

Number	K 11045/05	Replaces	K 11045/04
Issued	2009-01-01	date	2006-09-01
Valid until	Indefinite	Page	1 of 3



Concrete construction elements

Betonfabriek Nigtevecht B.V.

STATEMENT BY KIWA

This technical approval with product certificate was issued on the basis of evaluation guideline BRL 2813 'Concrete Construction Elements' d.d. 2006-06-01, in conformity with the Kiwa Regulations for Product Certification.

Kiwa declares that:

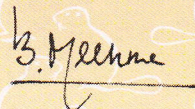
- The concrete construction elements manufactured by the certificate holder may be relied upon to meet the technical and environmental specifications defined in this technical approval with product certificate on delivery, provided that they have been labelled with the KOMO[®] quality mark as indicated in this technical approval with product certificate;
- the structures composed of the certified products will deliver a performance laid down in this technical approval with product certificate, provided:
 - the structures are constructed in accordance with the handling methods described in this technical approval with product certificate;
 - the application conditions described in this technical approval with product certificate are met.

Kiwa declares that the concrete construction elements if applied under the above-mentioned conditions will comply with the applicable requirements of the Dutch Building Decree and the Dutch Decree on soil quality.

Within the framework of this technical approval with product certificate, Kiwa does not carry out any inspections on:

- the production of the other parts of the structures;
- the manufacture of the structures itself;
- the user's obligation to report and/or send information to the competent authority.

This certificate is an approved quality certificate in accordance with the Tripartite agreement (Official Gazette 132, 2006), the Housing Act and the Building Decree. For the Decree on soil quality, this is a certificate approved by VROM (Ministry of Spatial Planning, Housing and the Environment) and V&W ministers if the certificate is listed in the "List of approved quality certificates in the building industry" on the SBK website (SBK: Foundation for Building Quality) www.bouwkwaliteit.nl and the Bodem+ website www.bodemplus.nl.

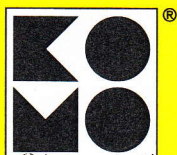


Bouke Meekma
Director Kiwa Nederland B.V.

Advice: go to www.kiwa.nl to find out whether this certificate is valid.

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Building Decree Decree soil quality

The following has been
evaluated:

- quality system
- product
- product performance
- in application
- Periodic check

Concrete construction elements

1. BUILDING CODE

Building Decree section no. and title	Limit value / Determination method	Performance in accordance with quality declaration	Comments related to application
Chapter 2 – Safety regulations			
2.1 General strength of the construction	Limit condition determined in accordance with NEN 6720 or the alternative determination method in section 4.2.1 of BRL 2813.	The concrete construction elements comply with the detailing requirements according to chapters 5 and 9 of NEN 6720	
2.2 Strength in case of fire	Duration of fire resistance with respect to collapse according to section 2.9 of the Building Decree, determined in accordance with NEN 6069 or NEN 6071.		To be determined per project

2. TECHNICAL SPECIFICATION AND SPECIFICATION CONCERNING ENVIRONMENTAL PROTECTION

2.1 SUBJECT

Construction concrete elements can be used in structures which can be in contact with rain, ground water and/or surface waters.

2.2 TECHNICAL SPECIFICATION

This technical approval with product certificate covers the following concrete construction elements:

- Construction elements of VBC concrete manufactured in conformity with NEN-EN 206-1 and NEN 8005 and NEN 6722, that comply with the requirements in chapters 5 and 9 of NEN 6720.

The construction elements consist of (non-)reinforced concrete.

Further specifications of the products have been specified in the drawings approved by the buyer or certified by the company with the approval of the buyer, if necessary providing any further descriptions with respect to accepted crack width, structure, colour, smoothness, size tolerances and the like.

2.3 SPECIFICATION CONCERNING ENVIRONMENTAL PROTECTION

The average composition values determined in accordance with AP 04-SB and the average emissions determined in accordance with AP04-U comply with appendix A to the Regulations on soil quality for the intended field of application.

Conditions for application

The elements are to be used in accordance with clauses 5, 6, 7 and 33 of the Decree on soil quality.

2.4 MARKING AND MARKS ON THE DELIVERY DOCUMENTS

Each element is marked with the KOMO[®] quality mark shown next to the text.

Required indications:

- manufacturer brand or name;
- production date;
- element number and product number, corresponding with the drawing concerned.

The KOMO[®] quality mark is placed on the delivery documents or it is to be specified in the delivery documents that the product complies with the Decree on soil quality



3. HANDLING

The manufacturer has agreed with Kiwa to take care of the quality assurance of the product after the final check of this in the factory until the time of delivery at the place of delivery.

The manufacturer will make available to the buyer all documentation that is relevant to the buyer, such as guidelines for handling and use, product certificates, warnings and the like at the moment of delivery.

The manufacturer is obliged towards Kiwa to ensure the correct contents of this documentation.

4. PERFORMANCE

4.1 STRENGTH OF THE CONSTRUCTION (BUILDING DECREE SECTION 2.1)

The manufacturer or buyer will draw up drawings and calculations for each construction element demonstrating compliance of the construction element with the section of the Building Decree referred to.

NEN 6720 as referred to in section 2.1 of the Building Decree may be used to determine the strength of the construction elements of VBC concrete.

When accepting an order, the certificate holder shall agree with this client on performing the tasks and responsibilities with respect to the calculations and drawings of the concrete construction elements according to category 1, 2, 3 or 4.

Concrete construction elements in a category higher than 4 will be delivered under this product certificate.

The categories are described in annex 8 of the Criteria 73.

Clarification

Concrete construction elements

This technical approval with product certificate does not cover the (distribution of) tasks and responsibilities with respect to the calculations and drawings in categories higher than 4. However, the elements manufactured in accordance with the approved drawings shall be provided with the KOMO quality mark.

See www.kiwa.nl/betonelementen for further information.

The logo of the certificate holder as well as the category of the corresponding project are mentioned on the calculations and any drawings drawn up by or on behalf of the certificate holder.

Clarification

The certification organisation does not check the contents of the calculations, but at random checks the following aspects (for projects up to category 4 inclusive):

- the actual performance of the agreed tasks by the certificate holder;
- the correct processing of the agreed basic assumptions in the calculations;
- the correct processing of the results of the calculations in the drawings.

4.2 STRENGTH IN CASE OF FIRE (BUILDING DECREE 2.2)

The duration of the fire resistance of concrete construction elements with respect to collapse can be determined in accordance with NEN 6071 and shall be part of the calculations to be drawn up per project.

5. TIPS FOR THE USER

5.1 At the receipt of the products listed in the 'Technical specification', inspect these for the following:

- whether the delivery is consistent with the order;
- whether the quality mark and the manner of marking are correct;
- whether the products do not show any visible defects as a result of transport or handling.

5.2 At the receipt of the delivery, make sure that the products listed in 'Handling' meet the specifications described in that section.

5.3 If you reject products on the basis of these specifications, please contact:

- Betonfabriek Nigtevecht B.V.
and if necessary:
- Kiwa Nederland B.V.

5.4 Carry out storage, transport and handling in accordance with the stipulations mentioned under 'Handling'.

5.5 Observe the conditions for use mentioned under 'Performance'.

5.6 Deliver the evidence (delivery documents, evidence of ground and this certificate) to the client. This does not apply with delivery to individual persons who are not practising their job or company.

6. TIPS FOR THE CLIENT

Keep the evidence (delivery documents, evidence of ground and this certificate) at least 5 years to be shown to authorities. This does not apply with delivery to individual persons who are not practising their job or company.

7. LIST OF DOCUMENTS MENTIONED*

BRL 2813	Construction concrete elements.
NEN-EN 206-1	Concrete – Part 1: Specification, characteristics, manufacture and conformity.
NEN 6069	Experimental determination of the fire resistance of construction elements.
NEN 6071	Determination of the fire resistance by calculation. Concrete structures.
NEN 6720	Regulations Concrete. Constructive requirements and calculation methods.
NEN 6722	Regulations Concrete. Performance.
NEN 7330	Leaching characteristics of solid soil- and stone-like building materials and waste products.
	Determination of the content of organic components. General directions.
NEN 8005	Dutch interpretations of NEN-EN 206-1: Concrete – Part 1: Specification, characteristics, manufacture and conformity
Building Decree	The Building Decree.
AP04	Program of accreditation Building materials decree, version 3, SIKB, Gouda.
Decree Soil quality	Decree Soil quality, Official State journal of the monarchy of the Netherlands 2007, nr. 469.
Order Soil quality	Order Soil quality, Papers of the state, nr. 247.

* For the correct version of the above-mentioned standards we refer to the last revision of BRL 2813.