



NATIONAL ROOFING CONTRACTORS ASSOCIATION





## EP-A1 ASSIGNMENT: MECHANICALLY ATTACHED EPDM SYSTEMS Installer Performance Assignment and Instructions

Here are the instructions for your performance exam assignment. It is important you pay close attention to these instructions. Some of the tasks in this assignment are ranked high in importance for scoring purposes. These tasks are marked <u>HIGH!</u>.

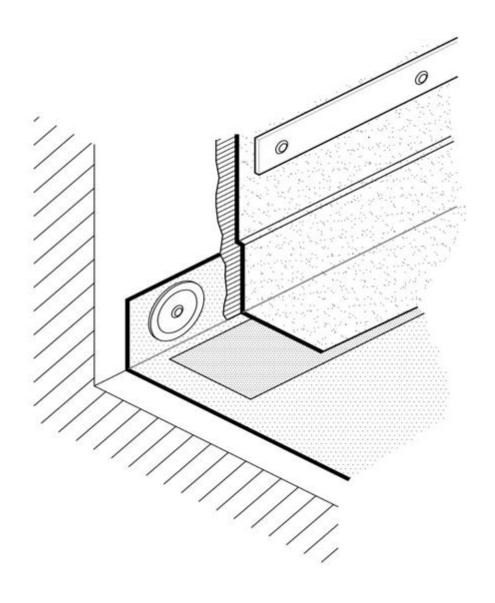
Be aware that you also will be scored on your ability to follow instructions. You will lose points if you do not follow these instructions exactly as they are given. Your ability to follow instructions is also ranked <u>HIGH!</u>. You will not be given any more information about this assignment. You can keep this copy of your instructions to look at any time during your exam.

There are two parts to this assignment. In Part One, you will set up and demonstrate how to properly put on and use a personal fall-arrest system, or PFAS. This part of your assignment is not timed. In Part Two, you must install mechanically attached EPDM field sheets, parapet wall flashings, a curb flashing and a vent pipe flashing following specific instructions. This part of your assignment is timed. Remember, you must follow all instructions exactly as they are given. Your Qualified Assessor will review the details with you before starting each part of this assignment.

EXAM PART ONE: SETUP, PFAS DEMO AND SAFETY INSTRUCTIONS		
1	This is Part One of your assignment. This part is not timed.	
2	You may NOT ask your assessor or anyone else questions about:	
	- How to set up or use any tools, equipment or materials	
	- How to wear or use a PFAS	
	- Correct or incorrect procedures, steps or techniques to help you do any task	
3	For Part One of this exam, you must demonstrate and explain to your assessor how to use a	
HIGH!	PFAS, including:	
	- How to inspect and use each PFAS component and how they work	
	- How to put on your harness	
	- How to connect the lanyard to the harness and to the lifeline	
	- How to use the rope grab device and lifeline so that if you fall, you will not hit the	
	ground or swing sideways and strike something	
	- How and where to attach an anchor device on a roof	
	- How to connect the lifeline to the anchor (Your Qualified Assessor will show you the	
	demo anchor device to use.).	
4	Type of the Control Deat Contro	
4	When you finish Part One, your assessor will read the instructions for Part Two.	
5	Your assessor will show you the demo anchor device you will use to connect the lifeline.	
	EXAM PART TWO: INSTALLATION TASKS INSTRUCTIONS	
6	This is Part Two of your assignment. This part of your exam is timed. Once the timer starts, you	
	will have three hours to complete this part of the exam.	

7 HIGH!	You must use the correct PPE when doing the work. Your assessor will stop your work if you do something unsafely. You must correct the safety error before proceeding. You do not get extra time when you are stopped for a safety issue.
8	Take whatever time you need to set up all tools, equipment and materials. But you cannot ask anybody for help. You must tell your assessor when you are ready to start working on your assignment. Only then will your assessor start the timer.
9	Your assessor will tell you when you have 10 minutes left on the timer.
10	Your assessor will tell you when the time ends, and you must stop.
11	Your assessor will read your assigned tasks. These tasks are not provided in any particular order. You can perform them in any order you think is best within the allotted time. He or she can repeat any instruction for you at any time during the exam if you ask, but you cannot ask questions about how to do any part of the work or ask for help in any way to get the assignment done.
12 <u>HIGH!</u>	Install two 8-foot-long rows of reinforced EPDM membrane sheets. Maintain a minimum 6-inch sidelap. Your assessor will tell you the direction of the roof slope.
13	Extend sheets a minimum of 4 inches up parapet walls and curbs.
14 <u>HIGH!</u>	Set and align the field sheet around the inside and outside corners. Do not cut the sheet at the inside corners.
15	You must cut the field sheet when installing it around the pipe penetration.
16 <u>HIGH!</u>	Mechanically attach the field sheet with fastener plates set a maximum of 6 inches on-center in seams and within 1 inch from the sheet edge.
17	Mechanically attach field sheets around penetrations using a minimum of four fasteners set a maximum of 6 inches on center.
18 HIGH!	Attach field sheets on the parapet walls a maximum of 12 inches on center. Follow the details shown in Diagram 1.
19 HIGH!	Bond all sheet lap seams using 3-inch-wide seam tape.
20	Adhere minimum 6-inch-wide cover strips at field sheet cuts as needed, including T-joint covers. Show your assessor where lap sealant should be applied when installing cover strips.
21 HIGH!	Install a prefabricated boot flashing on the pipe penetration, including the draw band. Show your assessor where sealants should be applied when installing the pipe flashing. Follow the details shown in Diagram 2.
22 HIGH!	Install a 12-inch-tall base flashing on the short parapet wall, around the inside and outside corners and extend at least 2 feet onto the long parapet wall. Cut flashing sheets from the same membrane used for field sheets. Fold and seal the flashing sheets at the inside corners; do not

	cut. Use the system manufacturer's premolded outside corners. Extend flashing sheets a minimum of 4 inches onto field sheets. Show your assessor where you would apply lap sealant. Follow the details shown in Diagram 1.
23	Secure the top of base flashing with a termination bar anchored a maximum of 6 inches oncenter using screw fasteners. Show your assessor where sealant should be applied when installing termination bar.
24 HIGH!	Field-fabricate and install base flashing sheets on all sides of the box curb. Extend sheets over the top of curb and attach using capped nails set with a maximum spacing of 6 inches oncenter. Extend sheets a minimum of 4 inches out onto field sheet. Use the system manufacturer's premolded outside corners. Follow the details shown in Diagram 3.
25	Remember, you must show your assessor all areas where all types of sealants need to be applied but do not actually install any sealants.
26	You can complete these tasks in any order you judge best. When you are all setup and ready to begin, tell your assessor and he or she will start the timer.



## DIAGRAM 1: DETAIL FOR WALL FLASHING

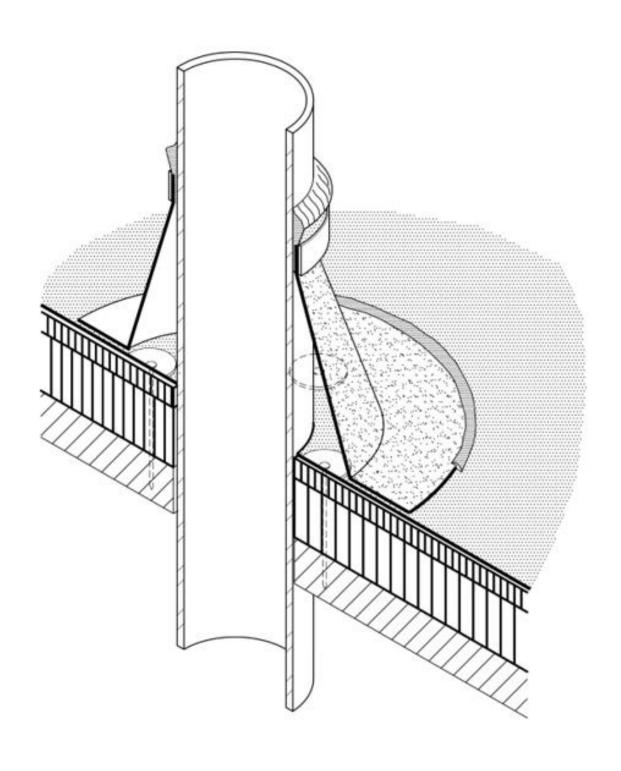
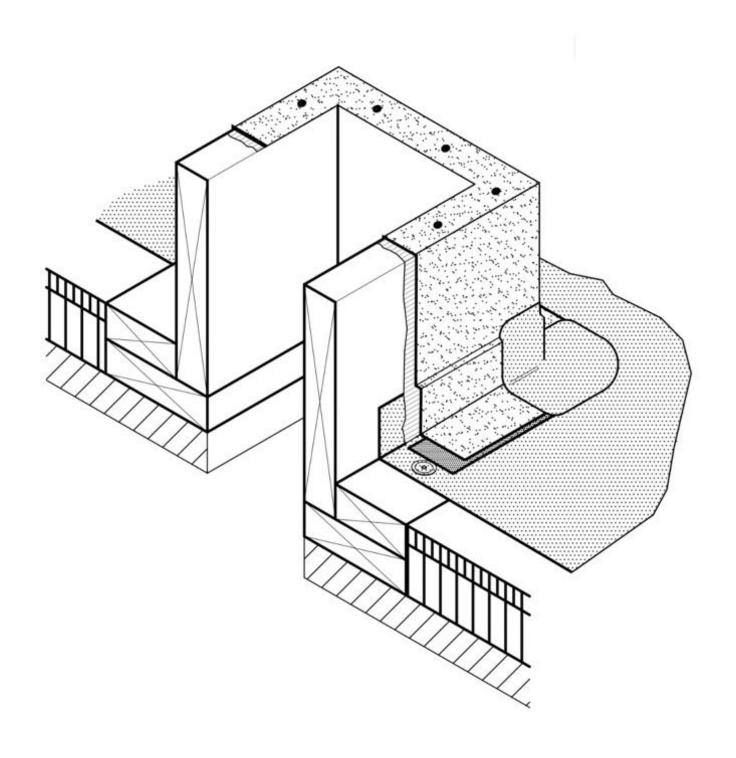


DIAGRAM 2:
DETAIL FOR PIPE PENETRATION FLASHING



## DIAGRAM 3: DETAIL FOR CURB FLASHING