



Steinzeug-Keramo N.V.  
Paalsteenstraat 36  
B-3500 Hasselt Belgium  
Telephone: +32 11 265 279

13

116

EN 295-1:2013

Vitrified clay pipe DN500 – 2,5 – FN80 – C

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
Crushing strength ( $F_N$ )	80 kN/m
<b>Dimensional tolerances, concerning:</b>	
Internal diameter	Within tolerance
Length	Within tolerance
Squareness of ends	Within tolerance
Straightness	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
<b>Tightness (gas and liquid) and Permeability as:</b>	
Watertightness	Tight
Airtightness	Tight
<b>Watertightness of joint assemblies, as:</b>	
Angular deflection	Tight
Shear resistance	Tight
<b>Durability of crushing strength, against:</b>	
Chemical resistance	$\leq 0,15\%$ loss of mass
Resistance against high pressure water jetting <ul style="list-style-type: none"> <li>Moving nozzle</li> <li>Stationary nozzle</li> </ul>	12 MPa 28 MPa
Water absorption	< 6% of mass
<b>Durability of watertightness, against:</b>	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight



Steinzeug-Keramo N.V.  
Paalsteenstraat 36  
B-3500 Hasselt Belgium  
Telephone: +32 11 265 279

13

116

EN 295-1:2013

Vitrified clay connector GA DN500 – 0,75 – FN80 – C  
Vitrified clay connector GZ DN500 – 0,75 – FN80 – C

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
Crushing strength ( $F_N$ )	80 kN/m
<b>Dimensional tolerances, concerning:</b>	
Internal diameter	Within tolerance
Length	Within tolerance
Squareness of ends	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
<b>Tightness (gas and liquid) and Permeability as:</b>	
Watertightness	Tight
Airtightness	Tight
<b>Watertightness of joint assemblies, as:</b>	
Angular deflection	Tight
Shear resistance	Tight
<b>Durability of crushing strength, against:</b>	
Chemical resistance	$\leq 0,15\%$ loss of mass
Resistance against high pressure water jetting <ul style="list-style-type: none"> <li>Moving nozzle</li> <li>Stationary nozzle</li> </ul>	12 MPa 28 MPa
Water absorption	< 6% of mass
<b>Durability of watertightness, against:</b>	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight



Steinzeug-Keramo N.V.  
Paalsteenstraat 36  
B-3500 Hasselt Belgium  
Telephone: +32 11 265 279

13

116

EN 295-1:2013

Vitrified clay bend DN500 – FN80 – C – 15°  
Vitrified clay bend DN500 – FN80 – C – 30°  
Vitrified clay bend DN500 – FN80 – C – 45°  
Vitrified clay bend DN500 – FN80 – C – 90°

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
<b>Dimensional tolerances, concerning:</b>	
Internal diameter	Within tolerance
Angle of curvature and radius	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
<b>Tightness (gas and liquid) and Permeability as:</b>	
Watertightness	Tight
Airtightness	Tight
<b>Watertightness of joint assemblies, tested as joint assembly of pipes</b>	
Angular deflection	Tight
Shear resistance	Tight
<b>Durability of watertightness, against:</b>	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight



Steinzeug-Keramo N.V.  
Paalsteenstraat 36  
B-3500 Hasselt Belgium  
Telephone: +32 11 265 279

13


116

EN 295-1:2013

Vitrified clay junction DN500150 – FN80 – C/F – 90°  
Vitrified clay junction DN500200 – FN80 – C/F – 90°  
Vitrified clay junction DN500200 – FN80 – C/C – 90°  
Vitrified clay junction DN500250 – FN80 – C/C – 90°  
Vitrified clay junction DN500300 – FN80 – C/C – 90°  
Vitrified clay junction DN500350 – FN80 – C/C – 90°  
Vitrified clay junction DN500400 – FN80 – C/C – 90°  
Vitrified clay junction DN500450 – FN80 – C/C – 90°  
Vitrified clay junction DN500500 – FN80 – C/C – 90°

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
<b>Dimensional tolerances, concerning:</b>	
Internal diameter	Within tolerance
Squareness of ends	Within tolerance
Branch angle	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
<b>Tightness (gas and liquid) and Permeability as:</b>	
Watertightness	Tight
Airtightness	Tight
<b>Watertightness of joint assemblies, tested as joint assembly of pipes</b>	
Angular deflection	Tight
Shear resistance	Tight
<b>Durability of watertightness, against:</b>	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight

	
Steinzeug-Keramo N.V. Paalsteenstraat 36 B-3500 Hasselt Belgium Telephone: +32 11 265 279  13  116	
EN 295-4:2013  Vitrified clay connector GE DN500 – FN80 – C  Buried drain and sewer systems for the conveyance of wastewater	
<b>Essential characteristics</b>	<b>Performance</b>
<b>Reaction to fire</b>	Class A1
<b>Dimensional tolerances, concerning:</b>	
Internal diameter	Within tolerance
Squareness of ends	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
<b>Tightness (gas and liquid) and Permeability as:</b>	
Watertightness	Tight
Airtightness	Tight
<b>Watertightness of joint assemblies, tested as joint assembly of pipes</b>	
Angular deflection	Tight
Shear resistance	Tight
<b>Durability of watertightness, against:</b>	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight

<b>Declaration of Performance 116</b>	
1. Unique identification	Vitrified clay pipe system DN500 – FN80 – C
2. Type	Vitrified clay pipe DN500 – 2,5 – FN80 – C Vitrified clay connector GA DN500 – 0,75 – FN80 – C Vitrified clay connector GZ DN500 – 0,75 – FN80 – C Vitrified clay bend DN500 – FN80 – C – 15° Vitrified clay bend DN500 – FN80 – C – 30° Vitrified clay bend DN500 – FN80 – C – 45° Vitrified clay bend DN500 – FN80 – C – 90° Vitrified clay junction DN500150 – FN80 – C/F – 90° Vitrified clay junction DN500200 – FN80 – C/F – 90° Vitrified clay junction DN500200 – FN80 – C/C – 90° Vitrified clay junction DN500250 – FN80 – C/C – 90° Vitrified clay junction DN500300 – FN80 – C/C – 90° Vitrified clay junction DN500350 – FN80 – C/C – 90° Vitrified clay junction DN500400 – FN80 – C/C – 90° Vitrified clay junction DN500450 – FN80 – C/C – 90° Vitrified clay junction DN500500 – FN80 – C/C – 90° Vitrified clay connector GE DN500 – FN80 – C
3. Intended use	Buried drain and sewer systems for the conveyance of wastewater
4. Name and contact address of the manufacturer	Steinzeug-Keramo N.V. Paalsteenstraat 36 B-3500 Hasselt Belgium Telephone: +32 11 265 279
5. Name and contact address of the authorised representative	N.A.
6. System of assessment and verification of the construction product	System 4
7. Declaration of performance concerning a construction product covered by a harmonised standard	Yes
8. European Technical Assessment issued	N.A.

9. Declared performance:		
<b>Essential characteristics</b>	<b>Performance</b>	<b>Harmonised technical specification</b>
Reaction to fire	Class A1	EN295-1:2013 EN295-4:2013
Crushing strength ( $F_N$ ) <sup>a)</sup>	80 kN/m	
<b>Dimensional tolerances, concerning:</b>		
Internal diameter	Within tolerance	
Length <sup>a)</sup>	Within tolerance	
Squareness of ends <sup>e)</sup>	Within tolerance	
Straightness <sup>b)</sup>	Within tolerance	
Angle of curvature and radius <sup>c)</sup>	Within tolerance	
Branch angle <sup>d)</sup>	Within tolerance	
Continuity of invert	Within tolerance	
Joint inter-changeability	System C	
<b>Tightness (gas and liquid) and Permeability as:</b>		
Watertightness	Tight	
Airtightness	Tight	
<b>Watertightness of joint assemblies, as:</b>		
Angular deflection	Tight	
Shear resistance	Tight	
<b>Durability of crushing strength, against:</b>		
Chemical resistance	≤ 0,15% loss of mass	
Resistance against high pressure water jetting <ul style="list-style-type: none"> <li>Moving nozzle</li> <li>Stationary nozzle</li> </ul>	12 MPa 28 MPa	
Water absorption	< 6% of mass	
<b>Durability of watertightness, against:</b>		
Chemical and physical resistance to effluent	Tight	
Thermal cycling stability	Tight	
Long term thermal stability	Tight	
The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.		
a) Only for pipes and connectors GA/GZ b) Only for pipes c) Only for bends d) Only for junctions e) For pipes, junctions & connectors		

Signed for and on behalf of the manufacturer:

Name and function: Mr. R. van Veldhoven, Quality Director

Place and date: Frechen, 2 July 2013

Signature:

