



SPECIAL EDITION

# TOOLBOX TALKS CLEAN ENERGY PROGRAM

TODAY'S TOPIC:

## HEAT PUMP PERFORMANCE



Mechanical Contractors Association of America, Inc.  
1385 Piccard Drive Rockville MD 20850 T 301 869 5800 F 301 990 9690 [MCAA.ORG](http://MCAA.ORG)



## Training Documentation for HEAT PUMPS

The undersigned workers have participated in training covered by the MCAA Toolbox Talk that corresponds to the topic in the space above.

- |           |           |
|-----------|-----------|
| 1. _____  | 11. _____ |
| 2. _____  | 12. _____ |
| 3. _____  | 13. _____ |
| 4. _____  | 14. _____ |
| 5. _____  | 15. _____ |
| 6. _____  | 16. _____ |
| 7. _____  | 17. _____ |
| 8. _____  | 18. _____ |
| 9. _____  | 19. _____ |
| 10. _____ | 20. _____ |
| 11. _____ | 21. _____ |
| 12. _____ | 22. _____ |
| 13. _____ | 23. _____ |
| 14. _____ | 24. _____ |



### Instructions for the Toolbox Talk Presenter

#### PREPARATION

1. Select the most appropriate talk for the week.
2. Keep track of the talks you present so you don't inadvertently repeat them.
3. Print copies of the talk you plan to use (one for each participant).
4. Print a copy of the training documentation sheet and write in the number of the talk in the blank at the top.
5. Read the talk you plan to present several days ahead of time.
6. Make sure you understand all aspects of the topic you'll be presenting.
7. Anticipate the questions that are most likely to be asked and prepare your responses to them ahead of time.

#### PRESENTATION

1. Answer any questions from the previous week's talk that you were unable to answer during the presentation.
2. Give a copy of the new talk you will be presenting to each participant.
3. Present the content of the talk slowly and clearly.
4. Relate any experiences you've had that relate to the topic.
5. Ask the participants to share their own experiences that relate to the topic.
6. Write down any questions that you can't answer and any comments that you think would be useful to the company.
7. Have each participant sign the training documentation sheet.
8. File the training documentation sheet where you can access it quickly if needed.

#### FOLLOW-UP

1. Be sure to re-read the questions and comments that you recorded.
2. Find the answers to the questions you were unable to answer. Start the next week's talk by revisiting the topic and answering those questions.

**TOPIC: Heat Pump Performance Training****FACTS**

- Ø Decarbonization = Clean Energy = Electrification
  - Decarbonization is the reduction/ elimination of carbon dioxide from energy sources.
  - Utilizing heat pumps for water heating and comfort cooling & heating is clean energy.
- Ø Heat pumps are beneficial to building owners
  - Heat pump water heaters works like a refrigerator, but in reverse. A domestic heat pump water heater captures heat from the surrounding air and transfers it to stored water inside the tank. Because heat pump water heaters move heat, as opposed to generating heat, they are able to operate more efficiently.
- Ø Installing, commissioning, and servicing heat pump equipment is the everyday work of the United Association.

**OPPORTUNITY**

- Ø State & Federal Financial Incentives:
  - Rebates, Tax Credit, Loans, Grants, & More
- Ø Signatory contractors and UA members are uniquely qualified to get trained and perform the work to reduce the carbon footprint for any state or city.
- Ø The UA International Training Fund has created a heat pump training course.

**UA LED HANDS ON & CLASSROOM TRAINING**

- Ø Learn all parts of a heat pump and their purpose, and installation best practices.
- Ø Go through a systems checklist and proper charging procedures.
- Ø Review heat pump troubleshooting including identification of failures.
- Ø Use digital devices to harvest data for compliance with state and federal incentive programs.

**FOR MORE INFORMATION AND TO SIGN UP:**

- Ø Please reach out to Robert Vilches (rvilches@uanet.org) or Raffi Elchemmas (raffi@mcaa.org)