

KOMO®

Technical approval-with-product certificate
K93148/04



Issued 2023-07-15 Replaces K93148/03

Valid until Indefinite Dated 2022-08-15

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SYSTEMPEX

Van Marcke NV

STATEMENT OF KIWA

This technical approval-with-product certificate on the basis of BRL 5610 Plastics piping systems of PE-X/Al intended for heating installations: radiator connections issued on 25 October 2016 by Kiwa, in accordance with the Kiwa Regulation for Certification.

The quality system and the product characteristics belonging to the Systempex are checked periodically and the performance of the SYSTEMPEX 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 SYSTEMPEX 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 SYSTEMPEX with the KOMO®-mark in the manner as indicated in this technical approval-with-product certificate;
- the SYSTEMPEX 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 is no inspections with regard to the production of other parts of the SYSTEMPEX or the processing of the SYSTEMPEX.

Ron Scheepers
Kiwa

This technical approval-with-product certificate is also included on the KOMO foundation websites: www.komo.nl and www.komo-online.nl.

Users of technical approval-with-product certificate is advised to check whether it is still valid. For this purpose consult the website of Kiwa: www.kiwa.nl.

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

Certificate holder
Van Marcke NV
Lar Blok Z5
B-8511 AALBEKE
België
Tel. +32 56 237 511



Assessed is:

- Quality system
- Product
- Performance in the application
- Periodic control

SYSTEMPEX

TECHNICAL SPECIFICATION

Subject

SYSTEMPEX

Product characteristics

The product complies to BRL 5610 Plastics piping systems of PE-X/Al intended for heating installations: radiator connections.

The system consists of:

- Plastic pipes of PE-Xb/Al/PE-Xb;
- Metal press fittings;
- Corrugated protection pipes.

Specification

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

Nominal outside diameter (mm)	Wall thickness (mm)	Wall thickness aluminum layer (mm)	Pressing profiles fittings
16	2,0	0,20 / 0,30	TH
20	2,0	0,25 / 0,40	TH
26	3,0	0,35 / 0,58	TH
32	3,0	0,40 / 0,75	TH
40	3,5	0,80	TH
50	4,0	1,00	TH
63	4,5	1,20	TH

Colour:

- pipes: inner pipe; natural/ outer pipe; white;
- fittings: body; brass/ press sleeve; stainless steel AISI 304

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 5/ 10 bar;
- material identification: PE-Xb;
- the build up of the pipe: PE-Xb/Al/PE-Xb;
- 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.

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



SYSTEMPEX

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.

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

Protection pipes

The minimum required marking on the protection pipes shall be:

- KOMO (KOMO® word mark);
- the manufacturer's name, trade name, certificate number of the protection pipe or the certificate number of the belonging technical approval (system) certificate.

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. In relation to this the requirement is that in case additives are added to the heating medium these additives have to comply with the Dutch drinking water regulations.

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 heating installations: radiator connections and floor heating systems with a lifetime of 50 years at an operating temperature profile according to class 4/ 5 of NEN-ISO 10508 and an allowable working pressure of maximum 10 bar. The corrugated protection pipes have to protect the medium pipes for radiator connections in case the medium pipes are embedded.

TIPS FOR THE USER

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

- o Van Marcke NV

And if necessary,

- o Kiwa Nederland B.V.

Carry out the storage, transport and processing in accordance with the provisions included in this technical-approval-with-product certificate and/or documents of the certificate holder.



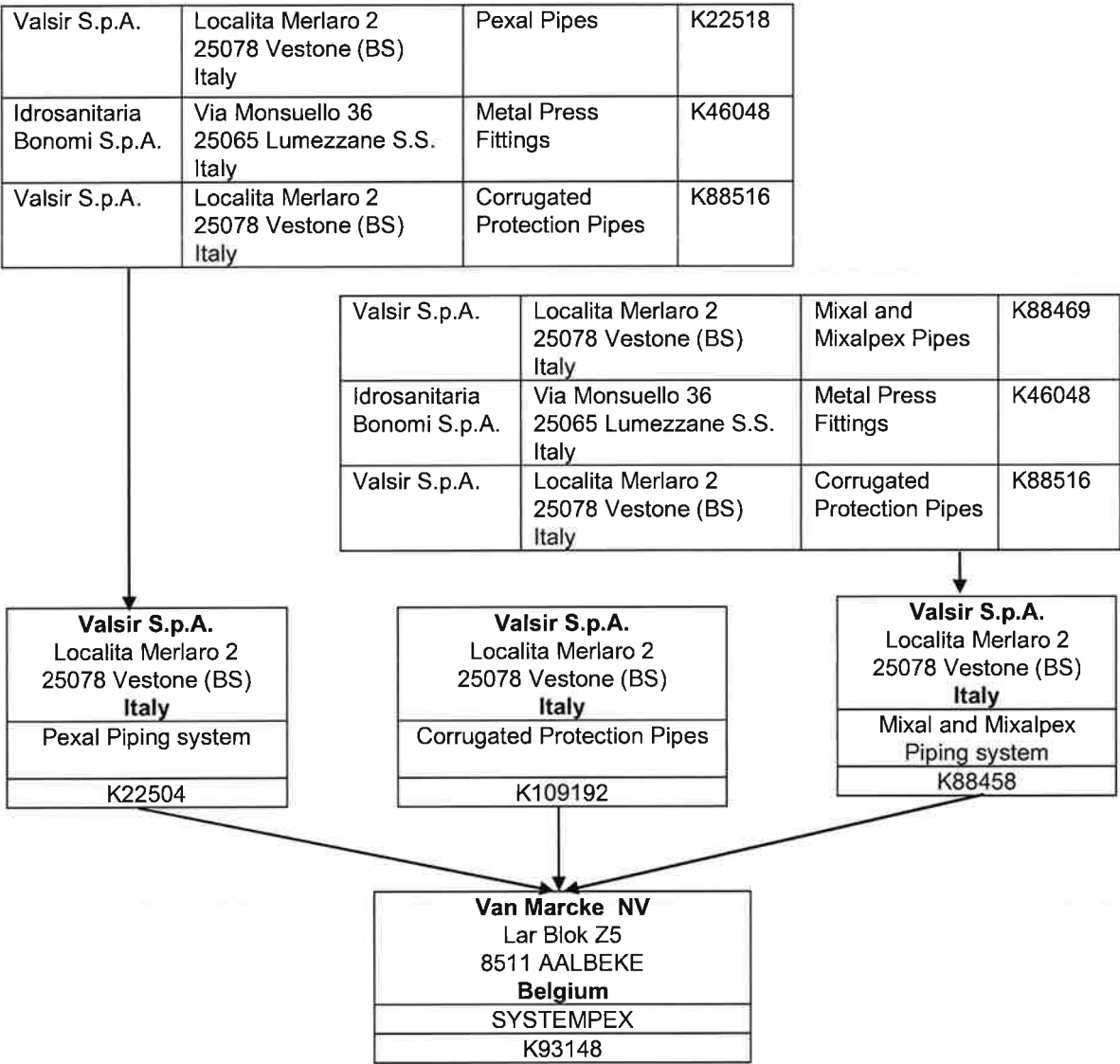
Certification-agreement K93148

Appendix 1

Commencing date: 2023-07-15

Flow schedule

The use of the KOMO Product certificate and the KOMO quality mark is only granted in combination with the products made by the producers mentioned hereafter and which are stated in the specifications of the certificates to the agreements with the numbers mentioned below.



The present agreement replaces previous versions, if any.
Drawn up in duplicate and signed,

Rijswijk, 15-07-2023
Kiwa Nederland B.V.



ir. A.J. van der Velden,
Unit manager Products & Installations

Kortrijk,
Van Marcke N.V.



Hilde Debby
Category Manager Installation