

Edition February 2023

# MAPEGUARD WP 2K MEMBRANE

CEMENT-BASED MEMBRANE SYSTEM  
INSTALLATION INSTRUCTIONS



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## RELEVANT PRODUCTS

### MAPEGUARD WP 2K MEMBRANE SYSTEM

PRODUCT TYPE	VAPOUR RESISTANCE	PRODUCT	CONSUMPTION	DRYING TIME
Primer/Vapour barrier	Sd > 69 m	PRIMER VT PLUS	2 x 0,15 kg/m <sup>2</sup>	Ca 30 min
Primer (Sd < 10 m)	Sd > 2,2 m	PRIMER G	0,1 – 0,2 kg/m <sup>2</sup>	30 – 40 min
Primer (Sd < 10 m)	Sd > 2,2 m	ECO PRIM T PLUS	0,1 – 0,2 kg/m <sup>2</sup>	15 – 20 min
Liquid membrane	–	MAPEGUARD WP 2K MEMBRANE	>1,5 kg/m <sup>2</sup>	Ca 3 hours

WATERPROOFING DETAILS	PRODUCT	SIZE
Sealing tape	MAPEGUARD ST	12 cm x 10 m / 30 m
Elastic sealing tape	MAPEBAND EASY	13 cm x 10 m / 30 m
Inner corner	MAPEGUARD IC	
Inner corner	MAPEBAND EASY 90°	
Outer corner	MAPEGUARD EC	
Outer corner	MAPEBAND EASY 270°	
Pipe collar	MAPEGUARD PC 10–24 MM	10 – 24 mm
	MAPEGUARD PC 15–38 MM	15 – 38 mm
	MAPEGUARD PC 28–50 MM	28 – 50 mm
	MAPEGUARD PC 32–55 MM	32 – 55 mm
	MAPEGUARD PC 50–75 MM	50 – 75 mm
	MAPEGUARD PC 75–110 MM	75 – 110 mm
	MAPEGUARD PC 100–130 MM	100 – 130 mm
	MAPEGUARD WC 30x45 CM	30 x 45 cm
Drain collar	MAPEBAND B DC	37 x 37 cm
Drain collar, long	MAPEBAND B DCL	37 x 120 cm
Butylic tape	MAPEBAND B T	12 cm x 20 m

## CONDITIONS FOR USE

### VAPOUR RESISTANCE

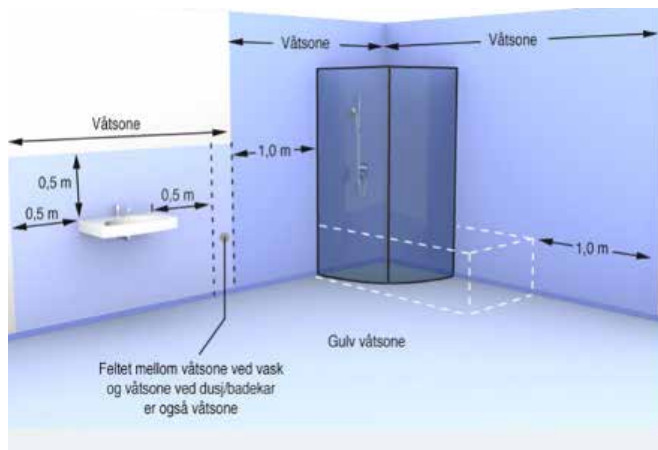
MAPEGUARD WP 2K MEMBRANE liquid membrane system achieves a vapour resistance with an  $S_d$  value  $> 69$  m when PRIMER VT PLUS and MAPEGUARD WP 2K MEMBRANE is used together. Norwegian requirements state that walls, floors and ceilings that borders to outdoor climate or rooms with limited heating must be vapour resistant with an  $S_d$  value  $> 10$  m. For these areas, Primer VT Plus must be applied to comply with Norwegian requirements. Other surfaces can be primed with any of the system's primers.

### TO ACHIEVE THE REQUIREMENT OF VAPOUR RESISTANCE, PRIMING MUST BE EXECUTED AS FOLLOWS:

2 coats of PRIMER VT PLUS applied perpendicular ( $90^\circ$  in relation to each other) with  $0,15 \text{ kg/m}^2$

### APPLYING MEMBRANE:

Wetroom membrane must be applied in all wetzones:



Source: TEK17 from dibk.no

### Required thickness to membrane layer in wetzones:

#### FLOOR:

One or more coatings of MAPEGUARD WP 2K MEMBRANE to achieve a thickness of minimum 1 mm. This corresponds to a consumption of at least  $1,5 \text{ kg/m}^2$ .

#### WALLS:

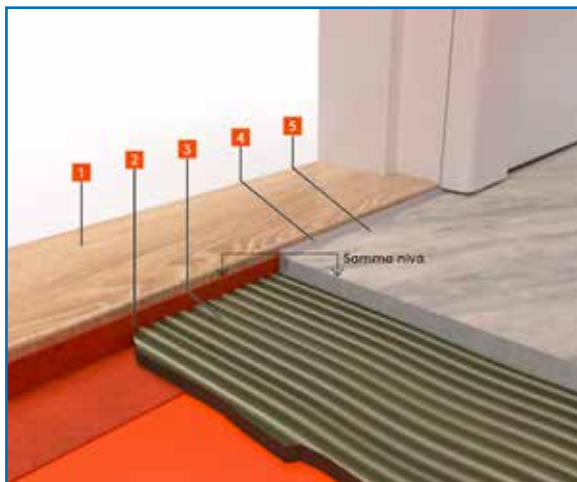
One or more coatings of MAPEGUARD WP 2K MEMBRANE to achieve a thickness of minimum 1 mm. This corresponds to a consumption of at least  $1,5 \text{ kg/m}^2$ .

It is advised to apply the membrane system to the floor and all walls and joints in the wetroom to achieve required waterproofing and vapour resistance.

For product documentation required by the Norwegian Building Authority (DIBK), please refer to the Technical Approval from Sintef, TG 20806. All relevant products for the membrane system and user conditions are listed in TGA for Denmark, ETA for Sweden and Finland.



## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE



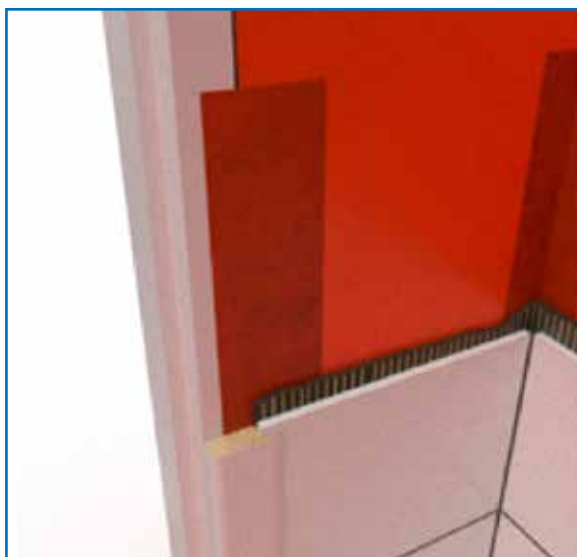
Source: BBV

- 1 Door sill
- 2 MAPEBAND B T
- 3 Tile adhesive
- 4 MAPESIL AC/MAPESIL LM
- 5 Ceramic tile

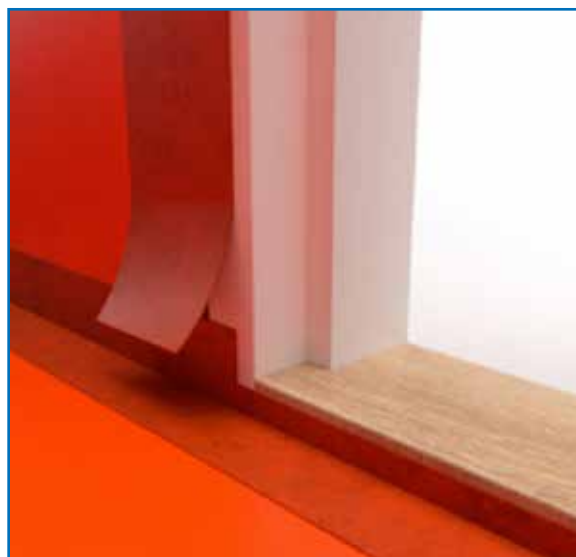
### SEALING AGAINST DOOR SILLS

A way to connect the MAPEGUARD WP 2K MEMBRANE system to door sills, is to adhere a strip of MAPEBAND B T butylic tape to the substrate before applying MAPEGUARD WP 2K MEMBRANE and fold up against the sill to the level of finished floor. MAPEGUARD WP 2K MEMBRANE is then applied over the butylic tape. An option to using MAPEBAND B T is MAPEGUARD ST or MAPEBAND EASY, adhered using MAPEFLEX MS45.

### SEALING GAP BETWEEN WALL AND DOOR FRAME



Source: BBV



Source: BBV

MAPEBAND B T BUTYLIC TAPE or MAPEGUARD ST or MAPEBAND EASY.

The door frame should be on level with the substrate as shown in the picture. The door sill and frame should be installed before the MAPEGUARD WP 2K MEMBRANE liquid membrane system is installed. Sealing against the doors frame can be done the same way as against the sill by joining with MAPEBAND B T butylic tape before applying MAPEGUARD WP 2K MEMBRANE. An alternative is to seal the gap with MAPEGUARD ST or MAPEBAND EASY using MAPEFLEX MS45.

## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

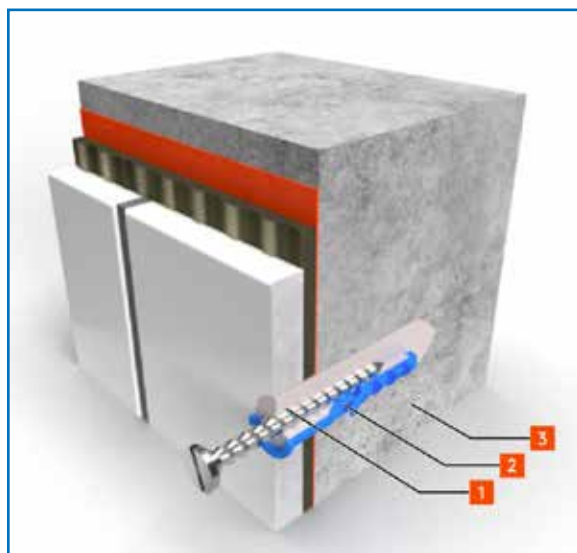
### SEALING BORE HOLES IN THE MEMBRANE LAYER FROM INSTALLATIONS IN A FINISHED WETROOM

All holes in the membrane for installations done when the wetroom is completed should be sealed by filling the bore hole with [MAPESIL AC](#) or [MAPESIL LM](#).



Illustrasjon: BBV

- 1 [MAPESIL AC/MAPESIL LM](#) and plug
- 2 Board
- 3 Wooden lath



Illustrasjon: BBV

- 1 [MAPESIL AC/MAPESIL LM](#)
- 2 Plug
- 3 Concrete wall

## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### PREREQUISITS

- 1 The residual humidity in concrete substrates must not be higher than 85 % RH together with **PRIMER VT PLUS**, and 95% RH with other primers.

The substrate must be clean, dry and free of dust, oil, fat, and residues before installation. Large cracks, chips and indentations from screws must be filled.

Remove any cement laitance and curing membrane from concrete substrates. Substrate preparation may be performed by grinding or blasting followed by vacuuming.

- 2 The substrate shall under all circumstances be vacuumed after cleaning preparation before the membrane system is installed.

- 3 Check that sloping towards drain is made correct, and that there are no recesses in the floor where water can collect and be left standing.

- 4 Check that all protruding pipes are firmly installed and protruding perpendicular (90°) from the walls and floor.

#### Suitable tools

- Paint roller
- 50 mm brush
- Plastic wallpapering tool with rounded corners
- Scissors
- Knife
- Angle iron





## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### VAPOUR BARRIER

- 1 For surfaces that requires vapour resistance, **PRIMER VT PLUS** must be applied.

**PRIMER VT PLUS** must be applied in 2 coats. The 2nd coat must be applied at 90° to the first coat.

Consumption per coat: min 0,15 kg/m<sup>2</sup>  
Total consumption: min 0,3 kg/m<sup>2</sup>



### PRIMER

- 1 Surfaces without requirements regarding vapour resistance, can be primed with **PRIMER VT PLUS**, **PRIMER G** or **ECO PRIM T PLUS**.



- 2 **PRIMER G** is suitable for absorbing substrates. **PRIMER G** is applied in one or more coats, and can be diluted with water depending on the substrate. Ratio is listed in the Technical Data Sheet.



- 3 **ECO PRIM T PLUS** is suitable for light absorbing, and non-absorbing substrates. **ECO PRIM T PLUS** is applied in one or more coats, and is not to be diluted.



## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### CONNECTION TO DRAINS

- 1 Remove the clamp ring, if installed. Insert the knife foot if such is provided the relevant drain.



- 2 Remove the first half of the covering paper from MAPEBAND B DC or MAPEBAND B DCL drain gasket and adhere the exposed part halfway over the drain, such that the drain gasket is centered over the drain.



- 3 Remove the rest of the covering paper and adhere the other half of MAPEBAND B DC or MAPEBAND B DCL over the drain. Make sure the drain gasket is adhered flat and without air pockets.



**Connection to various drains is described at the end of the instruction manual.**

# INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

## PREPARATION AND PRIMING

- 1 MAPEGUARD WP 2K MEMBRANE is applied with a roller and a brush for details.

Consumption:

- ca 1,5 kg/m<sup>2</sup> to achieve 1 mm thickness on walls
- ca 1,5 kg/m<sup>2</sup> to achieve 1 mm thickness on floors

Time between coats: about 25–30 min.



- 2 Apply first layer of chosen primer.  
PRIMER VT PLUS applied with at least 0,15 kg/m<sup>2</sup>.



- 3 Apply the second coat perpendicular to the first.  
MAPEGUARD WP 2K MEMBRANE may be applied when the primer is dry.



## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### WATERPROOFING PIPES

- 1 Apply **MAPEGUARD WP 2K MEMBRANE** around the pipe. Make sure the entire backside of the collar is covered.



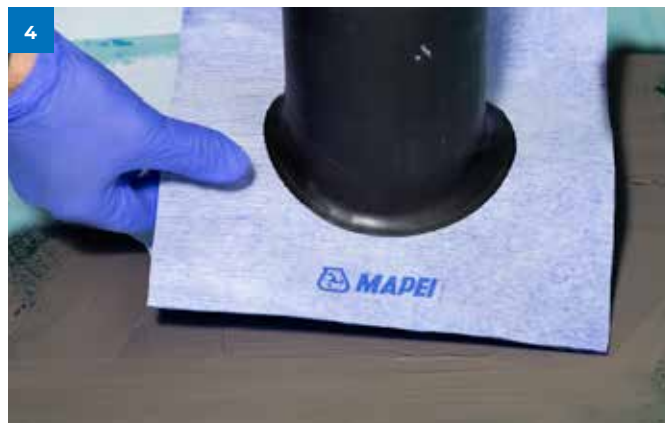
- 2 Place a **MAPEGUARD PC** pipe collar in the correct size over the pipe.



- 3 Press the collar into the membrane. Press out any air pockets. Cover the entire pipe collar in **MAPEGUARD WP 2K MEMBRANE**.



- 4 Complete all pipes.



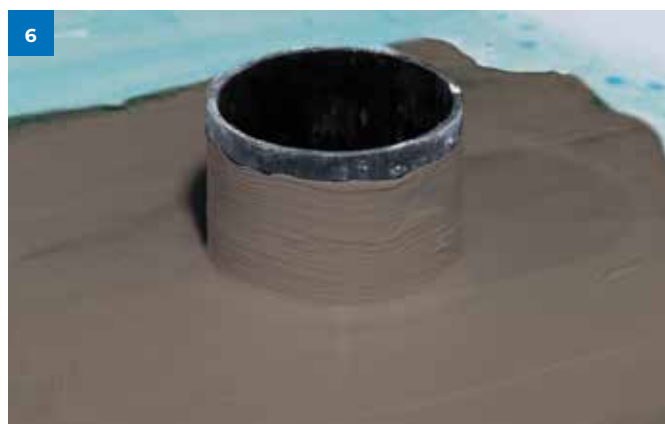
## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### WATERPROOFING PIPES

- 5** MAPEGUARD WP 2K MEMBRANE is applied around the transition where the collar's rubber core meets the pipe. The collar is to be fully coated in MAPEGUARD WP 2K MEMBRANE.



- 6** Finished sealing of a Ø110 mm drain pipe.





## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### WATERPROOFING CORNERS AND JOINTS, AND APPLICATION OF MAPEGUARD WP 2K MEMBRANE

- 1 Start by measuring joints between walls and floor and any joints in the substrate. Cut to size pieces of the chosen sealing tape: [MAPEGUARD ST](#) or [MAPEBAND EASY](#).



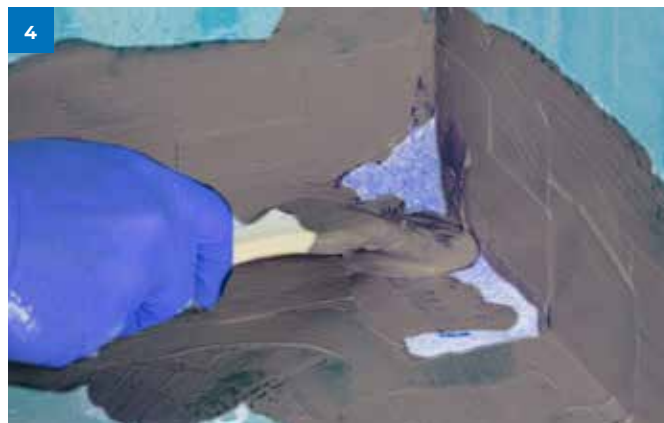
- 2 Apply [MAPEGUARD WP 2K MEMBRANE](#) to inner corners. Apply sufficiently to cover the entire backside of the chosen corner gasket: [MAPEGUARD IC](#), or [MAPEBAND EASY 90°](#).



- 3 Place [MAPEGUARD IC](#) or [MAPEBAND EASY 90°](#) in the inner corner and press out any air pockets.



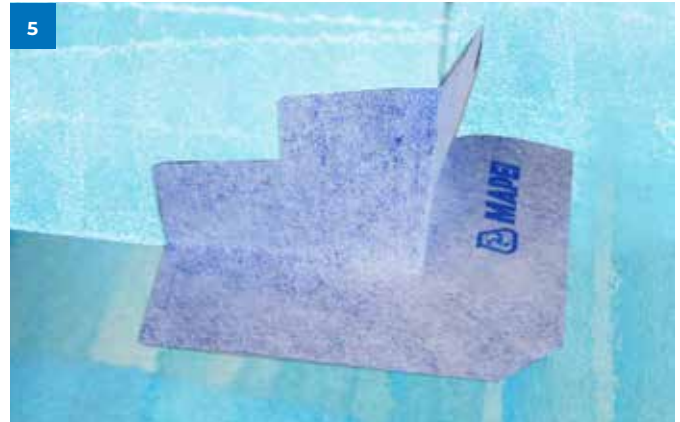
- 4 Cover the entire corner in [MAPEGUARD WP 2K MEMBRANE](#).



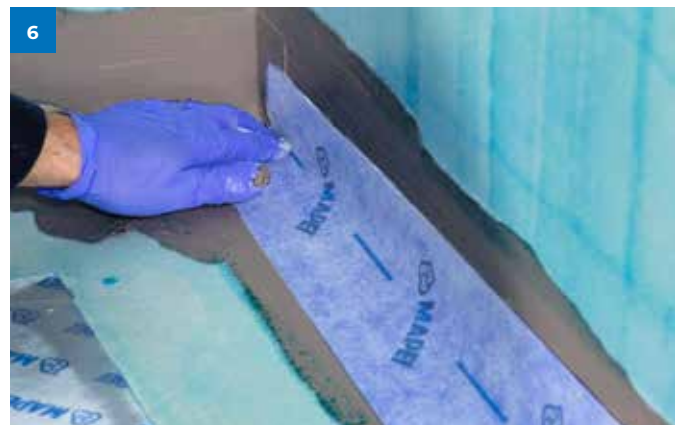
## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### WATERPROOFING CORNERS AND JOINTS, AND APPLICATION OF MAPEGUARD WP 2K MEMBRANE

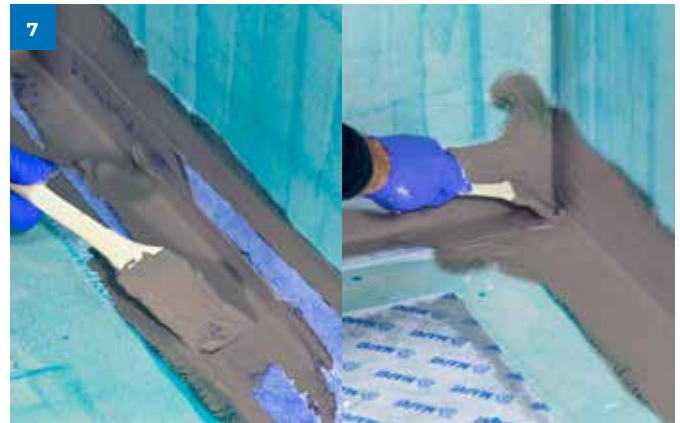
- 5** MAPEGUARD EC or MAPEBAND EASY 270° is likewise installed in outer corners.



- 6** Apply MAPEGUARD WP 2K MEMBRANE and install ready-cut pieces of MAPEGUARD ST or MAPEBAND EASY in joints between walls and floors. Make sure that the center line coincides with the joint. Press the sealing tape firmly into the joint to prevent that any air pockets or chamfering occurs.



- 7** Cover the entire sealing tape with MAPEGUARD WP 2K MEMBRANE.



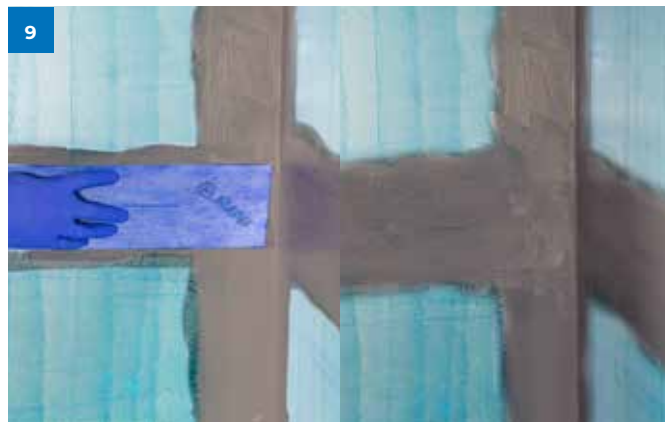
- 8** Install MAPEGUARD ST or MAPEBAND EASY likewise in all joints between walls.



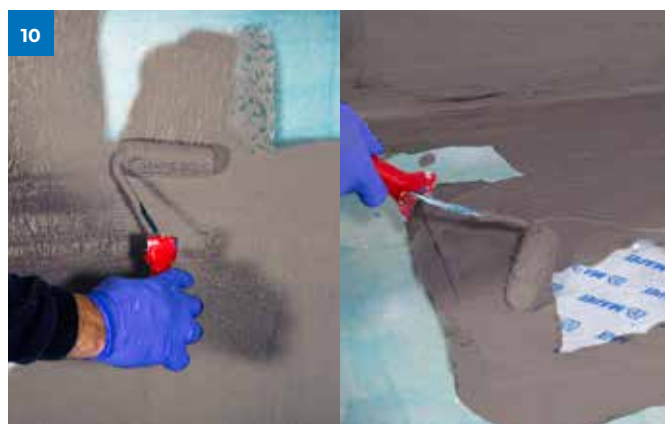
## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### WATERPROOFING CORNERS AND JOINTS, AND APPLICATION OF MAPEGUARD WP 2K MEMBRANE

- 9** Install **MAPEGUARD ST** or **MAPEBAND EASY** likewise over any board joints in the substrate.



- 10** Apply **MAPEGUARD WP 2K MEMBRANE** with a roller to all surfaces in the wetzone. Apply at least 1,5 kg/m<sup>2</sup> on walls and at least 1,5kg/m<sup>2</sup> on the floor. Wait about 25–30 min between each coat.



- 11** Wetroom after finished installation of **MAPEGUARD WP 2K MEMBRANE** liquid membrane system. Check that the installation has been performed correctly. Check that:

- The membrane layer is complete and any damages / tears has been repaired.
- All joints, corners and pipes has been sealed correctly.

It might be useful to take pictures during and after the installation.





## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### CONNECTION TO PURUS DRAIN WITH BOLTED CLAMP RING

**1** Check that the drain is installed flush with the substrate. Remove the screws and take off the clamp ring. Check that the o-ring is installed under the clamp ring.



**2** Install knife stand or cutting guide if such is provided for the drain.



**3** Install [MAPEBAND B DC](#) drain collar and the [MAPEGUARD WP 2K MEMBRANE](#)-system as described above.  
When the [MAPEGUARD WP 2K MEMBRANE](#) has cured (about 3 hours after the second coat), install the Purus-knife if provided for the drain.



**4** Cut a hole in the [MAPEGUARD WP 2K MEMBRANE](#) and [MAPEBAND B DC](#) using the Purus-knife, or any other knife. Cut only a small hole to begin with.



## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### CONNECTION TO PURUS DRAIN WITH BOLTED CLAMP RING

- 5** Install the clamp ring with the screws over the drain.  
Do not use a power tool.



- 6** Cut the hole clean around the clamp ring. Make sure that a narrow edge of the membrane and drain gasket is visible under the clamp ring.



- 7** Ready installed Purus drain with bolted clamp ring.



## INSTALLATION OF MAPEGUARD WP 2K MEMBRANE

### CONNECTION TO PURUS DRAIN WITH PRESSED CLAMP RING

**1** Check that the drain is installed flush with the substrate. Remove the screws and take off the clamp ring. Check that the o-ring is installed under the clamp ring.



**2** Install knife stand or cutting guide if such is provided for the drain.



**3** Call the [MAPEBAND B DC](#) drain collar and the [MAPEGUARD WP 2K MEMBRANE](#)-system as described above.  
When the [MAPEGUARD WP 2K MEMBRANE](#) has cured (about 3 hours after the second coat), install the Purus-knife if provided for the drain.



**4** Cut a hole in the [MAPEGUARD WP 2K MEMBRANE](#) and [MAPEBAND B DC](#) using the Purus-knife, or any other knife. Cut only a small hole to begin with.



## MONTERING AV MAPEGUARD WP 2K MEMBRANE

### CONNECTION TO PURUS DRAIN WITH PRESSED CLAMP RING

- 5 If installed, remove the knife mount or cutting guide from the drain, and press the clamp ring over the [MAPEGUARD WP 2K MEMBRANE](#) down into the drain. Cut the hole clean around the clamp ring.



**For other drains, see separate installation instructions.**







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