

Declaration of Performance

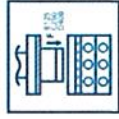
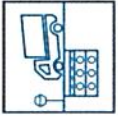

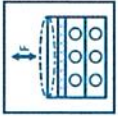







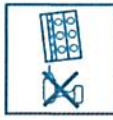
No.: 18/0734

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| 1. Identification code of the product type: | Polycarbonate manholes |
| 2. Purpose of use: | Polycarbonate manholes for underground network access installed under manhole covers in accordance with EN 124 |
| 3. Manufacturer: | Langmatz GmbH
Am Gschwend 10
82467 Garmisch-Partenkirchen
Germany |
| 4. Authorised representative: | / |
| 5. Assessment and verification of constancy of performance | AVCP system 4 |
| 6. Basis of the Declaration of Performance based on a Technical Assessment: | EAD no.: 340225-00-1109 (Feb 2018)
ETA 18/0734 V05

Notified body: (Notified body no.: 0063)
Kiwa Nederland B.V. |

7. Declared performance (Technical Assessment Document ETA 18/0734)

Essential characteristic	Description		Performance / test values (Minimum requirement)
<p>Load-bearing strength - stand-alone overall system: Load case 1: on the centre of the system Load case 2: with multiple covers following load case 1 in a fixed position less favourable for the system</p>	 <p>Load-bearing strength test on a stand-alone overall system with the associated cover in accordance with EN 124-1 as well as with a maximum number of unclosed duct openings without reinforcing elements.</p>	<p>✓</p>	<p>B125 ≥ 125 kN, passed C250 ≥ 250 kN, passed D400 ≥ 400 kN, passed</p>
<p>Shear loading</p>	 <p>The smaller, less favourable side of the test specimen must be tested. Shearing of the cover from the body is tested. This allows extreme braking on the cover to be simulated</p>	<p>✓</p>	<p>≥ 22 kN (value to be declared)</p>
<p>Load-bearing strength in an installed state Load case 1: adjacent static load on the less favourable (longer) side. Load case 2: central static load on the overall system. Load case 3: central static load until failure of the overall system.</p>	 <p>The test must be carried out on an installed, modular or one-piece overall system, including the associated cover, in accordance with EN 124-1 and with a maximum number of unclosed duct openings without reinforcing elements.</p>	<p>✓</p>	<p>Load case 01: ≥ 300 kN – 10 hours, passed Load case 02: B125 ≥ 125 kN, passed Load case 02: C250 ≥ 250 kN, passed Load case 02: D400 ≥ 400 kN, passed Load case 03: ≥ 500 kN (value to be declared)</p>
<p>Dynamic loading in an installed state Load case 1: adjacent static load on the less favourable (longer) side. Load case 2: central static load on the overall system. Load case 3: central static load until failure of the overall system.</p>	 <p>The test must be carried out on an installed, modular or one-piece overall system, including the associated cover, in accordance with EN 124-1 and with a maximum number of unclosed duct openings without reinforcing elements.</p>	<p>✓</p>	<p>Load case 01: sine wave vibration of 10 kN to 83 kN at 500,000 load cycles, passed Load case 02: sine wave vibration of 10 kN to 83 kN at 500,000 load cycles, passed Load case 03: ≥ 500 kN (value to be declared)</p>

Essential characteristic	Description	Performance / test values (values to be declared)
Mechanical strength (material) Impact strength Flexural strength Elongation at flexural strength Tensile strength	 <p>Charpy impact properties (EN ISO 179-1) Flexural properties (EN ISO 178) Tensile properties (EN ISO 527-1 to -5)</p>	50.87 KJ/m ² to "No break" 86.90 MPa to 103.71 MPa 5.27% to 6.39% 56.02 MPa to 68.99 MPa
	 <p>Mechanical strength tests are carried out after defined temperature changes in accordance with EN 60068-2-14</p>	Strength reduction < 8% Deviations in elongations < 7%
	 <p>Mechanical strength tests The material must be stable after storage in liquid chemicals e.g. storage in mineral oil, petroleum (24 h), lime water (7 days) etc.</p>	Strength reduction < 7% Deviations in elongation < 7%
	 <p>Mechanical strength tests Use a "narrow band" irradiance process The test duration is defined as 800 hours</p>	Strength reduction < 8% Deviations in elongation < 7%
Fire protection	 <p>The polycarbonate manhole systems are tested with the appropriate test methods for the respective fire protection class in order to be classified according to EN 13501-1 in connection with the delegated Regulation 2016/364</p>	"E" normally flammable
Occupational health and safety	 <p>The dust exposure (inhalation exposure) resulting from mechanical processing, e.g. drilling of pipe entries, is tested in a critical polycarbonate manhole</p>	"0" no dust and environmental emissions. The result is a complete breakout of the predetermined breaking point without exposure.

The performance of the above product corresponds to the declared performance. The aforementioned manufacturer is solely responsible for preparation of the Declaration of Performance in accordance with (EU) Regulation No. 305/2011.

Garmisch-Partenkirchen, 19. March 2026



Board of Management
Ludwig Fischer



Board of Management
Dieter Mitterer