



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
0015/0009	8.0 - 1/04/2025	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 AND JOINTS FOR PIPE JACKING	VITRIFIED CLAY JACKING PIPES

CAPTION ON THE PRODUCT

BENOR
Production date
Production unit
EN 295-7
PTV 895-7
Nominal size (DN...)
Crushing strength FN in kN/m
Jacking strength FJ in MN

APPLICATION

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> CCT/TB 2015 | <input checked="" type="checkbox"/> PTV 895-7 (3.0) | <input checked="" type="checkbox"/> EN 295-7 (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

On a pallet.

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 stainless steel sleeves, polypropylene sleeve couplings and load transfer rings should be marked with reference to PTV 895-7.
- * The KeraMat Lubricant shall be used for all vitrified clay joint systems.
- * The conformity of the rubber components according to PTV 895-7 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 CHARACTERISTICS	ACCORDING	UNIT	VALUE	MIN	MAX
Water absorption	PTV 895-7, Cla use 3.4.2	%	-	-	6
Appearance	PTV 895-7, Cla use 3.4.3		Glazed	-	-
DIMENSIONAL REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
Internal diameter (*)	PTV 895-7, Cla use 3.4.4	mm	See drawing	-	-
Continuity of invert (*)	PTV 895-7, Cla use 3.4.5	mm	See drawing	-	-
External diameter (*)	PTV 895-7, Cla use 3.4.6	mm	See drawing	-	-
Length (*)	PTV 895-7, Cla use 3.4.7	m	See drawing	-	-
Squareness of ends (*)	PTV 895-7, Cla use 3.4.8	mm	-	-	1
Deviation from straightness (*)	PTV 895-7, Cla use 3.4.9	mm	-	-	5
OTHER REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
Crushing strength (*)	PTV 895-7, Cla use 3.4.10	kN/m	See drawing	-	-
Bending tensile strength	PTV 895-7, Cla use 3.4.11	N/mm ²	-	18	-
Compressive strength	PTV 895-7, Cla use 3.4.12	N/mm ²	-	100	-
Jacking strength (*)	PTV 895-7, Cla use 3.4.13	kN	See drawing	-	-
Maximum working jacking load	PTV 895-7, Cla use 3.4.14		Pass	-	-
Fatigue strength under cycling load	PTV 895-7, Cla use 3.4.15		Pass	-	-

Watertightness	(*)	PTV 895-7, Cla use 3.4.16		Pass	-	-
Airtightness	(*)	PTV 895-7, Cla use 3.4.17		Pass	-	-
Chemical resistance	(*)	PTV 895-7, Cla use 3.4.18	%	-	-	0,15
Abrasion resistance		PTV 895-7, Cla use 3.4.20	Class	AH	-	0,25
Resistance against high pressure water jetting	(*)	PTV 895-7, Cla use 3.4.21		Pass	-	-
REQUIREMENTS FOR JOINT ASSEMBLIES		ACCORDING	UNIT	VALUE	MIN	MAX
Watertightness of joint assemblies	(*)	PTV 895-7, Cla use 3.5.2		-	-	-
Under deflection			mm	See drawing	-	-
Under shear load				Pass	-	-
Increased watertightness of jointed pipes at 1 bar		PTV 895-7, Cla use 3.5.3		Pass	-	-
Chemical and physical resistance to effluent	(*)	PTV 895-7, Cla use 3.5.4	Class	CH	-	-
Thermal cycling stability	(*)	PTV 895-7, Cla use 3.5.5		Pass	-	-
Long-term cycling stability	(*)	PTV 895-7, Cla use 3.5.6		Pass	-	-
Airtightness of jointed pipes		PTV 895-7, Cla use 3.5.7		Pass	-	-

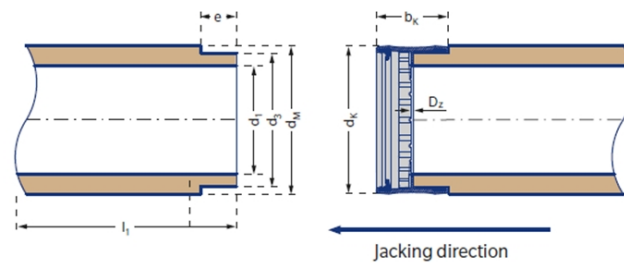
(*) These product characteristics are a statement by the producer taken from its declaration of performance. The certificate holder declares that the values listed are in accordance with its declaration of performance.

TECHNICAL DRAWING

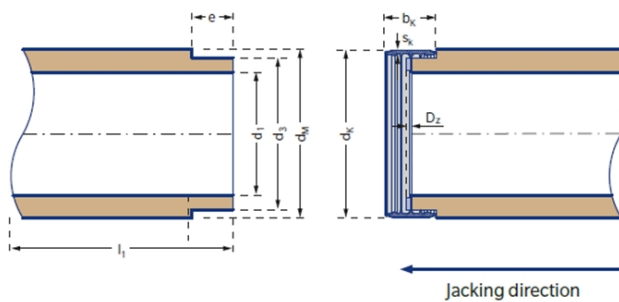


Nominale diameter	Maten		Lengte	Bodemgelijkheid	Kruindrukweerstand	Doorperskracht	Hoekverdraaiing
Nominal size	Dimensions		Length	Continuity of invert in joint assemblies	Crushing strength	Jacking strength	Angular deflection
Diamètre nominal	Dimension		Longueur	Continuité du fil d'eau dans les assemblages	Résistance à l'écrasement	Résistance au fonçage	Déviations angulaire
DN	binnenkant buis inner pipe intérieur tuyaux d_i mm	buitenkant buis outer pipe extérieur tuyaux d_m mm	l_1 cm	mm	FN kN/m	FJ mN	mm/m
150	149 ± 2,5	213 + 0 / - 4	496 ± 2 997 ± 2	≤ 4	64	0,9	20
200	199 ± 3	276 + 0 / - 6	990 ± 2		80	1,4	
250	250 ± 3	360 + 0 / - 6	990 ± 1 1990 ± 1		130	3,1	
300	299 ± 4	406 + 0 / - 8	990 ± 1 1990 ± 1		120	3,7	
400	400 ± 5	554 + 0 / - 10	985 ± 1 1985 ± 1		160	8,4	
500	498 ± 7	660 + 0 / - 14	985 ± 1 1985 ± 1	≤ 5	140	10,5	20
600	599 ± 7	762 + 0 / - 14	982 ± 1 1982 ± 1	≤ 6	120	12,2	

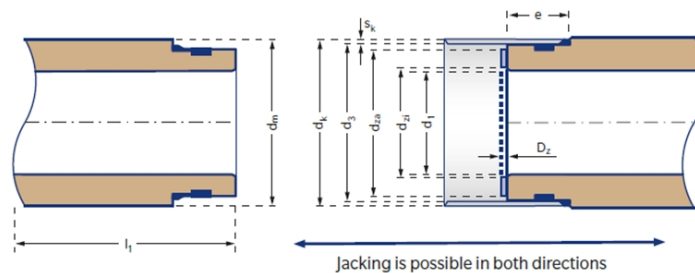
Doorpersbuis / Jacking pipe / Tuyau de fonçage DN 150



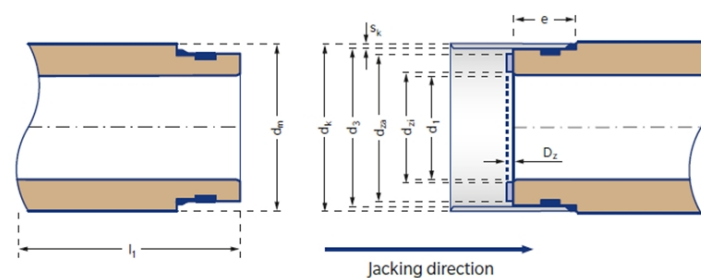
Doorpersbuis / Jacking pipe / Tuyau de fonçage DN 200 - DN 300



Doorpersbuis / Jacking pipe / Tuyau de fonçage DN 400 - DN 500



Doorpersbuis / Jacking pipe / Tuyau de fonçage DN 600



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: 1/04/2025

COPRO

Name: Koen Van Daele

Date: 1/04/2025

Signature:



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Zellik