



## **Permaroof500 Liquid EPDM Rubber: Installation Guide**

# www.permaroof.co.uk



## Permaroof500 Liquid EPDM Rubber: Installation Guide



What's in this guide?

In this comprehensive tutorial we're going to introduce you to, and show you how to apply the Permaroof500 Liquid EPDM waterproofing system.

- An introduction to Permaroof500 Liquid EPDM
- Detail application
- Main area application
- <u>Top Coat UV application</u>
- The creation of anti-slip surfaces
- Application to pitched roofing.

Please refer back to our <u>resources page</u> to download the tutorials individually.

Let's go...





## **Introducing Permaroof500 Liquid EPDM**



Permaroof500 Liquid EPDM Waterproofing system provides a cost-effective solution to completely transform your spaces either at home or in a commercial environment.

With the ability to apply liquid waterproofing to many surfaces, the possibilities are almost endless for domestic application, and makes it ideal for DIYers with its rapid curing time, ease of application and because it can be applied over existing roof coverings.

Our system is easy to apply and cures fast, leaving a smooth, professional finish and making it a great solution for balconies, external stairs, walkways, paths and garden office roofing.

Once completely dry and cured, the product can remain performing successfully with a 15 or 20-year warranty.



#### **Preparation**

Preparation of the area is critical to ensure a successful application of the Permaroof500 Liquid EPDM. Failure to prepare the surface properly can potentially lead to compromised performance of the finished project.

#### This is the *most important step.*

Preparation must be carried out **before opening and mixing** the product, as once combined with the accelerator, the Permaroof500 Liquid EPDM has a pot life of 25 minutes.

First use a domestic brush to completely clear away any loose surface dirt, stones and other debris, making sure that the area to be treated is completely clear.

If necessary, remove any grease or surface dirt patches by washing down with a suitable cleaner or ordinary soapy water and allow to dry thoroughly before you begin mixing the product.

Once fully dry, you are ready to begin mixing the product...





#### **Mixing the Product**

Open the Permaroof500 liquid EPDM drum and stir thoroughly before adding the accelerator.



Add the accelerator and mix again with a low-speed mixer for a couple of minutes until completely blended.



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#### Things to remember:

Once mixed with the accelerator, the Permaroof500 Liquid EPDM has 20-25 minutes of pot life.

Top Tip 1: During the preparation stage, identify any areas that could be marked by drips, such as fascia boards, for example, and use wide masking tape to protect them.

Top Tip 2: Mix the Permaroof500 and accelerator in batches in a smaller container if the project is a large one, remembering the 20-25-minute pot life guideline.

Important: Carry out all detailed work first and allow to go off before working on the main application area.

Let's get to work on the application...

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## **Detail Work Application**



Apply the accelerated Permaroof500 across the surface of your detail work area and 50mm onto the roof deck using a roller.



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Lay the Permaband onto the surface, overlapping joins by 50mm. Dry roll firmly into the liquid membrane until it is drawn through. Overlap joins by 50mm. Add another layer of the product.

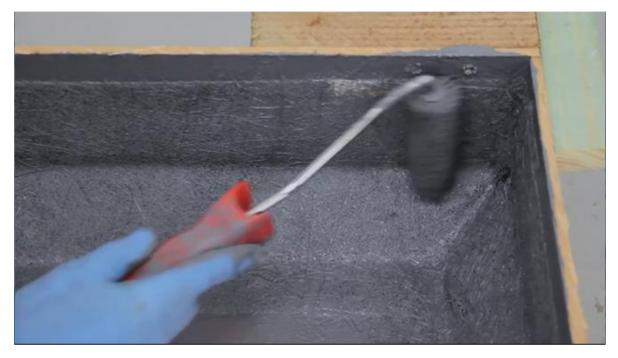




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Note that after a couple of minutes, the matting softens considerably, and can then be rolled tight into any detail.



Repeat this process on all relevant areas, considering that joins must be lapped 50mm each side and on any change of material.







Joins in the Permaband, trims or fixings must be overlapping 50mm on each side and on the board.



There should also be 50mm on the trim covering the fixing.







#### **Outlets and extrusions**

Outlets and other detailed work must be treated in the same way, by using matting embedded in a thick coat of Permaroof 500, as previous.





Allow all detail work, including joins, to dry and cure fully before applying the product to the main area.





## **Main Area Application**



Accelerated Permaroof500 can be applied to the main surface in one or more layers using a 9-inch, solvent-resistant roller. Each layer must be fully cured before applying the next.







Next lay the matting. Work in sections, as shown, when applying the matting to the surface area. As before, dry roll the product through.



And add another layer of the Permaroof500 liquid EPDM to fully embed the matting before moving to the next section.



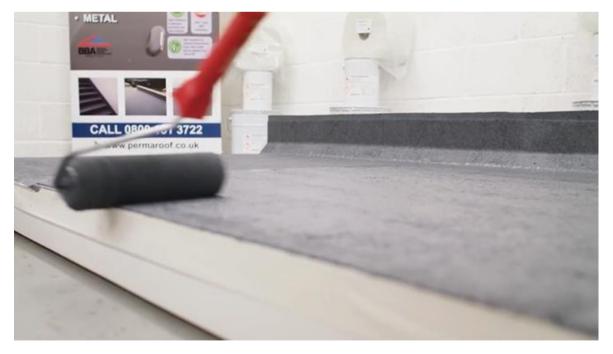
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Go over the entire area to fully embed all sections into the Permaroof500 Liquid EPDM.



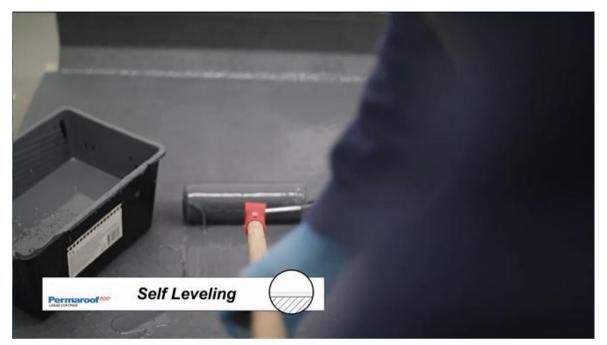
Make sure the Permaroof500 liquid EPDM is worked right to the edges of the area.



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As it is naturally self-levelling, the Permaroof500 liquid EPDM does not need to be over-worked.



This provides more control over the thickness, which needs to be a minimum of 1.4mm thick, or a coverage rate of 2kg per square metre.







Accelerated Permaroof500 will be touch-dry in approximately 40-50 minutes and ready for topcoat in a couple of hours.

The Permaroof500 liquid roof system can be complemented with our unique Permaroof trim system, giving your roof a professional, neat-looking finish.





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Full details on how the trim is installed is covered in our training course.



Find out more about Permaroof Liquid training at http://www.permaroof.co.uk/liquid-training

To complete installation of the Permaroof500 Liquid EPDM roofing system, a Top Coat UV product is applied. This layer offers a hard-wearing, durable surface that also gives the product longevity.

Anti-slip coatings can be added to the top coat layer directly or mixed with the product.

Let's see how to apply the Permaroof500 Top Coat UV layer.

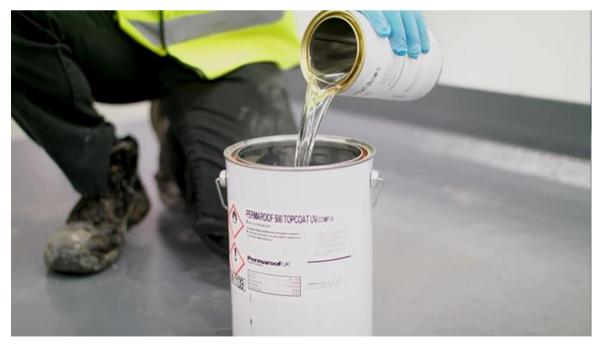




## Application of Permaroof500 Liquid EPDM Top Coat UV



Permaroof500 Top Coat UV is pre-measured in 1.3 tin part A, and 1.7 litre tin part B. Both tins can be mixed together fully and applied at a coverage rate of 150g per square metre.



This will cover around 25 square metres, or has a mixing ratio of 6parts A:1part B for smaller areas.





## Mix thoroughly to ensure the two products are fully blended.



You will notice that the colour becomes slightly lighter when fully blended.



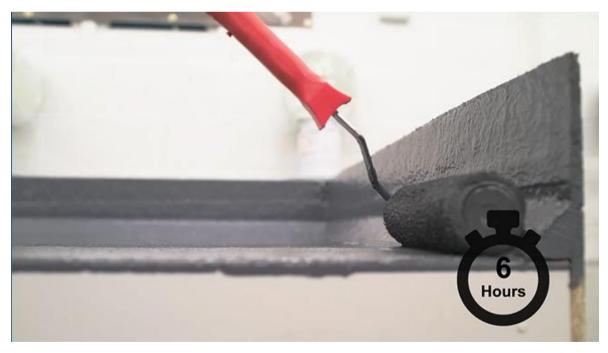




## Add the blended product to a suitable container.



The pot life of the mixed product is approximately 6 hours.



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Using a roller, apply the Permaroof500 Top Coat UV to the entire surface of your working area, making sure coverage is complete.



Permaroof500 Top Coat UV is also self-levelling, so there is no need to overwork the product.







#### **Additional information:**

For car parks and high traffic areas, two layers of Permaroof500 Top Coat UV must be applied.

Allow each layer to dry and cure fully before applying the next.

It will dry in around 1-2 hours depending on the weather.

Permaroof500 Liquid EPDM can also be used to effectively create anti-slip surfaces to increase safety for certain types of use:

- External staircases or steps
- Balconies
- Safe walking surfaces in nurseries, schools and homes for the elderly
- Swimming pool areas
- Car parks

This involves adding a medium to the Permaroof500 top coat UV layer.

Let's look at how it's done...





## **Creating an Anti-slip Surface**



Anti-slip finishes can be applied directly onto the Top Coat UV layer while it is still wet.

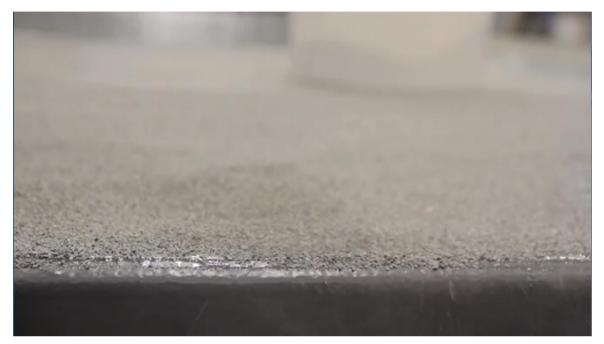


Depending upon the design level required, silica sand, mineral clippings or other suitable anti-slip finishes can be added.





Make sure you add the anti-slip medium to the edges of the area.



Allow the top coat to dry before sweeping off loose chippings. Masking tape must be removed immediately after the anti-skid has been applied.







For a finer, encapsulated anti-skid, you can add Permaplastic to the mixed Top Coat UV at a 10–50% ratio before application.



Mix thoroughly at medium speed and ensure the product is well-blended. This plastic bead does not sink to the bottom of the mixed tin or container.







When applying the Permaroof500 Top Coat UV combined with PermaPlastic with a roller, it leaves a finer anti-skid encapsulated in the surface area.



This is ideal for balcony areas or swimming pool patios where people will be walking barefoot.



Allow to fully dry and cure before walking on the surface.





For commercial or heavy use, such as in a car park, public park area or in areas with steps, the creation of anti-skid and antislip surfaces is simplified with the use of Permaroof500 Liquid EPDM rubber.

The professional teams at Permaroof are available to offer advice and recommend the best anti-skid mediums for individual commercial projects.

Contact the Permaroof teams on **01773 608 839** 

We aren't quite done yet, however...

Permaroof500 Liquid EPDM systems contain a self-levelling compound, which makes it easier to apply. This does not mean that the system is unsuitable for pitched roofing.

Permaroof has introduced **Permathix**, an innovative product that effectively removes the self-levelling element of the Permaroof500 Liquid EPDM, enabling run-free and even application to pitched and sloped surfaces.

Let's look at how it's done...





## **Application to Pitched Roofing**



If the surface you want to cover is pitched, or even vertical, you can mix Permathix and Permaroof500 to take the self-levelling element out of the product and avoid runs or drops.



Permathix is available in 1-litre tins. Usually 250ml of Permathix per 25kg drum is sufficient.







Accelerator can still be used with Permathix. Mix the Permaroof500 Liquid EPDM with accelerator as in flat surface applications, before adding the Permathix.



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After mixing the accelerator, following the same process as aforementioned, add the Permathix - usually 250ml of Permathix per 25kg drum is sufficient.



Mix the Permathix into the Permaroof500 (whether accelerated or not) by hand until thoroughly blended. Ensure the Permathix is fully incorporated.



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Apply the Permaroof500 Liquid EPDM with a roller to the pitched surface and continue the project following previous steps in this installation guide for flat surfaces.



Permathix also allows Permaroof500 to be applied in box gutters with matting in a wet on wet system.







# You can view the full video demonstration online at:

## https://youtu.be/LSM-fRxCMIQ

Follow our channel and view all our video tutorials and demonstrations.

You can download this installation guide in individual sections in the resource library:

www.permaroof.co.uk/diy-flat-roof-library

# For more guides, videos and downloads please visit:

## www.permaroof.co.uk

## To buy the Permaroof500 Liquid EPDM system, please visit the Permaroof online store:

https://www.permaroofstore.co.uk/produc ts/permaroof-500-liquid-rubber-roofing

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