

AUSSIE Clay 590 – Repair Guidelines

AVM's Aussie Clay 590 is a heavy-duty, high strength bentonite composite sheet waterproofing membrane consisting of needle punched woven and non-woven geotextile fabrics encapsulating a thick layer of active sodium bentonite between them. Aussie Clay 590 can be post applied, such as backfill foundation walls and tunnel lids, or can be pre-applied, such as underslab or propertyline applications.

When the membrane is installed in post applied applications, the risk of damage prior to backfill/overburden coverage is typically minimal but can still occur without precaution the membranes are installed. In pre-applied applications particularly underslab, there poses a risk of damage prior to concrete coverage. Proper site preparation, communication between the construction team, and protecting the waterproofing contractor's work all contribute to successful installation of the Aussie Clay 590. In the event that the membrane is damaged, the below guideline can be followed to ensure the membrane is repaired properly prior to coverage.

When to Repair

Designed with a robust two layers of geotextiles, AVM's Aussie Clay 590 membrane can be subjected to typical construction activity/traffic prior to concrete coverage without requiring repairs in most circumstances. There is always risk, however, that construction traffic/activity can result in damage to the membrane which will require repairs prior to concrete coverage or backfill for the system to properly work. Pre-hydration can also influence the performance of the membrane (please refer to PreHydration assessment bulletin). These necessary repairs often depend on the degree of damage that has occurred to the membrane and whether the installation sits in the water table (hydrostatic is present). Common causes of damage can be:

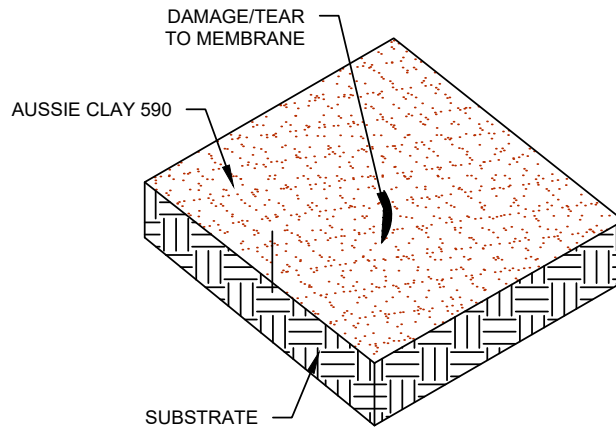
- Careless placement or movement of rebar or reinforcing over the membrane
- Construction activities occurring near the membrane (torching piles, placing formwork/steel, chipping concrete, etc.)
- Construction materials placed/dropped onto the membrane (steel, sharp tools, adhesives/chemicals, etc.)

Be aware of when these activities take place and be sure to check the membrane for any gashes, slices, punctures, tears, corrosion, etc. If any of the above is noted, the membrane will need to be repaired.

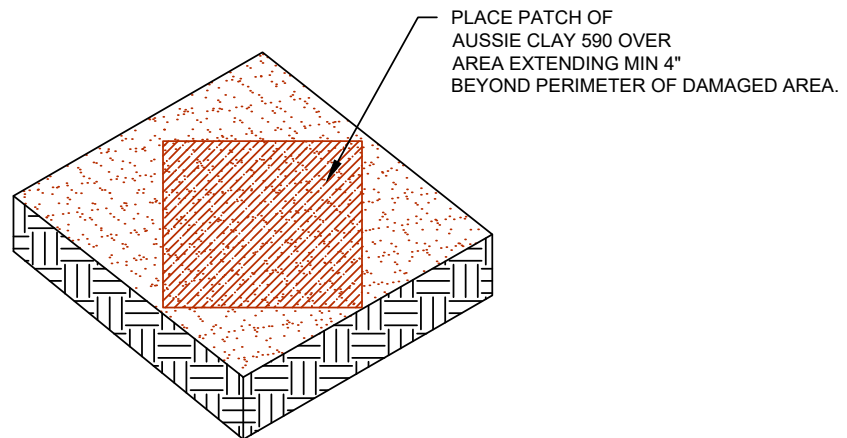
- Displacement of bentonite in the membrane

Repair Procedures

- Slice in the membrane
 - Install Aussie Clay patch centered over the slice that extends 4" around perimeter of slice
- Large area of damage or a cutout area from a misplaced penetration
 - Install Aussie Clay patch over the damage that extends 4" around perimeter of damaged area
- Displacement of bentonite in membrane due to pre-hydration
 - Remove any standing water and allow membrane to dry
 - Install Aussie Clay patch over the damage that extends 4" around perimeter of displaced area



Step #1



Step #2

Figure 1 - Repair Procedure for Aussie Clay 590

For additional or specific questions regarding pre-hydration of the Aussie Clay 590, please consult your local AVM Sales Representative or the Technical Services department at: **888.414.1041** or **818.888.0050**.