



KOMO®
Product certificate
K86478/04



Issued 2017-06-15 Replaces K86478/03
 Valid until Indefinite Dated 2017-07-01
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Eneflex 5 layer piping system
Enetec Plastics GmbH

STATEMENT BY KIWA

This technical approval-with-product certificate on the basis of BRL 5607 Plastics piping systems of PE-RT intended for heating installations: radiator connections issued on 25 October 2016 by Kiwa, in accordance with the Kiwa regulations for product certification.

The quality system and the product characteristics belonging to the Eneflex 5 layer piping system are checked periodically and the performance of the Eneflex 5 layer piping system in the application as radiator connections 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 Eneflex 5 layer piping 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 the Eneflex 5 layer piping system has been marked with the KOMO®-mark in the manner as indicated in this technical approval-with-product certificate;
- the Eneflex 5 layer piping 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 approval-with-product certificate.

Within the framework of this KOMO technical approval-with-product certificate there are no inspections with regard to the production of other parts of the Eneflex 5 layer piping system or the processing of the Eneflex 5 layer piping system.

Luc Leroy
 Kiwa

*The 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.*

Kiwa Nederland B.V.
 Sir Winston Churchilllaan 273
 Postbus 70
 2280 AB RIJSWIJK
 The Netherlands
 Tel. +31 88 998 44 00
 Fax +31 88 998 44 20
 info@kiwa.nl
www.kiwa.nl

Holder of Certificate
 Enetec Plastics GmbH
 Halle 26
 Kalkarer Str. 81
 47533 KLEVE
 Duitsland
 Tel. +49(0)2821 89880-0
 export@enetec.info
<http://www.enetec.info/>



Evaluated is:
 quality system
 product
 Periodic inspection

CERTIFICATE

473170526

Eneflex 5 layer piping system

TECHNICAL SPECIFICATION

Subject

Eneflex 5 layer piping system

Product characteristics

The piping system complies to BRL 5607 Plastic piping systems of PE-RT intended for heating installations: radiator connections.

The system consists of:

- 5 layer PE-RT type 1 an PE-RT type 2 pipes manufactured by Enetec Plastics GmbH: K86477;
- Metal press and compression fittings manufactured by IPA Produktions & Vertriebsges.m.b.H: K11612;
- Corrugated protection pipes:, manufactured by Hegler Plastics GmbH: K13791

Specification

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

Class 4 / 6 bar		Class 5 / 6 bar			
PE-RT Type 1 and PE-RT Type 2		PE-RT type 1		PE-RT type 2	
Nominal outside diameter (mm)	Wall thickness (mm)	Nominal outside diameter (mm)	Wall thickness (mm)	Nominal outside diameter (mm)	Wall thickness (mm)
10	1,3	10	1,3	10	1,3
12	2,0	12	2,0	12	2,0
14	1,25				
14	2,0	14	2,0	14	2,0
15	1,5				
16	2,0	16	2,0	16	2,0
17	2,0	17	2,0	17	2,0
18	2,0			18	2,0
20	2,0			20	2,0
25 ¹⁾	2,3				

¹⁾ only press fittings

Colour:

inner layer of the pipe is: natural

outer layer of the pipe is: natural, red, blue, green, yellow, white, black, silver

metal fittings: brass

protection pipe: color red, blue, black and white

Remark: the piping system can also be used for underfloor heating according to BRL 5602 (without the protection pipes)

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 or 5/ 6 bar;
- certificate number of accompanying technical approval-with-product certificate of the piping system;
- the manufacturer's name, trade name, system name or logo;
- material identification: PE-RT type 1 or 2;
- the build-up of the pipe; PE-RT/EVOH/PE-RT;
- nominal outside diameter and 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.



Eneflex 5 layer piping system

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.

The minimum required marking on the smallest packaging unit of the fittings 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.

Protection pipes

The minimum required marking on the protection pipes shall be:

- KOMO (or KOMO[®] word mark);
- certificate number of the protection pipe;
- the manufacturer's name, trade name or logo.

The realization of the marks is as follows: clearly and indelible at intervals of not more than 2,5 m.

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

All system components (except the protection pipes) must be designed for a lifetime of 50 years at an a operating temperature profile according to class 5 of NEN-ISO 10508 and an allowable working pressure of maximum 6 bar.

The protection pipes have to protect the medium pipes for radiator connections in case the medium pipes are embedded.

RECOMMENDATION FOR THE CUSTOMER

Check at the time of delivery whether:

- the supplier has delivered in accordance with the agreement;
- the mark and the marking method are correct;
- the products show no visible defects as a result of transport etc.



Eneflex 5 layer piping system

if you should reject a delivery on the basis of the above, please contact:

- Enetec Plastics GmbH

and, if necessary:

- Kiwa Nederland B.V.

For the proper storage, transport and processing consult the instructions of the certificate holder.

