



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
<b>0015/0001</b>	<b>8.2 - 8/02/2025</b>	<b>CERTIFIED</b>
CERTIFICATE HOLDER	PRODUCTION UNIT	CERTIFICATE NUMBER
WIENERBERGER INFRA Europaallee 63 D-50226 Frechen +49 22 34 50 70 <a href="mailto:info@steinzeug-keramo.com">info@steinzeug-keramo.com</a>	WIENERBERGER INFRA 'WERK 1' Verlängerte Torgauerstrasse 1 D-06905 Bad Schmiedeberg +49 34 92 57 50 <a href="mailto:info@steinzeug-keramo.com">info@steinzeug-keramo.com</a>	BENOR 0015/95 Vitrified clay pipe systems

## PRODUCT

OFFICIAL NAME	COMMERCIAL NAME
<b>PIPES, FITTINGS AND JOINTS</b>	<b>VITRIFIED CLAY SOCKETED PIPES AND GA, GZ</b>

## CAPTION ON THE PRODUCT

BENOR  
Production date  
Production unit  
EN 295-1  
PTV 895-1  
Nominal size (DN...)  
Joint system  
Crushing strength FN in kN/m  
Bending moment resistance in kNm (if applicable)

## APPLICATION

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> CCT/TB 2015                  | <input checked="" type="checkbox"/> PTV 895-1 (3.0) | <input checked="" type="checkbox"/> EN 295-1 (2013) |
| <input checked="" type="checkbox"/> CCT Qualiroutes (2017)       |   |   |
| <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 technical data sheet code mentioned on the delivery note correspond with the code mentioned on the product?
- \* Does the product meet the requirements from the tender?

## FORM OF DELIVERY

## EXTRA INFORMATION

- \* In case vulcanized rubber sealing elements are supplied as separate components, they should be marked with reference to PTV 8681-1 and the classification for high chemical resistance.
- \* Coupling materials such as polypropylene sleeve couplings should be marked with reference to PTV 895-1.
- \* The KeraMat Lubricant shall be used for all vitrified clay joint systems.
- \* The conformity of the rubber components according to PTV 895-1 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	ACCORDING	UNIT	VALUE	MIN	MAX
Water absorption	PTV 895-1, Clause 3.4.2	%	-	-	6
Appearance	PTV 895-1, Clause 3.4.3		Glazed	-	-
DIMENSIONAL REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
Internal diameter (*)	PTV 895-1, Clause 3.4.4	mm	See drawing	-	-
Length (*)	PTV 895-1, Clause 3.4.5	m	See drawing	-	-
Squareness of ends (*)	PTV 895-1, Clause 3.4.6	mm	See drawing	-	-
Deviation from straightness (*)	PTV 895-1, Clause 3.4.7	mm/m	See drawing	-	-
OTHER REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
Crushing strength (*)	PTV 895-1, Clause 3.4.11	kN/m	See drawing	-	-
Bending tensile strength	PTV 895-1, Clause 3.4.12	N/mm <sup>2</sup>	-	18	-
Bending moment resistance (*)	PTV 895-1, Clause 3.4.13	kNm	-	See drawing	-
Fatigue strength under cyclic load	PTV 895-1, Clause 3.4.15		Pass	-	-
Watertightness of pipes and junctions (*)	PTV 895-1, Clause 3.4.16		Pass	-	-
Chemical resistance (*)	PTV 895-1, Clause 3.4.17	%	-	-	0.15
Abrasion resistance	PTV 895-1, Clause 3.4.19	Class	AH	-	0.25
Airtightness (*)	PTV 895-1, Clause 3.4.20		Pass	-	-

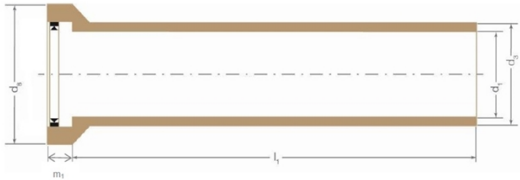
Resistance against high pressure water jetting	(*)	PTV 895-1, Clause 3.4.22		Pass	-	-
<b>REQUIREMENTS FOR JOINT ASSEMBLIES</b>		<b>ACCORDING</b>	<b>UNIT</b>	<b>VALUE</b>	<b>MIN</b>	<b>MAX</b>
Watertightness of joint assemblies	(*)	PTV 895-1, Clause 3.5.2		-	-	-
<i>Under deflection</i>			mm	See drawing	-	-
<i>Under shear load</i>				Pass	-	-
Increased watertightness of jointed pipes at 1 bar		PTV 895-1, Clause 3.5.3		Pass	-	-
Continuity of invert in joint assemblies	(*)	PTV 895-1, Clause 3.5.4		See drawing	-	-
Joint interchangeability of pipes and fittings	(*)	PTV 895-1, Clause 3.5.5		See drawing	-	-
<i>Jointing system</i>			Class	See drawing	-	-
Chemical and physical resistance to effluent	(*)	PTV 895-1, Clause 3.5.6	Class	CH	-	-
Thermal cycling stability of joint assemblies	(*)	PTV 895-1, Clause 3.5.7		Pass	-	-
Long-term thermal stability of joint assemblies	(*)	PTV 895-1, Clause 3.5.8		Pass	-	-
Airtightness of jointed pipes		PTV 895-1, Clause 3.5.9		Pass	-	-

(\*) These product characteristics are a statement by the producer taken from its declaration of performance. The certificate holder declares that the values listed are in accordance with its declaration of performance.

## TECHNICAL DRAWING

Nominale diameter	Verbindings-systeem	Maten			Lengte		Maximale kromheid	Haaksheid uiteinden	Bodemgelijkheid	Kruindruk-weerstand	Sterkte-klasse	Weerstand bij buigmoment	Hoek-verdraaiing					
Nominal size	Joint system	Dimensions			Length		Maximum deviation from	Squareness of ends	Continuity of invert in joint assemblies	Crushing strength	Strength class	Bending moment resistance	Angular deflection					
Diamètre nominal	Système d'assemblage	Dimension			Longueur		Flèche maximale	Équerrage des extrémités	Continuité du fil d'eau dans les assemblages	Résistance à l'écrasement	Classe de résistance	Résistance au moment de flexion	Déviation angulaire					
DN		binnenkant buis inner pipe intérieur tuyaux d <sub>1</sub> mm	buitenkant buis outer pipe extérieur tuyaux d <sub>3</sub> mm	binnenkant mof inner socket intérieur du collet d <sub>4</sub> mm	I <sub>1</sub>		Buis Pipe Tuyaux mm	GA GZ	mm	mm	FN		kNm	mm/m				
					Buis Pipe Tuyaux cm	GA GZ cm		kN/m										
125	F	126 ± 4	159 ± 2	-	100	-	5	-	≤ 6	-	34	-	-	100				
150		151 ± 5	186 ± 2		100		4,5				≥ 5							
					125		5,63											
					250		11,25											
200	C	200 ± 5	242 ± 3	-	100		4		2,4	≤ 4	40	200	-	50				
					260 ± 0,5	250	60	10			2,4					≥ 12		
					275 ± 0,5													
					317,5 ± 0,5													
					341,5 ± 0,5													
					371,5 ± 0,5													
					398,5 ± 0,5													
					507,5 ± 0,5													
					515,5 ± 0,5													
					605 ± 0,5													
					637 ± 0,5													
					720 ± 0,5													
				758 ± 0,5														
250			250 ± 6		75	7,5	2,25	≤ 8	≤ 5	≤ 6	48	240	≥ 14	30				
300		300 ± 7		40							160							
				60							240							
				48							160							
			72	240														
			64	160														
			80	200														
			60	120														
			80	160														
			57	95														
			96	160														
400		398 ± 8																
500		496 ± 9																
600		597 ± 12																

DN 125 - DN 200 1 meter / DN 125 - DN 200 1 metre / DN 125 - DN 200 1 mètre  
Buis verbindingsysteem F / Pipe jointing system F / Tuyaux système d'assemblage F



GA DN 150 - DN 200 / GA DN 150 - DN 200 / GA DN 150 - DN 200  
GA verbindingsysteem F / GA jointing system F / GA système d'assemblage F



GZ DN 150 - DN 200 / GZ DN 150 - DN 200 / GZ DN 150 - DN 200  
GZ verbindingsysteem F / GZ jointing system F / GZ système d'assemblage F



DN 150 1,25 meter & 2,5 meter / DN 150 1,25 metre & 2,5 metre / DN 150 1,25 mètre et 2,5 mètre  
DN 200 2,5 meter / DN 200 2,5 metre / DN 200 2,5 mètre  
Buis verbindingsysteem F / Pipe jointing system F / Tuyaux système d'assemblage F



Buis verbindingsysteem C / Pipe jointing system C / Tuyaux système d'assemblage C



GA verbindingsysteem C / GA jointing system C / GA système d'assemblage C



GZ verbindingsysteem C / GZ jointing system C / GZ système d'assemblage C



## 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:** 14/08/2024

## COPRO

**Name:** Koen Van Daele

**Date:** 14/08/2024

**Signature:**



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