

## Declaration of Performance Nr 13004 dated 2013-12-29

1. Product name	<b>NOFIRNO®</b>
2. Type identification	NOFIRNO sealing system (filler sleeves and sealant), size range see annex, batch number see packaging
3. Intended use	Sealing system for fire safe wall and floor pipe penetrations
4. Name and contact address of manufacturer	Beele Engineering BV Vierde Broekdijk 12 7122 JD Aalten The Netherlands
5. Name and contact address of authorised representative	Not applicable
6. System of assessment and verification of constancy of performance (AVCP)	System 1
7. Notified Body	Not applicable
8. Technical Assessment Body	<p>Technical Assessment Body No.0620, Kiwa Nederland BV, issued ETA 13/0153 on the basis of ETAG 026 part 2, performed the activities:</p> <ul style="list-style-type: none"> <li>• the evaluation and approval of the products based on initial type assessment (including sampling)</li> <li>• the initial inspection of the production installation and the factory production control</li> <li>• the permanent surveillance and evaluation of the factory production control</li> </ul> <p>and issued certificate of constancy of performance of the product with the unique number 76875</p>

9. Declared performance			
Essential characteristics	Performance	Standard	Harmonised technical specification
Reaction to fire • Classification	Class E	EN-ISO 11925-2 EN 13501-1	ETAG 026 part 2
Resistance to fire • Fire resistance classification	EI 120-C/U and E 120-C/U	EN 1366-3 EN 13501-2	
Air permeability	NPD		
Water permeability	NPD		
Emission of dangerous substances or radiation	NPD		
Mechanical resistance and stability	NPD		
Airborne insulation	NPD		
Water vapour permeability	NPD		
Durability and serviceability Use categories: Type Y <sub>2</sub> , Z <sub>1</sub> , Z <sub>2</sub>  <b>NOFIRNO filler sleeves</b> 1. Durability of physical-mechanical properties  2. Components and materials compatibility  3. Physical-mechanical properties Hardness Density Tensile strength Elongation at break Limited oxygen index (LOI)	No essential change in performance  Compatible with metal pipes, concrete wall and floor and hard plastic conduit pipes  65 – 85 Shore A 1,55 – 1,65 Mg/m <sup>3</sup> ≥ 2,0 MPa ≥ 100 % ≥ 40 %	EOTA TR 024, table 4-2       ISO 7619-1 ISO 2781 ISO 37 ISO 37 ASTM D2863	



## 9. Declared performance (continued)

Essential characteristics	Performance	Standard	Harmonised technical specification
Durability and serviceability Use categories: Type Y <sub>2</sub> , Z <sub>1</sub> , Z <sub>2</sub>  <b>NOFIRNO sealant</b> 4. Durability of physical-mechanical properties  5. Components and materials compatibility  6. Physical-mechanical properties Density of uncured material Viscosity of uncured material Hardness after curing Elongation at break Limited oxygen index (LOI)	No essential change in performance  Compatible with metal pipes, concrete wall and floor and hard plastic conduit pipes  1,42 – 1,52 Mg/m <sup>3</sup> 30 – 60 g/sec 35 – 55 Shore A ≥ 50 % ≥ 35 %	EOTA TR 024, table 4-2         ISO 2781 Internal test ISO 7619-1 ISO 37 ASTM D2863	ETAG 026 part 2

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.

Signed for and on behalf of the manufacturer by:

Aalten, 2013.12.29



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J.A. Beele  
Managing Director

**ANNEX**  
**List of NOFIRNO sleeves**

<b>NOFIRNO filler sleeve</b>	<b>sleeve length</b>
18/12 multi	60
18/12 single	110
18/12 multi	110
18/12 single	140
18/12 multi	140
18/12 single	160
18/12 multi	160
18/12 single	210
18/12 multi	210
27/19 multi	60
27/19 single	110
27/19 multi	110
27/19 single	140
27/19 multi	140
27/19 single	160
27/19 multi	160
27/19 single	210
27/19 multi	210
22/15 multi	60
22/15 multi	110
22/15 multi	140
22/15 multi	160
22/15 multi	210

All dimensions in mm

## ANNEX

### PRODUCT INFORMATION SEALANT

01) colour	red brown
02) specific gravity	1.40 ± 0.03 g/cm <sup>3</sup>
03) curing of top layer	0.5 - 1 hour depending on temperature and air humidity
04) service temperature	-50 °C up to +180 °C
05) tensile strength	1.5 MPa
06) elongation at break	200%
07) hardness	45 Shore A
08) elastic deformation	approx. 50%
09) resistance	UV, Ozone, arctic conditions
10) ageing	more than 20 years
11) supplied in	310 ml cartridges
12) storage	to be stored cool and dry min/max temperature = +5/+30° C
13) storage life	guaranteed 6 months; when applied later than 6 months after date of manufacturing, curing and adhesive properties have to be checked before application