

BRL-K14001/04 01-02-2012

Evaluation guideline

for the Kiwa product certificate for Sanitary tapware: frost resistant outdoor taps with wall passage



Preface

This evaluation guideline has been accepted by the board of experts CWK of Kiwa, in which the parties concerned in the sector Drinkingwater appliances are being represented. This Board of Experts also supervises the certification activities and where necessary requires the evaluation guideline to be revised. All references to Board of Experts in this evaluation guideline pertain to the above mentioned Board of Experts.

This evaluation guideline will be used by Kiwa in conjunction with the Kiwa-Regulations for Product Certification. This regulation details the method employed by Kiwa for conducting the necessary investigations prior to issuing the product certificate and the method of external control.

This evaluation guideline is to be assessed by the Board of Experts at least every 5 years, but at the latests before 1 February 2017.

Kiwa N.V. Sir W. Churchill-laan 273 PO Box 70 2280 AB RIJSWIJK the Netherlands

Tel. +31.70 414 44 00 Fax +31.70 414 44 20 www.1kiwa.com

© 2012 Kiwa Nederland B.V.

All rights reserved. No part of this book may be reproduced, stored in a database or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photoprint, microfilm or any other means without prior written permission from the publisher.

The use of this evaluation guideline by third parties, for any purpose whatsoever, is only allowed after a written agreement is made with Kiwa to this end.

Validation

This evaluation guideline has been validated by Kiwa on 1 February 2012.

Contents

1	Introduction	5
1.1	General	5
1.2	Field of application / scope	5
1.3	Acceptance of test reports provided by the supplier	5
1.4	Quality declaration	5
2	Terms and definitions	6
3	Procedure for granting the quality declaration	7
3.1	Pre certification tests	7
3.2	Granting the quality declaration	7
4	Requirements and test methods	8
4.1	General	8
4.2	Materials	8
4.3	Product requirements	9
4.4	Additional requirements	9
5	Marking	11
5.1	General	11
5.2	Certification mark	11
6	Test methods	12
6 6.1	Test methods Determination of the adherence and durability of plastic coatings	12 12
6.1	Determination of the adherence and durability of plastic coatings	12
6.1 6.2	Determination of the adherence and durability of plastic coatings Determination automatic drainage	12 12
6.16.26.3	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost	12 12 12
6.16.26.36.4	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking	12 12 12 12
6.16.26.36.4	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system	12 12 12 12 13
6.1 6.2 6.3 6.4 7 7.1	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system	12 12 12 12 13
6.1 6.2 6.3 6.4 7 7.1 7.2	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan	12 12 12 12 13 13
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions	12 12 12 12 13 13 13
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions Summary of tests and inspections	12 12 12 12 13 13 13 13
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3 8 8.1	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions Summary of tests and inspections Test matrix	12 12 12 12 13 13 13 14 14
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3 8 8.1 8.2	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions Summary of tests and inspections Test matrix Inspection of the quality system	12 12 12 12 13 13 13 14 14
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3 8 8.1 8.2	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions Summary of tests and inspections Test matrix Inspection of the quality system Agreements on the implementation of certification	12 12 12 12 13 13 13 14 14 14 14
6.1 6.2 6.3 6.4 7 7.1 7.2 7.3 8 8.1 8.2 9	Determination of the adherence and durability of plastic coatings Determination automatic drainage Resistance against damage by frost Low water consumption indication and marking Requirements in respect of the quality system Manager of the quality system Internal quality control/quality plan Procedures and working instructions Summary of tests and inspections Test matrix Inspection of the quality system Agreements on the implementation of certification General	12 12 12 12 13 13 13 13 14 14 14 15

Contents

9.5	Lay out of quality declaration	16
9.6	Nature and frequency of external inspections	16
9.7	Interpretation of requirements	16
10	Titles of standards	17
I	Model certificate	1
II	Model IQC-scheme	2

1 Introduction

1.1 General

This evaluation guideline includes all relevant requirements which are adhered to by Kiwa as the basis for the issue and maintenance of a certificate for sanitary tapware; frost resistant outdoor taps with wall passage.

This evaluation guideline replaces BRL-K14001/03 dated 16 June 2009.

For the performance of its certification work, Kiwa is bound to the requirements as included in EN45011, clause 4.6 "conditions and procedures for granting, maintaining, extending, suspending and withdrawing certification".

1.2 Field of application / scope

The sanitary tapware: frost resistant outdoor taps with wall passage are intended for application in drinking water installations with a static water pressure of maximum 1000 kPa and a maximum water temperature of 90°C.

The recommended limits for correct operation are a dynamic pressure between 100 kPa and 500 kPa and a water temperature of maximum 65°C.

The frost resistant outdoor taps with wall passage are designed in such a way that drainage of the installation in case of frost is not necessary, due to positioning of the obturator behind or partly in the wall.

1.3 Acceptance of test reports provided by the supplier

When by the manufacturer reports from test Institutions or laboratories are produced in order to demonstrate that the product meets the requirements of this evaluation guideline, the institute or laboratory shall meet one of the applicable accreditation norms, being;

- NEN-EN-ISO/IEC 17025 for laboratories;
- NEN-EN-ISO/IEC 17020 for inspection bodies;
- NEN-EN 45011 for certification bodies certifying products;

This requirement is being considered to be fulfilled when a certificate of accreditation can be shown, either issued by the Board of Accreditation (RvA) or one of the institutions with which the RvA an agreement of mutual acceptance has been concluded.

The accreditation shall refer to the examination as required in this BRL. When no certificate of accreditation can be shown, Kiwa will verify whether the accreditation norm is fulfilled.

1.4 Quality declaration

The quality declarations to be issued by Kiwa are described as Kiwa product certificate. A model of the certificate to be issued on the basis of this Evaluation Guideline has been included as an Annex.

2 Terms and definitions

In this evaluation guideline the following terms and definitions are applicable:

Evaluation Guideline: the agreements made within the Board of Experts on the subject of certification.

Board of Experts: The Board of Experts "CWK".

Supplier: the party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based.

IQC scheme: a description of the quality inspections carried out by the supplier as part of his quality system.

Product requirements: requirements made specific by means of measures or figures, focusing on (identifiable) characteristics of products and containing a limiting value to be achieved, which limiting value can be calculated or measured in an unequivocal manner.

Pre-certification tests: tests in order to ascertain that all the requirements recorded in the Evaluation Guideline are met.

Inspection tests: tests carried out after the certificate has been granted in order to ascertain whether the certified products continue to meet the requirements recorded in the Evaluation Guideline.

Remark

The test matrix contains a summary showing what tests Kiwa will carry out in the precertification stage and in the event of inspections as well as showing the frequency with which the inspection tests will be carried out.

Product certificate: a document, in which Kiwa declares that a product may, on delivery, be deemed to comply with the product specification recorded in the product certificate.

Tap water (origin NEN 1006:2002): water intended for drinking, cooking, food preparation or other domestic purposes.

3 Procedure for granting the quality declaration

3.1 Pre certification tests

The pre certification tests to be performed are based on the (product) requirements as included in this evaluation guideline including the test methods and contain, de pending on the nature of the product to be certified:

- type testing to determine whether the products comply with the product and/or functional requirements,
- Production Process Assessment,
- Assessment of the quality system and the IQC-scheme,
- Assessment on the presence and functioning of the remaining procedure.

3.2 Granting the quality declaration

After finishing the pre-certification tests the results are presented to the person deciding on granting of certificate. This person evaluates the results and decides whether the certificate can be granted or additional data and/or tests are necessary.

4 Requirements and test methods

4.1 General

This chapter contains the requirements the frost resistant outdoor taps with wall passage have to fulfil. These requirements will make part of the technical specification of the products, as included in the certificate

4.2 Materials

4.2.1 Toxicological requirements

Products and materials, which (may) come into contact with drinking water or warm tap water, shall not release substances in quantities which can be harmful to the health of the consumer or negatively affect the quality of the drinking water. Therefore, the products or materials shall meet the toxicological, microbiological and organoleptic requirements as laid down in the valid "Ministerial Regulation materials and chemicals drinking water and warm tap water supply" (published in the Government Gazette). Consequently the procedure for obtaining a recognised quality declaration, as specified in the valid Regulation, has to be concluded with positive results.

Products and materials with a quality declaration*, e.g. issued by a foreign certification institute, are allowed to be used in the Netherlands, provided that the Minister has declared this quality declaration equivalent to the quality declaration as meant in the Regulation.

4.2.2 Chemical and mechanical requirements

4.2.2.1 Rubber

Rubber shall comply with BRL-K 17504 on the aspect of influence on drinking water as well as the mechanical and physical aspects¹.

This standard does not apply to rubber sealing components, such as valve coverings or diaphragms. Natural rubber (NR) and isoprene rubber (IR) are not allowed to be used.

4.2.2.2 Zinc-Aluminum alloys

Zinc-aluminum alloys may only be used for control handles and must be furnished with a corrosion resitant layer.

4.2.2.3 Corrosion resistance

The applied materials shall be corrosion resistant or protected against corrosion. The materials used may not have an adverse effect on each other.

4.2.2.4 Metallic protection layers

Applied metallic anticorrosive protection layers shall fulfill the requirements of EN 248.

4.2.2.5 Plastic coatings

After a test according to 6.1, the coating shall meet;

- EN 248, article 7.1.1 in relation to the corrosion resistance,
- ISO 2409, table 1, class 0 or 1 in respect of the adherance.

^{*} A quality declaration issued by an independent certification institute in another member state of the European Community than the Netherlands or another state party to the agreement to the European Economic Area, is equivalent to a recognised quality declaration, to the extent that, to the judgment of the Minister of the first mentioned quality declaration, is fulfilled the at least equivalent requirements as meant in the Regulation materials and chemicals drinking water- and warm tap water supply.

¹ The rubber parts are considered to comply with the requirements of BRL 2013 when the functional tests as described in this guideline have been finished with positive results.

4.2.3 Construction and shape

4.2.3.1 Dimensions

The distance between the back of the wall plate of the out door tap and the seat of the obturator shall be at least 200mm. The diameter of the wall plate shall be at least 50mm.

4.2.3.2 Connecting ends

Outdoor taps can be provided at the inlet side with one of the following connecting ends with a nominal dimension of DN15 or DN 20;

a. Connecting end with thread

Threads shall comply with ISO 7-1 or ISO 228-1.

The length of the thread and the total length of end joints with an external thread shall be conform to evaluation guidelines BRL-K623. Threaded connecting ends shall be provided with wrench flats right behind the thread.

b. Press-, compression- or push-in joints

Connecting ends provided with press-, compression- or push-in joints shall meet the functional requirements as included in the Kiwa evaluation guideline BRL-K640

c. End joints with a secured union nut.

The usable thread length after fitting shall meet the minimum requirements laid down in Kiwa evaluation guideline BRL-K623.

The outlet side shall be designed with a flat seal of at least 1.5 mm in case no hose mouthpiece is supplied alongside the tap.

4.2.3.3 Automatic drainage

The outdoor tap shall be designed in such a way that it will drain automatically after closing. When tested according to article 6.2, downstream of the obturator maximum 5% of the initially measured amount of water shall remain.

4.2.3.4 Replacement head part

Replacement of the headpart of the outdoor tap shall be possible with standard tools.

4.2.3.5 Resistance against damage by frost

Frost resistant outdoor taps that are designed in such a way that damage by frost is prevented by means of controlled expansion shall, after testing in accordance with article 6.3, comply with EN 200, Clause 8.

4.2.3.6 Vacuum breaker

Frost resistant outdoor taps shall be provided with a vacuum breaker.

Hereby shall;

- a. the vacuum breaker comply with the Kiwa evaluation guideline BRL-K628 "Vacuum breakers",
- b. the fastening screw thread of the vacuum breaker, or parts of it, shall be constructed in such a way that it is not possible to establish a leaktight connection with the help of standard couplings and fittings, the vacuum breaker part and the tap part need to be combined in such a way that in case the tap is closed, the vacuum breaker is not under pressure of the water of the installation the tap has been connected to.

4.3 Product requirements

The conditions of use and requirements for the sanitary tapware; mechanical mixers are laid down in:

"Sanitary tapware; General technical specifications for single taps and mixer taps (nominal size ½) PN 10; Minimum flow pressure of 0.05 MPa (0.5 bar), June 1989"

4.4 Additional requirements

In addition to what has been mentioned in 4.3 also the following applies.

4.4.1 Dimensions

Contrary to what has been mentioned in EN 200, article 7.3 "Bip taps for mounting on vertical surfaces", the dimensions are free, with the exception of dimension "C" and what is mentioned in article 4.2.3.1

4.4.2 Mechanical endurance

Contrary to what has been mentioned in EN 200, article 12.1 "Mechanical endurance characteristics of the operating mechanism", the test to determine the mechanical endurance of the outdoor taps will be carried out with 15,000 cycles.

4.4.3 Acoustic properties

In contradistinction to EN 200, article 13 "Acoustic characteristics" no requirements in respect to acoustic performance are applicable for outdoor taps.

5 Marking

5.1 General

Frost resistant outdoor taps shall be clearly and indelibly marked with the manufacturers name or mark. This mark shall be visible on the body and the head part.

5.2 Certification mark

After conclusion of the Kiwa certification agreement, in addition to the marks indicated in 5.1, the $mark\ KIWA\ \ \textbf{8} \ \ shall\ be\ applied\ legible\ and\ indelible.\ The\ head\ part\ shall\ be\ marked\ with\ the\ abreviated\ wordmark\ KK$

The packaging may be provided with the following mark:



6 Test methods

6.1 Determination of the adherence and durability of plastic coatings

6.1.1 Test installation and appliances

For the determination of the adherence and the durability of the plastic coating, first the test pieces have to be conditioned in a bath of which the water is automatically maintained at the temperature required.

The appliances used for the determination of the adherence are to be according to ISO 2409.

6.1.2 Test piece

At least two tap bodies or two control elements, however the number of test pieces must be such that the surface to be tested is at least 10 000 mm².

6.1.3 Test requirements

During the conditioning of the test pieces:

- the water in the bath shall be 90 ± 3 °C:
- the ambient temperature shall be $20 \pm 10^{\circ}$ C.

6.1.4 Procedure

- a. Put the test pieces in the water bath for 1 hour.
- b. Cool the test pieces down to ambient temperature.
- c. Determine the adherence of one test piece according to NEN 5337-6.2.
- d. With the remaining test pieces it is to be determined whether they comply with EN 248.

6.2 Determination automatic drainage

- a. Determine the weight of the empty tap and cap with an accuracy of ± 1 gr.
- b. Fill the tap completely with water, close the outlet with the cap and also close the vacuum breaker.
- c. Determine the total weight of the tap, filled with water, with an accuracy of ± 1 gr.
- d. Drain the tap and mount the tap in accordance to the mounting instructions of the supplier.
- e. Rinse the tap with a free outlet.
- f. Close the tap.
- g. Close the outlet with the cap 300 sec after closing the tap, dismount the tap and determine the weight again.
- h. Determine the percentage of the water remaining in the tap.

6.3 Resistance against damage by frost

- a. Fill the tap completely with water and purge of air.
- b. Condition the sample for 24 hours at a temperature of -20 \pm 2°C.
- c. Thaw the sample at ambient temperature.
- d. Determine closure and watertightness according to NEN-EN 200, Clause 8.

6.4 Low water consumption indication and marking

Mechanical mixers complying with the evaluation guideline BRL-K607 which, within the recommended limits for correct operation, have a minimum flow rate, measured according to EN817:2008, clause 10.6, between 4.0 l/min and 9.0 l/min, may be indicated with the Kiwa "Low waterconsumption" mark.

The indication "Low water consumption" (see below) can be placed on the package.

7 Requirements in respect of the quality system

This chapter contains the requirements which have to be met by the supplier's quality system.

7.1 Manager of the quality system

Within the supplier's organizational structure an employee must have been appointed who is in charge of managing the supplier's quality system.

7.2 Internal quality control/quality plan

The supplier shall have an internal quality control scheme (IQC scheme) which is applied by him.

The following must have been demonstrably recorded in this IQC scheme:

- what aspects are checked by the producer;
- according to what methods such inspections are carried out;
- how often these inspections are carried out;
- in what way the inspection results are recorded and kept.

This IQC scheme should at least be an equivalent derivative of the model IQC scheme included in the addendum.

7.3 Procedures and working instructions

The supplier shall be able to submit the following:

- procedures for:
 - o dealing with products showing deviations;
 - o corrective actions to be taken if non-conformities are found;
 - o dealing with complaints about products and/or services delivered;
- the working instructions and inspection forms used.

8 Summary of tests and inspections

This chapter contains a summary of the following tests and inspections to be carried out in the event of certification:

- Pre-certification tests;
- Inspection test as to toxicological requirements and product requirements;
- Inspection of the quality system.

The frequency with which Kiwa will carry out inspection tests is also stated in the summary.

8.1 Test matrix

	Article BRL	Tests within the scope of			
Description of requirement	or EN 200	Pre- certification	Supervision by Kiwa after granting of certificate 1)		
			Inspection 2)	frequency (no./year)	
Material	BRL				
Toxicological requirements	4.2.1	X	Χ	2	
Chemical and mechanical requirements	4.2.2	X	Χ	2	
Construction and shape	4.2.3				
Design and configuration	EN 200				
Identification and marking	4	X	Χ	2	
Dimensions	6	X	X	2	
Functional requirements	EN 200				
Closure and tightness	8	X	Χ	2	
Mechanical strength	9	X	X	2	
Flow rate	10	X	X	2	
Resistance to forces and moments	11	X	X	1	
Endurance	12	X			
Backflow prevention	13	X	X	2	
Acoustic properties	14	X			
Additional requirments	BRL				
Dimensions	4.4.1	Χ	X	2	
Mechanical endurance	4.4.2				
Acoustic properties	4.4.3	Χ	Χ	2	
Marking	BRL				
General	5.1	X	Χ	2	
Certification mark	5.2	X	X	2	

In case of significant changes of the product or production process, compliance of the product to the performance requirements shall be determined.

8.2 Inspection of the quality system

The quality system will be checked by Kiwa on the basis of the IQC scheme.

The inspection contains at least those aspects mentioned in the Kiwa Regulations for Product certification.

²⁾ The indicated inspections shall be carried out by the manufacturer, eventually in presence of the inspector.

9 Agreements on the implementation of certification

9.1 General

Beside the requirements included in these evaluation guidelines, also the general rules for certification as included in the Kiwa Regulations for Product Certification apply.

These rules are in particular

- The general rules for conducting the pre-certification tests, to be distinguished in:
- the way suppliers are to be informed about an application is being handled,
- how the test are conducted,
- the decision to be taken as a result of the pre certification tests.
- The general directions for conducting inspections and the aspects to be audited,
- The measurements to be taken by Kiwa in case of Non Conformities,
- Measurements taken by Kiwa in case of improper Use of Certificates, Certification Marks, Pictograms and Logos,
- Terms for termination of the certificate,
- The possibility to lodge an appeal against decisions of measurements taken by Kiwa.

9.2 Certification staff

The staff involved in the certification may be sub-divided into:

- certification experts: they are in charge of carrying out the pre-certification tests and assessing the inspectors' reports;
- inspectors: they are in charge of carrying out external inspections at the supplier's works;
- decision-makers: they are in charge of taking decisions in connection with the pre-certification tests carried out, continuing the certification in connection with the inspections carried out and taking decisions on the need to take corrective actions.

9.2.1 Qualification requirements

The following qualification requirements have been set by the Board of Experts for the subject matter of this Evaluation Guideline:

EN45011	Certification Expert	Inspector	Decision maker
Education - general Education - specific	 Technical higher-level professional education Internal training certification and Kiwa policy Training auditing for BRL relevant 	 Intermediate-level professional education Internal training certification and Kiwa policy Training auditing for BRL relevant 	 Higher level professional education Internal training certification and Kiwa policy Training auditing not applicable unless
Education specific	technical education specific studies and training (know-how and skills)	technical education specific studies and training (know-how and skills)	the CvD has specific requirements
Experience - general	1 year of relevant work experience with at least 4 pre certification tests of which one carried out independent under supervision.	1 year of relevant work experience with at least 4 inspections of which one carried out independent under supervision	4 year of relevant work experience with at least 1 year in certification

EN45011	Certification Expert	Inspector	Decision maker
Experience - specific	Detailed knowledge of the BRL and 4 certification tests carried out on the basis of the BRL or one related.	Detailed knowledge of the BRL and 4 inspections carried out on the basis of the BRL or one related.	• general knowledge of the BRL

The level of education and the experience of the certification staff involved should be demonstrably recorded.

9.2.2 Qualification

The qualification of the Certification staff shall be demonstrated by means of assessing the education and experience to the requirements mentioned before. In case staff is to be qualified on the basis of deflecting criteria, written records shall be kept.

The authority to qualify staff is dedicated to:

- decision makers: qualification of certification experts and inspectors,
- Management of Kiwa: qualification of decision makers.

9.3 Report Pre certification tests

Kiwa records the results of the pre certification tests in a report. This report shall comply with the following requirements:

- completeness: the reports verdicts about all requirements included in the evaluation guideline,
- traceability: the findings on which the verdicts have been based shall be recorded traceable,
- basis for decision: the decision maker shall be able to base his decision on the findings included in the report.

9.4 Decision for granting the certificate

The decision for granting the certificate shall be made by a qualified decision maker which has not been involved in the pre certification tests. The decision shall be recorded traceable.

9.5 Lay out of quality declaration

The product certificate shall be conform the model included as an annex

9.6 Nature and frequency of external inspections

The certification body shall carry out Audits at the supplier at regular intervals to check whether the supplier complies with his obligations. About the frequency of inspections the Board of Experts decides. At the time this Evaluation Guideline took effect, the frequency was set at the number of two inspection visits per year.

Inspections shall at least refer to:

- The suppliers IQC-scheme and the results obtained from inspections carried out by the supplier,
- The correct way of marking of certified products
- Complying with required procedures.

The results of each inspection shall be traceable recorded in a report.

9.7 Interpretation of requirements

The Board of Experts may record the interpretation of requirements of these evaluation guidelines in one separate interpretation document.

10 Titles of standards

Titles of the Standards and Publications as mentioned and to be consulted:

Number Title

NEN 1006 General technical specifications for drinking waterinstallations

BRL-K 623 Fittings

BRL-K 628 Vacuum breakers

BRL-K 640 Compression-, press-, and push fittings

BRL-K 17504 Vulcanised rubber pipe joint seals for cold and hot drinking water

DIN 7737 Schichtpressstoff-Erzeugnisse; Vulkanfiber, Typen

NEN-EN 200 Sanitary tapware – Single taps and mixing taps (PN 10) - General technical

specifications, July 2008

EN 248 Sanitary taps: General technical specifications for electrode posited nickel chrome

coatings

ISO 2409 Paints and varnishes. Cross-cut test

Waterwerkblad Drinkwaterinstallaties WB 2.2 A

Kiwa-Regulations for Productcertification

In this BRL is referred to the version in force, unless something else is mentioned.

I Model certificate





Issue

Replaces

Page 1 of 2

Frost resistant outdoor taps with wall passage

STATEMENT BY KIWA

With this product certificate, issued in accordance with the Kiwa Regulations for Product Certification, Kiwa declares that legitimate confidence exists that the products supplied by

Name supplier

complying with the technical specifications as laid down in this product certificate and marked with the Kiwa®-mark in the manner as indicated in this product certificate, on delivery, may be relied upon to comply with Kiwa evaluation guideline BRL-K14001/04 "Sanitary tapware; frost resistant outdoor taps with wall passage".

3. Helhne

Bouke Meekma Kiwa

Publication of the certificate is allowed.

Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

Kiwa Nederland B.V.
Sir W. Churchill-laan 273
Postbus 70
2280 AB RIJSWIJK
The Netherlands
Tel. +31 70 414 44 00
Fax +31 70 414 44 20
E-mail info@kiwa.nl
www.kiwa.nl

Supplier

Certification process consits of intial and regular inspection of: • quality system

product

II Model IQC-scheme

Inspection subjects	Inspection aspects	Inspection method	Inspection frequency	registration
Receiving inspection				
raw materials	material			
Process control				
hot pressing processhot pressing products	temperature appearance non filled parts weld lines dimensions			
machining of partsassembly	 dimensions fit threads correct parts correct location lubrication 			
Product control				
appearancemarkingfunctional properties	finishing correctness			
Measuring and testing equipment				
test equipmentcalibration				
Logistics				
 Internal transport Storage Packaging Preservation Identification or marking of semi-manufactures and end-products 				