

CERTIFICATE OF CONSTANCY OF PERFORMANCE

Issued by DBI Certification, notified body No. 2531.

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product

Vertical hollow straight Vierendeel signposts

Scope: **Supports supplied for fixed vertical signs (ZA.2)**

The product fulfils the essential characteristic:

See Annex 1

Intended use: Stock items (described by performance)

Placed on the market under the name or trade mark of:

**Infra Group
Industrivej 17
5750 Ringe**

and produced in the manufacturing plant:

CPA30005

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 12899-1:2007 : **Fixed, vertical road traffic signs - Part 1: Fixed signs**

under system 1 for the performance set out in this certificate are applied and that the performance of the construction product is assessed to remain constant.

The attached annexes form part of this certificate.

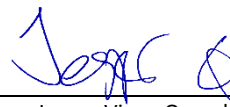
Date of issue: **2020-08-19**.

This certificate will remain valid as long as neither the harmonized standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly unless suspended or withdrawn by the notified product certification body.

This certificate was first issued 2020-08-19.



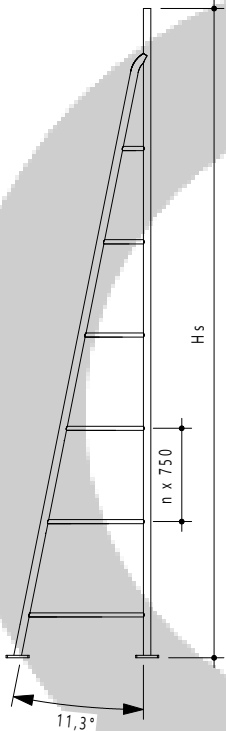
Allan Laursen
Responsible for evaluation



Jesper Viggo Quaade
Responsible for certification decision

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Annex 1
EXTENT

Type	Description																																																																																																																																																																																																																																																																									
<p>Dimensions: Ø33,7x 3,6 Ø60,3 x 3,6</p> <p>Material: Steel S235 JR Hot dip galvanized coating, according to EN 1461.</p> <p>Princip drawing</p> 	<p>Resistance to horizontal loads, bending, torsion:</p> <table border="1"> <thead> <tr> <th>Height of support. H_s</th> <th>Max height of sign. h</th> <th>Max width of sign with use of min. two supports. w</th> <th>Temporary deflection. Class</th> <th>Min. stiffness for bending. E*I</th> </tr> <tr> <th>m</th> <th>m</th> <th>m</th> <th></th> <th>10³ kN/m²</th> </tr> </thead> <tr><td>4,20</td><td>1,75</td><td>7,00</td><td>TDB1</td><td>7,26</td></tr> <tr><td>4,20</td><td>2,00</td><td>7,00</td><td>TDB2</td><td>6,21</td></tr> <tr><td>5,20</td><td>1,75</td><td>7,00</td><td>TDB1</td><td>11,53</td></tr> <tr><td>5,20</td><td>2,75</td><td>7,00</td><td>TDB2</td><td>6,58</td></tr> <tr><td>5,20</td><td>3,00</td><td>6,75</td><td>TDB3</td><td>4,80</td></tr> <tr><td>6,20</td><td>1,25</td><td>7,00</td><td>TDB1</td><td>22,81</td></tr> <tr><td>6,20</td><td>2,50</td><td>7,00</td><td>TDB2</td><td>11,02</td></tr> <tr><td>6,20</td><td>2,75</td><td>6,00</td><td>TDB2</td><td>9,78</td></tr> <tr><td>6,20</td><td>3,00</td><td>5,50</td><td>TDB2</td><td>8,73</td></tr> <tr><td>6,20</td><td>3,25</td><td>5,00</td><td>TDB2</td><td>7,85</td></tr> <tr><td>6,20</td><td>3,50</td><td>4,75</td><td>TDB3</td><td>7,08</td></tr> <tr><td>6,20</td><td>3,75</td><td>4,50</td><td>TDB3</td><td>6,43</td></tr> <tr><td>6,20</td><td>4,00</td><td>4,25</td><td>TDB3</td><td>5,87</td></tr> <tr><td>7,20</td><td>1,50</td><td>7,00</td><td>TDB1</td><td>26,27</td></tr> <tr><td>7,20</td><td>2,25</td><td>7,00</td><td>TDB2</td><td>17,41</td></tr> <tr><td>7,20</td><td>2,50</td><td>6,25</td><td>TDB2</td><td>15,37</td></tr> <tr><td>7,20</td><td>2,75</td><td>5,50</td><td>TDB2</td><td>13,59</td></tr> <tr><td>7,20</td><td>3,00</td><td>5,00</td><td>TDB3</td><td>12,13</td></tr> <tr><td>7,20</td><td>3,25</td><td>4,50</td><td>TDB3</td><td>10,93</td></tr> <tr><td>7,20</td><td>3,50</td><td>4,25</td><td>TDB3</td><td>9,90</td></tr> <tr><td>7,20</td><td>3,75</td><td>4,00</td><td>TDB3</td><td>9,01</td></tr> <tr><td>7,20</td><td>4,00</td><td>3,75</td><td>TDB3</td><td>8,25</td></tr> <tr><td>7,20</td><td>4,25</td><td>3,50</td><td>TDB3</td><td>7,59</td></tr> <tr><td>7,20</td><td>5,00</td><td>3,25</td><td>TDB3</td><td>6,02</td></tr> <tr><td>8,20</td><td>1,25</td><td>7,00</td><td>TDB1</td><td>39,09</td></tr> <tr><td>8,20</td><td>1,50</td><td>7,00</td><td>TDB2</td><td>34,06</td></tr> <tr><td>8,20</td><td>2,25</td><td>7,00</td><td>TDB3</td><td>22,94</td></tr> <tr><td>8,20</td><td>2,50</td><td>6,00</td><td>TDB2</td><td>20,23</td></tr> <tr><td>8,20</td><td>2,75</td><td>5,25</td><td>TDB2</td><td>18,02</td></tr> <tr><td>8,20</td><td>3,00</td><td>4,75</td><td>TDB3</td><td>16,16</td></tr> <tr><td>8,20</td><td>3,25</td><td>4,25</td><td>TDB3</td><td>14,59</td></tr> <tr><td>8,20</td><td>3,50</td><td>3,75</td><td>TDB3</td><td>13,25</td></tr> <tr><td>8,20</td><td>3,75</td><td>3,50</td><td>TDB3</td><td>12,09</td></tr> <tr><td>8,20</td><td>4,00</td><td>3,25</td><td>TDB3</td><td>11,06</td></tr> <tr><td>8,20</td><td>4,50</td><td>3,00</td><td>TDB3</td><td>9,38</td></tr> <tr><td>8,20</td><td>5,00</td><td>2,75</td><td>TDB3</td><td>8,09</td></tr> <tr><td>8,20</td><td>6,00</td><td>2,50</td><td>TDB3</td><td>6,22</td></tr> <tr><td>9,20</td><td>1,25</td><td>7,00</td><td>TDB1</td><td>48,80</td></tr> <tr><td>9,20</td><td>2,00</td><td>7,00</td><td>TDB2</td><td>33,41</td></tr> <tr><td>9,20</td><td>2,25</td><td>6,50</td><td>TDB2</td><td>29,51</td></tr> <tr><td>9,20</td><td>2,50</td><td>5,75</td><td>TDB2</td><td>26,18</td></tr> <tr><td>9,20</td><td>2,75</td><td>5,00</td><td>TDB2</td><td>23,38</td></tr> <tr><td>9,20</td><td>3,00</td><td>4,50</td><td>TDB3</td><td>21,03</td></tr> <tr><td>9,20</td><td>3,25</td><td>4,00</td><td>TDB3</td><td>19,01</td></tr> <tr><td>9,20</td><td>3,50</td><td>3,50</td><td>TDB3</td><td>17,23</td></tr> <tr><td>9,20</td><td>3,75</td><td>3,25</td><td>TDB3</td><td>15,73</td></tr> <tr><td>9,20</td><td>4,25</td><td>3,00</td><td>TDB3</td><td>13,31</td></tr> <tr><td>9,20</td><td>5,00</td><td>2,50</td><td>TDB3</td><td>11,83</td></tr> <tr><td>9,20</td><td>5,25</td><td>2,25</td><td>TDB3</td><td>9,95</td></tr> <tr><td>9,20</td><td>6,25</td><td>2,00</td><td>TDB3</td><td>7,73</td></tr> <tr><td>9,20</td><td>7,00</td><td>1,75</td><td>TDB3</td><td>6,56</td></tr> </table>	Height of support. H _s	Max height of sign. h	Max width of sign with use of min. two supports. w	Temporary deflection. Class	Min. stiffness for bending. E*I	m	m	m		10 ³ kN/m ²	4,20	1,75	7,00	TDB1	7,26	4,20	2,00	7,00	TDB2	6,21	5,20	1,75	7,00	TDB1	11,53	5,20	2,75	7,00	TDB2	6,58	5,20	3,00	6,75	TDB3	4,80	6,20	1,25	7,00	TDB1	22,81	6,20	2,50	7,00	TDB2	11,02	6,20	2,75	6,00	TDB2	9,78	6,20	3,00	5,50	TDB2	8,73	6,20	3,25	5,00	TDB2	7,85	6,20	3,50	4,75	TDB3	7,08	6,20	3,75	4,50	TDB3	6,43	6,20	4,00	4,25	TDB3	5,87	7,20	1,50	7,00	TDB1	26,27	7,20	2,25	7,00	TDB2	17,41	7,20	2,50	6,25	TDB2	15,37	7,20	2,75	5,50	TDB2	13,59	7,20	3,00	5,00	TDB3	12,13	7,20	3,25	4,50	TDB3	10,93	7,20	3,50	4,25	TDB3	9,90	7,20	3,75	4,00	TDB3	9,01	7,20	4,00	3,75	TDB3	8,25	7,20	4,25	3,50	TDB3	7,59	7,20	5,00	3,25	TDB3	6,02	8,20	1,25	7,00	TDB1	39,09	8,20	1,50	7,00	TDB2	34,06	8,20	2,25	7,00	TDB3	22,94	8,20	2,50	6,00	TDB2	20,23	8,20	2,75	5,25	TDB2	18,02	8,20	3,00	4,75	TDB3	16,16	8,20	3,25	4,25	TDB3	14,59	8,20	3,50	3,75	TDB3	13,25	8,20	3,75	3,50	TDB3	12,09	8,20	4,00	3,25	TDB3	11,06	8,20	4,50	3,00	TDB3	9,38	8,20	5,00	2,75	TDB3	8,09	8,20	6,00	2,50	TDB3	6,22	9,20	1,25	7,00	TDB1	48,80	9,20	2,00	7,00	TDB2	33,41	9,20	2,25	6,50	TDB2	29,51	9,20	2,50	5,75	TDB2	26,18	9,20	2,75	5,00	TDB2	23,38	9,20	3,00	4,50	TDB3	21,03	9,20	3,25	4,00	TDB3	19,01	9,20	3,50	3,50	TDB3	17,23	9,20	3,75	3,25	TDB3	15,73	9,20	4,25	3,00	TDB3	13,31	9,20	5,00	2,50	TDB3	11,83	9,20	5,25	2,25	TDB3	9,95	9,20	6,25	2,00	TDB3	7,73	9,20	7,00	1,75	TDB3	6,56
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| | Performance under vehicle impact (passive safety) Class 0. **Durability:** | | | |--|---| | Corrosion resistance (supports)
Metal | SP1 | | Resistance to penetration of dust and water | Supports can not be provided with compartments for electrical equipment | |

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Annex 2

TEST DOCUMENTATION

Accredited Laboratory	Report no.	Date
N/A	N/A	

Annex 3

TECHNICAL BASIS

File number	Title	Date
None	Infra Group ApS CE-marking of Vierendeel posts Calculation report. Verification of the physical performance by calculation in accordance with EN 12899-1:2007.	April 2020

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DBI Certification A/S

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