	CO-ORDINATION OF NOTIFIED BODIES **PPE Regulation 2016/425** **RECOMMENDATION FOR USE**	PPE-R/11.156 Version 01

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Origin : Horizontal Committee	

Question related to ☒ PPE Regulation ☐ PPE Guidelines ☒ EN/prEN: EN 568:2015 ☐ Other:

Article: Annex: Clause:

Key words:

Preparation, conditioning, cellular concrete

Question:

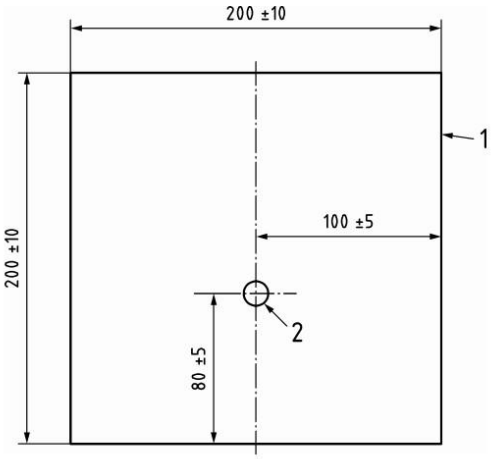
How to carry out test preparation and conditioning for the holding test on radial direction when using cellular concrete?

Solution:

Use the test preparation and conditioning as described in prEN 568 from May 2024 (Doc TC136/WG5/N1504):

Test preparation and conditioning:

Drill at the middle of the surface of the cellular concrete block, and (80 +/- 5) mm from one edge, at an angle of (90 +/- 3)°, with a depth equivalent to the placement length l in mm (-0/+5) mm. See figure 3



Key:

1 test block

2 drilled hole

Figure 3 — Test block dimension and position of the drilled hole

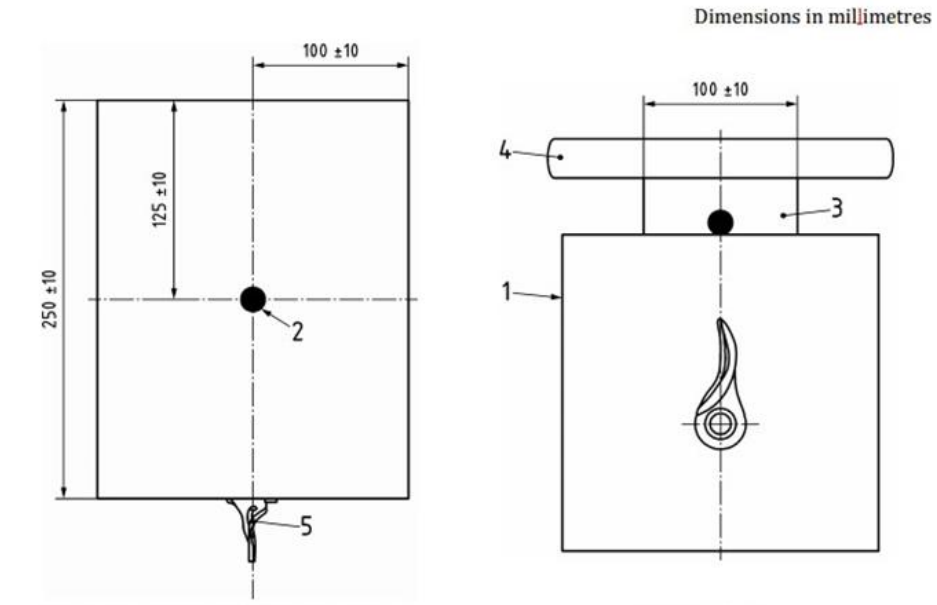
The drilled diameter d is calculated with the following formula (1): (d ± 0,1) mm = D - 4 mm

Where

d is the drilled diameter in millimetres, rounded to the nominal diameter;

D is the internal diameter of the ice anchor measured from the toothed end of the ice screw.

Condition the cellular concrete block for (48 0/+2) h in water at (23 ± 2) °C. Because the test block is initially floating, it shall be loaded to be completely immersed. The bearing surface on the test block shall be as small as possible in order to allow water to penetrate over the entire surface and also the bottom surface.
Within 3 min of removal from the water, insert the ice anchor as specified in the manufacturer's instructions and information in the drilled hole of the test block. For ice screws, if screwing becomes difficult, unscrew the ice screw and empty the tube of cellular concrete debris, then screw again. For long ice screw, repeat this operation if necessary. If at the end of the screwing the hanger is not in the pulling axis, excavate the surface of the cellular concrete to screw in the intended position.
Store the test block in a conditioning chamber. Place the temperature sensor as indicated in Figure 4 a).



a) top view without EPS block and mass

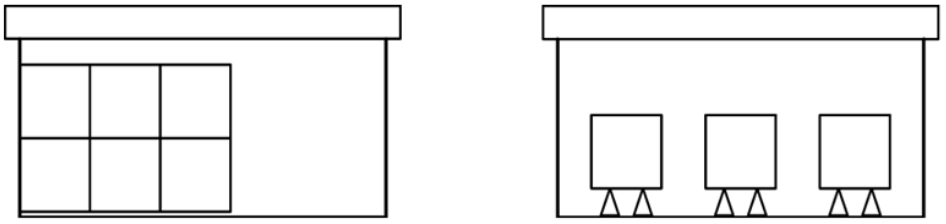
b) side view

Key:

1 test block
2 temperature sensor
3 EPS block
4 (5 ± 0,1) kg mass
5 ice anchor

Figure 4 — Position of the temperature sensor

Isolate the temperature sensor with an EPS (expanded polystyrene) block of (100 ± 5) mm x (100 ±5) mm x (35 ±5) mm and load the EPS block with a mass of (5 ± 0,1) kg as indicated in Figure 4 b). If necessary, excavate the EPS block to give room for the sensor and cable. Check that the EPS surface is fully in contact with the test block surface, temperature sensor and cable.
Store the test block with the test sample at (– 20 ±5) °C. A clearance of at least 50 mm around the test block shall be insured (see Figure 5).



a) Bad placement of the test blocks

b) Good placement of the test blocks

Figure 5 — Example of test block placement in the conditioning chamber

Start the conditioning time when the temperature sensor reaches -20 °C. After at least 12 h at (-20 ± 2) °C given by the temperature sensor, remove the test block from the conditioning chamber and carry out the test within 3 min.