

UNIQUE MATERIAL, SPECTACULAR EFFECT

COR-TEN®

RUUKKI

Energy-efficient steel solutions for better LIVING. WORKING. MOVING.

COR-TEN[®] MATERIAL FEATURES



School in Oulu, Finland
Designed by: Pekka Lukkaroinen Architects Ltd.

Cor-Ten[®] is a weather-resistant steel grade that due to its chemical composition and alloying elements (copper, chromium, nickel and phosphorus) is optimal for various applications in various environments.

Total costs calculated for the product life cycle indicate that the use of Cor-Ten[®] steel brings considerable economic benefits.

This product range, delivered in form of heavy plates, cut-to-length sheets, strip and coil products, is manufactured based on the US Steel Corporation license and meets the requirements of EN 100255:2004.



Office building in Oulu, Finland
Designed by: Juha Pasanen / Vauhtiviiva



National Memorial Museum in Palmiry, Poland
Designed by: WXCA Architectural Office

Properties

Cor-Ten[®] steel has an increased ability to resist atmospheric corrosion. This feature is related to carefully selected steel composition that results in forming of an oxide layer on the steel surface, i.e. patina. The patina layer is fully tight and durable. It stops the corrosion process and thus limits losses on steel thickness. In addition to weather resistance, Cor-Ten[®] offers unique steel surface appearance and works exceptionally well in the elevated temperatures.

Applications:

- facades
- chimneys
- containers
- bridges
- pipe bridges
- landscape architecture
- tanks.

LIBERTA COR-TEN® 600 RAINSCREEN PANELS



Theatre and cinema in Kwidzyn, Poland
Designed by: D&M Projekt

Ruukki Liberta rainscreen panel offering includes panels made of Cor-Ten® steel. Together with accessories they create a complete and accurately dimensioned façade system that thanks to its full patina formation process ensures high quality of façade surface finishing. Liberta Cor-Ten® 600 rainscreen panels are made of steel sheets with specially formed edges. Individual selection of panel sizes provides extensive possibilities for the façade design.





Office building and warehouse Global, Szymanów, Poland
Designed by: Portal-PP design office



Theatre and cinema in Kwidzyn, Poland
Designed by: D&M Projekt

LAMELLA COR-TEN® 30



National Memorial Museum in Palmiry, Poland
Designed by: WXCA Architectural Office

Cor-Ten® 30 cladding lamellas are a highlighting part of Ruukki Design Palette offering and provide various ways of creating a harmonic and modern image for the façade also with the use of Cor-Ten® steel.

Standard height of Lamella Cor-Ten® 30 is 300 mm. Other height options from 150 to 600 mm are available on special order. The façade of Museum in Palmiry was made of Cor-Ten® flat sheets, thickness 1.5 mm, effective height 1000 mm.



DESIGN COR-TEN® S7 CORRUGATED PROFILED SHEETS



The universal type of Design Cor-Ten® S7 profile provides various application options – as a façade and decorative internal walls – in places where individuality and high quality surface are required. Design profile system ensures fast and easy installation and fully finished façade together with all accessories.



FLAT SHEETS



Visualization of the European Solidarity Center in Gdańsk, Poland
Designed by: Przedsiębiorstwo Projektowo-Wdrożeniowe FORT Sp. z o.o.
Investor: Gdańskie Inwestycje Komunalne Sp. z o.o.
Contractor: Polimex Mostostal S.A.

Due to their unique chemical composition, Cor-Ten® flat sheets are significantly more resistant to atmospheric corrosion than similar elements made of standard carbon steel.

Weather-resistant steels are used in architectural applications without requiring any separate surface treatment. Use of this steel grade eliminates the need of additional coating application during the manufacturing and operational periods, reducing thus the environmental loads and costs throughout the product life cycle.

These features are very important for buildings, for which the expected operational period is even few hundred years.

Ruukki offers the following steels:

- **Cor-Ten A**
 - cold-rolled steels in thickness range from 0.5 to 3 mm
 - hot-rolled steels in thickness range from 2 to 12 mm
- **Cor-Ten B**
 - hot-rolled steels in thickness range from 2 to 40 mm.



Zone shopping center in Lublin, Poland
Designed by: Bieńkowski Lis Mierzwa ARCHITEKCI

EXAMPLES OF COR-TEN® APPLICATIONS

Due to its unique qualities and easy processing, Cor-Ten® steel is also used in such applications as landscape architecture, monuments, lamps, chimneys, public transportation means, heat exchangers, aerial lifts, transmission towers and traction posts.



**Ruukki provides its customers
with energy-efficient steel
solutions for better living,
working and moving**

RUUKKI

Ruukki Construction Oy,
Suolakivenkatu 1, FI-00810 Helsinki,
☎ +358 20 5911, www.ruukki.com

Copyright© 2013 Rautaruukki Corporation. All rights reserved. Ruukki, Rautaruukki, Living. Working. Moving.
are trademarks or registered trademarks of Rautaruukki Corporation.
Cor-Ten® is a registered trademark of USS Corporation.