



technical sheet

CERTIFICATION OF

VITRIFIED CLAY PIPE SYSTEMS

BENOR

This technical data sheet was printed on 29/04/2024.
 The validity of this technical data sheet can be checked on
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TECHNICAL DATA SHEET		
QUICK CODE	VERSION	VALIDITY
0001/0002	6.0 - 22/01/2024	CERTIFIED
CERTIFICATE HOLDER	PRODUCTION UNIT	CERTIFICATE NUMBER
STEINZEUG-KERAMO 'WERK 2' Paalsteenstraat 36 BE-3500 Hasselt +32 11 21 02 32 info@steinzeug-keramo.com	STEINZEUG-KERAMO 'WERK 2' Paalsteenstraat 36 BE-3500 Hasselt +32 11 21 02 32 info@steinzeug-keramo.com	BENOR 001/95 Vitrified clay pipe systems

PRODUCT																
OFFICIAL NAME	COMMERCIAL NAME															
PIPES, FITTINGS AND JOINTS	VITRIFIED CLAY T-PIPES															
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																
<table border="0"> <tr> <td><input checked="" type="checkbox"/> CCT/TB 2015</td> <td><input checked="" type="checkbox"/> PTV 895-1 (3.0)</td> <td><input checked="" type="checkbox"/> EN 295-1 (2013)</td> </tr> <tr> <td><input checked="" type="checkbox"/> CCT Qualiroutes (2017)</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> SB 250 - versie 4.1</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> CCT Qualiroutes (2021)</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> SB 250 - versie 4.1 + errata</td> <td></td> <td></td> </tr> </table> <p>This product was not checked according to the crossed-out reference documents or does not comply with them.</p> <p>Use: Drains and sewers.</p>		<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		
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<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																

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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- * **Certificate holder:** René van Veldhoven +32 11 21 02 32 R.vanVeldhoven@steinzeug-keramo.com

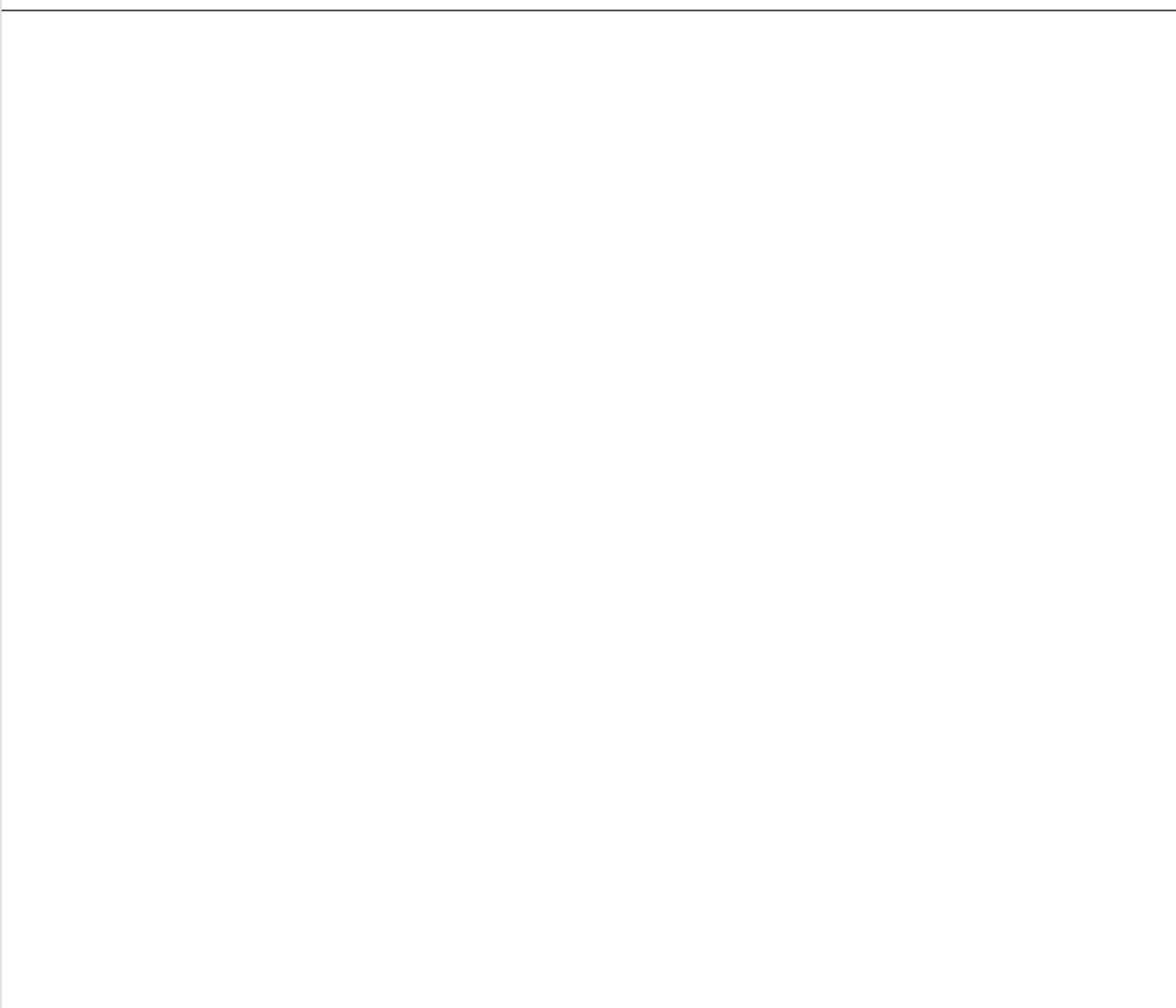
PRODUCT CHARACTERISTICS

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	-	-
Branch angle of junctions (*)	PTV 895-1, Clause 3.4.10	°	See drawing	-	-
OTHER REQUIREMENTS	ACCORDING	UNIT	VALUE	MIN	MAX
Bond strength of adhesive for fixing clay parts	PTV 895-1, Clause 3.4.14		-	-	-
<i>Minimum bending tensile strength of the bond</i>		N/mm ²	-	5	-
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		-	-	-
<i>Joining 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	-	-

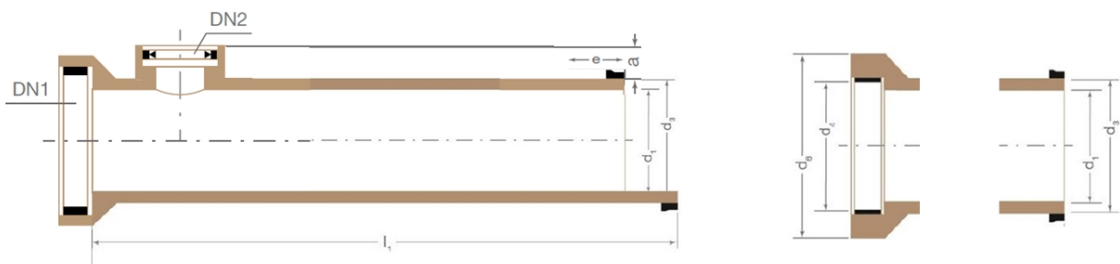
(*) These product characteristics are a statement by the producer taken from its declaration of performance. The certificate holder declares that the values listed are in accordance with its declaration of performance.

TECHNICAL DRAWING



Nominale diameter		Verbindings-systeem	DN 1		DN 2		Lengte		Maximale kromheid	Haaksheid uiteinden	Bodemgelijkheid	Sterkte-klasse	Hoek-verdraaiing						
Nominal size		Joint system	Dimensions		Dimensions		Length		Maximum deviation from straightness	Squareness of ends	Continuity of invert in joint assemblies	Strength class	Angular deflection						
Diamètre nominal		Système d'assemblage	Dimension		Dimension		Longueur		Flèche maximale	Équerrage des extrémités	Continuité du fil d'eau dans les assemblages	Classe de résistance	Déviatoin angulaire						
DN 1	DN 2		binnenkant buis inner pipe intérieur tuyaux d ₁ mm	binnenkant mof inner socket intérieur du collet d ₄ mm	binnenkant intérieur d ₁ mm	a max 90° ± 5° mm	l ₁												
							cm	cm	200 cm	250 cm	mm	mm	mm/m						
250	125	CF	250 ± 6	317,5 ± 0,5	126 ± 4	170	200	8	10	≤ 6	≤ 4	160/34	50						
	150				151 ± 5	180						160/200							
	200				200 ± 5	180						240/34							
	125				341,5 ± 0,5	126 ± 4						170		200	8	10	≤ 6	≤ 4	240/200
	150					151 ± 5						180							160/34
	200					200 ± 5						180							160/200
125	371,5 ± 0,5		126 ± 4	170		200	6	7,5	≤ 7	≤ 5	240/34								
150			151 ± 5	180							160/34								
200			200 ± 5	180							160/200								
125			398,5 ± 0,5	126 ± 4	170						200	6		7,5	≤ 7	≤ 5	240/200		
150				151 ± 5	180												160/34		
200				200 ± 5	180												160/200		
125	433,5 ± 0,5			126 ± 4	170	250	6	7,5	≤ 8	≤ 5							160/34		
150				151 ± 5	180												160/200		
200				200 ± 5	180												200/34		
125			507,5 ± 0,5	126 ± 4	170						-	-		7,5	≤ 10	≤ 5	200/200		
150				151 ± 5	180												120/34		
200				200 ± 5	180												120/200		
125	515,5 ± 0,5			126 ± 4	170	-	-	7,5	≤ 10	≤ 5							160/34		
150				151 ± 5	180												160/200		
200				200 ± 5	180												160/34		
125			605 ± 0,5	126 ± 4	170						-	-		7,5	≤ 10	≤ 5	120/34		
150				151 ± 5	180												120/200		
200				200 ± 5	180												160/34		
125	637 ± 0,5	126 ± 4		170	-	-	7,5	≤ 10	≤ 5	160/200									
150		151 ± 5		180						160/34									
200		200 ± 5		180						160/200									
125		720 ± 0,5	126 ± 4	170						-	-	7,5	≤ 10	≤ 5	95/34				
150			151 ± 5	180											95/200				
200			200 ± 5	180											160/34				
125	758 ± 0,5		126 ± 4	170	-	-	7,5	≤ 10	≤ 5						160/200				
150			151 ± 5	180											160/34				
200			200 ± 5	180											160/200				
125		871 ± 0,5	126 ± 4	170						200	-	6	-	≤ 12	≤ 6	120/34			
150			151 ± 5	180												120/200			
200			200 ± 5	180												120/200			
125	976 ± 0,5		126 ± 4	170	-	-	6	-	≤ 12							≤ 6	120/34		
150			151 ± 5	180													120/200		
200			200 ± 5	180													120/200		

T-buis verbindingssysteem CF / T-Pipes jointing system CF / T-Tuyaux système d'assemblage CF



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 (2.0), 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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