
Floor Product H	**Rofo Flodek**	Rofo Flodek I (75)  Flodek I and II is a versatile and robust structural decking and ceiling system solution. It can be used as a lightweight alternative for concrete slabs in conventional and composite slab design  Rofo Flodek II (35)
Stair I	**RIBS Stair**	Coming Soon
Finishing Screws J		