

# RECYCLED CONTENT fact sheet



## Recycled Content of Dofasco Steel for Building Products

This fact sheet provides an overview of the methods Dofasco uses to produce steel, and describes the recycled content of Dofasco steels used to manufacture building products.

Today's steel is produced using two technologies both of which require "old" steel to make "new" steel. Dofasco is a unique North American steelmaker in that we utilize both technologies. The combination of these technologies enables Dofasco the flexibility to produce a variety of steel grades for a wide range of consumer product applications.

### Dofasco Building Products Recycled Content

The traditional **basic oxygen furnace (BOF)** technology uses up to 25% steel scrap ("old" steel) to make new steels. Steels manufactured by the BOF method are used to produce products whose main material characteristic is formability. These products include automotive outer body panels and hydroform tube applications, exterior panels for refrigerators and stoves, residential door skins, and packaging, as used in soup cans.

The scrap based **electric arc furnace (EAF)** technology uses close to 100% steel scrap as its feedstock. EAF steels are used in building products such as commercial roofing and cladding, steel studs, decking and floor joists where the major required material characteristic is strength. Dofasco uses EAF steel to supply over 90% of its construction market end uses.

The following represents the makeup of the recycled content found in Dofasco steel used for building products, based on 90% EAF and 10% BOF steel utilization:

<i>Post Consumer Content</i> <sup>(1)</sup>	27.3%
<i>Post Industrial Content</i> <sup>(2)</sup>	40.6%
<i>Home Scrap</i> <sup>(3)</sup>	13.6%
<b>Total Recycled Content</b>	<b>81.5%</b>

### World's Most Recycled Material

Steel is the world's most recycled material, and in North America alone, over 70 million tons of steel are recycled annually or exported for recycling annually. This is done for both economic and environmental reasons. It is always economical to recycle steel. However, it should be understood that many steel applications remain in service for decades. Even though two out of every three kilograms of new steel are produced from "old" steel, the fact that cars, buildings, appliances, and bridges have such long service lives, makes it necessary to continue to mine some virgin ore to supplement the production of new steel. Economic expansion, here and abroad, also creates additional demand that cannot be fully met by available scrap supplies.

### A Car to a Can to a Bridge and Back to a Car...

Steel possesses a unique material property unrivalled by other materials in that it can be recycled both up and down the product value chain. Open loop recycling allows, for example, an old car to be melted down to produce a soup can, and then, as the new soup

can is recycled, it is melted down to produce a new appliance, car, or perhaps a structural beam used in a bridge.

Unlike competing industries, recycling in the steel industry is second nature. The North American steel industry has been recycling steel scrap for over 150 years through the 1,800 scrap processors and some 12,000 auto dismantlers.

As a result of the large quantities of "old" steel we supply to the EAF and BOF, Dofasco is Ontario's largest steel recycler consuming 1.6 million tonnes of steel scrap per year.

### Better, Greener Buildings

The American Institute of Architects based in the United States, has been actively encouraging its architect members to adopt energy efficient building design practices. In response to this the United States Green Building Council has created LEED™ (Leadership in Energy & Environmental Design). This program was developed by the U.S. Department of Energy and is a rating system to assess the architectural design and performance features of a commercial building for "green and sustainable" attributes. Building products made from Dofasco steel can be credited with the maximum number of points for the Materials Credit aspect of the rating system (Sections 4.1 and 4.2).

#### NOTES

(1) Post Consumer Content – is defined as scrap steel resulting from end of life consumer products (e.g. steel cans, steel auto bodies, building materials)

(2) Post Industrial Content – is defined as scrap steel resulting from product manufacturing operations (e.g. turnings, stampings from auto part manufacturers)

(3) Home Scrap – is defined as internally generated scrap from our steel processing operations



**Special Customer Note:**

The information in this Fact Sheet is provided for the general guidance of customers and does not imply any warranty. Information provided is based on research conducted by Dofasco and the Steel Recycling Institute. Interpretation and/or use of this information is the sole responsibility of the user. For further details, contact your Dofasco Technical Service Manager at 1-800-363-2726.

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**DOFASCO**

Our product is steel. Our strength is people.

*Solutions In Steel*

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