CE

CPR (EU) No 305/2011
Declaration of performance
No: 001DoP2017-07
Date: 01.07.2016
EN 1873: 2014+A1:2016

DECLARATION OF PERFORMANCE

№ 001DoP2017-07

1. Product Type Unique identification code of the product-type:	**Prefabricated accessories for roofing – Individual rooflights of plastics, upstands**
2. Type batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):	**MEGALUX® rooflight systems** **Individual rooflights of plastics – acrylic [PMMA] and/or polycarbonate [PC] cupolas, single or multiple skinned, with or without edge profile, light-transmitting panels. Upstands of PVC or Polyester**
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:	**For natural light transmittance and/or ventilation for use in flat and/or inclined roofs**
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5): - **Registered trade mark:**	**Van Deudekom Plastics B.V.** **Oceanenweg 9, 1047 BA Amsterdam, The Netherlands** **Postbus 59353, 1040 KJ Amsterdam, The Netherlands** **Tel. + 31 (0)20 497.90.90, Fax:+ 31 (0)20 497.90.92** **Email: info@vandeudekom.nl** MEGALUX®
5. Authorized representative: Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):	**Not applicable**
6. AVCP: System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:	**AVCP System 1 + AVCP System**
7. Notified Body (hEN NB): In case of the declaration of performance concerning a construction product covered by a harmonized standard: **System 1: Notified factory production control certification body** performed the determination of the product type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product, the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity of the constancy of performance of the product. **System 3: The notified testing laboratory** Performed the determination of the product type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product. The manufacture - Van Deudekom Plastics B.V. performed the factory production control.	**System 1: Factory production control (FPC) certification performed by notified bodies (NB):** NB 0336 - TÜV Rheinland Nederland BV - TÜV NB 0786 - VdS Schadenverhütung GmbH - VdS NB 0432 - Materialprüfungsamt Nordrhein-Westfalen- MPA **System 3: Product testing and certification performed by notified bodies (NB):** AB L115 - TNO Technical Sciences (Rva Accr.) - TNO NB 0786 - VdS Schadenverhütung GmbH - VdS NB 0960 - SKG-IKOB Certificatie BV - SKG NB 0432 - Materialprüfungsamt Nordrhein-Westfalen- MPA NB 1020 - Technický a zkušební ústav stavební Praha-TZUS NB 1368 - Institut für Industrieaerodynamik GmbH – IFI

8. Declared performance

Essential characteristics	Performance Acrylic (PMMA)	Performance Polycarbonate (PC)	Harmonized technical specification
Resistance to upward load (wind) Resistance to downward load (snow)	UL 1500 – UL 3000 DL 1125 – DL 2500	UL 1500 – UL 3000 DL 1125 - DL 2500	EN 1873 EN 1873
Reaction to fire External fire performance	E, S2, D2 F_{ROOF}(t4)	B, S1, D0 B_{ROOF}(t4)	EN 13501-1 EN 13501-5
Water tightness	Pass	Pass	EN 1873
Impact resistance: - Small hard body (250g, drop from 1m) - Large soft body (50 kg bag)	 Pass Fail	 Pass SB 600 - SB 1200	 EN 1873 EN 1873
Direct airborne sound insulation Rw (Ctr, C) (dB)	1-S dome 20 2-S dome 22 3-S dome 24 4-S dome 24 ISO dome 23 Glass-frame HR^{++} + 1-S dome 36 Glass-frame HR^{++} + 2-S dome 37 Glass-frame HR^{++} + 3-S dome 37 Glass-frame HR^{++} + 4-S dome 37 Glass-frame HR^{++} + ISO dome 37 ISO-frame PC 10/32 + 1-S dome 27 ISO-frame PC 10/32 + 2-S dome 27 ISO-frame PC 10/32 + 3-S dome 31 ISO-frame PC 10/32 + 4-S dome 33 ISO-frame PC 10/32 + ISO dome 36		EN-ISO 140-3
Thermal transmittance of rooflights, (W/m^{2}K) U_t – thermal transmittance of the translucent part- cupolas; $U_{r,ref}$ – Thermal transmittance of the reference rooflight; Reference rooflight – Type A, Daylight size 1,20m x 1,20m $A_{r,ref}$ – Outer exposed surface (area) of the translucent part of reference rooflight, in m^2; $A_{r,ref}$ = 1,61 m^2		U_t / $U_{r,ref}$ 1-S dome 6,3 / 5,7 2-S dome 2,9 / 3,5 3-S dome 1,9 / 2,6 4-S dome 1,4 / 2,1 ISO dome 1,4 / 1,8 Glass-frame HR^{++} + 1-S dome 1,3 / 1,2 Glass-frame HR^{++} + 2-S dome 1,0 / 0,95 Glass-frame HR^{++} + 3-S dome 0,87 / 0,85 Glass-frame HR^{++} + 4-S dome 0,76 / 0,77 Glass-frame HR^{++} + ISO dome 0,74 / 0,76 ISO-frame PC 10/32 + 1-S dome 0,95 / 0,86 ISO-frame PC 10/32 + 2-S dome 0,81 / 0,76 ISO-frame PC 10/32 + 3-S dome 0,71 / 0,69 ISO-frame PC 10/32 + 4-S dome 0,63 / 0,63 ISO-frame PC 10/32 + ISO dome 0,62 / 0,62	EN 1873: 2014 + A1:2016

Radiation properties* (for 1-S dome): - Light transmittance, τD65-value, % - Solar energy transmittance, g-value, %	Clear: 92 Opal: 84 Clear: 85 Opal: 76	Clear: 90 Opal: 84 Clear: 82 Opal: 76	EN 410: 2011
Air permeability	Ap 1	Ap 1	EN 1873: 2014 + A1:2016
Durability	ΔA, Cu 1, Ku 1	ΔA, Cu 1, Ku 1	EN 1873: 2014 + A1:2016
Mechanical strength: - Tensile strength (bending), N/mm² - E-Modulus (elasticity), N/mm²	 105 3300	 90 2400	 ISO 527-1 ISO 527-2

** Light transmittance and Solar energy transmittance values for particular rooflight / combination of domes / can be provided on request.*

Upstand and Frame	**PVC**	**Polyester**	
Reaction to fire External fire performance	E F_{roof}	E F_{roof}	EN 13501-1 EN 13501-5
Thermal transmittance of upstands, U_{up}, W/m²K	PVC E15 2,9 PVC E30 2,3 PVC E30 EPS 1,1	POL H15 2,3 POL E15 1,3 POL E30 1,1 POL E50 1,0 POL E15/6 0,87 POL E15/8 0,83 POL E30/6 0,59 POL E30/8 0,53 POL E50/6 0,48 POL E50/8 0,41	EN 1873: 2014 + A1: 2016
Thermal transmittance of the Frame, U_e, W/m²K	Bicameral PVC frame 0,62		EN 1873: 2014 + A1: 2016

9. Declaration

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.
This declaration of performance (DoP) is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Ir. Rene de Vries
Managing Director

Amsterdam, 01 July 2017