



Print Reading for HVACR Integration into HVACR Programs and Correlation with Modern Refrigeration and Air Conditioning



Many HVACR programs do not include a dedicated print reading course. However, the content in *Print Reading for HVACR* can be effectively integrated into programs to supplement and expand existing course areas.

The following chart illustrates how content from *Print Reading for HVACR* can be effectively integrated into courses/curriculum areas commonly found in HVACR programs.

Course/Curriculum Area	Print Reading for HVACR Chapters and Sections
Installation of Air-Conditioning Systems	Chapter 1—Introduction to Print Reading
	Chapter 7—Piping Drawings
	Chapter 8—Project Drawings
	Chapter 11—HVACR Schedules
	Chapter 12—Estimating HVACR Jobs
Ductwork / Airflow	Chapter 2—Math Review—Arithmetic
	Chapter 3—Math Applications
	Chapter 4—Measurements and Scales
	Chapter 5—Basic Duct Symbols and Drawings
	Chapter 6—Estimating Duct Systems
Heating and Cooling Loads	Chapter 2—Math Review—Arithmetic
	Chapter 3—Math Applications
	Chapter 4—Measurements and Scales
	Large Prints
Electrical Fundamentals	Chapter 9—Electrical Wiring Diagram Basics
	Chapter 10—Electrical Wiring Diagrams for Furnaces, Hot Water Heating, and Heat Pump Systems

For HVACR programs using *Modern Refrigeration and Air Conditioning* as the primary content source, the following chart illustrates how content in *Print Reading for HVACR* can be used to supplement and expand on the coverage provided in *Modern Refrigeration and Air Conditioning*.

Modern Refrigeration and Air Conditioning Chapters	Print Reading for HVACR Chapters and Sections
Chapter 4—Energy and Matter	Chapter 2—Math Review—Arithmetic Chapter 3—Math Applications
Chapter 17—Electrical Troubleshooting Fundamentals	Section 9.1—Electrical Devices Section 9.2—Electrical Symbols and Wiring Diagrams
Chapter 29—Air Distribution	Chapter 1—Introduction to Print Reading Chapter 4—Measurements and Scales Chapter 5—Basic Duct Symbols and Drawings Chapter 6—Estimating Duct Systems
Chapter 31—Self-Contained Air-Conditioning Systems	Section 9.3—Basic Window Air-Conditioning Unit Wiring Diagrams
Chapter 32—Residential Split Air-Conditioning Systems	Chapter 7—Piping Drawings Chapter 8—Project Drawings Section 9.4—Basic Split Air-Conditioning System Wiring Diagrams
Chapter 37—Heating and Cooling Loads	Chapter 2—Math Review—Arithmetic Chapter 3—Math Applications Large Prints
Chapter 38—Forced-Air Heating Fundamentals	Section 10.1—Furnace Wiring Diagrams
Chapter 39—Hydronic Heating Fundamentals	Section 10.2—Hot Water Heating System Wiring Diagrams
Chapter 40—Heat Pumps	Section 10.3—Heat Pump System Wiring Diagrams Section 10.4—Heat Pump Modes of Operation
Chapter 52—Installing Commercial Systems	Chapter 11—HVACR Schedules Chapter 12—Estimating HVACR Jobs