

Environmental Impact of Steel Production and Processing 2021	
MATERIAL	Galvanized and Mild Steel Sections
SUPPLIER	voestalpine Metsec plc Broadwell Road, Oldbury, Warley, West Midlands B69 4HF
ENVIRONMENTAL IMPACT	MANUFACTURER INFORMATION / COMMENTS:
Fossil Fuel Depletion. A measure of the amount of non-renewable resources used in creating energy for a particular process - Coal, oil or gas consumption.	For the manufacturing process we do not directly use coal, oil or gas. We use electricity for production purposes and gas for heating the work area. We use 4,973,279kWh of electricity per year and 2,296,656kWh of gas (source data from energy bills)
Climate Change Energy Used in section production. A measure of the resultant climate change caused by the Creation of energy for a particular process - Production of greenhouse gases.	With regards to climate change and greenhouse gasses the above energy consumption is equivalent to 3119 tonnes of carbon dioxide. Calculated using the "Cities for Climate Protection Greenhouse Gas" software.
Climate Change Energy Used in Crude Steel Production. A measure of the resultant climate change caused by the Creation of energy for a particular process - Production of greenhouse gases.	Every ton of steel produced in 2018 emitted on average 1.85 tons of carbon dioxide (www.mckinsey.com/industries/metals-and-mining). Using the above data to convert this to rolled section would take an additional 0.04 tonnes of CO2. Total for rolled section including steel production is 1.89 tonnes of CO2.
Recycled Content. A measure or percentage of the amount of secondary or re-used materials in a product.	The manufacture of steel allows for 100% re-used materials to be added and includes a significant recycled content, the average of which is 60% for structural steel used in the UK according to WRAP. Information current as of 2019 www.steelconstruction.info/Sustainability#Steel_manufacture
Recyclability. A measure or % of the amount of material that can be reused recycled at the Product end of the life.	100% of the steel sections can be recycled at the end of use or life. – Worldsteel Association Fact Sheet – Steel and Raw Materials Last updated: Feb 2019
Durability. Expected lifespan of the material and maintenance issues.	The durability of cold formed steel is dependent upon the environmental conditions it is exposed to and the coating type and thickness of the product supplied. These need to be taken into account when selecting a product and it's required life to first maintenance.
Ecotoxicity. The emission of substances within the product that can potentially contaminate the building or surrounding environment.	In its finished state, of a steel section, there is no potential for contamination, this will only occur if the product state is changed and this is not foreseen.
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