Indaten® weathering steel evolves with its environment, changing and developing on a daily basis – always improving, always protecting.

- no painting or chemicals necessary to protect the material
- beautiful and ever-changing appearance
- natural protection against corrosion
- lower maintenance costs
- eco-friendly and 100% recyclable
- high longevity
Indaten® belongs to the same group of steel alloys as the well-known Cor-Ten steel (with ASTM international standards) and offers the same levels of performance.

As a maintenance-free material that can last for 80 years, Indaten® weathering steel has been the product of choice for buildings, bridges and sculptures since 1930 and has been used extensively on a range of fine architectural projects that have an on-going ‘visual dialogue’ with their environment, changing and improving as time goes by.

Like a fine wine, Indaten® weathering steel is enriched by air and enhanced with age. When exposed to the natural environment, Indaten® develops a beautiful patina that serves as protective armour.

Left: Project: Campus Vesta, Emblem, Belgium Architect: © STRAMiEN, Architectuur en Ruimtelijke Planning cvba Photography: © Chak Lopez
Right: Project: Multi sports stadium, Cannes la Bocca, France Photographer and architect © Roberto Ferraia, RFArq, Barcelona
Applications
Indaten® can be made into flat cassettes or curved panels. It can be used for facades, steel structures, fences and barriers, bridges, architectural and sculptural objects as well as for interior applications. It is easily formable, can be perforated, embossed with patterns or given combinations of finishes.

Aesthetics
Indaten® develops its patina following exposure to the atmosphere. The first oxide layer appears within a few weeks, with the final colour being achieved within one to two years. The finish can last, without maintenance, for at least 80 years.

The primary alloying material in weathering steel is copper, at concentrations up to 0.55%. The copper produces a homogeneous and regenerating protective layer over the surface, which slows corrosion, ensures the integrity of the underlying steel and creates the beautiful, natural patina.

The development of the patina
The patina's appearance depends on time, the average temperature of exposure and exposure to moisture. The appearance is also influenced by such things as the concentration of SO₂ or chloride content in the air. For example, when used in an industrial environment, the patina tends to develop a darker colour than when used in rural areas.

Indaten® is supplied unweathered but over time, the patina will transform from its red-orange colour to a dark, purplish brown colouration. Although the process can take up to two years, it can be accelerated with sandblasting and, to ensure a homogeneous development of the patina, sandblasting by specialised sub-contractors is recommended.

Performance
Properly installed, Indaten® is a material that has a symbiotic relationship with its environment – natural environmental processes improve Indaten® and Indaten® improves the environment, requiring no maintenance for up to 80 years.

Welding and joining
Indaten® 355A (hot rolled steels) enjoys excellent performance using all common welding processes.

However, when using weathering steel, specific fasteners are required. It is highly recommended that you avoid having your weathering steel come into contact with aluminum, copper, zinc or stainless steel. Always use an elastomer to prevent contact between the bolt and the panel. The ideal solution is to use fasteners also made of weathering steel.

Functionality
The protective layer appears when the steel surface is exposed to an alternately wet/dry environment. Building an optimal protective layer greatly limits corrosion rates and prevents a reduction of the steel's overall thickness (see graph below).
**Technical data**

<table>
<thead>
<tr>
<th>Product</th>
<th>Indaten® 355A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>2.0 - 5.0 mm</td>
</tr>
<tr>
<td>Max. coil width (dependent on thickness)</td>
<td>1880 mm</td>
</tr>
<tr>
<td>Fire performance</td>
<td>European standard (EN 13501-1) A1</td>
</tr>
<tr>
<td></td>
<td>French standard (FD P92-507) M0</td>
</tr>
<tr>
<td></td>
<td>British standard (BS 476) AA</td>
</tr>
</tbody>
</table>

Full technical details are available online. Scan the QR code below.

**Standards compliance**

Indaten® satisfies the requirements for EN 10025-5:2005.

**Specification considerations**

In your design, be sure you avoid:

- Permanent humidity and condensation
- Extreme industrial atmospheres
- Corrosive fumes
- Marine environments
- Contact with de-icing salt

Additionally, to maintain the material’s excellent aesthetics, proper management of run-off water is required to avoid staining (e.g. using gutters, drainpipes etc). When using weathering steel, always use specific fasteners.

**How to specify this material**

Weathering steel, developing patina during exposure to the atmosphere (Indaten® 355A by ArcelorMittal or equivalent).

**We are here to help you**

There is a wide range of online information available to help you discover more about our products and find solutions for your specific projects.

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