

Intro to Brazing and Soldering

Phase 5

BLOCK 4

Phase 5 — Block 4 Overview

Block 4 introduces the foundational brazing and soldering techniques used throughout refrigeration system service and repair. You'll develop an understanding of flame control, capillary action, joint preparation, nitrogen purging, and proper

material selection. The concepts and skills presented in this block serve as the foundation for safe tubing installation, component replacement, and refrigeration piping procedures throughout Phase 5.

Block Completion Requirements

Access *Absorb* resources through DRW platform & contact a mentor/supervisor for topic assistance. This Mastery is instructor-led + must be completed with a Senior/Master Technician with extensive refrigeration systems experience.



1. Review all *Absorb* resources



2. Complete all *Articulate* questions



3. Complete the **Instructor-led Mastery**

Absorb Resources

Refer to the DRW Learning Block online for the complete list of assigned resources for this block. Topics to review include:

REFR. SERVICE SKILLS

- Brazing Fundamentals
- Soldering Fundamentals
- Capillary Action
- Joint Prep & Materials Selection

SUPPLEMENTAL

- Assigned Videos
- Brazing Demonstrations
- Nitrogen Purging
- Flame Control & Torch Op.

AST580 TRAINING MATLS.

- Westchester Braze Training PowerPoint

Resources

Key Competencies

By completion of this Learning Block, technicians should demonstrate competency in:

- Flame Safety & PPE Requirements
- Torch Operation & Flame Types
- Capillary Action Principles
- Copper Tubing Preparation

- Brazing + Soldering Fundamentals
- Filler Metals & Flux Selection
- Copper-to-Copper Connections
- Dissimilar Metal Connections

- Nitrogen Purging Practices
- Component Protection Techniques
- Overheating Prevention
- Joint Quality & Safe Piping Practices

Competencies

Mastery

Instructor-Led Skills Session
Copper Brazing and Soldering

Complete **Assessment Tasks** with an instructor, then return to DRW platform to document:

- **Safety** — Review flame safety, PPE requirements, and firewatch responsibilities.
- **Preparation** — Clean + prepare copper tubing + fittings for brazing and soldering.
- **Materials** — Identify the purpose and proper use of flux, solder, and brazing rods.
- **Torches** — Demonstrate torch operation and identify common flame types.
- **Practice** — Complete 4 brazing + soldering exercises using copper tubing + fittings.
- **Development** — Discuss best practices for cont. safe practice + skill improvement.

Name: _____

Phase Start Date: _____

DRW