

Prehydration Assessment for Aussie Swell Red Waterstop Due to Exposure

Introduction- What Does Active Mean?

AVM's Aussie Swell Red is a hydrophilic strip waterstop composed of a formulated blend of sodium bentonite & butyl rubber. Being as it is formulated with sodium bentonite, the Aussie Swell Red is classified as an "active" waterstop meaning that it reacts to water/moisture by activating and swelling. This makes it particularly effective in sealing construction joints once it is confined entirely in concrete by swelling within its confinement and self-injecting into localized voids and minor fissures resulting in a strong replacement for the conventional passive PVC/Rubber waterstops.

As is the case with any active sealing product, there is a risk of hydration to the Aussie Swell Red prior to the encapsulation in concrete due to environmental and hydrostatic conditions. In a perfect situation, the Aussie Swell Red will only hydrate after it has been submerged in concrete. Often, this is not the case and pre-hydration will occur which can greatly impact the performance of the Aussie Swell Red and can call for it to be completely removed and replaced with new Aussie Swell. This Assessment Guideline is to assist in determining whether the Aussie Swell Red has reached a point of excessive hydration prior to the concrete coverage.

Exposure Limits & Guidelines

There are two criteria that should be reviewed during each scenario when Aussie Swell Red has become hydrated prior to concrete confinement to determine if the Aussie Swell is still good: **Activation & Adhesion**. Not every scenario of pre-hydration is alike. In the most extreme conditions, the Aussie Swell Red will remain

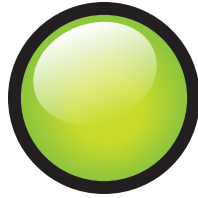
submerged in standing water for a minimum of 7-10 days allowing the Aussie Swell Red to reach its maximum potential prior to coverage. Actual exposure scenarios are going to be less severe resulting in the Aussie Swell Red not reaching its maximum potential.

Activation: Aussie Swell Red can become partially activated prior to concrete coverage as it does not need to achieve maximum swell in order to be effective in sealing joints and fissures. To assess partially hydrated Aussie Swell Red ensure there is not cracking along the corners and edges of the waterstop. The Aussie Swell should remain intact without major surface cracks. If the Aussie Swell Red can be compared to an alligator tail, the product has reached the maximum activation allowed prior to coverage and will need to be removed and replaced with a new strip of Aussie Swell Red.

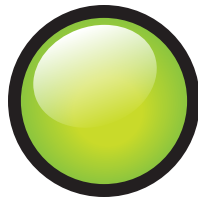
Adhesion: The Aussie Swell Red should be fully adhered to the substrate by the Aussie Seal-M. As the Aussie Swell Red begins to activate due to pre-hydration, that adhesion can be influenced. Look for gaps between the substrate and the Aussie Swell Red. Clasp the Aussie Swell Red and test the quality of the adhesion by pulling gently on the waterstop. If the Aussie Swell Red can be easily removed, the product should be replaced by a new strip.

If the Aussie Swell Red remains well bonded to the substrate and there is not any indication of major surface cracking, then the product can remain in place. Standing water should be removed as soon as possible to prevent excessive hydration prior concrete coverage.

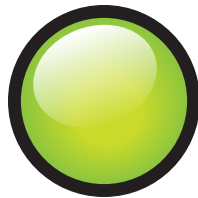
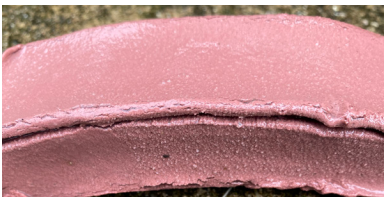
Visual Assessment Guideline for Aussie Swell Red



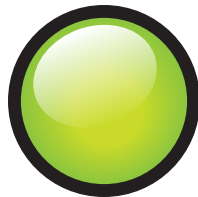
The Aussie Swell Red has not been exposed at all and remains perfectly intact.



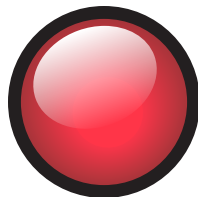
The Aussie Swell Red was left exposed and submerged for less than a day. Color has faded and the waterstop has activated slightly. Still remains mostly intact and adhered to substrate.



The Aussie Swell Red was left exposed and submerged for two days. The waterstop continues to swell due to activation. Still adhered to the substrate.



The Aussie Swell Red was left exposed for 3-5 days. The waterstop continues to further swell and is showing minor signs of surface cracking. Remains adhered to substrate.



The Aussie Swell Red was exposed and submerged for around a week. The waterstop has swelled to a point of extreme surface cracking to where it is separating from itself. To remain eligible for the warranty, removal and replacement would be required.

For additional or specific questions regarding pre-hydration of the Aussie Swell Red, please consult your local AVM Sales Representative or the Technical Services department at: **888.414.1041** or **818.888.0050**.