HEAT WELD GUIDE

ATTENTION: Always refer to the most current technical information available at *www.lonseal.com*, and review completely prior to starting the job. Lonseal reserves the right to change its products' design and material, or to improve products or processes at any time without notice. Installation procedures and use of Lonseal products must be in strict accordance with Lonseal's technical documentation for warranty terms to be valid.

HEAT WELDS: Heat welding is the process of heat fusing two pieces of sheet vinyl flooring together at the seam. A properly executed heat welded seam offers impervious, reinforced seams recommended for areas of high traffic, including those subjected to heavy rolling or wheeled loads, areas exposed to excess moisture (frequent washing), healthcare applications (sanitation), laboratories, and clean rooms.

IMPORTANT: Please refer to the **Welding Thread** Technical Data Sheet (TDS) for complete installation requirements and product information. If any discrepancy is found between this guide and the TDS, the TDS will supersede.



Grooving

Using a straight edge and grooving tool with a #4 (4 mm) blade, groove the seam to a consistent depth of approximately 2/3 the thickness of the flooring or half the thickness of the welding thread (2 mm), whichever is less. Take care not to groove completely through the backing layer.



Welding

Using a heat gun set between 650 - 700 °F (343.3 - 371.1 °C), depending on ambient conditions, insert the welding thread into the nozzle, and then bring the thread into contact with the grooved seam. Keeping the bottom of the nozzle parallel to the floor, apply slight downward pressure, and draw it along the seam at a smooth and constant speed. If stopping at any point along the seam, pull the heat gun away from the flooring, and cut the welding thread. This will prevent the heat gun from scorching the surface of the flooring and welding thread.

Test seam strength by tugging a length of welding thread. If fused properly, it should break before pulling away from the seam.



Trimming

After allowing the thread to cool to room temperature it may be trimmed and skived. This must be done in two passes. The first pass is done using a trim plate and crescent knife, which will trim off the top of the thread.

The second pass is done using the crescent knife only, and will trim the thread flush with the surface of the flooring. Note that for embossed products, the thread can only be skived to the top of the embossing.



Glazing

Using a heat gun with the nozzle attached, draw it along the seam with the nozzle approximately 1/8 - 1/4 in. (3.1 - 6.4 mm) above the thread. Move the gun slowly enough to glaze the surface of the thread, but fast enough to avoid damaging the flooring on either side. Note that glazing of the thread after trimming is required (except for those products using RapidThread as listed under the **Notes** section of the **Welding Thread** TDS). This step will ensure correct color matching of the thread to the material, and may require a reduction in the temperature of the heat gun.

URETHANE SURFACED PRODUCTS (E.G. TOPSEAL): Use of the urethane nozzle (Lonseal Part ZZ65) is required for heat welding this type of flooring. Failure to use this nozzle may result in blistering or scorching of the urethane finish on either side of the seam. When using this nozzle, the heat gun must be set at a higher temperature, 750 – 800 °F (398.9 – 426.7 °C), and moved at a slower pace. Automatic welding machines are not recommended, unless the nozzle has been determined to be suitable for urethane finishes. Test thoroughly on scrap material prior to use, to ensure that the seams may be completed as noted above without damage to the flooring. The suitability of the automatic welding machine will be the responsibility of the installer.

