

# LIGHT GAUGE STEEL PROFILES AND ASSEMBLY PRODUCTS

## Environmental Product Declaration EPD

v05



September 2015

### ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration	Europrofil AB
Program operator	EPD International AB
Publisher	EPD international AB
Declaration number	S-P-00537
ECO EPD Ref.No.	00000043
Issue date	2015-09-15
Valid to	2020-09-15

## The company

Europrofil AB, founded 1982, is a leading producer of light gauge steel profiles for the building construction industry. Headquarters and the production site are located in Nora, Sweden, from where products are distributed throughout the Nordic market.

Europrofil is, since 2006, included in the Danish industrial group Ib Andresen Industries A/S (IAI). IAI has production sites in Sweden, Norway, Denmark, Hungary and Thailand and processes annually some 600 000 tonnes of steel with a turnover of approximately € 1 600 000.

Europrofil is the sole supplier in the Nordic market that exclusively focus on light gauge steel building systems and to develop these solutions on the absolute best level. The range of light gauge steel building systems are custom designed for interior walls, ceilings and exterior walls. The guiding principles behind Europrofil's work are the overall construction economy as well as the construction environmental performance throughout the entire life cycle of the construction. Our customers should, seen in a holistic way, always benefit from selecting Europrofil's solutions.

In short, Europrofil's ambition is to develop tomorrow's systems of light gauge steel building systems, something we communicate through the expression **Making room for tomorrow!**

## Declared unit

Profiles are normally sold in meters or weight. It is considered easier to perform calculations of a product's environmental impact throughout its weight.

**THUS, THE DECLARED UNIT IS SET TO 1 TONNE LIGHT GAUGE STEEL PROFILE.**



## Methodology

The environmental impact of Europrofil products have been calculated according to the rules of the EPD (Environmental Product Declaration) International program. PCR 2012:01 for construction products is the basis for the calculation of the life cycle assessment (LCA) from cradle to gate.

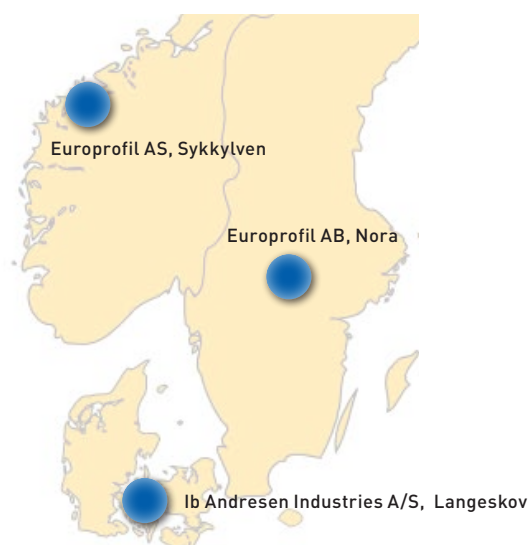
## Input data

The steel production (Upstream processes) is the major source for the environmental impact and the data from WSA is assumed to be the most representative for the suppliers to Europrofil. Thus, European average data from 2007 for steel production from Worldsteel Association (WSA) have been used (Hot dip galvanized steel (HDG)) and they correspond to a zinc content of 35 kg per tonne steel. The steel grades relevant for the steel profiles and assembly products in this EPD contain different amounts of zinc and in some cases Aluminum, Silicone and Polyester coating. This has been considered in the LCA modeling by adjusting the WSA HDG data accordingly.

The most important data sources besides the ones for steel production are Zinc production (International Zinc Association (IZA) 2005) and Aluminium production (International European Aluminium Association (EAA) 2010). Other upstream data and transportation data etc. are mainly from the Gabi 6 professional database.

Site specific data on use of electricity and fuels provided by Europrofil have been used for the core processes in Denmark and Sweden. Some ancillaries used in very small amounts, e.g. different kind of oils, drawing fluid and steel scrap for recycling, have been considered as negligible. The site specific data are based on an average for 2013. Electricity production data according to country averages<sup>1</sup> have been used for electricity consumed in the core processes. The EPD is also valid for assembly products manufactured in other sites where Nordic data are used concerning electricity and fuel for these external sites.

<sup>1</sup> Electricity Denmark: 532 g CO<sub>2</sub>eq/kWh, Electricity Sweden: 104 g CO<sub>2</sub>eq/kWh





### Raw material

Europrofil products are available with different types of surface treatment. Products used in internal walls and ceilings have a surface layer of 140 g per square meter (steel no. 1 in table below) and products used in external walls are manufactured from steel coated with a minimum of 275 g plain zinc per square meter (steel no. 2). Products that are supposed to be exposed outside of a constructions shelter are manufactured from galvanized steel with coating of aluminum, zinc and silicone (steel no. 3), with zinc and polyester coating (steel no. 4) or with zinc, aluminum and magnesium (steel no. 5).

Following table includes five (5) steel qualities included in the life cycle assessment of this Environmental Product Declaration. Steel grades are expressed according to the standard EN 10027 where e.g. S 250 GD + z140 designates a structural steel (S) with a specified yield strength of 250 MPa (250) and a surface layer of 140 g plain zinc per square meter (z140).

Steel no.	1	2	3	4	5
Steel grade	S 250 GD + z 140	S 350 GD + z 275	S 250 GD + az 185	S 250 GD + z 275 min 2*25 µm Polyester coating	S 250 GD + ZM 310
Product objectives	Material of essentially 0.5 mm thickness for use in steel profiles for interior walls and ceilings.	Material of 0.7-1.5 mm for use in profiles for external walls and light weight steel beams.	Products for mounting in external environments with greater demands on corrosion protection.	Products for mounting in external environments with greater demands on corrosion protection.	Products for installation in external environments where greater demands are placed on corrosion protection.
<b>Steel</b>					
Manufactured in accordance with European standard	SS-EN 10346:2009				
Iron weight (w-%)	97,35				
Carbon weight (w-%)	0,2				
Manganese weight (w-%)	0,6				
Silicon weight (w-%)	1,7				
Sulfur weight (w-%)	0,1				
Phosphorus weight (w-%)	0,045				
<b>Coating</b>					
Coating	Hot galvanized				
Coating thickness per side (µm/m2)	10	20	25	45	25
Coating total weight (g/m2)	140	275	185	345	310
Zinc weight (w-%)	100,0	100,0	43,0	80,0	93,5
Aluminium weight (w-%)			55,0		3,5
Silicon weight (w-%)			2,0		
Polyester coating weight (w-%)				20,0	
Magnesium weight (w-%)					3,0
Corrosion class	C1	C2	C3	C4	C5



Photo by Ruukki Metals

## The product

Europrofil products are manufactured from hot dip galvanized steel with different surface treatment in order to obtain requested corrosion protection properties. Europrofil systems and products are primarily used for the mounting of various plasterboard or other sheet materials in the construction of interior walls, exterior walls and ceilings.

Steel is a 98% recyclable building material and transportation is rational when the weight is low in comparison to alternative construction materials and the profiles are folded together to reduce loading and storage space to half. Waste is also low because the profiles are pre-cut into the proper lengths and the U-shape top and bottom profile provides flexibility in height.

Steel profiles are not affected by moisture and can therefore be stored and handled on a construction site without the risk of moisture damage or being attacked by mould.

Walls built with steel profiles in combination with plasterboards or other fireproof boards meet the highest fire protection requirements. With the right material, it is easy to achieve requested wall properties such as sound reduction, stability and surface demands.

## Service life prediction

The product has an estimated service life of 50 years.

## Product dimensions and standards

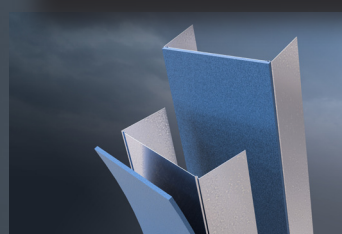
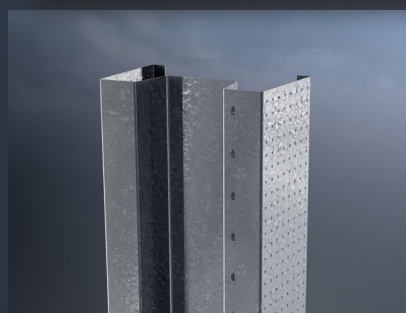
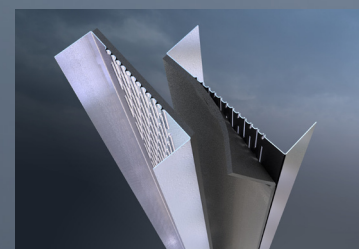
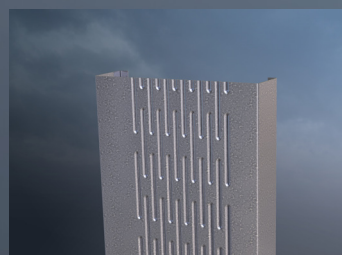
EN 14195:2005, EN 1090-1, EN 1090-2, EN ISO 14001:2004.  
Concerning CE-marking: Conformity system 2+.

## Included products

Roll formed profiles produced from steel quality and steel thickness presented in the table below, with or without sealing strips or isolation sheet, are included in the LCA presented in this EPD. See the next page for some example pictures of included product types.

A updated table of all articles included in this EPD can be found on Europrofil website (see General Information page 11). The EPD product table also includes product weight per meter to simplify the calculation of the one articles unique environmental impact.

Steel no.	Steel grade	Steel thickness (mm)
Steel 1a		0,46
Steel 1b	S 250 GD + z 140	0,50
Steel 1c		0,60
Steel 2a		0,70
Steel 2b		1,00
Steel 2c		1,20
Steel 2d	S 350 GD + z 275	1,50
Steel 2e		2,0
Steel 2f		2,50
Steel 2g		3,00
Steel 3a	S 250 GD + az 185	0,70
Steel 3b		1,00
Steel 4	S 250 GD + z 275 min 2*25 µm Polyester coated	0,70
Steel 5a		0,70
Steel 5b	S 250 GD + ZM 310	1,00



## Environmental management

Europrofil environmental management system, which is certified according to ISO 14001:2004, is mainly focusing on developing products and systems that increasingly reduces the

- amount of material in the building construction and the
- energy consumption throughout the construction life cycle

A lifecycle approach is therefore incorporated into the Europrofil processes. Especially the product development process is considered central to the product environmental impact and even more in the building's environmental impact during its life cycle. The amount of developed products and the amount of sold products with a reduced environmental impact are considered key indicators of the process performance.



## Product environmental impact

We want to make it easier for you as our customer to choose products, within our product range, that have a reduced impact on the environment by labeling these products with an environmental symbol. Products with an environmental symbol have a positive impact on the building's energy use, promote a more efficient construction process or is contributing to a reduction of materials used in the construction.

Thus, the environmental symbol is ultimately a symbol of Europrofil's environmental commitment presented to you so that you can choose products that will make the construction more profitable and more environmental friendly at the same time.

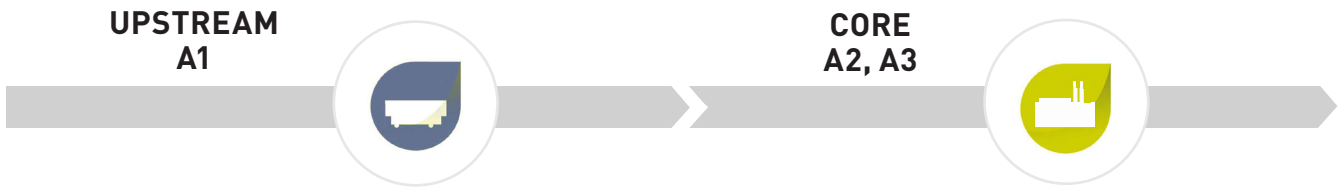
You will find further information on the environmental symbol in our product catalogue and the symbol is presented next to our products both on our website and in our product catalogue.

## System boundaries

With the Environmental Product Declaration, Europrofil supply a thorough analysis of the environmental performance of the product from its life cycle phases from cradle to gate. Life cycle phases are divided in upstream processes and core processes. Upstream processes includes steelmaking processes and core processes includes processing activities from raw material to steel profile.

Europrofil's products are manufactured from hot dip galvanized carbon steel. The raw material is delivered from steelworks as coils by boat to the IAls' port in Nyborg, Denmark. The coil is then divided in narrower bands whose width fit the specific profiles.

The steel band is then delivered from Langeskov, Danmark, to Nora, Sweden, by truck where steel profiles are manufactured through roll forming technique.



Product stage			Construction / installation stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transportation	Manufacturing	Transportation <sup>1</sup>	Construction / installation / assembly	Use	Maintenance (incl. transportation)	Repair (incl. transportation)	Replacement (incl. transportation)	Refurbishment (incl. transportation)	Operational energy use	Operational water use	De-installation/ demolition/ disassembly	Transportation	Waste processing	Disposal	Reuse - Recovery - Recycling - potential
A1	A2	A3	A4 <sup>1</sup>	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MND

<sup>1</sup> Transportation to warehouse in Oslo region, Norway, involves GWP= 15,2 kg CO<sub>2</sub> eq/tonne



## UPSTREAM A1



Recycling,  
collection of steel scrap



Hot dip galvanizing and  
other pre-treatments

### UPSTREAM PROCESS



Photo by Rukki Metals

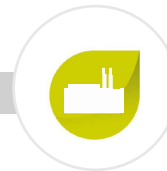


Extraction of ore,  
production of alloy  
elements and ancillaries



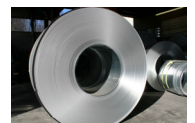
Ore-based steel production  
including hot rolling and  
cold rolling processes

## CORE A2, A3



Transportation of raw  
material from steelworks  
to IAI by boat. Internal logistics.  
Transportation of steel  
bands from IAI to  
Europrofil by truck

### CORE PROCESS



Coil to band  
cutting process, IAI



Steel scrap collection  
and transportation to  
steelworks for recycling



Profile production by  
roll forming technique

## Environmental performance

		UPSTREAM			CORE		TOTAL		
		Raw material supply, A1			Transportation, A2	Manufacturing, A3	Steel 1a	Steel 1b	Steel 1c
		Steel 1a	Steel 1b	Steel 1c					
<b>ENERGY RESOURCES</b>									
<b>Non-renewable primary energy resources: Energy</b>	MJ net calorific value	27 146	27 022	26 788	1 212	401	28 759	28 635	28 400
Crude oil	MJ net calorific value	1 052	1 040	1 016	934	28	2 014	2 002	1 978
Hard coal	MJ net calorific value	20 882	20 842	20 765	64	56	21 002	20 961	20 884
Lignite	MJ net calorific value	324	311	286	24	8	356	343	319
Natural gas	MJ net calorific value	3 262	3 237	3 191	120	61	3 442	3 417	3 371
Peat	MJ net calorific value	18	18	17	0	12	31	31	30
Uranium	MJ net calorific value	1 609	1 575	1 512	70	236	1 914	1 881	1 818
<b>Non-renewable primary energy resources: Raw materials</b>	<b>MJ net calorific value</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>0</b>	<b>0</b>	<b>619</b>	<b>619</b>	<b>619</b>
<b>Total Non-renewable primary energy resources: Energy &amp; Raw materials</b>	<b>MJ net calorific value</b>	<b>27 765</b>	<b>27 641</b>	<b>27 406</b>	<b>1 212</b>	<b>401</b>	<b>29 377</b>	<b>29 254</b>	<b>29 019</b>
<b>Renewable primary energy resources: Energy</b>	<b>MJ net calorific value</b>	<b>629</b>	<b>606</b>	<b>564</b>	<b>1 014</b>	<b>316</b>	<b>1 959</b>	<b>1 937</b>	<b>1 895</b>
<b>Renewable primary energy resources: Raw materials</b>	<b>MJ net calorific value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Renewable primary energy resources: Energy &amp; Raw materials</b>	<b>MJ net calorific value</b>	<b>629</b>	<b>606</b>	<b>564</b>	<b>1 014</b>	<b>316</b>	<b>1 959</b>	<b>1 937</b>	<b>1 895</b>
<b>OTHER RESOURCES</b>									
<b>Use of secondary material: Steel scrap</b>	<b>kg</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>0</b>	<b>0</b>	<b>94</b>	<b>94</b>	<b>94</b>
<b>Use of renewable secondary fuels</b>	<b>MJ net calorific value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>WATER</b>									
<b>Use of net fresh water</b>	<b>m3</b>	<b>38</b>	<b>36</b>	<b>34</b>	<b>21</b>	<b>247</b>	<b>305</b>	<b>304</b>	<b>301</b>
<b>WASTE</b>									
Hazardous waste disposed	kg	0	0	0	0,01	0,1	0,1	0,1	0,1
Non-hazardous waste disposed	kg	7 003	6 856	6 578	22	26	7 051	6 904	6 626
Radioactive waste disposed/stored	kg	0,6	0,6	0,5	0,01	0,1	0,7	0,7	0,6
<b>OTHER</b>									
Materials for recycling: Steel scrap	kg	0	0	0	0	22	22	22	22
<b>POTENTIAL ENVIRONMENTAL IMPACT</b>									
Global warming	kg CO2 equivalents	2 573	2 564	2 546	80	17	2 671	2 661	2 643
Ozone depletion	kg CFC 11 equivalents	4,5E-05	4,4E-05	4,2E-05	6,3E-07	9,4E-10	4,6E-05	4,5E-05	4,3E-05
Acidification (Baseline)	kg SO2 equivalents	5,7	5,6	5,5	0,44	0,05	6,2	6,1	6,0
Eutrophication	kg P04 3- equivalents	0,47	0,46	0,45	0,11	0,01	0,58	0,57	0,56
Photochemical ozone creation	kg C2H2 equivalents	1,1	1,1	1,1	-0,04	0,01	1,1	1,1	1,1
Depletion of abiotic resources (elements)	kg Sb equivalents	3,4E-02	3,1E-02	2,4E-02	1,5E-05	5,2E-06	3,4E-02	3,1E-02	2,4E-02
Depletion of abiotic resources (fossil)	MJ net calorific value	25 955	25 865	25 694	1 141	165	27 262	27 172	27 001



UPSTREAM							CORE		TOTAL						
Raw material supply, A1							Transportation, A2	Manufacturing, A3	Steel2a	Steel2b	Steel2c	Steel2d	Steel2e	Steel2f	Steel2g
Steel 2a	Steel 2b	Steel 2c	Steel 2d	Steel 2e	Steel 2f	Steel 2g									
27 590	26 997	26 766	26 527	26 288	26 143	26 045	1 212	401	29 203	28 609	28 379	28 140	27 901	27 756	27 657
1 096	1 037	1 014	990	966	952	942	934	28	2 058	1 999	1 976	1 952	1 928	1 914	1 904
21 028	20 833	20 758	20 679	20 601	20 554	20 521	64	56	21 147	20 953	20 877	20 799	20 721	20 673	20 641
370	308	284	259	234	219	209	24	8	403	341	317	292	267	252	241
3 349	3 232	3 187	3 140	3 093	3 064	3 045	120	61	3 529	3 412	3 367	3 320	3 273	3 244	3 225
20	18	17	16	15	15	14	0	12	33	30	30	29	28	27	27
1 728	1 568	1 507	1 443	1 378	1 340	1 313	70	236	2 033	1 874	1 812	1 748	1 684	1 645	1 619
<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>0</b>	<b>0</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>	<b>619</b>
28 209	27 615	27 385	27 146	26 907	26 762	26 664	1 212	401	29 821	29 228	28 998	28 758	28 519	28 374	28 276
708	602	561	518	475	449	431	1 014	316	2 039	1 933	1 891	1 848	1 806	1 780	1 762
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
708	602	561	518	475	449	431	1 014	316	2 039	1 933	1 891	1 848	1 806	1 780	1 762
94	94	94	94	94	94	94	0	0	94	94	94	94	94	94	94
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	36	34	31	29	28	27	21	247	309	303	301	299	296	295	294
0	0	0	0	0	0	0	0,01	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
7 529	6 826	6 552	6 269	5 986	5 813	5 697	22	26	7 577	6 874	6 600	6 317	6 034	5 861	5 745
0,6	0,6	0,5	0,5	0,5	0,5	0,5	0,01	0,1	0,7	0,7	0,6	0,6	0,6	0,6	0,6
0	0	0	0	0	0	0	0	22	22	22	22	22	22	22	22
2 607	2 562	2 544	2 526	2 508	2 497	2 489	80	17	2 704	2 659	2 642	2 624	2 605	2 594	2 587
4,8E-05	4,4E-05	4,2E-05	4,0E-05	3,8E-05	3,7E-05	3,7E-05	6,3E-07	9,4E-10	4,9E-05	4,4E-05	4,3E-05	4,1E-05	3,9E-05	3,8E-05	3,7E-05
5,9	5,6	5,5	5,4	5,2	5,2	5,1	0,44	0,05	6,4	6,1	6,0	5,9	5,7	5,7	5,6
0,49	0,46	0,44	0,43	0,42	0,41	0,40	0,11	0,01	0,61	0,57	0,56	0,55	0,53	0,52	0,52
1,1	1,1	1,1	1,1	1,1	1,1	1,1	-0,04	0,01	1,1	1,1	1,1	1,1	1,1	1,1	1,1
4,7E-02	3,0E-02	2,3E-02	1,6E-02	9,5E-03	5,2E-03	2,4E-03	1,5E-05	5,2E-06	4,7E-02	3,0E-02	2,3E-02	1,6E-02	9,5E-03	5,3E-03	2,4E-03
26 279	25 847	25 679	25 505	25 331	25 225	25 153	1 141	165	27 585	27 153	26 985	26 811	26 637	26 531	26 460

## Environmental performance

		UPSTREAM					CORE		TOTAL				
		Raw material supply, A1					Transportation, A2	Manufacturing, A3	Steel 3a	Steel 3b	Steel 4	Steel 5a	Steel 5b
		Steel 3a	Steel 3b	Steel 4	Steel 5a	Steel 5b							
<b>ENERGY RESOURCES</b>													
Non-renewable primary energy resources: Energy	MJ net calorific value	28 183	27 418	28 268	28 426	27 579	1 212	401	29 795	29 030	29 880	30 039	29 192
	Crude oil	1 456	1 292	1 523	1 181	1 096	934	28	2 418	2 254	2 485	2 143	2 058
	Hard coal	21 068	20 862	20 818	21 542	21 189	64	56	21 188	20 982	20 937	21 662	21 309
	Lignite	246	220	398	386	320	24	8	278	253	430	419	353
	Natural gas	3 740	3 510	3 751	3 496	3 335	120	61	3 920	3 690	3 931	3 677	3 515
	Peat	15	14	20	20	18	0	12	28	27	33	33	31
	Uranium	1 658	1 520	1 759	1 801	1 621	70	236	1 964	1 825	2 064	2 106	1 926
<i>Non-renewable primary energy resources: Raw materials</i>	<i>MJ net calorific value</i>	<i>619</i>	<i>619</i>	<i>855</i>	<i>619</i>	<i>619</i>	<i>0</i>	<i>0</i>	<i>619</i>	<i>619</i>	<i>855</i>	<i>619</i>	<i>619</i>
<b>Total Non-renewable primary energy resources: Energy &amp; Raw materials</b>	<b>MJ net calorific value</b>	<b>28 801</b>	<b>28 036</b>	<b>29 123</b>	<b>29 045</b>	<b>28 198</b>	<b>1 212</b>	<b>401</b>	<b>30 414</b>	<b>29 649</b>	<b>30 735</b>	<b>30 658</b>	<b>29 810</b>
Renewable primary energy resources: Energy	MJ net calorific value	1 285	1 011	730	867	712	1 014	316	2 616	2 342	2 061	2 198	2 043
Renewable primary energy resources: Raw materials	MJ net calorific value	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total Renewable primary energy resources: Energy &amp; Raw materials</i>	<i>MJ net calorific value</i>	<i>1 285</i>	<i>1 011</i>	<i>730</i>	<i>867</i>	<i>712</i>	<i>1 014</i>	<i>316</i>	<i>2 616</i>	<i>2 342</i>	<i>2 061</i>	<i>2 198</i>	<i>2 043</i>
<b>OTHER RESOURCES</b>													
Use of secondary material: Steel scrap	kg	94	94	94	94	94	0	0	94	94	94	94	94
Use of renewable secondary fuels	MJ net calorific value	0	0	0	0	0	0	0	0	0	0	0	0
<b>WATER</b>													
Use of net fresh water	m <sup>3</sup>	2 151	1 533	62	304	216	21	247	2 419	1 800	329	571	483
<b>WASTE</b>													
Hazardous waste disposed	kg	0	0	0	0	0	0,01	0,1	0,1	0,1	0,2	0,1	0,1
Non-hazardous waste disposed	kg	6 011	7 571	7 570	7 710	6 959	22	26	6 059	7 619	7 619	7 758	7 007
Radioactive waste disposed/stored	kg	0,6	0,5	0,6	0,6	0,6	0,01	0,1	0,7	0,7	0,7	0,7	0,7
<b>OTHER</b>													
Materials for recycling: Steel scrap	kg	0	0	0	0	0	0	22	22	22	22	22	22
<b>POTENTIAL ENVIRONMENTAL IMPACT</b>													
Global warming	kg CO <sub>2</sub> equivalents	2 657	2 597	2 642	2 688	2 618	80	17	2 754	2 695	2 739	2 785	2 715
Ozone depletion	kg CFC 11 equivalents	4,2E-05	3,9E-05	4,8E-05	5,0E-05	4,5E-05	6,3E-07	9,4E-10	4,3E-05	4,0E-05	4,9E-05	5,0E-05	4,5E-05
Acidification (Baseline)	kg SO <sub>2</sub> equivalents	6,0	5,7	6,0	6,4	5,9	0,44	0,05	6,5	6,2	6,5	6,9	6,4
Eutrophication	kg PO <sub>4</sub> 3- equivalents	0,45	0,43	0,50	0,54	0,49	0,11	0,01	0,57	0,55	0,61	0,65	0,60
Photochemical ozone creation	kg C <sub>2</sub> H <sub>2</sub> equivalents	1,1	1,1	1,2	1,2	1,1	-0,04	0,01	1,1	1,1	1,1	1,1	1,1
Depletion of abiotic resources (elements)	kg Sb equivalents	5,6E-03	4,6E-04	4,7E-02	5,0E-02	3,2E-02	1,5E-05	5,2E-06	5,6E-03	4,8E-04	4,7E-02	5,0E-02	3,2E-02
Depletion of abiotic resources (fossil)	MJ net calorific value	26 946	26 320	27 161	27 042	26 376	1 141	165	28 252	27 627	28 468	28 348	27 683

## General information

### Europrofil AB

#### EPD Programme

The International EPD® System.

For more information — [www.environdec.com](http://www.environdec.com)

#### Programme holder

EPD International AB,  
Box 210 60,  
SE-100 31 Stockholm  
Sweden

#### PCR review conducted by

The technical committee of the international EPD® System

#### Declaration number

S-P-00537

#### Product category rules

PCR 2012:01 version 1.2

#### Central Product Classification

CPC 4219

#### Issue date

2015-09-15

#### Valid to

2020-09-15

Verification	
The CEN standard EN 15804 serves as the core PCR <sup>a</sup> .	
Independent verification of the declaration and data, according to EN ISO 14025:2010	
<input type="checkbox"/> internal	<input checked="" type="checkbox"/> external
Third party verifier:	
DNV GL Business Assurance Sweden AB, Box 6046/Hemvärnsgatan 9, S-17106 Solna, Sweden Tel: +46 8 587 940 00 Martin Erlandsson	
<sup>a</sup> Product Category Rules	

### Light gauge steel profiles

#### Owner

Europrofil AB

Head office and production site:

Europrofil AB,  
Industrivägen 9,  
S-71391 Nora,  
Sweden  
[www.europrofil.se](http://www.europrofil.se)

#### Geographical representativeness:

Scandinavia.

#### Declared unit

Per tonne of light gauge steel profiles.

#### Scope

This declaration and its LCA are relevant to Light gauge steel profiles manufactured by cold-forming technique from galvanized structural steel in plain form or provided with sealing strips or isolation sheet.

The minimum yield strength of the material vary from 250-350 MPa and are coated with plain zinc or zinc with different combinations of aluminum, silicone or polyester. Profiles vary in thickness, in order to meet different properties, from 0,46-3,00 mm.

The LCA study includes product life cycle phases from cradle to gate.

The list of included products is published at [www.europrofil.se](http://www.europrofil.se) under the link "Produkter".

#### Additional information

Product contain no substances in the REACH Candidate list.

Product contain no substances in the Norwegian priority list.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804.

## References

IVL Svenska Miljöinstitutets LCA report dated 2015-01-15.

#### CML 2001

Characterisation factors according to the CML 2001 version can be downloaded at <http://cml.leiden.edu/software/data-cmlia.html#downloads>, University of Leiden, Institute of Environmental Sciences (CML).

#### Gabi professional database

LCA database connected to the LCA software Gabi provided PE International, Stuttgart, Germany.

#### Worldsteel association (WSA)

A trade organisation Worldsteel representing approximately 170 steel producers (including 17 of the world's 20 largest steel companies), national and regional steel industry associations, and steel research institutes. Worldsteel members represent around 85% of world steel production.

**Contact**

For further information about this environmental declaration and Europrofil environmental management in general, please contact:

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