

# **COMPANY PROFILE**



Wall & Roof Cladding

Ventilation Systems & Building Accessories



# PT Robertson FastBuild Indonesia

Kawasan industri MM2100, JL. Sulawesi II Blok F5, Ds. Gandamekar, Kec. Cikarang Barat, Kab. Bekasi 17520



(021) 38716085



+62 21 8984 2202



Sales@ptrobertsonfastbuild.com



Robertson.id









### 1. TENTANG KAMI

PT Robertson FastBuild Indonesia dengan bangga telah mendukung Industri Bahan Bangunan & Konstruksi Indonesia sejak tahun 2011 dan merupakan bagian dari International Building Technologies Group yang telah melayani Pasar Global selama lebih dari 90 Tahun dengan produk & solusi bangunan dari produk baja yang berkualitas yang dapat diandalkan.

### 1. ABOUT US

PT Robertson FastBuild Indonesia has proudly supported the Indonesian Building & Construction Industry since 2011 and is part of an International Building Technologies Group that has served Global Markets for more than 90 Years with reliable, quality driven Steel & Allied Building products as well as fully Engineered Building Solutions.

#### 2. VISI & MISI

#### **VISI**

Dengan bangga membangun Indonesia melalui inovasi, berorientasi pelanggan, dan solusi baja berkelanjutan.

#### **MISI**

Memberdayakan pertumbuhan dan potensi Indonesia. Misi kami adalah menyediakan solusi bangunan baja berkualitas yang meningkatkan kehidupan dan masyarakat. Kami mengutamakan pelanggan dan manusia sebagai mitra berharga. Membina pendekatan kolaboratif yang mendorong inovasi, pembelajaran, dan kesuksesan bersama.

#### 2. VISION & MISSION

#### **VISION**

Building Indonesia with pride through innovative, customer-centric, and sustainable Steel solutions.

#### **MISSION**

Empowering Indonesia's growth and potential, our Mission is to provide quality Steel building solutions that enhance lives and communities. We prioritise our customers and people as valued partners, fostering a collaborative approach that drives innovation, learning, and shared success.

# 3. NILAI

- FOKUS pada pelayanan & Kekuatan PELANGGAN
- UNGGUL dalam segala hal yang kami lakukan.
- KEMITRAAN untuk kesuksesan BERSAMA.
- INTEGRITAS melalui etika, kepercayaan & kepatuhan.
- **KEPEDULIAN** terhadap karyawan kami, masyarakat, dan lingkungan.

# 3. VALUES

- Strong CUSTOMER & Service FOCUS
- **EXELLENCE** in ALL we do
- PARTNERSHIP for SHARED SUCCESS.
- **INTEGRITY** through Ethics, Trust & Compliance.
- **CARE** for our Employees, Community and the Environment.

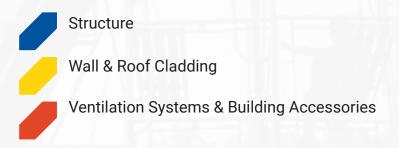
# 4. SERTIFIKAT & ISO

# 4. CERTIFICATE & ISO



# 5. FILOSOFI

# 5. PHILOSOPHY



# 6. BAGIAN DARI

# 6. PART OF GROUP



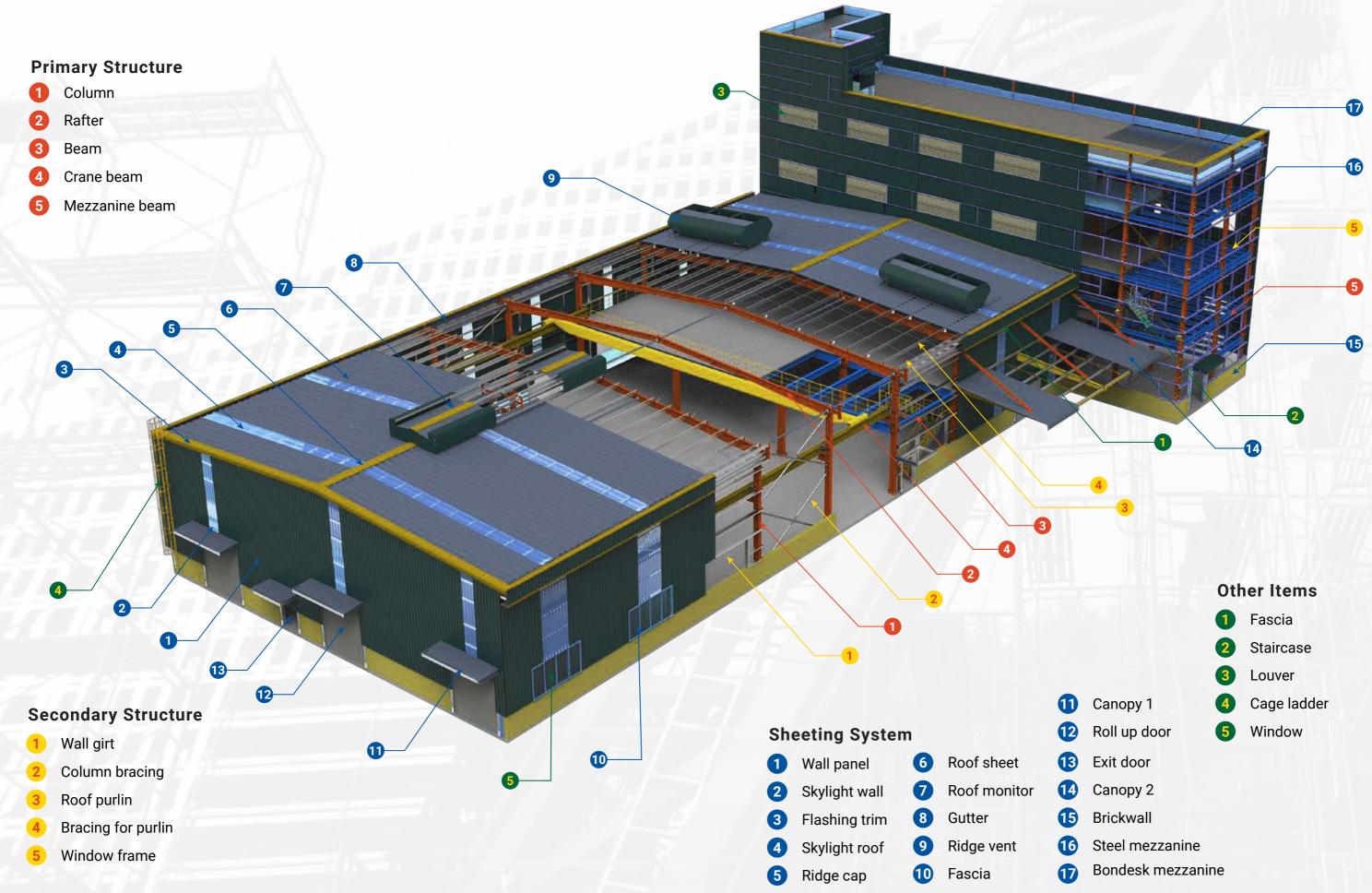






# 7. APA YANG KAMI TAWARKAN

# 7. WHAT WE OFFERS







# 8. ROBERTSON PURLIN

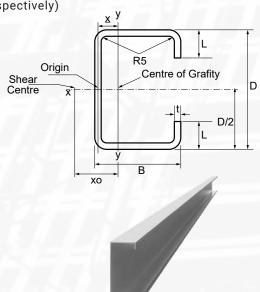
Purlin Robertson utamanya digunakan pada desain bangunan perumahan, bangunan industri dan bangunan peternakan. biasa digunakan untuk struktur utama PEB Ringan dan untuk menahan atap dan penutupan dinding terhadap struktur PEB berat

#### Material

Purlins dan girts Robertson dibuat dari hi-tensile Baja galvanis G450, G500 atau G550, dengan minimum Lapisan galvanis Z275 (275gr/m2) sesuai dengan AS 1397.

#### **C PURLIN DIMENSIONS & PROPERTIES**

NOTE: x and y axes coincide x1 and y1 axes (respectively)



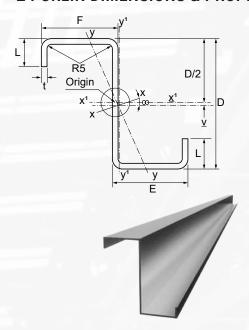
# 8. ROBERTSON PURLIN

Robertson Purlins profile is primarily used in the design of residential, industrial and farm building. The section are typically used for main structure in PEB Lite and to support roof and wall sheeting in Heavy PEB structure

#### **Materials**

Robertson purlins and girts are manufactured from hi-tensile G450, G500 or G550 galvanised steel, with a minimum Z275 (275gr/m2) galvanised coating conforming to AS 1397.

#### **Z PURLIN DIMENSIONS & PROPERTIES**





### **C & Z PURLIN SIZE & MASS TABLE**

Section	Thickness (t)	Height (D)		Z PURLINS		C PUR	LINS	Mass kg/m
Section	mm	mm	Е	F	L	В	L	Widss Ky/III
100 10	1.0	102	53	49	12.5	51	12.5	1.75
100 12*	1.2	102	53	49	13	51	12.5	2.09
100 15	1.5	102	53	49	13.5	51	13.5	2.59
100 19	1.9	102	53	48	14.5	51	14.5	3.26
150 12*	1.2	152	65	61	15.5	64	14.5	2.86
150 15	1.5	152	65	61	16.5	64	15.5	3.55
150 19	1.9	152	65	61	17.5	64	16.5	4.48
150 24	2.4	152	66	60	19.5	64	18.5	5.81
200 15	1.5	203	79	74	18	76	15.5	4.46
200 19	1.9	203	79	74	18.5	76	19	5.69
200 24	2.4	203	79	73	21.5	76	21	7.39
250 19	1.9	254	79	74	18	76	18.5	6.45
250 24	2.4	254	79	73	21	76	20.5	8.37
300 24	2.4	300	100	93	27	96	27.5	10.11
300 30	3.0	300	100	93	31	96	31.5	12.66
350 24	2.4	350	129	121	30	125	30	12.23
350 30	3.0	350	129	121	30	125	30	15.15
400 30	3.0	400	96	96	30	96	30	15.15

#### **C SECTION PROPERTIES**

Section	Area mm²	Second Moment of Area (x10^6 mm4)		Form Factor	Torsion Constant mm4	Warping Constant (x10^9 mm6)	Monosymmetry Constant mm	Shear Centre mm	Centre of Gravity
		lx	ly	Q	J	lw	by	хо	<u>x</u>
C100 10	215	0.361	0.075	0.644	71.7	0.158	123.3	-39.85	16.03
C100 12*	258	0.429	0.088	0.731	123.8	0.186	122.8	-39.61	15.93
C100 15	321.7	0.531	0.111	0.824	241.3	0.238	122	-39.9	16
C100 19	408.5	0.667	0.41	0.879	491.6	0.307	121.7	-40.28	16.18
C150 12*	354	1.28	0.186	0.573	169.9	0.835	170.7	-46.38	18.22
C150 15	441.4	1.593	0.234	0.671	331	1.059	170.1	-46.7	18.3
C150 19	560.5	2.009	0.297	0.76	674.5	1.358	169.8	-47.07	18.49
C150 24	708	2.527	0.382	0.813	1359.4	1.79	168.5	-47.93	18.82
C200 15	555	3.509	0.393	0.557	416.3	3.042	223.2	-51.54	19.89
C200 19	710.7	4.472	0.522	0.647	855.2	4.157	220.8	-53.4	20.7
C200 24	901.5	5.642	0.673	0.726	1722.8	5.483	218.8	-54.2	21
C250 19	807.5	7.585	0.557	0.574	971.7	6.82	276.4	-48.46	18.1
C250 24	1020	9.577	0.716	0.645	1958.4	8.859	273.9	-49.21	18.39
C300 24	1260	16.919	1.504	0.592	2419.2	26.671	319.8	-65.97	24.99
C300 30	1590	21.253	1.948	0.672	4770	35.487	315.8	-67.88	25.74
C350 24	1545	29.12	3.18	0.52	3015	77.379	386.9	-91.11	34.07
C350 30	1905	35.708	3.799	0.596	5715	89.651	378.4	-86.24	33.18
C400 24	1665	39.8	3.31	0.54	3246	103.979	439.9	-86.23	31.61
C400 30	2072	49.32	4.07	0.63	6318	127.269	440	-85.69	31.33

#### **Z SECTION PROPERTIES**

Section	Area mm²	Sec		nent of A mm4)	ırea	Form Factor	Torsion Constant mm4	Warping Constant (x10^9 mm6)	Con	mmetry stant m		Centre nm		re of vity	Angle (Deg)
		lx¹	ly¹	lx	ly	Q	J	lw	β <b>x</b>	βу	хо	yo	х	у	œ
Z100 10	215	0.361	0.13	1.448	0.043	0.644	71.7	0.213	9.9	11.8	-1.94	-4.73	1.11	-0.94	27.6
Z100 12*	258	0.429	0.153	0.532	0.051	0.731	123.8	0.25	9.9	11.8	-1.94	-4.75	1.11	-0.94	27.5
Z100 15	322.5	0.533	0.194	0.663	0.064	0.826	241.9	0.317	9.9	11.8	-1.95	-4.75	1.11	-0.94	27.8
Z100 19	408.5	0.667	0.248	0.833	0.081	0.879	491.6	0.404	9.9	11.7	-1.96	-4.77	1.12	-0.94	28
Z150 12*	352.4	1.274	0.3	1.46	0.114	0.576	169.2	1.145	12.4	12.7	-1.9	-5.9	1	-1	21.7
Z150 15	441.4	1.586	0.379	1.822	0.144	0.676	331	1.447	12.4	12.6	-1.9	-5.9	1	-1	21.9
Z150 19	559.2	1.995	0.482	2.294	0.181	0.725	672.9	1.839	12.5	12.6	-1.9	-5.9	1	-1	22
Z150 24	705.9	2.506	0.625	2.897	0.235	0.811	1363.3	2.381	18.6	18.5	-2.9	-8.8	1.5	-1.5	22.4
Z200 15	555	3.512	0.616	3.876	0.253	0.555	416.3	4.235	17.6	17.1	-2.26	-8.3	1.17	-1.36	18.5
Z200 19	712.5	4.496	0.837	4.994	0.339	0.647	857.4	5.795	17.4	16.8	-2.3	-8.24	1.19	-1.34	19.1
Z200 24	900	5.673	1.089	6.324	0.438	0.726	1728	7.58	21	19.8	-2.79	-9.94	1.45	-1.6	19.4
Z250 19	805.4	7.808	0.916	8.318	0.407	0.57	969.2	10.235	25.8	23.4	-2.7	-12.1	1.3	-1.9	14.7
Z250 24	1023.5	9.572	1.074	10.158	0.487	0.643	1952	12.261	26.9	23.4	-2.6	-12.8	1.3	-1.8	14.3
Z300 24	1260	17.117	2.381	18.471	1.027	0.59	2419.2	37.465	20.9	17.2	-1.99	-10.19	0.94	-1	16.2
Z300 30	1590	21.513	3.119	23.3	1.332	0.672	4770	49.318	21.3	16.9	-2.02	-10.42	0.94	-0.94	16.6
Z350 24	1545	29.1	4.98	32.02	2.07	0.52	2965	101	21.1	18.6	-2.1	-10.4	1.87	-2.16	18.2
Z350 30	1905	36.03	6.069	39.583	2.516	0.596	5715	126.23	21.6	19.1	-2.38	-10.49	1.16	-1.19	18
Z400 24	1665	39.8	4.98	42.55	2.22	0.54	3196	136	23.3	20.5	-2.4	-11.5	1.74	-2.29	15.2
Z400 30	2072	49.3	6.11	52.69	2.73	0.63	6250	166	23.7	21	-2.5	-11.8	1.73	-2.3	15.1



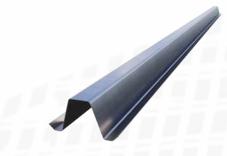
# 9. ROBERTSON TOP HATCH

Robertson Top Hatch utamanya digunakan untuk gording atap bangunan perumahan, industri, dan bangunan peternakan. umumnya digunakan untuk menahan atap dan penutup dinding.



# 9. ROBERTSON TOP HATCH

Robertson Top Hatch profile is primarily used in the design of residential purlins, industrial and farm building. The sections are typically used to support roof and wall sheeting





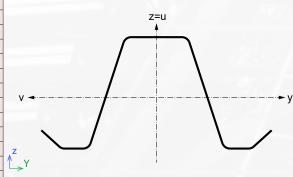
Specification	Value	Unit
Material	G450	
Yield Strength (Fy)	450	Мра
Tensile Strength (Fu)	480	Мра
Thickness	0.7	mm
Weight	1.18	Kg/m '

# 35.0 64.2 61.0 10.0 15.0 15.0 10.0

#### **SECTION PROPERTIES**

#### **Properties of transformed section**

	X	у	z	u	V
A (mm²)	150.35			67.734	38.341
I (mm⁴)		77434	1.7659E+05	1.7659E+05	77433
lyz (mm⁴)	-344.5				
It (mm³)	28.275				
S (mm³)		7.6873	11.343		
Wel (mm³)				2813.7	2318.6
Wpl (mm³)				4670.8	3115.8
Cg (mm)		0.07544	0.05113		
lw (mm⁵)	3.3799+07				
i (mm)		22.68	34.27	34.27	22.69
y0, z0 (mm)		-0.1023	41.09		
a (°)	89.8				
Painting Surface (m²)	0.44				





### 10. AKSESORIS STRUKTUR

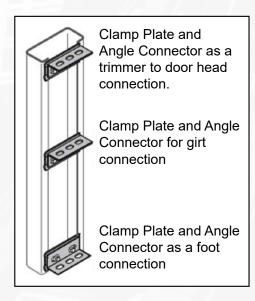
#### **Aksesoris Purlins dan Girts**

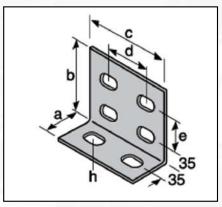
Semua braket dibuat dari baja berlapis seng dengan hasil minimum 300 Mpa dan lapisan galvanis Z275 atau lapisan seng aluminium alloy AZ150.

# 10. STRUCTURE ACCESSORIES

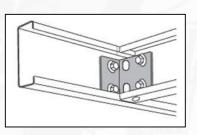
#### Accessories Purlins dan Girts

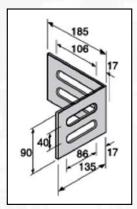
All bracket is manufactured from zinc coated steel with minimum yield of 300 Mpa and galvanized coating of Z275 or zinc aluminium alloy AZ150 coating.



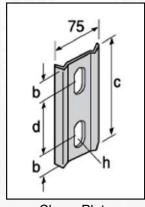


General Purpose Bracket

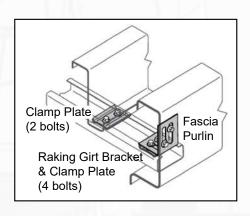


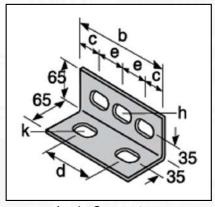


Raking Girt Bracket



Clamp Plate





**Angle Connector** 

**Brackets & Ancillary Items** 

# 11. DINDING & CLADDING ATAP 11. WALL & ROOF CLADDING

Atap dan dinding Robertson diproduksi oleh PT Robertson FastBuild Indonesia dengan spesifikasi dasar baja lembaran G550/AZ150 atau G550/AZ100 dengan finishing tertentu atau persyaratan lain seperti baja Galvanis dengan lapisan PVDF atau PVF2.

#### **ROBERTSON-960**

Robertson-960 memiliki tampilan lekuk yang tegas dan menjadikannya pilihan yang sangat menarik karena memiliki banyak karakteristik yang menguntungkan seperti lebar 960 mm, rasio kekuatan terhadap berat, yang memberikan konsistensi rentang beban optimal, dan galur yang lebar memastikan drainase yang sangat baik.

Robertson-960 dipasang dengan 2 konfigurasi, Konfigurasi standar galur sempit, atau galur lebar, yang biasa digunakan untuk cladding vertikal.



#### Allowable Safe Load Table (in kPa)

BMT Span					Span (	in mm)				
Divi	opun	600	900	1,200	1,500	1,800	2,100	2,400	2,700	3,000
0.30	Single	9.50	4.20	2.35	1.50	1.00	0.75	n/r	n/r	n/r
	Double	11.95	5.30	2.90	1.90	1.30	0.95	0.70	n/r	n/r
	Triple	14.25	6.30	3.55	2.25	1.55	1.10	0.85	0.70	n/r
0.35	Single	11.15	4.95	2.75	1.75	1.20	0.90	0.65	n/r	n/r
0.33	Double	12.50	5.55	3.10	2.00	1.35	1.00	0.03	0.60	n/r
										-
	Triple	15.30	6.80	3.80	2.45	1.70	1.25	0.95	0.75	0.60
0.40	Single	12.70	5.65	3.15	2.00	1.40	1.00	0.75	0.60	n/r
	Double	14.30	6.35	3.55	2.25	1.55	1.15	0.85	0.70	0.60
	Triple	17.50	7.75	4.35	2.80	1.90	1.40	1.05	0.85	0.75
0.50	Single	15.90	7.00	3.95	2.50	1.75	1.30	0.95	0.75	0.60
	Double	17.50	7.95	4.45	2.85	1.95	1.45	1.10	0.85	0.70
	Triple	21.90	9.70	5.45	3.50	1.40	1.75	1.35	1.05	0.85
0.60	Single	19.00	8.92	5.02	3.12	1.81	1.14	n/r	n/r	n/r
	Double	21.50	9.95	5.60	3.58	2.49	1.83	1.40	1.11	0.90
	Triple	24.25	11.61	6.53	4.18	2.90	2.13	1.63	1.16	0.85
0.70	Single	n/r	10.56	5.94	3.80	2.22	1.40	0.93	n/r	n/r
	Double	n/r	11.48	6.46	4.13	2.87	2.11	1.61	1.28	1.00
	Triple	n/r	13.41	7.54	4.83	3.35	2.46	0.89	1.39	1.01
0.90	Single	n/r	13.83	7.78	4.98	3.04	1.91	1.28	0.90	n/r
	Double	n/r	14.56	8.19	5.24	3.64	2.67	2.05	1.62	1.31
	Triple	n/r	16.99	9.56	6.12	4.25	3.12	2.39	1.84	1.34
		.,,,								

Allowable loads limited by stess 180 Mpa, or deflection of L/180

Robertson roofing and wall manufactured by PT Robertson FastBuild Indonesia with the specification, base sheet steel shall be G550/AZ150 or G550/AZ100 with specified finish or other requirement such as Galvanized steel with PVDF or PVF2 coatings.

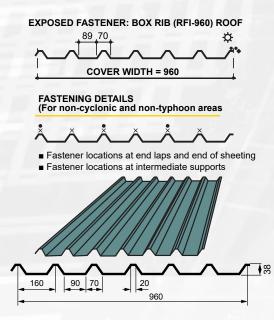
#### **ROBERTSON-960**

Robertson-960 offers an excellent balance of performance and economy.

Robertson-960 has a bold angular appearance and makes it a very attractive choice as it has many advantageous characteristics such as its wide 960 mm cover width, strength to weight ratio, that provide optimum load span

consistency, and the broad flutes ensure excellent drainage.

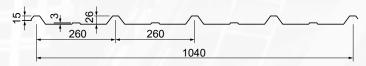
Robertson-960 can be laid in 1 of 2 configurations; narrow flute out, the standard manner, or broad flute out, commonly used for cladding of vertical surfaces.



Mass per unit area (kg/m²)									
вмт	Colorbond®	Kirana®	Zincalume®	Abad®	Galv Z275 PVDF/PVF2				
0.30	2.59	2.54	2.53	2.48					
0.35	2.98	2.94	2.92	2.88					
0.40	3.37	3.33	3.32	3.27					
0.50	4.16	4.11	4.10	4.05	5.21				
0.60	4.94	4.90	4.88	4.84	6.17				
0.70	5.33	5.29	5.27	5.23	7.13				
0.90	6.90	6.86	6.84	6.80	9.04				

#### **ROBERTSON-1040**

Atap Robertson-1040 merupakan profil atap umum yang biasa digunakan untuk atap industri & sistem Wall Cladding. Tersedia dengan ketebalan mulai dari 0.25 mm hingga 0.9 mm AZ75 - AZ150

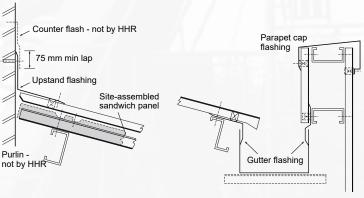


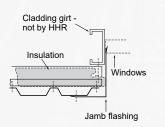
#### **FLASHING**

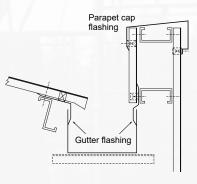
- Total lebar maksimum untuk produk coating Robertson adalah 1200 mm.
- Panjang minimum setiap leg flashing adalah 15 mm.
- Edge break: Edge break sebesar 10° disediakan pada setiap run-out leg dari setiap flashing. Hal ini diperlukan untuk memastikan flashing menempel pada lembaran penutup (untuk menghindari tepi flashing yang bergelombang).

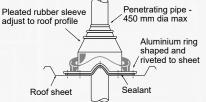
#### SAMBUNGAN BERTUMPUK

Flashing seperti ridge cap, talang flashing dan semua flashing sederhana harus tersusun bertumpuk 100 mm dan diseal dengan silikon. Kedua bagian Flashing diikat menjadi satu dengan blind rivets.



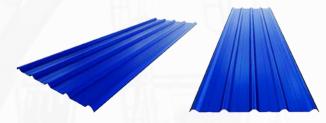






#### ROBERTSON-1040

Robertson-1040 roof is the commons roof profile that usually used for industrial roof & Wall Cladding system Available in thicknesses from 0.25 mm to 0.9 mm AZ75 - AZ150

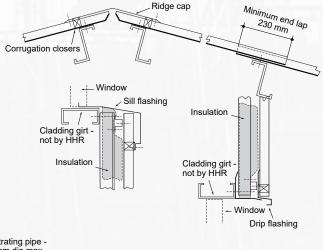


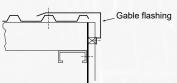
#### **FLASHING**

- Maximum total girth for Robertson coated product is 1200 mm.
- The minimum length of any leg of flashing is 15 mm.
- Edge break: An edge break of 10 deg is provided on every run-out leg of every flashing. This is necessary to ensure the flashing hugs the sheeting (to avoid wavy edges).

#### LAP JOIN

Flashing such as ridge cap, gutter flash and all simple flashing should be lapped 100mm and sealed with silicone. The two flashing sections are fastened together blind rivets.



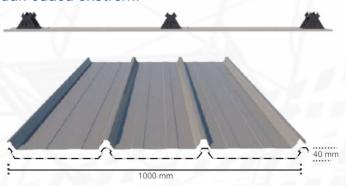


**Typical Flashing Details** 



#### **RFI LOCK**

RFI Lock adalah jenis atap metal yang dirancang dengan teknologi tinggi untuk memberikan solusi perlindungan bangunan yang kuat dan tahan lama. Produk ini terbuat dari material berkualitas, seperti Zincalume, Galvalume, dan Galvalume Colour, yang terkenal dengan ketahanannya terhadap korosi dan cuaca ekstrem.



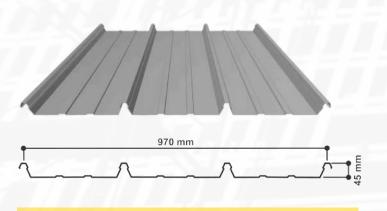
Bahan Spesifikasi RFI-Lock 1000

Material : Zincalume, Galvalume

Galvalume Colour

Ketebalan : 0.45 - 0.60 mm (TCT)

Lebar Efektif : 1000 mm Tinggi Gelombang : 40 mm Panjang : Custom



Spesifikasi RFI-Lock 970

Material : Zincalume, Galvalume,

**Galvalume Colour** 

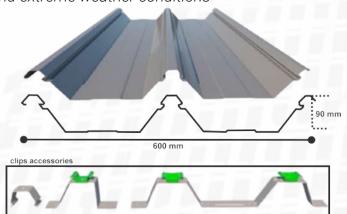
Ketebalan : 0.45 - 0.60 mm (TCT)

Lebar Efektif : 970 mm Tinggi Gelombang : 45 mm

Panjang: Custom

#### RFI LOCK

RFI Lock is a type of metal roofing designed with advanced technology to provide a durable and long-lasting building protection solution. This product is made from high-quality materials, such as Zincalume, Galvalume, and Galvalume Colour, which are known for their resistance to corrosion and extreme weather conditions



Bahan Spesifikasi RFI-Lock 600

Material : Zincalume, Galvalume,

Galvalume Colour

Ketebalan : 0.45 - 0.60 mm (TCT)

Lebar Efektif : 600 mm Tinggi Gelombang : 90 mm

Panjang: Custom



Bahan dan Spesifikasi SOLID 500

Material : Zincalume, Galvalume,

Galvalume Colour

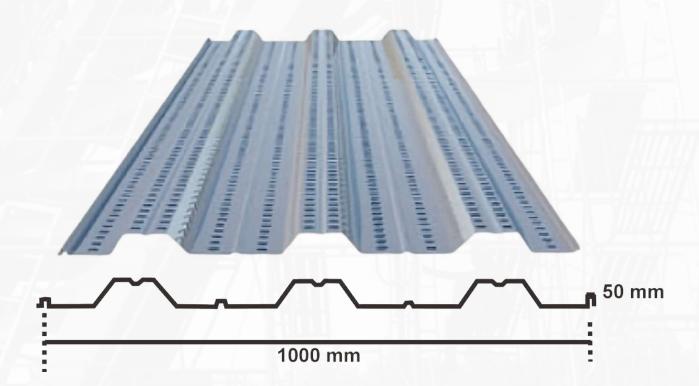
Ketebalan (TCT) : 0.45 - 0.6 mm Lebar Efektif : 500 mm Panjang : Custom

#### **RFI DECK**

RFI Deck adalah material berkualitas tinggi yang dirancang untuk kebutuhan konstruksi modern. Terbuat dari bahan galvanis dan galvalum, produk ini memiliki daya tahan luar biasa terhadap korosi dan beban berat. Dengan ketebalan 0.60–1 mm (TCT) dan lebar efektif yang bervariasi, RFI Deck memberikan fleksibilitas untuk berbagai desain konstruksi. Panjang produk dapat disesuaikan dengan kebutuhan proyek Anda, menjadikannya pilihan ideal untuk atap, lantai, maupun dinding.

#### RFI DECK

RFI Deck is a high-quality material designed to meet modern construction needs. Made from galvanized and galvalume materials, this product offers exceptional durability against corrosion and heavy loads. With a thickness of 0.60–1 mm (TCT) and varying effective widths, RFI Deck provides flexibility for various construction designs. The length of the product can be customized to suit your project requirements, making it an ideal choice for roofing, flooring, and walls.



#### Spesifikasi RFI Deck

Material : Galvanis, Galvalum Ketebalan : 0.60–1 mm (TCT)

Lebar Efektif: 1000 mm, 880 mm, 600 mm

Panjang : Custom

# 12. SYSTEM VENTILASI & AKSESORIS BANGUNAN GUTTER, FASCIA & CAPPING

Kami memproduksi berbagai jenis aksesoris untuk kebutuhan atap pada bangunan diantara lain seperti:

- Flashing
- Fascia (Listplang)
- Ridgecap (Nok)
- Gutter (Talang)
- Ridge Ventilator

#### **SPESIFIKASI**

Bentuk dan Dimensi custom disesuaikan dengan kebutuhan dan desain dari bangunan.

Material : Aluminium, Zincalume,

Galvanis, Stainless Steel.

Ketebalan : 0,25mm - 3mm

Panjang : 6,00mtr Girth : 1219mm

# 12. VENTILATION SYSTEMS & BUILDING ACCESSORIES GUTTER, FASCIA & CAPPING

We produce various types of accessories for roofing needs on buildings, including:

- Flashing
- Fascia
- · Ridgecap
- Gutter
- Ridge Ventilator

#### **SPECIFICATION**

Custom shapes and dimensions are adapted to the needs and design of the building.

Material : Aluminium, Zincalume,

Galvanis, Stainless Steel.

Thickness: 0,25mm - 3mm

Length : 6,00mtr Girth : 1219mm

# Fascias, Gutters & Ancillary Items









Fascia Brackets



Hi Font Quad Gutter



Quad Gutter



Gutter Stop Ends



Fascia

150 Half Round Gutter



150 Flatback Half Round Gutter



Fascia Brackets



Hi Font Quad Gutter



# SISTEM VENTILASI ALAMI ROBERTSON

Sistem ventilasi alami (gravitasi) Robertson dirancang untuk menghasilkan dan mempertahankan kondisi yang dapat diprediksi pada bangunan komersial, pergudangan biasa, dan bangunan industri.

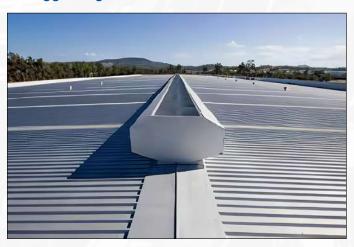
# ROBERTSON NATURAL VENTILATION SYSTEM

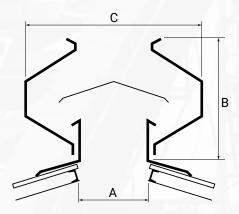
Robertson natural (gravity) ventilation systems are designed to produce and maintain predictable conditions in commercial, general warehousing and industrial buildings.

#### **ROBERTSON VENTILATOR**

Robertson Ventilator memberikan sistem ventilasi alami yang sangat efisien untuk digunakan di gudang industri, bengkel, fasilitas penanganan material, dll.

Untuk mendapatkan efek maksimal dari ventilator ini, bukaan pembuangan harus ditempatkan secara horizontal di titik tertinggi bangunan





#### **Dimensions and Mass**

			Approximate Mass (kg)				
Dimensions (mm)			Per Linear Metre	Pair of Ends			
Α	В	С	Zincalume	Zincalume			
150	328	432	32	3			
250	410	562	38	5			
300	496	710	44	6			
500	781	1290	87	14			

Note: Maximun continuous damper operating length via single operator on all above size = 6.0 mm.

#### ROBERTSON VENTILATOR

Robertson Ventilator guided flow ventilator provides a highly efficient system of natural ventilation for use on industrial warehouses, workshops, materials handling facilities, etc. To obtain maximum effect from this ventilator, the exhaust opening should be located horizontally at the highest point of the building



#### **Exhaust Capacity Table**

(cubic metres per second per metre run)

Temp	p. Diff. x Eff. Ht (ΔT °C x metres)									
		CLEAR C	PENING	(mm)						
	150	250	300	500	600					
30	0.243	0.404	0.485	0.809	0.971					
40	0.249	0.416	0.499	0.831	0.998					
50	0.255	0.426	0.511	0.852	1.022					
60	0.261	0.435	0.522	0.870	1.044					
70	0.266	0.443	0.532	0.886	1.063					
80	0.271	0.451	0.541	0.902	1.082					
90	0.275	0.458	0.550	0.916	1.100					
100	0.279	0.465	0.558	0.930	1.116					
110	0.283	0.472	0.566	0.943	1.132					
120	0.287	0.478	0.573	0.956	1.147					
130	0.290	0.484	0.581	0.968	1.161					
140	0.294	0.490	0.587	0.979	1.175					
150	0.297	0.495	0.594	0.990	1.188					
160	0.300	0.501	0.601	1.001	1.201					
180	0.306	0.511	0.613	1.022	1.226					
200	0.312	0.521	0.625	1.041	1.249					
250	0.326	0.543	0.651	1.086	1.303					
300	0.338	0.563	0.676	1.126	1.351					
350	0.349	0.582	0.698	1.163	1.396					
400	0.359	0.599	0.719	1.198	1.438					
450	0.369	0.615	0.738	1.231	1.477					
500	0.378	0.631	0.757	1.261	1.514					
550	0.387	0.645	0.774	1.291	1.549					
600	0.396	0.659	0.791	1.319	1.582					
650	0.404	0.673	0.807	1.345	1.614					

Note: The above exhaust capacities are based on wind speed of 8 km/h

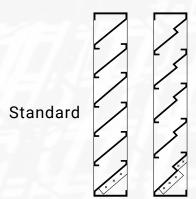
#### **ROBERTSON-LOUVER**

Fitur desain Louver bilah tetap dapat dirancang sebagai jalusi tunggal untuk digunakan pada bukaan kecil dan jalusi ganda untuk bukaan lebar, yang digunakan pada fitur jendela vertical. Louver dapat disusun miring dengan support rangka baja yang tepat, penyediaan area bukaan louver yang besar. Louver dibuat dengan kokoh dan akurat, dengan beragam varietas finishing material yang memungkinkan desainer tersedia dapat dan mengkontarskan louver memadukan dengan bahan bahan disekitarnya untuk menghasilkan efek arsitektur yang diinginkan.

#### Standard Louver Heights (mm)

S	tandard Blad	e	Weather Res	sistant Blade
No. of Inter. Blades	Type 1140 100 deep	Type 1160 150 deep	Type 1540 100 deep	Type 1560 150 deep
*1	405	545	499	656
2	520	710	639	846
3	635	875	779	1036
4	750	1040	919	1226
5	865	1205	1059	1416
6	980	1370	1199	1606
7	1095	1535	1339	1796
8	1210	1700	1479	1986
9	1325	1865	1619	2176
10	1440	2030	1759	2366
11	1555	2195	1899	2556
12	1670	2360	2039	2746
13	1785	2525	2179	2936
14	1900	2690	2319	3126

\*Denotes minimum dimensional limitation. Nominal Weight in steel: 100 mmdeep 15 kg/m². 150 mm deep 17 kg/m².



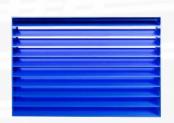
Weather Resistant

**Typical Cross Section** 

#### ROBERTSON-LOUVER

Design Features Fixed Blade Louvers are designed for either single louver use in small openings or multiple louver applications in larger openings where the vertical mullions are to be features. Louvers can be stacked in banks, with the proper supporting steelwork, to provide a large louver opening area. The louvres are ruggedly and accurately made, and the wide variety of available materials and finishes enables designers to blend or contrast the louvres with the surrounding materials to achieve the desired architectural effect.









Bird and insect screens

#### FITUR DESAIN & AKSESORIS

#### **MINIM PEMELIHARAAN**

Inlet louver Robertson dapat dibuat dari berbagai bahan, tergantung pada ketahanan yang diperlukan terhadap korosi

#### **AKSESORIS OPSIONAL**

#### Screen Burung dan Serangga

Louver Robertson tersedia baik screen burung maupun screen serangga, dibuat dari bahan yang kompatibel dengan yang digunakan untuk unit louver. Screen umumnya dipasang pada permukaan bagian dalam dari unit louver.

# ROBERTSON TURBINE VENTILATOR

Turbine ventilator, atau juga dikenal sebagai whirlybird, adalah perangkat ventilasi pasif yang menggunakan energi angin untuk menciptakan aliran udara dan memberikan ventilasi pada ruang tertutup seperti loteng, gudang, dan bangunan industri. Perangkat ini terdiri dari serangkaian bilah atau baling-baling yang dipasang pada poros berputar. Ketika angin bertiup melewati perangkat ini, gerakan berputar dari turbin menciptakan zona tekanan rendah, menarik udara kotor dan panas dari dalam bangunan dan mengalirkan nya ke luar.

#### **DESIGN FEATURES & ACCESSORIES**

#### MINIMAL MAINTENANCE

Robertson inlet louvers can be manufactured from a range of materials, depending on the required resistance to corrosion

#### **OPTIONAL ACCESSORIES**

#### Bird and Insect Screens

Robertson louvers are available with either bird or insect screens, manufactured from materials compatible with those used for the louver unit. The screens are generally fitted to the internal face of the louver units.

# ROBERTSON TURBINE VENTILATOR

Turbine ventilators, also known as whirlybird, are passive ventilation devices that use wind energy to create air flow and ventilate enclosed spaces such as attics, warehouses, and industrial buildings. This device consists of a series of blades or propellers mounted on a rotating shaft. When wind blows past these devices, the rotating motion of the turbine creates a low-pressure zone, pulling hot, dirty air from inside the building and venting it outside.



**RFI Turbine Ventilator** 

## **AKSESORIS ROBERTSON**

#### **AKSES PINTU ROBERTSON**

Serangkaian pintu PA baru dirancang dan diproduksi di Indonesia untuk kekuatan dan daya tahan tinggi, merupakan pilihan ideal untuk gudang, garasi, atau bangunan industri Anda. Fitur:

- Semua pintu dilengkapi rangka penyangga silang atas dan bawah
- Kusen dan rangka pintu dilapisi powder coating
- Dilapisi metal dari COLORBOND coate steel
- Dilengkapi Engsel pengaman baja tahan karat Ultra heavy duty 316 marine grade
- Memberikan keamanan dan kualitas tinggi dengan material baja pilihan
- Menggunakan rangka las dari baja tubular dan engsel dari baja lapis galvanis
- Menggunakan engsel gantung untuk pemasangan yang cepat dan mudah
- Dapat di buka 180 derajat ke arah kiri atau kanan.

# **ROBERTSON ACCESSORIES**

#### **ROBERTSON ACCESS DOORS**

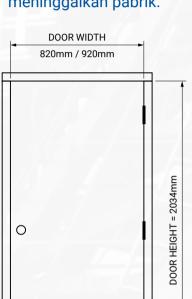
Robertson Access Doors new range of PA doors are engineered and manufactured in Indonesia for high strength and durability, are the ideal choice for your shed, garage or industrial building. Features:

- All doors include upper and lower cross brace frame stiffeners
- Powder coated frames and door jambs
- · Metal clad from COLORBOND coated steel
- Ultra heavy duty 316 marine grade stainless steel security hinges
- High quality security stainless steel hardware options
- Welded tubular frame and door jambs construction from galvanised coated steel Installation
- Pre-hung for quick and easy installation
- Left or right hand 180 degree outward swing

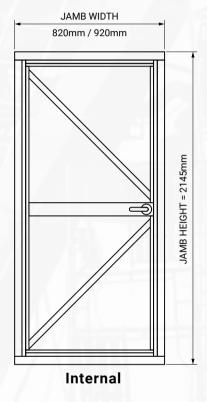




Dengan beberapa konfigurasi knob dan handel, pintu kami dirancang agar terpasang sempurna untuk berbagai keperluan gudang, garasi, atau proyek industri Anda. Perhatian Robertson akan detail dan komitmen terhadap kualitas dilakukan dengan cara pemeriksaan steiap pintu untuk memastikan bahwa setiap pintu memenuhi standar kualitas kami yang ketat sebelum meninggalkan pabrik.



**External** 



With multiple knob and handle configurations, our doors are designed to be a perfect fit for whatever your shed, garage, or industrial project requires. Robertson attention to detail and commitment to quality means each door is inspected to ensure that it meets our strict quality standards before leaving the factory.

#### **Details**

- Door dimensions
   2034mm H x 820mm w x 35mm D
   2034mm H x 920mm w x 35mm D
- Door jamb dimensions
   2145mm H x 925mm w x 83mm D
   2145mm H x 1025mm w x 83mm D
- · Pre-hung quick and easy to install
- · Left or right hand swing options
- · Outward swing standard
- Quality knob and knob lockset included as standard
- Complies to Australian Standards: AS/NZS 1170.2.2011 & AS 4055-2012
- Industrial PA Doors include:
  - 35mm PIR fire retardant insulation
  - 0.55mm COLORBOND steel double skin (inside and outside)















# 13. ROBERTSON TOTAL SOLUTION

# **FSB (Fast Strong Building)**

FSB adalah solusi ringan pra-rancang bangun gedung yang dikembangkan oleh PT Robertson FastBuild Indonesia.

Setiap FSB terbuat dari sistem portal baut yang kuat dengan menggunakan high tensile purlin baja galvanis dan komponen reng dan berbagai pilihan atap maupun dinding yang terbuat dari seng aluminium dan bahan baja atau aluminium yang sudah dicat sebelumnya.

Dirancang mengikuti peraturan dan regulasi desain terbaru Australia dan Indonesia dengan mempertimbangkan kekuatan angin di lokasi tertentu dan kekuatan seismik. Berbagai tipe desain dan ukuran panjang dan lebar custom dengan opsi pitch juga tersedia untuk memberikan Anda berbagai kemungkinan kebutuhan desain bangunan Anda.

Aksesori juga dapat disertakan dalam paket seperti personal door, roller dan sliding door, rotari ventilator , opsi jack roof, louver, insulasi, dan banyak lagi untuk menjadikan bangunan anda benar-benar unik.

# 13. ROBERTSON TOTAL SOLUTION

# FSB (Fast Strong Building)

FSB is a light pre-engineered building solution developed for PT Robertson FastBuild Indonesia

Every FSB is made of strong bolted portal system by use of high tensile galvanised steel purlins and battens components and wide range of choice of roofing and walling made from zinc-aluminium and prepainted steel or aluminium materials.

It is designed to comply with the latest Australian and Indonesian design rules and regulations with allowance for wind at specified locations and seismic forces. Various design types and custom length and width size with optios of pitch also available to give you various possibilities with your building design and needs.

Accessories can also be inclusive in the packages such as personal doors, roller and sliding doors, rotary ventilators, jack roof options, louvers, insulation and much more to making your building truly unique.

#### The FSB™ range of solutions are suitable for :

- Factories Warehouses Workshops
- Facility Buildings Resendential Garages
  - Sport Halls Offices Sheds
  - Modular Buildings Modular Houses

#### Spesifikasi:

Spans : up to 30m
Height : up to 7m
Bays : up to 7m

Roof Pitches : 5, 10, 15, 20, and 25 System : Bolted Portal System



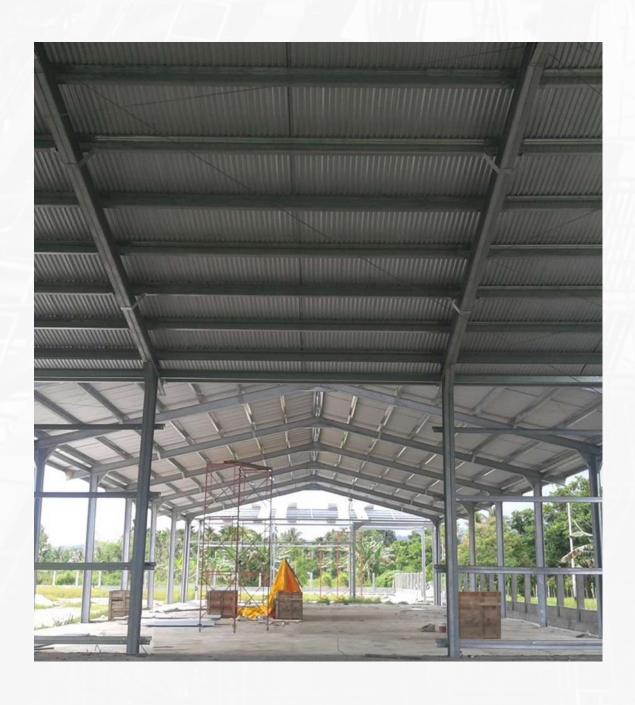


### Fitur FSB

- · Paket desain dan engineering
- Tidak ada rangka yang dilas atau komponen yang dicat yang memerlukan perawatan berkala.
- Mudah diangkut dan dipasang, biaya tenaga kerja rendah.
- Layanan instalasi dan pemasangan oleh reseller bersertifikat

# **FSB Features**

- Design and engineering package.
- No welded frames or painted components that require periodic maintenance.
- · Easy to transport and install, low labor cost.
- Installation and erection service by certified resellers.



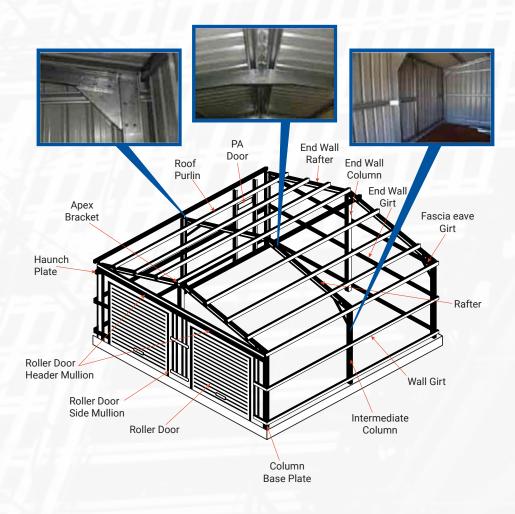


#### Fitur dan keuntungan FSB

- Beragam desain fleksibel
- Sambungan knee dan ujung gusset sepenuhnya dengan baut
- Sepenuhnya direkayasa agar sesuai dengan kondisi Indonesia
- Tidak ada rangka yang dilas dan komponen yang dicat - Perawatan rendah
- Custom desain dan dirancang khusus untuk lokasi anda
- Pilihan beberapa kemiringan atap
- dikemas untuk memudahkan pengiriman ke lokasi
- · Manual instruksi yang komprehensif
- mudah di pasang

#### The FSB Features and Benefits

- Extensive range of flexible designs
- Fully bolted knees and apex gussets
- Fully engineered and certified to suit Indonesian conditions
- No welded frames and painted components
   Low maintenance
- Custom designed and engineered for your site
- · Choice of multiple roof pitches
- · Packaged to easy delivery to site
- · Comprehensive instruction manuals
- easy to install







**Bolted Connection** 





**Erection Structure** 

# **ROBERTSON TRUSS**

Robertson Truss adalah rangka bangunan ringan dan kuat yang tidak akan terpelintir, melengkung, rusak atau terkena rayap Rangka tiang RFI memungkinkan siapa pun dengan mudah membuat rangka baja custom untuk disesuaikan dengan berbagai aplikasi.

# **ROBERTSON TRUSS**

ROBERTSON TRUSS is a frame that won't twist, warp, rot or be affected by termites RFI stud framing allows anyone to easily create custom steel framing to suit any application.







#### **ROBERTSON BATIC**

menawarkan solusi yang lebih cepat, ringan, fleksibel, dan tahan lama, sehingga cocok untuk struktur di area rawan gempa. Dengan pemasangan yang lebih cepat dan biaya lebih rendah, Robertson - Purlin menjadi alternatif unggul untuk menggantikan beton konvensional.

Spesifikasi Rumah

Tinggi Celing = 3.2m & 4m

Ukuran dapat menyesuaikan

Lebar Muka

Panjang

= LB 36 m2

= 6 m = 5.7m & 7m

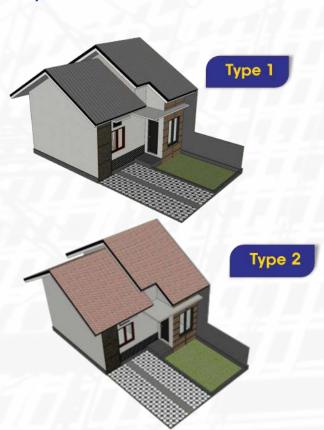
Bangunan

Anti Karat

ahan Gempa

rit

Cepat dan Kuat



Material Utama
Waktu Konstruksi
\* Tergantung aplicator

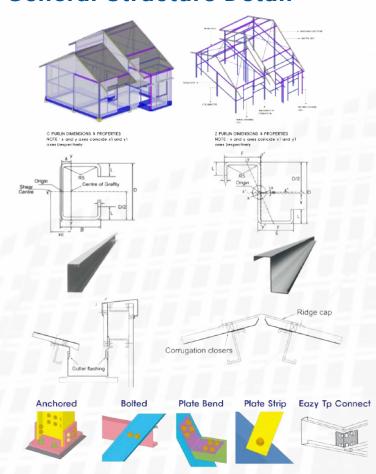
onstruksi : ± 1 minggu

Berat Bangunan

: Light

: Purlin

#### **General Structure Detail**



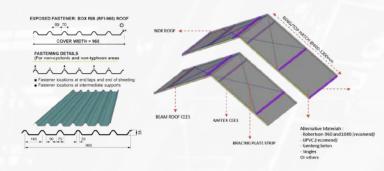
# **Roofing Option**

#### **ROBERTSON-960**

Robertson-960 memiliki tampilan lekuk yang tegas dan menjadikannya pilihan yang sangat menarik karena memiliki banyak karakteristik yang menguntungkan seperti lebar 960 mm, rasio kekuatan terhadap berat yang memberikan konsisensi rentang beban optimal dan galur yang lebar memastikan drainase yang sangat baik

#### **ROBERTSON-1040**

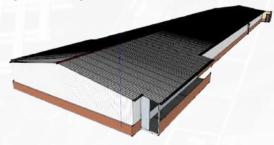
Atap Robertson-1040 merupakan profil atap umum yang biasa digunakan untuk atap industri & sistem Wall Cladding. Tersedia dengan keyebalan mulai dari 0.25 mm hingga 0.9 mm AZ75-AZ150



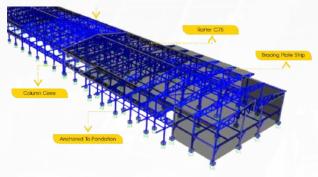


# **ROBERTSON POULTRY HOUSE**

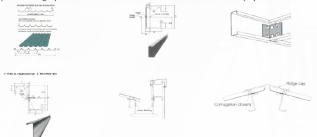
**ROBERTSON Poultry House menawarkan** solusi yang lebih ringan, cepat efisien dan tahan lama, dengan faktor penting pen dukung kandang antara lain:

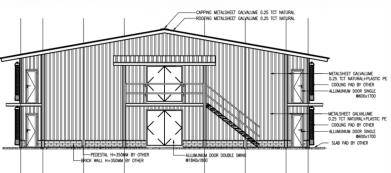


# **General Structure Detail**



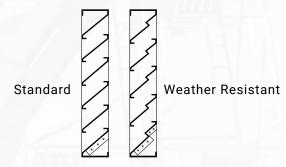
Eazy Tp Connect Atap & Clading Spandek Main Structure Full C Galvanized





# **Walling & Flooring**

#### **Robertson-louver**



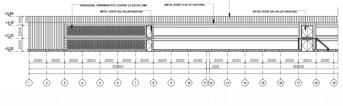
Typical Cross Section

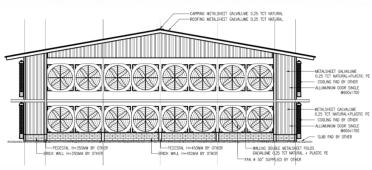
#### **Custom Doors Option**



#### **Alternative Walling Materials**







# **Poultry Project**











# **ROBERTSON PROJECT EXPERIENCES**

# Fast Strong Build (FSB) - PEB Lite

# **RESIDENTIAL**

- Cluster Leonora Sumarecon Serpong
- Cluster Strozy Sumarecon Serpong





# **CAMP BUILDING**

Banti Camp





## **INDUSTRIAL**

- Warehouse PEB Lite Kawan Lama
- Roofmart Showroom PEB Lite Bekasi Timur
- Vanilla Processing Warehouse PEB Lite Papua
- · Warehouse PEB Lite Multi Bintang
- Warehouse PEB Lite PT Integrated Healthcare Indonesia
- Warehouse PEB Lite PT Indo MuroKencana
- Warehouse B29 Afrika PEB Lite PT Sinar Ancol
- Ext.





# **FARM BUILDING**

- Open House Chicken Shed Charon Pokphand
- · Close House Chicken Shed 2 Storey Charon Pokphand
- · Close House Chicken Shed 3 Storey Charon Pokphand



