



CONTACT CEMENT SELECTION AND FIELD TESTING

Notes

- This document is intended as a guide to selecting and field testing contact cements to verify compatibility with Life Floor tile installations.
- Test and install all contact cements according to manufacturer's specifications.
- Always field test contact cements to ensure proper performance before installation.
- Read manufacturer's Technical Data Sheet, Safety Data Sheet and any other documents to ensure contact cement meets the required performance measures.
- Always mix cement thoroughly before application.

PERFORMANCE MEASURES

Use these criteria when selecting potential contact cements.

Cement Type

Contact cements that have the potential to work are flammable and have a base of chemically stable rubber, synthetic rubber, or neoprene with solvent carriers. Any water based or non flammable contact cements will not perform to Life Floor required standards and will break down in an aquatic environment.

Flash Time

Drying or flash times between 5 and 30 minutes are preferred. This allows for the preparation of multiple tiles simultaneously without slowing work flow.

Open Time

This is the time from when the contact cement is flashed and ready to bond to when the contact cement will no longer bond strongly. Longer open times are generally preferred. High performing contact cements have open times of roughly 2-5 hours. This can be as little as 60 minutes.

Workability

Cement must be thin enough that it can be spread on Life Floor with a paint roller or appropriate notched trowel, but not so thin that multiple coats are required to have enough adhesive to bond properly. Cements that are too thick result in fewer tiles installed per gallon/liter. Cements that are too thick should not be diluted.



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Environmental Sensitivity

The contact cement must have a practical installation temperature range for the environment they are applied to. High performing cements can generally be applied in conditions ranging from 60°F to 120°F. The contact cement must also have resistance to heat after curing up to 150°F. Other environmental factors such as humidity may have to be tested on a case by case basis, and will require field testing at the installation location. Substrates should be thoroughly dried before attempting to install Life Floor. See the manufacturer's requirements for more details.

Substrate pH

Most contact cements perform well when the substrate pH is in the neutral range. Check with the manufacturer for the acceptable pH range. Bonding to substrates outside the range may damage the bond over time and fail.

FIELD TESTING

Use these tests to determine whether a prospective contact cement is appropriate for Life Floor installation. A contact cement's documents should indicate whether it would be a proper adhesive, but testing will confirm.

Test 1: Tile to Tile Test

Use contact cement per manufacturer's instructions to bond two Life Floor tiles back to back. As soon as the contact cement is flashed, press the samples together. Once bonded, the contact cement should form an instantly strong bond, and should not be able to be repositioned once together. This ensures that installed tiles will not shift once placed. Allow tiles to cure per manufacturer's specifications and recheck the bond. Tiles should not be able to be separated without damaging the Life Floor tiles.

Test 2: Submersion Test

Bond a sample of Life Floor to a paver, brick, or small piece of cement board. Immediately upon bonding, submerge the entire sample in pH neutral fresh water or chlorinated pool water. Allow the sample to remain submerged for 24 hours. After 24 hours, remove the test sample from the water and recheck the bond. This test ensures that newly installed tiles will not fail due to rainfall or park reopening immediately after an installation is complete.

Test 3: Open Time Test

Use contact cement as per manufacturer's instructions to bond two Life Floor tiles back to back. When the contact cement is flashed, wait 60 minutes before bonding the samples together. This should be considered a minimum open time to allow for efficient installations. Once bonded, the contact cement should form an instantly strong bond, and should not be able to be repositioned once together. Allow tiles to cure per manufacturer's specifications and recheck the bond. Tiles should not be able to be separated without damaging the Life Floor tiles. This test can be repeated with different open times (2-5 hours) to determine the approximate maximum open time.



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RECOMMENDED ADHESIVES

1 Gallon of adhesive can install approximately 65 sq. ft. (1 Liter of adhesive can install approximately 1.6 sq. m.)

DAP Original

Can be sourced from most local and big box hardware stores in the US. Maintains a robust bond while being extremely workable. This makes it a good option for a less experienced installer.

Make sure to use the ORIGINAL formula. Other varieties will not work in an aquatic environment.

Other Commercial Grade Contact Cements

These other options can be sourced at most flooring supply centers.

- W.F. Taylor 1-N (C-California compliant)
- Powerhold 500
- Parabond M-250
- Capitol CC028

*SDS Documents for these adhesives can be found on the Life Floor website under Technical Documents or by visiting lifefloor.com/tech-documents.