



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

PRODUCT

OFFICIAL NAME	COMMERCIAL NAME
PIPES, FITTINGS AND JOINTS	VITRIFIED CLAY SOCKETED PIPES AND GA, GZ

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

- ☒ CCT/TB 2015
- ☒ CCT Qualiroutes (2017)
- ☒ SB 250 - versie 4.1
- ☒ CCT Qualiroutes (2021)
- ☒ SB 250 - versie 4.1 + errata

☒ PTV 895-1 (3.0)

☒ EN 295-1 (2013)

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

* **COPRO:** Koen Van Daele +32 2 468 00 95 koen.vandaele@copro.eu
 * **Certificate holder:** René van Veldhoven +32 11 21 02 32 R.vanVeldhoven@steinzeug-keramo.com

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 ²	-	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	-	-
REQUIREMENTS FOR JOINT ASSEMBLIES		ACCORDING	UNIT	VALUE	MIN	MAX
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 ₁ mm	buitenkant buis outer pipe extérieur tuyaux d ₃ mm	binnenkant mof inner socket intérieur du collet d ₄ mm	I ₁		Buis Pipe Tuyaux mm	GA GZ	mm	mm	FN	kNm	mm/m			
					Buis Pipe Tuyaux cm	GA GZ cm										
					cm	cm	mm	mm								
125	F	126 ± 4	159 ± 2	-	100	-	5	-	≤ 6	-	34	-	100			
150		151 ± 5	186 ± 2		100	-	4,5	-			40	-				
					125	-	5,63	-				≥ 5				
					250	-	11,25	-				-				
200	C	200 ± 5	242 ± 3	-	100	-	4	-	≤ 6	-	200	≥ 12	50			
					60	10	2,4	2,4				≥ 14				
												-				
												-				
250		250 ± 6	-		250	75	7,5	2,25		≤ 4	-	240				
												160				
												240				
												160				
300		300 ± 7										240				
												160				
												200				
												120				
												160				
												95				
												160				
400		398 ± 8						≤ 8	200							
								≤ 10	≤ 5	160						
								≤ 12	≤ 6	95						
500		496 ± 9						160								
								95								
600		597 ± 12						160	30							

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



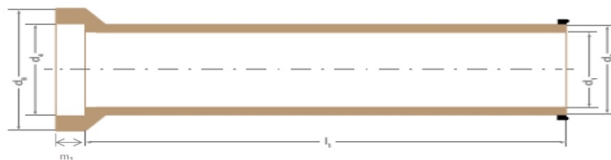
GZ DN 150 - DN 200 / GZ DN 150 - DN 200 / GZ DN 150 - DN 200
GZ verbindingsysteem F / GZ jointing system F / GZ système d'assemblage F



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:



COPRO NPO - Z.1 Researchpark - Kranenberg 190 - B-1731
Zellik