

# Pórobetonové tvárnice Autoclaved aerated concrete masonry units

**CE**

01234

AnyCo Ltd, PO Box 21, B-1050

02

01234-CPD-00234

EN 771-4

Category I, xxx-yyy-zz mm autoclaved aerated concrete masonry unit

**Compressive strength:** mean xx N/mm<sup>2</sup> (L bedface)(Cat I)

**Dimension stability:** moisture movement: NPD

**Bond strength:** by testing xx (N/mm<sup>2</sup>) A1

**Reaction to fire:** Euroclass Not to be left exposed

**Water absorption:** Water vapour diffusion coefficient: xxx

**Direct airborne sound insulation:** xxx

**Gross density:** xxx (D1) kg/m<sup>3</sup>

**Configuration:** attached drawing if necessary

**Equivalent thermal conductivity:** xx W/mK

( $\lambda_{10, dry}$ )

**Durability against freeze-thaw:** Not to be left exposed

**Dangerous substances:** See NOTE below

CE conformity marking, consisting of the

"CE"-symbol given in directive 93/68/EEC.

Identification number of the certification body<sup>a</sup>

Name or identifying mark and registered address of the producer

Last two digits of the year in which the marking was affixed

Certificate number<sup>b</sup>

No. of European standard

Description of product

and

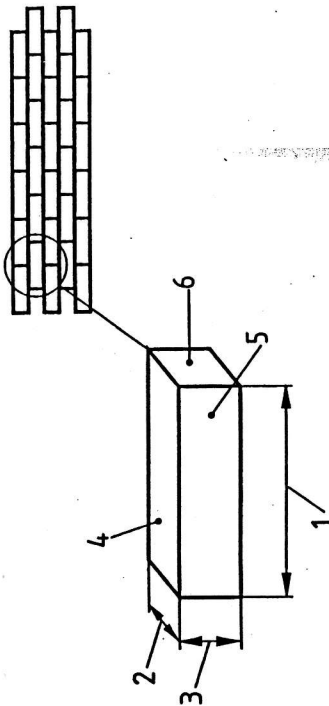
information on regulated characteristics

<sup>a</sup> The identification of the notified body is only relevant for system 2+

<sup>b</sup> Reference to the Certificate number shall only be made under systems 2+

NOTE Information on dangerous substances will only be given when and where required and in the appropriate form (see clause ZA.3).

Example of the information for an autoclaved aerated concrete masonry unit of Category I intended for all possible uses and to be placed on markets where there are no regulations for moisture movement



Key

1 Length

4 Bed

2 Width

5 Face

3 Height

6 Header

NOTE This relates to the normal use of the masonry unit in the wall.

Figure 1 — Dimensions and surfaces

Table 1 — Maximum dimensions for AAC masonry units

	Dimensions in millimetres
Length	1500
Width	600
Height	1000

They shall be given in terms of work size.


NOTE In addition the co-ordinating size may be given.

AAC masonry units shall be sampled in accordance with Annex A and tested in accordance with EN 772-16.

Figure ZA.2 — Examples CE marking information

# Zdící prvky z umělého kamene

## Manufactured stone masonry units

 01234	AnyCo Ltd, PO Box 21, B-1050 03 01234-CPD-00234
<b>EN 771-5</b> Category I, manufactured stone masonry unit	
<b>Compressive strength: normalized characteristic:</b> xx N/mm <sup>2</sup> (L bedface), Ground (Cat I)	<b>Compressive strength: normalized characteristic:</b> xx N/mm <sup>2</sup>
<b>Dimensional stability: moisture movement:</b> NPD	<b>Dimensional stability: moisture movement:</b> NPD
<b>Bond strength: by testing</b> xx (N/mm <sup>2</sup> )	<b>Bond strength: by testing</b> xx (N/mm <sup>2</sup> )
<b>Reaction to fire:</b> Euroclass A1	<b>Reaction to fire:</b> Euroclass A1
<b>Water absorption:</b> Not to be left exposed	<b>Water absorption:</b> Not to be left exposed
<b>Water vapour diffusion coefficient:</b> xxx	<b>Water vapour diffusion coefficient:</b> xxx
<b>Direct airborne sound insulation:</b>	<b>Direct airborne sound insulation:</b>
<b>Gross density</b> xxxx (D1) kg/m <sup>3</sup>	<b>Gross density</b> xxxx (D1) kg/m <sup>3</sup>
<b>Configuration</b> As in attached drawing	<b>Configuration</b> As in attached drawing
<b>Equivalent thermal conductivity:</b> xx W/mK ( $\lambda_{10,dr}$ )	<b>Equivalent thermal conductivity:</b> xx W/mK ( $\lambda_{10,dr}$ )
<b>Durability against freeze-thaw:</b> Freeze-thaw resistance	<b>Durability against freeze-thaw:</b> Freeze-thaw resistance
<b>Dangerous substances:</b> See NOTE below	<b>Dangerous substances:</b> See NOTE below

NOTE 3 Information on dangerous substances will only be given when and where required and in the appropriate form (see ZA.3).

Example of the information for a manufactured stone masonry unit of Category I intended for all possible uses, and to be placed on markets where there are no regulations for drying shrinkage.

CE conformity marking, consisting of the

"CE"-symbol given in Directive 93/68/EEC.

Identification number of the certification body<sup>a</sup>

Name or identifying mark and registered address of the producer

Last two digits of the year in which the marking was affixed  
 Certificate number<sup>b</sup>

No. of European standard

Description of product  
 and

information on regulated characteristics

<sup>a</sup> The identification of the notified body is only relevant for system 2+

<sup>b</sup> Reference to the Certificate number shall only be made under systems 2+

Table 2 — Normalised compressive strength of manufactured stone masonry units<sup>a</sup>

Type of masonry unit	Mean compressive strength N/mm <sup>2</sup>	Characteristic compressive strength N/mm <sup>2</sup>
Homogeneous	20	17,5
Two-part: facing mix backing mix	20 15	17,5 13

NOTE 1 The compressive strength values in this table are based on durability and other considerations.

NOTE 2 When the compressive strength of two-part units is required to establish the strength of walls in accordance with design codes, only results obtained from testing whole masonry units should be used.

<sup>a</sup> For the normalised compressive strength see annex B.

### Annex B (normative)

The value of mechanical strength called up in 5.5 is the normalised compressive strength.

To reach this from the value obtained by testing in accordance with EN 772-1, it shall be brought to the air dry equivalent if conditioned by immersion, by multiplying by 1,2, and then further multiplied by the factor  $\delta$  given in Table B.1 to allow for the height and width of the specimens tested.

Table B.1 — Values of factor  $\delta$

Height of unit (mm)	Least horizontal dimension of unit (mm)			
	50	100	150	200
50	0,85	0,75	0,70	-
65	0,95	0,85	0,75	0,65
100	1,15	1,00	0,90	0,75
150	1,30	1,20	1,10	0,95
200	1,45	1,35	1,25	1,10
250 or greater	1,55	1,45	1,35	1,15

NOTE Linear interpolation is permitted.

# Zdici prvky z přírodního kamene

## Natural stone masonry units

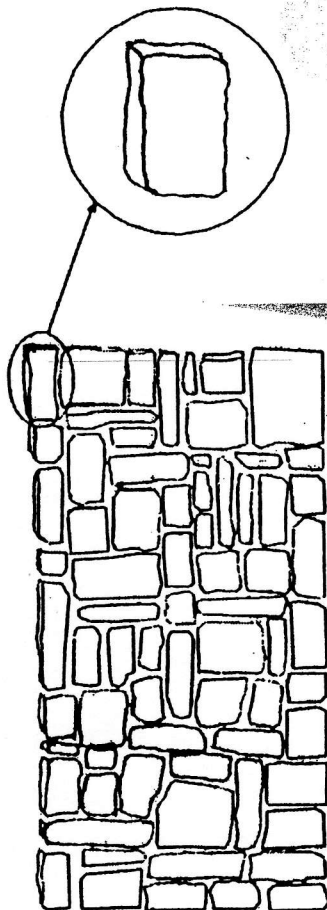


Figure 1 — Dimensions and surfaces for rubble stone

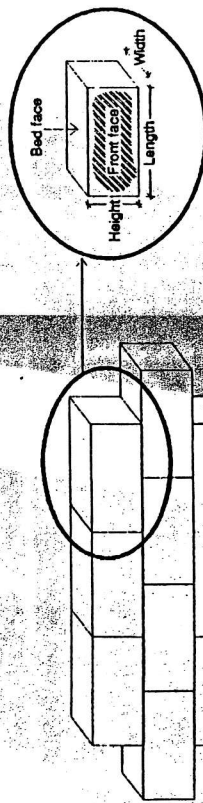


Figure 2 — Dimensions and faces for dimensioned stone

Natural stone is a natural product obtained by mining or by quarrying and made into masonry units by a manufacturing process.

### Materials of Natural Stone

The following groups of materials are considered as natural stone:

- **Magmatic or igneous rocks:** Rocks formed by the cooling and solidification of the magma, e.g. granite, basalt, diorite, porphyry.
- **Sedimentary rocks:** Rocks formed by deposition (generally in water) and consolidation of organic or inorganic particles. For example limestone, sandstone, travertine.
- **Metamorphic rocks:** Transformed rocks resulting from action of heat and/or pressure on the pre-existing rocks. For example slate, gneiss, quartzite, marble.

The manufacturer/supplier shall declare the average apparent density and total and open porosity of six specimens sampled in accordance with annex A and tested in accordance with EN 772-4.

### 5.6 Mechanical strengths

#### 5.6.1 Compressive strength

The compressive strength shall be declared by the manufacturer/supplier. When the natural stone masonry units are sampled from a consignment in accordance with Annex A and tested in accordance with prEN 772-1 and conditioned in accordance with 7.3.3 b) of prEN 772-1 then the mean compressive strength of the specified number of natural stone units from a consignment shall be not less than the declared compressive strength.

When it is not convenient to test units whole the test specimen may be cubes with a length, width and height of  $(70 \pm 5)$  mm. If the compressive strength is greater than  $40 \text{ N/mm}^2$  and the strength of each individual specimen is greater than  $30 \text{ N/mm}^2$  the test specimens may be cubes with a length, width and height of  $(50 \pm 5)$  mm.

Sawn test specimens shall be representative of the original unit section.

The declaration shall relate to and indicate the intended orientation of natural stone units as tested and the method of bedding the units. Where, due to its means of formation the strength properties of the stone are not isotropic, e.g. due to presence of bedding planes, it may be necessary to declare the compressive strength normal to more than one face of the test specimen. If the grinding process significantly alters the contact area of the faces tested or if the flatness tolerance cannot be achieved and the capping procedure is thereby used this shall be declared.

#### 5.6.2 Flexural strength

For units that could be subjected to flexural stress during use the manufacturer/supplier shall declare the mean flexural strength under concentrated load of six specimens sampled in accordance with annex A and tested in accordance with EN 12372.

When the stone shows bedding planes or anisotropic features the test shall be carried out with the force applied on the plane parallel to that which will be loading during use. If no arrangement of use is established, three values of flexural strength shall be declared:

- 1) Load applied with rollers perpendicular to the bedding plane;
- 2) Load applied with rollers parallel to the bedding plane;
- 3) Load applied with rollers perpendicular to the edges of the bedding plane.

declared value:

A value that a manufacturer is confident of achieving bearing in mind the precision of the test and the variability of the manufacturing process.

indicative samples:

A piece of natural stone of sufficient size to indicate the appearance of the finished work, regarding the colouring, the vein pattern, the physical structure and face finish.

# Malty pro zdění Masonry Mortar

Tabulka 1 - Třídy malt

Třída	M 1	M 2,5	M 5	M 10	M 15	M 20	M d
Pevnost v tlaku N/mm <sup>2</sup>	1	2,5	5	10	15	20	d
d je pevnost v tlaku větší než 25 N/mm <sup>2</sup> deklarovaná výrobcem							

<b>CE</b> 01234	Výrobce 00	01234-CPD-00234	EN 998-2
<p>Návrhová obyčejná malta pro zdění k použití ve venkovních stavebních částech s konstruktivními požadavky</p> <p>Pevnost v tlaku: Třída M 5</p> <p>Počáteční pevnost ve smyku: 0,15 N/mm<sup>2</sup> (tabulková hodnota)</p> <p>Obsah chloridů: 0,07 % Cl</p> <p>Reakce na oheň: Třída A 1</p> <p>Absorpce vody: 0,05 kg/(m<sup>2</sup>·min<sup>0,5</sup>)</p> <p>Propustnost vodních par: μ 15/35</p> <p>Tepelná vodivost: (λ<sub>10,6K</sub>) 0,83 W/(m·K) (tabulková hodnota)</p> <p>Trvanlivost (zmrazování / rozmrazování): posouzení podle ustanovení platného v místě určeného použití malty</p>			

Označení shody CE sestávající ze symbolu „CE“ uvedeného ve směrnici EU 93/68/EHS

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Jméno nebo identifikační značka a registrovaná adresa výrobce

Poslední dvojciferný rok, v němž bylo označení připojeno

Číslo certifikátu

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Popis výrobku

a

informace o předepsaných vlastnostech

<b>CE</b>	Výrobce 00	EN 998-2	EN 998-2
<p>Předpisová obyčejná malta pro zdění k použití ve venkovních stavebních částech s konstruktivními požadavky</p> <p>Dávkování složek (objemově): cement 15 % vápno 10 % kamenivo 75 %</p> <p>Obsah chloridů: 0,07 % Cl</p> <p>Reakce na oheň: Třída A 1</p> <p>Absorpce vody: 0,1 [kg/(m<sup>2</sup>·min<sup>0,5</sup>)]</p> <p>Propustnost vodních par: μ 15/35</p> <p>Tepelná vodivost: 0,83 W/(m·K) (λ<sub>10,6K</sub>) (tabulková hodnota)</p> <p>Trvanlivost (zmrazování / rozmrazování): posouzení podle ustanovení platného v místě určeného použití malty</p>			

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