BRL-K777
2024-06-19
draft

Evaluation Guideline

for the Kiwa product certificate for repair clamps and repair couplings

Trust
Quality
Progress

Preface Kiwa

This Evaluation Guideline (BRL) has been formulated by the Technical Advise Board of Pipes and Appendages (CLA). It is accepted by the Kiwa Board of Experts Watercycle (CWK), in which all relevant parties in the field of repair clamps and repair couplings are represented. This Board of Experts also supervises the certification activities and will adjust this BRL if required. 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 Certification, which include the general rules employed by Kiwa for its certification activities.

This updated version explains the differences between repair clamps and couplings in more detail. Said differences are explained in the chapters of requirements and testing methods.

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Binding declaration
This evaluation guideline has been declared binding by Kiwa effective [06-19-2024]

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Contents

1 Introduction

1.1 General

The requirements included in this evaluation guideline will be employed by Kiwa when dealing with an application and the maintenance of a product certificate for Non controllable backflow preventers with different pressure zones - Family C, type A.

This BRL replaces BRL-K777 dated: 2016-12-23.
The quality declarations issued on the basis of the last BRL remain valid after this BRL has been declared binding.

When carrying out certification activities, Kiwa is bound by the requirements laid down in NEN-EN ISO/IEC 17065.

1.2 Field of application / scope

These products are intended to be applied in piping systems with a water pressure of max. 1,6 MPa, a water temperature of max. 30°C and a nominal diameter equal to or greater than 15mm, or equal to or smaller than 400mm. The clamps are intended to be used to repair small fractures, holes, cracks and couplings for creating permanent connections in said piping systems. Couplings are intended to couplet wo piping sections with the same specifications (material, wall thickness, pressure class, etc.).

1.3 Acceptatie van door de leverancier geleverde onderzoeksrapporten

With regard to the requirements included in this evaluation guideline, the applicant, in the view of third party assessments, can submit conformity reports issued by evaluation bodies to prove that the requirements of this BRL are being met. It will have to be demonstrated that the relevant inspection, analysis, test, and/or evaluation reports have been prepared by an institution that meets the corresponding applicable accreditation standard, namely:

- NEN-EN-ISO/IEC 17020 for inspection bodies,
- NEN-EN-ISO/IEC 17021-1 for certification bodies certifying management systems,
- NEN-EN-ISO/IEC 17024 for certification bodies certifying persons,
- NEN-EN-ISO/IEC 17025 for laboratories,
- NEN-EN-ISO/IEC 17065 for certification bodies certifying products, processes, and services.

Clarification
This requirement is considered to be fulfilled when a certificate of accreditation can be shown, issued either by the Board of Accreditation (RvA) or by one of the institutions with which an agreement of mutual recognition and acceptance of accreditation has been concluded by the Board of Accreditation.
This accreditation must relate to this BRL's established research and/or testing methods. If no certificate of accreditation can be submitted, the certification institution itself will verify if the accreditation criteria have been met.

1.4 Quality delcaration

The quality declarations to be issued by Kiwa based on this evaluation guideline will be referred to as Kiwa product certificate.
A model of the product certificate has been included for information purposes as Annex.

2 Terminology

2.1 Definitions

The following terms and definitions apply in this BRL:

- **Evaluation Guideline (BRL):** The agreements made by the Board of Experts on the subject of certification;
- **Follow-up investigation:** the investigation carried out after granting the certificate to determine that the certified products and/or approved quality related processes continue to be in compliance with the requirements laid down in the evaluation guideline;
- **Certification mark**: a protected trademark of which the authorization of the use is granted by Kiwa to the supplier whose products can be considered to comply on delivery with the applicable requirements and to which a possibly a specially for this purpose designed label on the quality information about the application of this product may be added, based on the results as stated in the report issued by Kiwa on the inspection of the prototype;
- **Board of Experts:** the Board of Experts Watercycle
- **Distribution network**: Composition of pipes and connected couplings, valves and other technical appendages for transport and delivery of drinking water, notwithstanding a collective piping network (Source: Dutch Drinking Water Act);
- **DN:** according to NEN-EN-ISO 6708;
- **Drinking water**: water intended or intended as well for drinking, cooking or food preparation or other domestic purposes, except for hot water, which is made available by pipelines to consumers or other customers. (Source: Dutch Drinking Water Act)
- **Drinking water installation**: an installation directly or indirectly connected to the public drinking water distribution network of a drinking water company (source Dutch Drinking Water Act);
- **IQC scheme**: a description of the quality inspections carried out by the supplier as part of his quality system;
- **Installatio**n: configuration consisting of the pipe work, fittings, and appliances;
- **Household water**: non-potable water that does not meet the requirements for drinking water and may only be used for flushing toilets (source: Dutch drinking water act);
- **Piping systems:** piping systems for the transport of tap water by means of pipes and their connections made of different materials;
- **Tap wate**r: water intended or partly intended for drinking, cooking or food preparation or other domestic purposes;
  Remark: Tap water can be drinking water, warm tap water or household water;
- **Supplier**: the party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based;
- **PFA,** permissible operating pressure: according to NEN-EN-805;
- **PMA,** highest permissible operating pressure: according to NEN-EN-805;
- **PEA,** permissible test pressure, according to NEN-EN-805.
- **PN**: alphanumerical indication used for reference purposes which is related to a combination of mechanical and dimensional properties of a component of piping systems according to NEN-EN-1333;
- **Private Label Certificate**: A product certificate that only pertains to products that are also included in the product certificate of another supplier that has been certified by Kiwa, the only difference being that the products and product information of the private label holder bear a brand name that belongs to the private label holder.
- **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 can be calculated or measured in an unequivocal manner.

- **Product certificate**: a document in which Kiwa declares that a product may be deemed, on delivery, to comply with the product specification recorded in the product certificate;
- **Initial investigation:** The initial evaluation of the supplier and the investigation of the relevant products for the first issuance of a certificate.
- **Raw water:** groundwater, surface water of sea water extracted to prepare drinking water;
- **Repair clamp:** clamp meant to be used to repair tears and holes in piping systems.
- **Repair coupling:** a coupling intended for repairing parts of pipe lines that are completely separated from each other due to a breakage, or for making permanent connections in piping systems.
- **Reparation surface:** The size of a damage that can be repaired with a repair clamp or repair coupling.

3 Procedure for obtaining a quality declaration

3.1 Initial investigation

The initial investigation to be performed based on the product requirements as contained in this evaluation guideline, including the test methods, depending on the type of product to be certified:

- a type testing to determine whether the products comply with the product and/or performance requirements;
- production process assessment;
- assessment of the quality system and the IQC scheme;
- verification on the presence and functioning of the further required procedures.

3.2 Certificaatverlening Granting the certificate

After completing the initial investigation, the results are presented to the Decision maker (see §9.2). This person evaluates the results and decides whether the certificate can be granted or if additional data and/or tests are necessary before the certificate can be granted.

3.3 Investigation into the product and/or performance requirements

Kiwa will investigate the products to be certified against the certification requirements as stated in this evaluation guideline or will have them investigated on its behalf. The required samples will be drawn by or on behalf of Kiwa.

3.4 Beoordeling productieproces Production porcess assessment

When assessing the production process, it is investigated whether the producer is capable of continuously producing products that meet the certification requirements The evaluation of the production process takes place during the ongoing work at the producer.

The assessment will at least include:

- The quality of raw materials, semi-finished products, and end products;
- Internal transport and storage.

3.5 Contract assessment

If the supplier is not the producer of the products to be certified, Kiwa will assess the agreement between the supplier and the producer.

This written agreement, which is available to Kiwa, must at least include:

That accreditation bodies, scheme managers and Kiwa will be given the opportunity to observe the certification activities carried out by Kiwa or on behalf of Kiwa at the producer.

4 Product requirements

4.1 General

This chapter describes the requirements Product shall meet, as well as the determination methods to establish that the requirements are being met.

4.2 Regulatroy requirements

4.2.1 Suitability for contact with drinking water

Products and materials that (may) enter into contact with drinking water or warm tap water, shall not release substances in quantities that may be harmful for the health of the consumer or affect the quality of the water in any other way. Therefore the products or materials must comply with the toxicological, microbiological, and organoleptic requirements laid down in the Ministerial Regulation on the Materials and Chemicals for Drinking and Warm Water Supply ("*Ministeriële Regeling materialen en chemicaliën drink- en warm tapwatervoorziening*") (published in the Government Gazette). This means that the procedure for obtaining a recognised quality declaration, as referred to in the current Regulations, has to be concluded with a positive result. Products or materials that are provided with a quality declaration,[1] issued by, for example, a foreign certification body, may also be used in the Netherlands, provided that this quality declaration has been declared equivalent by the Minister to the quality declaration as referred to in the Regulation.

4.3 Private law requirements

4.3.1 Technical product information

In the technical product information, the supplier shall indicate in the Dutch language:

- The minimum and maximum pipe diameter to which the repair clamp or repair coupling may be applied;
- The maximum surface to be repaired that is presenting with damage caused by tearing or holes, and can be covered with a certain type of repair clamp or repair coupling;
- The largest connection that can be made with a repair coupling. This assumes that the breakage covers the entire circumference of the pipe. The product information shall specify the maximum allowable distance in axial direction between two pipe parts to repair a breakage.
- The momentum that shall be applied to the fasteners to achieve a watertight connection.
- For which pipe materials the repair clamps or repair couplings can be used.

[1] The “Regulation” states (Article 16): “A quality declaration issued by an independent certification body in another Member State of the European Union or in another state that is party to the Agreement on the European Economic Area is equivalent to a recognised quality declaration, insofar as in the opinion of the Minister, the first mentioned quality declaration evidences that at least equivalent requirements as referred to in this regulation are being met.”

4.3.2 Public law requirements

4.3.2.1 Hygienic treatment of products in contact with drinking water

The supplier must have a procedure in place that protects the products in such a way that hygiene is ensured during storage and transport.
Furthermore, the supplier shall inform the customer about the handling of delivered products which come into contact with drinking water and warm tap water, from arriving at the installation site through to the realization and commissioning. The primary reason for providing this information is to contribute to the awareness of the importance of hygienic working as a “prevention measure.”

4.3.2.2 Pressures

Repair clamps and repair couplings intended for piping systems are referred to with a PN-value and shall be designed in such a way that they can withstand PFA, FMA and PEA pressures as per **Error! Not a valid bookmark self-reference.**.

Tabel 1 pressures

PN	PFA (bar)	PMA (bar)	PEA (bar)[1]
6	6	8	12
10	10	12	17
16	16	20	25

4.3.2.3 Fasteners

Fasteners used to achieve the clamping function of the repair clamp or the repair coupling shall be suitable to be induced to a momentum as described in article 4.3.1, item four.

4.3.2.4 Sealing materials

Rubber sealing materials must comply with BRL-K17504, article 1.2 class I.

4.3.3 Protection against corrosion

To repair clamps, repair couplings, and fasteners that by nature are not considered as corrosion resistant a corrosion protective layer shall be applied according to 4.3.3.1.

4.3.3.1 Coating systems in contact with drinking water

The coating system shall meet the requirements of BRL-K759. The application of the coating shall be realized according to the relevant aspects as per BRL-K746.

Remark:

- *If the applied coating is included in a Kiwa product-certificate according to BRL-K759, this condition is deemed to have been met.*
- *If the applied coating is included in a Kiwa product-certificate according to BRL-K746 this condition is deemed to have been met.*

4.3.3.2 Exterior coating

If the exterior of repair clamps and repair couplings has a protective layer, it shall be applied in accordance with the instructions of the coating’s supplier.

[1] PEA shall not be smaller than 1,5 x PMA or PMA+5 and the lowest value will be applicable.

4.3.4 Functional product requirements

4.3.4.1 Mechanical strength
When tested according to the test method in 5.1.3, repair clamps and repair couplings shall withstand an internal pressure of the highest of the following two values: PEA or 1.5 x PFA.

4.3.4.2 Watertightness under internal pressure
When tested according to the test method in 5.3, repair clamps and repair couplings shall withstand an internal pressure of (1.5 X PFA) bar for a period of 2 hours and during the determination according to 5.3 they shall not show any leakages or permanent deformations.

4.3.4.3 Watertightness under low pressure
When tested according to the test method in 5.4, repair clamps and repair couplings shall withstand an absolute pressure of 0.1 ± 0.02 bar for a period of 2 hours. When tested according to 5.4, the pressure shall not increase beyond 0.09 bar. If a repair clamp or repair coupling has withstood the test described, it will be considered to be watertight even with low operating pressures.

4.3.4.4 Water tightness under varying internal pressure
When tested according to the test method in 5.5.2(d), repair clamps and repair couplings after 24,000 cycles at a varying pressure between PMA and PMA-5 shall comply with 4.3.4.

4.3.4.5 Bending
When testing repair couplings according to 5.6, the couplings shall comply with 4.3.4.2 / 4.3.4.4.

5 Testing methods

5.1 General

5.1.1 Pressures and temperatures

To perform the following tests, whereby with the addition of water, the required pressures can be achieved, the following applies:

- it must be possible to measure the pressure with a precision manometer according to NEN 927.
- the ambient pressure is atmospheric;
- the test pressure shall not be higher than the required pressure and not lower than 95% of the required pressure;
- the water temperature shall be lower than 30°C;
- the ambient temperature shall be 20 ± 10 °C.

5.1.2 Models to be tested

For each DN group Table 1 specified which DN shall be tested.

Table 1 *Models to be tested*

DN group	15<DN≤140	150<DN≤300	>300
Model to be tested	DN 100	DN 200	DN 400
	PN 10[1]	PN 10	PN 10
Length L*)	1.0 m	1.0 m	1.0 m

5.1.3 Installation of repair clamps / repair couplings

Assembly of the repair coupling is done with 2 loose pipe parts with identical specifications. The repair clamp must be installed in accordance with the supplier's installation instructions.
The tests according to 5.3, 5.4, and 5.5 are done on all pipe materials as specified in the Technical product information (see 4.3.1).

5.2 Determination mechanical strength under internal pressure

5.2.1 Test installations and accessories

For the determination of the internal pressure, the repair clamp is installed in a test installing according to Figure 2 and the repair coupling according to Figure 2. The test installation is made on metallic pipes.

[1] PN10 includes PN6.

5.2.2 Procedure

a. Fill the test installation with water, vent it, and close the vent, subject to the proviso that the F force is not applied;
b. Load the test installation evenly within 30s to a pressure as per 4.3.4.1 and maintain this pressure for 2 hours;
c. During the test, no leakage or permanent deformation may occur.

5.3 Determination of watertightness under internal pressure

5.3.1 Test installations and accessories

For the determination of water tightness under internal pressure, the repair clamp or repair coupling is installed in the test installation according to Figuur 1 respectively Figure 2.

5.3.2 Procedure

a. Fill the test installation with water, vent it, and close the vent opening;
b. Load the test installation evenly within 30s to a pressure as per 4.3.4.2 and maintain this pressure for 2 hours;
c. During the test, no leakage or permanent deformation may occur.

5.4 Determination watertightness under low pressure

5.4.1 Test installations and accessories

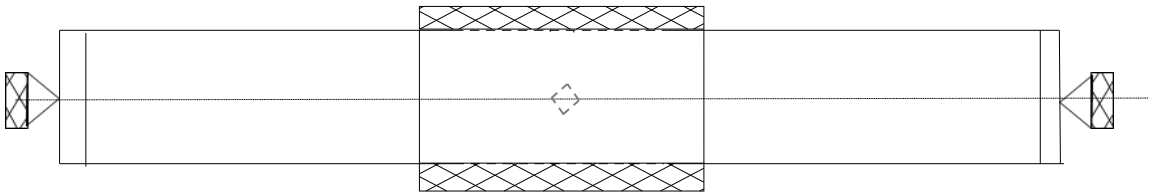
For the determination of water tightness under external pressure, the repair clamp is installed in a test installation according to Figure 2 and the repair coupling according to Figuur 1.

5.4.2 Procedure

a. Drain the test installation and connect a vacuum line to the vent opening;
b. Load the test installation evenly within 30s to an absolute pressure as per 4.3.4.3 and maintain this pressure for 2 hours;
c. During the test, this pressure shall not increase beyond 0.09 bar.
d. Determination of water tightness under varying internal pressure

5.4.3 Test installations and accessories

The repair clamp and coupling are mounted in the test installation Figure 2, respectively Figuur 1.



Figuur 1: Test installation repair clamp

5.4.4 Procedure

(a) Fill the test installation with water, vent it, and close the vent opening;
(b) Load the test installation evenly within 5 s to PMA;
(c) Reduce the pressure to (PMA-5) bar evenly within 5 s and maintain this pressure for 5 s;
(d) Increase the pressure to PMA evenly within 5 s and maintain this pressure for 5 s;
(e) Repeat steps (c) and (d) 24.000 times;
(f) During the test, no leakage or permanent deformation may occur.

5.5 Determination watertightness on bending

5.5.1 Test installations and accessories

The repair coupling are mounted in the test installation according to Figure 2.

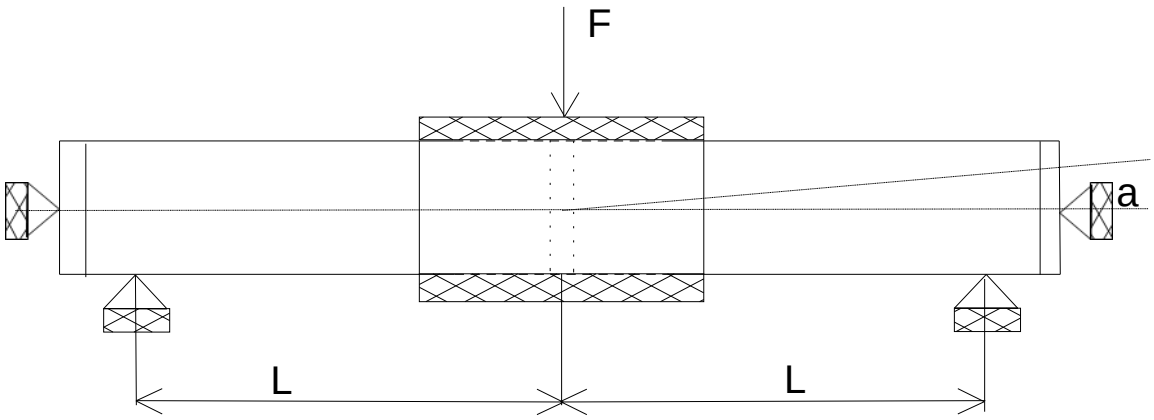


Figure 2: Test installation repair coupling

5.5.2 Testing requirements for repair coupling

Table 2 Relation between DN and bending

ND	Angle a
40<DN≤300	3°30’
300<DN≤400	2°30’

5.5.3 Procedure repair coupling

(a) Fill the test installation with water, vent it, and close the vent opening;
(b) Load the test installation evenly within 30 s to a pressure as per 4.3.4.2 and bending force F based on the values specified in Table 2 and maintain both for 2 hours;
(c) Measure angle “a”;
(d) During the test, no leakage or permanent deformation may occur.

6 Markings

6.1 General

The following markings and indications shall be applied properly and clearly to all products:

- factory name and/or trademark;
- production date or production code;
- PN (PFA) of the repair clamp or repair coupling
- the minimum and maximum pipe diameter to which the repair clamp or repair coupling may be applied;
- type of material;
- type of indication.

6.2 Certificatiemerk

After concluding a Kiwa certification agreement, the certification mark must be applied to the product in a durable and inerasable manner.

For products meant for contact with drinking water:

The Kiwa Water Mark "KIWA  "

7 Requirements in respect of the quality system

This chapter contains the requirements that 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 who will be in charge of managing the supplier's quality system must have been appointed.

7.2 Internal quality control/quality plan

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

The following must be demonstrably recorded in this IQC scheme:

- which aspects must be inspected by the supplier;
- 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 as shown in the Annex.

7.3 Management of test and measuring equipment

The supplier shall verify the availability of necessary test and measuring equipment for demonstrating product conformity with the requirements in this evaluation guideline.
If and when required, the test and measuring equipment shall be calibrated at specified intervals.
The supplier shall record and evaluate the validity of the previous measuring data if at the time of calibration it is established that the equipment is not functioning properly.
The measuring equipment in question must carry an identification that allows for determining the calibration status.
The supplier shall record the results of the calibration.

7.4 Procedures and working instructions

The supplier shall be able to submit the following:

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

7.5 Other requirements of the quality system

The supplier must be able to submit the following:

- the organisation’s organogram;
- the qualification requirements of the staff involved.

8 Summary of tests and inspections

This chapter contains an overview of the steps required for certification:

- **initial investigation**: the investigation to determine that compliance is given to all the requirements laid down in the evaluation guideline;
- **follow-up investigation:** the investigation carried out after granting the certificate to determine that the certified product continue to be in compliance with the requirements laid down in the evaluation guideline; the required frequency for the follow-up investigation by the certification body (CI) is also specified;
- **inspection of the quality system of the supplier:** monitoring compliance of the IQC scheme and procedures.

8.1 Onderzoeksmatrix

Description of requirement	Article no. BRL	Tests within the scope of:	
		Pre-certification	Inspection by Kiwa after granting of certificate [a), b)]
Material requirements			
Suitability for contact with drinking water	**Error! Reference s ource not found.**	X	X
Product requirements			
Technical product information	4.3.1	X	X
Pressures	**Error! Reference s ource not found.**	X	X
Fasteners	4.3.2.3	X	X
Sealing materials	4.3.2.3	X	X
Protection	4.3.3	X	X
Mechanical strength	4.3.4.1	X	
Watertightness under internal pressure	4.3.4	X	X
Watertightness under low pressure	4.3.4.2	X	
Water tightness under varying internal pressure	4.3.4.3	X	
Bending	4.3.4.4	X	
Marking			
General	6.1	X	X
Certificatiemerk	6.2	X	X

a) In case of product or production process changes, it shall be determined again in consultation between the supplier and Kiwa, if the product complies with the performance requirements.

b) During the follow-up investigation, the inspector will inspect the product by means of a selection of the above mentioned marked product requirements. The frequency of the follow-up visits is defined in §9.5 of this BRL.

8.2 Inspection of the quality system

The supplier's quality system will be assessed by Kiwa based on the IQC scheme. The inspection contains at least those aspects mentioned in chapter 7.

9 Agreements on the implementation of certification

9.1 General

The certification body must have a procedure in place in which the general regulations used for certification are established.

9.2 Certification staff

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

- Certification assessor/Reviewer **(CAS/RV**): in charge of carrying out the design and documentation evaluations, pre-certification tests, initial investigations, and evaluation of applications and reviewing conformity assessments.
- Site assessor (**SAS**): in charge of carrying out external inspections at the supplier's works;
- Decision maker (**DM**): in charge of taking decisions in connection with the pre-certification tests carried out, continuing the certification based on the inspections carried out and taking decisions on the need to take corrective actions.

9.2.1 Competence criteria certification staff

The competence criteria for the implementing certification staff are laid down in the following table. The competence of the certification staff involved must have been demonstrably recorded.

Basic competences	**Evaluation criteria**
Knowledge of company processes. Skills for conducting professional assessments on products, processes, services, installations, design, and management systems.	*Relevant work experience* **SAS, CAS/RV**: 1 year **DM**: 5 years, including 1 year related to certification Relevant technical knowledge and experience at the level of: **SAS:** High school **CAS/RV, DM**: Bachelor
Skills with regard to site assessments to be performed Adequate communication skills (e.g. writing reports, presentation skills and interviewing skills).	**SAS**: Kiwa Assessment training or equivalent and 4 site assessments including 1 supervised self-reliant assessment.
Execution of Initial Investigation	**CAS**: 3 initial assessments under supervision.
Conducting reviews	**RV**: evaluation of 3 reviews

Technical competences	**Evaluation criteria**
Education	**General:** Education in one of the following technical areas: • Civil Engineering; • Engineering.
Testing skills	**General:** • 1 week laboratory training (general and scheme specific) including measuring techniques and conducting tests under supervision; • Conducting tests (per scheme).

Experience – specific	**CAS** • 1 complete application (Initial audit of a production location excluded) under supervision by **CAS.** • 1 complete application self-reliant (to be evaluated by **PM**) • 1 initial assessment of the production site under supervision by **PM** **SAS** • 2 inspection visits together with a qualified **SAS** • 1 inspection visit conducted self-reliant (evaluated by **PM**)
Skills in performing witnessing	**PM** Internal training witness testing

Legend:
- Product manager: (**PM**)
- Site assessor (**SAS**)
- Certification assessor (**CAS**)
- Reviewer (**RV**)
- Decision maker (**DM**)

9.2.2 Qualifications certification staff

The qualification of the Certification staff shall be demonstrated by means of assessing the education and experience to the above mentioned requirements. In case staff is to be qualified on the basis of deflecting criteria, written records shall be kept.
The authority regarding qualifications shall be recorded in the quality assurance system of the certification body.

9.3 Report on initial investigation

The certification body records the results of the initial investigation in a report. This report shall comply with the following requirements:
- completeness: the report provides a verdict about all requirements included in the evaluation guideline;
- traceability: the findings on which the verdicts have been based shall be recorded and traceable;
- basis for decision: the DM shall be able to base their decision on the findings included in the report.

9.4 Decision for granting the certificate and/or imposition of measures

The decision for granting the certificate or the imposition of measures with regard to the certificate shall be based on the results recorded in the file.

The results of an initial investigation and a periodic assessment (in case of critical non-conformities) must be assessed by a reviewer.

Based on the performed review, the decision maker will decide if:
- The certificate can be granted,
- Sanctions are imposed,
- The certificate shall be suspended or revoked.

The reviewer and the decision maker shall not have been involved in the preparation of the results based on which the decision is being made.

The decision shall be recorded in a traceable manner.

9.5 Nature and frequency of third party assessments

The certification body shall carry out surveillance assessments on site at the supplier to verify compliance with their obligations. The Board of Experts decides on the frequency of assessments.

At the time this BRL entered into force, the frequency of assessments amounts to 2 of on site assessment(s) per year for suppliers with a quality management system in accordance with ISO 9001 for their production, which has been certified by an acknowledged body (in accordance with ISO/IEC 17021) and where the IQC scheme forms an integral part of the quality management system.
In case the supplier does not have a quality management system in accordance with ISO 9001 (issued by Kiwa or any other accredited certification body), the frequency is increased to 3 of assessment visits for the duration of one year.

An overview of the assessments to be performed by the certification body is given in the test matrix and must cover at least:

- the product specifications laid down in the certificate;
- the production process of the products;
- the supplier's IQC Scheme and the results of the inspections performed by the supplier;
- the correct way of applying markings to the certified products;
- compliance with the required procedures;
- dealing with complaints about delivered products.

For suppliers with a private label certificate, the frequency of assessments for the products covered by this certificate is established at 1 assessment per year. The assessments are conducted at the site of private label holder and focused on the aspects inserted in the IQC scheme and the results of the control performed by the private label holder. The IQC scheme of the private label holder shall at least refer to:

- the correct way of applying markings to the certified products;
- compliance with required procedures for receiving and final inspection;
- the storage of products and goods;
- dealing with complaints about delivered products.

The results of each assessment shall be recorded by Kiwa in a traceable manner in a report.

9.6 Non conformities

When the certification requirements are not met, measures are taken by Kiwa in accordance with the sanctions policy as written in the Kiwa Regulation for Certification. The Kiwa Regulation for Certification and the Sanctions Policy are available page on the Kiwa website.

The following applies with regards to the relevance, follow-up of nonconformities, and the sanctions policy.

9.6.1 Severity of nonconformities

The severity of the issued nonconformity in relation to the assessment conducted after granting the product certificate by certification body can be differentiated as follows:

- Nonconformities entitled as critical are deviations that can directly affect the quality and/or performance of product and/or process
- Other" nonconformities (noncritical nonconformities).

9.6.2 Follow-up on nonconformities

The follow-up procedure for nonconformities by a certification body is as follows:

- The certification body shall be able to deal with critical nonconformities within the time frame established by the certification body, but shall not exceed the maximum term of 10 business days,
- The certification body shall be able to deal with noncritical nonconformities within the time frame established by the certification body, but shall not exceed the maximum term of 3 months.

9.7 Report to the Board of Experts

The certification body shall report at least annually about the performed certification activities. In this report the following aspects shall be included:

- mutations in number of issued certificates (granted/withdrawn);
- number of executed assessments in relation to the established minimum;
- results of the inspections;
- measures imposed in case of nonconformities;
- complaints received from third parties about certified products.

9.8 Interpretation of requirements

The Board of Experts may record the interpretation of requirements of this evaluation guideline in one or more separate interpretation document(s). This or those interpretation documents will be available to the members of the BoE, the certification bodies, and the certificate holders who are active based on this evaluation guideline. This or those interpretation documents will be published on Kiwa's website.

10 Titles of standards

10.1 Public law rules

BJZ2011048144 29 juni 2011	Regulation from the State Secretary for Instructure and Environment [1]

10.2 Normative documents

Number	Title	Version*
NEN-EN-ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection	
NEN-EN ISO/IEC 17021-1	Conformity assessment - Requirements for bodies providing audit and certification of management systems	
NEN-EN-ISO/IEC 17024	Conformity assessment - General requirements for bodies operating certification of persons	
NEN-EN-ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories	
NEN-EN-ISO/IEC 17065	Conformity assessment - Requirements for bodies certifying products, processes, and services	
NEN 6075	Determination of the resistance to smoke movement between spaces in buildings 1991, including amendment sheet NEN 6075/A1	May 1997
BRL-K746	The application of coating systems for drinking water applications	
BRL-K759	The application of coating systems for drinking water applications	
BRL-K17504	Vulcanised rubber products for cold and hot drinking water applications.	
NEN 927	Manometers - inspection and calibration	
NEN-EN 545	Ductile iron pipes, fittings, accessories and their joints for water pipelines - Requirements and test methods	
NEN-EN 805	Water supply - Requirements for systems and components outside buildings	
NEN-EN 1333	Flanges and their joints - Pipework components - Definition and selection of PN	
NEN-EN-ISO 4016;	Fasteners - Hexagon head bolts - Product grade C	
NEN-EN-ISO 4034;	Hexagon head bolts - Product grade C	
NEN-EN-ISO 7091;	Plain washers - Normal series - Product grade C	
NEN-EN-ISO 9001;	Quality management systems - Requirements	
NEN-EN-ISO 6708;	Pipework components - Definition and selection of PN (nominal size)	
NEN-EN 14525	Ductile iron and steel wide tolerance couplings and flange adaptors for use with pipes of different materials: ductile iron, Grey iron, steel, PVC-U, PVC-O, PE, fibre-cement.	

*) If no date of issue is specified in this column, the current version of the document is applicable.

Remark in case the normative documents have a date:
Every year, the normative documents are checked to see if they are still up to date. Modifications of normative documents to be applied, will be published on the Kiwa website services page.

[1] Effective July 1, 2017

II Model certificate (sample)

CERTIFICATE

Product certificate
KXXXXXX/0X

kiwa

Issued

Replaces

Page 1 of 1

Name product

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

Name customer

as specified in this product certificate and marked with the Kiwa®-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with Kiwa evaluation guideline

BRL-xxxx "xxxxxxxxxxxxxxxxxxxxxxxxf" dated [dd-mm-yyyy]

inclusive amendment sheet dated dd-mm-yyyy.

Name Director
Kiwa

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

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info@kiwa.nl
www.kiwa.nl

Company
Name customer
Address customer

Phone number
Fax number
www.
Email

Certification process consists of initial and regular assessment of:
- **quality system**
- **product**

III Model IQC Scheme (sample)

Inspection subjects	Inspection aspects.	Inspection method	Inspection frequency	Inspection registration
Raw materials or supplied materials: • Entry inspection raw materials				
Production process, production equipment, other equipment: • Procedures • Working instructions • Equipment • Other equipment				
Finished products				
Measuring and testing equipment • Measuring equipment • Calibration				
Logistics				