



## Environmental Product Declaration for STRUCTURA panels

### GENERAL INFORMATION

<b>Company information</b>	<p>Etex Group Tervurenlaan 361 1150 Bruxelles</p> <p><b>Plant:</b> Neubeckum Dyckerhoffstr. 95 – 105 59269 Beckum Germany </p>
<b>Subject</b>	Structura fibre cement cladding panel
<b>Code / number declaration</b>	To be completed
<b>Date of issue</b>	To be completed
<b>Unit</b>	<p>To cover 1 m<sup>2</sup> of wall during the reference service life (60 years).</p> <p>If the building where the Structura panels are placed is scheduled to last 60 + X years, one must multiply the EPD results by 1+ X/60 to take into account the replacement.</p> <p>Number of units needed to cover 1 m<sup>2</sup> of wall : 0.31</p>
<b>Part of the unit</b>	<p>Reference flow: 15.47 kg of Structura</p> <p>It is assumed that there is no loss during the construction phase or replacement during the life in use phase.</p>
<b>Description of the product</b>	<div style="text-align: center;">  </div> <p>The dimensions of one unit are: 2.53 m x 1.28 m x 0.008 m</p> <p>Weight: 15.4 kg/m<sup>2</sup> or 49.9 kg/unit</p> <p>In order to cover 1 m<sup>2</sup> of wall, Structura panels are screwed using 23 g of screws made of stainless steel.</p>

## ENVIRONMENTAL PROFILE

Theme	Unit	Total	Production	Transport	Construction	Use/ Operation	Use/ Maintenance	End of life
<i>Abiotic depletion</i>	kg antimony eq.	1.1E-01	1.0E-01	1.4E-03	4.9E-03	0.0E+00	0.0E+00	5.8E-04
<i>Global warming</i>	kg CO <sub>2</sub> eq.	1.9E+01	1.8E+01	2.3E-01	4.6E-01	0.0E+00	0.0E+00	9.7E-02
<i>Depletion of the ozone layer</i>	kg CFC-11 eq.	1.8E-06	1.6E-06	1.6E-07	7.7E-09	0.0E+00	0.0E+00	6.1E-08
<i>Human ecotoxicity</i>	kg 1,4 dichlorobenzene eq.	6.2E+00	5.9E+00	4.5E-02	1.9E-01	0.0E+00	0.0E+00	1.8E-02
<i>Ecotoxicity aquatic<sup>1</sup></i>	kg 1,4 dichlorobenzene eq.	2.1E+03	2.0E+03	1.7E+01	3.5E+01	0.0E+00	0.0E+00	9.6E+00
<i>Ecotoxicity terrestrial</i>	kg 1,4 dichlorobenzene eq.	7.0E-02	6.0E-02	2.5E-04	9.8E-03	0.0E+00	0.0E+00	8.9E-05
<i>Smog</i>	kg 1,4 dichlorobenzene eq.	1.5E-02	1.4E-02	7.3E-04	5.4E-04	0.0E+00	0.0E+00	3.2E-04
<i>Acidification</i>	kg SO <sub>2</sub> eq.	8.4E-02	7.8E-02	1.4E-03	3.6E-03	0.0E+00	0.0E+00	5.8E-04
<i>Eutrophication</i>	kg PO <sub>4</sub> <sup>-</sup>	7.5E-03	6.7E-03	3.3E-04	3.0E-04	0.0E+00	0.0E+00	1.3E-04

## ENVIRONMENTAL MEASURES

Theme	Unit	Total	Production	Transport	Construction	Use/ Operation	Use/ Maintenance	End of life
<i>Resources</i>	Year <sup>-1</sup>	7.4E-12	7.0E-12	9.1E-14	3.3E-13	0.0E+00	0.0E+00	3.9E-14
<i>Energy</i>	MJ	2.7E+02	2.4E+02	2.8E+00	2.1E+01	0.0E+00	0.0E+00	1.2E+00
<i>Emissions</i>	Year <sup>-1</sup>	1.9E-10	1.8E-07	3.3E-09	7.5E-09	0.0E+00	0.0E+00	1.4E-09
<i>Non hazardous waste</i>	kg	1.8E+00	1.5E+00	2.6E-04	7.7E-02	0.0E+00	0.0E+00	1.5E-01
<i>Hazardous waste</i>	kg	3.6E-02	3.5E-02	6.5E-05	5.5E-04	0.0E+00	0.0E+00	2.8E-05

<sup>1</sup> fresh water and marine impacts are aggregated

<b>Representative for</b>	Eternit A.G. Germany 2004 data
<b>Life cycle phases</b>	All the life cycle phases are included: - Production, transport, construction, use and maintenance, demolition and end of life. The product is considered as being 99% recycled and 1% landfilled.
<b>Other life cycle phases and necessary materials and processes</b>	All life cycle steps are included.
<b>References</b>	This declaration has been prepared according to the NEN 8006:2004 standard. A methodology report is available upon request from the Etex Group Environmental Department. A Product Category Rules (PCR) is currently being drafted.
<b>Peer review</b>	This EPD has been peer reviewed by : J.P.R. Meijer MSc INTRON B.V.
<b>Other company information</b>	Company that carried out the study: ECOBILAN S.A. PricewaterhouseCoopers 63, rue de Villiers 92 208 Neuilly sur Seine Cedex, France.