

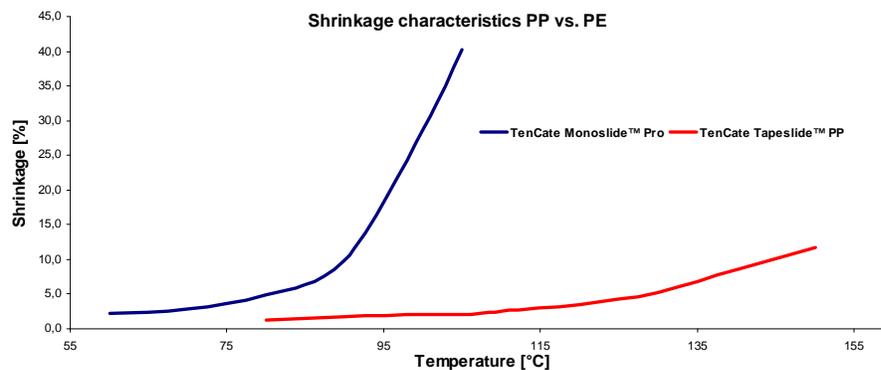
Product advisory

marketing

Coating temperature and synthetic turf blades

One of the last stages of producing a synthetic turf carpet is coating the carpet. Although coating is one of the last stages, it is also one of the most critical aspects that merely determine the quality of the carpet. The coating process has two functions, namely providing stability to the carpet and providing tuftlock for the yarn in carpet. During the process several important parameters determine if these two functions are realized. Parameters are for example the coating compound used, tensions in the carpet and drying temperatures.

In this product advisory however, the focus will be on the (possible) influence of these parameters on the yarn and thus the synthetic turf carpet. From this perspective the temperature used during coating is the most important parameter. With the trend of using softer materials as a base for synthetic turf (polyethylene [PE] instead of polypropylene [PP]) the coating temperature on the pile side as well as on the coating side becomes even more important. The following figure shows the differences in shrinkage characteristics of PE and PP in relation to temperature.



The figure clearly shows that the chosen coating temperature is essential for the shrinkage level of the yarn. Consequently, an even distribution of the temperature over the carpet is very important to exclude shrinkage differences in the end product. The temperature during coating on the pile side, when using TenCate Monoslide™ Pro should not exceed 75 °C in order to prevent excessive shrinkage of the yarn and possible effects of processing the yarn too close to its softening point.

The advised coating temperatures can be found on the external specification of every product. On request information about shrinkage versus temperature is available for most standard products.

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