IRONAGEGRATES.COM

Available at Drainage Solutions, Inc.
(317) 346-4110
www.drainagesolutionsinc.com

Cast iron is extremely durable, low maintenance and definitely the most affordable option. A drawback for some is the "rusty" phase it goes through when first installed, but there are ways to sidestep that process if desired. (For more information, see "Cast Iron Oxidation" and "Baked-On-Oil Finish" below.)

Sun Catch Basin in raw ductile iron (left), oxidation phase (middle), and Baked-On-Oil Finish (right)

Raw in first stages of oxidation (left), Raw two years after installation (right)

CAST IRON OXIDATION – A.K.A. "RUST"

Why are my grates turning orange?

Raw cast iron starts out grey in color, but upon contact with water, a bright orange oxide develops. This loosely adhering layer (more commonly known as "rust") easily washes or wears away, leaving behind a more tightly adhering oxide coating that actually protects the grate from further corrosion. What you end up with is a rich, chocolate brown patina, similar to any manhole cover in the street.

How long will my grates be orange?

Depending on the environment the grates are placed in, the oxidation process generally lasts anywhere from a few months to a year. Just keep in mind that the more traffic and weather the grates receive, the faster their transformation.

Will the grates rust away to nothing?

Cast iron has been used for hundreds of years in the manufacture of items that need to be exceptionally durable and resistant to corrosion. For example, the Navy has traditionally made ship anchors out of cast iron. Our grates, just like those anchors, will last for decades in a raw state.

What can I do if I don't want orange grates—even temporarily?

We generally recommend letting our grates age naturally, but for those who wish to bypass the bright orange oxidation phase of raw iron, we offer an eco-friendly "Baked-On-Oil Finish" using recycled vegetable oil. For more information, see "FINISH — BAKED-ON-OIL" below.

Will rust stain the area surrounding the grates?

Rust should not stain the surrounding area if your grates are installed in a pre-formed drain body or in Iron Age custom frames. The drain bodies have plastic, metallic or polymer edges and our frames have steel edges—all of which prevent the iron grates from directly touching the surrounding surface. Therefore, as long as the drain is working properly, any rust particles will flow down the drain with the water.

Is rust a problem when using cast iron grates around a pool ?

Rust is not a problem as long as the grates are installed in a pre-formed drain body or custom steel frames and not touching the surrounding surfaces. Cast iron actually handles the pH balance in chlorinated pool water better than cast aluminum, which over time will turn to mush.

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FINISH -BAKED-ON-OIL (BOOF)

Baked-On-Oil Finish is a full-immersion application for iron castings which uses recycled cooking oil as the coating material. Its primary purpose is as an aesthetic treatment to mimic an aged, raw iron product. As the natural oil finish wears off, it provides a smooth, graceful transition from installation to final patina.

Castings with this finish are dry to the touch, and have a minimum coefficient of friction equal to or greater than that of any painted or powder coated product. There are no VOC's or harmful chemicals associated with the product or the process.

Surface Preparation — Castings:

Castings are arrayed in single, distinct layers and sprayed with water for 100% coverage and allowed to dry. This process is repeated a minimum of five times or until the castings have a uniform orange rust color throughout.

Application — Oil:

The oil used is 100% recycled cooking oil, and is applied to 100% of the piece to be coated. The coating process is full immersion to ensure complete coverage.

Baking Process:

The oiled castings are baked at a minimum of 430 degrees Fahrenheit for a minimum of 90 minutes, or until oil is polymerized (i.e. dry to the touch).

Capture:

All excess oil from application and baking process is captured for re-use.

Lead time:

Adding BOOF to your grates is a multi-step, labor-intensive process, and typically requires an additional 10-14 day lead time.