



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
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TECHNICAL DATA SHEET

QUICK CODE	VERSION	VALIDITY
0015/0004	6.3 - 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 BENDS

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
Angle

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 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	-	-
Angle of curvature and radius of bends (*)	PTV 895-1, Clause 3.4.9	°	See drawing	-	-
OTHER REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
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	-	-
Tightness of fittings (*)	PTV 895-1, Clause 3.4.21		-	-	-
<i>Airtightness</i>			Pass	-	-
<i>Watertightness</i>			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, Cla use 3.5.3		Pass	-	-
Continuity of invert in joint assemblies (*)		PTV 895-1, Cla use 3.5.4		See drawing	-	-
Joint interchangeability of pipes and fittings (*)		PTV 895-1, Cla use 3.5.5		-	-	-
<i>Joining system</i>			Class	See drawing	-	-
Chemical and physical resistance to effluent (*)		PTV 895-1, Cla use 3.5.6	Class	CH	-	-
Thermal cycling stability of joint assemblies (*)		PTV 895-1, Cla use 3.5.7		Pass	-	-
Long-term thermal stability of joint assemblies (*)		PTV 895-1, Cla use 3.5.8		Pass	-	-
Airtightness of jointed pipes		PTV 895-1, Cla use 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

COPRO Quick-code van het certificaat: 0015/0004

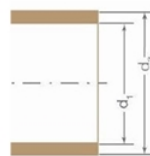
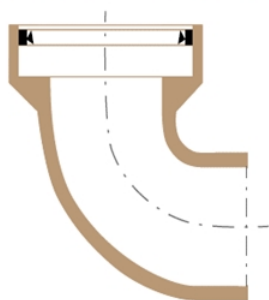
26/08/2020

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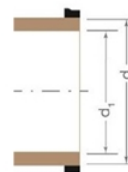
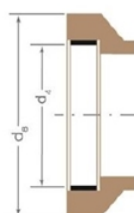
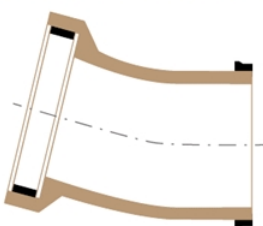
26/08/2020

Nominale diameter	Verbindings-systeem	Maten				Krommingshoek, radius en lengte van bochten				Bodemgelijkheid	Sterkte-klasse	Hoek-verdraaiin
Nominal size	Joint system	Dimensions				Angle of curvature, radius and length of bends				Continuity of invert in joint assemblies	Strength class	Angular deflection
Diamètre nominal	Système d'assemblage	Dimension				Courbure et rayon et longueur des coudes				Continuité du fil d'eau dans les	Classe de résistanc	Déviation angulaire
DN		binnenkant buis inner pipe intérieur tuyaux	buitenkant buis outer pipe extérieur tuyaux		binnenkant mof inner socket intérieur du collet	15° ± 3°	30° ± 4°	45° ± 5°	90° ± 5°	mm		mm/m
		d ₁ mm	d ₃ mm	e _{min} mm	d ₄ mm							
100	F	100 ± 4	131 ± 1.5	70	-	250 ± 25			285 ± 25	-	34	100
125		126 ± 4	159 ± 2				290 ± 25					
150		151 ± 5	186 ± 2	75		260 ± 25			295 ± 25			
200	C	200 ± 5	242 ± 3	85	260 ± 0,5	270 ± 25			325 ± 25	≤ 4	160	50
					275 ± 0,5						200	
250		250 ± 6	-		317,5 ± 0,5	350 ± 25			-		240	
					341,5 ± 0,5						160	
300		300 ± 7			371,5 ± 0,5	370 ± 30					240	
					398,5 ± 0,5							

Bochten verbindingssysteem F / Bends jointing system F / Coudes système d'assemblage F



Bochten verbindingssysteem C / Bends jointing system C / Coudes système d'assemblage C



Nominale diameter	Verbindings-systeem	Maten			Krommingshoek, radius en lengte van bochten				Bodemgelijkheid	Sterkte-klasse	Hoek-verdraaiing
Nominal size	Joint system	Dimensions			Angle of curvature, radius and length of bends				Continuity of invert in joint assemblies	Strength class	Angular deflection
Diamètre nominal	Système d'assemblage	Dimension			Courbure et rayon et longueur des coudes				Continuité du fil d'eau dans les assemblages	Classe de résistance	Déviation angulaire
DN		binnenkant buis inner pipe intérieur tuyaux d ₁ mm	buitenkant buis outer pipe extérieur tuyaux d ₃ mm	e min mm	15° ± 3° mm	30° ± 4° mm	45° ± 5° mm	90° ± 5° mm	mm		mm/m
150	F	151 ± 5	186 ± 2	75	275 ± 25	315 ± 25		415 ± 25	-	34	100

Bochten verbindingssysteem F / Bends jointing system F / Coudes 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: 22/01/2024

COPRO

Name: Koen Van Daele
Date: 22/01/2024
Signature: 

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