System Data Sheet

PolyMaxx HA

High Performance Deck & Roof Waterproofing System

Revision: 2.0 - 04 March 2026

INTRODUCTION

Newton PolyMaxx HA is a seamless, hand-applied, glass fibre-reinforced membrane system designed for use on decks, flat roofs, both protected and unprotected balconies and walkways, with or without falls. This high-performance hybrid-polymer liquid coating is supported by a 20-year warranty and certified by the BBA, with a proven service life exceeding 30 years under normal conditions.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 25/7459

Featuring advanced curing technology, each coat typically cures within 30 minutes, allowing the full system to be installed in a single working day, year-round. The result is a flexible, durable membrane that is fully bonded to the substrate, effectively preventing water tracking.

Newton PolyMaxx HA is exclusively installed by Newton-approved contractors. Every stage of the application is carried out by trained and carded applicators, with full documentation provided as part of the quality assurance process for the warranted system.

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APPLICATION

TYPICAL APPLICATIONS

Waterproofing of decks, balconies and roofs:

- Covered or protected decks
- Buried decks
- Balconies and decks receiving foot traffic
- Warm roofs
- Zero fall, blue roofs or inverted roofs
- Green roofs

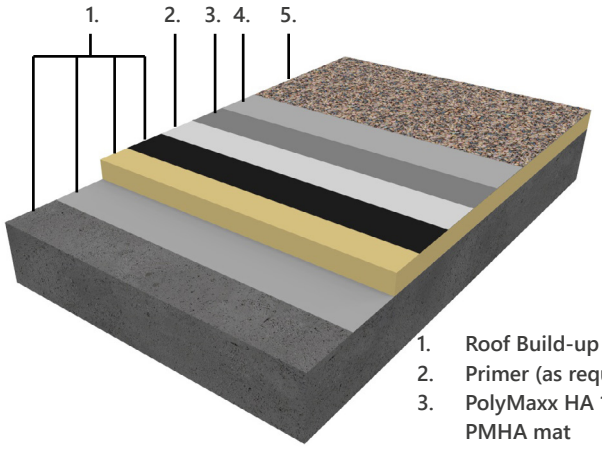
SUITABLE SUBSTRATE

- Concrete, screed and timber
- Liquid applied coatings
- Single ply membranes such as EPDM or TPO
- Asphalt/tarmac, felt and bituminous coatings
- Steel
- GRP (glass-reinforced plastic)
- Warm roof insulation
- Concrete beams
- Block and beam

SYSTEM HIGHLIGHTS

- Flexible and durable thanks to unique hybrid-polymer technology
- Rapid-cure technology results in extremely fast application with typical curing times of 30 minutes per coat, in all seasons - Applies to: PolyMaxx HA, PolyMaxx HA Primer, PolyMaxx Sealer and PolyMaxx Grip Coating
- Can be applied to all common substrates including concrete, rib-deck, modular concrete systems, insulation, timber & ply, and to existing coverings
- Extremely economical refurbishment over tired and failing roof coverings with minimum disruption
- Tough and durable
- Choice of hard wearing, decorative finishes provide anti-slip surfaces suitable for regular foot traffic
- Excellent abrasion resistance
- No fall needed - is suitable for zero fall, blue roof and inverted roof applications
- Suitable for warm roof application, with or without grading to falls
- Fire Classification: BROOF (t4) to BS EN 13501-5:2005
- Resistant to root penetration of mosses, sedums and some wild flower species and so suitable for green roofs

TYPICAL SYSTEM BUILD UP



1. Roof Build-up
2. Primer (as required)
3. PolyMaxx HA 1st coat with PMHA mat
4. PolyMaxx HA 2nd coat
5. Anti-slip/protective finish

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SYSTEM COMPONENTS

RESIN

Name	Description	Purchase Code	Packaging	Average Coverage
PolyMaxx HA	Resin - main component - Dark Grey	PMHA-DG	14.2 litres	1.35 l/m^2 in two coats
PolyMaxx HA Catalyst	Catalyst that ensures optimum curing times in all seasons	PMHAC	1 kg	0.04kg/m^2
PolyMaxx HA Mat 225	225g/m^2 Fibreglass Reinforcement Matting which is embedded into the first coat of PolyMaxx HA Resin	PMHAM	Roll 50 m x 1 m	48 m^2
PolyMaxx HA Accelerator	Low Temperature Curing Accelerator	PMHAA	600 g	1 unit per 14.2 litres of PolyMaxx HA resin
PolyMaxx HA Inhibitor	High Temperature Curing Inhibitor	PMHAI	210 g	1 unit per 14.2 litres of PolyMaxx HA resin

PRIMING & PREPARATION

PolyMaxx HA Primer	Primer for bituminous coatings, concrete & timber. **NOTE:** Requires PolyMaxx HA Catalyst	PMHAP	5 litres	4 - 6 m^2/litre
PolyMaxx HA Primer Accelerator	Low Temperature Curing Accelerator	PMHAPA	400 g	1 unit per 5 litres of PolyMaxx HA Primer
PolyMaxx Carrier SF	Sand Faced Carrier Membrane that provides a stable surface for when the system is applied over modular substrate such as block & beam, warm-roof insulation, or where differential movement is anticipated	PMCSF	Roll 15 m x 1 m	13.8 m^2
PolyMaxx AVCL	Foil Faced air and vapour control layer.	PMAVCL	Roll 40 m x 1.08 m	39.7 m^2
PolyMaxx Carrier Adhesive	Adhesive/primer for the Polymaxx Carrier SF	PMCA-10	10 litres tin	20 to 80 /m^2
PolyMaxx Detailing Primer	For the detailing/priming of metal substrate	PMDPS PMDP	250 ml bottle Pack of 6	50 - 150 ml/m^2
PolyMaxx Joint Tape	Reinforcement at joints/cracks	PMJT	100 mm x 33m	33 m
PolyMaxx Zinc Wash	Preparation of new zinc components	PMZW	5 litres	Site Dependent
PolyMaxx Solid Foam Wall Fillet	50 mm x 50 mm x 1200 mm foam fillet	PMFTWF	30 units = 36 l/m	1.2 l/m per length

Pre-formed GRP Trims including smoothing fillet - packs of 10 - See page 6 for further details and purchase codes.

SURFACE PROTECTION, ANTI-SLIP & DECORATIVE FINISHES

PolyMaxx Quartz Sand Various colours - see page 4	Coloured quartz sand provides a decorative, textured , nonslip, wearing coat	PMQS	25 kg	2.5 kg/m^2
PolyMaxx Mineral Slate	Mid-grey mineral slate aggregate provides a textured , non-slip, wearing coat.	PMMS	15 kg	2.5 kg/m^2
PolyMaxx Sealer	Clear wearing coat that provides enhanced protection against chemical, UV and mechanical wearing agents. Kit includes the required catalyst	PMS	9.6 litres	0.6 litres/m^2
PolyMaxx Grip Coating Various colours - see page 4	High grip and high-wear decorative coating. **NOTE:** Requires PolyMaxx HA Catalyst	PMGC	10 kg	1.0kg/m^2 - dependent on substrate porosity

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APPLICATION RATES

Features	Result	Units
Application temperature	1 - 30	°C
Application rate - first coat with PolyMaxx HA Mat 225 - smooth substrate	0.85 - 1.2*	litres/m²
Application rate - first coat with PolyMaxx HA Mat 225 - rough/chipped substrate	1.2 - 1.7*	litres/m²
Application rate - second coat and additional coats for anti-slip finishes	0.5	litres/m²

*Application rates are indicative and it is the responsibility of the installing contractor to ascertain the exact coverage rates, which are dependent on substrate and environment. Additional materials should be allowed for areas requiring detailing or reinforcement etc. Further information on application rates is contained within the PolyMaxx HA System Installation Manual. Consult with your local approved contractor for further information on application rates.

CURING

	3°C	5°C	10°C	15°C	20°C	25°C	30°C	Units
Ready for second coat - touch dry	30 - 60	30 - 60	30 - 60	30 - 60	30 - 60	30 - 60	30 - 60	Minutes
To not be adulterated by rain	20-30	20-30	20-30	20-30	20-30	20-30	20-30	Minutes
Ready for temporary traffic/protection boards	1	1	1	1	1	1	1	Hour
Ready for flood/hosepipe test	1	1	1	1	1	1	1	Hour
Fully cured	60	60	60	45	30	30	30	Minutes

CURED PERFORMANCE - POLYMAXX HA

Features	Result	Units	Standard
Colour	Dark Grey - Other colours by request		
Membrane thickness - 2 coats - reinforced	1.5 - 2	mm	
Membrane weight	2.2 - 2.4	kg/m²	
Foot traffic / mechanical impact: Static indentation Dynamic indentation	 Pass Pass	 L4 L4	 EOTA TR 007 EOTA TR 006
Delamination to substrate (day-joint in steel)	Pass	≥50 kPa	EOTA TR 004:2004
Dynamic indentation - steel @ -20°C	Pass I4		EOTA TR 006:2004
Dynamic indentation - PIR insulation @ -20°C	Pass I2		EOTA TR 006:2004
Static indentation - steel @ 23°C	Pass L4		EOTA TR 007:2004
Static indentation - PIR insulation @ 23°C	Pass L4		EOTA TR 007:2004
Tensile strength - Controlled Cure - 28 days @ 3°C 23°C 40°C	 2400 2600 2600	N per 50mm	BS EN ISO 527-4:1996
Elongation - Controlled Cure - 28 days @ 3°C 23°C 40°C	 3.3 3.4 3.4	%	BS EN ISO 527-4:1996
Water vapour permeability	0.72	g/m²/day	
Fire classification	BROOF (t4)		BS EN 13501-5:2005

ANTI-SLIP & PROTECTIVE FINISH OPTIONS

The standard two-coat PolyMaxx HA waterproofing system does not need to be protected or required to provide a non-slip finish where is not exposed to foot-traffic, such as with roofs, or where it is buried or covered with paving, drainage membranes or decking. Maintenance access paths require a non-slip surface. Where the system is used in high foot-trafficked areas, a protective finish is required. The system is not suitable for vehicle traffic.

	PolyMaxx Quartz Sand	PolyMaxx Mineral Slate	PolyMaxx Grip Coating
Bonding Layer	PolyMaxx HA - 0.5 litres/m²	PolyMaxx HA - 0.5 litres/m²	N/A
Primer	N/A	N/A	PolyMaxx HA Primer at 0.2 litres/m²
Coverage rate	Applied at 4kg/m² 1.5 kg/ m² is recovered	Applied at 4kg/m² 1.5 kg/ m² is recovered	1kg/m²
Clear Protective Coat	PolyMaxx Sealer at 0.6 litres/m²	PolyMaxx Sealer at 0.6 litres/m²	PolyMaxx Sealer at 0.6 litres/m²

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APPLICATION CHART

System protected by decking, drainage membrane, paving, pedestals, green roof etc.										
Surface	PolyMaxx Carrier SF	Felt	Asphalt	Liquid Applied Membrane	Metal	New Zinc	EDPM/ Single Ply Membrane	Concrete	OSB	GRP Overlay
Preparation/ Cleaning	Not Required	Jet Wash	Jet Wash	Jet Wash	Wipe clean	PolyMaxx Zinc Wash	Jet Wash	Grinding/ Jet Wash (3000 PSI)	PolyMaxx Support Band to joints	Not Required
Priming	Not Required	PolyMaxx HA Primer	PolyMaxx HA Primer	Not Required	PolyMaxx Detailing Primer	PolyMaxx Detailing Primer	PolyMaxx HA Primer	PolyMaxx HA Primer	PolyMaxx HA Primer	Not Required
First Coat PolyMaxx HA										
Non-Slip, Decorative and Protective Finishes										
		Third Coat Of PolyMaxx HA Over Sand	PolyMaxx Quartz Sand or PolyMaxx Mineral Slate With Clear Coat of PolyMaxx Sealer Over							
Purchase code:		Dark Grey PMHA-DG	PolyMaxx Mineral Slate PMMS	Barn Owl Blend PMQS-BO	Vineyard Blend PMQS-V	Hillside Blend PMQS-H	Bayside Blend PMQS-B	Harvest Blend PMQS-HT	Mist Blend PMQS-M	
		PolyMaxx Grip Coating								
PolyMaxx Sealer may be applied above the PolyMaxx Grip Coating to further enhance durability and ease of cleaning Purchase code:		Black RAL 9017 PMGC9017	Anthracite RAL 7016 PMGC7016	Grey RAL 7040 PMGC7040	White RAL 9016 PMGC9016	Red RAL 3020 PMGC3020	Yellow RAL 1007 PMGC1007	Green RAL 6018 PMGC6018	Sky Blue RAL 5015 PMGC5015	

COLOURS & FINISHES

The standard colours of PolyMaxx HA are light grey and dark grey and provide a smooth finish.

ROOT PENETRATION

The PolyMaxx HA System will resist penetration by plants that do not have invasive root systems, such without the requirement for additional root barriers.

LIFE EXPECTANCY & MAINTENANCE

The system has a life expectancy of at least 20 years, (confirmed as being in excess of 30-years by the BBA) and once installed, does not require inspection or maintenance by the manufacturer.

The client or building maintenance contractor should ensure that the system is subjected to a standard inspection and maintenance regime as recommended within BS 6229 and this should be recorded in the building O&M manual.

If the wear expectations are high, the inspection intervals should be reduced and further wearing coats may be required. Please speak with the installing contractor for advice.

PRODUCT WARRANTY

Contractors who are trained and registered by Newton Waterproofing for the installation of the PolyMaxx HA System are able to provide the client with 20-year warranties supported by Newton Waterproofing.

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FIRE CLASSIFICATION

Roofs & Decks
The PolyMaxx HA System has been tested to CEN/TS1187:2014 Test 4 on the following substrates:

- Calcium Silicate (Concrete equivalent)
- 18mm OSB3 (Tested in conjunction with various construction build ups as per BBA Certificate number 25/7459)

The system achieves BROOF (t4) classification in accordance with BS EN 13501-5:2016, and is therefore unrestricted in proximity to boundaries, at any height, when applied to the following tested substrates/constructions cited within the BBA Certificate.

The system is also unrestricted for use to balconies, roofs when protected by one of the following:

- A roof garden with a minimum of 100 mm gravel and 300 mm soil
- ≥40 mm stone or concrete paving slabs
- An irrigated green roof

This classification applies to roof pitches between 0° and 10°. **Note:** The system is not certified to BROOF (t4) when applied to any other substrates.

Balconies
The system is restricted in some cases when applied to balconies that are attached to buildings within England, Scotland, Wales, and Northern Ireland as laid out in sections 2.2.7 to 2.2.10 of the BBA Certificate, which should be referenced in all situations where application to balconies is intended. This applies only when installed on the tested substrates listed above.

In England, Wales and Northern Ireland the system may also be used on balconies, regardless of the building heights when protected by a protection layer that meets A1 or A2-s1,d0 fire classification, for example ≥40 mm stone or concrete paving slabs.

TRAINING & COMPETENCY OF USER

The PolyMaxx HA System must only be installed by contractors who have been trained and approved by Newton Waterproofing, and who carry a valid contractors's certificate. A list of suitable contractors can be obtained by contacting the email address in the section at the bottom.

SURFACE PREPARATION - GENERAL

Generally the surfaces to be waterproofed must be structurally stable, clean, dry and free from release agents, dust, laitance, oils, paints or other forms of contamination.

Substrate damage, deterioration, cracks, voids, and holes must be repaired, filler or replaced filled prior to installation of the waterproof membrane with HydroCoat 203-RM repair mortar. Deep or structural cracks must be inspected to confirm if they are live or dormant. Suitable repair by qualified personnel is recommended. For further guidance please contact a member of the Newton Technical Team.

PRIMING

The requirement and priming product required is dependent on the substrate. The required primer and coverage rates for each substrate are:

Block & beam, concrete planks	PolyMaxx Carrier SF	
PolyMaxx Carrier SF	No primer required	
Liquid applied coatings/membranes	No primer required	
Bituminous coatings, concrete, timber	PolyMaxx HA Primer	4 - 6 m^2/litre
Single ply membranes	PolyMaxx HA Primer	12 - 15 m^2/litre
Metal - detailing only	PolyMaxx Detailing Primer	50 - 150 m^2/litre

UNIDENTIFIABLE COATINGS

Specific guidance should be sought for unidentified coatings such as solar reflective paints or unidentified single ply membranes. Adhesion tests may be required.

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BOARD JOINTS REINFORCEMENT

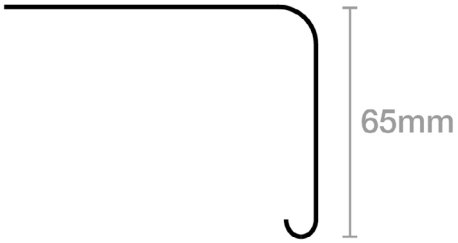
Local reinforcement is not needed to the interlocking joints of T&G OSB3 (TG4) boards provided that the joints are adequately filled with PolyMaxx HA Primer and a pin-hole free coating can be achieved with the PolyMaxx HA coating.

The joints of all square edge boards require reinforcement. Prime the joint and once the primer is cured, bed 100 mm wide PolyMaxx Joint Tape into a coating of PolyMaxx HA and allow to cure.

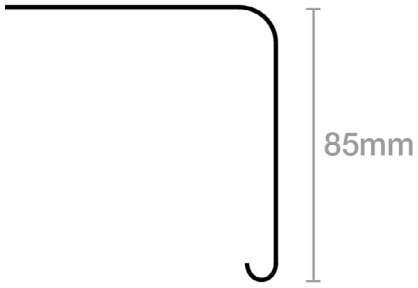
TRIMS

Where required, the PolyMaxx range of rigid, GRP trims provide a fast and reliable means of installing the correct finishing trim to ensure perfect detailing. Trim purchase code, size and type are below.

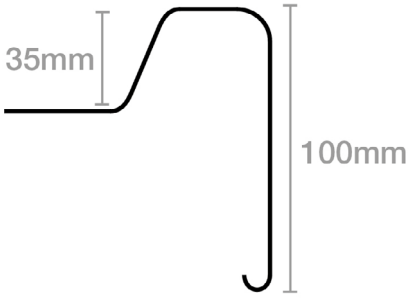
PMTD65 - 65mm Drip



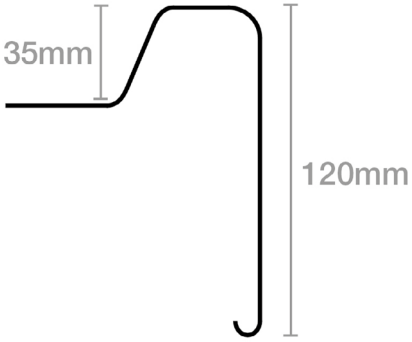
PMTD85 - 85mm Drip



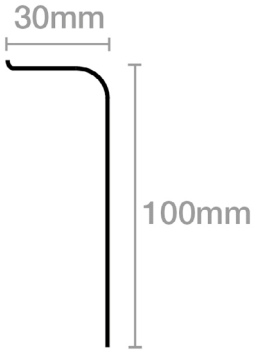
PMTUF100 - 100mm Upstand Facia



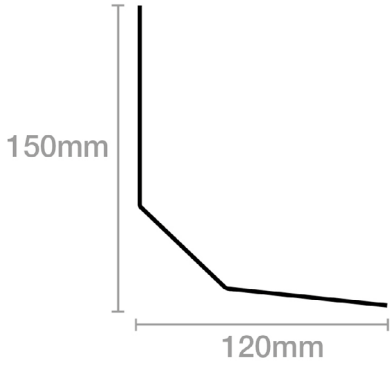
PMTUF120 - 120mm Upstand Facia



PMTCF - Cover Flashing



PMTWF - Wall Fillet



APPLICATION TEMPERATURE

The system application range is 1°C to 30°C. The system **must not** be applied in damp conditions or where there is risk of rain.

LOW TEMPERATURE WORKING

Application at 1-5°C is only possible with the addition of PolyMaxx HA Accelerator. 1 x 600 g container is added to a tin of PolyMaxx HA resin before PolyMaxx HA Catalyst is added. At 5-10°C the PolyMaxx HA Accelerator is recommended.

HIGH TEMPERATURE WORKING

At temperatures between 25°C and 30°C, PolyMaxx HA will have a reduced pot life and significantly accelerated curing times. To compensate, PolyMaxx HA Inhibitor must be added at these temperatures to extend both pot life and curing time.

Add one 210 g container of PolyMaxx HA Inhibitor to a tin of PolyMaxx HA Resin before adding the PolyMaxx HA Catalyst.

Note: Application is not possible above 30°C.

MIXING/CATALYST

The amount of catalyst required is dependent on temperature. Further information on catalysing, inhibiting and accelerating the curing of the PolyMaxx HA Resin is contained within the PolyMaxx HA System Installation Manual. Consult with your local approved contractor for further information and confirmation of curing rates at high or low temperatures.

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APPLICATION METHOD

By medium pile roller or brush.

STORAGE & SHELF LIFE

The product should be stored inside and at a temperature between + 10°C and + 35°C. If packaging remains unopened under these conditions it has a shelf life of 12 months from date of manufacture.

CAUTIONS & LIMITATIONS

- The PolyMaxx HA System should only be installed by trained specialists
- The system must not be applied in damp conditions or where there is risk of rain
- Do not apply to frozen surfaces
- Remove all standing water from the substrate
- Substrate with residual dampness within the surface porosity should be force dried using roofing gas torches
- If the PolyMaxx HA Resin coat is over 7 days old and over coating is required, the resin must be activated with a wipe of acetone.
- Between 1°C and 5°C, PolyMaxx HA Accelerator must be added to the PolyMaxx HA resin before the PolyMaxx HA Catalyst is added.
- Between 25°C and 30°C, PolyMaxx HA Inhibitor must be added to the PolyMaxx HA resin before the PolyMaxx HA Catalyst is added.

HEALTH & SAFETY

Use appropriate PPE for the environment the system is installed within. Use products only as stated within this System Data Sheet and the individual product Technical Data and Safety Data Sheets.

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