	
Steinzeug-Keramo N.V. Paalsteenstraat 36 B-3500 Hasselt Belgium Telephone: +32 11 265 279 13 111	
EN 295-1:2013 Vitrified clay pipe DN350 – 2,5 – FN56 – C Buried drain and sewer systems for the conveyance of wastewater	
Essential characteristics	Performance
Reaction to fire	Class A1
Crushing strength (F_N)	56 kN/m
Dimensional tolerances, concerning:	
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
Tightness (gas and liquid) and Permeability as:	
Watertightness	Tight
Airtightness	Tight
Watertightness of joint assemblies, as:	
Angular deflection	Tight
Shear resistance	Tight
Durability of crushing strength, against:	
Chemical resistance	$\leq 0,15\%$ loss of mass
Resistance against high pressure water jetting <ul style="list-style-type: none"> Moving nozzle Stationary nozzle 	12 MPa 28 MPa
Water absorption	< 6% of mass
Durability of watertightness, against:	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight



Steinzeug-Keramo N.V.
Paalsteenstraat 36
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Vitrified clay connector GA DN350 – 0,75 – FN56 – C
Vitrified clay connector GZ DN350 – 0,75 – FN56 – C

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
Crushing strength (F_N)	56 kN/m
Dimensional tolerances, concerning:	
Internal diameter	Within tolerance
Length	Within tolerance
Squareness of ends	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
Tightness (gas and liquid) and Permeability as:	
Watertightness	Tight
Airtightness	Tight
Watertightness of joint assemblies, as:	
Angular deflection	Tight
Shear resistance	Tight
Durability of crushing strength, against:	
Chemical resistance	$\leq 0,15\%$ loss of mass
Resistance against high pressure water jetting <ul style="list-style-type: none"> Moving nozzle Stationary nozzle 	12 MPa 28 MPa
Water absorption	< 6% of mass
Durability of watertightness, against:	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight



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Vitrified clay bend DN350 – FN56 – C – 15°
Vitrified clay bend DN350 – FN56 – C – 30°
Vitrified clay bend DN350 – FN56 – C – 45°
Vitrified clay bend DN350 – FN56 – C – 90°

Buried drain and sewer systems for the conveyance of wastewater

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



Steinzeug-Keramo N.V.
Paalsteenstraat 36
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Vitrified clay junction DN350150 – FN56 – C/F – 45°
Vitrified clay junction DN350150 – FN56 – C/F – 90°
Vitrified clay junction DN350200 – FN56 – C/F – 45°
Vitrified clay junction DN350200 – FN56 – C/F – 90°
Vitrified clay junction DN350200 – FN56 – C/C – 45°
Vitrified clay junction DN350200 – FN56 – C/C – 90°
Vitrified clay junction DN350250 – FN56 – C/C – 90°
Vitrified clay junction DN350300 – FN56 – C/C – 90°
Vitrified clay junction DN350350 – FN56 – C/C – 90°

Buried drain and sewer systems for the conveyance of wastewater

Essential characteristics	Performance
Reaction to fire	Class A1
Dimensional tolerances, concerning:	
Internal diameter	Within tolerance
Squareness of ends	Within tolerance
Branch angle	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
Tightness (gas and liquid) and Permeability as:	
Watertightness	Tight
Airtightness	Tight
Watertightness of joint assemblies, tested as joint assembly of pipes	
Angular deflection	Tight
Shear resistance	Tight
Durability of watertightness, against:	
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 13 111	
EN 295-4:2013 Vitrified clay connector GE DN350 – FN56 – C Buried drain and sewer systems for the conveyance of wastewater	
Essential characteristics	Performance
Reaction to fire	Class A1
Dimensional tolerances, concerning:	
Internal diameter	Within tolerance
Squareness of ends	Within tolerance
Continuity of invert	Within tolerance
Joint inter-changeability	System C
Tightness (gas and liquid) and Permeability as:	
Watertightness	Tight
Airtightness	Tight
Watertightness of joint assemblies, tested as joint assembly of pipes	
Angular deflection	Tight
Shear resistance	Tight
Durability of watertightness, against:	
Chemical and physical resistance to effluent	Tight
Thermal cycling stability	Tight
Long term thermal stability	Tight

Declaration of Performance 111	
1. Unique identification	Vitrified clay pipe system DN350 – FN56 – C
2. Type	Vitrified clay pipe DN350 – 2,5 – FN56 – C Vitrified clay connector GA DN350 – 0,75 – FN56 – C Vitrified clay connector GZ DN350 – 0,75 – FN56 – C Vitrified clay bend DN350 – FN56 – C – 15° Vitrified clay bend DN350 – FN56 – C – 30° Vitrified clay bend DN350 – FN56 – C – 45° Vitrified clay bend DN350 – FN56 – C – 90° Vitrified clay junction DN350150 – FN56 – C/F – 45° Vitrified clay junction DN350150 – FN56 – C/F – 90° Vitrified clay junction DN350200 – FN56 – C/F – 45° Vitrified clay junction DN350200 – FN56 – C/F – 90° Vitrified clay junction DN350200 – FN56 – C/C – 45° Vitrified clay junction DN350200 – FN56 – C/C – 90° Vitrified clay junction DN350250 – FN56 – C/C – 90° Vitrified clay junction DN350300 – FN56 – C/C – 90° Vitrified clay junction DN350350 – FN56 – C/C – 90° Vitrified clay connector GE DN350 – FN56 – 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:		
Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	Class A1	EN295-1:2013 EN295-4:2013
Crushing strength (F_N) ^{a)}	56 kN/m	
Dimensional tolerances, concerning:		
Internal diameter	Within tolerance	
Length ^{a)}	Within tolerance	
Squareness of ends ^{e)}	Within tolerance	
Straightness ^{b)}	Within tolerance	
Angle of curvature and radius ^{c)}	Within tolerance	
Branch angle ^{d)}	Within tolerance	
Continuity of invert	Within tolerance	
Joint inter-changeability	System C	
Tightness (gas and liquid) and Permeability as:		
Watertightness	Tight	
Airtightness	Tight	
Watertightness of joint assemblies, as:		
Angular deflection	Tight	
Shear resistance	Tight	
Durability of crushing strength, against:		
Chemical resistance	≤ 0,15% loss of mass	
Resistance against high pressure water jetting <ul style="list-style-type: none"> Moving nozzle Stationary nozzle 	12 MPa 28 MPa	
Water absorption	< 6% of mass	
Durability of watertightness, against:		
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:

