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|                       | Textbook Section                                  |   | Section 1 |   |              | Section 2 |   | Secti        | on 3         |
|-----------------------|---|---|-----------|---|--------------|-----------|---|--------------|--------------|
|                       | Chapter Number                                    | 1 | 2         | 3 | 4            | 5         | 6 | 7            | 8            |
|                       | Introduction to Heating                           | ~ |           |   | $\checkmark$ | ~         | ✓ |              |              |
|                       | Principles of Thermodynamics<br>and Heat Transfer |   |           |   | ~            | ~         | ~ |              |              |
|                       | Safety  | ~ | ~         | ~ | ~            | ~         | ~ | ~            | ~            |
|                       | Tools and Equipment                               |   |           | ~ |              |           |   | ~            | ~            |
|                       | Piping and Piping Practices                       |   |           |   |              |           |   | ~            | ~            |
|                       | Electricity                                       |   |           |   |              |           |   | $\checkmark$ |              |
|                       | Controls  |   |           |   |              |           | ~ |              |              |
|                       | Solid State Electronics                           |   |           |   |              |           |   |              |              |
|                       | Load Calculations                                 |   |           |   | ~            | ~         | ~ |              |              |
| S                     | Refrigerant System<br>Components                  |   |           |   |              |           | ~ | ~            | ~            |
| ı Area                | Air-Conditioning Systems                          |   |           |   |              |           | ~ | ~            |              |
| AHRI Curriculum Areas | Heat Pump Systems                                 |   |           | ~ |              |           | ~ | ~            | ~            |
| Curri                 | Heating Systems                                   |   |           | ~ |              |           |   | ~            |              |
| AHRI                  | Commercial Refrigeration                          |   |           | ~ | ~            | ~         | ~ | ~            | ~            |
|                       | Air Handling                                      |   |           |   |              |           |   | ~            |              |
|                       | System Installation and Start-<br>Up              |   |           | ~ | ~            | ~         |   | ~            | ~            |
|                       | System Servicing and<br>Troubleshooting           |   |           | ~ |              | ~         | ~ | ~            | ~            |
|                       | Indoor Air Quality                                |   |           |   |              |           |   |              |              |
|                       | Preventive Maintenance                            |   |           | ~ |              |           |   | ~            | ~            |
|                       | Refrigerant Recovery                              | ~ |           |   |              |           | ~ | ~            | ~            |
|                       | Refrigerant Retrofits                             |   |           |   |              |           |   |              |              |
|                       | Refrigerants and Lubricants                       |   |           |   |              |           |   | ✓            |              |
|                       | Regulations                                       | ~ | ~         |   |              |           |   | ~            | $\checkmark$ |
|                       | Professional Service                              | ~ |           | ~ |              |           |   |              |              |

|                       | Textbook Section                                  |              | Section 4 |    |   | Section 5 |    |
|-----------------------|---|--------------|-----------|----|---|-----------|----|
|                       | Chapter Number                                    | 9            | 10        | 11 |   |           | 14 |
|                       | Introduction to Heating                           |              |           |    |   |           |    |
|                       | Principles of Thermodynamics<br>and Heat Transfer | ~            | ~         |    |   |           |    |
|                       | Safety  | ~            | ~         | ~  |   | ~         | ✓  |
|                       | Tools and Equipment                               |              | ~         | ~  | ~ | ~         | ✓  |
|                       | Piping and Piping Practices                       |              |           |    |   |           |    |
|                       | Electricity                                       |              |           | ~  | ~ | ~         | ✓  |
|                       | Controls  |              |           | ~  | ~ | ~         | ✓  |
|                       | Solid State Electronics                           |              |           |    | ~ | ~         | ✓  |
|                       | Load Calculations                                 | $\checkmark$ |           |    |   |           |    |
| SE                    | Refrigerant System<br>Components                  | ~            | ~         | ~  |   |           | ~  |
| אר ה                  | Air-Conditioning Systems                          |              | ~         | ~  |   | ~         |    |
| culun                 | Heat Pump Systems                                 | ~            | ~         | ~  | ~ | ~         | ~  |
| AHRI Curriculum Areas | Heating Systems                                   |              | ~         | ~  | ~ | ~         |    |
| AHRI                  | Commercial Refrigeration                          | ~            | ~         | ~  | ~ | ~         | ~  |
|                       | Air Handling                                      |              |           |    |   | ~         |    |
|                       | System Installation and Start-<br>Up              | ~            | ~         | ~  | ~ | ~         | ✓  |
|                       | System Servicing and<br>Troubleshooting           | ~            | ~         | ~  | ~ | ~         | ~  |
|                       | Indoor Air Quality                                |              |           |    |   |           |    |
|                       | Preventive Maintenance                            |              | ~         | ~  |   |           |    |
|                       | Refrigerant Recovery                              | ~            | ~         | ~  |   |           |    |
|                       | Refrigerant Retrofits                             | ~            | ~         | ~  |   |           |    |
|                       | Refrigerants and Lubricants                       | ~            | ~         | ~  |   |           |    |
|                       | Regulations                                       | ~            | ~         | ~  |   | ~         |    |
|                       | Professional Service                              |              |           |    |   |           |    |

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|                       | Textbook Section                                  |              | -  | ion 6 |    |    |    | Section 7 |              |    |
|-----------------------|---|--------------|----|-------|----|----|----|-----------|--------------|----|
|                       | Chapter Number                                    | 15           | 16 | 17    | 18 | 19 | 20 | 21        | 22           | 23 |
|                       | Introduction to Heating                           |              |    |       |    |    |    |           |              | ~  |
|                       | Principles of Thermodynamics<br>and Heat Transfer |              |    |       |    | ~  | ~  | ~         | ~            | ~  |
|                       | Safety  |              |    | ~     | ~  |    |    |           |              |    |
|                       | Tools and Equipment                               |              | ~  | ~     | ~  |    |    |           |              |    |
|                       | Piping and Piping Practices                       |              |    |       |    |    | ~  |           |              |    |
|                       | Electricity                                       | $\checkmark$ | ~  | ~     | ~  | ~  | ~  | ~         | ~            | ~  |
|                       | Controls  | ✓            | ~  | ~     | ~  |    | ~  | ~         | ~            | ~  |
|                       | Solid State Electronics                           | ~            | ~  | ~     | ~  |    |    |           |              |    |
|                       | Load Calculations                                 |              |    |       |    |    |    |           | ~            |    |
| S                     | Refrigerant System<br>Components                  | $\checkmark$ | ~  | ~     | ~  | ~  | ~  | ~         | ~            | ~  |
| ı Area                | Air-Conditioning Systems                          |              | ~  | ~     | ~  |    |    |           | $\checkmark$ | ~  |
| culum                 | Heat Pump Systems                                 | $\checkmark$ | ~  | ~     | ~  |    |    |           | ~            | ~  |
| AHRI Curriculum Areas | Heating Systems                                   | ~            | ~  | ~     | ~  |    |    |           |              |    |
| AHRI                  | Commercial Refrigeration                          | $\checkmark$ | ~  | ~     | ~  | ~  | ~  | ~         | ~            | ~  |
|                       | Air Handling                                      | ~            | ~  | ~     | ~  |    |    | ~         |              |    |
|                       | System Installation and Start-<br>Up              | ~            | ~  | ~     | ~  |    |    |           |              |    |
|                       | System Servicing and<br>Troubleshooting           | ~            | ~  | ~     | ~  | ~  | ~  |           | ~            | ~  |
|                       | Indoor Air Quality                                |              |    |       |    |    |    |           |              |    |
|                       | Preventive Maintenance                            |              |    | ~     | ~  |    |    |           |              | ~  |
|                       | Refrigerant Recovery                              |              |    |       |    |    |    |           |              | ~  |
|                       | Refrigerant Retrofits                             |              | ~  |       |    | ~  |    |           |              |    |
|                       | Refrigerants and Lubricants                       |              |    |       |    | ~  | ~  |           |              |    |
|                       | Regulations                                       | $\checkmark$ | ~  | ~     | ~  |    |    |           | ~            | ~  |
|                       | Professional Service                              |              |    |       |    |    |    |           |              |    |

|                  | Textbook Section                                  |              | Section 8 |    |             | Sect | ion 9 |    |
|------------------|---|--------------|-----------|----|-------------|------|-------|----|
|                  | Chapter Number                                    | 24           | 25        | 26 | 27 28 29 30 |      |       | 30 |
|                  | Introduction to Heating                           |              |           |    | ~           | ~    | ✓     | ✓  |
|                  | Principles of Thermodynamics<br>and Heat Transfer |              |           |    | ~           |      |       |    |
|                  | Safety  |              |           |    |             |      |       |    |
|                  | Tools and Equipment                               |              |           |    | ~           |      | ~     | ✓  |
|                  | Piping and Piping Practices                       |              |           |    |             |      | ~     | ✓  |
|                  | Electricity                                       | $\checkmark$ | ~         | ~  |             |      | ~     | ✓  |
|                  | Controls  |              |           | ~  |             | ~    | ~     | ✓  |
|                  | Solid State Electronics                           |              |           |    |             | ~    |       | ~  |
|                  | Load Calculations                                 |              |           |    | ~           | ~    | ~     | ~  |
| S                | Refrigerant System<br>Components                  | $\checkmark$ | ~         | ~  | ~           |      | ~     | ~  |
| Curriculum Areas | Air-Conditioning Systems                          |              | ~         |    | ~           | ~    | ~     | ~  |
| culun            | Heat Pump Systems                                 |              |           |    |             |      |       |    |
| Curri            | Heating Systems                                   |              |           |    | ~           |      | ~     | ~  |
| AHRI             | Commercial Refrigeration                          | $\checkmark$ | ~         |    | ~           |      | ~     | ~  |
|                  | Air Handling                                      |              |           |    | ~           |      | ~     | ~  |
|                  | System Installation and Start-<br>Up              |              | ~         | ~  | ~           |      | ~     | ~  |
|                  | System Servicing and<br>Troubleshooting           | $\checkmark$ | ~         | ~  | ~           | ~    | ~     | ~  |
|                  | Indoor Air Quality                                |              |           |    | ~           | ~    | ~     | ~  |
|                  | Preventive Maintenance                            | $\checkmark$ | ~         | ~  |             | ~    |       | ~  |
|                  | Refrigerant Recovery                              |              | ~         | ~  |             |      |       |    |
|                  | Refrigerant Retrofits                             |              |           | ~  |             |      |       |    |
|                  | Refrigerants and Lubricants                       |              |           | ~  |             |      |       |    |
|                  | Regulations                                       |              |           |    | ~           | ~    | ~     | ~  |
|                  | Professional Service                              |              |           |    |             |      |       |    |

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|                       | Textbook Section                                  | Section 10   |    |    |    |    |              |              |  |  |  |
|-----------------------|---|--------------|----|----|----|----|--------------|--------------|--|--|--|
|                       | Chapter Number                                    | 31           | 32 | 33 | 34 | 35 | 36           | 37           |  |  |  |
|                       | Introduction to Heating                           | $\checkmark$ | ✓  | ~  | ~  | ~  | ~            | ~            |  |  |  |
|                       | Principles of Thermodynamics<br>and Heat Transfer |              | ~  | ~  |    | ~  |              |              |  |  |  |
|                       | Safety  | $\checkmark$ | ~  | ~  |    |    |              |              |  |  |  |
|                       | Tools and Equipment                               | $\checkmark$ | ~  | ~  |    |    | $\checkmark$ | $\checkmark$ |  |  |  |
|                       | Piping and Piping Practices                       |              | ~  | ~  |    |    |              |              |  |  |  |
|                       | Electricity                                       | $\checkmark$ | ~  | ~  |    | ~  | ~            |              |  |  |  |
|                       | Controls  | $\checkmark$ | ~  | ~  |    | ~  | ~            |              |  |  |  |
|                       | Solid State Electronics                           |              |    |    |    | ~  |              |              |  |  |  |
|                       | Load Calculations                                 | $\checkmark$ | ~  | ~  |    | ~  |              | ~            |  |  |  |
| s                     | Refrigerant System<br>Components                  | $\checkmark$ | ~  | ~  | ~  |    |              | ~            |  |  |  |
| n Area                | Air-Conditioning Systems                          | ~            | ~  | ~  | ~  |    |              |              |  |  |  |
| culum                 | Heat Pump Systems                                 | ~            | ~  |    |    |    | ~            |              |  |  |  |
| AHRI Curriculum Areas | Heating Systems                                   |              |    |    |    | ~  | ~            | ~            |  |  |  |
| AHRI                  | Commercial Refrigeration                          |              |    | ~  | ~  |    | ~            | ~            |  |  |  |
|                       | Air Handling                                      |              |    |    |    |    |              |              |  |  |  |
|                       | System Installation and Start-<br>Up              | ~            | ~  | ~  |    | ~  | ~            |              |  |  |  |
|                       | System Servicing and<br>Troubleshooting           | $\checkmark$ | ~  | ~  |    | ~  | ~            |              |  |  |  |
|                       | Indoor Air Quality                                |              |    |    |    |    |              |              |  |  |  |
|                       | Preventive Maintenance                            | ✓            | ~  | ~  | ~  |    |              |              |  |  |  |
|                       | Refrigerant Recovery                              | ✓            | ~  |    |    |    |              |              |  |  |  |
|                       | Refrigerant Retrofits                             | ✓            | ~  | ~  |    |    |              |              |  |  |  |
|                       | Refrigerants and Lubricants                       | $\checkmark$ |    |    |    |    |              |              |  |  |  |
|                       | Regulations                                       | ✓            | ~  | ~  |    |    | ~            | ~            |  |  |  |
|                       | Professional Service                              |              |    |    |    |    | ~            |              |  |  |  |

| Textbook Section Section 11 |   |    |              |    |    | DOOK CZ |              |
|-----------------------------|---|----|--------------|----|----|---------|--------------|
|                             | Chapter Number                                    | 38 | 39           | 40 | 41 | 42      | 43           |
|                             | Introduction to Heating                           | ~  | $\checkmark$ | ~  | ~  | ~       | $\checkmark$ |
|                             | Principles of Thermodynamics<br>and Heat Transfer |    |              |    |    |         | ~            |
|                             | Safety  |    |              |    |    | ~       |              |
|                             | Tools and Equipment                               | ~  | ~            | ~  | ~  | ~       | ✓            |
|                             | Piping and Piping Practices                       |    | ~            |    | ~  |         |              |
|                             | Electricity                                       | ~  | ~            | ~  | ~  | ~       | ✓            |
|                             | Controls  | ~  | ~            | ~  | ~  | ~       | ✓            |
|                             | Solid State Electronics                           |    |              |    |    |         |              |
|                             | Load Calculations                                 |    |              |    |    |         |              |
| SE                          | Refrigerant System<br>Components                  | ~  | ~            | ~  | ~  | ~       |              |
| AHRI Curriculum Areas       | Air-Conditioning Systems                          | ~  | ~            |    | ~  |         |              |
| culun                       | Heat Pump Systems                                 | ~  |              | ~  |    |         |              |
| Curri                       | Heating Systems                                   | ~  | ~            | ~  | ~  | ~       | ~            |
| AHRI                        | Commercial Refrigeration                          |    |              |    |    | ~       | ~            |
|                             | Air Handling                                      | ~  |              |    |    |         |              |
|                             | System Installation and Start-<br>Up              | ~  | ~            | ~  | ~  | ~       | ~            |
|                             | System Servicing and<br>Troubleshooting           | ~  | ~            | ~  | ~  | ~       | ~            |
|                             | Indoor Air Quality                                |    |              |    |    |         |              |
|                             | Preventive Maintenance                            | ~  | ~            | ~  | ~  | ~       | ~            |
|                             | Refrigerant Recovery                              |    |              |    |    |         |              |
|                             | Refrigerant Retrofits                             |    |              |    |    |         |              |
|                             | Refrigerants and Lubricants                       |    |              |    |    |         |              |
|                             | Regulations                                       |    |              |    | ~  |         |              |
|                             | Professional Service                              |    |              |    |    |         |              |

|                       | Textbook Section                                  | 9  | Section 12   | 2            |              | Section 13 |    |
|-----------------------|---|----|--------------|--------------|--------------|------------|----|
|                       | Chapter Number                                    | 44 | 45           | 46           | 47           | 48         | 49 |
|                       | Introduction to Heating                           | ~  |              | ~            | ~            |            |    |
|                       | Principles of Thermodynamics<br>and Heat Transfer | ~  |              |              | $\checkmark$ |            | ~  |
|                       | Safety  |    |              |              |              |            |    |
|                       | Tools and Equipment                               |    |              |              |              |            |    |
|                       | Piping and Piping Practices                       |    |              |              |              |            |    |
|                       | Electricity                                       | ~  | ✓            |              | $\checkmark$ |            |    |
|                       | Controls  | ~  | ✓            | $\checkmark$ |              |            |    |
|                       | Solid State Electronics                           | ~  | $\checkmark$ |              |              |            |    |
|                       | Load Calculations                                 | ~  | ~            | ~            |              | ~          |    |
| S                     | Refrigerant System<br>Components                  |    |              | ~            | ~            |            | ~  |
| ı Area                | Air-Conditioning Systems                          | ~  | ~            | ~            |              |            |    |
| culum                 | Heat Pump Systems                                 |    |              |              |              |            |    |
| AHRI Curriculum Areas | Heating Systems                                   |    |              |              |              |            |    |
| AHRI                  | Commercial Refrigeration                          | ~  | ~            | ~            | ~            | ~          | ~  |
|                       | Air Handling                                      |    |              |              |              |            |    |
|                       | System Installation and Start-<br>Up              |    |              |              |              |            |    |
|                       | System Servicing and<br>Troubleshooting           |    |              |              |              |            |    |
|                       | Indoor Air Quality                                |    |              |              |              |            |    |
|                       | Preventive Maintenance                            |    |              |              | ~            |            |    |
|                       | Refrigerant Recovery                              |    |              |              |              |            |    |
|                       | Refrigerant Retrofits                             |    |              |              |              |            |    |
|                       | Refrigerants and Lubricants                       |    |              |              |              |            |    |
|                       | Regulations                                       |    | ✓            |              | ~            |            |    |
|                       | Professional Service                              |    |              |              |              |            |    |

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|                       | Textbook Section                                  | Section | on 14        |              | Section 15   |              |              |
|-----------------------|---|---------|--------------|--------------|--------------|--------------|--------------|
|                       | Chapter Number                                    | 50      | 51           | 52           | 53           | 54           | 55           |
|                       | Introduction to Heating                           |         |              |              |              |              |              |
|                       | Principles of Thermodynamics<br>and Heat Transfer |         |              |              | ✓            | ~            |              |
|                       | Safety  | ~       | ~            | ~            | ~            | ~            | ✓            |
|                       | Tools and Equipment                               |         |              | ~            | ~            | ~            | ✓            |
|                       | Piping and Piping Practices                       | ~       | ~            | ~            | ~            | ~            | ✓            |
|                       | Electricity                                       |         | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|                       | Controls  |         |              | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|                       | Solid State Electronics                           |         |              |              |              |              |              |
|                       | Load Calculations                                 | ~       | ~            |              |              |              |              |
| S                     | Refrigerant System<br>Components                  | ~       | ~            | ~            | ~            | ~            | ~            |
| ı Area                | Air-Conditioning Systems                          |         |              |              | ~            | ~            | ✓            |
| culum                 | Heat Pump Systems                                 |         |              |              |              |              |              |
| AHRI Curriculum Areas | Heating Systems                                   |         |              |              |              |              |              |
| AHRI                  | Commercial Refrigeration                          | ~       | ~            | ~            | ~            | ~            | ~            |
|                       | Air Handling                                      |         |              |              |              |              |              |
|                       | System Installation and Start-<br>Up              |         |              |              |              | ~            | ✓            |
|                       | System Servicing and<br>Troubleshooting           |         |              |              | ~            | ~            |              |
|                       | Indoor Air Quality                                |         |              |              |              |              |              |
|                       | Preventive Maintenance                            |         |              |              | ~            | ~            | ~            |
|                       | Refrigerant Recovery                              | ✓       |              |              | $\checkmark$ | ~            | ~            |
|                       | Refrigerant Retrofits                             |         |              |              |              |              | $\checkmark$ |
|                       | Refrigerants and Lubricants                       |         |              |              |              |              | ~            |
|                       | Regulations                                       | ~       |              | ~            | ~            |              | ~            |
|                       | Professional Service                              |         |              |              |              |              |              |