

RapidRoof Installation Guide







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Introduction

EcoProof are manufacturers of high performance, technologically advanced cold liquid membranes for the waterproofing of roofs, walls, floors and balconies. Each of our systems are leaders in their respective fields, due to their unique credentials in waterproofing, longevity and application speed, making them the preferred choice of quality, cost effective systems. At EcoProof, we are dedicated to providing our customers with the support they need through our technical team, by offering specifications, technical data and product guarantees, which come as standard with all of our systems. For more information on any of our products, please contact our technical support team on 00 350 58478000 or email enquiries@ecoproofinternational.com.

Product Range



RapidRoof is a rapid curing, seamless, fully bonded system that comes in waterproof or antiskid variants. RapidRoof is suitable for use over many surfaces including asphalt, timber, felt, metal and concrete. Available in either waterproof or Anti-Skid, it has a wide variety of applications - from flat roofs and balconies to stairways and car park decks. For more information on RapidRoof, please contact our technical support team on 00 350 58478000 or email enquiries@ecoproofinternational.com





FastCoat is a polyurethane waterproofing liquid, has very good UV and outdoors resistance. EcoProof FastCoat Pro waterproofing system is a rapid curing, tough and flexible hand applied pure polyurethane. With exceptional performance and ease of application FastCoat Pro is backed by a 25-year BBA certification. FastCoat Pro is ideal for Flat Roofs, Pitched Roofs, Balconies / Terrace. FastCoat Pro is a single component brush or roller applied seamless and fully bonded membrane suitable for application onto both new builds and refurbishment projects. FastCoat Pro Guarantees range from 10 – 25 years depending on the spec applied.



Liquid Rubber is an instant set spray applied waterproofing membrane that can be applied up to a rate 1000sq/m per day. It is fully bonded to the surface and completely seamless and sets upon contact with the surface. Its elasticity of over 1000% provides a flexible membrane suitable for any surface. For more information on Liquid Rubber, please contact our technical team, or alternatively visit www.ecoproofinternatonal.com





Contractor training

EcoProof host regular training programmes throughout the year to provide contractors with the necessary skills and product knowledge to become fully certified EcoProof Approved Contractors. For more information please call our technical help desk on 00 350 58478000 or email enquiries@ecoproofinternational.com.

Product guarantee

EcoProof offer a range of guarantees from 10-25 years. EcoProof work closely with Specifiers, Architects & Contractors alike to ensure the correct specification is provided to suit all budgets and the most demanding waterproofing requirements. On larger projects or when required we can look to extend this up to 25 years depending on the project. We can also offer insurance backed guarantees on request. For more information, contact our technical support team.

Contact details

EcoProof International Ltd

Unit 96 Harbours Walk

The New Harbours

Gibraltar

GX11 1AA

T.00 350 584780007l

E. enquiries@ecoproofinternational.com



Product Features

What is RapidRoof?

RapidRoof is a cold applied, fully bonded, seamless, PMMA resin based waterproof coating. It is a rapid curing two coat membrane that provides a tough surface coupled with upto 200% elasticity. With a smooth finish and available in various colours (subject to minimum quantity), RapidRoof provides a cured membrane with a similar finish to GRP or EPDM but with greater flexibility and faster application. RapidRoof is ideal for domestic projects or small industrial roofing and is available with an anti-skid finish for designated walkways, balconies or other trafficable surfaces.

Key features

- Specially formulated for roofing applications
- 10 and 15-year product guarantees
- 200% elasticity
- Resistant to wind uplift
- Full training and on-site support available
- Suitable for all types of foot trafficking
- Can be applied between 0°c 35°c
- Full technical support team
- Cures in 20 minutes per coat

Fully bonded and seamless membrane

RapidRoof waterproofing system is fully-bonded to the roof substrate. The system is resistant to any wind uplift that could reasonably be expected during the products lifespan.





Multiple applications

RapidRoof Waterproofing system can be used for waterproofing applications of almost any size or complexity, be it vertical or horizontal.

Fully trafficable

RapidRoof Waterproof and Anti-Skid system can withstand heavily trafficked areas such as walkways and balconies without the requirement of a reinforcement carrier layer throughout the system.

Multiple finish options

RapidRoof Waterproof (smooth finish) and Anti-Skid (rough finish) are available.

Available in kit form

RapidRoof is available in kit form, supplied in 5, 10, 20m² areas. These come in either waterproof, anti-skid or waterproof and anti-skid formats. They are also supplied with some tools to help get you started.

RapidRoof training

RapidRoof training is completed by our regional technical support representative; this usually takes place at our training centre in Prees Green approximately every 6-8 weeks. For more information contact our technical team on 00 350 58478000 or email enquiries@ecoproofinternational.com to find out when the next available course is.





System Applications

Over coating

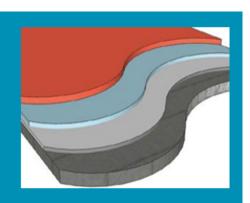
One of the biggest benefits of RapidRoof is the ability to over coat existing failing surfaces.

This completely removes the requirement to replace the timber deck, saving cost and time on site.

The substrate must be dry prior to application, and inspection of the boards underneath must be undertaken prior to installation by the contractor and must be in good condition (not sodden or rotten).

Standard specification (Waterproof)

Existing surface cleaned and prepared
RapidRoof Detailing Primer 0.25kg per m²
RapidRoof Joint Tape (100mm width)
RapidRoof Waterproof coat 1.5kg per m²
RapidRoof Catalyst (4% calculation)
Applied as per the RapidRoof Installation Manual

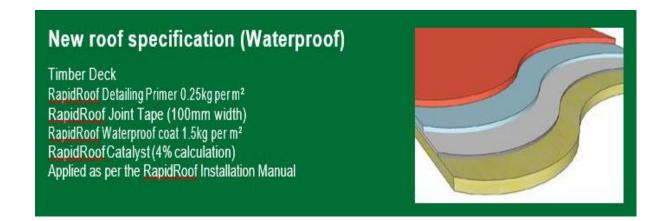


New roofs

RapidRoof can be applied directly onto a new timber deck, much like GRP and Single-Ply systems, but in a fraction of the time.

RapidRoof is approved for use with Norbord OSB3 or alternatively marine plywood.

This ensures a strong and suitable substrate and adheres to the RapidRoof warranty guidelines.





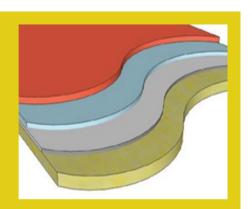


Anti-skid

RapidRoof can be used as a standalone anti-skid coating designed to provide a tough hard wearing surface; ideal for safety walkways, access ramps, factory floors, existing balconies and car park ramps and decks.

Anti-skid specification (Anti-skid)

Existing surface cleaned and prepared
RapidRoof Detailing Primer 0.25kg per sg/m RapidRoof Joint
Tape (100mm width)
RapidRoof Anti-Skid coat 1kg per sg/m
RapidRoof Catalyst (4% calculation)
Applied as per the RapidRoof Installation Manual



System Variations

RapidRoof Systems

RapidRoof is available in three main systems. Each has different benefits and uses, but are all similar in applications.

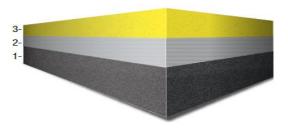
Waterproof System

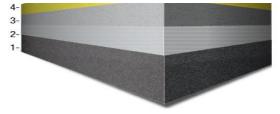
- 1. Substrate
- 2. RapidRoof Primer
- 3. RapidRoof Waterproof



Anti-Skid System

- 1. Substrate
- 2. RapidRoof Primer
- 3. RapidRoof Anti-Skid
- 1. Substrate
- 2. RapidRoof Primer
- 3. RapidRoof Waterproof
- 4. RapidRoof Anti-Skid

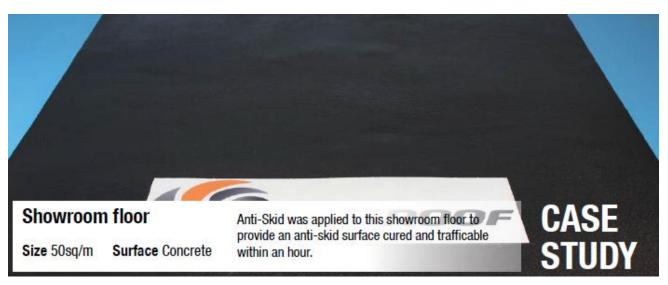


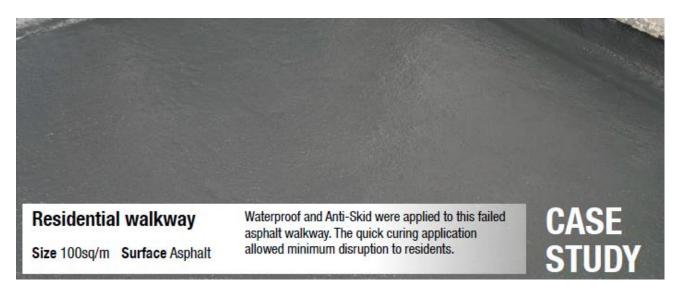
















Mixing Guide

RapidRoof mixing

Mixing

It is advised that all products are mixed using a paddle mixer where available, or with similar apparatus.

Ensure all products are mixed thoroughly to ensure even curing. Typically, 1 minute of mixing is sufficient.

Primers, Waterproof and Anti-Skid

All primer, waterproof and anti-skid products in the RapidRoof range are two part; base product and catalyst.

The base product typically is provided in 5 or 10Kg tins, with a plastic bottle containing the catalyst.

20 minutes curing time

Once catalysed (catalyst mixed into base product) you will have up to 20 minutes in which to apply the product to the required area or application.

It is advised to always decant only the amount of product that can be applied within 10 minutes to avoid unnecessary wastage and avoid shortage of product.

When applying the product, it is advisable to pour directly onto the surface to avoid any accelerated curing that can occur from excess heat generated within the tin by the catalysing process.



Catalyst Ratio

The catalyst ratio equates to 2% of the main product, 20g of catalyst to every 1Kg of product.





Product Volume	Catalyst
1KG	20g
5KG	100g
10KG	200g

Decanting

Using a mixing bucket or similar container, decant only the amount of product you require to cover that particular area.

Decanting product avoids unnecessary wastage and provides you with enough time to apply product on detailed areas.

Product Identification

Product Identification, sizes and coverage rates

Primers - available in 5KG and 10KG



Detailing Primer for Use on all joints.



Waterproof- Flexible

Waterproof membrane applied

over the surface at 1.5kg m²

over 2 coats.



Anti-Skid is for walkways, Balcony's

Maintenance routes etc. Once the

Surface has been prepared the anti-skid

Will be applied at 1kg per m² either over RapidRoof

Waterproof or on its own.



RapidRoof kits

As well as individual items, RapidRoof is also available in kit form to provide an easy to apply system specifically designed to coat a pre-determined area.

Waterproof Kits

Waterproof kits are specifically formulated to waterproof a new or existing roof surface. They include a quick start guide and some application tools to get you started.

Available in 5sq/m, 10sq/m and 20sq/m kits.



RapidDeck Anti-Skid Kits

RapidDeck Anti-Skid kits are ideal for floors, ramps, safety walkways etc. They include a quick start guide and some application tools to get you started.

Available in 5sq/m, 10sq/m and 20sq/m kits.



RapidDeck Waterproof Anti-Skid Kits

RapidDeck Waterproof Anti-Skid kits combine both systems to provide the ideal solution for balconies and similar applications. They include a quick start guide and some application tools to get you started.

Available in 5sq/m, 10sq/m and 20sq/m kits.







Filling kits

For any areas requiring filling or levelling we have two variations of filling kits available; Ponding Filler Mortar Mix and Ponding Filler Pourable.

Crack and Joint filler:

Our Crack and Joint Filler Kit is a three-part system comprising of an aggregate, liquid base and catalyst. Mixed together they create a trowelable filling system that is fully cured in 20 minutes.



Catalyst added to base product and mixed



Catalysed product poured into aggregate



Mix together



Fill hole, gap or crack



Trowel to a smooth finish

Ponding filler Kit

Our other available system is our Ponding Filling Kit - a two-part system. Once mixed, it can be poured into any uneven areas, big gaps or cracks to level out the surface. The pourable system also fully cures in 20 minutes.



Preparation

Over coating roof preparation

Cleaning

Prior to coating, the entire surface should be thoroughly cleaned down to remove all dirt, dust or other contaminants, especially when over coating an existing surface.

The main criteria is to provide a clean, dry surface to ensure the materials can key to the existing surface.

Repairs to existing surface

RapidRoof can be applied to felt, asphalt, timber, concrete and many other surfaces (please check our website for the current list of applicable surfaces).

We have shown a few examples below. Although the surface may vary, the method is always the same.

Clean surface of area to be detailed, prime with detailing primer, embed joint tape and allow to cure (typically 20 minutes).

Products required

For detailing we recommend the use of Primer and Joint Tape.

Failing Joint/ felt laps



De-bonding joint cleaned out



Joint Tape pre-cut to length



Primer poured onto and into joint to re-bond



Brush Joint Tape into Primer



Completed repair

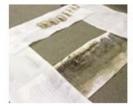




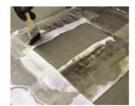
Existing repair



Existing repair cleaned



Joint Tape cut to fit and placed onto Primer

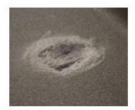


Brush Joint Tape into Primer to embed



Completed repair

Blister



Blister cleaned out



Joint Tape cut to shape



Coating of Primer



Joint Tape embedded into Primer



Completed repair

Split



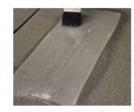
Split in surface



Joint Tape cut to shape



Coating of Primer



Joint Tape embedded into



Completed repair

Detailing existing surface

RapidRoof can be applied to any existing upstands and protrusions to provide waterproofing.

We have shown a few examples below, although the surface may vary the method is always the same.





Clean surface of area to be detailed, apply primer, embed joint tape and allow to cure as with repairs to existing roof surfaces (typically 20 minutes).

Protrusion







Joint tape cut around pipe



Primer applied to surface and pipe



Joint Tape brushed into primer



Completed protrusion

Upstand



Upstand



Pre-cut Joint Tape



Primer applied to upstand



Brush Joint Tape into Primer to embed



Completed upstand

Outlet



Outlet



Remove covers



Cut Joint Tape to shape and star cut hole



Brush Joint Tape into Primer to embed



Completed outlet

Please Note: Unless otherwise stated, once mixed, all liquid products within the RapidRoof product range have a typical pot life of 20 minutes at 10°C. Be sure to pour out all of the product onto the surface to ensure the curing process doesn't accelerate in the tin. Check mixing guide for further information.



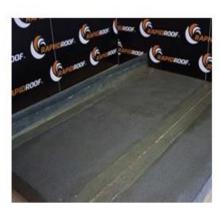


Priming

On completion of the cleaning and preparation, proceed with coating the whole roof with RapidRoof Detailing Primer from the product range at a typical application rate of 3-4sq/m per KG (may vary depending on primer and surface, check quick reference guide on page 9 for more information). Use a brush or roller to apply to all areas required to be waterproofed including upstands, although upstands may not be required if using only Anti-Skid.











Waterproof

Once the primer layer has been applied it is advised to allow a 1 hour gap before applying the waterproofing layer, to ensure the primer is fully cured. Decant the required amount for the area to be covered at a rate of 1kg per sq/m on the first coat, and 0.5kg per sq/m on the second coat (we advise 2 coats to avoid pin-holing) and mix with catalyst following the mixing guide recommendations. Once mixed, pour the waterproof membrane onto the surface and coat evenly using brush or roller. Allow 1 hour before applying the second coat. Following application also allow 1 hour before proceeding to walk over the roof surface if required. If not applying anti-skid you can proceed to apply any trims or carry out any additional works required.















Anti-Skid

If applying an Anti-Skid to the waterproofing membrane, proceed by ensuring the area to be coated is free of any dust or dirt. Apply masking tape to the area at the specified width required to create a neat finish. Decant and mix the amount of Anti-Skid Membrane required for the area to be coated. Once mixed, pour onto surface and apply using brush or roller. Maintain the coverage rate of 1kg per sq/m to ensure the aggregate stands proud of the liquid and provides a rough finish to the surface. While curing, remove the tape to ensure a clean edge to the walkway. Allow 1 hour before trafficking.















Joints in membrane

In certain circumstances, it may be necessary to apply the membrane in sections. In this instance, it is advised to mark out an area to be coated and tape the joint edge with masking tape. When applying the waterproofing membrane, coat up to the previously applied tape, within the following 20 minutes of curing remove the tape to leave a neat edge to adjoin to. When applying the next section, feather into the previously coated section by 50mm to ensure a seamless membrane finish.





New roof preparation

Board selection

Although RapidRoof can be applied to many timber surfaces, we recommend using a marine plywood in line with standard roofing practice. RapidRoof has also been approved by Norboard for use on 18mm OSB3. When using any other type of decking, please be sure to confirm with the manufacturer that it is suitable for use with EcoProof RapidRoof.





Laying new deck

Before laying the deck ensure the joists are of sound condition, and ensure the boards are securely fixed. When attaching the deck, ensure all nail heads finish flush with the surface of the deck.



Picture shows new deck being laid.

Trim selection and application

Although any flat roofing trim can be used with RapidRoof, we recommend using readily available GRP trims from your local roofing merchant as these are cost effective and easy to apply and detail. Mechanically fix all trims to the timber decking ensuring the face is vertical



New GRP trim installed and reinforced using EcoProof Detailing Primer and EcoProof Joint Tape.





Surface preparation

Before commencing with detailing, please ensure the entire area to be coated is free from all dust and dirt, including joints between boards and areas of detailing. Any cleaning or preparation of upstands should also be carried out prior to membrane application to avoid any dust or dirt becoming trapped in the membrane during application.







Products required

For detailing we recommend the use of Detailing Primer and Joint Tape. **Detailing new roof surface.** Prior to coating the new roof surface ensure it is clean and free from any dust or dirt. The order of detailing is the same as over coating; clean surface of area to be detailed, prime with Detailing Primer, embed Joint Tape and allow to cure (typically 20 minutes)

Joint in board



De-bonding joint cleaned out



Joint Tape pre-cut to length



Primer poured onto and into joint to re-bond



Brush Joint Tape into Primer



Completed repair

Pitched roof detail



De-bonding joint cleaned out



Joint Tape pre-cut to length



Primer poured onto and into joint to re-bond



Brush Joint Tape into Primer

Outlet detail



De-bonding joint cleaned out



Joint Tape pre-cut to length



Primer poured onto and into joint to re-bond



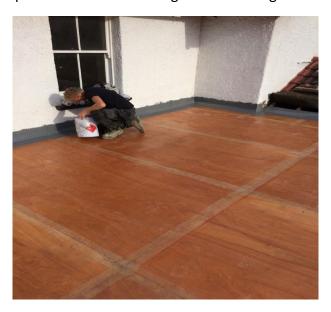
Brush Joint Tape into Primer





Protrusions and upstands

All new or existing upstands should be detailed with Detailing Primer and Joint Tape to provide additional strength and a strong bond with the waterproofing membrane.



Please Note: Unless otherwise stated, once mixed, all liquid products within the RapidRoof product range have a typical pot life of 20 minutes at 10°C. Be sure to pour out all of the product onto the surface to ensure the curing process doesn't accelerate in the tin. Check mixing guide for further information.





Priming

On completion of the preparation work, proceed with detailing all joints with EcoProof Detailing Primer at a coverage rate of 0.3kg per m² which typically cures around 20 mins.

If waterproofing concrete or asbestos the whole surface will need priming using EcoProof Detailing Primer at a coverage rate of 0.3kg per m² depending how porous the surface is.



Above: Perfect example on how the joints on a timber roof should be reinforced using EcoProof Detailing Primer and EcoProof Joint Tape.







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Waterproof

Once the primer layer has been applied it is advised to allow a 1-hour gap before applying the waterproofing layer, to ensure the primer is fully cured. Decant the required amount for the area to be covered at a rate of 1kg per m² on the first coat, and 0.5kg per m² on the second coat (we advise 2 coats to avoid pin-holing) and mix with catalyst following the mixing guide recommendations. Once mixed, pour the waterproof membrane onto the surface and coat evenly using brush or roller. Allow 1 hour before applying the second coat. Following application also allow 1 hour before proceeding to walk over the roof surface if required. If not applying anti-skid you can proceed to apply any trims or carry out any additional works required.



Above: First coat being applied at 1kg per m².













Anti-Skid

If applying an anti-skid coating to the waterproofing membrane, proceed by ensuring the area to be coated is free of any dust or dirt.

Apply masking tape to the area at the specified width required to create a neat finish.

Decant and mix the amount of Anti-Skid Membrane required for the area to be coated.

Once mixed, pour onto surface and apply using brush or roller.

Maintain the coverage rate of 1kg per m² to ensure the aggregate stands proud of the liquid and provides a rough finish to the surface.

While curing, remove the tape to ensure a clean edge to the walkway. Allow 1 hour before allowing traffic over the cured surface.













Joints in membrane

In certain circumstances, it may be necessary to apply the membrane in sections.

In this instance, it is advised to mark out an area to be coated and tape the joint edge with masking tape.

When applying the waterproofing membrane overlap the existing coatings by 50mm and coat up to the previously applied tape, within the following 20 minutes of curing remove the tape to leave a neat edge to adjoin to.

When applying the next section, coat up to the previously coated section to ensure a seamless membrane finish.





Anti-Skid surface preparation

Cleaning

Prior to coating, the entire surface should be thoroughly cleaned down to remove all dirt, dust or other contaminants especially when over coating an existing surface.

The main criteria are to provide a clean, dry surface to ensure the materials can key to the existing surface.





Repairs to existing surface

RapidRoof can be applied to felt, asphalt, timber, concrete and many other surfaces (please check our website for the current list of applicable surfaces).

We have shown a few examples below, although the surface may vary the method is always the same.

Clean surface of area to be detailed, apply primer, embed joint tape and allow to cure (typically 20 minutes).

Products required

For detailing, we recommend the use of Detailing Primer and Joint Tape.

Blister







Joint Tape cut to shape



Coating of Primer



Joint Tape embedded into



Completed repair

Gaps or cracks



Catalyst added to base product and mixed



Catalysed product poured into aggregate



Mix together



Fill hole, gap or crack



Trowel to a smooth finish

Please Note:

Unless otherwise stated, once mixed, all liquid products within the RapidRoof product range have a typical pot life of 20 minutes at 10oC. Be sure to pour out all the product onto the surface to ensure the curing process doesn't accelerate in the tin. Check mixing guide for further information.





Anti-Skid

If applying an anti-skid coating to the waterproofing membrane, proceed by ensuring the area to be coated is free of any dust or dirt.

Apply masking tape to the area at the specified width required to create a neat finish.

Decant and mix the amount of Anti-Skid Membrane required for the area to be coated.

Once mixed, pour onto surface and apply using brush or roller.

Maintain the coverage rate of 1kg per m² to ensure the aggregate stands proud of the liquid and provides a rough finish to the surface.

While curing, remove the tape to ensure a clean edge to the walkway. Allow 1 hour before allowing traffic on the cured membrane.













Frequently asked questions

What to do if it rains?

It is advised to always check the weather forecast in advance but for circumstances where rain is an immediate problem, stop application immediately.

Any product applied on a wet surface risks not bonding correctly.

If within the 20-minute curing window, cover up your existing work and wait for a good dry spell to continue.

Thoroughly dry coat between applications.

Can we apply different layers on different days?

RapidRoof does not have to be applied in one day, you can apply one layer at a time if it is necessary.

It is advised to always clean the surface before application of the next layer if there has been such a break from application.

How clean does the surface have to be?

Rapidroof is a fully bonded system; if there is any dust or dirt on the surface RapidRoof will bond to this.

Ensure the surface is clean by using a high-pressure jet wash or similar cleaning method.

Ultimately, each project is unique, and it's down to the applicator to decide the best method of cleaning for that specific surface.

Do I need to use a flashing or termination bar?

Rapidroof is a self-terminating system and can ideally be finished under or on any existing flashing or halfway up a clean and dust free brick course or parapet wall.





How do I become an approved installer?

EcoProof run training sessions at regular intervals, here you will be trained on our systems and once completed will be awarded approved status.

Please contact our team to register for one of our training sessions.

Can I slow down the curing process?

Using less or more catalyst can affect curing time, but it may also cause an uneven and incomplete curing of the membrane.

We advise to always stick to the prescribed catalyst to product ratio.

What can I clean my brushes or roller in?

We strongly advise disposing of brushes and rollers after each use, this avoids any contamination occurring in the membrane and ensures a uniform finish.

Due to this we advise using cheap brushes and short pile rollers.

Where can I get further information?

For further information on any of our products and systems please contact our technical team on 00 350 58478000 or email enquiries@ecoproofinternational.com.

Further information and technical data is also available on our website at ecoproofinternational.com.



Additional information

Handling

Keep containers upright and tightly closed when not in use and keep from freezing.

Pot life

RapidRoof has a working life of up to 20 minutes depending on atmospheric conditions:

Pot life @ 20°C: 15 Minutes Pot life @ 10°C: 20 minutes.

Traffic after curing

Light Foot Traffic: 1 hour @ 20°C Vehicular Traffic: 2 Hours @ 20°C

Full chemical resistance: 24 hours @ 20°C

Shelf life

RapidRoof has a shelf life of 12 months when stored in original unopened containers.

Catalyst Ratio

The catalyst ratio equates to 2% of the main product, 20g of catalyst to every 1Kg of product.

Caution

Avoid naked flames, avoid contact of the material with skin and eyes. Wear gloves and goggles. Wash off splashes immediately with soap and water.

Any eye contamination must be rapidly irrigated with copious amounts of clean water and immediate medical attention sought.





Storage

Store in dry conditions between $5^{\circ}c - 20^{\circ}c$, out of direct sunlight in accordance to manufacturer's instructions.

Adequate ventilation of the storage area should be provided.

Please refer to material safety data sheet for additional information.

Contact

EcoProof International Ltd

Unit 96 Harbours Walk

The New Harbours

Gibraltar GX11 1AA

T. 00 350 58478000

E. enquiries@ecoproofinternational.com

W. ecoproofinternational.com

Opening times: 8:30am -5:30pm Mon-Fri

Note

RapidRoof shall be applied strictly in accordance with the manufacturer's instructions. For specific advice regarding any aspect of our systems please consult our technical team.

Product Volume	Catalyst
1KG	20g
5KG	100g
10KG	200g