



NATIONAL ROOFING CONTRACTORS ASSOCIATION





AS-B2 ASSIGNMENT: ASPHALT SHINGLE 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 HIGH!.

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 **HIGH!**. 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 underlayment, metal edge flashings and shingles over the entire mockup 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 HIGH!	For Part One of this exam, you must demonstrate and explain to your assessor how to use a 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	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 setup all tools, equipment and materials any way you want. But you cannot ask for help from your assessor or anybody. You must tell your assessor when you are ready to start. 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. If you finish your task before the timer ends, tell your assessor you are finished.	
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 HIGH!	Install T-style metal edge flashing at all rake edges and L-style at eave edges with section ends lapped 2 inches, corners folded a minimum of 2 inches and attached with roofing nails spaced a maximum of 6-inches on-center, and staggered.	
13 <u>HIGH!</u>	Install a single layer of self-adhering underlayment in valleys, around penetrations and on the lower eaves. Turn underlayment up vertical surfaces a minimum of 4 inches. See Diagram 1.	
14 HIGH!	Install underlayment over the remainder of the roof deck with a minimum 2-inch side lap and, if necessary, a minimum 4-inch end lap over the remainder of the roof deck. Fasten the underlayment using plastic-cap nails spaced a maximum of 12-inches on center in side lap and staggered 18-inches in the field.	
15 HIGH!	Install premanufactured starter strips extending $1/2$ inch, plus or minus $1/4$ inch, beyond edges and nailed $1 1/2$ to 3 inches inside the perimeter edge and offset from the first shingle a minimum of 5 inches. Do not install starter strips at rake edges.	
16 HIGH!	Install standard laminate asphalt shingles on entire mockup using the product manufacturer's recommended horizontal offset diagonal pattern and exposure, plus or minus 1/8 of an inch, and attached with four nails per strip located within 1/8 of an inch of the manufacturer's specified locations.	
17	Install a vent pipe flashing around the vent pipe penetration. See Diagram 2.	

18	Install closed-cut valleys on the dormer. See Diagram 3.
HIGH!	
19	Install a metal apron flashing on the dormer headwall, attached with screw fasteners spaced a maximum of 3 inches on-center and within 1 inch of top edge and folded a minimum of 2 inches around each corner. See Diagram 4.
20	Install metal step flashings at intersecting dormer walls and fascia, attached to the roof.
HIGH!	Show your assessor all areas where you would need to apply elastomeric sealant to seal the step flashings. See Diagram 5.
21	Fabricate and install a metal transition flashing over the fascia intersecting the roof below the mouth of valleys.
22	Install 3 lineal feet of continuous ridge vent, set back 12 inches from the tie in with the main slope and attached following the vent manufacturer's instructions.
23 HIGH!	Install 10 lineal feet of factory-made hip and ridge cap shingles aligned straight and set with the manufacturer's recommended exposure, plus or minus $1/8$ of an inch, with one fastener on each side of ridge line located within $5/8$ -of-an-inch above sealant strips and 1 inch in from the shingles' outermost edge.
24	Remember, you must show and explain to your assessor all areas where all sealants need to be applied, but do not actually install any sealants.
25	Take as much time as you need to set up. When you are ready, tell me and I will start the timer.
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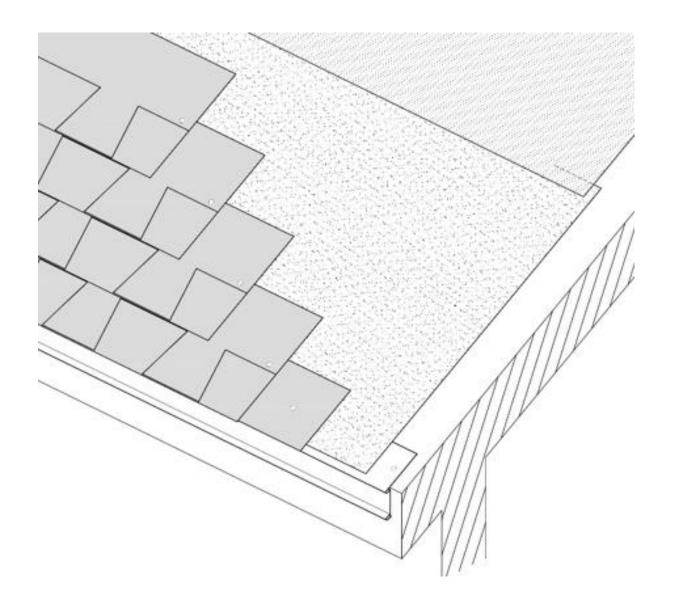


DIAGRAM 1: DETAIL FOR INSTALLING SELF-ADHERING UNDERLAYMENT AT EAVES

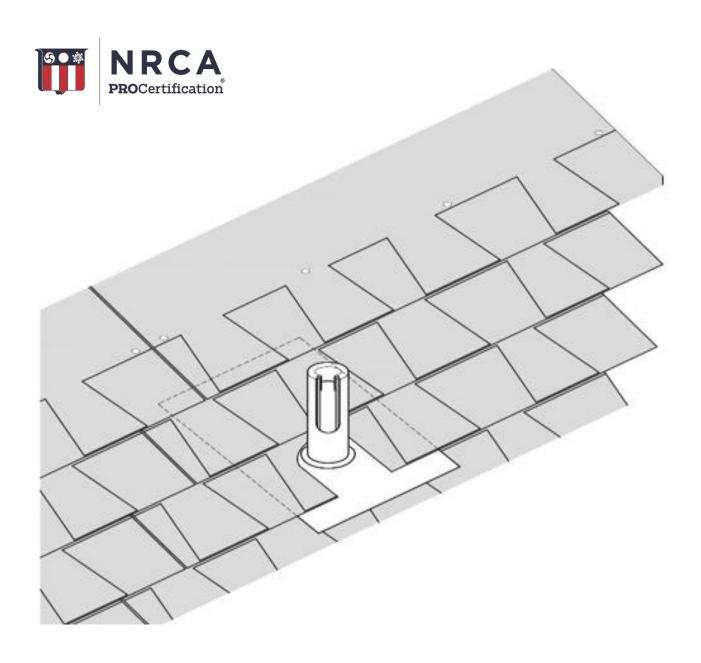


DIAGRAM 2: DETAIL FOR INSTALLING A PIPE PENETRATION FLASHING (FLASHING STYLE MAY VARY)



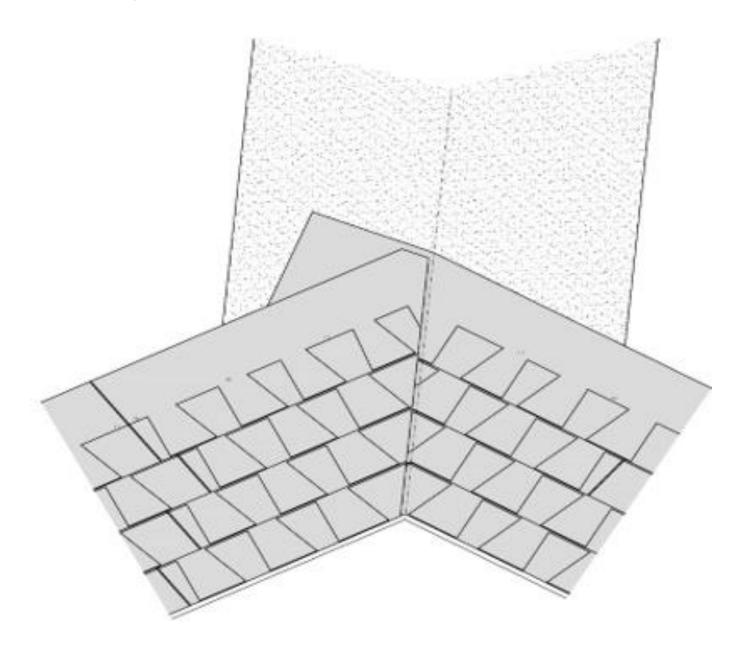


DIAGRAM 3: DETAIL FOR INSTALLING A CLOSED-CUT VALLEY



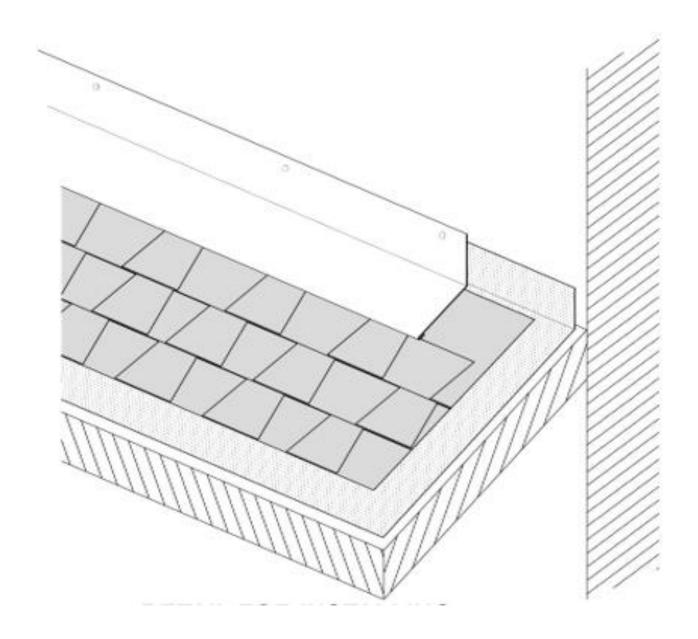


DIAGRAM 4:
DETAIL FOR INSTALLING A HEADWALL FLASHING



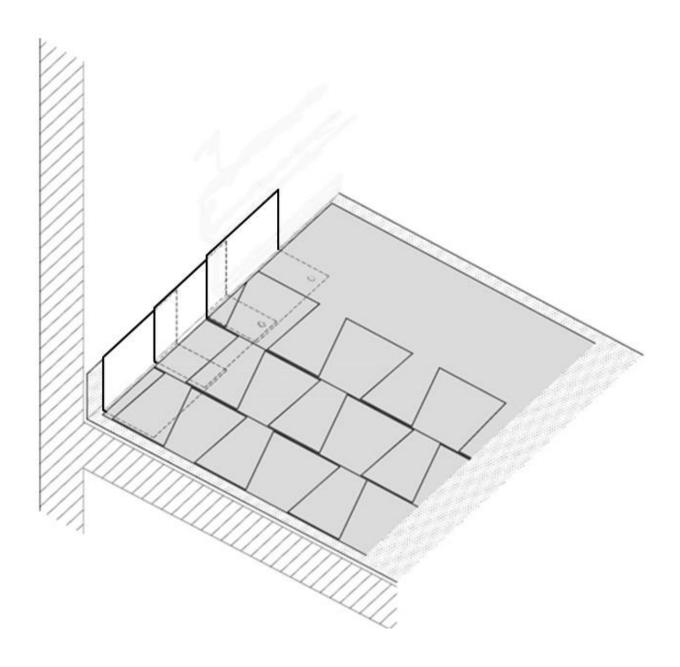


DIAGRAM 5: DETAIL FOR INSTALLING STEP FLASHING