



Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.



Proposal for Peter Landon and Keahi Bustamente

Olinda Offices and Lab
Pre-Engineered Building Kit

March 3, 2023



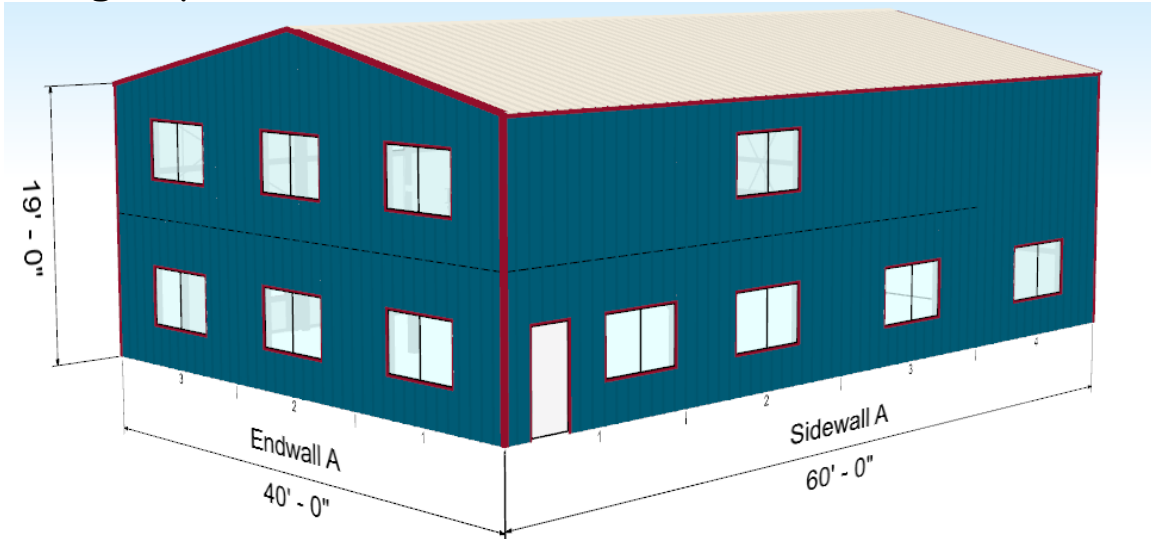
Ohana Steel Buildings
A Distributor of OutBack™ Buildings

866-452-8522 Phone

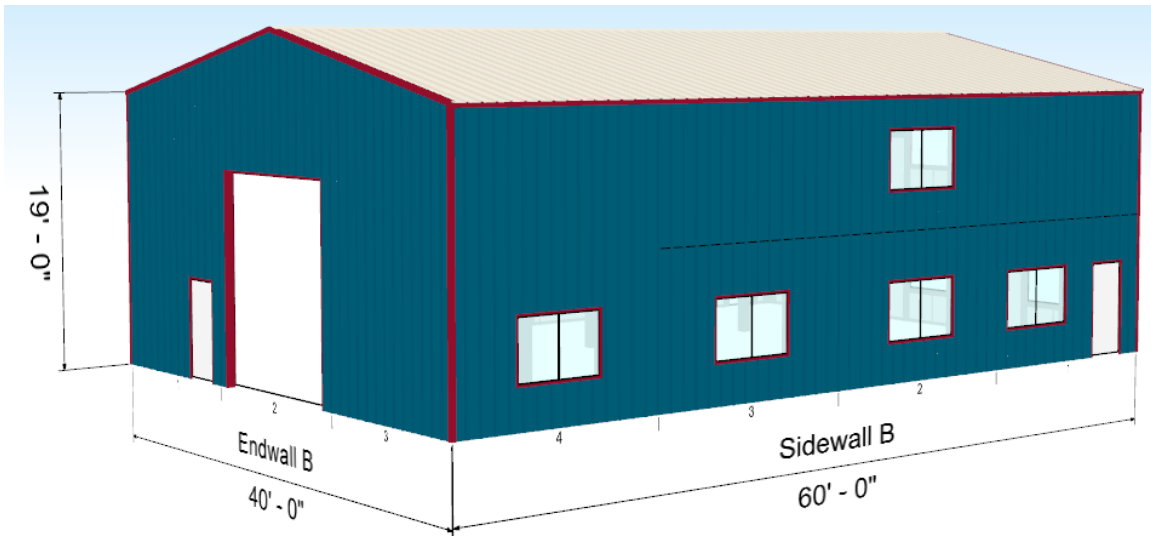
Kathy@ohanasteelbuildings.com

Layout based upon ACT web building designer and email and phone discussions

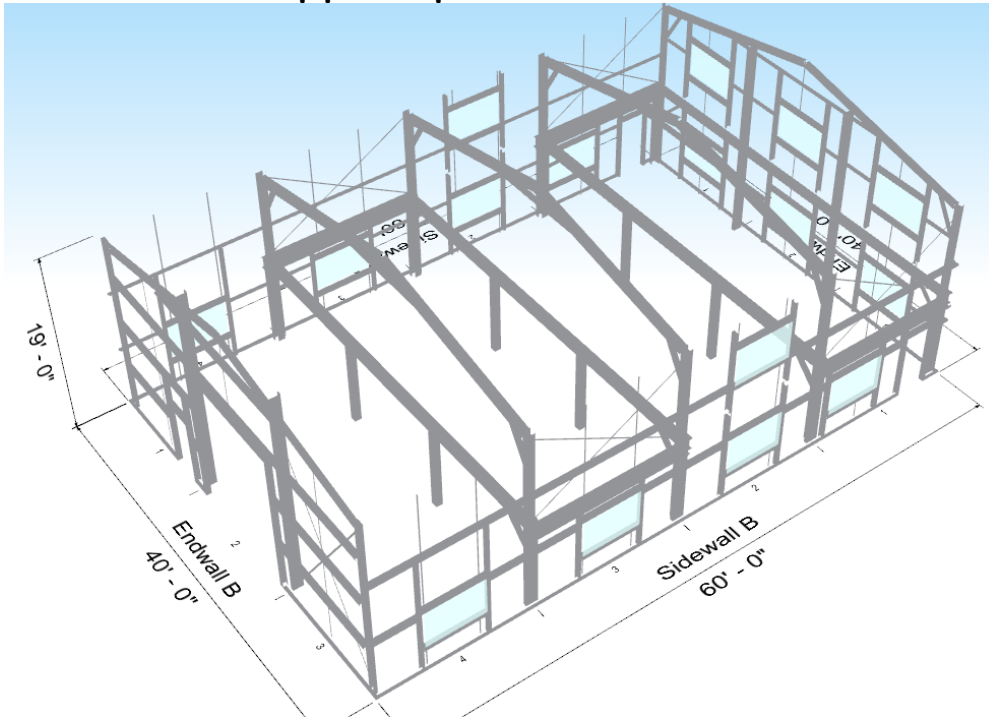
3-D view - Side A - number of and locations of windows are optimized for building structural integrity.



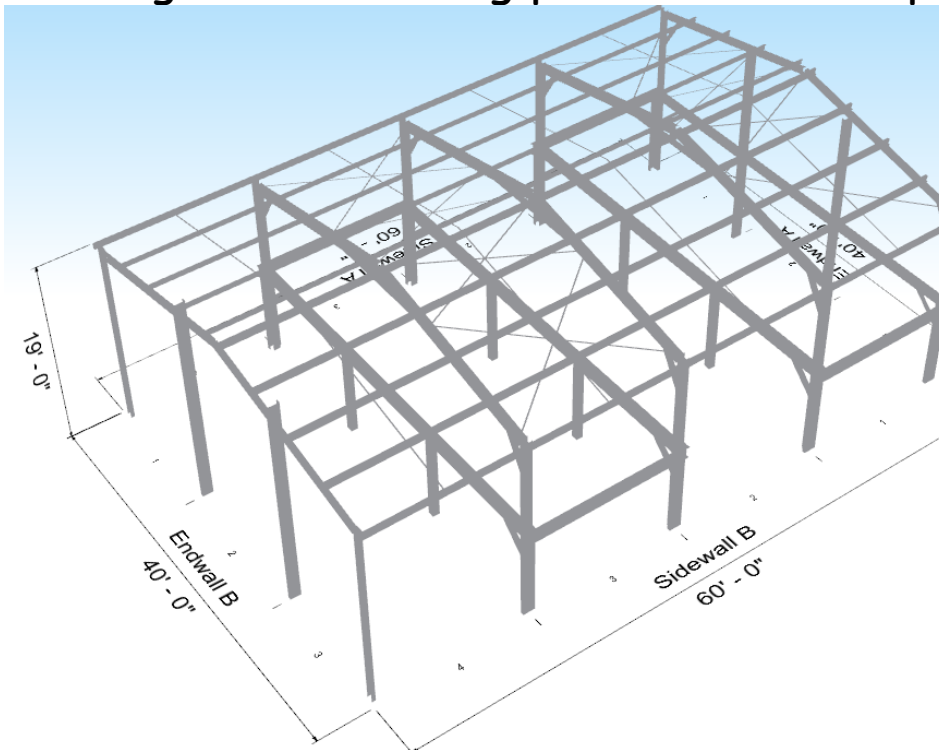
3-D view - Side B - black dashed line shows mezzanine level



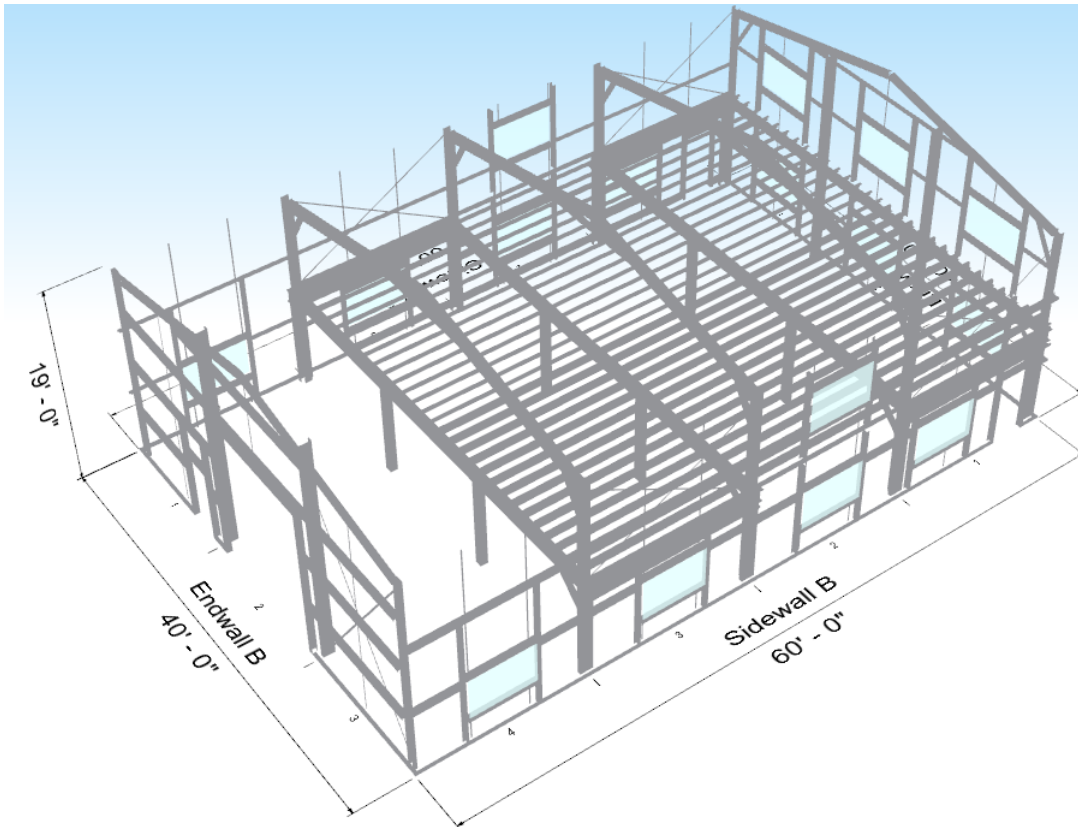
Building frame showing portals, wall girts and mezzanine support posts



Building frame showing portals and roof purlins



Building frame showing portals, wall girts and mezzanine framing. Mezzanine is rated for 50 pounds per square foot (office space) with joists spaced 16" on center. Clear head room under mezzanine bearer beams is 8.5'.



Foundation estimate for your building

Sidewall Foundation Estimate:	4" slab with 1' - 0" deep and 1' - 0" wide thickened edge, with (2)-#4 reinforcing at the top of the slab edge, and (2)-#4 reinforcing at the bottom of the slab edge
Endwall Foundation Estimate:	4" slab with 1' - 0" deep and 1' - 0" wide thickened edge, with (1)-#4 reinforcing at the top of the slab edge, and (2)-#4 reinforcing at the bottom of the slab edge



Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.



Price includes all items listed with container delivery to Kahului port.

	Description	Price
Kit Price	Price for kit with all listed included items Price quoted 3/3/2023	\$ 90,000.00

Building Description

The building footprint is 2,400 square feet 40' wide by 60' long and 19' high at the eave. Roof pitch is 2.55"/12" with peak at ~23'. The risk category II building is engineered for wind speed 110 exposure C following 2018 IBC building codes. Foundation is monolithic slab and building is two-story having 3 bay mezzanine. Mezzanine square footage is 1,800 bring total square footage to 4,200.

Building is made of G90 cold rolled galvanized steel. Your building arrives pre-cut and pre-punched for easy bolt together and self-taping screw assembly. Our buildings require no welding and minimal cutting on site. Minimal cutting includes but is not limited coping knee and apex braces. No shear wall is required - roofing and siding attach directly to structural steel.



Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.



Our building system is based upon bays. Your building has 4 side bays and 3 end bays. Our buildings use knee and apex braces for structural support, eliminating the need for trusses or I-beams.

Included in price - everything you need for the building shell on your foundation:

1. Structural steel for building
2. PBR 24-gauge siding and roofing
3. Versa vent breathable closure strips for ridge cap, formed closure strips for other areas.
4. All screws, bolts, and fasteners for erection
5. One 12' wide by 14' high roll-up garage door
6. Three pre-hung steel personal doors with panic bar opener and automatic closure device
7. Framing and trim materials for sixteen 6' wide by 4' high windows. Window framing installed during building erection. See construction package for more information. Full sheeting materials allow windows to be installed after erection.
8. Online construction videos and instruction manuals at www.ohanasteelbuildings.com



Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.



9. Wet stamped structural drawings and calculations for building and foundation for the state of Hawaii.
10. Delivery of all building components to the Kahului port.

Other available options:

1. Roof line overhangs - eaves
2. Gutters and downspouts
3. Lean-to areas - open or enclosed
4. Insulation

Not included:

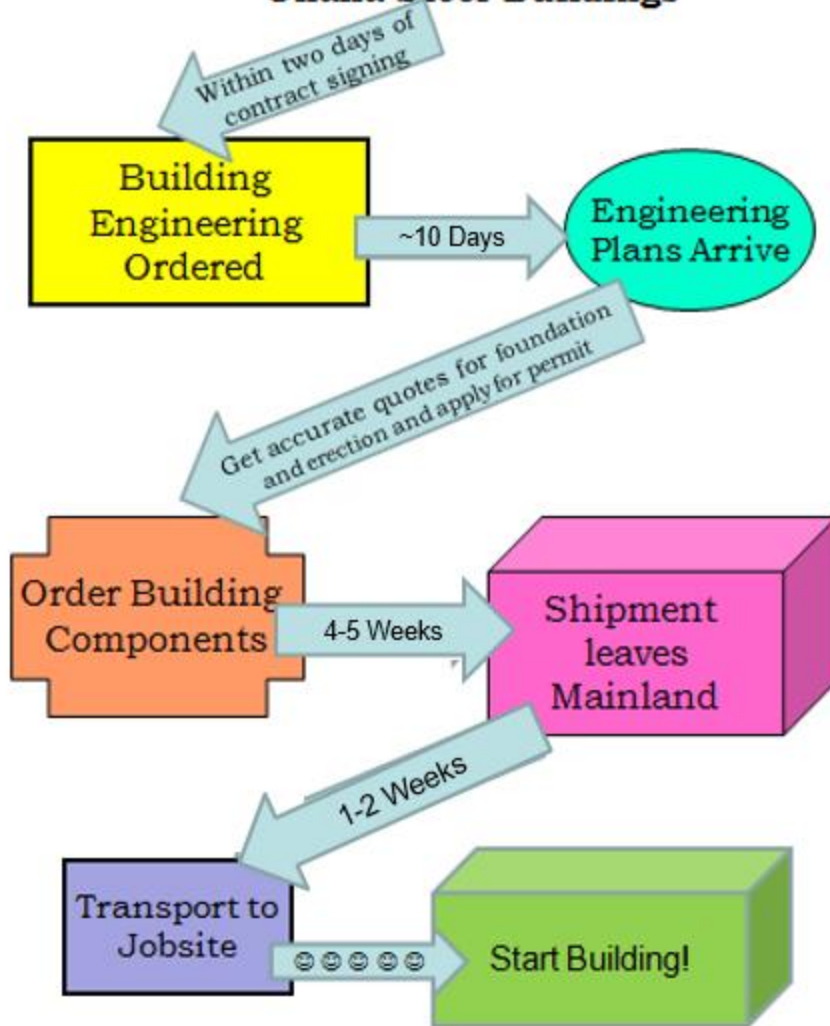
1. Windows
2. Engineering or steel for stairs to loft or mezzanine
3. Engineering or steel for loft safety railing.
4. Foundation, erection or finishing
5. Permits, application for permits or any other documentation other than what was previously included. On-island engineer or architect of record support may be required for permitting.



Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.



Building Project Starts with Purchase from Ohana Steel Buildings



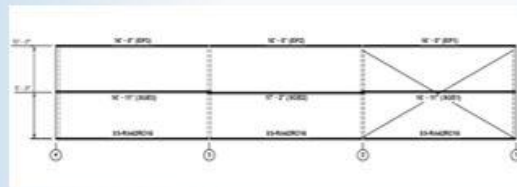
Our buildings are easy to erect!

Customers Ask 'How Do I Know Where the Pieces Go?'

- Structural Drawings
- Order Shows Piece Mark



1	16'-11"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Roof, Bay 1	PL00
1	16'-11"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall A Girt, Bay 1	SGA1
1	6'-9 1/8"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall A Girt, Bay 2	SGA2
1	6'-6 1/8"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall A Girt, Bay 3	SGA3
1	16'-11"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall B Girt, Bay 1	SGB1
1	17'-2"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall B Girt, Bay 2	SGB2
1	16'-11"	ALLIANCE-ZEE	Zee-6x2.5-14ga R/O	Sidewall B Girt, Bay 3	SGB3



we make **COLDFORMEDBUILDINGS** easy

Construction Package Notes

This construction package is to be used in conjunction with the created order for the job. All lengths and piece marks of materials in this package will correspond to an item in the order. For example, on the Sidewall A girt layout, there will likely be an item with a piece mark of SGA1. This will correspond to a line item in the order with the piece mark of SGA1. Products that do not include a piece mark will be marked with the product code.

All girt layout and sheeting layouts drawings in this construction package are exterior views, and in these illustrations, components are drawn as if viewed from the outside of the building.

All drawings in this construction package are for reference only, and are to be used to supplement the engineering drawings. If any discrepancies occur, the engineering plans will always take precedence.

Versa vent breathable ridge vent closure strips



Color chart for roofing, siding, and trim.

PVDF Paint System

Snowdrift White (W81)	Linen White (81)	Sandstone (W51)	Parchment (W74)	Taupe (74)
Khaki (88)	Medium Bronze (H4)	Weathered Copper (W50)	Mansard Brown (133)	Dark Bronze (50)
Ash Grey (25)	Old Town Grey (W25)	Old Zinc Grey (W29)	Slate Grey (W38)	Matte Black (106)
Aged Copper (65)	Patina Green (W58)	Hemlock Green (M7)	Classic Green (66)	Felt Green (W66)
Patriot Red (73)	Terra Cotta (W72)	Colonial Red (W75)	Brandywine (P8)	River Teal (59)
Metallic Silver (K7)	Champagne Metallic (168)	Mistique Plus (W31)	Copper Penny (W92)	Antique Patina (M1)
Tahoe Blue (W71)	Ocean Blue (35)	Regal Blue (W35)	Galvalume® (41) <i>Non-painted Finish</i>	All Colors Meet or Exceed ENERGY STAR® Steep Slope

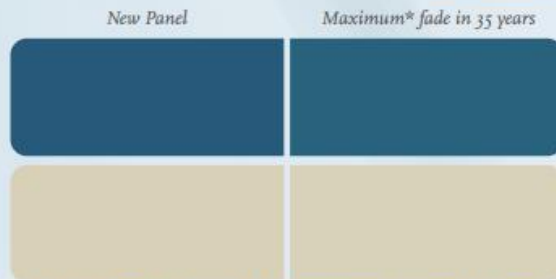
24-gauge roofing and siding is included

PVDF (Kynar 500) Finish

THE WINNING DEFENSE AGAINST NATURE'S OFFENSE

35 Year
COLOR PERFORMANCE
Warranty

Metal Sales PVDF (Kynar 500®) finish couples premium ceramic pigments with fluoropolymer resins for long life resistance against color fading and chalking. As a result color performance is warranted for a full 35 years in accordance with ASTM test standards. All metal panel finishes will fade with years of sun exposure. However, panels from Metal Sales with PVDF (Kynar 500) will look almost as good years from now as they did in their first year. Visit www.metalsales.us.com for complete warranty details.

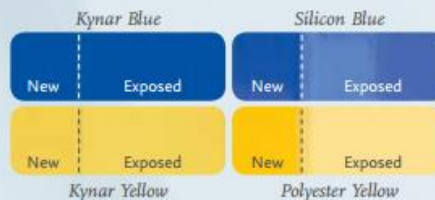


35 YEAR KYNAR 500 FADE PERFORMANCE CHART

* Based on extreme, real outdoor, south Florida exposure performance data; exposure conditions in more northerly climates will likely demonstrate greater performance (less fade). This chart represents a maximum allowable fade over thirty-five years measured as five Hunter units. This chart is a mechanical representation and may vary slightly from actual test panels.

KYNAR COMPARED TO OTHER COATINGS

Blue: 15 years exposure Yellow: 17 years exposure



With excellent exterior durability this PVDF steel panel color coating will keep you in the game right into overtime. PVDF (Kynar 500) coated panels from Metal Sales Manufacturing provide such an outstanding defense against ultraviolet radiation that they are warranted for 35 years against chalking and fading.

This exceptional color and gloss retention is not possible with any other coating available today.

Also warranted against blistering, cracking and peeling for 45 years, PVDF (Kynar 500) coating is architect preferred and your best defense against the rigors of nature and atmospheric pollution.

45 Year
DURABILITY
Warranty

Demonstrating its competitive edge, PVDF (Kynar 500) performance leads the league in defense against the sun, weather and pollution. Its carbon-fluorine chemistry creates one of the strongest bonds in the universe. It is warranted against blistering, cracking and peeling for 45 years. Visit www.metalsales.us.com for complete warranty details.

PVDF (Kynar 500) Coating System

The PVDF (Kynar 500) system is tougher than just the front line; its superior performance is a result of a layered, fluoropolymer bonded coating system, each component layer providing a unique performance characteristic.

Topcoat | Premium ceramic and inorganic pigmented PVDF (PolyVinylidene DiFluoride) for exceptional color durability and gloss retention

Primer | UV & moisture resistant modified polyester, provides corrosion resistance and bonding

Chemical Rinse | Acts as a sealer providing additional corrosion protection

Pretreatment | Promotes adhesion, moisture and corrosion resistance

Galvanized or Galvalume® | Barrier protection on base steel, inhibits corrosion

BARE STEEL | Mill certified meeting ASTM standards

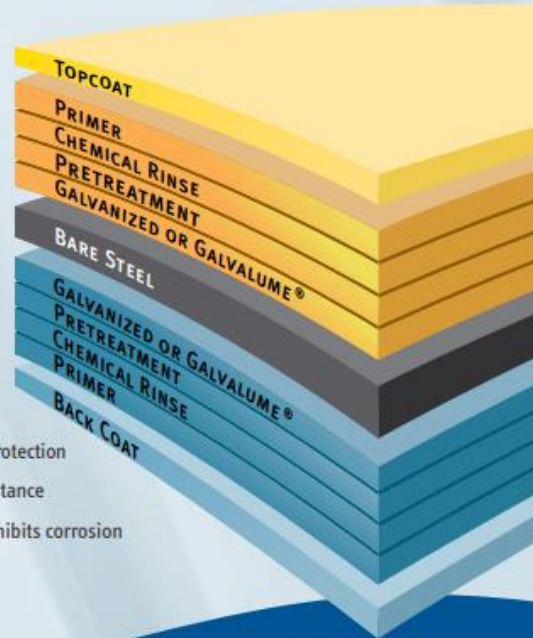
Galvanized or Galvalume®

Pretreatment

Chemical Rinse

Primer

Back coat | Finish coat on backside, covers primer and insures consistent color



Cool Roofing

Reduce building energy use by up to 50% with select PVDF (Kynar 500) colors

Metal Sales recognizes that architects and consumers are becoming more and more concerned with ways of making their building project more energy efficient. All of Metal Sales' PVDF (Kynar 500) colors are ENERGY STAR® listed. They use special pigments for solar reflectance to meet ENERGY STAR guidelines. These

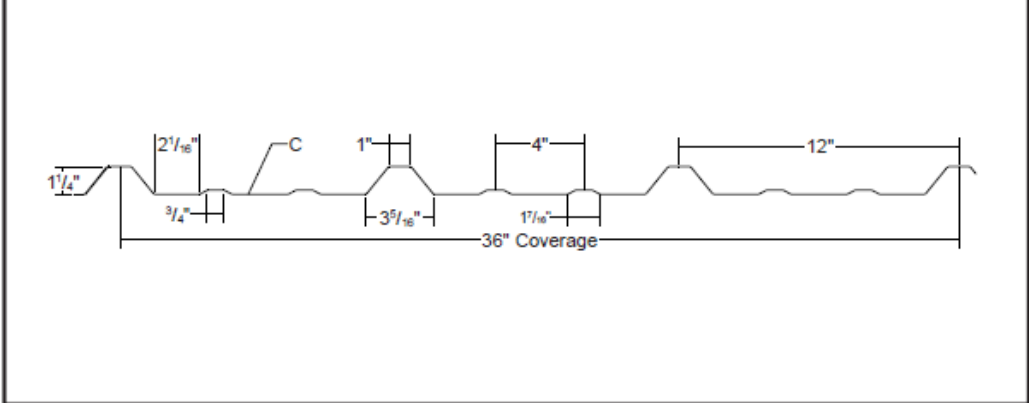
Metal Sales roof panels are "Eligible Building Envelope Components" that



qualify for tax credits for consumers and LEED (Leadership in Energy and Environmental Design) credits for architects. See www.metalsales.us.com for complete details and certificates.

PBR-PANEL

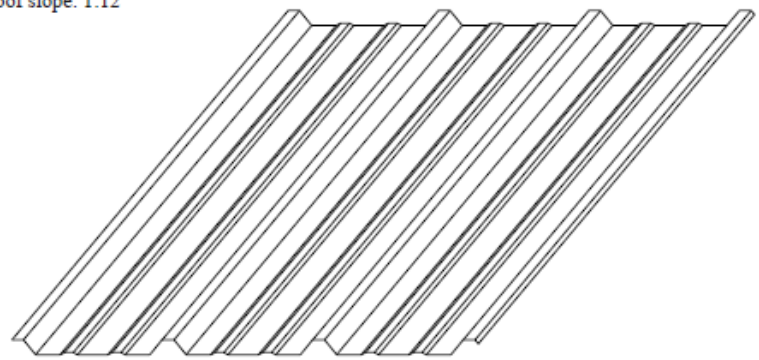
CONDENSED TECHNICAL REFERENCE



COMMERCIAL INDUSTRIAL PANEL
 DIRECT FASTEN
 36" COVERAGE
 MINIMUM SLOPE 1:12
OPEN FRAMING OR SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: Kynar 500 (PVDF), MS Colorfast45*, and Acrylic Coated Galvalume*
- ▶ Gauges: 26ga and 24ga standard, 22ga optional
- ▶ 36" panel coverage, 1 1/4" rib height
- ▶ Applies over open framing or solid substrate
- ▶ Exposed fastened metal building panel
- ▶ Trapezoidal rib on 12" centers
- ▶ Minimum roof slope: 1:12



TESTING

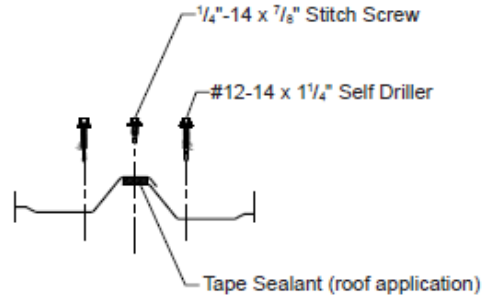
- ▶ UL 2218, Class 4 Impact Resistance
- ▶ UL 790, Class A Fire Resistance Rating
- ▶ Florida Building Code Approved 7490.3, 9482.3
- ▶ UL 580, Class 90 Wind Uplift Construction #161
- ▶ Miami-Dade County Approved Roof: 03-1210.03 Wall: 03-0430.08



PBR-PANEL

CONDENSED TECHNICAL REFERENCE

ATTACHMENT DETAIL

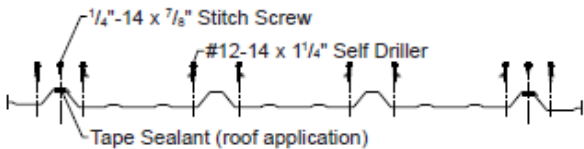


FASTENING PATTERNS

Field of Panel



Ends of Panel




GENERAL INFORMATION

- ▶ **Slope**
The minimum recommended slope for PBR-Panel is 1:12. Metal Sales recommends that in all roof applications, sealants be used on all sidelaps with stitch screw 1'-0" on center.
- ▶ **Substructure**
PBR-Panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. To avoid panel distortion, use a properly aligned and uniform substructure.
- ▶ **Coverage**
PBR-Panels are available in a 1 1/4" rib height with a coverage width of 36".
- ▶ **Length**
Minimum factory cut length is 5'-0". Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.
- ▶ **Fasteners**
The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.
NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.
- ▶ **Availability**
Finishes: Acrylic Coated Galvalume®, MS Colorfast45®, or various Kynar 500 (PVDF) colors.
Gauges: 28ga and 24ga standard, 22ga optional

SECTION PROPERTIES						ALLOWABLE UNIFORM LIVE LOADS PSF (3 or More Equal Spans)													
Ga.	Width (In.)	Yield KSI	Weight PSF	Top In Compression		Bottom In Compression		Inward (Gravity / Deflection) Load				Outward Uplift (Stress) Load							
				I _{xx} In ⁴ /ft	S _{xx} In ³ /ft	I _{xx} In ⁴ /ft	S _{xx} In ³ /ft	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	36"	80	0.91	0.0360	0.0358	0.0313	0.0452	256	127	74	49	34	23	217	104	60	39	27	20
24	36"	50	1.17	0.0560	0.0578	0.0457	0.0613	330	153	88	57	39	29	314	145	83	53	37	27
22	36"	50	1.51	0.0800	0.0856	0.0633	0.0813	451	206	117	75	52	39	472	217	123	79	55	40

- Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase in uplift.


Doors with options are included as listed and come in ADA approved width.





TELSTAR DOORS

Pre-hung door and frame assembly
161 lock prep
Deadbolt ready
ADA compliant threshold
Sweep and seal
Threshold flashing detaches for optional installation
Door reinforced for closer
Insulated core
Left or right hand reverse door
20 gauge galvanized door
18 gauge galvanized frame
Non-removable hinge pin


3 COLORS Available:



Grey



Bright White


Off White

Actual colors may vary from those shown due to limitations of the production process.



(Patent pending) 



**DETACHABLE
THRESHOLD
FLASHING**

TELL MFG follows the same set of performance specifications as other door manufacturers, as set forth in the Steel Door Institute (SDI) requirements.

Roll-up doors are included as listed

JANUS

[International]

Janus International has once again raised the bar with the Model 1000 commercial door. The Pre-Assembled Industrial Door (PAID) features the traditional dependability and sturdiness of a commercial door, while significantly saving time and money during installation. How? The push-up operation comes with brackets and tensioner pre-assembled. The reduced drive chain hoist operation is delivered with brackets, tensioner, gears and chain drive pre-assembled on the door. In addition, door and guides install to jamb as a single assembly. Pre-assembly from the factory means less time spent on installation, therefore saving you money. Backed by a one year warranty, our PAID Model 1000 is a solid and economical investment for commercial/industrial usage.

FEATURES



The 26 gauge corrugated door curtain is manufactured from full hard galvanized grade 80 steel and coated with Super Durable Polyester paint that is backed by a 40 year film integrity and a 25 year no-fade limited paint warranty. Available in sizes up to 12'0" x 14'0" and in over 20 different colors.

Tough, durable, wide, heavy-duty nylon stripping controls curtain stretch and works in conjunction with the vinyl guide strip to reduce wear and deaden sound.



The slide bolt lock assembly affixed to the bottom bar at each end of the door curtain fastens through the guide to securely keep the door locked and in the down position. Padlocks can be attached to the slide to further secure the door. Bulb astragal is standard on all doors.

The flat door stop slide makes installation quicker. Simply slide through the holder on the guide and affix with a fastener.



9 1/2" diameter drums allow for lower headroom requirements. An enclosed barrel houses the dead axle assembly and protects the factory-lubricated springs from direct contact with environmental elements. The inherent strength provided by the spiral barrel minimizes axle deflection, providing smoother operation. Because the curtain is attached by screws and not seamed to the barrel, cost-effective replacement of either independent assembly is quick and easy.

Grease-filled, shielded radial ball bearings at the drums provide longevity and smooth operation. Drums are embossed for rigidity.



The Janus ratchet tensioning device supplied as standard equipment on our door offers a simpler method of tensioning, while more accurately fine tuning all the springs on the door at the same time. There is no extra hardware required. Eight different positions on the tension wheel allow one to perfectly balance the door every time. There are no pins required to hold the tension on the spring. You simply just click it.



A 4:1 reduced drive chain hoist offers smoother operation on doors over 10'0" wide or 10'0" tall. Chain hoist comes pre-assembled on door.



superior product + recognized value

Three manufacturing facilities located throughout the United States and a team of experienced door experts are available to assist you with any of your door needs.

1000

commercial

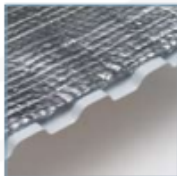
One year warranty on workmanship and material.



Factory-installed galvanized reinforced 12 gauge brackets are designed to easily snap onto the guides, reducing installation time.

OPTIONS

Roll•a•matic electric operators are internally enclosed in the barrel to provide quiet and reliable operation. The operator's design is compatible with transmitters and receivers, pneumatic sensing edges and other electric operation accessories. Right side operation only. Auxiliary operator hand chain not available.



Insulation is made of a foil-backed, dual-layer polyethylene air-bubble insulation secured in place with a strong adhesive and joined by mylar film to provide an R value of 4 (top draft stop and side draft stops are also included). Model 1000I only.



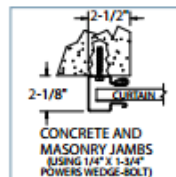
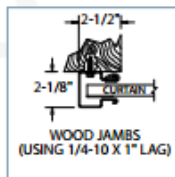
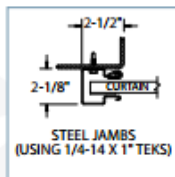
The top draft stop mounted to the door curtain provides a 2 3/4" weather seal between the door and the header.



The header seal attaches directly to the header and extends up to 5" to the door curtain to form an effective barrier from environmental elements.

GUIDE DETAILS

Universal mount 2" deep 16 gauge galvanized steel guides require no pre-installation modifications for wood, steel, concrete or masonry block applications. Guides have deeper engagement, which allows the curtain to stay in place under more severe wind conditions.



EZ seal Green insulation is an optional upgrade



Commercial Insulation



BENEFITS OF LOW-E INSULATION:

- Increases energy savings
- Non-toxic, no fiberglass – no itching
- Excellent vapor barrier
- Installs easily with razor knife and foil tape
- Superior thermal performance
- Flexible and durable
- Improves insulation system performance
- Insect/Bird resistant
- Great for new construction or retrofits
- Reflects up to 97% of radiant heat
- Helps Deaden Sound



Low-E can be used in all facets of the building industry where conventional insulations are used. It can be used alone or in conjunction with mass insulations for high R-systems. From large commercial buildings, light gauge steel to post frame structures. Low-E can be used to save money on heating and cooling costs. ESP LOW-E® Insulation is easy to handle and will not tear or puncture easily. It is flexible and seals tight around fasteners. With our Foil or White Foil facings and our EZ Seal Tab, Staple Flange or Trimmed edges to go with them, we have the products to make your building as energy efficient as possible while promoting a healthier indoor environment.

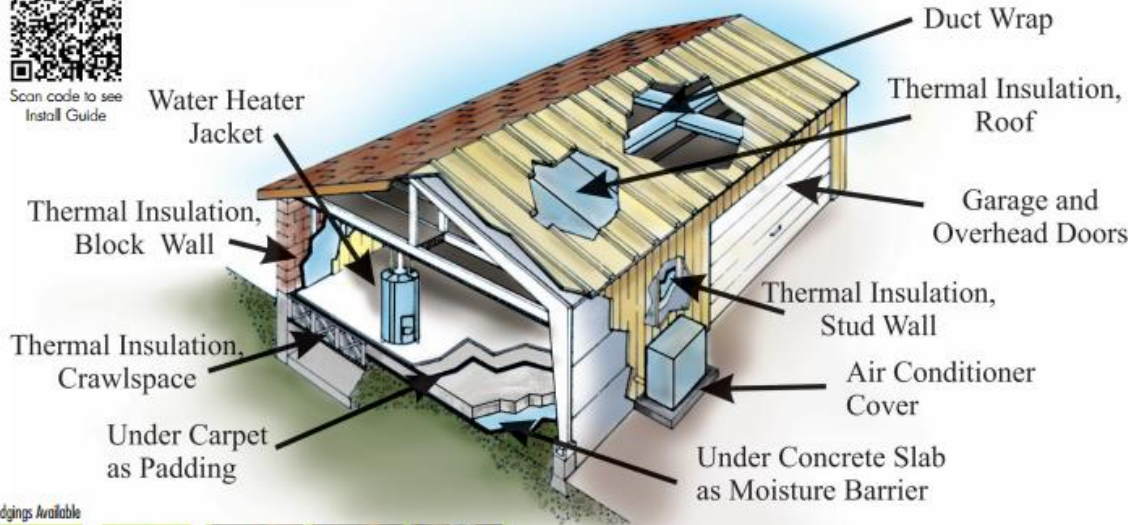


Prices subject to change at any time. Ohana Steel Buildings reserves the right to correct errors or omissions in this proposal.

Discover even more ways to lower energy costs with ESP LOW-E® Insulation



Scan code to see Install Guide



Edgings Available



Green building is not just a trend, but the wave of the future as more and more homeowners and builders demand energy efficient homes and products. ESP Low-E® Insulation products are designed for maximum energy and cost efficiency. Whether it's under slab, under roof, around duct work or wrapping the entire house, ESP LOW-E® Reflective Insulation products save more money on heating and cooling than regular insulation and Housewrap. Check out all the ways ESP LOW-E® Insulation can help reduce your energy consumption around the home.

ESP LOW-E® Insulation

PRODUCT CODES: 4LFLT, 4LFSL, 4LFLZ, 5LFLT, 6LFLT, 6LFSL, 6LFLZ
 PRODUCT DIMENSIONS & DESCRIPTIONS: Double sided scrimmed aluminum foil laminated to polyethylene foam (1/4" nominal thickness)
 WIDTH: 4', 5', 6' LENGTH: 125', 100', 84'
 CORE MATERIAL: Polyethylene
 FACINGS AVAILABLE: Foil/Foil
 EDGINGS AVAILABLE: Trimmed, Staple Flange, EZ Seal
 FLAME AND SMOKE: ASTM E-84
 FLAME SPREAD: Less than 25, SMOKE DEVELOPED: Less than 50
 FULL SCALE FIRE TEST: NFPA 286 - Foil/Foil Passed
 R-VALUE: Up to R-11*
 PERM RATING: E-96 -.008

*R-values vary depending on facing and assembly.

Specific R-values for specific applications can be obtained from Install Guide at www.low-e.com or by contacting ESP, Inc. at 1-800-289-5693. ESP, Inc strives to provide the most accurate R-value data possible. The R-values set forth in this document are the reflection of a combination of industry standard testing and conscientious calculation. However, these numbers, even within specific applications, can fluctuate due to the multiple variables that influence R-value.

ESP Class-A White Insulation

PRODUCT CODES: 4EFWT, 6EFWT, 4EFWS, 6EFWS, 4EFWZ, 6EFWZ
 PRODUCT DIMENSIONS & DESCRIPTIONS: Double sided scrimless aluminum foil laminated to polyethylene foam (1/4" nominal thickness)
 WIDTH: 4', 6' LENGTH: 125', 84'
 CORE MATERIAL: Polyethylene
 FACINGS AVAILABLE: Foil/Foil, Foil/White Foil
 EDGINGS AVAILABLE: Trimmed, Staple Flange, EZ Seal
 FLAME AND SMOKE: ASTM E-84
 FLAME SPREAD: Less than 25, SMOKE DEVELOPED: Less than 50
 FULL SCALE FIRE TEST: NFPA 286 - Foil/White Foil Passed
 R-VALUE: Up to R-11*
 PERM RATING: E-96 -.008

Do not leave product exposed when placed on both walls and ceiling of a conditioned space if ceiling height is less than 10 feet. In conditioned spaces where product is being used on both walls and ceiling, and ceiling height is less than 10 feet, surfaces should be covered with a proper thermal barrier.

CAUTION: Aluminum is an Electrical Conductor. Please use caution when working around electrical sources including overhead power lines. Carefully inspect electrical junction boxes and check for frayed wires before beginning installation.

WARNING: Although ESP LOW-E® Insulation Products are all fire tested to ASTM and/or NFPA standards; it is recommended that they or any insulation material should not be exposed to open flame or other ignition sources of sufficient intensity during shipment, storage or installation.