

**ATTENTION:** Always refer to the **Technical Manual for Interior Flooring Products** for complete installation information prior to using this product. Lonseal reserves the right to change our products' design, material, or to improve products or processes at any time without notice. Installation procedures and use of Lonseal adhesives must be in strict accordance with Lonseal's technical documents for warranty terms to be valid. **Please review the website for the most current technical information.**

**DESCRIPTION:** A vinyl welding thread, 4 mm in diameter, which comes color matched to the corresponding, chosen Lonseal flooring material (when applicable).

**USE:** For heat welding seams of Lonseal sheet vinyl flooring.

**ADVANTAGES:**

- ▶ Recommended for high traffic locations or floors subjected to heavy rolling loads
- ▶ Recommended for healthcare installations or areas that have sanitary requirements
- ▶ Recommended for floors exposed to excess moisture

**PREPARATION:**

- ▶ Ensure that all seams are free of contaminants such as dirt, dust, and moisture.
- ▶ Wait 24 hours after installation to perform any heat welds. If heat welding is to occur within 24 hours of the flooring installation, then Lonseal Double Face Tape (DFT) should be placed underneath all seams. Except as follows:
  - ▷ Since DFT cannot be placed at curved seams or insets, or in locations where Lonseal #650 Two-Component, Solvent-Free Epoxy is used, heat welding must occur 24 hours after flooring installation, without exception.
- ▶ Seams may be abutted factory edges, trimmed with a vinyl edge trimmer, or they can be double- or underscribe-cut. The gap between the two sheets should be as minimal as possible, and should not exceed the thickness of a credit card.

**IMPORTANT:**

- ▶ Use only equipment specifically designed for heat welding sheet vinyl flooring.
- ▶ Practice the methods noted below on scrap material prior to application to ensure familiarity with the tools and materials involved.

**APPLICATION:**

1. Using a straight edge and a grooving tool equipped with a #4 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 go completely through the backing layer. This depth should be kept consistent across the entire seam. If using a power groover, be sure to leave a small gap at the seams, about the thickness of a credit card, for the tool to follow.
2. After allowing the heat gun to pre-heat to the desired temperature (650 °F – 700 °F), insert the welding thread into the nozzle as it comes into contact with the grooved seam.
3. Keeping the bottom of the nozzle parallel with the floor, apply slight downward pressure, and draw it along the seam at a smooth and constant speed. Some products will develop a slight glaze on either side of the seam, which is normal. Upon application of the floor finish, this visual effect will be greatly diminished or eliminated.
4. 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.
5. Once completed, test seam strength by tugging at a length of welding thread. If fused properly, it should break before pulling away from the sheeting.
6. Allow the thread to cool to room temperature before proceeding.
7. Once cooled, the welding thread may be trimmed and skived, which is done in two passes.
8. For the first pass, use a trim plate and crescent knife to trim the top of the welding thread.
9. For the second pass, use only the crescent knife and trim the welding thread flush with the surface of the flooring. Ensure that the knife is flush with the flooring for a smooth seam. Note that for embossed products, the thread can only be skived to the top of the embossing.
10. Once trimmed, the welding thread **must** be glazed (except for those listed under **Notes** below) to ensure correct color matching of the thread to the material, and prevent the seam from collecting excessive soiling. To glaze the thread, draw the heat gun along the seam, with the nozzle approximately 1/4" above the thread. Move the gun slowly enough to melt the surface of thread, but fast enough to avoid damaging the flooring on either side. This may require a reduction in the temperature of the heat gun.

**URETHANE FINISHED PRODUCTS (E.G. TOPSEAL):** Use of the urethane nozzle (Lonseal Part ZZ65) is required for heat welding. 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 °F – 800 °F), and moved at a slower pace. **Automatic welding machines are not recommended.** Should you still choose to use one, 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.

**NOTES:**

- ▶ Do not leave seams unprotected. Apply masking or painter's tape over seams before leaving the job for the day to help prevent seam contamination.
- ▶ Use of welding nozzles larger than 4 mm will cause improper bonding or permanent damage to the flooring, including burning and blistering.
- ▶ During welding, the thread may have ridging, also known as wash, on either side. This is normal and will be removed after trimming and skiving.
- ▶ Keep the trim plate and trim or crescent knife smooth, clean, and free of burrs to avoid scratching the surface of the flooring.
- ▶ Attempting to trim and skive the welding thread before it has cooled, or to complete this procedure in one pass, can result in a concave seam. Concave seams will collect soiling, resulting in unsightly seams and maintenance issues.
- ▶ Welding thread for pearlescent and metallic patterns may not match the surface appearance due to the limitation of thread composition, which can cause the completed seam to stand out in contrast to the flooring.
- ▶ Some products have welding thread specifically formulated to eliminate the need for glazing. This new thread is called RapidThread. The following products use RapidThread and do not need to be glazed (*xx* or *xxx* represents the product color number where the entire product line has been changed):

| <b>Flooring</b>                              | <b>Welding Thread</b> |
|--|-----------------------|
| Loncourt I #38                               | ZTLP838               |
| Loncourt UV #838                             | ZTLP838               |
| Londante Topseal (all colors)                | ZTLPxxx               |
| Loneco Linen Topseal (all colors)            | ZTLPxxx               |
| Loneco Topseal (all colors)                  | ZT72xx                |
| Lonfloor Galvanized Topseal (all colors)     | ZT72xx                |
| Lonmoire Topseal (all colors)                | ZTLPxx                |
| Lonspeck Topseal (all colors)                | ZTLPxxx               |
| Lonwood Dakota Topseal (all colors)          | ZT70xx                |
| Lonwood Madera Topseal (all colors)          | ZTLPxxx               |
| Lonwood Natural Topseal Lonwood (all colors) | ZT74xx                |
| Lonwood Performa #547                        | ZT7097                |
| Lonwood Performa #548                        | ZT7082                |
| Lonwood Performa #549                        | ZT7467                |
| Lonwood Performa #550                        | ZTLP550               |
| Lonwood Performa #553                        | ZT7066                |
| Lonwood with Foam #375                       | ZTLP550               |
| Lonwood with Foam #382                       | ZT7082                |
| Lonzebra Topseal (all colors)                | ZT70xx                |

**Note:** Refer to the **Welding Thread List** Technical Bulletin for specific item numbers.

**CLEAN UP:** Dispose of any trimmed pieces in an environmentally safe manner.

**LIMITATIONS:** Certain products are too heavily embossed to be heat welded properly.

**PHYSICAL PROPERTIES:**

- ▶ **Color:** Varies
- ▶ **Shelf Life:** Indefinite, when stored properly
- ▶ **Storage Conditions:** 65 °F – 85 °F (18.3 °C – 29.4 °C); keep dry and out of direct sunlight.
- ▶ **Application Conditions:** 65 °F – 85 °F (18.3 °C – 29.4 °C)
- ▶ **Coverage:** 500 linear feet per spool