Q&A with the GURU of GLUE®



Norris Legue, ("Guru of Glue®") is a chemist and President of Synthetic Surfaces Inc. (www.nordot.com). In about 1969, he invented the first urethane adhesive that was used successfully to install synthetic turf athletic fields. His company's new generation of NORDOT® Adhesives are used to install synthetic turf more than any other adhesive in the world.

about one-part NORDOT® Adhesives vs. one-part solvent-free adhesives



Glue Box



Airless Spray



Stand-Up Trowel



Squeegee

Q: What is the most important installation property of an outdoor turf adhesive?

A: It's high "green strength". An adhesive with a high green strength (grab, tack and grip) is essential for profitable outdoor installations that also look good upon completion.

Q: Why is high green strength so important to achieving good appearance and profits?

A: High green strength (grab, tack and grip) during installation helps overcome the troublesome forces that cause turf movement from wind, expansion and contraction due to the weather, such as changing temperatures, passing clouds, sun/shade; overcoming buoyancy from unexpected rain or pooling; etc. Additionally, they do not ooze, squeeze-out, or foam through seams or other openings when rolled, stepped on or otherwise pressed during installation, like liquid solvent-free adhesives. Unnecessary are sandbagging or other weights to hold seams down and/or closed, until the adhesive cures. The profit comes from faster, all weather installation with less delays, labor expense and fewer call backs and repairs later, while the good appearance is from seams and inserts not creeping open during or after installation. Incidentally, if the solvent-free adhesive labels or literature says to let the turf "rest for awhile", and to avoid pressure, rolling or weights, it probably to avoid squeeze-out problems.

Q: What is the need and purpose of the solvent?

A: Solvent is a liquid that thins the otherwise sticky adhesive so that it can be applied. It then evaporates resulting in a high green strength adhesive that is temporarily tacky, sticky and with good grab and gripping properties.

Q: Do one-part, liquid solvent-free adhesives or pastes have a high green strength?

A: ***No, it's the opposite.*** They usually are oily and slippery, even those that are pastes. If they had the inherent grab, tack and gripping properties of a solvent based high green strength adhesive, they probably couldn't be spread because of their tack and drag, especially when cool.

Q: What about green colored solvent-free adhesives?

A: No harm done, but there is no need for it? In fact, it could be detrimental if the adhesive is visible as a result of a bad seam, or oozing or squeeze-out or foaming because the green will not match the turf after weathering. Additionally, if the installer knows how to make a good seam, the adhesive underneath, regardless of the color, won't show.

Q: What about solvent-free adhesive literature that has words or phrases like: wait before pressing the turf into the adhesive; let the turf rest before rolling; mist with water but don't apply to much?

A: In my opinion, these are "buzz words or phrases" that can be interpreted into "glue jargon" as subtle warnings about potential problems of "squeeze out", "oozing" and "foaming" of adhesive through seams or any other openings that are in the turf.

Q: NORDOT® Turf Adhesives are noted for their high green strength but do they have any other advantages over one-part solvent-free adhesives?

A: Some other advantages are: they can be applied at any temperature from below freezing to hot desert temperatures in which an installer can work; they don't solidify in their pail or become extremely thick when left outside at about 40° F or below. They don't need water misted on the surface of the applied adhesive in order to cure the adhesive in a reasonable time. Additionally, solvent-free turf adhesives are relatively new to synthetic turf and do not have the proven long term exterior durability of NORDOT® Adhesives (about 50 years). Hence, after weathering, some solvent-free adhesives are a potential "time bomb" that could fail after weathering, until they prove otherwise after years of exposure in different weather and climates.

Q: Can you summarize the details you outlined?

A: Yes, one-part NORDOT® high green strength solvent containing synthetic turf adhesives do not have the installing problems or cost of solvent-free urethane and/or silicone-silane one-part adhesives. Synthetic turf installers often have problems and quietly suffer without realizing it when installing with one-part solvent-free adhesives, whereas users of NORDOT® Adhesives avoid many of the same installation problems. The major reason is: NORDOT® Adhesives have a high green strength (grab, tack and grip) during installation, while oppositely solvent-free one-part adhesives are oily and slippery adhesives with negligible green strength before cure. Bottom line: more profits, proven exterior durability and fewer problems when installing turf with high green strength NORDOT® Adhesives.

