technical sheet

CERTIFICATION OF

VITRIFIED CLAY PIPE SYSTEMS

BENOR

This technical data sheet was printed on 14/08/2024.
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TECHNICAL DATA SHEET

QUICK CODE	VERSION	VALIDITY
0015/0001	**8.0 - 14/08/2024**	**CERTIFIED**

CERTIFICATE HOLDER	PRODUCTION UNIT	CERTIFICATE NUMBER
STEINZEUG-KERAMO Europaallee 63 D-50226 Frechen +49 22 34 50 70 info@steinzeug-keramo.com	STEINZEUG-KERAMO 'WERK 1' Verlängerte Torgauerstrasse 1 D-06905 Bad Schmiedeberg +49 34 92 57 50 info@steinzeug-keramo.com	BENOR 015/95 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
- ☑ PTV 895-1 (3.0)
- ☑ EN 295-1 (2013)
- ☑ CCT Qualiroutes (2017)
- ☑ SB 250 - versie 4.1
- ☑ CCT Qualiroutes (2021)
- ☑ 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 CHECHED 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^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		-	-	-
Under deflection		mm	See drawing	-	-
Under shear load			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	-	-
Jointing system		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	l_1 Buis Pipe Tuyaux cm	l_1 GA GZ cm	Buis Pipe Tuyaux mm	GA GZ mm	mm	mm	FN kN/m		kNm	mm/m
125	F	126 ± 4	159 ± 2	-	100	-	5	-	≤ 6	-	34	-	-	100
150	F	151 ± 5	186 ± 2	-	100	60	4,5	2,4	≤ 6	-	40	-	-	100
150	F	151 ± 5	186 ± 2	-	125	60	5,63	2,4	≤ 6	-	40	-	≥ 5	100
200	F	200 ± 5	242 ± 3	-	250	60	11,25	2,4	≤ 6	-	40	-	-	100
200	F	200 ± 5	242 ± 3	-	100	60	4	2,4	≤ 6	-	40	200	≥ 12	100
200	C	200 ± 5	-	260 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	48	240	≥ 14	100
250	C	250 ± 6	-	275 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	40	160	-	50
250	C	250 ± 6	-	317,5 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	60	240	-	50
300	C	300 ± 7	-	341,5 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	48	160	-	50
300	C	300 ± 7	-	371,5 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	72	240	-	50
400	C	398 ± 8	-	398,5 ± 0,5	250	60	10	2,4	≤ 6	≤ 4	64	160	-	50
400	C	398 ± 8	-	507,5 ± 0,5	250	75	7,5	2,25	≤ 8	≤ 4	80	200	-	50
500	C	496 ± 9	-	515,5 ± 0,5	250	75	7,5	2,25	≤ 8	≤ 4	60	120	-	50
500	C	496 ± 9	-	605 ± 0,5	250	75	7,5	2,25	≤ 10	≤ 5	80	160	-	50
600	C	597 ± 12	-	637 ± 0,5	250	75	7,5	2,25	≤ 10	≤ 5	57	95	-	30
600	C	597 ± 12	-	720 ± 0,5	250	75	7,5	2,25	≤ 12	≤ 6	57	95	-	30
600	C	597 ± 12	-	758 ± 0,5	250	75	7,5	2,25	≤ 12	≤ 6	96	160	-	30

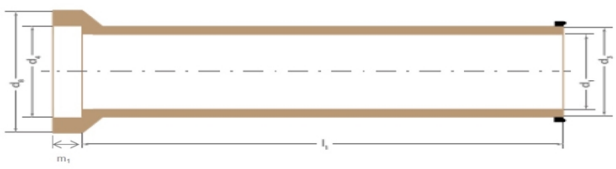
DN 125 - DN 200 1 meter / DN 125 - DN 200 1 metre / DN 125 - DN 200 1 mètre
Buis verbindingssysteem F / Pipe jointing system F / Tuyaux système d'assemblage F

GA DN 150 - DN 200 / GA DN 150 - DN 200 / GA DN 150 - DN 200
GA verbindingssysteem 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 verbindingssysteem 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 verbindingssysteem F / Pipe jointing system F / Tuyaux système d'assemblage F

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



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

GZ verbindingssysteem 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

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Date: 14/08/2024

COPRO

Name: Koen Van Daele
Date: 14/08/2024
Signature:

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