

KOMO®

Technical approval-with-product certificate K79262/04



Issued

2019-10-01

Replaces

K79262/03

Valid until

Indefinite

Dated

2017-09-01

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PE-RT System

Becker Plastics GmbH

STATEMENT BY KIWA

This technical approval-with-product certificate based on BRL 5602 Plastics piping systems of PE-RT intended for floor heating issued on 10/25/2016 by Kiwa, in accordance with the Kiwa Regulation for Certification.

The quality system and the product characteristics belonging to the PE-RT System are checked periodically and the performance of the PE-RT System in the application as floor heating is assessed. The basic principles for the assessment are checked periodically.

Based on this Kiwa declares that:

- legitimate confidence exists that the by the holder of the technical approval- with-product certificate delivered PE-RT System comply with:
 - the technical specifications as laid down in this technical approval-with-product certificate;
 - the product requirements as laid down in this technical approval-with-product certificate, provided that they have been marked the PE-RT System with the KOMO®-mark in the manner as indicated in this technical approval-with-product certificate;
- the PE-RT System provides the performances as described in this KOMO technical approval-with-product certificate, provided that:
 - the application conditions and technical specifications as described in this KOMO approval-with-product certificate are met;
 - the manufacturing takes place according to the processing methods as laid down in this technical approvalwith-product certificate.

Within the framework of this KOMO technical approval-with-product certificate there is no inspections with regard to the production of other parts of the PE-RT System or the processing of the PE-RT System.

Ronald Karel

Kiwa

This technical-approval-with-product certificate is listed in the overview on the website of Stichting KOMO: www.komo.nl.

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

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Assessed is:

- Quality system
- Product
- Single performance in the application Periodic control

PE-RT System

TECHNICAL SPECIFICATION

Subject

PE-RT System

Product characteristics

The product complies to BRL 5602 Plastics piping systems of PE-RT intended for floor heating.

The system consists of:

- 5 layer PE-RT type 1 pipe manufactured by Becker Plastics GmbH (certificate K20016);
- brass press fittings manufactured by IPA Produktions- & Vertriebs GmbH (certificate K11612).

Specification

The dimensions of the pipe in the table below are part of this certificate.

Nominal outside diameter (mm)	Wall thickness (mm)	Design pressure max. (bar)
14	2,0	4
16*)	2,0	6
17	2,0	4
18	2,0	4
20	2,0	4
25	2,3	4

Colour:

pipe: natural coloured

fitting: brass

Marking

The products shall be marked with the KOMO® mark.

Pipes

The minimum required marking on the pipes shall be:

- KOMO (or KOMO® word mark) + class 4 bar and only 16x2,0 mm also 6 bar.
- material identification: PE-RT 1;
- the build up of the pipe; PE-RT/EVOH/PE-RT;
- certificate number of accompanying technical approval-with-product certificate of the piping system;
- the manufacturer's name, trade name, system name or logo;
- nominal outside diameter in mm;
- nominal wall thickness of the pipe in mm;
- production code.

The realization of the marks is as follows: clearly, durable and indelible at intervals of not more than 2 meters.

Fittings

The minimum required marking on the fittings shall be:

- KOMO (if not possible KOMO only on the smallest packaging);
- the manufacturer's name, trade name or logo;
- nominal outside diameter of the corresponding pipe;
- production code.

Location of the marks: on every fitting.

The realization of the marks is as follows: clearly, durable and indelible.



^{*)} Remark: according to BRL 5607

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PE-RT System

The minimum required marking on the smallest packaging unit of the fitting shall be:

- KOMO (or KOMO[®] word mark);
- certificate number of the accompanying technical approval-with-product certificate of the piping system, according the marking of the belonging pipe;
- the manufacturer's name, trade name, system name or logo;
- material identification if the fitting body is made of plastics;
- nominal outside diameter and nominal wall thickness of the corresponding pipe in mm.

Location of the marks: on every package.

The realization of the marks is as follows: clearly, durable and indelible on every packaging.

Logistics

Production and assembly of the system is laid down in the annex of the certification agreement.

PROCESSING

The supplier shall provide installation instructions, approved by Kiwa. A reference to these instructions shall be made at or near the packaging. The instructions are published in the Dutch language and contains at least specific information with regard to storage, transport, processing temperature and construction of the joints.

So-called "combination boilers" are often applied in individual house heating systems. In such boilers, no double separation between drinking water and heating medium exists. A leak in the single separation may result in the heating medium coming into contact with drinking water. Because of this it is important that in case additives are added to the heating medium a Kiwa product certificate for these additives has been issued.

The heat emission to the floor is dependent on the thickness of the finishing coat and the mutual distance between the pipes. The preconditions have to be clearly described in the instructions.

PERFORMANCES

- 1. The system is oxygen tight.
- 2. All joints are leak tight and possess sufficient clamp force to resist external influences.

PERFORMANCES OF THE PRODUCTS

The medium pipes and fittings are designed for floor heating systems with a lifetime of 50 years at an operating temperature profile according to class 4 of NEN-ISO 10508 and an allowable working pressure of maximum 4 or 6 bar.

RECOMMENDATION FOR THE CUSTOMER

Check on delivery of the products listed under the "technical specification" whether:

- The product(s) and material(s) ordered are delivered in accordance with the agreement you made.
- · The brand and the method of marking is correct
- No defects or damage is visible (for example, resulting from the transportation).

If on the basis of the foregoing you decide to proceed to rejection, please contact

Becker Plastics GmbH

And if necessary,

Kiwa Nederland B.V.

