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www.rofo.com.my

Think Roof, Think Rofo.

欲しい 屋根 , 欲しい Rofo

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

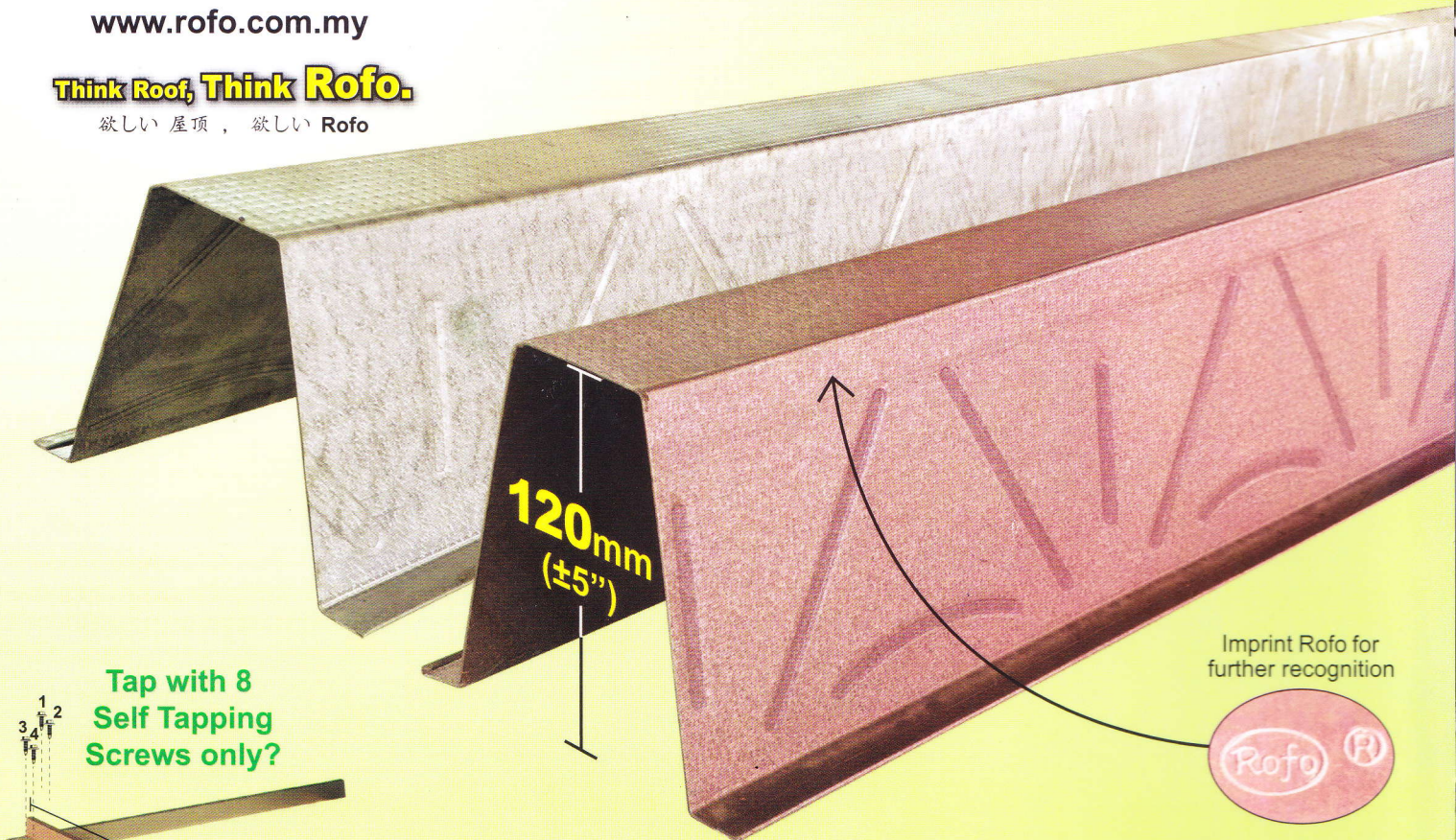


CERTIFIED TO ISO 9001:2015
CERT. NO. : QMS 03329

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Rofo[®] Batten (RB) 120

PNC Code: RB120



120mm
(±5")

Imprint Rofo for further recognition

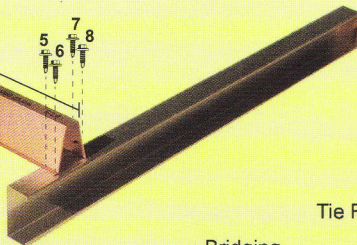


Tap with 8
Self Tapping
Screws only?



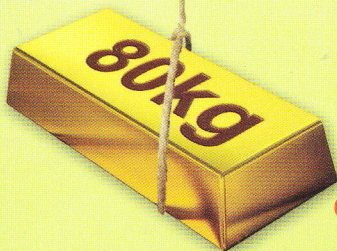
Span up to 20' (6.096m) and more...
Cheaper 1,2,3,4 Easier 1,2,3...

20'



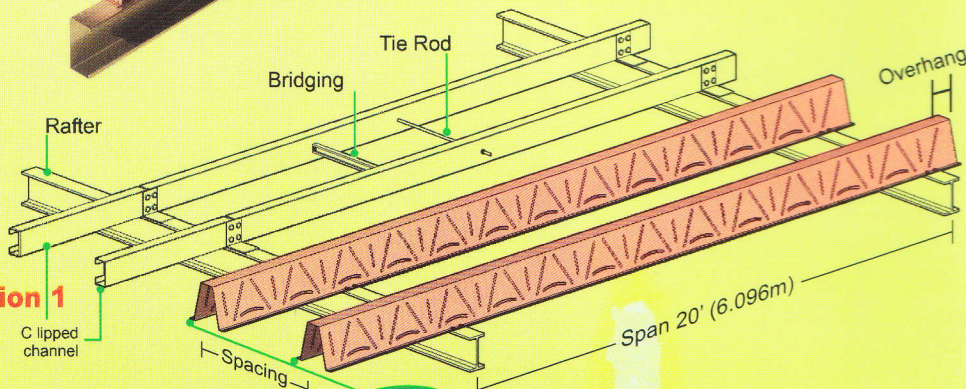
Design Pattern

Product Pattern and profile
copyright have been registered.



Option 1

C lip channel



Option 2 RB 120

Wise Choice!



2009



2012



2012



2013



2014



Since 2008

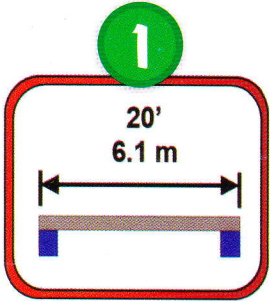
Introduction and Application

Once again, after our Rofo R & D Team carried out comprehensive study with Continue Improvement and Innovation, we successfully introduce the value product Rofo Batten RB 120 with advantages of well span ability, numerous points of cost saving and easy to install. It is a good news to the steel structural builder industry.

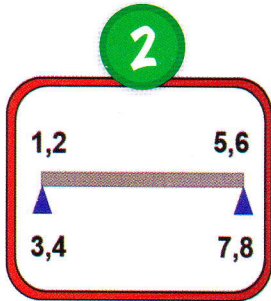
RB 120 are well-engineered with unique design and it have been patent registered. With the simple way to install, RB120 only using self-tapping screw so it does not require skillful steel truss fabricator to do the cutting, drilling and welding jobs.

The RB 120120 (1.2mm) is able to span up to 24' (7.315m) with strength testify. Now it has become the hot product in the market.

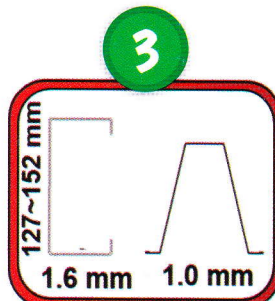
Advantage & Differentiation



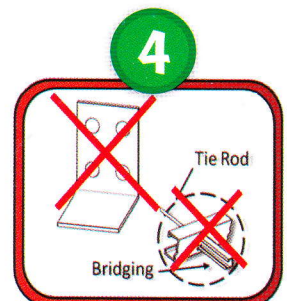
Well Spanning Ability



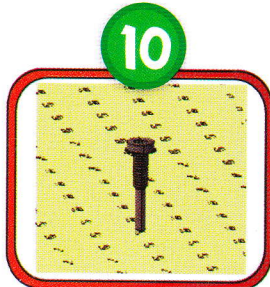
Simply support
8 self-tapping screws



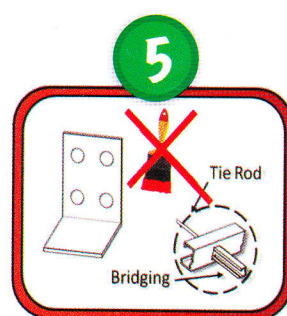
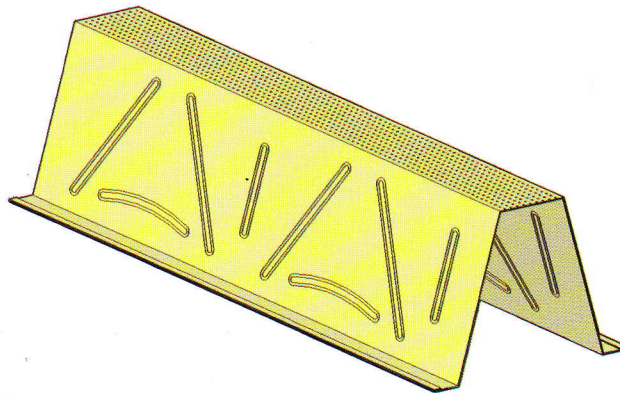
Save Cost 1
Cheaper Product Price



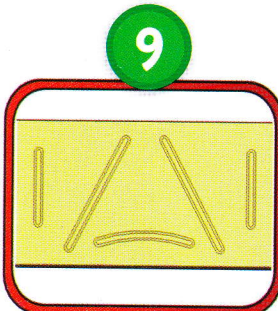
Save Cost 2
No need Bracket & Tie Rod



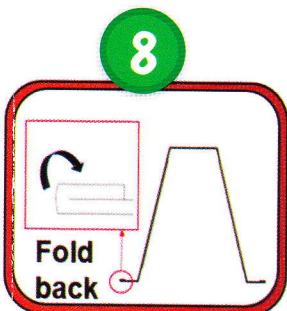
Dented surface texture
to ease self-tapping
screw penetration



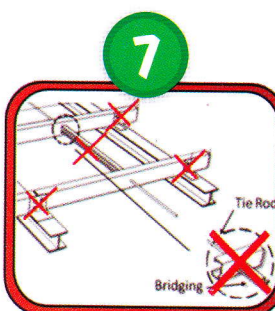
Save Cost 3
No Need Painting for
Bracket & Tie Rod



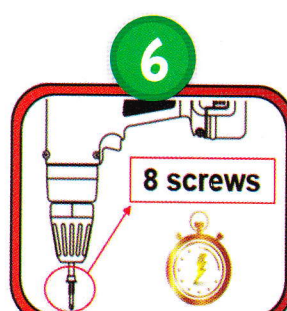
New Engineered
Embossment



Safety handle & strong
hold for screw

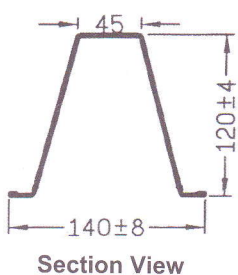


Save Cost 5
No need labour for fabricate &
install Bracket & Tie Rod

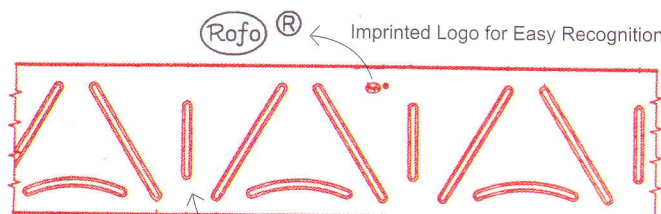


Save Cost 4
Labour Cost
Fast installation

Profile Diagram



Section View



Special Engineered Patterned Design
Side View

Guide for Product Code

RB 120 100

Rofo Batten Profile Height: 120 mm Thickness: 1.0 mm

Technical Data

Rofo Steel Roof Battens are designed in compliance with Australian Standard (AS) 4600:2018 (Cold-Formed Steel Structures), AS 4055:2012 (Wind Loads for housing), AS/NZS 1170.0:2002 (General Principles) and AS/NZS 1170.1:2002 (Structural Design Actions - Permanent, Imposed and other actions).

Our specific Design Parameters are aim for:

1. Cost Effective
2. Maximize Strength with Figure Support
3. Durability
4. User Friendly & Simple Installation

Material Specification

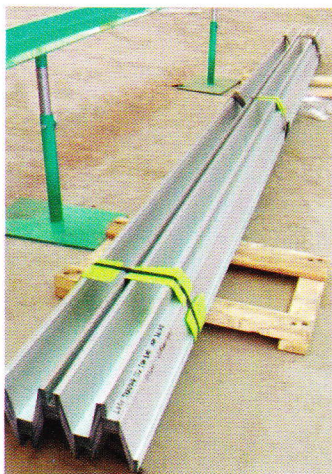
Rofo steel roof battens are manufactured from high tensile grade material with surface protection coating AZ100/150 or GF18 or Z22 and compliance with AS1397. We are the only using the material with Minimum Yield Strength equal or more than 550 MPa.

RB 120 Section Properties

Section Name	RB120 075	RB120 100	RB120 120
Section Properties			
Thickness TCT (mm)	0.75	1.00	1.20
Mass in (kg/m)	1.912	2.577	3.077
Sectional Area (mm ²)	254.64	339.19	405.28
Moment of Inertia, $I_{xx} \times 10^6$ (mm ⁴)	0.470181	0.626543	0.745694
Moment of Inertia, $I_{yy} \times 10^6$ (mm ⁴)	0.421393	0.561409	0.665784
Radius of Gyration, r_x (mm)	42.97	42.98	42.89
Radius of Gyration, r_y (mm)	40.68	40.68	40.53
Centroid x (mm)	70	70	70
Centroid y (mm)	60	60	60
Section Modulus, Z_x (mm ³)	7746.52	10301.5	12292.2
Section Modulus, Z_y (mm ³)	5987.81	7963.2	9430.3
Shear Properties			
A_x (mm ²)	37.14	49.49	59.21
A_y (mm ²)	162.16	216.19	259.47
Q_x (mm ³)	4850.38	6462.40	7702.89
Q_y (mm ³)	4780.22	6367.66	7582.20
Torsion			
Polar Moment of Inertia, J (mm ⁴)	47.71	126.92	211.27
Radial Distance of Point from Center of Section, r (mm)	0.763	1.893	2.051
Warping Constant, I_w (mm ⁶) $\times 10^8$	0.9285	1.237	1.458

Length

- Rofo Standard pack: 6.1 m \times 50 pcs
- We also welcome customized order. It can be cut in factory to any length specified by customer.



RB 120 Application Guideline

The RB 120 Section Span and Spacing Application Guideline are produced base on the following loading and conditions:

Dead Load (Self Weight + Metal Roof Sheet)	= 0.08 kN/m ²
Live Load (AS 1170.1)	= 0.25 kN/m ²
Ultimate Wind Speed	= 40 m/s
Serviceability Wind Speed	= 25 m/s

We present the selection of RB 120 in two format:

- I) Table Form
- II) Graphical Form

Both of them have the same purpose. You may use it as the general guideline for your roof batten design. It is proven not only cost effective but also simple installation and maintenance free.

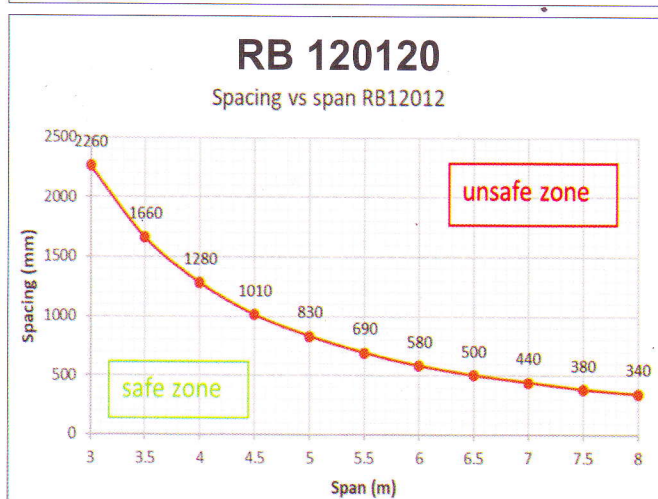
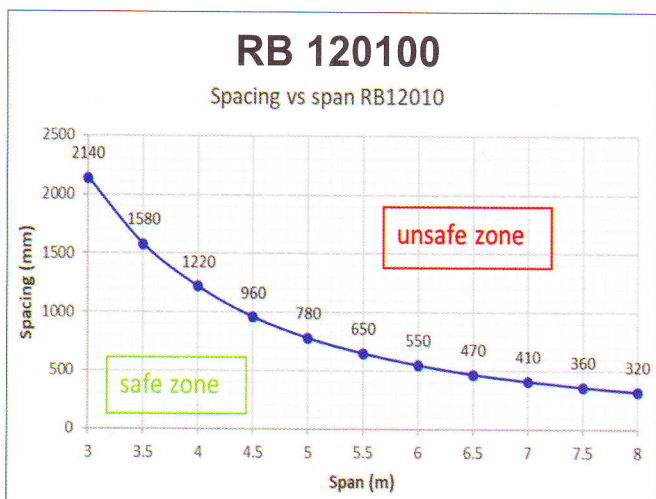
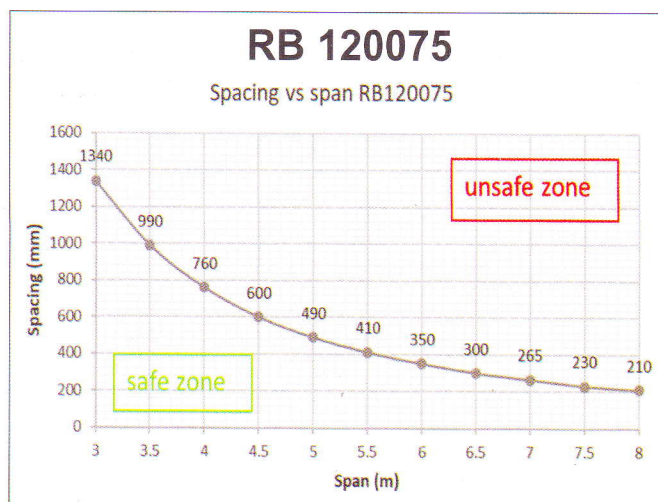
I) RB 120 Ability Span & Spacing Application Table

No	Product/ Section/ Code	Spacing (mm)	Maximum Span (mm)								
			4000	4500	4650	5000	5500	6000	6500	7000	7500
1	RB 120075	750	4000								
		600		4500							
		450			4650						
		400				5000					
		350					5500				
		300						6000			
2	RB 120100	1200	4000								
		950		4500							
		900			4650						
		750				5000					
		650					5500				
		550						6000			
		450							6500		
		400								7000	
		350									7500
3	RB 120120	1250	4000								
		1000		4500							
		950			4650						
		800				5000					
		690					5500				
		580						6000			
		500							6500		
		440								7000	
		380									7500

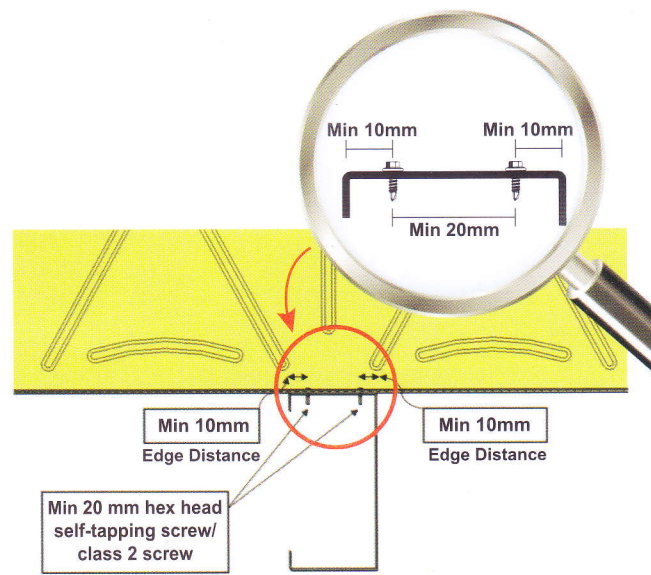
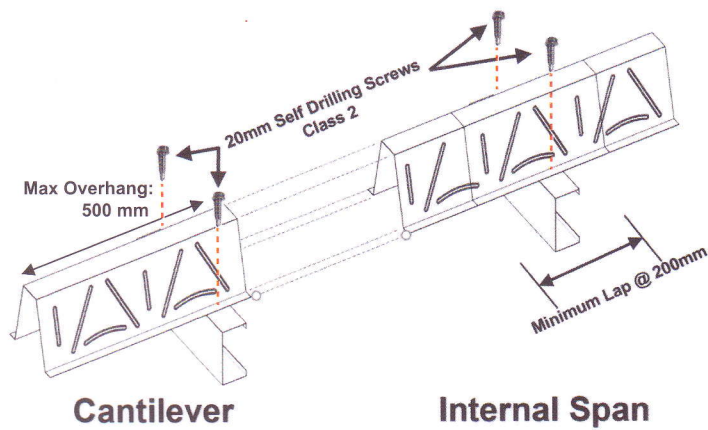
The Green Written Column are all safe to use of the section.

II) RB 120 Ability Span & Spacing Application in Graph Form

The advantages of the Graph form is you are able to estimate the intermediate values of Section Span and Spacing application which are not stated in the table form.

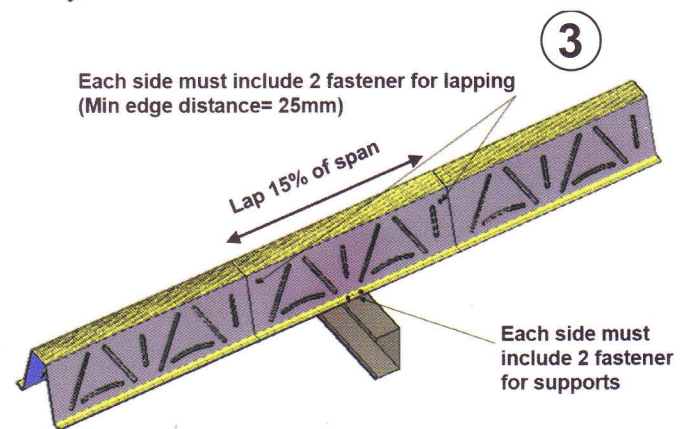
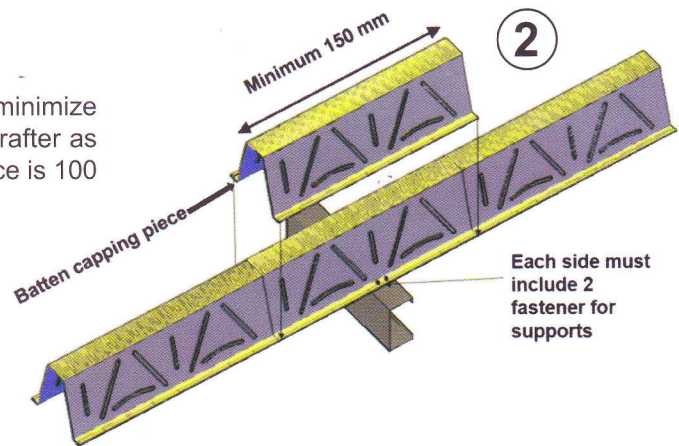
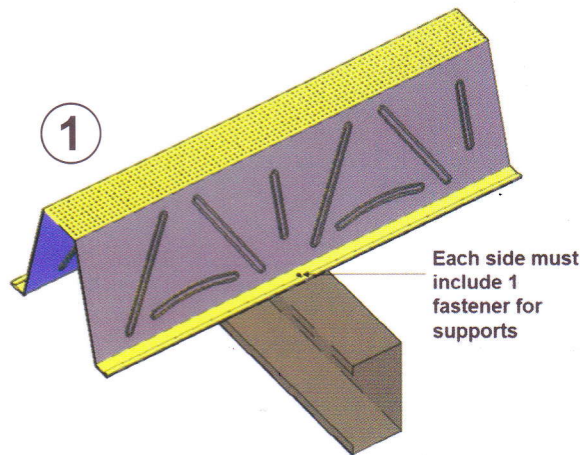


Installation Diagram



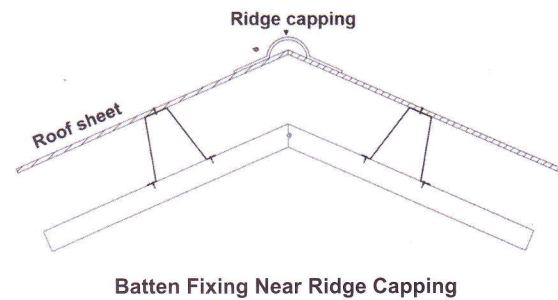
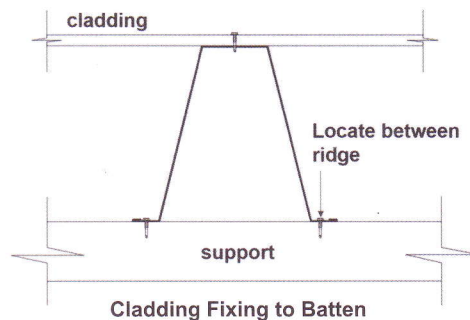
Laying and Lapping of RB 120

Lay all battens in one direction starting from one end to minimize cutting. The overlap must be supported over a truss or rafter as shown in figure below. The minimum overlapping distance is 100 mm.

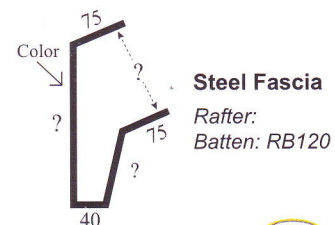
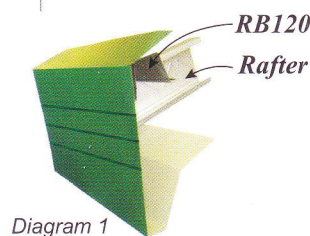


- ① Internal Support Connection (Non-Cyclonic Region)
- ② Internal Support Connection (Cyclonic Region)
- ③ Lapping – Internal Support Connection (Non-Cyclonic Region)

Details of Self-Tapping Screw



For the Gable End, we suggest to use the Steel Fascia to cover it up. The Steel Fascia dimension is subjected to the total height of RB 120 and Rafter (Diagram 1).



Product Health Care

Corrosive Environments

It is not recommended to use zinc or aluminium coated Rofo Steel Roof Batten in high corrosive environment or within one kilometre from seaside. Please contact our sales specialist for advice. Any further specification will refer to ISO 9223 Standard or our Manual Booklet – Material & Products Specification Manual Booklet (Page 44 & 45).

Storage & Handling

All Rofo Steel Roof Battens should be kept dry and stored under cover and above the ground. To maximize steel battens life cycle, RB 120 exposed to water must be separated and air dry as soon as possible to remove the moisture retention.

Batten used in residential dwellings



Batten as decorative



Batten used in portal frame warehouses as alternative to Z / C Channel Section



Available in Paris Brown colour to mimic timber for aesthetic purpose



RB120 can use in car park for Span more than 6m



Kina Roof Industries (Sabah) Sdn. Bhd. (667221-X)
Rofo for You Marketing Sdn. Bhd. (1030310-X)

Factory 1:

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Kota Kinabalu Industrial Park, 88460 Kota Kinabalu, Sabah.
Postal Add: P.O.Box 96, Pejabat Pos Mini, 88450 Telipok, Sabah, Malaysia.
T : 088 498 333, 494 333, 016 8622323 F: 088 499 933

Factory 2 (Main):

Lot 31, Jalan 2A, KKIP Timur, Industrial Zone 12, Kota Kinabalu Industrial Park, 88460 Kota Kinabalu, Sabah.

Colo Steel System Sdn. Bhd. (673950-D)

Lot 1904, Jalan Maigold, Taman Desa Senadin Shophouse,
98100 Miri, Sarawak, Malaysia.
Tel: 085-491 288 Fax: 085-661 387

Website:



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