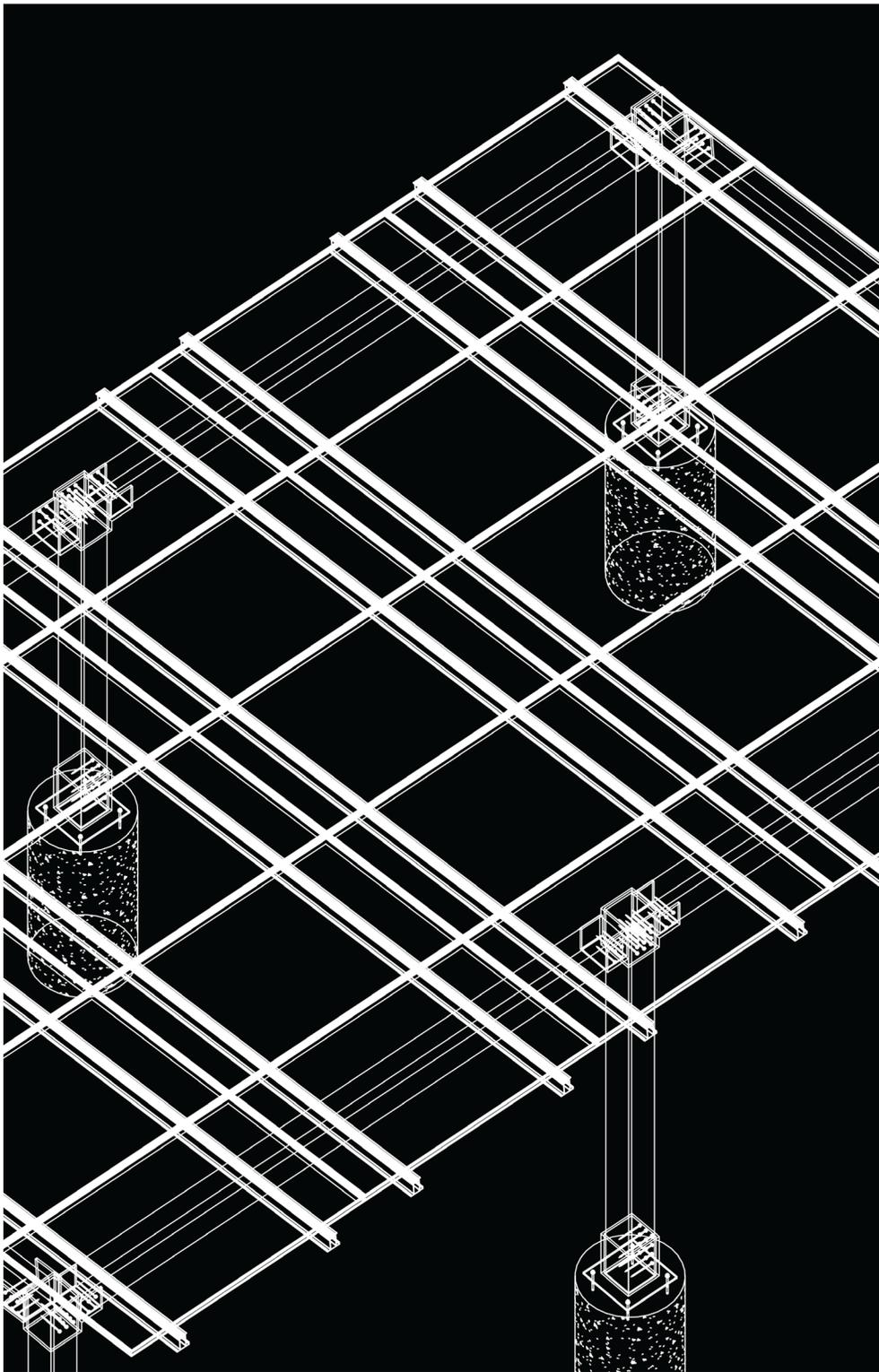


A high-angle photograph of a solar canopy. The canopy is constructed from light-colored wood posts and beams. It supports a large array of dark blue solar panels arranged in a 4x6 grid. The canopy is installed on a dark, gravelly surface. In the background, there is a dry, brushy landscape with some trees and a clear sky. The company logo and name are overlaid in the top left corner.

BSC BROOKLYN SOLAR CANOPY CO.

**THE WOOD-POST CANOPY
INSTALLATION MANUAL**



MATERIALS + TOOLS

COMPONENTS

TYPE NUMBER	COMPONENT NAME	COUNT	MATERIAL	NOTES
A-1	Base Plate	(Per Project)	Aluminum	
B-1 / B-2	End Brackets	(Per Project)	Aluminum	
B-3	Middle Bracket	(Per Project)	Aluminum	
B-4	BSCC Custom Rail	(Per Project)	Aluminum	
B-5	Rail Splice Bar	(Per Project)	Aluminum	

BOLTS + SCREWS

Y-1	Fully Threaded Bolt (5/8" Dia.)		Stainless Steel	
Z-1	Tek Screws	8 per splice bar	Stainless Steel	
Z-3	Clamp + Fully Threaded Carriage Bolt (3/8" Dia.)		Stainless Steel + Aluminum	

ACCESSORIES

Q-1	Rail End Caps	1 per rail	Plastic	
-----	---------------	------------	---------	--

NOT PROVIDED BY BSCC

COMPONENTS

B-6	8ft Wood Column	(Per project)	Wood	
B-6	10x10 Wood Beams	(Per project)	Wood	

BOLTS + SCREWS

X-1	HLTI HT-Z Anchor Bolt (5/8" Dia.)	1 per base plate	Stainless Steel	
Z-2	IronRidge LFD Bolt	2 per row of panels	Stainless Steel	

ACCESSORIES

Q-2	IronRidge LFD Bolt Slapper Sleeve	2 per rail	Plastic	
Q-3	IronRidge Grounding Lug	1	Tin	
	HLTI Epoxy	4	Epoxy	



9/16in

Wrench



15/16in

Wrench



Ratchet



Drill



Impact Drill



Hammer Drill



Deep Cut
Portable Ban Saw



Level



x2 Ladders



Measuring Tape



HILTI Epoxy
+ Grout



Non-Shrink Grout



Saw



Metal Drill Bit



Hammer
Drill Bit



3/8in

Driver



1/2in

Driver



9/16in

Driver



15/16in

Driver

ALL REQUIRED TOOLS & MATERIALS ARE NOT PROVIDED
BY BROOKLYN SOLAR CANOPY CO.

THANK YOU

ABOUT US

Thank you for choosing a Brooklyn Solar Canopy Company solar canopy product. We have designed, engineered and manufactured a beautiful solar structure that will meet your project needs. We hope to serve you well.



The Wood-Post redefines the residential solar experience, offering creative yet traditional options for the contemporary homeowner. Create sheltered space for backyard amenities, or vehicle parking and charging with this elegant wood design. Elevate solar panels over physical barriers and common shade factors to make solar possible anywhere on your property. Whatever your need, the Wood-Post delivers bold possibilities with ease, elegance, and versatility.

This innovative wood solar canopy product originated in New York in 2024, the result of providing customers a robust and natural appearance to the solar canopy. This solution is perfect for the suburban or rural homeowner.

Today, this Made in New York innovation, the Wood-Post, is available to solar installers everywhere.

TABLE OF CONTENTS

1	PRODUCT INFORMATION				
1.1	Product Information		5		
1.2	Product Information		6		
2	DESIGN PARAMETERS				
2.1	Canopy Configurations		8		
3	COMPONENTS				
3.1	Components Exploded View		10		
3.2	Base Attachment Components		11		
3.3	Structural Components		12		
3.4	Fasteners & Additional Comp.		13		
4	BASE ATTACHMENTS				
4.1	Grade - Footings			15	
5	ASSEMBLY				
5.1	Bracket/Base Plate Assembly			17	
5.2	Rail Splice Assembly			18	
6	CONSTRUCTION				
6.1	Construction Site Layout			20	
6.2	Beam Placement & Secure			21	
6.3	Rail Installation			22	
6.4	Panel Installation			23	
6	ELECTRICAL				
6.1	Mounting				25
6.2	Grounding				26
7	WARRANTY				
7.1	Warranty				28

1



PRODUCT INFORMATION

1.1	PRODUCT INFORMATION.....	5
1.2	PRODUCT REQUIREMENTS.....	6

1.1 PRODUCT INFORMATION

Brooklyn Solar Canopy Company's (BSCC) Wood-Post canopy design is a set of configurations for ground mounted structures. All BSCC canopies are custom fabricated in the United States using 6061 grade aluminum or equivalent strength aluminum and have been certified by a structural engineer to meet the wind, snow and seismic loads in North America.

Remember that it is the responsibility of the installer to assess and have structurally certified the underlying foundations upon which the canopy is being built with and on.

Please read the installation manual fully before installing and follow all design parameters, guidelines, and requirements.

CERTIFICATIONS



CSA GROUP
US CSA Product Certified, ADD NUMBER



UL Certified
UL Product Certified



PZSE Structural Engineering
Engineering and stamped by PZSE structural engineers.



Made in United States of America
Designed in Brooklyn, New York and manufactured in Providence, Rhode Island.

1.2 PRODUCT REQUIREMENTS

TABLE 1 – FASTENER TORQUE VALUES

FASTENER LOCATION	SECTION + PAGE NUMBER	TORQUE (PSI)
Panel Installation	Construction 6.4, pg 24	80
Ground Lug to Rail	Electrical 7.2, pg 27	80

Assembly + Maintenance Requirements:

- a.) All metal to metal components and fasteners shall be tightened to a torque value of shown in 'TABLE 1.'
- b.) Any loose components or fasteners shall be re-tightened in accordance with the torque values in 'TABLE 1.'
- c.) Any components showing signs of damage that compromise safety shall be replaced immediately.
- d.) See 'Components, 3.0' for Bonding Device requirements.

TABLE 2 – CSA APPROVED PANELS

PANEL MAKE	MODEL	WATTAGE (W)
Axitec	AXIpremium XXL HC 530-555	530-555
Canadian Solar	HIDM5 (All-Black) 390-405	390-405
Jinko Solar	Tiger Mono-facial All Black	370-390
Panasonic	EVERVOLT BLACK SERIES 400-410	400-410
Q-Cell	Q.PEAK DUO BLK ML G10+ SERIES	385-410
Q-Cell	Q.PEAK DUO L G6.2 405-425	405-425
Q-Cell	Q.PEAK DUO XL G10.3 / BFG 470-485	470-485
REC Group	Alpha Pure Black REC405AA	405
REC Group	Alpha Pure Black REC410AA	410
SunPower	M Series 420-440W Residential AC Module	420-440



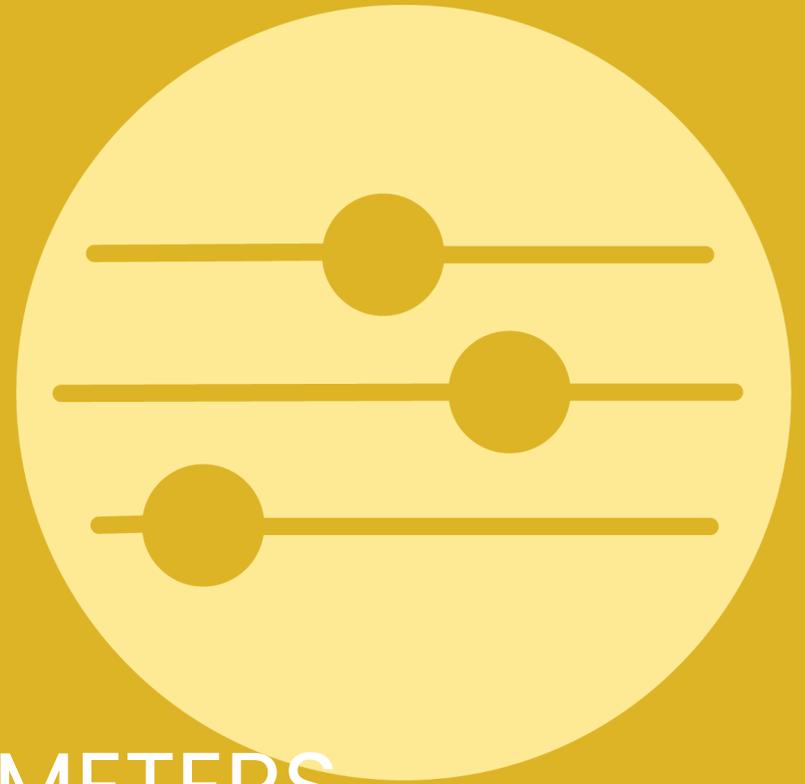
The BSCC Wood-Post Canopy is 'Not Fire Rated'

Place the provided 'Not Fire Rated' sticker on the solar canopy once installation is completed.

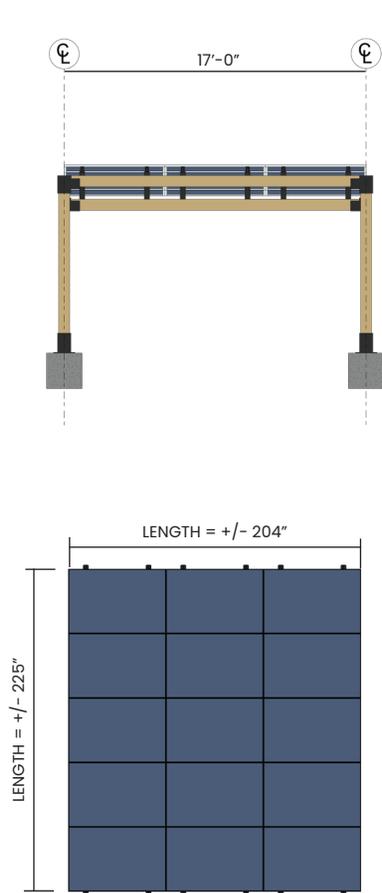
2

DESIGN PARAMETERS

2.1 CANOPY CONFIGURATIONS.....	8
--------------------------------	---

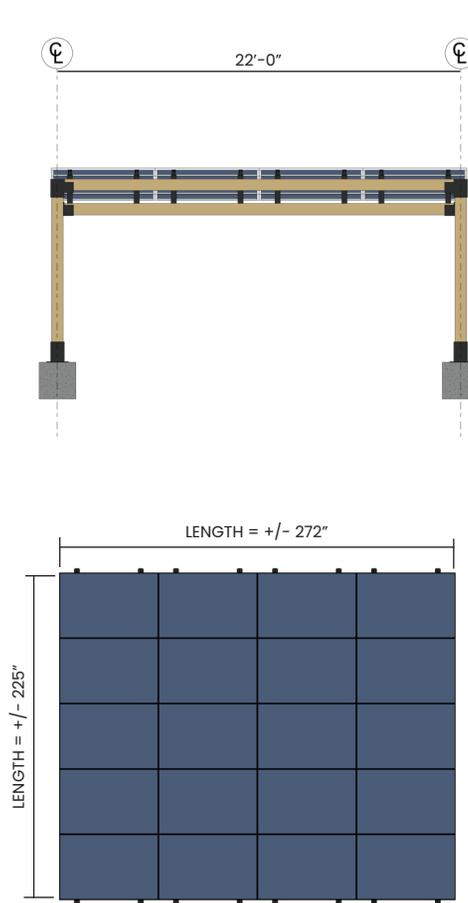


2.1 CANOPY CONFIGURATIONS



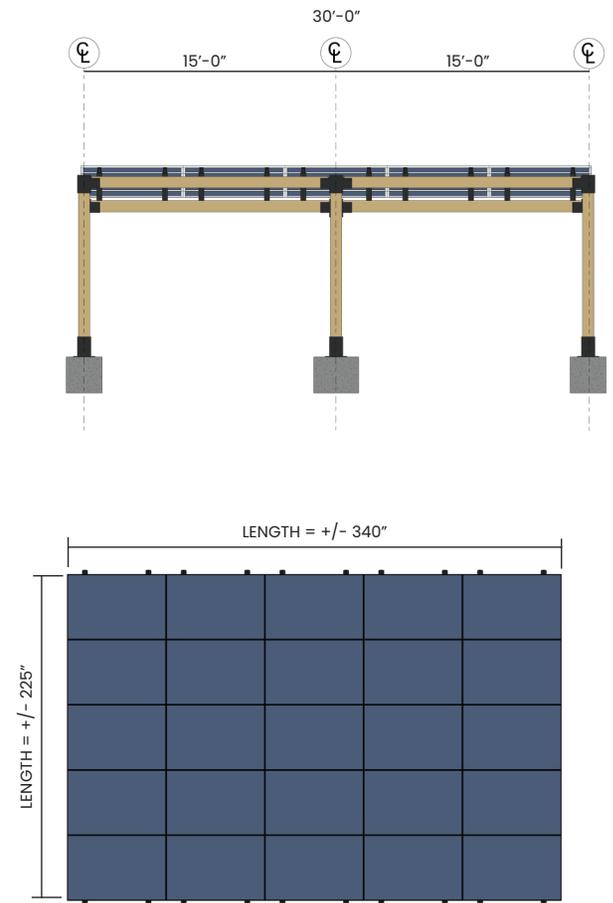
CONFIGURATION 1
5 Degree Tilt - Single Bay, Short

3 PANEL LANDSCAPE CONFIGURATION



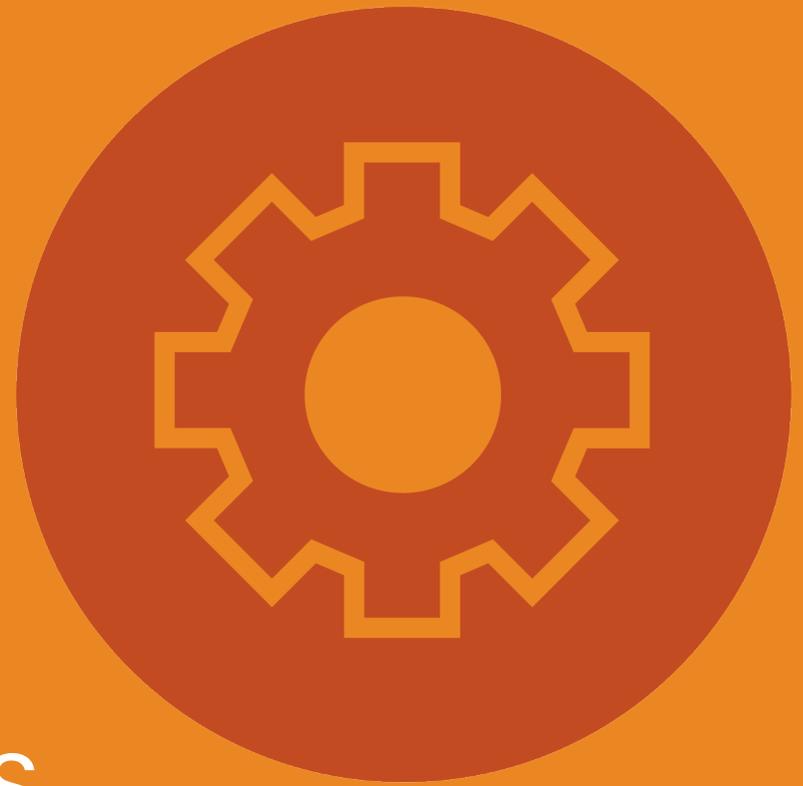
CONFIGURATION 2
5 Degree Tilt - Single Bay, Long

4 PANEL LANDSCAPE CONFIGURATION



CONFIGURATION 3
5 Degree Tilt - Double Bay

5 PANEL LANDSCAPE CONFIGURATION

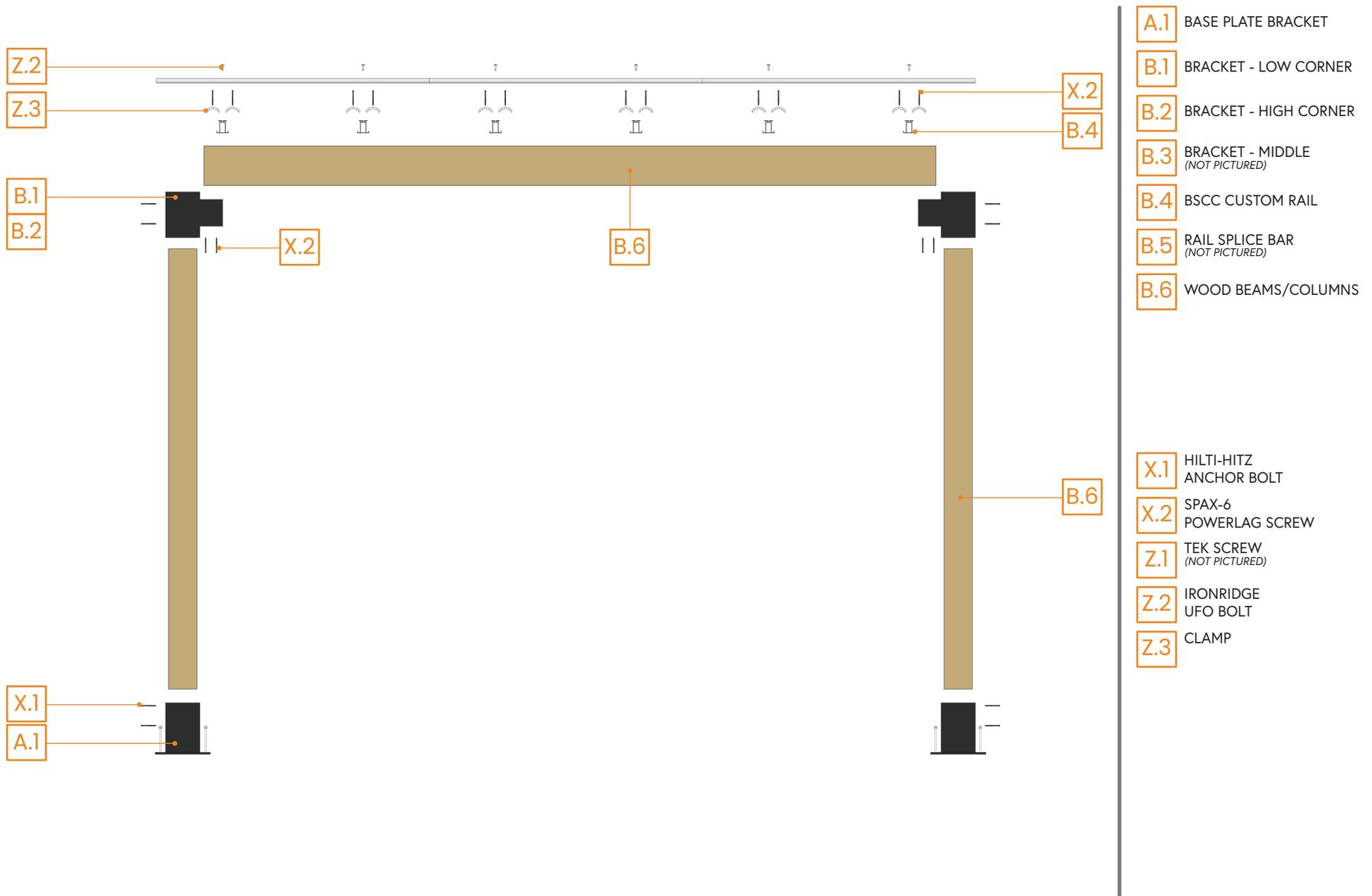


3

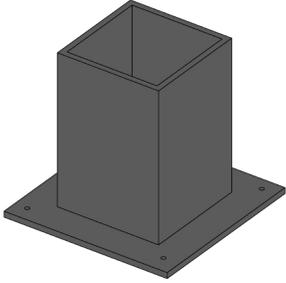
COMPONENTS

3.1 COMPONENTS EXPLODED VIEW.....	10
3.2 BASE ATTACHMENT COMPONENTS.....	11
3.3 STRUCTURAL COMPONENTS.....	12
3.4 FASTENERS & ADDITIONAL COMPONENTS.....	13

3.1 COMPONENTS EXPLODED VIEW



3.2 BASE ATTACHMENT COMPONENTS

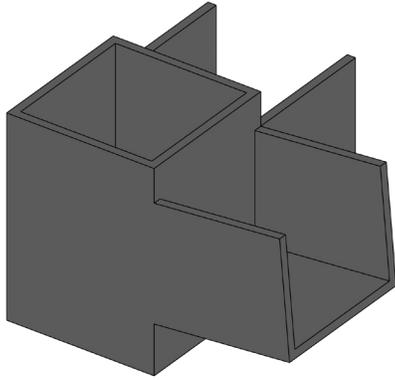


A.1 | BASE PLATE BRACKET
GROUND MOUNT

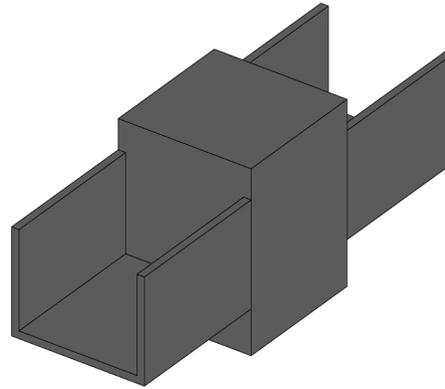


X.1 | FOR SINGLE USE ONLY
HILTI HIT-Z ANCHOR BOLT
5/8" DIA. 
Bolt: X.1

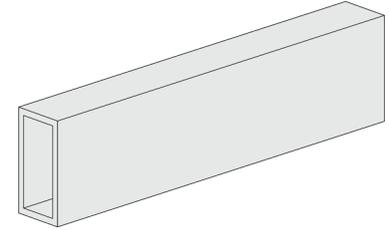
3.3 STRUCTURAL COMPONENTS



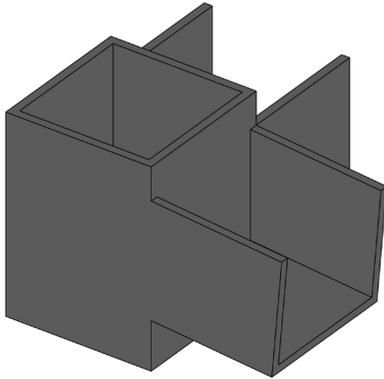
B.1 BRACKET - LOW CORNER
ALUMINUM, 6061



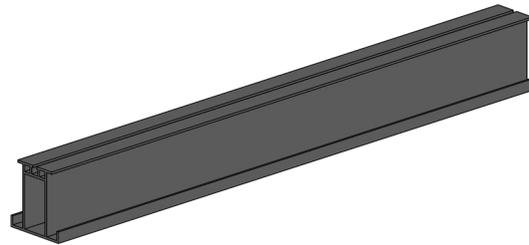
B.3 BRACKET - LOW MIDDLE
ALUMINUM, 6061



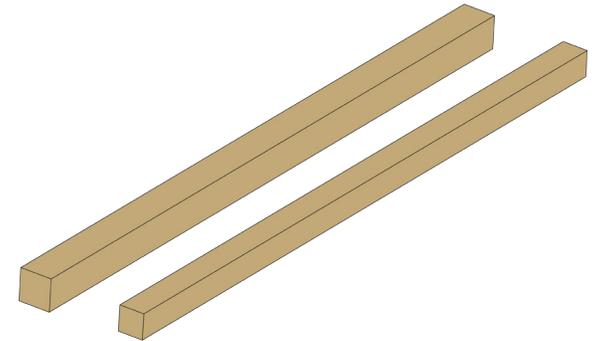
B.5 RAIL SPLICE BAR
ALUMINUM, 6061



B.2 BRACKET - HIGH CORNER
ALUMINUM, 6061

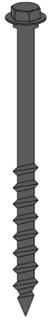


B.4 BSCC CUSTOM RAIL
ALUMINUM, 6061



B.6 WOOD BEAMS/COLUMNS
WOOD - WHITE PINE OR SIMILAR: 8x8 or 10x10

3.4 FASTENERS & ADDITIONAL COMPONENTS



X.2 SPAX-6 POWERLAG SCREW
3/8 DIA. X 6" L 



Z.3 CLAMP
ALUMINUM, 6061



Q.1 RAIL END CAPS



FOR SINGLE USE ONLY
Z.1 TEK SCREWS
Drill Point 



Q.2 IRONRIDGE UFO BOLT STOPPER SLEEVE
(not included)



Z.2 IRON RIDGE UFO BOLT
UL 2703
(not included) 



FOR SINGLE USE ONLY
Q.3 IRONRIDGE GROUNDING LUG (GD-LUG-003)
(not included)

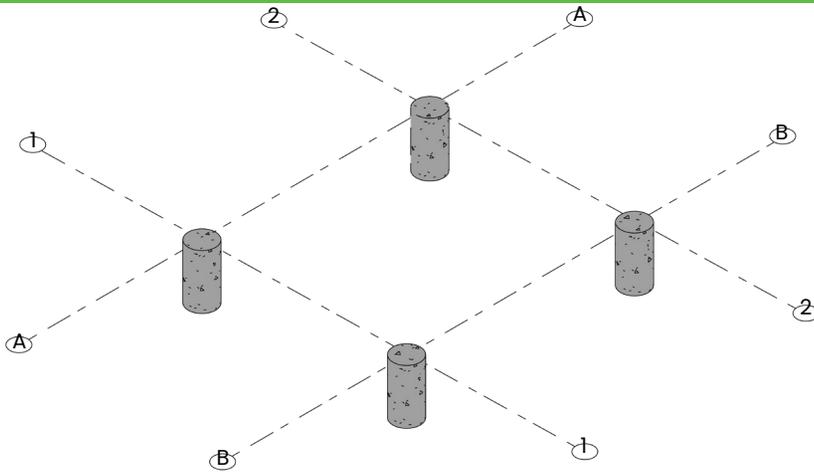


4

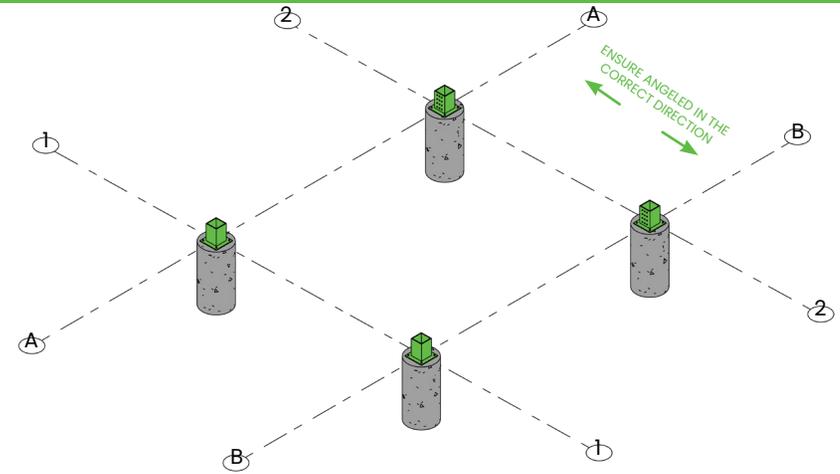
BASE ATTACHMENTS

4.1 GRADE - FOOTINGS.....15

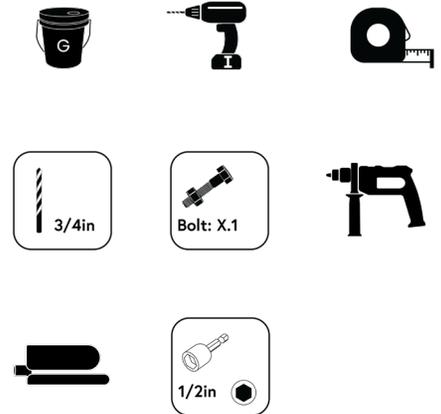
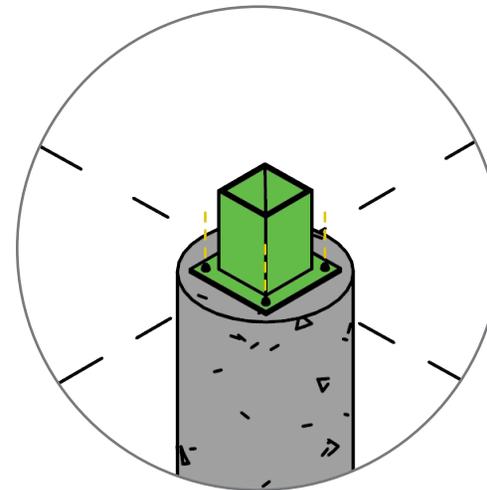
4.1 GRADE – FOOTINGS



1.) Mark foundations, dig and pour concrete ensuring footings are level. Let concrete cure.



2.) Place base plate brackets, ensure columns are in the correct location. Drill and clean anchor bolt holes. Drill anchor bolts and apply epoxy.



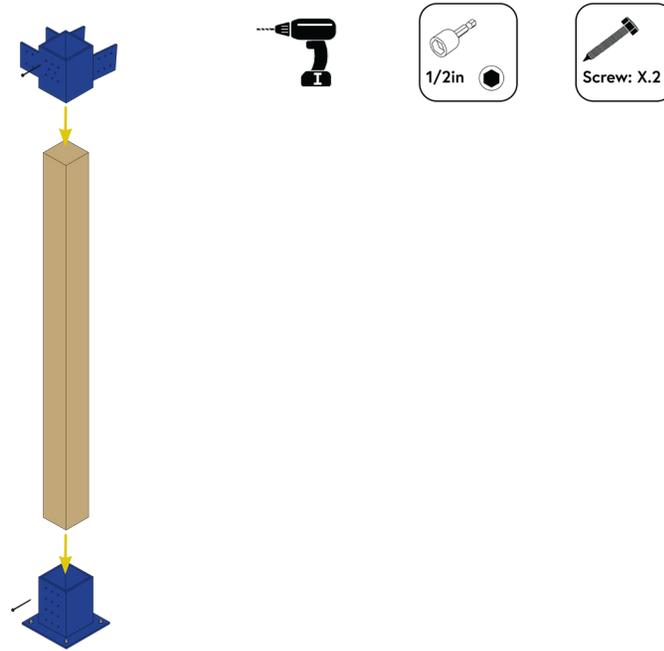
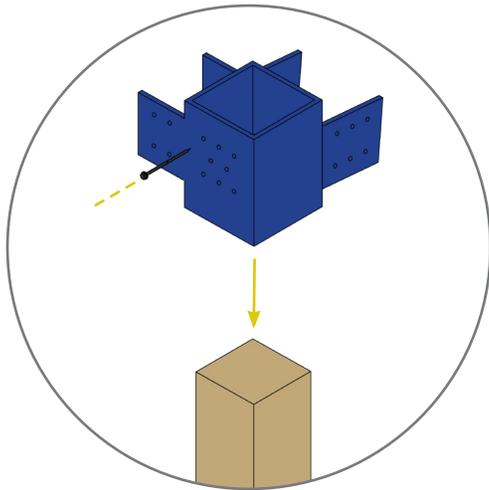


5

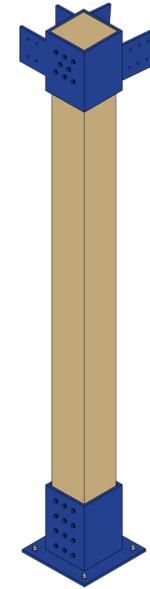
ASSEMBLY

5.1 BRACKET + BASE PLATE ASSEMBLY.....	17
5.2 RAIL SPLICE ASSEMBLY.....	18

5.1 BRACKET + BASE PLATE ASSEMBLY

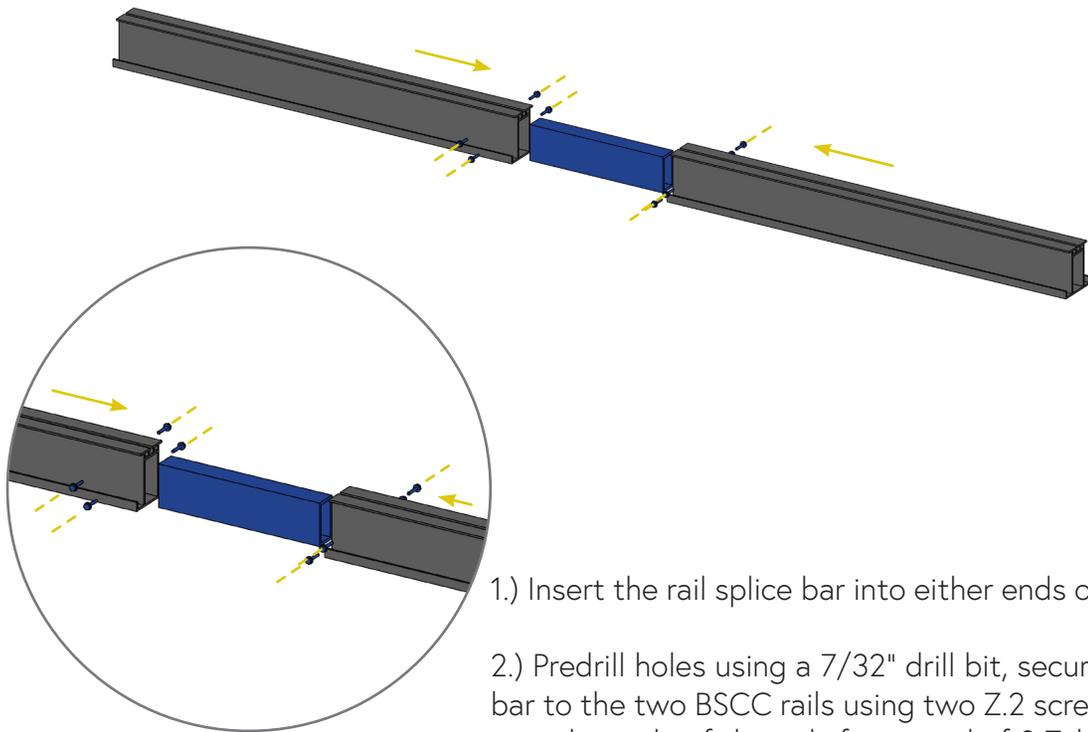
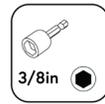


TRUSS ASSEMBLY



- 1.) Ensure the wood columns are pre-cut the required height.
- 2.) Move the bracket and the base plate bracket to the appropriate column. Ensure the angled portion of the bracket is in the correct direction.
- 3.) Using the X.2 screws (Spax-6 Powerlag Screws) and a drill secure the screws.

5.2 RAIL SPLICE ASSEMBLY



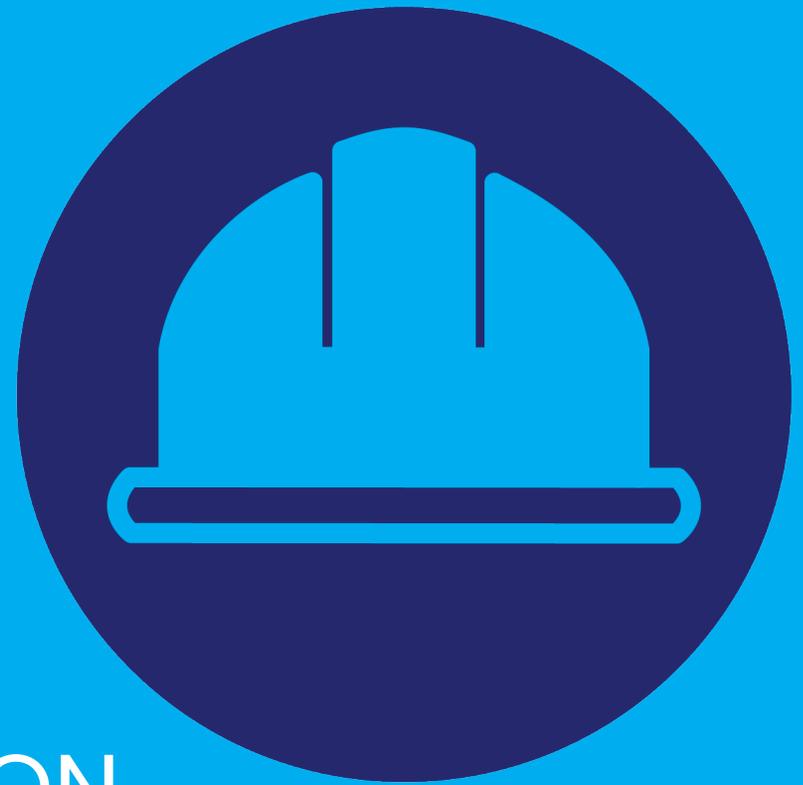
- 1.) Insert the rail splice bar into either ends of the BSCC rail.
- 2.) Pre-drill holes using a 7/32" drill bit, secure the rail splice bar to the two BSCC rails using two Z.2 screws, Tek screws, on either side of the rails for a total of 8 Tek screws.
- 3.) Do this for all rails and set aside.

RAIL ASSEMBLY



6

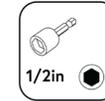
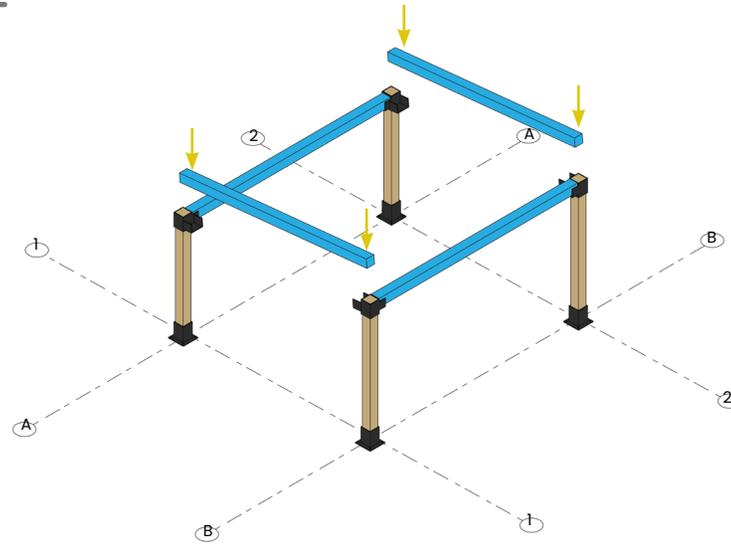
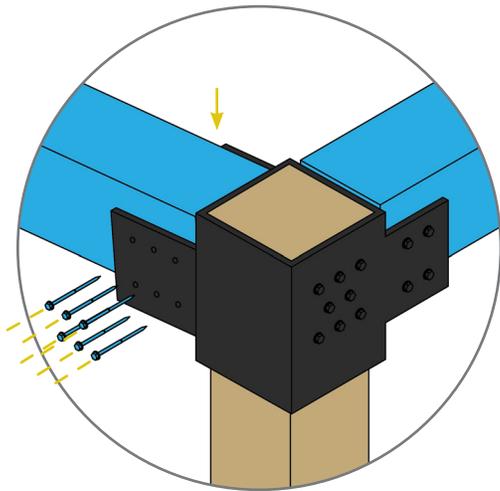
CONSTRUCTION



6.1	CONSTRUCTION SITE LAYOUT.....	20
6.2	BEAM PLACEMENT & SECURE.....	21
6.3	RAIL INSTALLATION.....	22
6.4	PANEL INSTALLATION.....	23

6.2 BEAM PLACEMENT & SECURE

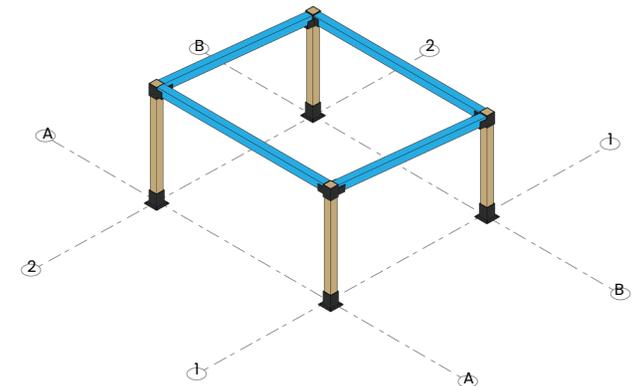
COLUMN LEG - TRUSS ATTACHMENT



1.) After the wood columns have been secured, lift the pre-cut wood beams into place. The wood beams will fall into brackets.

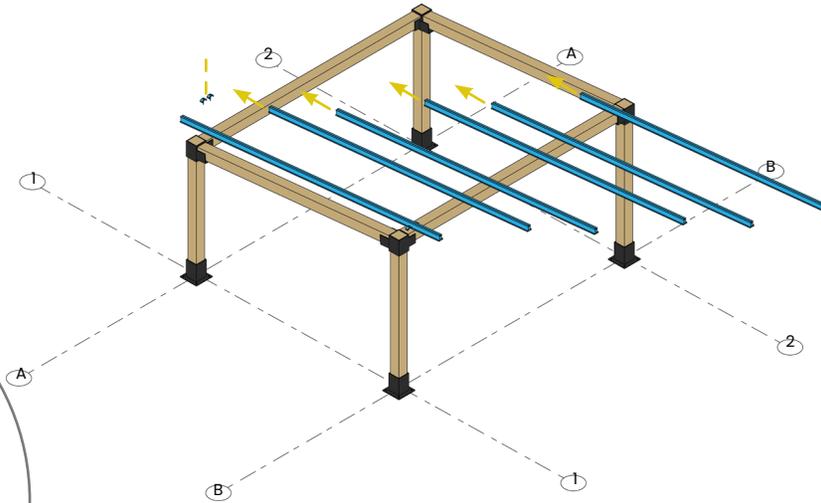
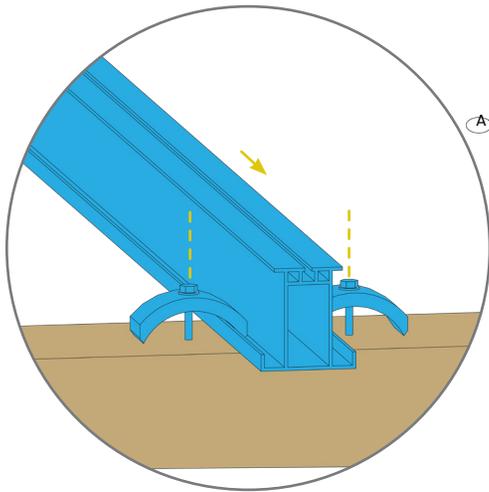
2.) Using the X.2 screws (Spax-6 Powerlag Screws) and a drill secure the screws.

3.) Do this for all wood beams.



6.3 RAIL INSTALLATION

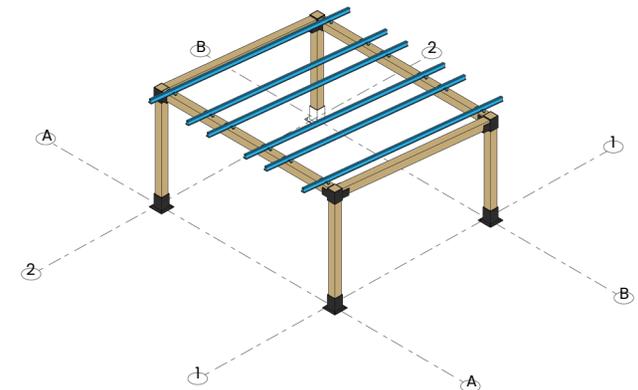
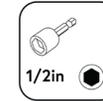
RAIL - TRUSS ATTACHMENT



1.) Once the wood beams have been securely fastened, slide the BSCC Rails across the top of the truss ensuring that there is a Z.3 clamp on each side of the rail at every truss location.

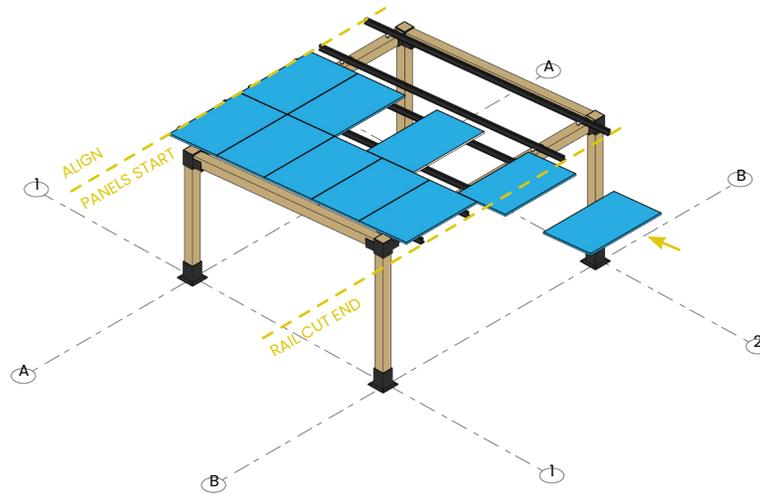
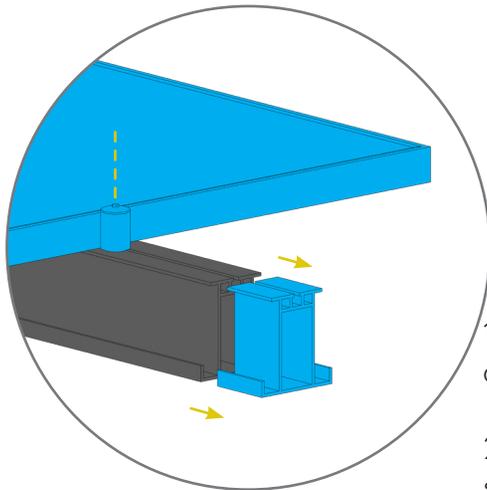
2.) Align the end of the rails at one side of the canopy, leaving roughly 2"-3" of space from the end of the rail to solar panel frame. This allows for cuts to only occur at the opposite ends of the rails.

3.) After all rails are in place sing the X.2 screws (Spax-6 Powerlag Screws) and a drill secure the screws.



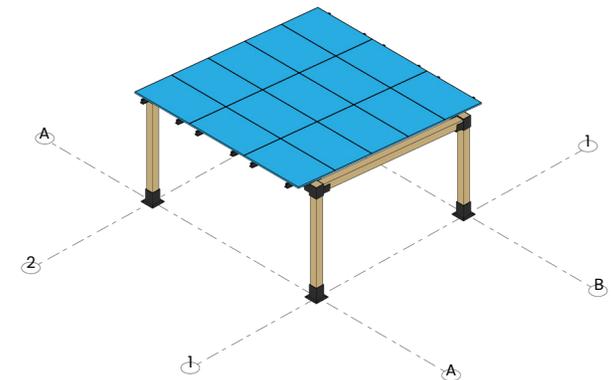
6.4 PANEL INSTALLATION

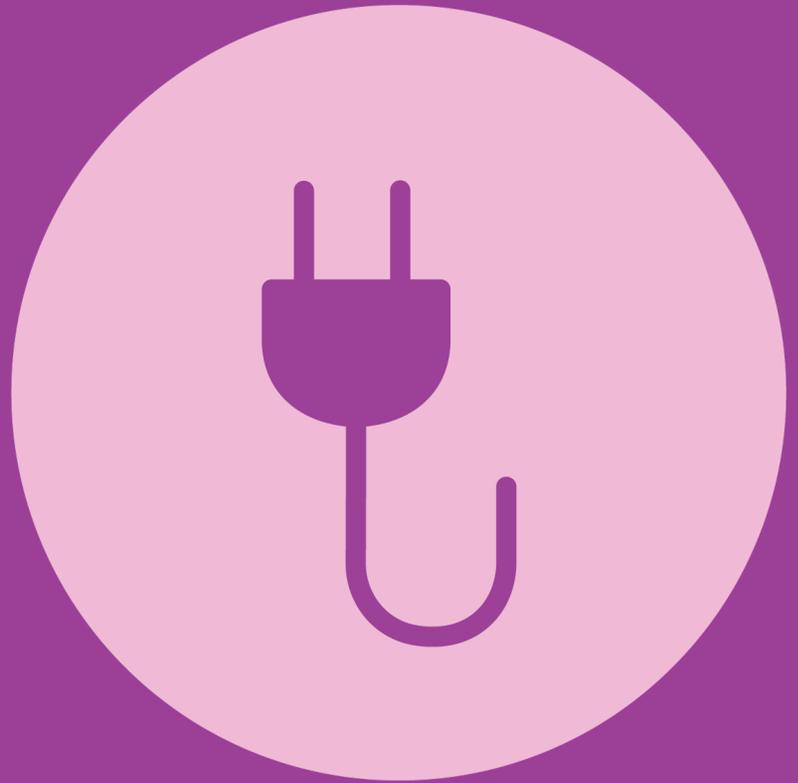
PANELS - RAIL ATTACHMENT



TORQUE VALUE = 80PSI

- 1.) Place solar panels on secured rails, leaving roughly 2"-3" of space from the end of the rail to solar panel frame.
- 2.) Start with one row of panels and complete a row before starting the next. Secure the panels by sliding the end of the Z.3, UFO bolt into the top of the BSCC Rail and allowing the top of the Z.3, UFO bolt to rest on top of the solar panel frame. Secure the UFO bolts with an impact driver.
- 3.) There may be excess BSCC Rail. Measure 2"-3" of the rail from the end of the solar panel frame. Use the deep cut portable ban saw to cut the rails, if needed
- 4.) Place Q.1, End Caps on exterior rails and Q.2, Iron Ridge UFO Stoppers on exterior UFO bolts.





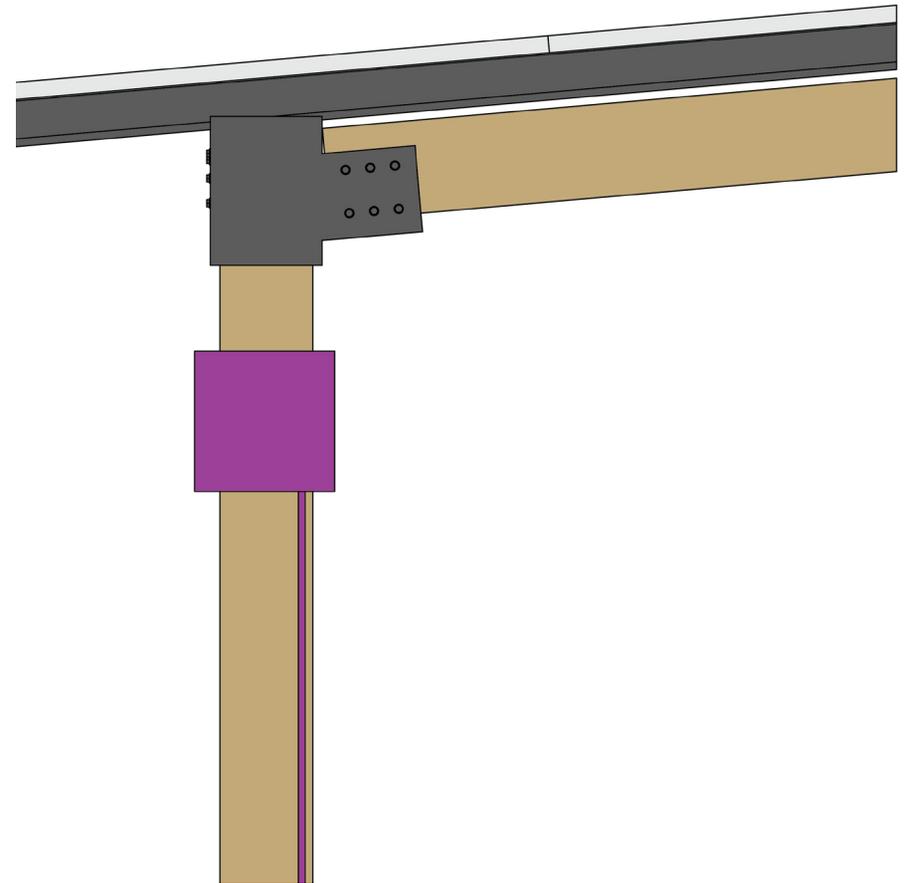
7

ELECTRICAL

7.1 MOUNTING.....	25
7.2 GROUNDING.....	26

7.1 MOUNTING

- 1.) Junction boxes can be mounted to any part of the canopy, this drawing illustrates a convenient place to mount a junction box.
- 2.) Conduit can be run flush with the outer member of the leg.

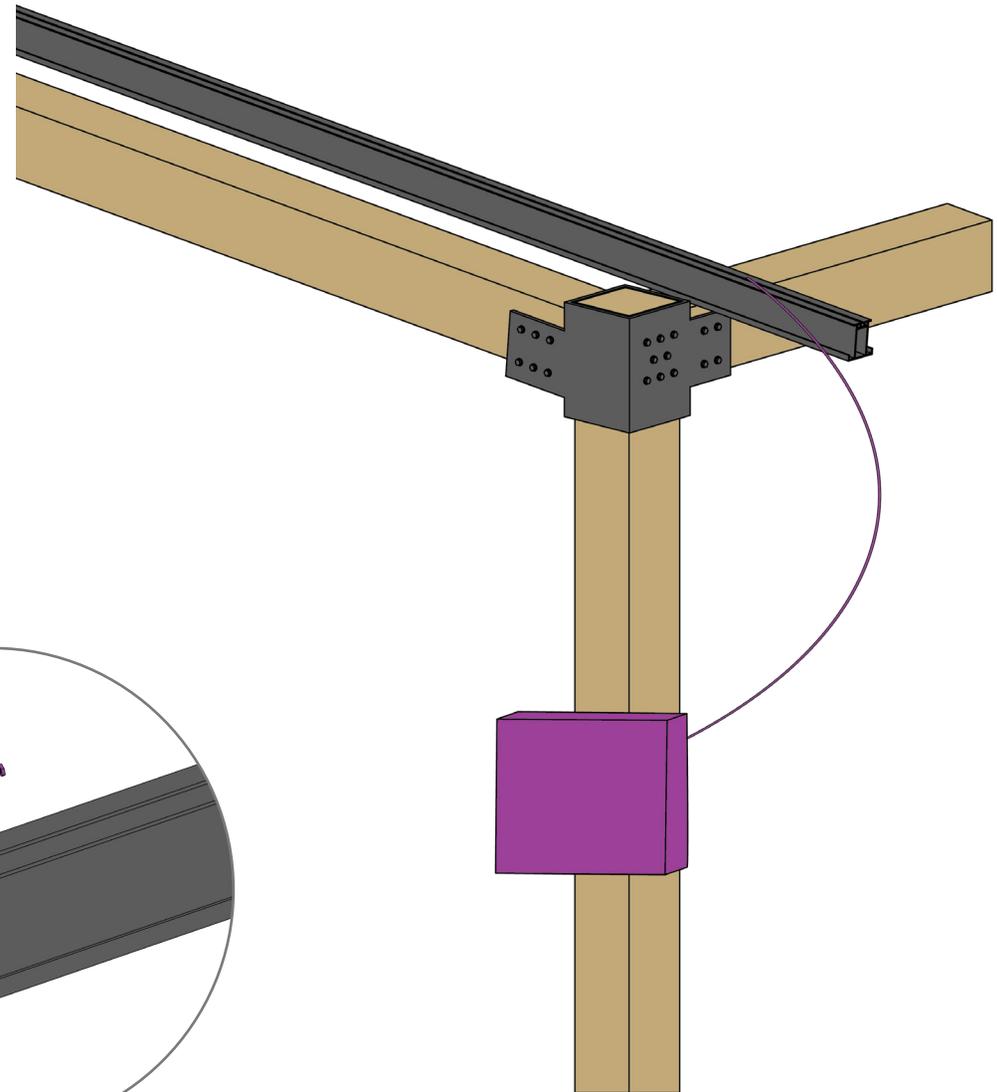
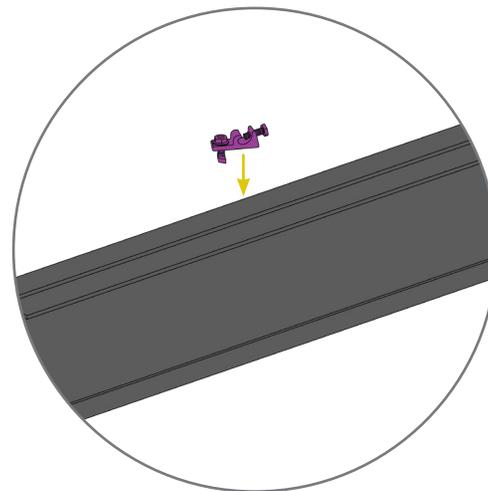


7.2 GROUNDING

1.) The BSCC A-Frame Canopy is UL certified to have one grounding connection from the rail to the junction box.

2.) Place IronRidge ground lug (GD-LUG-003) in rail nearest to junction box, fasten down using 7/16" wrench and run bare copper #6 to junction box.

TORQUE VALUE = 80PSI



8

WARRANTY

8.1 WARRANTY.....	28
-------------------	----



8.1 WARRANTY

To the extent that BSCC reasonably concludes (in accordance with the timeline and process set forth in Section 1.7) that any Products have been delivered to Customer with a bona-fide, material defect or non-conformity, then BSCC will repair or replace such Products, at its own expense.

BSCC additionally warrants that the Products shall be free from Structural Defects (as defined below) for a period of thirty (30) years from the date of delivery (the "Warranty Period").

For purposes of this Agreement, "Structural Defects" means a collapse, material cracking or clear failure of a structural component that is not caused by:

- (i) user error, negligence or misconduct by Customer, its end user customer or any other party which shall include but not be limited to any usage that does not conform to the requirements of the Documentation and/or any that is caused by the Customer's breach of any of its obligations hereunder,
- (ii) unsafe conditions or negligence of any materials or components supporting or otherwise touching the Products, (i.e., such as an end user's roof or panels),
- (iii) environmental conditions or load strain or usage of the Products in excess of the maximum amounts stated in the Documentation and/or (iv) standard "force majeure" events that are outside of BSCC's control (war, earthquake, hurricane...etc.)

BSCC's liability for defective Products is limited to replacement, repair or refund, at BSCC's option and shall be conditioned upon Customer's and its end user's (if applicable) complete cooperation with any reasonable investigation by BSCC of the circumstances surrounding the problem and its efforts to schedule replacement. In all cases, if a Product is deemed to be defective, any disposal of the defective Products will be Customer's sole responsibility. For clarity, BSCC shall have no liability to Customer for Structural Defects or other Product defects caused by Customer's or its end user's (or any other party that is not BSCC) negligence, storage, handling or use.



Designed in Brooklyn, New York

Brooklyn Solar Canopy Company

200 6th Street, Suite 3G
Brooklyn, NY 11215

www.brooklynSolarcanopy.com

Manufactured in Providence, Rhode Island