CERTIFIED
ENVIRONMENTAL PRODUCT DECLARATION
UL.COM/EPD

EPD **Transparency Summary**

COMPANY NAME

American Galvanizers Assoc.

PRODUCT TYPE

Hot-Dip Galvanized Steel

PRODUCT NAME

Hot-Dip Galvanized Steel Plate

PRODUCT DEFINITION

Hot-dip galvanized steel is used in building, bridge, and industrial applications to combat steel corrosion throughout North America.

2.5" X 3"
300 DPI
CMYK

PRODUCT CATEGORY RULE (PCR)

North American PCR for Designated Steel Construction Products v1.0, 2015

CERTIFICATION PERIOD

September 22, 2016 - September 22, 2021

DECLARATION NUMBER

11345278.101.1

LIFECYCLE IMPACT CATEGORIES

The environmental impacts listed below were assessed throughout the product's lifecycle – including raw material extraction, transportation, manufacturing, packaging, use, and disposal at end of life.

	ATMOSPHERE			WATER		EARTH	
	Global Warming Potential refers to long-term changes in global weather patterns – including temperature and precipitation – that are caused by increased concentrations of greenhouse gases in the atmosphere.	**Ozone Depletion Potential** is the destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation that's harmful to life, caused by human-made air pollution.	**Photochemical Ozone Creation Potential** happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce a type of air pollution known as smog.	**Acidification Potential** is the result of human-made emissions and refers to the decrease in pH and increase in acidity of oceans, lakes, rivers, and streams – a phenomenon that pollutes groundwater and harms aquatic life.	**Eutrophication Potential** occurs when excessive nutrients cause increased algae growth in lakes, blocking the underwater penetration of sunlight needed to produce oxygen and resulting in the loss of aquatic life.	**Depletion of Abiotic Resources (Elements)** refers to the reduction of available non-renewable resources, such as metals and gases, that are found on the periodic table of elements, due to human activity.	**Depletion of Abiotic Resources (Fossil Fuels)** refers to the decreasing availability of non-renewable carbon-based compounds, such as oil and coal, due to human activity.
TRACI	**1.77** metric ton CO2 eq	**Not Reported**	**0.0865** metric ton O3 eq	**0.00716** metric ton SO2 eq	**0.000285** metric ton N eq	**Not Reported**	
CML	**1.77** metric ton CO2 eq	**Not Reported**	**0.002** metric ton C2H2 eq	**0.00725** metric ton SO2 eq	**0.000507** metric ton PO43- eq	**Not Reported**	**19,875** MJ

FUNCTIONAL UNIT One metric ton (1000kg) of galvanized structural steel product

MATERIAL CONTENT

Material content measured to 1%.

COMPONENT	MATERIAL	AVAILABILITY	MASS%	ORIGIN
Building Material	Steel	Recyclable	96-99	Worldwide
Protective Coating	Zinc	Reyclable	1-4	Worldwide

ADDITIONAL ENVIRONMENTAL INFORMATION

PRE-CONSUMER RECYCLED CONTENT	15.6 %
POST-CONSUMER RECYCLED CONTENT	56.1 %
VOC EMISSIONS	None
WATER CONSUMPTION	Not Reported

RECYCLING OR REUSE

The primary components (zinc and steel) are both 100% recyclable.

The material can either be reused, by stripping and regalvanizing the steel (without reprocessing) or it can be recycled at a steel recycling facility, where the zinc will be captured in the EAF dust and sent to a zinc recycler for reprocessing.

ENERGY

RENEWABLE ENERGY	4 %	930.7 MJ
NON-RENEWABLE ENERGY	96 %	22,200 MJ

STANDARDS

ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanizing) Coatings on Iron and Steel Products

CERTIFICATIONS

MANUFACTURER CONTACT INFO

NAME	American Galvanizers Association (AGA)
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