

Tech Tip # 401

Yellowing/discoloring of floors beneath mats.

From time to time customers complain that mats cause the floors beneath them to discolor. This complaint has applied both to carpet and hard surface floors such as vinyl or tile. The discoloration is usually a yellow or brown color. The points below discuss some possible causes for these complaints

1. Moisture

- Moisture from the ground comes up through the floor until it reaches the floor surface. This moisture normally evaporates and goes unnoticed.
- Placement of a mat on the floor prevents the evaporation, therefore trapping the moisture, thus causing the discoloration. This seems to be most
- common at entrances where cold or warm air enters the building when the door is opened causing condensation (sweating).
- Placement of mats on freshly cleaned and still damp carpet. This prevents carpet from fully drying, thereby causing discoloration.
- Moisture from the back of mats. If not properly dried, the back of mats can be damp, thereby providing moisture to cause discoloration.
- Moisture leaks through perforations in the rubber backing. As mats age, perforations increase in size. Larger perforations can develop into slits
- large enough to allow moisture to pass through the backing thereby causing discoloration.

2. Chemicals

- Yellowing can occur on a VCT (vinyl composition tile) or resilient floor. The best explanation for this is that the yellowing comes from chemicals that are in the floor that migrate to the surface over time. These chemicals are generally very small molecules that move within the molecular structure of the synthetic VCT or resilient tile. Due to their very small size they have the ability to move around and work their way to the surface. Upon reaching the surface they are exposed to light, and air and normally will either vaporize or fade becoming unnoticed to the casual observer. If they are kept from exposure to light or air, they turn yellow with age. Evidence of this explanation can be seen in supermarket and large department stores where yellowed areas can be seen on the VCT floor where display counters and checkout lines have been moved. If mats cause the yellowing, why then would there be yellowing in these areas where no mats have been used?

Once a floor becomes yellowed it can be difficult to remove the yellowing. Depending on the type of floor affected it may be possible to reduce or remove the yellowing by cleaning and waxing hard surface floors or contracting with a professional carpet cleaner on carpeted floors.

In most instances where mats are placed on floors and discoloration results, the customer is faced with a difficult decision. Use no mat and the floor doesn't discolor, however, the floor is damaged by tracked in soils, moisture and dirt, and the entire area deteriorates. Or use a mat and protect the floor with resulting discoloration in the area underneath the mat. Of the two, most customers select the latter.

Corrective Actions

Discoloration can usually be removed by stripping and re-waxing. In the case of carpet, professional carpet cleaning is usually required.

Should you require additional information or if M+A Matting can be of further assistance, please call us at 1-800-241-5549 or 1-706-882-2961.