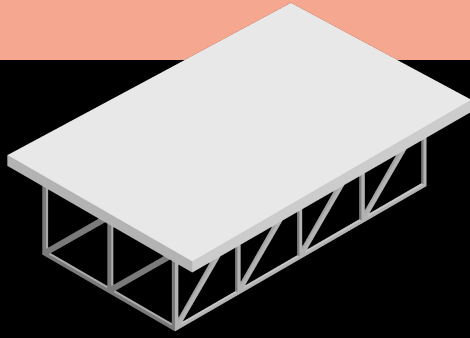


# C2C Hot-dip Galvanized Steel



Steel is a perfect material for circular purposes and is used, among other things, as a material for stage structures. In order to make the steel elements usable for as long as possible, they must be treated with an anti-corrosion system. Usually, an organic coating (e.g. varnish) is used for this purpose.

But such coatings impair a circular use due to harmful abrasions that can be released into the environment. A hot-dip galvanizing process such as the one used by Zinq is a circular alternative and was used in the stage prototype made of C2C materials at Tempelhof Lab.

## Environmental potential of the C2C-certified zinc coating from Zinq

Organic Coating	Hot-dip Galvanizing	Exploited Sustainability potential	Future Sustainability potential
<b>9,39 kg CO<sub>2e</sub> per m<sup>2</sup><sup>[1]</sup></b> 	<b>3,27 kg CO<sub>2e</sub> per m<sup>2</sup></b> 	Hot-dip galvanized coatings are very durable and can be used and/or reused for many decades. The elimination of maintenance and the circular quality (reuse, recycling) reduces the CO <sub>2</sub> footprint.	The use of CO <sub>2</sub> -reduced primary zinc or secondary zinc can further reduce CO <sub>2</sub> emissions. The use of hot-dip galvanized steel can thus also further reduce the CO <sub>2</sub> footprint of events.
<b>127,92 L</b> 	<b>40,97 L</b> 	The galvanizing process is wastewater-free. The production processes are optimized in order to carry out hot-dip galvanizing in the most sustainable and water-saving way possible.	Further optimization measures to reduce water consumption in administrative or non-production areas and to collect and use rainwater.
<b>~ 161,58 MJ</b> 	<b>70,97 MJ</b> 	Electricity required in the galvanizing process is covered 100% by regenerative sources.	Conversion of the furnace heating system, which has so far been operated with natural gas, to hydrogen-rich energy gas, and prospectively to green hydrogen or alternatively green electricity.
		In the course of C2C certification, all process materials were analyzed and optimized for their material health (ABC-X analysis). The hot-dip galvanizing coating has been awarded the C2C Material Health Certificate in bronze.	Continuous optimization of the process materials used through the company's own R&D and in cooperation with suppliers.
		The company's commitment to training at the Chamber of Industry and Commerce, Klimaschutz-Unternehmen e.V., DIN and other initiatives has been recognized with the C2C Social Fairness Certificate in Gold, among other awards.	Continuous expansion of engagement, with customers, suppliers and other stakeholders.
		The hot-dip galvanized coating itself as well as hot-dip galvanized steel components are 100% recyclable. Zinq takes back used hot-dip galvanized material.	For future concerts, fixed steel beams and fence elements can be made of hot-dip galvanized steel and reused/ repurposed.

[1] Data from ZINQ GmbH & Co. KG in cooperation with Sphera Solutions Inc., refer to a corrosion protection period of 60 years.