

Issue: Curing Of Substrate Prior To Membrane Application

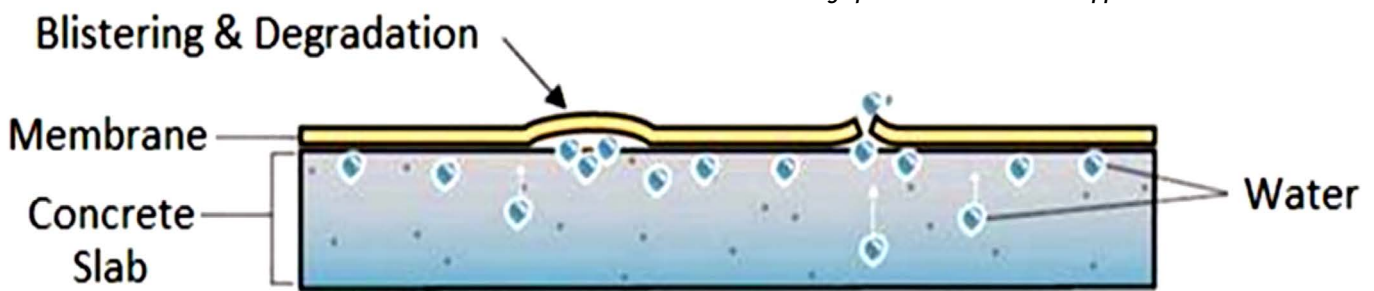
August 2023

Waterproofing issues continue to occur due to increased program pressure during construction to install membranes onto substrates not adequately cured.

All suppliers typically specify 28 days for curing to occur prior to any membrane application. Curing rates to achieve the correct moisture content in a substrate prior to the membrane application is the key for correct adhesion and in avoiding blistering and delamination issues.



1. Blistering of membrane due to entrapped moisture



Early application of membranes onto substrates with a high moisture content is the cause of most blistering and delamination issues.

Entrapped moisture heats up and expands, trying to escape, it delaminates and blisters the membrane from underneath. Eventually, the blisters break resulting in water ingress.

AS 4564.2 -2012 outlines that "moisture content of mortar toppings and concrete substrates should have 8% or less, or suitable for the application of a membrane.

High moisture content of the substrate may cause blistering in some membranes and failure of the membrane system to fully cure."



2. Delamination of membrane from substrate



3. Delamination of membrane, high moisture content

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Recommended Curing Times*:

- Concrete - 28 days curing.
- Hobs (100mm wide) - 14 days curing.
- Screeds (50mm or less) - 7 to 10 days curing .
- Block walls - 7 to 10 days curing.
- Roof plinths (10M² or less) - 7 to 10 days curing.

*NOTE:

- Environmental factors play a huge part in construction - Curing times will vary depending on the season, summer vs winter, rainfall, and high humidity. Please speak to your Bayset representative to determine a fit for purpose solution on site.
- 2-part spray applied polyurea require the moisture content in the substrate to be 5% or less prior to application.

28 MINIMUM
DAYS FOR
CURING

