For the most up to date assembly manual, to register your set, or to order replacement parts please visit www.backyarddiscovery.com

SAVE THIS ASSEMBLY MANUAL FOR FUTURE REFERENCE IN THE EVENT THAT YOU NEED TO ORDER REPLACEMENT PARTS.
With Go Configure, we bring you 18 years of experience right to your doorstep. We service a wide array of indoor and outdoor recreation products that most consumers don’t have the time or ability to deliver & install themselves.

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*Installation services are only available to U.S. customers.*
STOP
MISSING A PART?
CALL US BEFORE GOING
BACK TO THE STORE

The store where you made your purchase does not stock parts for this item. If you have assembly questions or you are missing or have damaged parts, please call

1-800-856-4445

you can also visit www.backyarddiscovery.com or e-mail customerservice@backyarddiscovery.com

Please have the following information ready when you make your call:

• Model Number of the product located on the front of the assembly manual
• The item description and number from the parts list from the manual that was included in your box

• Read entire assembly manual, paying special attention to the important tips and safety information.
• To ensure there are no missing pieces do a complete inventory by first separating and identifying all parts.
• Make sure to check packing material for small parts that may have fallen out during shipment.
• Structures are not intended for public use. The Company does not warranty any of its residential structures subjected to commercial use.
• This manual contains helpful information concerning assembly preparation, installation procedure and required maintenance.
• Always keep safety in mind as your structure is being built.
• Keep these instructions for future reference.
Please read entire booklet completely before beginning the assembly process

Please retain these instructions and your receipt for future reference. Keep them in a safe place where you can refer to them as needed. In order to provide you with the most efficient service, it is required that you provide us with the part numbers when ordering parts.

For Your Records:
Please take time and fill out the information below. This information will be needed for warranty issues.

Where Purchased: ________________
Date of Purchase: ________________
Installation Date: ________________
Installed by: ____________________
Tracking Number: ________________

Tracking Number Reference Label
Tracking ID number on the carton and on the bottom of the vertical ID plate are included for tracking purposes associated with warranty claims.

This Limited Warranty by Backyard Discovery applies to products manufactured under the Backyard Discovery brand or its other brands including but not limited to Backyard Botanical, Adventure Playsets, and Leisure Time Products.

Backyard Discovery warrants that this product is free from defect in materials and workmanship for a period of one (1) year from the original date of purchase. This one (1) year warranty covers all parts including wood, hardware, and accessories. All wood carries a five (5) year pro-rated warranty against rot and decay. Refer to the schedule below for charges associated with replacement of parts under this Limited Warranty. In addition, Backyard Discovery will replace any parts within the first 30 days from date of purchase found to be missing from or damaged in the original packaging.

This warranty applies to the original owner and registrant and is non-transferable. Regular maintenance is required to assure maximum life and performance of this product. Failure by the owner to maintain the product according to the maintenance requirements may void this warranty. Maintenance guidelines are provided in the Owner’s Manual.

This Limited Warranty does not cover:

- Labor for any inspection
- Labor for replacement of any defective item(s)
- Incidental or consequential damages
- Cosmetic defects which do not affect performance or integrity of a part or the entire product
- Vandalism, improper use, failure due to loading or use beyond the capacities stated in the applicable Assembly Manual.
- Acts of nature including but not limited to wind, storms, hail, floods, excessive water exposure
- Improper installation including but not limited to installation on uneven, unlevel, or soft ground
- Minor twisting, warping, checking, or any other natural occurring properties of wood that do not affect performance or integrity

Backyard Discovery products have been designed for safety and quality. Any modifications made to the original product could damage the structural integrity of the unit leading to failure and possible injury. Modification voids any and all warranties and Backyard Discovery assumes no liability for any modified products or consequences resulting from failure of a modified product.

This product is warranted for RESIDENTIAL USE ONLY. Under no circumstance should a Backyard Discovery product be used in public settings. Such use may lead to product failure and potential injury. Any and all public use will void this warranty. Backyard Discovery disclaims all other representations and warranties of any kind, express or implied.
WARNING

IT IS IMPORTANT TO CHECK AND TIGHTEN ALL HARDWARE AT THE BEGINNING AND DURING THE SEASON AS THEY MAY LOOSE DUE TO WOOD EXPANSION AND CONTRACTION.

• DO NOT climb or walk on the roof for any reason
• Requires two or more people to assemble safely
• Check for underground utilities before digging or driving stakes into the ground.
• Check carefully for overhead lines and ensure there is at least 6ft (2m) clearance from any overhead electrical wires.
• Permanent structures may require a building permit. As the purchaser and or installer of this product you are advised to consult local planning, zoning and building inspection departments for guidance on applicable building codes and/or zoning requirements.
• Wood is NOT flame retardant and will burn. Grills, fire pits and chimineas are a fire hazard if place too close to your structure.
• Wear gloves to avoid injury during installation.
• During installation, follow all safety warnings provided with your tools and use safety glasses.
• Check all nuts and bolts twice monthly during the usage season and tighten as required.(But not so tight that you crack the wood) It is particularly important that this procedure be followed at the beginning of each season.
• Oil all metallic moving parts monthly during the usage period.
• Oil all metallic moving parts monthly during the usage period.
• Check all coverings for bolts and sharp edges twice monthly during usage season to be certain they are in place. Replace when necessary. It is especially important to do this at the beginning of each new season.
• For rusted areas on metallic members such as hinges, brackets, etc. sand and repaint, using a non lead-based paint meeting the requirements of Title 16 CRF Part 1303.
• Inspect wood parts monthly. The grain of the wood sometimes will lift in the dry season causing splinters to appear. Light sanding may be necessary to maintain a safe environment. Treating your Product with protection (sealant) after sanding will help prevent severe checking/splitting and other weather damage.
• We have applied a waterborne translucent stain to your unit. This is done for color only. Once or twice a year, depending on your climate conditions, you must apply some type of protection (sealant) to the wood of your unit. Prior to the application of sealant, lightly sand any “rough” spots on your set. Please note this is a requirement of your warranty.

OWNERS SHALL BE RESPONSIBLE FOR MAINTAINING THE LEGIBILITY OF THE WARNING LABELS
About Our Wood

Backyard Discovery uses 100% Cedar (C. Lanceolata) wood. Although we take great care in selecting the best quality lumber available, wood is still a product of nature and susceptible to weathering which can change the appearance of your set.

What causes weathering? Does it affect the strength of my product?

One of the main reasons for weathering is the effects of water (moisture); the moisture content of the wood at the surface is different than the interior of the wood. As the climate changes, moisture moves in or out of the wood, causing tension which can result in checking and or warping. You can expect the following due to weathering. These changes will not affect the strength of the product:

1. **Checking** is surface cracks in the wood along the grain. A post (4” x 4”) will experience more checking than a board (1” x 4”) because the surface and interior moisture content will vary more widely than in thinner wood.

2. **Warping** results from any distortion (twisting, cupping) from the original plane of the board and often happens from rapid wetting and drying of the wood.

3. **Fading** happens as a natural change in the wood color as it is exposed to sun-light and will turn grey over time.

How can I reduce the amount of weathering to wood product?

1. Your wood product is coated with a water-based stain. Sunlight will break down the coating, so we recommend applying a water repellent or stain on a yearly basis (see your local stain and paint supplier for a recommended product). You must apply some type of protection (sealant) to the wood of your product. **Please note this is a requirement of your warranty.** Most weathering is just the normal result of nature and will not affect safety. However if you are concerned that a part has experienced a severe weathering problem please call our customer service department for further assistance.

2. Inspect wood parts monthly. The grain of the wood sometimes will lift in the dry season causing splinters to appear. Light sanding may be necessary to maintain a safe environment. Treating your Product with protection (sealant) after sanding will help prevent severe checking/splitting and other weather damage.
**Protrusion Hazard**

**Incorrect**

If you see exposed threads and your bolt protrudes beyond the T-Nut you may have over tightened the bolt or used incorrect hardware. If you've overtightened, remove the bolt and add washers to eliminate the protrusion.

**Correct**

1/8”

---

**Proper Hardware Assembly**

**Bolt and T-Nut Assembly**

Tap T-nut into the provided hole. Insert your bolt through the lock washer and insert into the provided hole opposite from the T-Nut. Turn clockwise to thread into T-nut. Do not completely tighten until instructed.

---

**Bolt and Barrel Nut Assembly**

Insert barrel nut through the lock washer and press the pair through the provided hole. Insert your bolt through the second lock washer and insert the pair into the provided hole opposite from the barrel nut. Turn clockwise to thread into the barrel nut. Do not completely tighten until instructed.

---

**Lag Assembly**

Normally there will be a pre-drilled pilot hole on assemblies that require a Lag Screw. If there is no pilot hole, line up the two boards as they are to be attached and use the factory drilled hole as a guide to drill another pilot hole into the adjoining board. This will keep the wood from splitting. Only a lock washer is required for steps with Lag Screws.
ASSEMBLY TIP:
Keep an eye out for these boxes which will contain helpful pictures and information making the assembly process as quick and painless as possible.

Sorting Wood

When removing the wood from the boxes we recommend arranging them by part number before you begin assembly. This will allow for faster assembly and easily identify any parts that may be missing or damaged.

Sorting Hardware

To help with assembly we recommend sorting your hardware bags with the seven digit alpha-numeric number printed on the bags or by hardware type (i.e. bolts, nuts, etc.). Organizing your hardware will make assembly easier.

Hardware Identification

Hardware bags are printed with a seven digit alpha-numeric part number. During assembly you only need to reference the last three digits of the part number as noted in each step. This will make finding the correct hardware easier.
Icons and their uses you will see throughout this manual

- You will need to make sure that your assembly is square before tightening your bolts.
- For proper assembly you will need to ensure that your structure is level before proceeding to the next step.
- Some steps in the assembly process will require an extra set of hands. Make sure you have a helper available.
- This icon shows the size of an open ended wrench. Using the wrench as the fraction bar.
- When you see this icon you will need a socket wrench. The icons below show the size of attachments needed for assembly 1/2.
- This icon warns you to not over tighten your bolts. This is to prevent structural damage and also splintering your wood.
- This icon will show you what drill attachments are needed. For this example you will need a Phillips head attachment and 3/8 socket.
It is critically important that you start with square and level footings, concrete pad or deck to attach your structure

- Pay close attention to the items needed for each step. Make sure you are using the correct hardware for each step. Using incorrect hardware may result in improper assembly
- Remember to double check for underground utilities and overhead electrical lines

Post mounts are provided with your structure which allows you to permanently install your structure to a pre-existing or new wood or concrete surface.

- The hardware to attach the post mounts to the structure is included.
- The hardware to mount the structure permanently to a concrete surface is included.
- The hardware to mount the structure permanently to a wood deck is NOT included and will need to be purchased separately. **You must ensure there is ample structural support under the deck before permanently attaching.**

**Metal Roof Assembly**

Remove plastic covering from metal roof panels before installing each piece. Place roofing materials on a nonabrasive, flat surface before and after assembly as it could bend, dent or scratch
### Wood Components (Not to Scale)

<table>
<thead>
<tr>
<th>Component Description</th>
<th>Code</th>
<th>Dimensions</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHEATHING BOARD</td>
<td>E3</td>
<td>1 3/8&quot;x3 3/8&quot;x58 1/4&quot;</td>
<td>(x8)</td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>1 3/8&quot;x3 3/8&quot;x87 1/4&quot;</td>
<td>(x8)</td>
</tr>
<tr>
<td>RAFTER</td>
<td>H1</td>
<td>1&quot;x3 3/8&quot;x79 3/8&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>FASCIA</td>
<td>H2</td>
<td>1&quot;x3 3/8&quot;x85 3/8&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>FASCIA</td>
<td>H4</td>
<td>1&quot;x3 3/8&quot;x59 3/4&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>POST</td>
<td>P1</td>
<td>6&quot;x6&quot;x69 1/2&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>POST</td>
<td>P2</td>
<td>6&quot;x6&quot;x89 1/2&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>POST</td>
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<td>END RAFTER</td>
<td>RP1</td>
<td>2 13/16&quot;x5 1/4&quot;x80 5/8&quot;</td>
<td>(x2)</td>
</tr>
<tr>
<td>END RAFTER</td>
<td>RP2</td>
<td>2 13/16&quot;x5&quot;x80 5/8&quot;</td>
<td>(x2)</td>
</tr>
</tbody>
</table>
Owner's Manual

Parts Identification

Hardware Components

**H100829** | BOLT WH BLK (x4) 5/16x1 1/2

**H100765** | BOLT WH 5/16x8 BLK (x26)

**H100354** | BOLT WH 5/16x6 1/2 BLK (x18)

**H100194** | BOLT WH BLK (x18) 5/16x2 1/2

**H100205** | BOLT WH BLK (x26) 5/16x2 1/4

**H100407** | BOLT WH BLK (x14) 5/16x1 1/2

**H100459** | BOLT WH BLK (x16) 5/16x1 1/4

**H100468** | BOLT WH BLK (x16) 5/16x1

**H100193** | NUT BARREL WH BLK (x42) 5/16x1-1/2

**H100192** | NUT BARREL WH BLK (x95) 5/16x7/8

**H100379** | T-NUT BLK (x26) 5/16

**H100482** | LAG SCREW WH 5/16x3-1/2 BLK (x18)

**H100206** | LAG SCREW WH 5/16x3 BLK (x4)

**H100471** | LAG SCREW WH 5/16x3/2 BLK (x18)

**H100829** | NUT BARREL WH BLK (x4) 5/16x9 1/2

**H100829** | BOLT WH BLK 5/16x7/8 (x95)

**H100829** | BOLT WH BLK 5/16x1 1/2 (x14)

**H100829** | BOLT WH BLK 5/16x1 1/4 (x4)

**H100829** | BOLT WH BLK 5/16x1 (x45)

**H100829** | BOLT WH BLK 5/16x9/16 (x4)

**H100829** | BOLT WH BLK 5/16x5/8 (x4)

**H100829** | BOLT WH BLK 5/16x3/4 (x4)

**H100829** | BOLT WH BLK 5/16x1/2 (x4)

**H100829** | BOLT WH BLK 5/16x1/4 (x4)

**H100829** | BOLT WH BLK 5/16x1/8 (x4)

**H100829** | BOLT WH BLK 5/16x3/8 (x4)

**H100829** | BOLT WH BLK 5/16x5/16 (x4)

**H100829** | BOLT WH BLK 5/16x7/32 (x4)

**H100829** | BOLT WH BLK 5/16x1/32 (x4)
Owner's Manual

Parts Identification

Hardware Components

- **H100201** SCREW PFH BLK (x4) 8x2-1/2
- **H100391** SCREW PFH BLK (x92) 8x2
- **H100200** SCREW PFH BLK (x35) 8x1 1/2
- **H100536** SCREW PWH BLK (x44) 8x1 1/4
- **H100392** SCREW PWH BLK (x17) 8x3/4
- **H100120** CONCRETE ANCHOR 1/4”x2” (x18)
- **H100760** SCREW WOODGRIP (x133) 10x1 1/4
- **H100833** SCREW WOODGRIP (x22) 10x3/4
- **H100759** SCREW TAPPING (x19) 1/4x3/4
- **H100630** WASHER FLAT BLK (x17) 8x19
- **H100198** WASHER LOCK EXT BLK (x118) 8x19
- **H100199** WASHER LOCK EXT BLK (x114) 12x19
- **H100770** WASHER FLAT (x4) 5/16 BLK
- **H100479** NUT LOCK BLK (x4) 5/16
- **H100769** NUT LOCK BLK (x4) 5/16
- **A100042** TORX BIT T-40 (x2)
- **A100041** TORX WRENCH T-40 (x2)
- **H100764** SCREW SETTER (x1)
Accessory Components (Not to Scale)

- **BYD ID Tag (Small) Without Ages**
  - A100241 (x1)

- **"A" Revision Tag**
  - A100314 (x1)

- **L Bracket 66x66x127 - BLK**
  - A4M00619 (x4)

- **Roof Bracket**
  - A4M00961 (x8)

- **Bracket**
  - A4M00972 (x4)
  - A4M00973 (x2)
  - A4M00974 (x4)
  - A4M00979 (x4)
Accessory Components (Not to Scale)

- **POST PLATE**: A4M00978 (x8)
- **POST ANCHORING PLATE**: A4M00977 (x8)
- **6x6 POST FOOT**: A6P00308 (x4)
Accessory Components (Not to Scale)

- **A4M01125 (x8)** 29 GA STEEL SHEETING
- **A4M01115 (x2)** 12 FOOT RIDGE CAP 29 GA
- **A4M01114 (x4)** ROOF EDGE TRIM
- **A4M00983 (x2)** ROOF EDGE TRIM SPLICE
- **A6P00398 (x2)** RIDGE CAP PROTECTOR
- **A4M01127 (x1)** RIDGE CAP SPLICE
STEP 1

COMPLETE THIS STEP TWICE

TIP:
FOR EASE OF ASSEMBLY WE RECOMMEND USING SAW HORSES FOR STEPS 1 THROUGH 3.

P1 POST - W2A03018
(x4) 6"x6"x89 1/2" (152x152x2274)

P2 POST - W2A03019
(x4) 6"x6"x89 1/2" (152x152x2274)

A6P00308
(x4) 6x6 POST FOOT

H100200
(x16) SCREW PFH BLK
8x1 1/2

200 (x8)
SCREW - 1 1/2"

308 (x2)
6x6 POST FOOT

P1 (x1)
POST

P2 (x1)
POST
STEP 2

2"-2" [557 mm]

D2 | BEAM - W4L13606
(x8) 1 3/8"x5 1/4"x64 5/8" (36x134x1640)

P3 | POST - W2A03021
(x2) 6"x6"x33 1/4" (152x152x845)

NOTE:
PILOT HOLES FACE DOWN

COMPLETE THIS STEP TWICE

NOTE:
READ ALL THE NOTES BEFORE YOU BEGIN EACH STEP.

FACE HOLES INWARD ON EACH POST

2"-2" [557 mm] TYP

D2 (x1) POST
D2 (x1) BEAM
D2 (x1) BEAM
D2 (x1) BEAM

P3 (x1) POST

972 (x2) BRACKET
471 (x4) LAG SCREW - 1 1/2"

NOTE:
Pilot holes face down

193 (x12) NUT BARREL - 1 1/2"
974 (x2) BRACKET

198 (x4) WASHER - 8x19
765 (x12) BOLT - 8"

A4M00619 | L BRACKET 66x66x127 - BLK
(x4)

A4M00972 | BRACKET
(x4)

A4M00974 | BRACKET
(x4)

H100765 | BOLT WH BLK
(x24) 5/16x8

H100193 | NUT BARREL WH BLK
(x24) 5/16x1-1/2

H100471 | LAG SCREW WH BLK
(x8) 5/16x1 1/2

H100198 | WASHER LOCK EXT BLK
(x8) 8x19

STEP 2
READ ALL THE NOTES BEFORE YOU BEGIN EACH STEP.

NOTE:
Face holes inward on each post

2"-2" [557 mm] TYP

D2 (x1) POST
D2 (x1) BEAM
D2 (x1) BEAM
D2 (x1) BEAM

P3 (x1) POST

972 (x2) BRACKET
471 (x4) LAG SCREW - 1 1/2"

NOTE:
Pilot holes face down

193 (x12) NUT BARREL - 1 1/2"
974 (x2) BRACKET

198 (x4) WASHER - 8x19
765 (x12) BOLT - 8"

A4M00619 | L BRACKET 66x66x127 - BLK
(x4)

A4M00972 | BRACKET
(x4)

A4M00974 | BRACKET
(x4)

H100765 | BOLT WH BLK
(x24) 5/16x8

H100193 | NUT BARREL WH BLK
(x24) 5/16x1-1/2

H100471 | LAG SCREW WH BLK
(x8) 5/16x1 1/2

H100198 | WASHER LOCK EXT BLK
(x8) 8x19

19
**STEP 3**

- **D8** ANGLE BRACE - W4L13611
  - 1 3/8"x6 3/8"x36 7/8" (34x163x938)

**COMPLETE THIS STEP TWICE**

- **H100482** LAG SCREW WH BLK
  - 5/16x3 1/2 (x8)

- **H100205** BOLT WH BLK
  - 5/16x2-1/4 (x16)

- **H100199** WASHER LOCK EXT BLK
  - 12x19 (x16)

- **H100192** NUT BARREL WH BLK
  - 5/16x7/8 (x16)

- **H100198** WASHER LOCK EXT BLK
  - 8x19 (x24)

**Angle Brace Assembly**

- **D8** ANGLE BRACE (x2)
- **192** NUT BARREL - 7/8" (x8)
- **199** WASHER - 12x19 (x8)
- **198** WASHER - 8x19 (x8)
- **205** BOLT - 2 1/4" (x8)
- **482** LAG SCREW - 3 1/2" (x4)
- **198** WASHER - 8x19 (x4)
STEP 4

**BEAM ASSEMBLY**

- **D4 BEAM - W4L13660**
  - 1 3/8"x5 1/4"x67 1/4" (36x134x1707)
- **BOLT WH BLK**
  - 5/16x1 (x16)
- **NUT BARREL WH BLK**
  - 5/16x7/8 (x16)
- **WASHER**
  - 12x19 (x16)
  - 8x19 (x8)
  - 12x19 (x16)

**COMPLETE THIS STEP TWICE**

- **D4 BEAM**
- **BOLT WH - 1”**
- **WASHER - 8x19**
- **WASHER - 12x19**
- **NUT BARREL - 7/8”**

**COMPLETE THIS STEP TWICE**

- **BEAM ASSEMBLY**
- **WASHER - 12x19**
- **NUT BARREL - 7/8”**
- **BOLT WH - 1”**
**STEP 5**

D1 | BEAM - W4L13661  
(x2)  
1 3/8”x5 1/4”x89 1/2” (34x163x2274)

D3 | BEAM - W4L13596  
(x4)  
1 3/8”x6 1/4”x35 5/8” (34x163x904)

D7 | ANGLE BRACE - W4L13610  
(x4)  
1 3/8”x6 3/8”x36 7/8” (34x163x938)

A4M00979 | BRACKET  
(x4)

COMPLETE THIS STEP TWICE

199 (x8) | WASHER - 12x19

192 (x8) | NUT BARREL - 7/8"

198 (x8) | WASHER - 8x19

205 (x8) | BOLT - 2 1/4"

TIP: ALIGN HOLES IN PLATE WITH HOLES IN D3 BOARD AND MOUNT.

199 (x8) | WASHER - 12x19

193 (x8) | NUT BARREL - 1 1/2"

979 (x2) | BRACKET

354 (x8) | BOLT - 6 1/2"

482 (x2) | LAG SCREW - 3 1/2"

198 (x2) | WASHER - 8x19

BEAM ASSEMBLY (x1) ASSEMBLED ABOVE
**STEP 6**

**D7** ANGLE BRACE - W4L13610
1 3/8"x6 3/8"x36 7/8" (34x163x938)

**H100205** BOLT WH BLK
5/16x2-1/4
(x16)

**H100192** NUT BARREL WH BLK
5/16x7/8
(x16)

**H100482** LAG SCREW WH BLK
5/16x3 1/2
(x4)

**H100198** WASHER LOCK EXT BLK
8x19
(x20)

**H100199** WASHER LOCK EXT BLK
12x19
(x16)

**COMPLETE THIS STEP ON ALL 4 ANGLE BRACES AS SHOWN**
**STEP 7**

**COMPLETE THIS STEP ON BOTH SIDES**

**NOTE:**
Align pilot holes with post holes by temporarily installing the long 9-1/2" bolts H100829 before installing screws.

---

**RP1**
End Rafter - W2A03020
2 13/16"x5 1/4"x80 5/8" (72x134x2048)

**RP2**
End Rafter - W2A03022
2 13/16"x5 1/4"x80 5/8" (72x134x2048)

**D5**
Angle Brace - W4L13602
1 3/8"x5 1/4"x30 1/4" (36x134x769)

**A4M00973**
Bracket

---

**H100206**
Lag Screw WH 5/16x3 BLK
(x4)

**H100471**
Lag Screw WH BLK
5/16x1 1/2
(x12)

**H100199**
Washer Lock Ext BLK
12x19
(x4)

**H100194**
Bolt WH BLK
5/16x2 1/2
(x8)

**H100192**
Nut Barrel WH BLK
5/16x7/8
(x8)

**H100198**
Washer Lock Ext BLK
8x19
(x4)

**H100407**
Bolt WH BLK
5/16x1 1/2
(x8)

**H100201**
Screw PFH BLK
8x2-1/2
(x4)

**H100379**
T-Nut BLK
5/16
(x8)

**201**
Screw - 2 1/2"
(x2)

**192**
Nut Barrel - 7/8"
(x4)

**194**
Bolt - 2 1/2"
(x4)

**199**
Washer - 12x19
(x4)

**198**
Washer - 8x19
(x2)

**206**
Lag Screw - 3"
(x2)

**471**
Lag Screw - 1 1/2"
(x4)

**973**
Bracket
(x1)

**379**
Lag Screw - 1 1/2"
(x4)

**407**
Bolt - 1 1/2"
(x4)

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**RP1**
End Rafter - RP1

**RP2**
End Rafter - RP2

**D5**
Angle Brace - D5

**BRACKET ASSEMBLY**

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**END RAFTER - W2A03020**
2 13/16"x5 1/4"x80 5/8" (72x134x2048)

**END RAFTER - W2A03022**
2 13/16"x5 1/4"x80 5/8" (72x134x2048)

**ANGLE BRACE - W4L13602**
1 3/8"x5 1/4"x30 1/4" (36x134x769)

**A4M00973**
Bracket
STEP 8

COMPLETE THIS STEP TWICE

RAFTER - W4L13604
1 3/8"x3 3/8"x77 3/8" (36x86x1965)
(x4)

RAFTER - W4L13666
1"x3 3/8"x79 3/8" (24x86x2016)
(x2)

RAFTER - W4L13667
1 3/8"x3 3/8"x11 11/16" (36x86x1364)
(x2)

RAFTER - W4L13603
1 3/8"x3 3/8"x77 3/8" (36x86x1965)
(x6)

FASCIA - W4L13663
1"x3 3/8"x85 3/8" (24x86x2170)
(x2)

FASCIA - W4L13668
1"x3 3/8"x59 3/4" (24x86x1518)
(x3)

FASCIA - W4L13669
1"x3 3/8"x85 3/8" (24x86x2170)
(x2)

FASCIA - W4L13668
1"x3 3/8"x59 3/4" (24x86x1518)
(x3)

RAFTER - W4L13666
1"x3 3/8"x79 3/8" (24x86x2016)
(x2)

NOTE JOINT

OUTSIDE RAFTER - W4L13604
1 3/8"x3 3/8"x77 3/8" (36x86x1965)
(x4)

OUTSIDE RAFTER - W4L13666
1"x3 3/8"x79 3/8" (24x86x2016)
(x2)

OUTSIDE RAFTER - W4L13667
1 3/8"x3 3/8"x11 11/16" (36x86x1364)
(x2)

OUTSIDE RAFTER - W4L13603
1 3/8"x3 3/8"x77 3/8" (36x86x1965)
(x6)

OUTSIDE RAFTER - W4L13666
1"x3 3/8"x79 3/8" (24x86x2016)
(x2)

OUTSIDE RAFTER - W4L13667
1 3/8"x3 3/8"x11 11/16" (36x86x1364)
(x2)

ALIGN PILOT HOLES
ON BOTH ENDS.

Screw - 2"
391 (x6)

Screw - 1 1/2"
200 (x6)

Screw PFH BLK
8x1 1/2
H100200
(x12)

Screw PFH BLK
8x2
H100391
(x36)
STEP 9

**COMPLETE THIS STEP TWICE**

**SHEATHING BOARD - W4L13662**
- (x8) 1 3/8"x3 3/8"x87 1/4" (36x86x2217)

**SHEATHING BOARD - W4L13659**
- (x8) 1 3/8"x3 3/8"x58 1/4" (36x86x1478)

**SCREW PFH BLK**
- (x48) 8x2

**WASHER LOCK EXT BLK**
- (x16) 8x19

**SCREW - 2"**
- (x24) 391

**T-NUT - 5/16"**
- (x16) 379

**BOLT - 1 1/4"**
- (x16) 459

**WASHER - 8x19**
- (x8) 198

**H100198**
- (x16) WASHER LOCK EXT BLK

**H100391**
- (x48) SCREW PFH BLK

**H100379**
- (x16) T-NUT BLK

**H100459**
- (x16) BOLT WH BLK

**NOTE:**
Square each roof panel. Measure from corner to corner as shown and ensure the measurement is the same in each direction. Then install the E3 & E4 boards as shown.
NOTE:
USE THIS PAGE TO FAMILIARIZE YOURSELF WITH THE ROOF PANEL & ASSIST YOU IN THE COMING STEPS.

WARNING:
GLOVES SHOULD BE WORN WHEN HANDLING ROOF PANELS; EDGES ARE SHARP.

• Note the pre-drilled holes on the top end of each sheet shown below. These holes will always go towards the ridge of the roof and will be used to install the ridge cap in a later step. Assemble each roof panel by starting on the right side and working toward the left as shown.

POSITION YOUR ROOF PANELS ON THE GROUND SO THEY MIRROR EACH OTHER AS SHOWN.
REMOVE PROTECTIVE BLUE FILM FROM PANELS.

TOP VIEW

NOTE HOLE LOCATIONS
GO TOWARDS THE PEAK
OF THE ROOF.
STEP 11

NOTE: MAKE SURE YOUR ROOF PANEL IS SQUARE BEFORE MOVING ON.

NOTE THE TWO RIDGE CAP HOLES IN EACH SHEET & THEIR ORIENTATION.

HOLD SHEETING INSIDE OF FRAME

1/8 in [3 mm]

5/16 in [8 mm]

A4M01125 (x2) 29 GA STEEL SHEETING

H100760 (x8) 10-16x1-1/4 WOODGRIP SCREW

760 (x8) SCREW - 1 1/4”

NOTE THRU HOLES
NOTE RIB OVERLAP

29 GA STEEL SHEETING

(29 ga steel sheeting x2)

A4M01125

SHEATHING BOARDS

FLUSH SHEETING
STEP 12

10-16x1-1/4 WOODGRIP SCREW

H100760 (x24)

760 (x24)
SCREW - 1 1/4"

SHEATHING BOARDS
STEP 13

H100760 (x32) 10-16x1-1/4 WOODGRIP SCREW

A4M01125 (x2) 29 GA STEEL SHEETING

NOTE HOLE LOCATIONS

NOTE RIB OVERLAP

1/8 in [3 mm] HOLD SHEETING TO INSIDE OF FRAME.

760 (x32) SCREW - 1 1/4"

125 (x2) 29 GA STEEL SHEETING

FLUSH SHEETING
STEP 14

NOTE: MAKE SURE YOUR ROOF PANEL IS SQUARE BEFORE MOVING ON.

NOTE THE TWO RIDGE CAP HOLES IN EACH SHEET & THEIR ORIENTATION.

HOLD SHEETING TO INSIDE OF FRAME.

1/8 in [3 mm]

5/16 in [8 mm]
STEP 15

H100760
(x24)
10-16x1-1/4 WOODGRIP SCREW

760 (x24)
SCREW - 1 1/4”
STEP 16

H100760 (x32) 10-16x1-1/4 WOODGRIP SCREW

A4M01125 (x2) 29 GA STEEL SHEETING

1/8 in [3 mm] HOLD SHEETING TO INSIDE OF FRAME.

760 (x32) SCREW - 1 1/4"

125 (x2) 29 GA STEEL SHEETING

FLUSH SHEETING

NOTE HOLE LOCATIONS

NOTE RIB OVERLAP
**TIP:**
DUE TO MULTIPLE LAYERS OF METAL ON THE EDGE TRIM, IT IS RECOMMENDED THAT A 1/8" DRILL BIT IS USED TO CREATE STARTER HOLES.

**NOTE:**
SCREWS GO THROUGH EDGE TRIM AND INTO THE TOP OF THE RIBS IN THE APPROXIMATE LOCATIONS SHOWN.

**NOTE:**
SLIDE EDGE TRIM INTO SPLICE. ENSURE THAT BOTH ENDS ARE FLUSH WITH EDGE OF ROOF PANELS.
WITH AT LEAST TWO PEOPLE LIFT ASSEMBLED ROOF PANEL AND SLIDE IT INTO THE TRACKS ON THE RAFTERS. ONCE IN PLACE, INSTALL ATTACHMENT HARDWARE.

NOTE:

ASSEMBLY TIP:
A THIRD PERSON IS HELPFUL TO ATTACH ROOF ONCE IT IS IN PLACE.

TWO PERSON LIFT
STEP 19

**NOTE:**
WITH AT LEAST TWO PEOPLE LIFT ASSEMBLED ROOF PANEL AND SLIDE IT INTO THE TRACKS ON THE RAFTERS. ONCE IN PLACE, ASSEMBLE THE TWO ROOF PANELS TOGETHER WITH THE ATTACHMENT HARDWARE AS SHOWN.

**TIP:**
A THIRD PERSON IS HELPFUL TO ATTACH ROOF ONCE IT IS IN PLACE.

WITH SLIDE ROOF PANEL UPWARD. THEN INSTALL HARDWARE.

- **BOLT WH BLK** 5/16x1 1/2 (x5)
- **WASHER LOCK EXT BLK** 8x19 (x5)
- **SCREW FWH BLK** 2" (x2)
- **NUT BARREL WH BLK** 5/16x7/8 (x5)
- **WASHER LOCK EXT BLK** 12x19 (x5)
- **WASHER - 8x19** (x5)
- **BOLT - 1 1/2"** (x5)
- **WASHER - 12x19** (x5)
- **SCREW - 2"** (x2)
STEP 20

COMPLETE THIS STEP TWICE

- BOLT WH BLK 5/16x9 1/2 (x2)
- WASHER FLAT 5/16 BLK (x2)
- NUT LOCK BLK 5/16 (x2)
- BOLT - 9 1/2"
- WASHER - 5/16"
- NUT - 5/16"
COMPLETED BOTH ENDS

- **D6** ANGLE BRACE - W4L13607 (4) 1 3/8” x 5 1/4” x 32 3/8” (36 x 134 x 823)
- **H100194** BOLT WH BLK 5/16 x 2 1/2 (x8)
- **H100205** BOLT WH BLK 5/16 x 2-1/4 (x8)
- **H100192** NUT BARREL WH BLK 5/16 x 7/8 (x16)

- **BOLT - 2 1/4”** (x4)
- **WASHER - 8x19** (x8)
- **WASHER LOCK EXT BLK - 12x19** (x16)

- **BOLT - 2 1/2”** (x4)
- **WASHER - 12x19** (x8)
- **NUT BARREL - 7/8”** (x16)

**NOTE:** Complete both ends of the structure as shown in the diagram.
STEP 22

CENTER ROOF BRACKETS ON EACH RAFTER AND ATTACH.

NOTE:

ROOF BRACKET (x8)

A4M00961

SCREW PWH BLK (x40)
H100536 8x1 1/4

536 (x40) SCREW - 1/4"

961 (x8) ROOF BRACKET
RIDGE CAP ASSEMBLY PREPARATION

NOTE:
INSTALL THE PROVIDED RIDGE CAP SPLICE BY SLIDING EACH RIDGE CAP INTO THE SPLICE AS SHOWN UNTIL CENTERED.
STEP 24

**NOTE:**

- **J61** (x2) RIDGE CAP STIFFENER - W4L13161
  1"x2 3/8"x62 1/2" (24x60x1546)

- **J60** (x2) RIDGE CAP STIFFENER - W4L13160
  1"x2 3/8"x60 7/8" (24x60x1546)

- **A6P00398** (x2) RIDGE CAP PROTECTOR

- **H100833** (x20) SCREW WOODGRIP
  10x3/4

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**NOTE:**

- ASSEMBLE BY ALIGNING THE HOLES ON EACH RIDGE CAP TO THE HOLES IN THE RIDGE CAP SPlice TO ENSURE THAT THE OVERALL LENGTH IS 143 9/16" MAX.

**NOTE:**

- REMOVE SPACERS AS SHOWN BEFORE INSTALLING.

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**BOTTOM VIEW**

**NOTE:**

- **J60** (x1) RIDGE CAP STIFFENER
- **J61** (x1) RIDGE CAP STIFFENER
- **J61** (x1) RIDGE CAP STIFFENER
- **398** (x1) RIDGE CAP PROTECTOR

**TOP ISO VIEW**

**NOTE:**

- **398** (x1) RIDGE CAP PROTECTOR
- **833** (x20) SCREW - 3/4"

**TOP VIEW**

**NOTE:**

- **J60** (x1) RIDGE CAP STIFFENER
- **J61** (x1) RIDGE CAP STIFFENER

**BOTTOM VIEW**

**NOTE:**

- **J60** (x1) RIDGE CAP STIFFENER
- **J61** (x1) RIDGE CAP STIFFENER
- **398** (x1) RIDGE CAP PROTECTOR

**TOP ISO VIEW**

**NOTE:**

- **398** (x1) RIDGE CAP PROTECTOR
- **833** (x20) SCREW - 3/4"

**BOTTOM VIEW**

**NOTE:**

- **J60** (x1) RIDGE CAP STIFFENER
- **J61** (x1) RIDGE CAP STIFFENER
- **398** (x1) RIDGE CAP PROTECTOR

**TOP ISO VIEW**

**NOTE:**

- **398** (x1) RIDGE CAP PROTECTOR
- **833** (x20) SCREW - 3/4"
NOTE: RIDGE CAP ASSEMBLY HAS BEEN DESIGNED FOR SAFE INSTALLATION FROM A LADDER AND NO ROOF ACCESS IS REQUIRED NOR RECOMMENDED.

NOTE: USING AN ADULT HELPER, SLIDE RIDGE CAP ASSEMBLY CAREFULLY ACROSS THE ROOF RIDGE UNTIL BOTH ENDS SIT INSIDE RAFTERS AS SHOWN.

TIP: FOR PROPER INSTALLATION, USE AN ADULT HELPER TO KEEP DOWNWARD PRESSURE ON THE RIDGE CAP DURING SCREW INSTALLATION.

NOTE: USE PILOT HOLES TO ATTACH ROOF PANEL.

NOTE ALL SCREWS LAND IN STIFFERNER BOARDS.
STEP 26

A4M00977 (x8) POST ANCHORING PLATE

A4M00978 (x8) POST PLATE

H100471 (x32) LAG SCREW WH BLK 5/16x1 1/2

LAG SCREW - 1 1/2"

POST ANCHORING PLATE

POST PLATE
MANUFACTURER RECOMMENDS INSTALLATION ON CONCRETE SURFACE OR CONCRETE POST PADS. SEE BELOW.

FOR INSTALLATION ON WOOD DECK, YOU MUST ENSURE THERE IS AMPLE STRUCTURAL SUPPORT UNDER DECK.

NOTE:

PRE-DRILL HOLES FOR CONCRETE ANCHORS USING A 3/16” CONCRETE DRILL BIT.