



technical sheet

## CERTIFICATION OF

## VITRIFIED CLAY PIPE SYSTEMS

BENOR

This technical data sheet was printed on 2/04/2025.  
The validity of this technical data sheet can be checked on  
<http://extranet.copro.eu/>



## TECHNICAL DATA SHEET

| QUICK CODE  | VERSION   | VALIDITY                                       |
|---|---|--|
| 0001/0011   | 6.0 - 23/08/2024  | CERTIFIED                                      |
| CERTIFICATE HOLDER  | PRODUCTION UNIT   | CERTIFICATE NUMBER                             |
| STEINZEUG-KERAMO 'WERK 2'<br>Paalsteenstraat 36<br>BE-3500 Hasselt<br>+32 11 21 02 32<br><a href="mailto:info@steinzeug-keramo.com">info@steinzeug-keramo.com</a> | STEINZEUG-KERAMO 'WERK 2'<br>Paalsteenstraat 36<br>BE-3500 Hasselt<br>+32 11 21 02 32<br><a href="mailto:info@steinzeug-keramo.com">info@steinzeug-keramo.com</a> | BENOR<br>001/95<br>Vitrified clay pipe systems |

## PRODUCT

| OFFICIAL NAME                 | COMMERCIAL NAME     |
|-------------------------------|---------------------|
| INSERTABLE FITTINGS IN RUBBER | KERAMAT - Ü - RINGS |

## CAPTION ON THE PRODUCT

- \* BENOR + PTV 895-4
- \* Nominal size
- \* Rubber type
- \* Manufacturer's identification
- \* Type of application (WC)
- \* Hardness class
- \* Production date or production period

## APPLICATION

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> CCT/TB 2015                  | <input checked="" type="checkbox"/> EN 295-4 (2013) |
| <input checked="" type="checkbox"/> SB 250 - versie 4.1          |   |
| <input checked="" type="checkbox"/> CCT Qualiroutes (2021)       |   |
| <input checked="" type="checkbox"/> SB 250 - versie 4.1 + errata |   |

This product was not checked according to the crossed-out reference documents or does not comply with them.

Use: Drains and sewers.

## EXPLANATIONS (THIS DOES NOT COME UNDER SUPERVISION IN THE CONTEXT OF BENOR CERTIFICATION)

## ATTENTION POINTS - TO BE CHECKED BY CUSTOMER (NOT LIMITED)

- \* Is there a delivery note for each delivery?
- \* Is there reference to the technical data sheet on the delivery document?
- \* Does the product meet the requirements from the tender?

## FORM OF DELIVERY

Individual pieces

## EXTRA INFORMATION

The Keramat Lubricant shall be used.

The conformity of the rubber components according to PTV 895-4 and EN 681-1 is demonstrated by an equivalence procedure, which is part of the BENOR certification of the vitrified clay product.

Contact at

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| PRODUCT CHARACTERISTICS                      |                          |         |             |     |     |
|--|--------------------------|---------|-------------|-----|-----|
| GENERAL REQUIREMENTS                         | VOLGENS                  | EENHEID | VALUE       | MIN | MAX |
| Appearance                                   |                          |         | Pass        | -   | -   |
| REQUIREMENTS FOR JOINT ASSEMBLIES            | VOLGENS                  | EENHEID | VALUE       | MIN | MAX |
| Watertightness under angular deflection      | PTV 895-4, Cla use 3.5.3 |         | See drawing | -   | -   |
| Watertightness under shear load              | PTV 895-4, Cla use 3.5.4 |         | Pass        | -   | -   |
| Chemical and physical resistance to effluent | PTV 895-4, Cla use 3.5.5 |         | CH          | -   | -   |
| Thermal cycling stability                    | PTV 895-4, Cla use 3.5.6 |         | Pass        | -   | -   |
| Long-term thermal stability                  | PTV 895-4, Cla use 3.5.7 |         | Pass        | -   | -   |
| Increased watertightness at 1 bar            | PTV 895-4, Cla use 3.5.8 |         | Pass        | -   | -   |
| DIMENSIONAL REQUIREMENTS                     | VOLGENS                  | EENHEID | VALUE       | MIN | MAX |
| Individual dimensional details               |                          |         | See drawing | -   | -   |
| Dimensional tolerances                       | ISO 3302-1               |         | M3          | -   | -   |
| REQUIREMENTS FOR THE VULCANIZED RUBBER       | VOLGENS                  | EENHEID | VALUE       | MIN | MAX |
| All characteristics                          | PTV 832-1                |         | Conforming  | -   | -   |

TECHNICAL DRAWING



COPRO Quick-code van het certificaat:

0001/0011

| Nominale diameter                  | Maten  |   |                                  | Hoek-<br>verdraaiing  |
|------------------------------------|--|---|----------------------------------|-----------------------|
| Nominal size                       | Dimensions   |   |                                  | Angular<br>deflection |
| Diamètre nominal                   | Dimension  |   |                                  | Déviaton<br>angulaire |
| DN                                 | inwendig diameter<br>internal diameter<br>diamètre intérieur<br>mm | uitwendig diameter<br>external diameter<br>diamètre extérieur<br>mm | hoogte<br>heigh<br>hauteur<br>mm | mm/m                  |
| 100 PVC / gietijzer                | 108 ± 1  | 129 ± 1   | 58 ± 1                           | 100                   |
| 100 PVC / cast iron                |  |   |                                  |                       |
| 100 PVC / fonte brute ou mi-ouvrée |  |   |                                  |                       |
| 125 gietijzer                      | 130 ± 1  | 156 ± 1   | 58 ± 1                           |                       |
| 125 cast iron                      |  |   |                                  |                       |
| 125 fonte brute ou mi-ouvrée       |  |   |                                  |                       |
| 125 PVC                            | 121 ± 1  | 157 ± 1   | 58 ± 1                           |                       |
| 150 PVC / gietijzer                | 157 ± 1  | 182 ± 1   | 70 ± 1                           |                       |
| 150 PVC / cast iron                |  |   |                                  |                       |
| 150 PVC / fonte brute ou mi-ouvrée |  |   |                                  |                       |
| 200 gietijzer                      | 207 ± 1  | 239 ± 1   | 60 ± 1                           |                       |
| 200 cast iron                      |  |   |                                  |                       |
| 200 fonte brute ou mi-ouvrée       |  |   |                                  |                       |
| 200 PVC                            | 197 ± 1  | 239 ± 1   | 60 ± 1                           |                       |

Dichtring (Ü-Ring) verbindingssysteem F / Sealing ring (Ü-Ring) jointing system F  
Bague d'étanchéité (Ü-Ring) système d'assemblage F



## ATTESTATION

The BENOR certification of the product states that there is, on the basis of a periodic external supervision, a sufficient degree of confidence that the certificate holder is in a position to continuously guarantee the conformity of the product as specified in the reference documents and TRA 95 BENOR (3.0).

This datasheet contains the performance characteristics specified by the manufacturer. The datasheet is verified by the certification body.

The certificate holder declares that the product supplier/delivered by it conforms to the datasheet as set out on the delivery note.

By making it available digitally, the producer declares that he agrees with this sheet

**Name:** René van Veldhoven

**Date:** 23/08/2024

## COPRO

**Name:** Koen Van Daele

**Date:** 23/08/2024

**Signature:**



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