GET STARTED

1. START DESIGN ASSISTANT

Go to the IronRidge home page at ironridge.com, then hover over the "Pitched Roofs" menu at the top and click the blue "Design Assistant" button.

2. SIGN UP FOR AN ACCOUNT

If you don't have an account, click the blue sign up link at the bottom of the page. If you already have an account click the sign in link.

* Having a Design Assistant account allows you to save all of your quoted projects in one location, share projects with other Design Assistant users, and receive important updates.

3. FILL OUT AND SUBMIT FORM

Fill out the web form as required, agree to the IronRidge terms of service, and then click the "submit" button. You will then be logged into the Pitched Roof Design Assistant.

4. CONFIRM YOUR ACCOUNT

Click the "confirm my account" link in your confirmation email. You will be automatically signed in. Now you're ready to create a new project.
A NAVIGATION
Click the "Site", "Design", and "Quote" tabs to jump to the corresponding sections of your project.

B PROJECT INFO
Name your project, to identify it from other projects you make later. Then, enter the project zip code. Typical wind and snow values will be loaded for the zip code entered.

C WIND SPEED
The typical wind speed for your zip code is automatically loaded, but please verify with the local building authority.

D GROUND SNOW LOAD
The typical ground snow load for your zip code is automatically loaded, but please verify with the local building authority.

E ROOF SLOPE
Select the roof slope (degrees).

F BUILDING HEIGHT
Select the height of the building.

G WIND EXPOSURE
Select wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.

H RISK CATEGORY
Select risk category I or II.

I MODULE MAKE & MODEL
Select the module manufacturer and model. Confirm that the module dimensions listed are accurate.

uspended wind exposure category B, C or D.
**A. PROJECT OVERVIEW**

The cost, watts, cost per watt, and number of modules, attachments, and splices update as changes are made.

**B. ARRAY ENTRY**

Click the “Array” icon and hover over the number of modules (columns) and rows. Click on the selection to confirm the array. Repeat to add additional subarrays.

*If you prefer not to use the visual grid, click the “Array” icon and select “Enter Manually.”*

**C. ARRAY ORIENTATION**

Select an array and click the “Orient” icon to change the module orientation between Portrait and Landscape.

*If you select landscape orientation for the array, make sure that installation method does not void the modules’ warranty.*

**D. DELETE ARRAY**

Click on the subarray you want to delete and click the “Delete” icon to remove it from the design.

**E. ARRAY DIMENSIONS**

Toggle dimensions for array perimeters on and off.

**F. MOVE & REMOVE MODULES**

Click and hold an array to drag it into a desired position. Click on specific modules in an array to remove them.

**G. VIEWPORT**

Drag the viewport to different parts of the array canvas to look at specific arrays.

**H. ZOOM LEVELS**

Zoom out to see multiple arrays or the entire project at once. Zoom in to get a closer look at specific arrays.

**I. FULLSCREEN**

Useful for large projects. Hit escape or click again to exit.

**J. BIRD’S EYE VIEW**

Zooms out to show the entire array canvas.

**K. ARRAY SHELF**

Shows all arrays created in design. Click on a specific array to center it on the screen.
**L ATTACHMENTS**

Select the roof attachment you plan on using.

FlashFoot is IronRidge's all-in-one composition shingle attachment. Visit the Pitched Roof resources page for info on compatible third-party attachments for other roof types.

**M ATTACHMENT SPAN**

Enter the attachment span.

Larger attachment spans reduce attachments and roof penetrations, but may require larger rail sizes and will increase the loads per attachment point.

**N ORIENTATION TOGGLE**

Toggle between portrait and landscape array data.

**O RAIL SELECTOR**

Select your rail.

**P DOWN (COMPRESSIVE) LOAD**

The maximum downforce per attachment (perpendicular to roof) due to system weight and snow and wind loads.

**Q UPLIFT**

The maximum uplift at each attachment (perpendicular to the roof) due to wind load.

**R LATERAL LOAD**

The average lateral force at each attachment (parallel to the roof) due to the snow load and system weight.
**MAX SPAN**
The rail’s maximum allowed span between attachments.

**MAX CANTILEVER**
The maximum length of rail past the last attachment.

**WEIGHT**
The specific weights of the system, including modules.

**REQUIRED RAIL**
Required rail is the exact length of rail required to fully support the number of modules in each row of the subarray.

**PROVIDED RAIL**
The optimal amount of rail needed for each row, based on minimizing rail scrap.

**ATTACHMENTS**
The number of attachments required for the array.

**RAIL LENGTHS**
Select rail length. XR rails come in stock lengths of 11’, 14’ and 17’, but custom lengths can be selected as well.

⚠️ If custom lengths are chosen, be sure to check with your distributor for availability and shipping times.
### Bill of Materials

<table>
<thead>
<tr>
<th>GROUP</th>
<th>COLOR</th>
<th>PART</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>PRICE/EA</th>
<th>TOTAL PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTACHMENTS</td>
<td></td>
<td>FM-FF1-002</td>
<td>Kit, 6pcs, FlashFoot, Mill</td>
<td>10</td>
<td>+</td>
<td>$1,320.00</td>
</tr>
<tr>
<td>CLAMPS &amp; GROUNDING</td>
<td></td>
<td>UFO-CL-001</td>
<td>Kit, 4pcs, Universal Module Clamp</td>
<td>26</td>
<td>+</td>
<td>$364.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GD-LUG-003</td>
<td>Kit, 2pcs, Grounding Lug, Low Profile</td>
<td>3</td>
<td>+</td>
<td>$42.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UFO-STP-40MM</td>
<td>Kit, 4pcs, Stopper Sleeve, 40MM, Clear</td>
<td>5</td>
<td>+</td>
<td>$10.00</td>
</tr>
<tr>
<td>RAILS &amp; SPLICES</td>
<td></td>
<td>XR-100-132A</td>
<td>XR100, Rail 132&quot; (11 Feet) Clear</td>
<td>2</td>
<td>+</td>
<td>$104.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XR-100-168A</td>
<td>XR100, Rail 168&quot; (14 Feet) Clear</td>
<td>22</td>
<td>+</td>
<td>$1,461.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XR-100-SPLC-BD</td>
<td>Kit, XR100 Bonded Splice</td>
<td>14</td>
<td>+</td>
<td>$112.00</td>
</tr>
</tbody>
</table>

**DISCOUNT LEVEL**

Enter a distributor's discount, if given, to update pricing.

**DOWNLOAD CSV**

Download the complete Bill of Materials spreadsheet.

**REQUEST QUOTE**

Send the project to a local distributor for a final quote.

---

**SAVE & CLOSE**

Exit the current project to view all past projects. The current project will automatically be saved to edit later.

**ACCESSORIES**

Add accessories. Click icon next to part to learn more.

**QUANTITY**

Use the plus and minus buttons to modify quantities.

**PRODUCT IMAGE**

Click to view an image of the selected product.

**COLOR SELECTOR**

Component colors are preset to match module color. Use the color selector to change finishes as desired.

* XR1000 is only available in clear finish.
**DOCUMENTS**

Relevant documents are provided, based on inputs. Download those you want or a ZIP file of all of them.

**SHARE PROJECT**

Share your project with another Design Assistant user by entering their email. They can then edit the project also.