

# 18

## Operating service temperature



The full range of Polyflor and Polysafe sheet vinyl floorcoverings can be used under a wide range of service temperatures.

**Maximum upper temperature 60°C (140°F)**

**Minimum lower temperature -20°C (-4°F)**

Use in such extreme conditions is dependent upon the correct selection of adhesive. Guidance should be sought from the adhesive manufacturer for approval of the adhesive at the expected temperatures. Typically, an approved two-part epoxy or polyurethane adhesive should be used in the main field, and a contact adhesive for vertical applications.

It is important that the materials be conditioned and installed at normal room temperatures: 18°C (65°F). The material should be fully adhered to the substrate, taking care to ensure that there are no unsupported voids beneath the vinyl. In these types of installation, and where site coving is specified, then a pencil cove should be used, and not one with a cove former. All joints should be hot welded 24 hours after installation and before the installation is taken to the service temperature.

Both Polyflor and Polysafe ranges can withstand occasional sudden changes in

temperature caused by short-term contact with hot water and steam. **Long-term or regular contact should be avoided.** Where there is a possibility of regular contact with liquid gases, which are extremely cold, the constant expansion and contraction of the vinyl may cause premature failure. In these instances, it can be beneficial to have a second piece of vinyl loose laid on top of the floor, to protect it. Should this become damaged, it can be easily and economically replaced.

### 18.1 UNDERFLOOR HEATING

All the Polyflor and Polysafe vinyl product ranges can be installed over underfloor heating. In installations where underfloor heating is used, this should be switched off from 48 hours prior to installation until 48 hours afterwards. It should then be slowly brought back up to the working temperature, a maximum of 27°C. Adhesives capable of withstanding temperatures up to 27°C should be used.

**Please note: It is recommended that underfloor heating systems are commissioned prior to the flooring being installed to ensure the heating system is operating correctly. The above installation procedure should then be followed.**

### 18.2 AREAS SUBJECTED TO PROLONGED SUNLIGHT

Large, sun-facing windows (especially where under-floor heating is in use) and conservatories can experience problems due to high daytime temperatures and low night-time temperatures. In these instances, it is necessary to ensure that an even day and night temperature is maintained during the laying

period and until the adhesive reaches its full bond strength, which is normally three days. To ensure the best results, shade all windows, turn off any underfloor heating, provide background heating at 18°C and select an epoxy or polyurethane grade adhesive. Condition the tiles correctly prior to installation. Polyflor will not accept responsibility for any expansion or shrinkage problems, which may result from changes in temperature during the period when the adhesive is reaching full bond strength. All Polyflor floor coverings are designed for internal usage only. We cannot guarantee the performance of any of our floor coverings in external environments.