# Floor Welding Procedure - The 4 Steps

**Markus Buehlmann**
**Product Manager Flooring**

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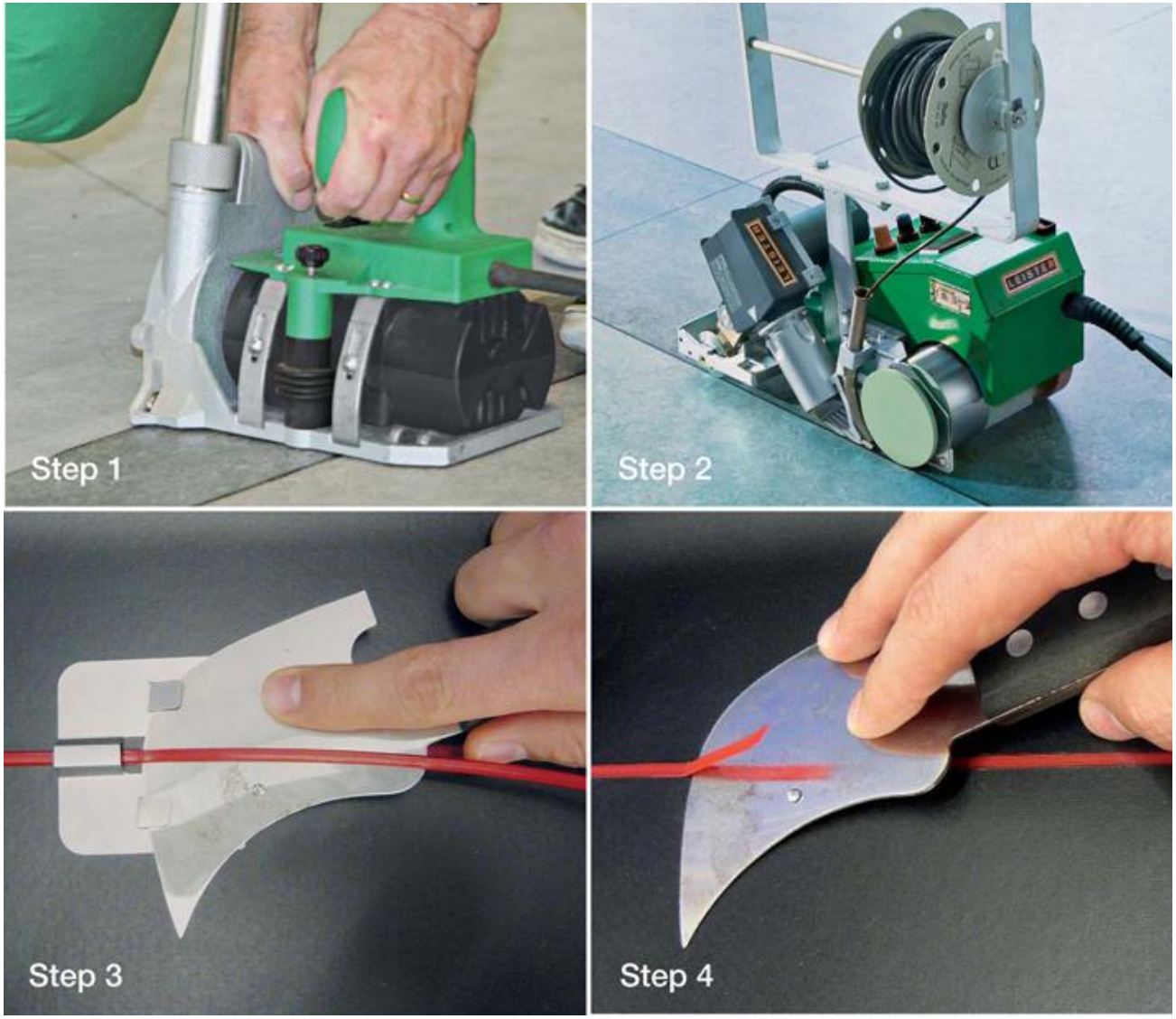
# Welding procedure in 4 steps



# Welding procedure

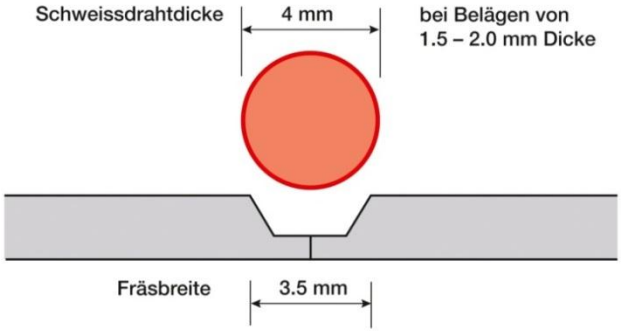
## Step 1: milling the groove with GROOVER and GROOVY

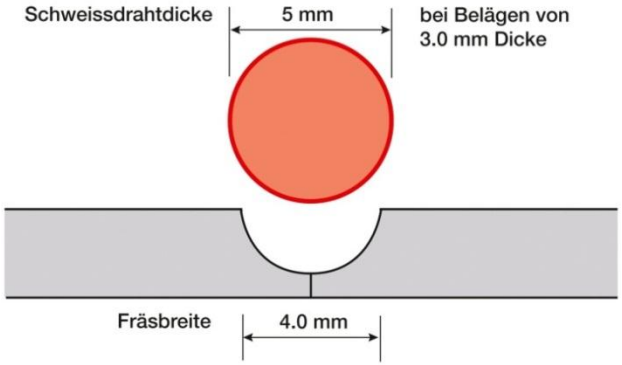
- Resilient floor coverings are glued to the subfloor before subsequent processing (approx. 1 – 2 days).
- Using the GROOVER milling machine, a groove must be cut along the laid floor cover joint. (**Attention**: work only in one direction).
- Depending on thickness of material and welding rod, different blades are used (details on following slide).
- The depth of the groove should be approximately 2/3 of the material thickness (details on following slide).

- With the GROOVY handheld gouging tool, the beginning and the end of a groove can be completed up to last millimeter.

# Welding procedure

## Step 1: milling the groove with GROOVER and GROOVY




**Recommended width of the groove**

| Ø Welding rod | Width of groove / blade |
|---|---|
| 3 mm | 2.5 mm |
| 4 mm | 3.5 mm |
| 5 mm | 4.0 mm |

**Recommended depth of the groove**

| Material | Thickness | Depth of groove |
|---|---|---|
| Linoleum | ≤ 2.5 mm<br>3.0 – 3.5 mm<br>≥ 4.0 mm<br>≥ 4.0 mm sports floor | down until to jute<br>2/3 (66%) thickness<br>2.5 mm<br>down until glass mat |
| PVC / PUR | ≤ 1.5 mm<br>2.0 – 3.5 mm<br>≥ 4.0 mm<br>≥ 4.0 mm sports floor | 4/5 (80%) thickness<br>2/3 (66%) thickness<br>2.5 mm<br>down until glass mat |

# Welding procedure

## Step 2: welding the seam

**Hot-air welding with UNIFLOOR E/S automatic welder**

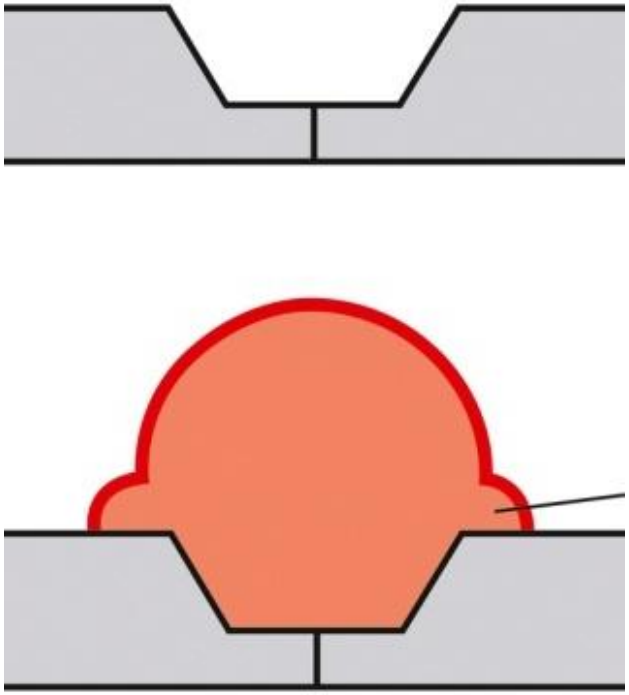
- Recommended **for longer seams** because time savings, equal welding seams and reproducible weld quality;
  - constant (high) speed
  - constant pressure
  - constant temperature during welding (UNIFLOOR E)

**Hot-air welding with handheld tool TRIAC or HOT JET S**

- Mostly used **for short seams**, repairs or connections
- In order to achieve an equal weld quality with hand welding tool, please pay attention to the following:
  - constant speed
  - constant pressure
  - constant temperature during welding (TRIAC AT)

# Welding procedure

## Step 2: welding the seam



### Welding parameters

- Pay attention that the welding parameters are set in such a manner that you get a bead.
- Respect welding parameters suggested by manufacturer of flooring material
- Before start welding on the laid floor cover; always make a welding test in order to define best suitable parameters.

**Possible welding parameters for UNIFLOOR automatic welder**

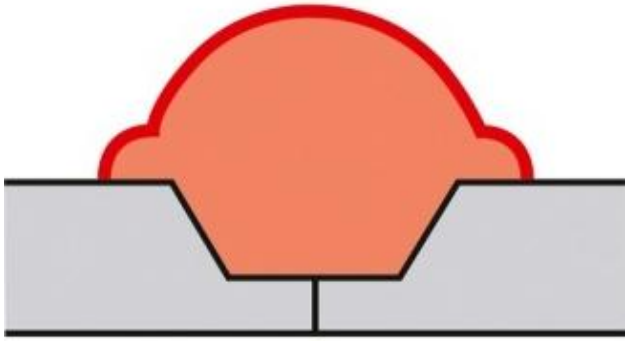
| Material | Temp. °C | Speed m/min | Air % | Air flap |
|---|---|---|---|---|
| Linoleum | 380 – 450 | 2 – 4 | 80 – 100 | 2/3 or 3/3 |
| PVC / PUR | 480 – 550 | 2 – 4 | 80 – 100 | no flap |

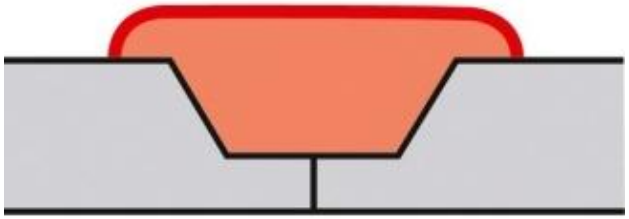
**Possible welding parameters for hand welding tool**

| Material | Temperature °C | Air % |
|---|---|---|
| Linoleum | 350 – 450 °C | 80 - 100 |
| PVC / PUR | 450 – 520 °C | 80 - 100 |

# Welding procedure

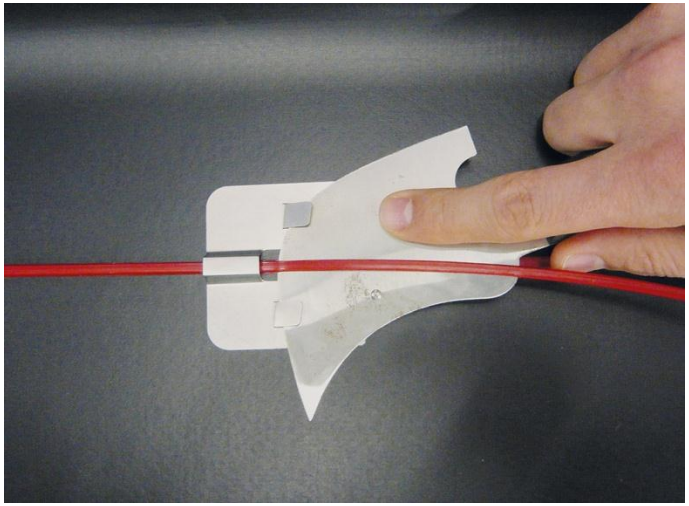
## Step 3: trimming welding rod “first cut”





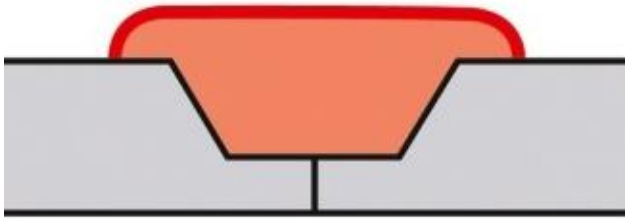
**Trimming welding rod with Spatula and Trimming guide**

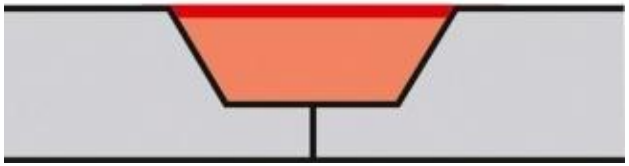
- Trim welding rod just after the seam has been welded.
- In order to prevent a sink mark of the welding rod after trimming, the seam should get enough time to cool down.
- An offload of the welded rod in two steps is recommended.



# Welding procedure

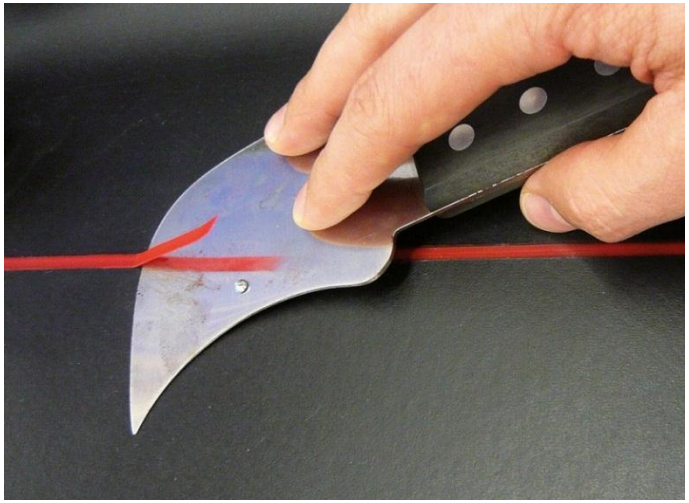
## Step 4: trimming welding rod “final cut”





**Finally, cut welding rod with Spatula**

- Trim welding rod using the spatula.



**Thank you for your attention**