

# Winter Months Advice and Tips

## Bauder cold liquids, primers, adhesives and self adhesive membranes

During the winter months and with colder weather, it is essential that you know how temperature can influence the performance of our liquids, primers, adhesives and self-adhesive products.

### Effects on product properties

In colder temperatures, there will be noticeable changes in the flow properties of our liquid products. The product's viscosity (its ability to resist flow) can increase, with the liquid becoming thicker than expected. This can impact the application and expected coverage of the product. To reduce this issue, products should be kept inside in a conditioned space, ideally at 10°C.

For canister products, if they are stored at low temperatures for prolonged periods, this may affect how easily products can be sprayed. There is less pressure to force the thicker liquid into a spray. However, the coverage rate of canisters is still more consistent at lower temperatures compared to traditional roller- or bead-applied products.

### Storage

Take the time to properly store liquids, adhesives, primers and self-adhesive products when not in use, especially overnight.

Products should be kept under cover in a dry place and sealed correctly to ensure they remain free from frost and moisture. Store products between 5-25°C in a well-ventilated, covered area. Do not leave the products outside exposed to the elements. This will ensure the products are ready to use and will produce expected coverage rates and adhesion, even on colder days. If products have been stored at temperatures out of this temperature range, you should try to get the material to an ambient temperature before starting work.

Canister products need to be kept in a designated cage, stored on pallet and protected from the weather where possible.

### Surface preparation

Products should only be applied in dry conditions. There are higher chances of moisture, such as rain, dew or frost, appearing on the substrate in winter months. Substrates need to be prepared appropriately, ensuring they are dry and free from any contamination before work can be commenced.

## **Liquid waterproofing products**

Bauder LiquiTEC and LiquiTOP systems are cold applied roofing systems that cure to form seamless and joint-free waterproof membranes. The product's viscosity can also dramatically increase at low temperatures, with the liquid becoming thicker than expected. This can impact the application and expected coverage of the product. For best results you should try to get your product to a consistent temperature before starting work, ideally 10°C or above, for ease of application during winter months.

Liquid waterproofing products have a minimum shelf life of 6 months. Please ensure you store your products accordingly in such a way that you will use the oldest products first.

LiquiTEC products are poly methyl methacrylate (PMMA) resins that use a catalyst to cure, and the amount of catalyst is required depends on the temperature – the range is printed on the product label. Although LiquiTEC products will cure below 5°C, surfaces must be free from frost or condensation/dew.

LiquiTOP PU is a moisture triggered curing polyurethane (PU) which reacts with moisture in the air to cure once applied. In colder conditions, the curing process will take longer. LiquiTOP Systems can still be applied at a temperature as low as 5°C. However, please be aware that cure-times will be slower.

## **Spray primers**

The recommended application temperature is between 5°C to 30°C. This does not mean the primer cannot be used at 0°C or lower than this, it just means the flow of the product may be reduced so the spray pattern is shorter and the product comes out thicker than when used within the temperature range mentioned. This would also reduce coverage rates, so this would need to be taken into account. The key point here is ensuring the substrate is not covered in moisture, as this would make adhering to the substrate very difficult.

## **Adhesives**

The outside air temperature when applying an adhesive will also affect its cure-time – the amount of time for the product to achieve its full bond. Most manufactures quote information on data sheets at 20°C. Colder temperatures will reduce the chemical reaction rate, meaning the product will cure more slowly, this will also affect the tack development rate of adhesives. Generally, every 10°C decrease in temperature doubles the reaction time, meaning extended cure rates.

Adhesives should only be applied when the outside temperature is above 5°C and rising, as they may not cure if used below 5°C.

## **Self-adhesive membranes**

Our self-adhesive membranes are manufactured utilising the latest technology with the use of reinforcements and SBS bitumen. The membranes themselves achieve the best bond when ambient temperatures are above 5°C and rising. When the temperature dips below this, then care should be taken to ensure adhesion. This can be in the form of gently warming with a gas torch or hot air when there is a requirement for torch-free. This gently warms the bitumen to ensure good adhesion is achieved.