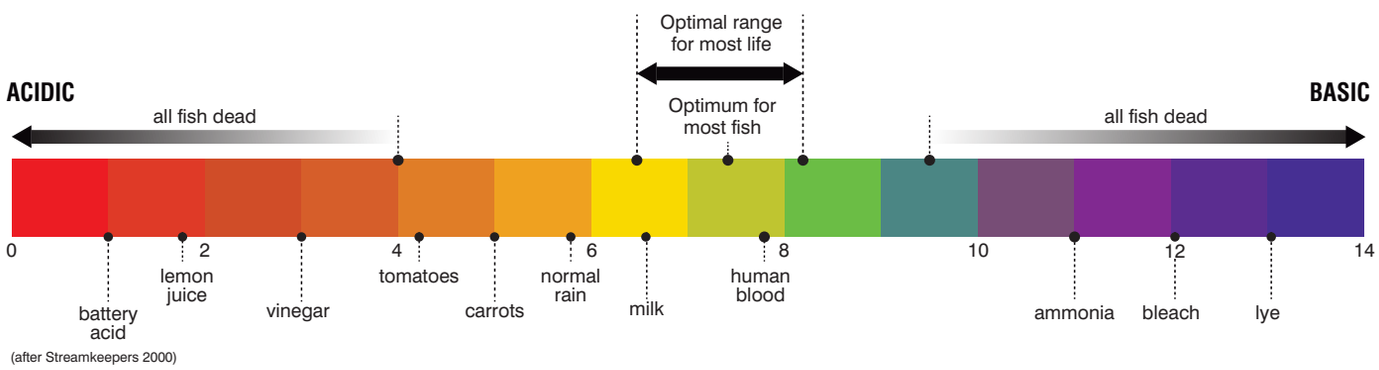
The Effects of Weather on Trim

Did you know the cure time of glue and grout is significantly impacted by changes in temperature, humidity and excess water? An increased cure time not only affects the glue and grout's performance but also raises health concerns.

CAUSES AND EFFECTS

Most glues and grouts are cementitious and alkaline in nature, as they have a high PH level. To understand the pH scale, consider drinking water. Drinking water has a pH level of 7. For every 1 pH increase above that level, the alkalinity increases 10x. When cementitious glues and grouts are mixed with water, their pH can increase dramatically, making them highly alkaline. This causes them to attack surfaces, causing tile movement and trim corrosion. When grout and glue have a slower cure time due to lower temperatures, higher humidity or excess water, they have longer to attack the aluminium at a very high ph, sometimes >13.



(after Streamkeepers 2000)

HEALTH RISKS

Allergic reactions, skin irritations, dermatitis and dryness are potential risks associated with prolonged skin exposure to high alkalinity materials. To minimise risk, wear appropriate protective equipment and avoid direct contact with the glue and grout where possible.

SOLUTIONS

To avoid aluminium attack and health risks associated with a long cure time, ensure you do the following:

1. Follow the glue and grout manufacturer's guidelines in regard to water content. This will be referenced in technical data sheets.
2. Minimise the amount of glue and grout that contacts aluminium surfaces. If they do come in contact, promptly clean up.
3. Change bucket water frequently, especially when cleaning the grout, to prevent high pH water from contacting the trim.
4. Wear appropriate personal protective equipment.
5. Use a quick set or accelerator material additive.