

Composite elements, like almost all substances in the environment, change their color due to the absorption of solar radiation, and in particular of the UV rays contained therein.

To show how the color of our composite (which is a mixture of PVC and natural wood dust) evolves under the influence of solar radiation, we conducted an aging test in the SUNTEST XLS aging-test chamber.

The obtained results correspond to the natural exposure of the elements to solar radiation for a period of 12 months and 24 months, in the climatic conditions prevailing in Central and Eastern Europe, which is the equivalent of approx. 1100 hours and 2200 hours of the test in the aging-test chamber.

Below we present the appearance of the material at the start of the test, in the middle of the test (which is equivalent to about 12 months of exposure to sunlight) and after the end of the test - i.e. after a period equivalent to 24 months of exposure.

Please note that the color change depends on the conditions of direct sunlight and exposure to it UV radiation. Hence with regard to the test result and the actual behavior of the material can occur differences, especially resulting from the arrangement of garden furniture, canopies, flower pots and other elements arranged on terraces or surrounding vegetation. This applies in particular to PARKAN systems exposed to impact garden plants.

base color

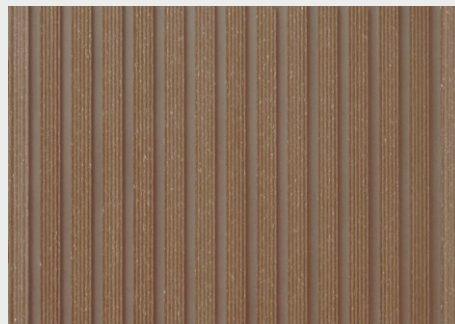
12 months exposure

24 months exposure

ICE MAPLE



LINDBERG OAK



base color

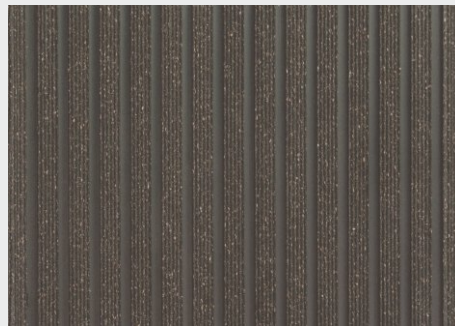
12 months exposure

24 months exposure

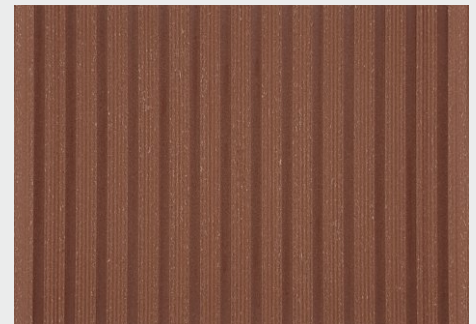
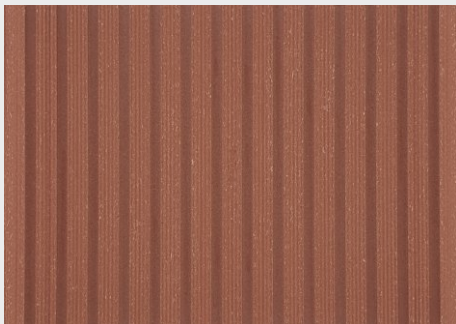
NOBLE WALNUT



SMOKY SPRUCE



NATURAL MAHOGANY



base color

12 months exposure

24 months exposure

GOLDEN OAK



MARINA MAPLE



Please note that the colour of the material perceived by the human eye depends on the angle of incidence of the light, its intensity and temperature, as well as the colours of the surroundings (facade elements, balustrades). Therefore, the colours presented in the photographs taken under laboratory conditions may differ from the actual visual impression under specific lighting conditions and environmental colours (background).

An additional factor affecting the color feeling is the way of brushing and the structure of the surface of composite materials. They are materials of natural origin and contain over 50% of wood in the form of natural wood dust. So how to determine the differences in the shade of the board in natural light conditions, in particular when the board is freshly installed and the natural light at the installation site creates a feeling of color differences depending on the angle of incidence of the light? Such a difference is not due to a product defect, the light are reflected from the brushed surface at different angles, giving a sense of a difference in shade.

A reliable assessment should be made in diffused light, standing with your back to the light source. Then, from a distance of 150-160 cm, looking from above at a right angle to the terrace, we can determine whether individual boards have a different color or shade.

According to the above visualizations, the color of composite boards under the influence of sunlight is gradually changing, and the differences in shade are evened out. Boards that are exposed to sunlight for a season not only change color, but also the difference in surface brushing disappears. We have the impression that the terrace has acquired a uniform shade of boards exposed to sunlight. This rule also applies to other WPC composite elements.