

# Barnes

Plastic Welding Equipment Ltd.



## VINYL FLOOR INSTALLATION – PLASTIC WELDING METHOD



**INSTALLATION OF VINYL FLOORING USING OUR HOT AIR  
VINYL WELDING TOOLS**

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### **Vinyl Floor Welding**

Vinyl or Linoleum flooring has is a popular choice for flooring contractors for use in commercial as well as domestic properties

Once the vinyl flooring tiles have been laid it is essential to weld the tiles together to stop moisture getting under the flooring

The Vinyl Floor Welding Process Consists of :

- **Groove cutting**
- **Hot air welding and jointing of the vinyl flooring**
- **Trimming and levelling the weld**

Hot welding provides a homogeneous fusion between the two edges of the vinyl flooring. The weld is carried out with the combined aid of a hot air vinyl welding gun and a matching weld rod made of the same type of material as the vinyl flooring.

Vinyl welding ensures a permanent seal and a longer life for the floor covering.

Note: tiles are always laid with close butt jointing. Sheets are usually laid overlapping and re-cut or occasionally edge-to-edge.

### **When should hot air welding be used?**

Hot air welding is recommended for all sheet products and also tile products, which are installed as a conductive installation. It is also worth considering when installing tiles over heated floors.

**In order to obtain a good result, it is essential to allow at least 48 hours after installation to allow for the adhesive to dry prior to commencing vinyl welding.**

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### Groove cutting:

The groove must be cut with a "U" shaped cutter to ensure the best possible contact between the weld rod and the covering – this can be achieved by using a hand grooving tool. Ensure the groove is clean and free from any cutting debris.

The depth of the groove depends on the thickness and type of covering to be welded and the diameter of the weld rod to be used, but it should never exceed half the diameter of the weld rod or 2/3 the thickness of the vinyl covering.

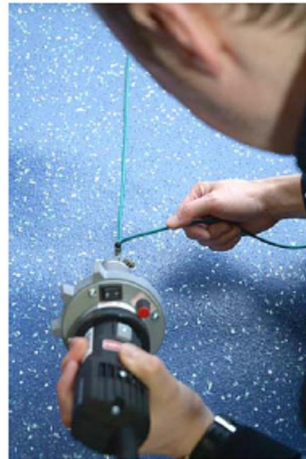
### Hot air welding:

The temperature of the hot air vinyl welder must be adjusted to suit the type of flooring and welding rod. Adjustment of the temperature and the speed of welding are required, prior to commencing (practice on an off cut of the flooring first)

The weld rod is fed through the speed welding nozzle of the vinyl welder – as this happens the hot air of the tool will in turn heat the welding rod and the edges of the vinyl floor covering.

The weld rod is passed through the speed welding nozzle and into the groove between the vinyl floor tiles – the heat from the tool will bond the to materials together.

Pay attention to the reaction of the weld rod, as the temperature, speed of movement and the pressure applied will all play a vital part in successfully completing this procedure.



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### Trimming and levelling the weld:

Once the hot air welding process has been completed it is necessary to remove the excess welding rod from the vinyl floor surface.

This is done by using a trimming knife and guide – see diagram below



Gently heating the rod surface before trimming will greatly assist you when doing this task

### Hot air welding is obligatory in the following cases:

- Wet areas
- Heated floors

To weld vinyl resilient floors, use a compatible recommended PVC welding rod.  
To weld Linoleum resilient floors, use compatible Linoleum welding rod (not PVC)

### Troubleshooting:

#### **The welding rod is not well fixed in the joint:**

Temperature is too high or too low. Downward pressure too light. Welding speed too fast.

#### **Eliminate poor welding:**

Adjust the temperature of the vinyl welding gun and practice on an off-cut of the flooring. Weld the joint paying attention to temperature, pressure and speed.

#### **The welding rod has failed to fully weld the joint:**

Varying speed of movement when welding with the hot air gun (too fast).  
Remove the loose sections and commence welding again starting and finishing at a sound section.

#### **The flooring is burnt or shiny on either side of the joint:**

Welding temperature too high or welding speed too low or incorrect angle of the hot air gun.

#### **After levelling, the filler stands proud or is curved inward or is hollow:**

Trimming level was not carried out in two stages.  
Trimming level was carried out too soon (welding rod was too hot). The groove was too deep.

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