

## GRK Installation Technical Bulletin

### Attaching metal to wood with GRK:

#### R4:

- The metal should be predrilled with a size larger than the diameter of the R4 screw. Suggested hole size is 1/16" larger than the outside thread diameter.
- To mate the countersinking head of the GRK R4 to the steel, prepare a hole at the standard 82° angle of the GRK R4 head shape.
- Minimize fastener to metal contact to avoid wearing down the GRK coating during install.
- Note: Review the corrosion compatibility of GRK fastener's case-hardened steel with the base metal.

#### RSS:

- The metal should be predrilled with a size larger than the diameter of the RSS screw. Suggested hole size is 1/16" larger than the outside thread diameter.
- A Teflon/Nylon type washer is suggested for install under the RSS washer head to prevent contact of the under-head cutting ribs with the metal fixture material. Ensure the washer gives into the installation torque.
- Do not countersink the RSS washer head, doing so results in reduction of the connection capacity.
- Minimize fastener to metal contact to avoid wearing down the GRK coating during install.
- Note: Review the corrosion compatibility of GRK fastener's case-hardened steel with the base metal.

### Installation troubleshooting of hardwood:

- GRK RSS does not require predrilling of the wood. However, if the fastener is not fully driving in very hard/dense wood such as mahogany or if there is excess torque causing the wood to split or causing the recess to strip. We suggest trying to predrill a pilot hole to facilitate installation in these cases. Pilot hole instructions below.
  - If predrilling a pilot hole: For screws which will be loaded in tension, a pilot hole with a diameter of approximately 70% of the minor diameter of the screw may be drilled in the side member and in the main member to a depth of 50% of the thread length of the screw.
  - For screws which will be laterally loaded, a pilot hole with a diameter of approximately 90% of the minor diameter of the screw may be drilled in the side member and a pilot hole with a diameter of approximately 70% of the minor diameter of the screw may be drilled in the main member to a depth of 70% of the thread length of the screw.