



INSTALLATION INSTRUCTIONS

MHK-RA ANGLE RAIL MOUNTING BRACKET KIT

PRODUCT	APPLICATION	BRACKET TYPE	REVISION
MHK-RA	Angle / Angular Rail Mounting	Bolt-On / Weld-Free	Rev. 01

1. PRODUCT APPLICATION

The MHK-RA is a bolt-on, weld-free angle rail mounting bracket kit intended to provide a secure mounting interface for compatible poles, lighting equipment, instruments, and other approved equipment on angular / angle-iron industrial rails. The bracket family is documented for handrail, stair and walkway rail applications.

2. SAFETY & PRE-INSTALLATION REQUIREMENTS

- Read all instructions and applicable project requirements before installation.
- Verify that the rail, mounting location, bracket, fasteners, and supported equipment are suitable for the intended load and environment.
- Do not modify, drill, weld, cut, or otherwise alter the bracket or supplied hardware unless specifically approved by the project engineer/manufacturer.
- For electrical installations, de-energize circuits before installation and follow all applicable electrical codes.
- Use appropriate fall protection and job-site safety procedures when working on elevated walkways, stairs, platforms, or handrails.
- Use two qualified installers when positioning or securing heavy equipment or pole assemblies.

3. KIT COMPONENTS

COMPONENT	DESCRIPTION
Mounting Brackets	Bracket plates used to secure the supported assembly to the angle rail.
Angle-Rail Fasteners	Fasteners supplied for attachment through the applicable angle-iron rail; verify supplied size and configuration before installation.
Flat Washers	Installed under applicable nuts/bolt heads as supplied.
Split Lock Washers	Installed as supplied with the kit where specified.
Hex Nuts	Used to secure the mounting hardware to the bracket/rail assembly.

4. INSTALLATION PROCEDURE

- 1. Inspect components** — Confirm that all brackets and hardware are present, undamaged, and appropriate for the intended angle rail. Do not install damaged or deformed components.
- 2. Verify mounting location** — Select a structurally suitable section of angular / angle-iron rail. Confirm the rail can support the bracketed equipment and any applicable wind, vibration, impact, or service loads.
- 3. Position the brackets** — Place the mounting brackets against the angle rail at the required spacing and orientation for the equipment or pole being mounted. Keep the brackets aligned with one another.
- 4. Install the angle-rail fasteners** — Position the supplied angle-rail fasteners through the applicable bracket and angle-iron rail holes. Install flat washers, split washers, and hex nuts in the supplied sequence.
- 5. Hand-tighten hardware** — Thread all nuts by hand and bring the assembly into contact with the rail. Do not fully tighten one side while leaving the opposite side loose.
- 6. Align the supported equipment** — Position the pole, stanchion, or compatible equipment between/against the mounting brackets as required by the product assembly drawing. Verify vertical alignment and orientation before final tightening.
- 7. Tighten evenly** — Tighten the mounting hardware gradually and alternately so the brackets seat evenly against the angle rail. Maintain alignment during tightening.
- 8. Final inspection** — Verify that all nuts are fully seated, the brackets are stable, the rail has not been damaged or distorted, and the supported equipment is secure and properly oriented.



5. TORQUE REQUIREMENTS

IMPORTANT: Final torque must be based on the exact application, supplied hardware, and governing installation specification. Do not substitute a torque value without verification.

The MHK-RA angle-rail configuration uses a different mounting interface from the MHK-RT tubular-rail configuration. Do not automatically apply the MHK-RT U-bolt torque values to the MHK-RA. Use the torque specified for the supplied fasteners, applicable product assembly drawing, project engineer, or fastener manufacturer.

For V-Spring-style angle-rail mounting arrangements, Eaton documentation identifies the MHK-RAG as an angled-rail galvanized handrail mounting kit and the MHK-RAS as an angled-rail stainless-steel handrail mounting kit. These references support the angle-rail configuration but do not establish a universal torque value for every SF Industries MHK-RA hardware configuration. Verify the exact supplied hardware before final publication or installation.

MHK-RA — POST-INSTALLATION & TECHNICAL INFORMATION

6. POST-INSTALLATION CHECK

- Brackets are fully seated and aligned.
- Angle-rail fasteners and nuts are installed in the correct sequence.
- Final torque has been verified and documented.
- Rail is free of visible deformation or damage.
- Supported equipment/pole is secure and correctly oriented.
- Electrical connections, if applicable, have been completed in accordance with applicable codes.
- Installation has been inspected by the responsible qualified person.

7. MAINTENANCE & INSPECTION

Inspect the bracket assembly periodically and after significant vibration, impact, structural changes, or maintenance activity. Check for loose hardware, corrosion, deformation, cracking, or movement of the supported equipment. Replace damaged components before returning the installation to service.

8. TECHNICAL REFERENCE

This installation document is intended for SF Industries product documentation and should be used together with the applicable product drawing, equipment manufacturer's instructions, project specifications, and governing codes.

MANUFACTURER: SF Industries USA | PRODUCT: MHK-RA Angle Rail Mounting Bracket Kit