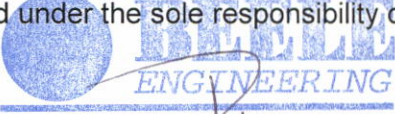


| Declaration of Performance Nr 13007 dated 2013.12.29 | |
|---|---|
| 1. Product name | CRUSHER® |
| 2. Type identification | CRUSHER sealing plugs, size range see annex, batch number see packaging |
| 3. Intended use | Sealing plugs for fire safe wall and floor thermoplastic pipe penetrations |
| 4. 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 13/0941 on the basis of ETAG 026 part 2, performed the activities:</p> <ul style="list-style-type: none"> • the evaluation and approval of the products based on initial type assessment (including sampling) • the initial inspection of the production installation and the factory production control • the permanent surveillance and evaluation of the factory production control <p>and issued certificate of constancy of performance of the product with the unique number 78543</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 240-C/U and E 240-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 Z ₁ , Z ₂ | | | |
| 1. Durability of physical-mechanical properties | No essential change in performance | EOTA TR 024, table 4-2 | |
| 2. Components and materials compatibility | Compatible with thermoplastic pipes, concrete wall and floor and metal or hard plastic conduit pipes | | |
| 3. Physical-mechanical properties Density Limited oxygen index (LOI) Expansion ration Expansion pressure | 1,45 – 1,55 Mg/m ³ ≥ 45 % ≥ 2,5 ≥ 190 hPa | ISO 2781 ASTM D2863 Internal test Internal test | |
| <p>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.</p> <p>Signed for and on behalf of the manufacturer by:</p> <p>Aalten, 2013.12.29</p> <div style="text-align: right;">  BEELE Engineering BV Beunkdijk 11 NL - 7122 NZ AALTEN Phone: +31 543 461629 Fax: +31 543 461786 J.A. Beele Managing Director </div> | | | |

ANNEX
List of CRUSHER plugs

| thermoplastic pipe diameter | CRUSHER type | thermoplastic pipe diameter | CRUSHER type |
|--------------------------------|-----------------|--------------------------------|-----------------|
| 16 | 30/16 | 63 | 77/63 |
| | 35/16 | | 80/63 |
| | 37/16 | | 82/63 |
| | 40/16 | | 90/63 |
| 18 | 30/18 | 75 | 100/63 |
| | 35/18 | | 100/75 |
| | 37/18 | | 105/75 |
| | 40/18 | | 107/75 |
| 20 | 35/20 | 90 | 110/75 |
| | 37/20 | | 125/90 |
| | 40/20 | | 128/90 |
| | 41/20 | | 130/90 |
| | 50/20 | | 131/90 |
| 25 | 40/25 | 110 | 138/110 |
| | 41/25 | | 149/110 |
| | 50/25 | | 150/110 |
| | 51/25 | | 154/110 |
| 32 | 48/32 | | 159/110 |
| | 50/32 | | 160/110 |
| | 51/32 | | |
| | 53/32 | | |
| | 54/32 | | |
| 40 | 50/40 | | |
| | 51/40 | | |
| | 53/40 | | |
| | 54/40 | | |
| | 60/40 | | |
| | 64/40 | | |
| 50 | 70/50 | | |
| | 75/50 | | |
| | 77/50 | | |
| | 80/50 | | |
| | 82/50 | | |
| 60 | 77/60 | | |
| | 80/60 | | |

Following lengths are available: 110-140-150-160-170-210

All dimensions in mm