Recommended Auto-Welder Settings

Guide for all WeatherBond PVC and KEE HP Membrane Thicknesses and Heat-Weldable Walkway Rolls

This guide is designed to provide information regarding common welder equipment settings to properly weld all thicknesses: 50-, 60-, and 80-mil WeatherBond PVC and KEE HP membranes, PVC heat weldable walkway rolls, and PVC flashings. As a reminder, this guide is not a substitute for good roofing practice. Test welds should be performed at the start of work each morning and afternoon using like material over the same substrate. Not all products or types of welding equipment are discussed in this guide. For assistance, please call 1-866-471-5125 and ask for the Technical Department.

Leister Varimat
- Welding Temperature: 1094°F
- Speed: 8.5 feet per minute
- Airflow: 100%

Leister UNIROOF
- The UNIROOF is intended for detail and tight space welding only. This unit should be utilized as a complement to and not a replacement for the heavier production welders.

Troubleshooting Tips
- Confirm Auto-Welder settings are correct
- Confirm power supply is sufficient for welder
- Confirm extension cords include adequate wire size for run length
- Confirm Auto-Welder weights are in place (2 weights minimum)
- Confirm membrane is not contaminated with dirt or moisture
- Confirm nozzle opening and air outlet holes are not damaged or obstructed
- Confirm air intake is unrestricted and free from debris

As a reminder, this guide is meant to address the equipment most commonly utilized in the field; however, not all products or types of welding equipment are discussed in this guide. For assistance, please call 1-866-471-5125 and ask for the Technical Department.

Recommended Settings for Auto-Welders

Leister V2
- Welding Temperature: 1094°F
- Speed: 10.8 feet per minute
- Airflow: 75%

BAK LarOn
- Welding Temperature: 1094°F
- Speed: 8.5 feet per minute
- Airflow: 100%

Leister V2
- Welding Temperature: 1094°F
- Speed: 10.8 feet per minute
- Airflow: 75%

Recommended Settings for Auto-Welders

Not Shown
- Welding Temperature: 1100°F
- Speed: 9 feet per minute
- Airflow: 100%

Correct!
- Hand-held roller flat to ensure proper weld.

Incorrect!
- Hand-held roller not flat to ensure proper weld.

Recommended Auto-Welder Settings

Leister V2
- Welding Temperature: 1094°F
- Speed: 10.8 feet per minute
- Airflow: 75%

BAK LarOn
- Welding Temperature: 1094°F
- Speed: 8.5 feet per minute
- Airflow: 100%

Recommended Settings for Auto-Welders

Leister V2
- Welding Temperature: 1094°F
- Speed: 10.8 feet per minute
- Airflow: 75%

BAK LarOn
- Welding Temperature: 1094°F
- Speed: 8.5 feet per minute
- Airflow: 100%

Recommended Auto-Welder Settings

Leister V2
- Welding Temperature: 1094°F
- Speed: 10.8 feet per minute
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BAK LarOn
- Welding Temperature: 1094°F
- Speed: 8.5 feet per minute
- Airflow: 100%
WeatherBond’s Best Practices

Equipment Setup

**Use Commercial Generators**
- Use commercial-grade generators only.
- Required generator wattage follows:
  - 6,500 watts - 1 Auto-Welder
  - 3,000 watts - 2 Hand-Welders

**Use Proper Gauge Extension Cords**
- Auto-Welders: 10 Gauge Wire - 100’ maximum length
- Hand-Welders: 12 Gauge Wire - 100’ maximum length

**Auto-Welder Weights**
- Confirm weights are in place when using the auto welder (Minimum 2 weights as shown.)

**Conditions That Affect Welding Set-Up Parameters:**
- Cold/hot ambient temperatures
- Sun versus shade
- Substrate – i.e. concrete vs. polyiso insulation
- Level of wind

These conditions may be alleviated by varying the speed of the welder to adapt to environmental factors.

**Check Test Welds Several Times Per Day:**
- Weld splice with recommended welder setting
- Cut 1” wide splice sample across the seam
- Pull 1” wide sample until failure
  - Note: MUST BE COMPLETELY COOL

**Welding for Step-offs**
1. Create membrane into step-offs
2. Use 2” silicone roller
3. Complete immediately after auto-welder crosses seam intersection
   - Note: Prevents formation of a water channel

**Probe All Seams at the End of Each Day**

**Inspect Silicone Pressure Wheel**
- Regularly inspect silicone pressure wheel cover to ensure a fully intacted wheel with no damage. Damaged silicone wheel will affect the integrity of the weld.

**To Repair Aged and New WeatherBond PVC and KEE HP Membrane**
1. Clean all residue from the weld area utilizing PVC and KEE HP Membrane Cleaner and a Splice Wipe or clean natural fiber (cotton) rag
2. Weld the new membrane to the cleaned area using standard welding procedures.

If membrane becomes dirty during initial installation, WeatherBond PVC and KEE HP Membranes can be cleaned using a Splice Wipe and PVC and KEE HP Membrane Cleaner.

**Ensure Proper Nozzle Adjustment**
- Make sure you rotate the nozzle to eliminate heel drag.

**Keep Air Intake Free From Debris**
- Clean dirt and debris from heat gun air intake daily. This allows for maximum airflow.

**Welder Maintenance**

**GOOD WELD**

**BAD WELD**