

## ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804 for:

**Hollow bricks and brick products**  
**HELUZ cihlářský průmysl, v. o. s.**



Programme:

The International EPD<sup>®</sup> System  
[www.environdec.com](http://www.environdec.com)

Programme operator:

EPD International AB

EPD registration number:

S-P-00750  
3013EPD-15-0311

Approval date:

2015-09-07

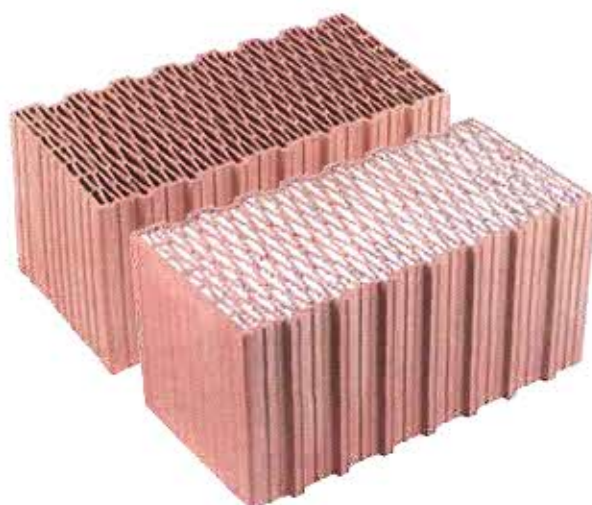
Valid until:

2020-09-07

Revision date:

Geographical scope:

Europe





## 1 COMPANY

The hollow bricks HELUZ is produced in HELUZ cihlářský průmysl v. o. s., 373 65 Dolní Bukovsko 295, Czech Republic. Registration No. / VAT No.: 466 80 004/ CZ46680004. The company is recorded in the Company Register kept by the Regional Court in České Budějovice, Section České Budějovice, File 1867. The record in the Company Register (22. 5. 1992) was ordered by the District Court in České Budějovice. Tel.: +420 389 018 111, fax: +420 386 354 309, <http://www.heluz.cz/>

The company of HELUZ cihlářský průmysl v. o. s. produces a complex range of brick products which can be further used for rough constructions. At current times, the company has its manufacturing facilities in three locations. There is a brick production plant in Dolní Bukovsko where the company's headquarter can be also find. This plant includes facilities for brick production, production of horizontal structures and production of roller blind lintels and chimney systems. In Hevlín, there are two production plants for complete range of brick products. Brick-kiln of Hevlín II is one of the most advanced manufacturing plants in Europe which is furnished with advanced technology; there are brick blocks which have the best thermal and insulation characteristics produced right here. In the brick-kiln of Libochovice, there is a production facility for brick blocks, accessories and also ceramic ceiling panels of HELUZ. The company of HELUZ cihlářský průmysl v. o. s. sell its goods to foreign markets too - Slovakia, Austria, Germany, Poland and Hungary and offer following categories of brick:

**HELUZ FAMILY** and **HELUZ FAMILY 2in1**: Unique news on Czech market used for passive and low-energy building without necessary thermal insulation. Passive and low-energy house.

**HELUZ STI**: Brick blocks of STI quality which comply with parameters of energy saving and low-energy buildings.

**HELUZ AKU**: Acoustic bricks for housing development.

**HELUZ PLUS**, **HELUZ P15** and **HELUZ** are brick blocks for internal and external masonry that will be additionally insulated.





## 2 PRODUCT

|               |   |
|---------------|---|
| Declared unit | 1 000 kg of burnt bricks  |
| UN CPC        | 3731: Bricks, blocks, tiles and other ceramic goods of siliceous earths |

The hollow brick HELUZ is a brick for general masonry use it can be used for load bearing, non load bearing and acoustic masonry. Especially it can be used for one layer thermal insulated masonry, that reach U - value 0,15 W/m<sup>2</sup>K. This EPD covers all HELUZ brick production with the same composition. Differences are only in shape and volume of bricks. Material and energy consumption of production is only product weight depended. As this EPD is based on declaration unit which is 1000 kg of product, environmental data shown below are valid for all bricks.

This EPD is valid for in tables below summarized HELUZ bricks:

### Plants Hevlín

| Trademark         | Type       | Width | Weight/ pcs | Weight/ m <sup>2</sup> | U - Value          | Recommended use |
|-------------------|------------|-------|-------------|------------------------|--------------------|-----------------|
|                   |            | cm    | kg          | kg                     | W/m <sup>2</sup> K |                 |
| HELUZ Family 2in1 | calibrated | 50    | 20,0        | 320                    | 0,11               | A, B, C         |
|                   |            | 44    | 17,6        | 281                    | 0,13               | A, B, C         |
|                   |            | 38    | 15,5        | 243                    | 0,16               | A, B, C         |
|                   |            | 30    | 12,5        | 201                    | 0,22               | A, B, C         |
|                   |            | 25    | 10,3        | 162                    | 0,31               | B, C            |
| HELUZ Family      | calibrated | 50    | 19,7        | 315                    | 0,15               | A, B, C         |
|                   |            | 44    | 17,3        | 277                    | 0,18               | A, B, C         |
|                   |            | 38    | 15,0        | 239                    | 0,21               | A, B, C         |
|                   |            | 30    | 12,4        | 198                    | 0,26               | A, B, C         |
|                   |            | 25    | 10,1        | 162                    | 0,35               | B, C            |
| HELUZ STI         | calibrated | 49    | 18,1        | 289                    | 0,19               | A, B, C         |
|                   |            | 44    | 15,7        | 251                    | 0,2                | A, B, C         |
|                   |            | 40    | 14,3        | 228                    | 0,22               | A, B, C         |
|                   |            | 38    | 13,8        | 221                    | 0,23               | A, B, C         |
| HELUZ STI         |            | 44    | 15,0        | 240                    | 0,20               | A, B, C         |

Expected service life time is 100 years.

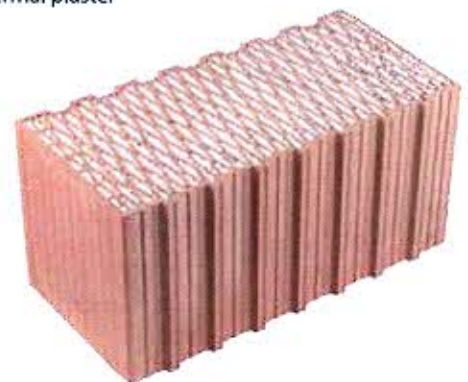
U - Value - design value without plaster except of category of use A, there is a design value with thermal plaster

A - One layer thermal insulating masonry

B - Load bearing masonry

C - Non load bearing masonry

D - Acoustic masonry



| Trademark  | Type       | Width | Weight/ pcs | Weight/ m <sup>2</sup> | U - Value          | Recommended use |
|------------|------------|-------|-------------|------------------------|--------------------|-----------------|
|            |            | cm    | kg          | kg                     | W/m <sup>2</sup> K |                 |
| HELUZ Plus | calibrated | 44    | 16,2        | 260                    | 0,22               | A, B, C         |
|            |            | 40    | 14,8        | 236                    | 0,24               | A, B, C         |
|            |            | 38    | 13,9        | 222                    | 0,25               | A, B, C         |
|            |            | 36,5  | 13,5        | 216                    | 0,29               | B, C            |
|            |            | 30    | 13,1        | 210                    | 0,53               | B, C            |
|            |            | 25    | 15,4        | 165                    | 0,49               | B, C            |
| HELUZ Plus |            | 44    | 15,5        | 248                    | 0,23               | A, B, C         |
|            |            | 40    | 14,1        | 226                    | 0,25               | A, B, C         |
|            |            | 38    | 13,3        | 213                    | 0,29               | B, C            |
|            |            | 36,5  | 12,9        | 206                    | 0,30               | B, C            |
|            |            | 30    | 12,5        | 200                    | 0,61               | B, C            |
|            |            | 25    | 14,7        | 158                    | 0,50               | B, C            |
| HELUZ P15  | calibrated | 30    | 12,9        | 207                    | 0,53               | B, C            |
|            |            | 25    | 17,3        | 185                    | 0,87               | B, C            |
|            |            | 20    | 17,6        | 141                    | 1,11               | B, C            |
| HELUZ P15  |            | 30    | 12,3        | 198                    | 0,61               | B, C            |
|            |            | 25    | 16,5        | 177                    | 0,93               | B, C            |
|            |            | 20    | 16,8        | 134                    | 1,17               | B, C            |
| HELUZ      | calibrated | 24    | 14,7        | 158                    | 0,88               | B, C            |
|            |            | 20    | 16,3        | 131                    | 1,00               | B, C            |
|            |            | 17,5  | 14,7        | 118                    | 1,11               | B, C            |
|            |            | 14    | 11,6        | 93                     | 1,29               | B, C            |
|            |            | 11,5  | 10,3        | 83                     | 1,46               | C               |
|            |            | 10    | 10,0        | 80                     | 1,59               | C               |
|            |            | 8     | 5,3         | 57                     | 1,80               | C               |
| HELUZ      |            | 24    | 14,0        | 151                    | 0,94               | B, C            |
|            |            | 20    | 15,6        | 125                    | 1,08               | B, C            |
|            |            | 17,5  | 14,1        | 113                    | 1,18               | B, C            |
|            |            | 14    | 11,1        | 89                     | 1,37               | B, C            |
|            |            | 11,5  | 9,9         | 79                     | 1,55               | C               |
|            |            | 10    | 9,5         | 76                     | 1,68               | C               |
|            |            | 8     | 5,0         | 54                     | 1,90               | C               |

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D - Acoustic masonry



| Trademark | Type      | Width | Weight/ pcs | Weight/ m <sup>2</sup> | SRI - R <sub>w</sub> | Recommended use |
|-----------|-----------|-------|-------------|------------------------|----------------------|-----------------|
|           |           | cm    | kg          | kg                     | dB                   |                 |
| HELUZ AKU | MK        | 36,5  | 20,2        | 323                    | 58                   | B, C, D         |
|           | 30/333 MK | 30    | 21,3        | 256                    | 58                   | B, C, D         |
|           | 30/333    | 30    | 23,3        | 280                    | 56                   | B, C, D         |
|           | MK        | 25    | 20,2        | 216                    | 56                   | B, C, D         |
|           |           | 20    | 18,2        | 195                    | 53                   | B, C, D         |
|           | MK        | 17,5  | 15,1        | 162                    | 53                   | B, C, D         |
|           |           | 11,5  | 11,0        | 118                    | 47                   | C, D            |

## Plants Libochovice

| Trademark    | Type       | Width | Weight/ pcs | Weight/ m <sup>2</sup> | U - Value          | Recommended use |
|--------------|------------|-------|-------------|------------------------|--------------------|-----------------|
|              |            | cm    | kg          | kg                     | W/m <sup>2</sup> K |                 |
| HELUZ Family | calibrated | 44    | 19,5        | 312                    | 0,17               | A, B, C         |
|              |            | 38    | 16,8        | 269                    | 0,21               | A, B, C         |
|              |            | 30    | 13,3        | 213                    | 0,29               | A, B, C         |
|              |            | 25    | 11,5        | 185                    | 0,35               | B, C            |
| HELUZ STI    | calibrated | 49    | 18,7        | 299                    | 0,17               | A, B, C         |
|              |            | 44    | 16,8        | 268                    | 0,19               | A, B, C         |
|              |            | 40    | 16,0        | 256                    | 0,20               | A, B, C         |
| HELUZ STI    |            | 44    | 16,0        | 257                    | 0,20               | A, B, C         |
| HELUZ Plus   | calibrated | 44    | 17,6        | 281                    | 0,21               | A,B,C           |
|              |            | 40    | 15,3        | 244                    | 0,23               | A,B,C           |
|              |            | 36,5  | 14,4        | 230                    | 0,25               | A,B,C           |
|              |            | 30    | 13,7        | 218                    | 0,58               | B,C             |
|              |            | 25    | 15,4        | 165                    | 0,49               | B,C             |
| HELUZ Plus   |            | 44    | 16,8        | 269                    | 0,22               | A,B,C           |
|              |            | 40    | 14,6        | 233                    | 0,24               | A,B,C           |
|              |            | 36,5  | 13,7        | 220                    | 0,29               | B,C             |
|              |            | 30    | 13,1        | 209                    | 0,66               | B,C             |
|              |            | 25    | 14,7        | 158                    | 0,50               | B,C             |

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C - Non load bearing masonry

D - Acoustic masonry



| Trademark | Type       | Width | Weight/ pcs | Weight/ m <sup>2</sup> | U - Value          | Recommended use |
|-----------|------------|-------|-------------|------------------------|--------------------|-----------------|
|           |            | cm    | kg          | kg                     | W/m <sup>2</sup> K |                 |
| HELUZ P15 | calibrated | 30    | 15,1        | 242                    | 0,53               | B,C             |
|           |            | 25    | 19,1        | 205                    | 0,87               | B,C             |
| HELUZ P15 |            | 30    | 14,5        | 231                    | 0,61               | B,C             |
|           |            | 25    | 18,3        | 196                    | 0,93               | B,C             |
| HELUZ     | calibrated | 24    | 16,2        | 175                    | 0,85               | B,C             |
|           |            | 20    | 17,1        | 137                    | 0,98               | B,C             |
|           |            | 17,5  | 15,4        | 123                    | 1,08               | B,C             |
|           |            | 14    | 11,4        | 91                     | 1,26               | B,C             |
|           |            | 11,5  | 10,5        | 84                     | 1,43               | C               |
|           |            | 8     | 5,3         | 57                     | 1,77               | C               |
| HELUZ     |            | 24    | 15,5        | 168                    | 0,92               | B,C             |
|           |            | 20    | 16,3        | 131                    | 1,05               | B,C             |
|           |            | 17,5  | 14,7        | 118                    | 1,08               | B,C             |
|           |            | 14    | 10,9        | 87                     | 1,35               | B,C             |
|           |            | 11,5  | 10,1        | 81                     | 1,52               | C               |
|           |            | 8     | 5,0         | 54                     | 1,87               | C               |

| Trademark | Type      | Width | Weight/ pcs | Weight/ m <sup>2</sup> | SRI - R <sub>w</sub> | Recommended use |
|-----------|-----------|-------|-------------|------------------------|----------------------|-----------------|
|           |           | cm    | kg          | kg                     | dB                   |                 |
| HELUZ AKU | MK        | 36,5  | 20,2        | 323                    | 58                   | B, C, D         |
|           | 30/333 MK | 30    | 21,3        | 256                    | 58                   | B, C, D         |
|           | 30/333    | 30    | 23,3        | 280                    | 56                   | B, C, D         |
|           | MK        | 25    | 20,2        | 216                    | 56                   | B, C, D         |
|           |           | 20    | 18,2        | 195                    | 53                   | B, C, D         |
|           | MK        | 17,5  | 15,1        | 162                    | 53                   | B, C, D         |
|           |           | 11,5  | 11,0        | 118                    | 47                   | C, D            |

Expected service life time is 100 years.

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## Plants Dolní Bukovsko

| Trademark  | Type       | Width | Weight/ pcs | Weight/ m <sup>2</sup> | U - Value          | Recommended use |
|------------|------------|-------|-------------|------------------------|--------------------|-----------------|
|            |            | cm    | kg          | kg                     | W/m <sup>2</sup> K |                 |
| HELUZ Plus | calibrated | 44    | 18,4        | 294                    | 0,32               | A,B,C           |
|            |            | 40    | 16,2        | 260                    | 0,34               | A,B,C           |
|            |            | 30    | 14,9        | 239                    | 0,59               | B,C             |
|            |            | 25    | 18,2        | 195                    | 0,67               | B,C             |
| HELUZ Plus |            | 44    | 17,6        | 281                    | 0,31               | A,B,C           |
|            |            | 40    | 15,5        | 248                    | 0,33               | A,B,C           |
|            |            | 30    | 14,3        | 229                    | 0,65               | B,C             |
|            |            | 25    | 17,4        | 186                    | 0,75               | B,C             |
| HELUZ P15  | calibrated | 30    | 17,9        | 286                    | 0,62               | B,C             |
|            |            | 25    | 22,6        | 242                    | 0,94               | B,C             |
| HELUZ P15  |            | 30    | 17,1        | 274                    | 0,68               | B,C             |
|            |            | 25    | 21,6        | 232                    | 0,99               | B,C             |
| HELUZ      | calibrated | 24    | 17,3        | 187                    | 0,92               | B,C             |
|            |            | 20    | 18,6        | 149                    | 1,05               | B,C             |
|            |            | 17,5  | 16,2        | 130                    | 1,15               | B,C             |
|            |            | 14    | 13,0        | 104                    | 1,34               | B,C             |
|            |            | 11,5  | 11,4        | 91                     | 1,52               | C               |
|            |            | 8     | 6,0         | 65                     | 1,85               | C               |
| HELUZ      |            | 24    | 16,6        | 179                    | 0,98               | B,C             |
|            |            | 20    | 17,7        | 142                    | 1,12               | B,C             |
|            |            | 17,5  | 15,5        | 124                    | 1,22               | B,C             |
|            |            | 14    | 12,4        | 99                     | 1,42               | B,C             |
|            |            | 11,5  | 10,9        | 87                     | 1,60               | C               |
|            |            | 8     | 5,7         | 62                     | 1,94               | C               |

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D - Acoustic masonry



