



## Technical-approval-with-product certificate **K101112/02**

Issued 2020-07-01

Replaces K101112/01

Page 1 of 4

CERTIFICATE

### Tigris K1/K5 system

#### STATEMENT BY KIWA

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

### Wavin Nederland B.V.

as specified in this technical-approval-with-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-K536 K "for the Kiwa technical-approval-with product certificate for multilayer piping systems PE-X /AI, PE-RT/AI, PP-R/AI and PP-RCT/AI intended for transport of hot and cold drinking water inside buildings " dated 15-11-2017.

Within the framework of this technical-approval-with-product certificate Kiwa does not impose any inspections with regard to the production of other parts of the Tigris K1/K5 system nor the processing of the Tigris K1/K5 system itself.

Ron Scheepers  
Kiwa

*Publication of this certificate is allowed.*

*Advice: consult [www.kiwa.nl](http://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](mailto:info@kiwa.nl)

[www.kiwa.nl](http://www.kiwa.nl)

#### Company

Wavin Nederland B.V.

J C Kellerlaan 8

7772 SG HARDENBERG

Tel. +31 (0)523 79 65 41

[info@wavin.nl](mailto:info@wavin.nl)

[www.wavin.nl](http://www.wavin.nl)



Certification process  
consists of initial and  
regular assessment of:

- quality system
- product

Tigris K1/K5 system

**PRODUCT SPECIFICATION**

The products mentioned below belong to this technical approval-with-product certificate.

The product complies to BRL K536-K multilayer piping systems PE-X/Al, PE-RT/Al, PP-R/Al and PP-RCT/Al intended for transport of hot and cold drinking water inside buildings and the "Product Evaluation Guideline W 001 Multilayer Piping Systems 2018-02-08" (PEG).

The system consists of:

- PE-X/Al/PE pipes, produced by Multilayer Pipe Company Sp. Z.o.o. (certificate K25071);
- PE-RT/Al/PE-RT pipes produced by WRW Westfälische Rohrwerke GmbH (certificate K42738);
- PPSU press fittings produced by Wavin Nederland B.V. (certificate K20020).

**Specification**

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

**PE-Xc/Al/PE**

Nominal diameter (mm)	Type fitting	Wall thickness (mm)	Wall thickness aluminum (mm)
14	K1	2,0	0,20
16	K1/K5	2,0	0,20
20	K1/K5	2,25	0,24
25	K1/K5	2,5	0,30
32	K1/K5	3,0	0,40
40	K1/K5	4,0	0,50
50	K1	4,5	0,70
63	K1	6,0	0,60

**PE-RT/Al/PE-RT**

Nominal diameter (mm)	Type fitting	Wall thickness (mm)	Wall thickness aluminum (mm)
75	K1	7,5	0,50

Color:

- pipes: inside natural/ outside white
- fitting body: blue

Remarks. The joints (press system) are made by a special tool.

Press profile K1 : U

Press profile K5: 16, 20 en 32 mm : B-H-TH-U-Up

Press profile K5: 25 mm : H-TH-U-Up

Press profile K5: 40 mm : H-TH-U

**Fitness for contact with drinking water**

The pipes and fittings used in this system are approved on the basis of the requirements for hygienic aspects set in the "Regeling materialen en chemicaliën drink- en warm tapwatervoorziening" dated 01-07-2017; ("Materials and chemicals in the supply of drinking water and warm tap water Regulation"; published in the Government Gazette). The criteria for these hygienic aspects are recorded in the respective product certificates.

## Tigris K1/K5 system



---

### MARKING

The products shall be marked with the Kiwa-mark.

#### Pipes

The minimum required marking on the pipes shall be:





- **KIWA**  or  \* + class 2 / 10 bar;
- material identification: PE-Xc or PE-RT type 2;
- the build up of the pipe; PE-X/Al/PE or PE-RT/Al/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.

\*) for smaller diameters permitted by Kiwa.

#### Fittings


The minimum required marking on the fittings shall be:

- **KIWA**  or on small products  or  or **KK**\* or **KK**\* (if not possible: **KIWA**  only on the smallest packaging unit)\*\*;
- 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 smallest packaging unit of the fittings are provided with at least the following information :

- **KIWA** 
- 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.

\*) for small fittings marking with only KK is permitted.

\*\*\*) only after approval by Kiwa.

### LOGISTICS

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

### APPLICATION AND USE

The medium pipes and fittings are designed for drinking water installations with a lifetime of 50 years at an operating temperature profile according to class 2 of NEN-ISO 10508 and an allowable working pressure of maximum 10 bar.

### RECOMMENDATIONS FOR CUSTOMERS

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.

If you should reject a product on the basis of the above, please contact:

- Wavin Nederland B.V.

and, if necessary,

- Kiwa Nederland B.V.

Consult the supplier's processing guidelines for the proper storage, transport and processing methods.