

Chemical Weld Guide

Chemical Welds: Chemical welding, also referred to as cold welding, is the process of chemically fusing two sheets of resilient sheet vinyl flooring together at the seam. A properly executed chemical weld can provide the appearance of a seamless floor, and is chosen due to aesthetics. This type of weld is best used in areas of light to normal traffic and not exposed to excessive moisture.

Seam Preparation

All seams must use LonSeal DFT to ensure a “clean zone”, which will allow the Lonsealer to properly bond the sheets together.

All seams should be double- or underscribe-cut to ensure they are as tight as possible. Do not attempt to chemically weld factory edges. Any gaps in the seam could result in seam failure.



Welding

Apply a piece of 1” wide masking tape or painters tape at both sides of the seam, allowing no gap between them. Use a small hand roller to ensure a strong, positive contact between the tape and the flooring. Failure to ensure a good bond between the tape and the floor could result in fluid leaking beneath the tape and marring the floor. Alternately, a 2” wide piece of tape centered in the seam may be used, but it must be cut at the seam to allow the needle to move freely along it. When cutting the tape, care must be taken to avoid cutting the flooring at either the side of the seam, and the tape should be rolled again after cutting has been accomplished.

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The needle is offset in the nozzle, and should be at the top of the nozzle when held correctly. This will ensure proper flow of the fluid. Holding the end of the tube in one hand, tilt it toward the seam, and use the index finger on the other hand to fully insert the needle into the seam at a 45 degree angle to the floor. Ensure full penetration of the needle into the seam, gently

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contacting the substrate. Typically coating the seam is not sufficient for successful bonding of the floor, and could not result in seam failure.

Draw the needle evenly and slowly along the seam, Flow may be regulated by exerting light pressure in the end of the tube. The angle of the tube may also be slightly adjusted to increase or decrease the rate of the flow. Apply a uniform bead 1/8" to 1/4" wide centered at the seam. As the needle is drawn along the seam, the sheets separate slightly which will allow the fluid to flow between them. The bead of sealer must flow back together around the needle after it has been applied to the seam. If the sealer is applied too thinly and does not flow back together, this could result in an inadequate amount of sealer being applied and seam failure could occur. Adjust the flow or slow the movement along the seam as necessary.

After completion, wipe any excess fluid off the needle, and replace the cap right away. If the tube is not closed immediately, a skin will form and blockage can occur, making the tube unusable. Wait 10-15 minutes before removing the tape, allowing the bead of the sealer time to set. The tape should be pulled away from the seam at an angle, and care should be taken to prevent any sealer from dripping onto the floor. Do not wait until the sealer had fully dried before removing the tape.

Lonsealer will be fully cured after 48 hours. While the seams may be walked on after 2 hours (essentially foot traffic only), allow a minimum of 48 hours before any regular foot traffic or initial maintenance.



Alternate Method

Follow the above directions, but do not apply tape along the seams. This method will result in permanent bead of sealer on the surface of the floor. Do not wipe away this bead, or permanent damage to the surface of the flooring will occur. Excess sealer may spill out upon initial insertion of the needle into the seam, and precautionary measures should be taken, such as starting on a portion of the flooring to be removed later or applying tape as directed above at the start of the seam only. Ensure hands/gloves are clean, to prevent any transfer of dirt to the flooring seams. Any dirt present will be permanently ingrained in the bead. The installation area must also be free of any activity which could result in

airborne dust or participlal settling on the bead while it cures. Ingrained dirt will be more noticeable in lighter colored flooring. Any swelling on the seam will disappear as it begins to harden. The bead will be high gloss, but this may diminish over time or with the application of a floor finish.

Urethane Surfaced Products (E.G. TopSeal): Lonsealer will not fuse to a urethane finish vinyl. When using the alternate method, this may result in the bead of the sealer debonding from the surface over time. Following all the above directions will ensure that

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adequate Lonsealer is used to properly fuse the seam.

Clean Up: While still wet, Lonsealer may be removed from tools with an absorbent cloth. If spilled on the flooring, wipe it up immediately using mineral spirits applied to a clean cloth. **Always use caution when handling mineral spirits.** Note that Lonsealer's effect on the surface of the flooring is immediate, and some marrying will occur. This marrying may become less visible on floors which receive a finish. **Cured sealer is impossible to remove from the surface of sheet vinyl.**

WARNING!

This product contains tetrahydrofuran, and is **EXTREMELY FLAMMABLE**. Always replace the cap when not in use.

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