

Bonding



In our industry there are 2 types of Bonding/ Adhesion, they are Mechanical and Chemical. Let's start with Mechanical, To achieve this type of bond you need a porous substrate and a porous tile eg Bicottura. The moisture in the adhesive is soaked up by the substrate and the tile, in doing so it becomes a vehicle for the cement and polymer to ingress, and as the adhesive dries/hydrates the cement and polymer provide an adhesion which is usually very strong. The same also applies to bonding of the screed to the substrate. To ensure the screed does not delaminate the slurry you apply must be wet NOT at a toothpaste consistency as with an adhesive.

*
Working a slurry onto a substrate prior to screeding. Ensure it doesn't dry off



NOTE: The Viscosity

The slurry usually consists of cement, water and Morgan's Plastinex Red or Black Label, some tilers will use some of the screed and add Plastinex into it until a paint like consistency is achieved. (Pictured)

The 2 main things to remember here are 1: Apply plenty of slurry to the substrate, broom it in well so the semi dry screed sucks or allows the slurry to ingress. This fusion creates a bond and in most cases you won't get a drummy screed. 2: Don't overdo your cement content. Too much cement can cause your screed to buckle / lift. Normally 1 part GP cement to 4 parts Plasters sand is the go, if your requirement is a strong/ dense screed, Hydration not extra cement will achieve this. Some tilers prefer to use an adhesive for a slurry. Remember it must be wet, otherwise you will get pockets of your screed that will be drummy.

*
A simple watering can pictured, is all you need to use for screed hydration. Ratio 1 part Plastinex 5 parts water. Hydrating a screed this way can improve the MPA dramatically



Chemical bond is achieved by the polymer / Resin that adhesive manufacturers include in their formulation of a cement based polymer modified product, in most cases they are activated by the water at the mixing stage. There are many forms of polymer to achieve different outcomes, hence these dictate the price you pay for a bag of adhesive. The polymer / resin adheres to the tile body remembering most vitrified, monocottura and porcelain tiles have little to no absorption, so a mechanical bond is NOT achievable.

Having said all that the challenge for a chemist is to firstly ensure a chemical bond, secondary the polymer / resin also provides a softness which gives flexibility, the loading and type is critical. Contrary to many beliefs the rubber crumb in the adhesive does not give flexibility. I receive calls from tilers saying they had to remove a tile and it came off as clean as a whistle. Now you know the reason for this, the adhesive is not faulty it is doing its job! Morgan's Resinflex 1 pack and Powerflex "Grey" to a lesser extent will not come off clean, the polymer in these products is different they are premium adhesives for higher specification

*
Lab Test Powerflex Grey C2S2F Showing a strong adhesion / bond to a cured primed concrete slab



Powerflex Grey is ideal for adhering to early age concrete. Screeds should be cured for 7 days, then allowed to air dry for a further 14 days according to Australian Standards AS3958 part 1 2007. Morgan's quality assurance program reflects the continual testing of our products by our chemist. We test to Australian and International Standards to ensure our products meet all the requirements for both performance and health.

Geoff's Spiel

Dear V.I.P Tilers,
I attended 2 Trade nights last month. I must say they were very well attended, organised and run. Thankyou to Shannon and John from **B&B Hardware** and Paul from **inStyle Ceramics** for making me feel very welcome. I enjoyed catching up with a lot of industry people and tilers I have not seen for a while. Great to see a strong presence from the "Tilers Independent Association" talking to fellow tilers about their objectives.

I keep getting asked about running an Epoxy Grout course, I put the feelers out about a month ago with little commitment. I require firm numbers to run the course, there is a lot to organise. Polytechnic West Balga Campus have kindly offered their training facility to host this event, which is an idea location. Thankyou to Liam and Ron. Scott Rowson has kindly offered his time to show you how its done he will demonstrate the Do's and Dont's (you also get to participate) Eddie from B.A.T Trims will show you the correct tools you require for an Epoxy application.

I need good numbers to make this happen, So if you are interested please send all your details to sales@morganadhesives.com.au "Epoxy Grout Course" and we will arrange the rest. Look forward to receiving your expression of interest..

Congratulations to Rob Ferraro
We hope you enjoy your Flight Simulator Experience
Until next time
Stay Safe, Cheers Geoff



Rob Ferraro

From Modern Stone. Long time VIP



Tiling Worldskills Fundraiser Golf Day

Araluen 21st July 2015

All Welcome

Contact Ron to book your spot NOW!

Ronald.Simeon@polytechnic.wa.edu.au

Next Months Winner

Maximo Commodore Grout Clean up System

Parts List: ☆☆☆☆☆☆
 Complete ☆☆☆☆☆☆
 with Bucket ☆☆☆☆☆☆
 and Roller set ☆☆☆☆☆☆



Velcro ☆☆☆☆☆☆
 Sponge Kit ☆☆☆☆☆☆

Kindly donated by our Sponsor B.A.T Trims

Thank You

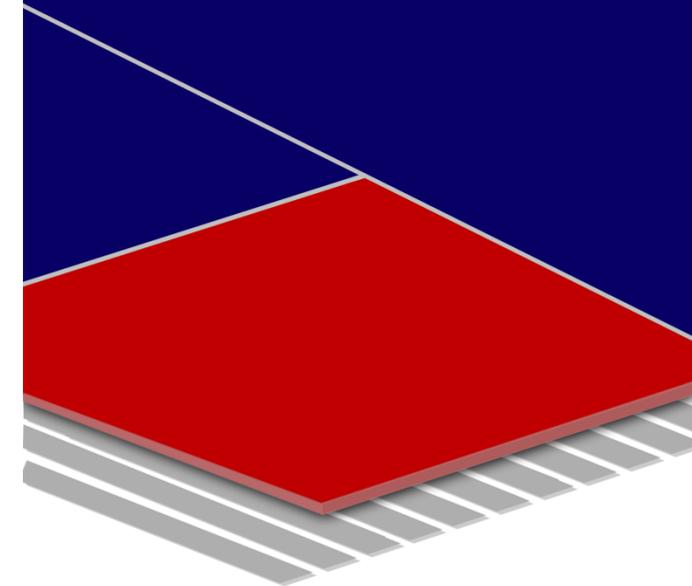
To Our Sponsors

B.A.T
Trims
2/33 Innovation
Circuit, Wangara
9303 9827

Tiling & Stone Trade Services/
Tilers
On-line
Unit 3/3 Collingwood Street
Osborne Park
9242 7373

V.I.P Tiler

July 2015



24 Hanwell Way Bassendean WA 6054
Ph: 08 9279 8911 Fx: 08 6278 1152
Technical Help Line: 08 9441 6677
Geoff Hoddy 0417 144 860
info@morganadhesives.com.au
www.morganadhesives.com.au



Wall and Floor Tilers Perth" Facebook Page