# **DECLARATION OF PERFORMANCE: 11135434-4**

# 1. Identification Code: 11135434 PROFESSIONAL 20 MINERALE FIRE DEFENCE

| 2. Intended use: |     |  |  |  |  |
|------------------|-----|--|--|--|--|
| Standard: EN     |     | Intended use:  |  |  |  |
| 13707:2013       | Rei | Reinforced flexible bitumen sheets for roof waterproofing:   |  |  |  |
|                  | Х   | Single layer   |  |  |  |
|                  | Х   | Top layer  |  |  |  |
|                  |     | Underlay and intermediate layer  |  |  |  |
|                  |     | Layer under heavy protection   |  |  |  |
|                  |     | Layer for roof gardens   |  |  |  |
| 13969:2007       |     | Bitumen damp proof sheets including bitumen basement tanking sheets  |  |  |  |
| 13859-1:2014     | Х   | C Flexible sheets for waterproofing : Underlays for discontinuous roofing  |  |  |  |
| 13970:2007       |     | Bitumen water vapour control layers  |  |  |  |
| 14695:2010       |     | Reinforced bitumen sheets for waterproofing concrete bridge decks and other areas of concrete subject to traffic |  |  |  |

3. Manufacturer: Valli Zabban S.p.A - 50041 Calenzano (FI) - Via Di Le Prata, 103 - Tel +39 055 328041 - Fax +39 055 300 300 www.vallizabban.it - info@vallizabban.it

## 4. System or systems of assessment and verification of constancy of performance of the construction product:

| EN harmonized standard | VVCP systems               |                   |                               |  |  |  |  |
|------------------------|----------------------------|-------------------|-------------------------------|--|--|--|--|
| 13707 / 13969 / 14695  | System 2+                  |                   |                               |  |  |  |  |
| 13859-1 / 13970        | System 3                   |                   |                               |  |  |  |  |
| 5. Notified bodies:    |                            |                   |                               |  |  |  |  |
| EN barmonized standard | Notified body / Jaboratory | Notification code | EBC Certificate of conformity |  |  |  |  |

| EN harmonized standard | Notified body / laboratory     | Notification code | FPC Certificate of conformity |
|------------------------|--------------------------------|-------------------|-------------------------------|
| 13707 / 13969 / 14695  | Bureau Veritas                 | 1370              | 1370-CPR-0042                 |
| 13859-1                | Technische Universität München | 1211              | /                             |
| 13970                  | Technische Universität München | 1211              | /                             |

### 6. Declared performances:

| Balance descriptions   | Unit  | Performance | Tolerance <sup>(1)</sup> | EN Test               | EN harmonized standard |       |       |         |
|--|---|-------------|--------------------------|-----------------------|------------------------|-------|-------|---------|
| Relevant characteristics :   |   |             |                          |                       | 13969                  | 14695 | 13970 | 13859-1 |
| External Fire Performance  | Broof   | B roof (t2) | -                        | 13501-5               |                        |       |       |         |
| Reaction To Fire   | Classe  | F           | -                        | 13501-1               | •                      |       | •     | •       |
| Watertightness   | kPa   | 60          | ≥                        | 1928                  | •                      |       | •     |         |
| Watertightness   | Classe  | W1          | -                        |                       |                        |       |       | •       |
| Tensile strength at max L/T  | N/5cm   | 900 / 700   | ± 20 %                   | 12211.1               |                        |       |       |         |
| Elongation at max L/T  | %   | 50 / 50     | ± 15                     | 12311-1               | •                      | •     | •     | •       |
| Root resistance  |   | NPD         | -                        | 13948                 |                        |       |       |         |
| Resistance to static loading – Method A soft substrate             | Kg  | NPD         | ≥                        | 12730                 |                        |       |       |         |
| Resistance to static loading – Method B hard substrate             | Kg  | 25          | ≥                        | 12730                 | •                      |       |       |         |
| Resistance to impact – Method B soft substrate                     | mm  | NPD         | ≥                        | 12691                 |                        |       |       |         |
| Resistance to impact - Method A hard substrate                     | mm  | 1250        | ≥                        | 12691                 | •                      |       | •     |         |
| Nail tearing resistance L/T  | N   | 180 / 180   | - 30 %                   | 12310-1               | ٠                      |       | •     | •       |
| Peel resistance of joints  | N/5cm   | 40          | - 20                     | 12316-1               |                        |       |       |         |
| Shear resistance of joints   | N/5cm   | 700 / 700   | - 20 %                   | 12317-1               | •                      |       | •     |         |
| Flexibility at low temperature                                     | °C  | - 20        | ≤                        | 1109                  | ٠                      | •     | •     | ٠       |
| Vapour resistance  | μ   | 20000       | ≥                        | 1931                  |                        |       | •     |         |
| Durability after ageing T: Flexibility at low temperature          | °C  | NPD         | ≤                        | 1296 / 1109           |                        | _     |       |         |
| Durability after ageing T: Flow resistance at elevated temperature | °C  | 140         | - 10                     | 1296 / 1110           |                        | •     |       |         |
| Durability after ageing UV: Visible difects                        |   | NPD         | -                        | 1297 / 1850-1         |                        |       |       |         |
| Durability after ageing UV/T: Tensile strength at max L/T          | N/5cm   | NPD         | -                        | 1207 / 1206 / 12211 1 |                        |       |       |         |
| Durability after ageing UV/T: Elongation at max L/T                | %   | NPD         | -                        | 1297 / 1296 / 12311-1 |                        |       |       | •       |
| Durability after ageing UV/T: Watertightness                       | kPa   | NPD         | -                        | 1297 / 1296 / 1928    |                        |       |       |         |
| Durability after ageing T: Watertightness                          | kPa   | NPD         | -                        | 1296 / 1928           | •                      |       |       |         |
| Durability after ageing RC: Watertightness                         | kPa   | NPD         | -                        | 1847 / 1928           |                        |       |       |         |
| Durability after ageing T: Vapour resistance                       | μ   | NPD         | -                        | 1296 / 1931           |                        |       | •     |         |
| Durability after ageing RC: Vapour resistance                      | μ   | NPD         | -                        | 1847 / 1931           |                        |       |       |         |
| Water absorption   | %   | NPD         | -                        | 14223                 |                        |       |       |         |
| Watertightness   | kPa   | NPD         | -                        | 14694                 |                        |       |       |         |
| Bond strength  | N/mm <sup>2</sup>   | NPD         | -                        | 13596                 |                        |       |       |         |
| Crack bridging   | °C  | NPD         | -                        | 14224                 |                        | _     |       |         |
| Compatibility by heat conditioning                                 | %   | NPD         | -                        | 14691                 |                        | •     |       |         |
| Resistance to thermal shock  | %   | NPD         | -                        | 14693                 |                        |       |       |         |
| Resistance to compaction of an asphalt layer                       |   | NPD         | -                        | 14692                 |                        |       |       |         |
| Shear strength   | N/mm <sup>2</sup>   | NPD         | -                        | 13653                 |                        |       |       |         |
| Dangerous substances   | Dangerous substances This Product does not contain asbestos or tar constituents. <sup>(2)</sup> |             |                          |                       |                        | •     |       | •       |

(1) Note: In the absence of a uniform test method throughout Europe, any verifications and declarations on release/content must be performed considering the national regulations of the place of use.

7. The performance of the product identified in points 1 and 2 id in conformity with the declared performance in point 7. The declaration of performance is issued under the sole responsibility of the manufactorer identified in point 3.



