

How to Install Water-Speed Controllers

Important: Make sure ALL high-flow areas pass the garden hose test! Remove the nozzle from your garden hose, position it over the high flow area, and run it full strength. (At extremely large high-flow areas use bucket of water instead of garden hose.) Your goal: no overflows or leaks. Adjust as necessary; don't move on until it passes the test.

Keep in mind:

1. IG2™ can handle very heavy downpours, even at large roof valleys, as long as you slow down that running water.
2. Make sure you install IG2™ High-Flow-Area Mesh under high-flow areas.
3. While testing any given area, **allow the water to run for at least 30 seconds. That's how long IG2™ Micro Mesh needs to reach its full filtration ability.**

If necessary, you can install Water-Speed Controllers at the bottom of your high-flow areas. You can make these yourself out of rigid metal, matching the material and color to your roofing surface.

- For asphalt shingles, use .032 gauge gutter coil. Choose a color that matches your shingles.
- For copper valleys, use copper sheet.

A. Water-Speed Controllers on asphalt shingle roof without metal valley

These can be used with IG and IG2™.

Use "wet or dry" type roofing tar to attach Water-Speed Controllers. **Do not** use screws or nails!



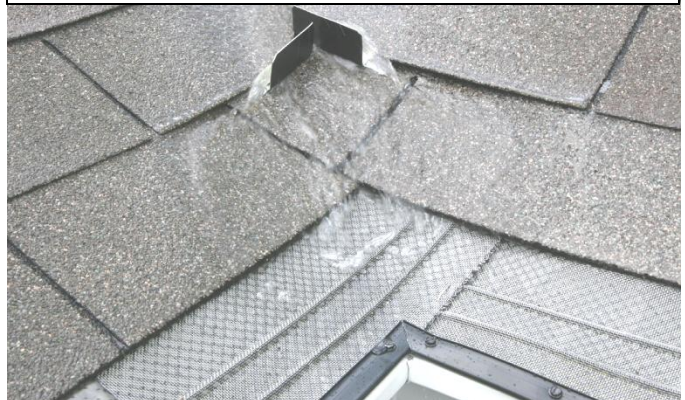
Water-Speed Controllers installed on asphalt shingle valley



Water-Speed Controllers installed on straight part of asphalt shingle roof

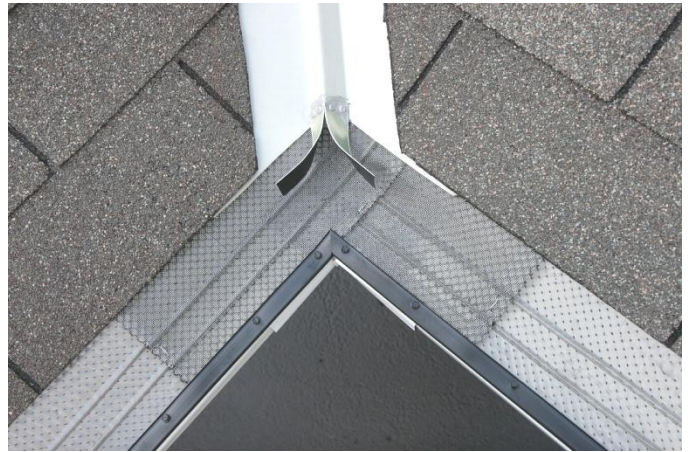


Testing IG2™ at inside gutter corner under roof valley with Water-Speed Controllers



B. Water-Speed Controllers on "W" style metal valley

These can be used with IG and IG2™. They are essentially two metal strips that you rivet to the end of the roof valley to disperse the running water over a larger area.



- Make your Water-Speed Controllers out of a rigid metal sheet, such as .032 gauge aluminum. (If you're installing them on a copper valley, use copper sheet.)
- Use gutter sealant to seal all rivets and connecting points between the Water-Speed Controllers and the metal valley.



- Adjust and re-form the metal strips as needed to spread the water over the largest possible area of IG or IG2™, eliminating overflows and leaks.

Important: Make sure ALL high-flow areas pass your water test! For more information on testing, refer back to **Page 1.**

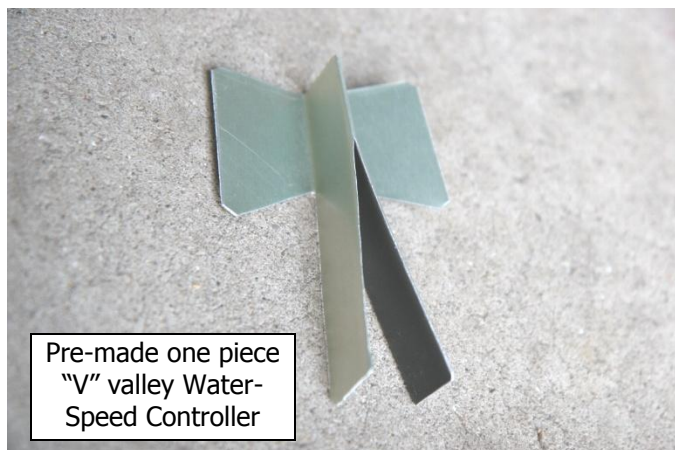
C. Water-Speed Controllers on "V" style metal valley

These can be used with IG and IG2™.

Make your Water-Speed Controllers out of a rigid metal sheet. We used .032 gauge aluminum here, or copper sheet for copper valleys. These work very well; the challenge is attaching the Water-Speed Controllers without punching holes in the metal valley. "V" valleys lay directly over their underlayment (i.e., Ice Shield® or felt), which can be damaged by penetrating fasteners.

We suggest using a good metal-to-metal adhesive. It may require time to bond, so plan accordingly. Install the Water-Speed Controllers, then IG or IG2™. Once the adhesive has set, use gutter sealant to seal all connecting points between the Water-Speed Controllers and the metal valley.

Then, adjust and re-form the metal strips as needed to spread the water over the largest possible area of IG or IG2™, eliminating overflows and leaks.



Important: Make sure ALL high-flow areas pass your water test! For more information on testing, refer back to **Page 1**.

D. Alternative Method (for IG only): Metal L-Pieces Inserted in the U-Channel

You may use this method when installing IG only; **this is not for IG2™.**

- Keep the total height of the raised edge as low as you can, since by increasing its height you create a chance to collect dirt behind it. In most cases increasing U-Channel edge height from its original 1/8" to 1/4" or to 3/8" does the trick.



- Make the L-pieces out of thin, .019 gauge, black-painted aluminum



- After you've completed an area, submit it to the garden hose test described on page 1.

For more information visit www.InvisiGuard.net

(IG & IG2™ are protected by U.S. Patents: 7,056,433 and 7,198,714 and Patents Pending.)