

## Heat Welding

Heat welding is the process of heat fusing two sheets of resilient sheet flooring together at a seam. A properly executed heat welded seam offers impervious reinforced seams recommended for areas of high traffic, exposure to excessive moisture (frequent washing), healthcare applications (sanitation), laboratories and clean rooms as well as floors subjected to heavy rolling or wheeled loads.

The welding thread is a 4mm diameter that is to be used with a 4mm nozzle. Larger diameter nozzles will cause improper bonding or permanent damage to the flooring, including burning and glazing of the vinyl wear layer surface.

Using a straight edge and grooving tool route or groove the seam. Maintain a consistent depth, of  $\frac{1}{2}$  the thickness of the material, in the groove. Keep the groove area dry and clean of debris. Practice grooving and welding on scrap material.

Do not groove through to the backing of the material.

### Welding

Allow heat gun to preheat to the desired temperature (600°F-700°F) prior to welding the sheets. Once the gun is properly heated, insert the welding thread into the nozzle as it comes into contact with the grooved seam. Make sure the angle of the nozzle is perpendicular to the floor and does not come into contact with the flooring; apply slight downward pressure to the nozzle with a smooth constant speed. If stopping; pull the heat gun from the floor and cut the welding thread, this will prevent the gun from scorching the surface of the flooring as well as the welding thread.

The flooring will be shiny on both sides of the welded area. This is normal for this type of method. Also a small area on either side of the welding thread will have ridging also known as a wash. Using the correct speed and temperature; ensure this area is not scorched or charred.

### Trimming

Allow the welding thread to cool before trimming. Trimming or skiving is done in two passes:

**a.)** With a trim plate and a crescent (half moon) knife and **b.)** With the crescent (half moon) knife only. If attempted in one pass, the welding thread can shrink and cause concaving at the seam. Ensure the crescent knife is flush to the surface of the flooring for a smooth seam.

### Glazing

To glaze the welding thread, using the same temperature, allow the gun to hover over the welding thread about  $\frac{1}{4}$ ". Move slow enough to glaze the surface but fast enough not to blister the surface. Unglazed welding thread can make the seams visibly dirty and create an "off-color" to the material color. Glazing will correct color matching of the welding thread to the flooring product.

