

Cladding Systems







"We do not only build our customer's needs, as we also build a lifetime bond & trust always hoping for a better future"

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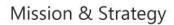




Alexform is the leading manufacturer of cold rolled steel profiles, offering both quality products and reliable service to its customers via the most advanced production facilities in Egypt.

Since our inception we have provided quality products that proudly bear the tag 'Made in Egypt' with over fifty years of experience in the steel business, we are capable of providing expert direction, meeting the specific needs of every customer.

Alexform provides integrated solutios by using new high quality products in the field of (Construction, storage, & Insulation products).



Alex form Factory is committed to principles of sustainability while exploiting innovative technology to its fullest in order to ensure the satisfaction of consumers' needs in the global market scale. This commitment is aimed at enhancing the quality of life for everyone now and for future generations.

Vision

Our visions work as a blueprint to how we would like to build and grow every part of our organization by taking into consideration each vision when conducting business, in order to achieve the highest quality of service and satisfaction both by our customers and employees.











Products

Roofing Sheets & Wall Cladding Sheets and standing seam panels

Alex form Steel Cladding roofing sheets and wall cladding sheets are manufactured and cut to size.

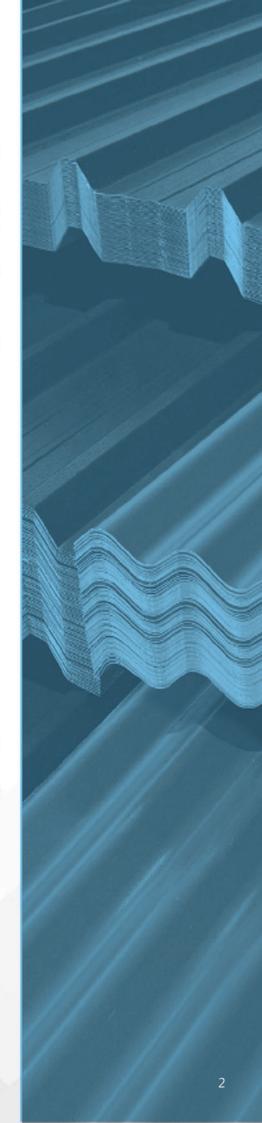
Today, corrugated steel sheets are made using a cold-form process, where sheets of metal are pressed flat and then run through a process called roll forming. During the roll forming process, the sheets are pressed using rolling dies that create the desired corrugations, the shapes of which are modified by changing the rolling dies. The finished corrugated sheets are then sheared off at a particular length.

Each profile is available in various colours and finishes with matching flashings and colour coded fixings.

We also manufacture Standing seam metal roofing system, This metal roofing system from Alex form is one of the most durable and weathertight roof systems available in the industry. Its concealed fastener design ensures that the fasteners aren't exposed to the elements which could cause them to fail over time. Since these panels are attached to the roof deck with clamps, they're free of any holes from nails or other fasteners which could allow moisture to seep through.

Metal cladding Benefits

- It is easy to install, more economical with high strength.
- Lightweight and durable.
 General durability, it is one of the most durable construction products on the market. Your corrugated siding will stand up to a wide range of threats, including wind, rain, and hail. In addition to weather, steel siding is also resistant to pest and fire damage, and its protective coatings also increase its resistance to moisture penetration and rot.
- Available in a vast range of colours.
- Easy to carry and handle.
- High resistance to water absorption.
- Designed to prevent deformation.



Applications

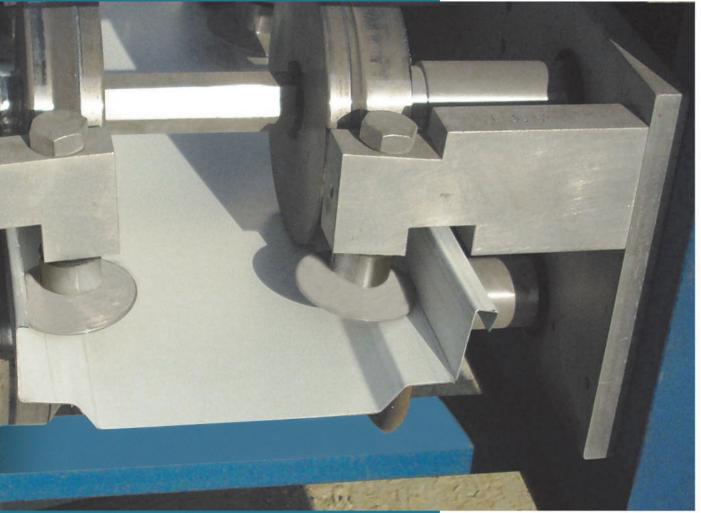


Corrugated metal sheets:

Corrugated metal sheets are used for different building purposes. It is not just a roof covering material. However depend on the type of corrugated steel its usage can be different. Other than roofing, galvanized corrugated sheets are also used for cladding purposes. Depending on your requirement, you have to choose the best suitable corrugated steel sheet for maximum benefits.

Applications:

- live stock houses types: poultry houses, chicken houses and farms.
- Grain Silos.
- Water tanks.
- Warehouses, factories, garages and exhibition centers.



Standing seam metal roofing systems:

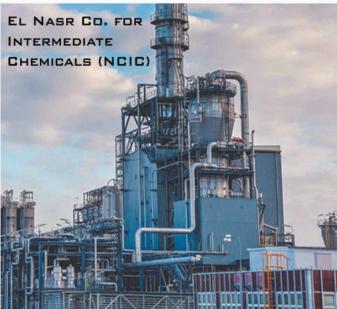
Standing seam metal roofing systems are suitable for new construction or renovation projects with slopes as shallow. It is especially cost-effective in re-roofing applications where it can be installed over the existing roofing material, bringing significant savings in time and labor in addition to eliminating the problem of disposal.

Applications:

- live stock houses types: poultry houses, chicken houses and farms.
- Grain Silos.
- Water tanks.
- Warehouses, factories, garages and exhibition centers.

Projects





List of Major projects

Project	Main contractor	Product	Location	Year
Cairo Airport - Terminal 2	Alexsteel	Cladding	Egypt	2015
Bani Sweif power plant	EL- Sewedy	Cladding	Egypt	2016
Industrial warehouse	Qatar Building Engineering Company	Cladding	Qatar	2017
Industrial warehouse	Mabani Aljeri	Cladding	Aljeria	2018
Industrial warehouse	Euro Tech	Cladding	Jordan	2018
Suez Steel Factory	ASF	Cladding	Egypt	2018
Mall of Tanta	GAMA	Cladding	Egypt	2018
ALMAZA City Center	CCC	Cladding	Egypt	2018
Berniece Air port	Hassan Allam Construction	Cladding	Egypt	2018
New capital - Industrial warehouse	Hassan Allam Construction	Cladding	Egypt	2018
Slaughter houses	NSPO	Cladding	Egypt	2019
EL-MASA Hotel	NSF	Cladding	Egypt	2019
Ismailiya Tunnels - Ventilation building	Petrojet	Cladding	Egypt	2019
Third Metro line 4B - Depot 7&24	Orascom Construction	Cladding	Egypt	2019
Third Metro line 4B - Depot 2,3&5	Arab cotractor	Cladding	Egypt	2019
Corona Factory	EAST	Cladding	Egypt	2019

Trapezoidal profiled sheets

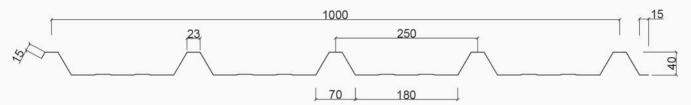
Alex-P40 Trapezoidal metal panel with a corrugation height up to 40 mm.

Suitable for almost all applications due to its static properties,
it can be used both for wall and roof covering

ACP-P40

Useful width	1m
Profile length	2:14m
No. of Ribs	4
Rib height	40mm
Steel thickness	0.5-0.7mm

Cross-section



Desing load tables (Steel Profile Only):

Sheets thickness | Iser (mm4) | Zx (mm3) | Mc (N.mm) | Pw (N)

0.5	118,047	14,563	925,306		542	2,963						
Sheet thickness		Span		1.5	2	2.5	3	3.5	4	4.5		
(mm)		Max. Load	Capacity	Kg/m2								
	Section	Mc (Moment)	925305.772	396	223	143	99	73	56	44		
	2007	Pw (Web crushing)	542	87	65	52	44	37	33	29		
0.5	Capacity	Pv (total shear)	2,963	476	357	286	238	204	178	159		
0.5	Single Span	L/200		333	140	72	42	26	18	12		
	The said of the said of the said	T (0.00 (T))		200	225	1.00	100			2.0		

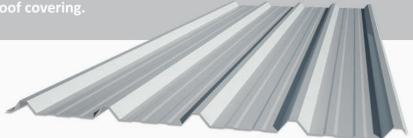
Note: All units are in N & mm.

Sheets thickness	Iser (mm4)	Zx (mm3)	Mc (N.mm)) P	w (N)	Pv (N)						
0.7	165,279	20,390	1,295,539	1	,005	4,127						
Sheet thickness	ĺ	Span	<u> </u>	1.5	2	2.5	3	3.5	4	4.5		
(mm)		Max. Load	Capacity	Kg/m2								
Caratian	Section	Mc (Moment)	1295539.47	555	312	200	139	102	78	62		
	Capacity	Pw (Web crushing)	1,005	161	121	97	81	69	61	54		
V	Capacity	Pv (total shear)	4,127	663	497	398	331	284	249	221		
0.7	Single Span	L/200		466	196	101	58	37	25	17		
	Two or more	L/200 (Distrip.)		1,119	472	242	140	88	59	41		
	enanc	T 18 0 0 1				470-41			745			

Note: All units are in N & mm.

Trapezoidal profiled sheets

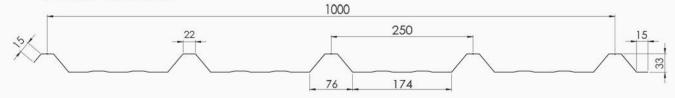
Alex-P33 Trapezoidal metal panel with a corrugation height up to 33 mm.
Suitable for almost all applications due to its static properties, it can be used both for wall and roof covering.



ACP-P33

Useful width	1m
Profile length	2:14m
No. of Ribs	4
Rib height	33mm
Steel thickness	0.5-0.7mm

Cross-section



Desing load tables (Steel Profile Only):

Sheets thickness | Iser (mm4) | Zx (mm3) | Mc (N.mm) | Pw (N) | Py (N)

onects thickness	Loci (mm+)	Zax (mmo)	1,10 (1,1,11111)	/	+ 11 (2.1)	- (-1)						
0.5	77,803	11,699	738,174		540	2,438	ĺ					
Sheet thickness		Span	C	1.5	2	2.5	3	3.5	4	4.5		
(mm)		Max. Load	Capacity		Kg/m2							
	Section	Mc (Moment)	738173.626	316	178	114	79	58	44	35		
No. 10.	Capacity	Pv (total shear)	2,438	392	294	235	196	168	147	131		
0.5	Single Span	L/200		219	92	47	27	17	12	8		
	Two or more	L/200 (Distrip.)		527	222	114	66	41	28	20		
	spans	L/200 (patern)		364	154	79	46	29	19	13		

Note: All units are in N & mm.

Sheets thickness	Iser (mm4)	Zx (mm3)	Mc (N.mm)	F	w (N)	Pv (N)				
0.7	108,938	16,381	1,033,578	1	,001	3,392				
Sheet thickness		Span	C:	1.5	2	2.5	3	3.5	4	4.5
(mm)		Max. Load	Capacity	Kg/m2						
	Section	Mc (Moment)	1033577.9	443	249	159	111	81	62	49
	Capacity	Pv (total shear)	3,392	545	409	327	272	233	204	182
0.7	Single Span	L/200		307	129	66	38	24	16	11
	Two or more	L/200 (Distrip.)		737	311	159	92	58	39	27
	spans	L/200 (patern)		510	215	110	64	40	27	19

Note: All units are in N & mm.

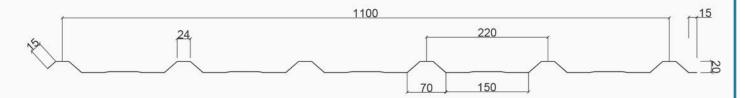
Trapezoidal profiled sheets

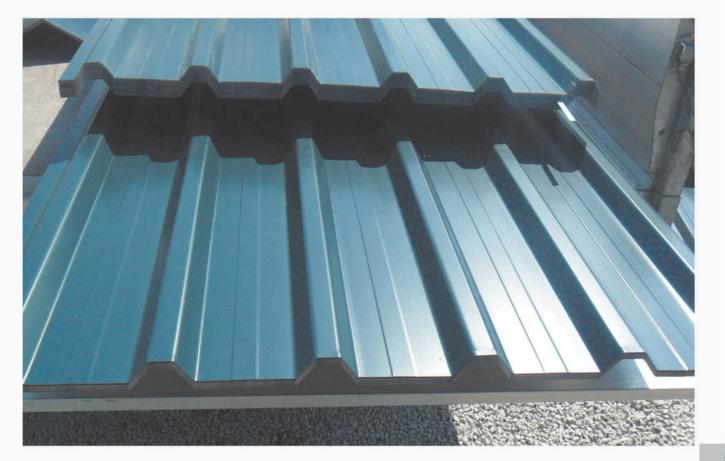
Alex-P20 Trapezoidal metal panel with a corrugation height up to 20 mm. Suitable for almost all applications due to its static properties, it can be used for wall covering.

ACP-P20

Useful width	1.10m
Profile length	2:14m
No. of Ribs	5
Rib height	20mm
Steel thickness	0.5-0.7mm

Cross-section





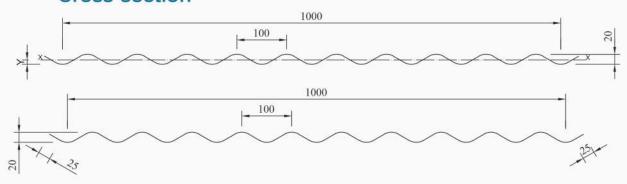
Wavy profiled sheets

Alex-W20 Sinusoidal profiled metal sheet with 20 mm high corrugation waves, This product can be used in wall covering, water

ACP-W20

Useful width	1m
Profile length	2:14m
wave height	20mm
Steel thickness	0.7:3.75mm

Cross-section



Desing load table (Steel Profile Only):

Thickness (mm)	Moment capacity	Dist. Equ. Load (kg/m2) / span (m)							
The state of the s	(t.cm)	1.00	1.20	1.50	2.00	2.50	3.00	3.50	4.00
0.7	12.967	1,037	720	461	259	166	115	85	65
1	18.279	1,462	1,015	650	366	234	162	119	91
1.25	22.606	1,808	1,256	804	452	289	201	148	113
1.5	26.849	2,148	1,492	955	537	344	239	175	134
1.75	31.015	2,481	1,723	1,103	620	397	276	203	155
2	35.109	2,809	1,950	1,248	702	449	312	229	176
2.25	39.138	3,131	2,174	1,392	783	501	348	256	196
2.5	43.106	3,448	2,395	1,533	862	552	383	282	216
2.75	47.019	3,762	2,612	1,672	940	602	418	307	235
3	50.883	4,071	2,827	1,809	1,018	651	452	332	254
3.25	54.701	4,376	3,039	1,945	1,094	700	486	357	274
3.5	58.478	4,678	3,249	2,079	1,170	749	520	382	292
3.75	62.219	4,978	3,457	2,212	1,244	796	553	406	311

Sheet Overlaps

Corrugated metal roof sheets should always be fitted by over-lapping by one corrugation.

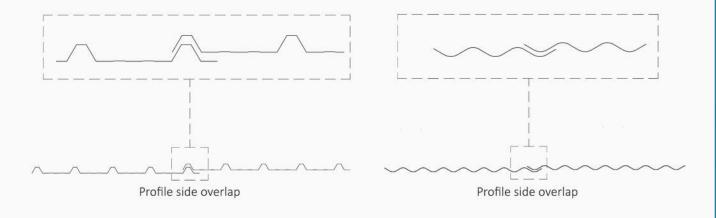
Fixing screws should always be screwed into the higher part of the profile when installing corrugated steel roof sheets to purlins and stitch screws are used to stitch the steel sheet to sheet or to fix to steel flashings.

Steel roof sheets can be cut on site with a nibbler tool or disk cutter but we generally ask our customers for exact sizes so we can do the cutting for them, saving them time and inconvenience.

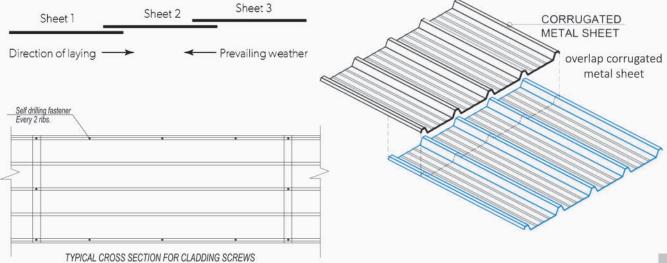
Box profile steel roof sheets are relatively easy to install as long as basic safety measures are followed.

If installing more than one steel roof sheet in the length you will need to allow minimum 100mm overlap between roof sheets.

Pick the correct end of the roof to start laying the roof sheeting, so that the prevailing weather is blowing over the lap join, not into it.



Lay sheets towards prevailing weather.



10

Accessories

Flashing, Trimmings, Gutters & Curved Panels.

We can manufacture any size according engineering design or as our standard profiles.

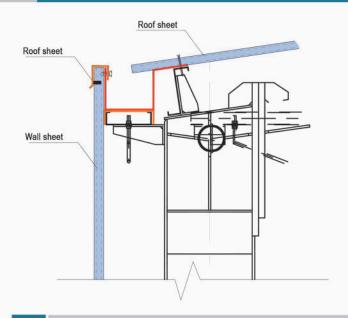
Flashings and cappings are used to weatherproof the edges of roofs and walls.

Flashings can be used on the gable ends of an apex roof, to flash around a single sloping pitched roof and on the corners of buildings. They provide closure between sheets and walls, protection against high winds and ensures a professional neat finish to any building.

Ridge capping is used on the ridge of an apex roof. It provides the closure between sheets to prevent water leakage and protection against high winds.

Profile	Prespective	Profile	Prespective
310 310		150 <u>20</u> 150 <u>15</u> 150 <u>20</u> 20 20µs	
310 320		100 100 U15	
250 P. 250		70	
205 205		70	
150 100 20 50 J15		100 15	
150 100 20 20 15 50 15		20 20 20 30 30 30	
90 ¥ 70 25 15		100 <u>15</u> 70	
7 70		20 50 115	
25 ¹¹⁵ 30 35 ₁₅		50 20 80 15 15	

Profile	Prespective	Profile	Prespective
20 40 15 40 15		100	
70 150 15			
70 150 15		*	
70 140 15		100 50 20/30	
70 15		70 60 20 20 20 115	
70 15 15		100 30 20 50 aug	
35 • 35		45 a5.00 25	
35 6 0		30 8500 · 30 10 8 · 10 · 10 · 10 · 10 · 10 · 10 · 1	
35 • 35		70 30 40 30 30 30	
20 150 170 220		50 30 30 50 20 20	



Locally fill or pack with foam

Stitching screw

Trim (A)

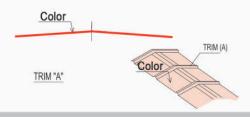
Self drilling fastener

Roof panel

Trim

Sealing tape

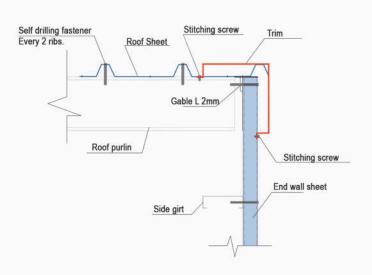
Roof purlin

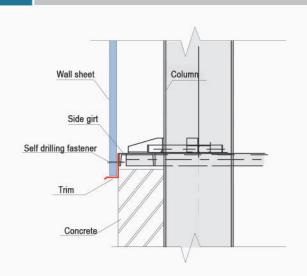


1 DRAINAGE GUTTER ROOF

2

TYPICAL CROSS SECTION AT TOP POINT

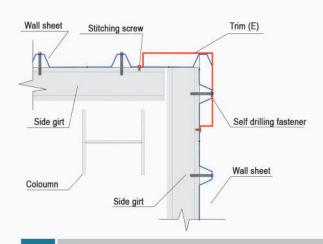




3 TYPICAL CROSS SECTION AT ROOF/ GABLE CLADDING

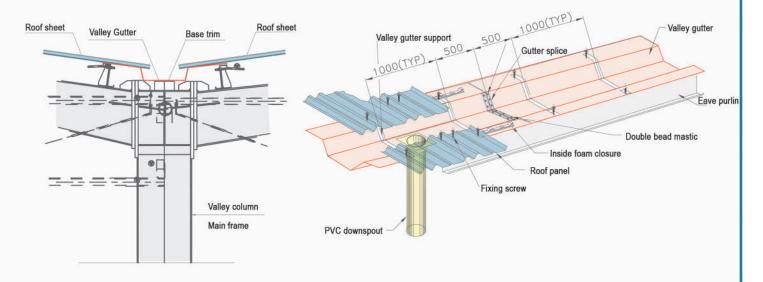
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TYPICAL CROSS SECTION AT WALLS



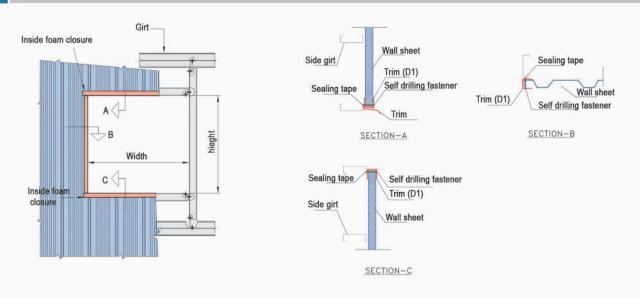
- 5

TYPICAL CROSS SECTION AT SIDE / END WALL CLADDING

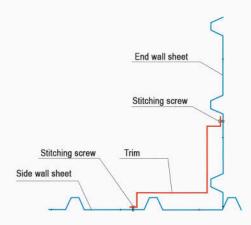


TYPICAL CROSS SECTION AT (VALLEY GUTTER)

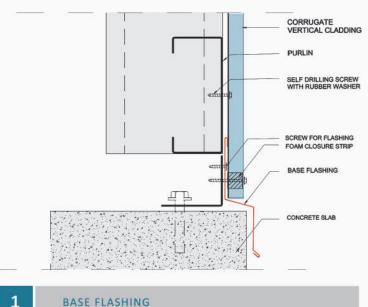
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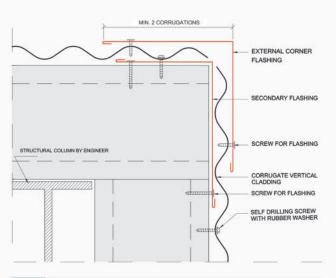


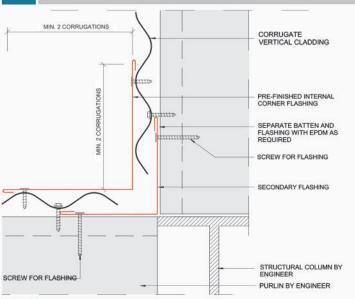
TYPICAL CROSS SECTION AT OPENINGS



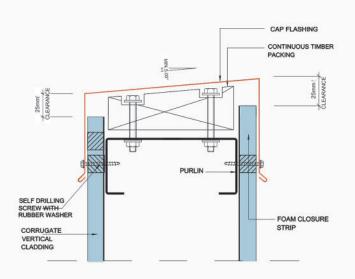
Wave cladding



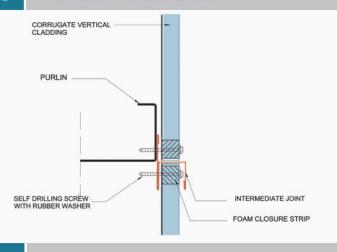




EXTERNAL CORNER FLASHING

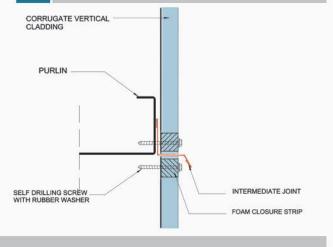


3 INTERNAL CORNER FLASHING



METAL COPING FLASHING

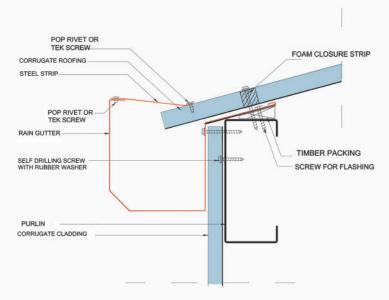
4

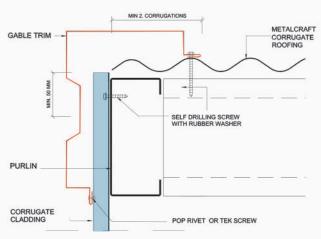


5

INTERMEDIATE JOINT FLASHING

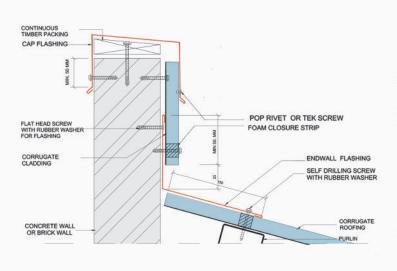
Wave cladding

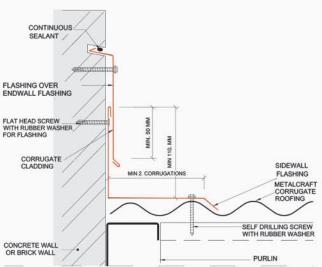




6 RAIN GUTTER TRIM

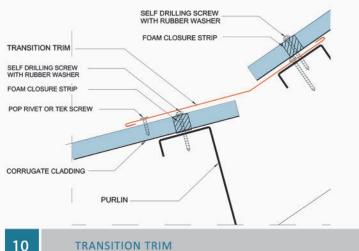
GABLE FLASHING

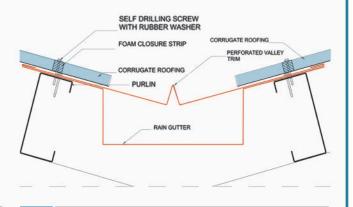




8 **ENDWALL FLASHING (WALL CLADDING)**

SIDEWALL FLASHING (EXISTED WALL)





VALLEY TRIM

Material Specifications

External Faced Sheets

- Steel Sheets:

Steel sheets undergo an intensive high voltage discharge prior to profiling (Corona-Pretreatment device) which guarantees a high quality long lasting panel.

The panels facing material is always under control as it is galvanized, skin passed, pre-painted and top coated, the top coat colors will be according to customer Preferred directions and usual international panel satisfactions.

The standard panel facing is a steel plate coated with Ral 9002 polyester paint suitable for food process purposes.

The optional top coating for interior & exterior applications:

PVDF: For inside and outside use where there is a high risk of corrosion.

PVC: High elasticity and very good corrosion – prevention properties, suitable especially for internal use.

- Aluminum Sheets:

It is available to use also aluminum sheets instead of steel for the panel production , All aluminum rolls used in the Alex panel's production are produced completely according to EN & ASTM & ISO norms.

Aluminum surface properties:

- Corrosion resistance
- Convenient processing property
- Decorative appearance

Physical features of aluminum panel surface:

- Yield Strength 150 Mpa
- Tensile Strength 175 Mpa
- Elongation 3 % (min)
- Surface Stucco Embossed or painted
- Temper H16 _ H26..... EN 485-2
- Alloy AW 3000 series..... EN 485-2
- Thickness tolerance is (+/-0.03 mm) EN 10145

Paint & Colors

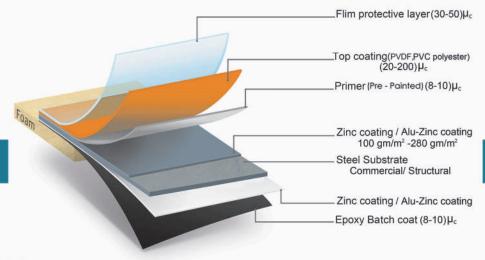
Alex panel's top coating colors are always possible for all available RAL colors, Production metal paints can be arranged according to customer preferred directions and usual international panel specifications.

Coil coating is the continuous and highly automated industrial process for efficiently coating coils of metal due to the metal treating before cutting & forming, Cleaning and treating the entire surface and providing tightly – bonded finishes.

Pre-painted coils are often considered more durable and more corrosion - resistant than most post painted coils.

The various coating that is available include polyesters, polyurethane, plastisol, PVDF, epoxies, primers, backing coats and laminated films. For each product the coating is built up in a number of layers. Backing coats are applying to the underside of the strip with or without a primer, generally not exposed to corrosive environments and not visible in the end application, The coating generally is not thick as the finish coating used for the exterior applications.

	Primer- Epoxy5- 7µ
Outer Face	Finish Polyester 18µ
	Total DFT 23- 25µ
Inner Face	Primer- Epoxy 5-7µ



Steel Facer Detail

Alex-Panel Standard RAL:

Standard Colors: White (RAL9002), Blue (RAL5012) and Beige (RAL1014).



Examples of Special Colors: (Available on Request). White (RAL9016), Green (RAL6021), Red (RAL3020) and Silver (RAL9006).



Certificates





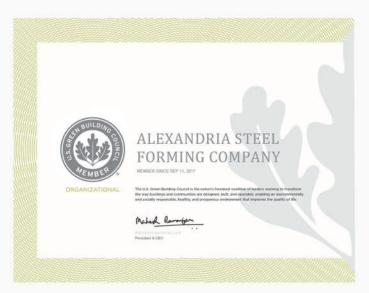












Egyptian Quality Seal:



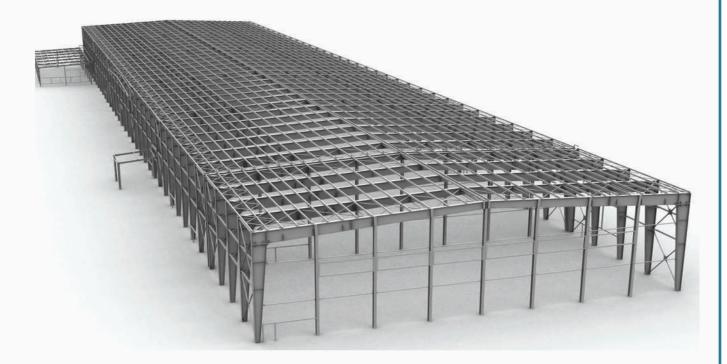


Engineering & Design

For project design, bid preparation or component manufacturing, our sales representatives, engineers, technicians and draftsmen are at your service. Our team can suggest efficient and economical solutions.

Project development support

Having developers and designers on board in the early phases, allows us to suggest reliable data and solutions for the scheduling, planning and estimating cost, either for buildings that require a new design or existent ones. Moreover, we provide efficient materials that assure the highest sustainability results.



Technical design support

Our designers are widely experienced in the various types of building designs. Their input of drawings, details and technical documentation has allowed us to keep our entire projects budget friendly while succeeding in reducing the construction time and achieving the required goal from client.

Our specialists on board are committed to a high level of professionalism, applying the International Codes and Standards by using the latest software systems, enabling us to deliver an efficient service, with top quality structural components, which are custom-designed to the client's specific requirements.

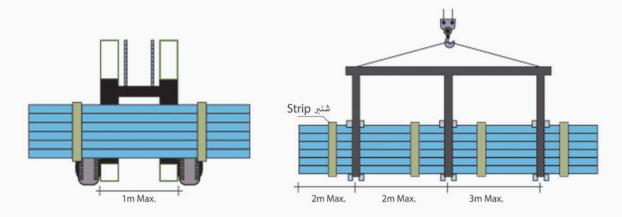
Field service

Not only does our field services teams have the expertise to supervise the erection, installation, and maintenance process, but also able to provide a complete demonstration of the installation procedure of the product starting with the safe unloading and manual handling.

Instructions for Packing, loading, Unloading, handling and storage

PACKAGING & LOADING:

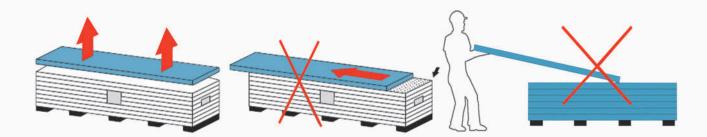
- Bundles should be stacked and strapped so that there is no danger of tipping, sliding, rolling, shifting or material damage.
- Bundles should be checked for tightness so wind cannot loosen sheets or work the bundles apart. Tightness should be periodically checked.
- Certain destinations may require special packing; we can create reinforced packing using extra wrappings elements or crates up on request.
- Put wooden blocks with width more than the bundle width from each side "5 cm".



- To ensure the protection of the edges in loading and unloading activities carried out by crane with lifting belts.
- Packages will be loaded with the longest bundles on the bed of the truck to ensure that the load will be balanced.
- Bundles are separated with dunnage (horizontally and vertically) of at least 1½ "(more if agreed upon) so that lifting slings can be inserted for unloading.
- To ensure safe and level loads, every other bundle may be turned on the truck. In all cases the bundle arrangement on the trailer
 will be made with an effort to provide the greatest stability of the load and to achieve the allowable weight.

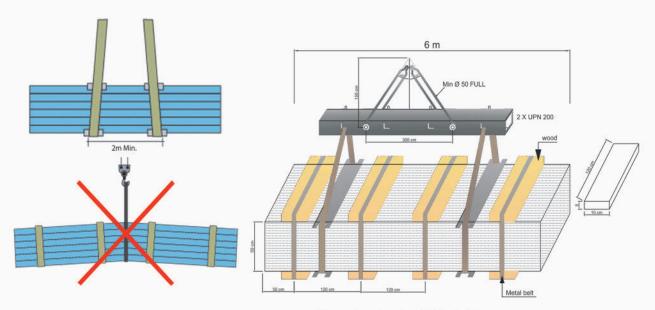
UNLOADING & HANDLING:

- Check to see if all items are present. Any material damages or shortages should be noted on the bill of lading prior to signing for the material and the supplier should be immediately notified.
- Individual decks should never be moved in a flat position as excessive flexing may result.



Instructions for Packing, loading, Unloading, handling and storage

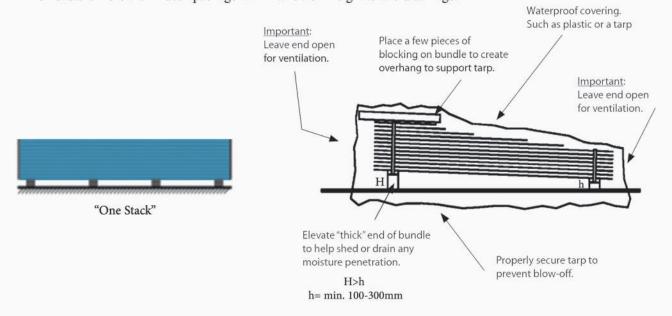
• Stacks up to 6m length can be raised by fork lifts; ones to 13.5 m shall be lifted using crane.



The package from length 2.5 m to 15 m

STORAGE:

- If ground storage is needed, the bundles should be stored off the ground, with one end elevated "slope 5%" to provide drainage.
- If the packages cannot be stored inside, Bundles should be protected against condensation with a ventilated waterproof
 polyethylene covering. Bundles should be stacked so that there is no danger of tipping, sliding, rolling, shifting or material damage.
- To protect the package from the collected water at the bottom, put wooden block through the long side with min height 100*50*1000 mm in case of concrete solid ground and 300*50*1000 mm in case of sand/mud ground.
- Do not store more than 1 deck package with max 50 cm height to avoid damage.



^{**}Manufacturer cannot assume responsibility for damage to the product resulting from improper following for the above protection instructions in the field.

Our Clients



























































































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Notes	

Available Also:









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