



®

OPERATOR EXAMINATION Powder Actuated Tools

(PLEASE PRINT LEGIBLY, ALL INFORMATION MUST BE COMPLETED TO RECEIVE A LICENSE)

Name _____ Date _____
(First) (Middle) (Last)

Address _____
(Street) (City) (State) (Zip)

Company Name _____

Address _____
(Street) (City) (State) (Zip)







Proof of I.D. _____ Age _____ Birthdate _____ Bus. Phone _____
(Driver's License, Identification Card, Social Security Number)

**DRAW A CIRCLE
AROUND THE CORRECT ANSWER:
Ⓣ FOR TRUE; ⓕ FOR FALSE**

- | | | | |
|-----|---|---|---|
| 1. | The mandatory loading sequence for all Simpson Powder Actuated (PAT) Tools is "Fastener First, Chamber Powder Load Last". | T | F |
| 2. | Fasteners may be set as close as 1" to the edge of the concrete and ¼" to the edge of steel base materials. | T | F |
| 3. | An operator's card issued for a non-Simpson tool is also valid for Simpson tools. | T | F |
| 4. | The operator should always check the thickness and type of base material before attempting any fastening. | T | F |
| 5. | Powder Actuated Tools should never be used in flammable atmospheres. | T | F |
| 6. | Defective tools, parts and/or accessories must be removed from service immediately. | T | F |
| 7. | Test fastening should always be made using the strongest load power level. | T | F |
| 8. | A warning sign, "Warning, Powder Actuated Tool in use", is required to be posted in plain sight where powder actuated tools are used. | T | F |
| 9. | The operator should remove the tool from the work surface and extract the powder load immediately if the tool fails to fire. | T | F |
| 10. | All precautions ordinarily used around firearms should be observed when operating any Powder Actuated Tool. | T | F |
| 11. | The operator should make sure that the tool is perpendicular to the work surface before firing. | T | F |
| 12. | Fastener penetration into average (2500-4000 psi) concrete should be approximately 1". | T | F |
| 13. | Simpson powder actuated tools work best when cleaned, lubricated and wiped dry of oil. Tools should be cleaned daily or after 1000 continuous fastenings. | T | F |
| 14. | Simpson Powder Actuated Tools can be used to successfully set fasteners into such materials as glazed tile, brick and similar brittle materials. | T | F |
| 15. | Operators may set fasteners into standard structural steel, but should never attempt to set fasteners into hardened steel, tool grade steel or cast iron materials. | T | F |
| 16. | The powder loads used in Simpson tools are color coded to visually indicate power levels. | T | F |
| 17. | Powder loads must never be struck or pried out of a tool. | T | F |
| 18. | "Getting the point through" when fastening into steel provides maximum holding value. | T | F |
| 19. | Every powder tool operator must know, understand, and follow the misfire procedure, should a misfire be encountered during tool use. | T | F |

20. Circle the letter(s) that help to minimize “fishhooking” in masonry materials:
- a) The use of a shorter shank length fastener.
 - b) The use of a larger shank diameter fastener.
 - c) The use of a mechanically galvanized fastener.
 - d) All of the above.
21. Operator safety is the most important factor when considering a powder actuated tool application. T F
22. Circle the letter(s) of all daily steps that an operator should always perform prior to using a Simpson Powder Actuated Tool.
- a) Check to be sure the tool is unloaded.
 - b) Check to be sure the tool is in good mechanical condition.
 - c) Check the tool’s safety features to be sure they are working properly.
 - d) Test fire the tool with the most powerful load and no fastener.
23. Circle the letter(s) of all suitable base materials for Simpson powder actuated fasteners?
- a) Natural Rock
 - b) Mild Construction Grade Steel
 - c) 4000 PSI Concrete
 - d) Fireplace Brick
24. The holding value of a fastener in concrete is affected by concrete strength, type of aggregate, fastener shank diameter, depth of penetration and spacing and edge distance. T F
25. All operators and helpers must wear safety goggles and other appropriate personal protective items that job conditions warrant while using Powder Actuated Tools. T F
26. The operator should never place their hand over the end of the muzzle of a Simpson tool to cock or to close the tool. T F
27. Tightening a nut on a threaded stud creates a pulling or tension load on the stud which could weaken the fastening if over tightened. T F
28. The stabilizer pad provided with all Simpson tools should be used when needed to keep the tool perpendicular to the work surface. T F
29. Only the tool repair parts manufactured by Simpson should be used to repair the Simpson Powder Actuated Tools. Each manufacturer designs their tool parts to their own specifications. T F
30. One cause of inconsistent fastener penetration is failing to fully reset the piston prior to each fastening. T F
31. Any material not passing the center punch test is not suitable for powder actuated fasteners. T F
32. You can fasten into cracked or spalled areas of concrete. T F
33. When fastening into concrete, the base material thickness must be at least 5 times the shank penetration. T F
34. Do not drive fasteners into steel thinner than the shank diameter of the fastener. T F

Test for Color Blindness

Color	Number	Fill in the correct number for each color listed at left.					
Gray	_____						
Brown	_____	1	2	3	4	5	6
Green	_____						
Yellow	_____						
Red	_____						
Purple	_____						

I AM _____ I AM NOT _____ color deficient in my vision and have demonstrated my ability to distinguish the load power levels used by Simpson according to color and power level number system.

Signature: _____ Operator Applicant

QUALIFIED OPERATOR CHECKLIST:

- _____ a. Knowledge of Simpson Powder Actuated Tool safety rules.
- _____ b. Practiced loading, test firing and extracting power loads and fasteners including the proper handling of misfires.
- _____ c. Instructed on how to disassemble, and clean the tool(s).
- _____ d. Instructed on the need for and the use of all available Simpson Powder Actuated Tool accessories.
- _____ e. All test answers have been reviewed and all incorrect answers have been explained.
- _____ f. Understands how to conduct a center punch test of materials.

This certifies that _____ has received instruction in the proper operation and use of the specified models of Simpson Powder Actuated Fastening Tools. The operator applicant has successfully passed both the written and practical tests and satisfies all applicable requirements to qualify as an operator of Simpson Powder Actuated Tools. I agree to conform to all federal, state, and local regulations, and to adhere to Simpson's policies concerning operators using Simpson Powder Actuated Tools.

Models _____

(Authorized Instructor Signature)

(Operator Applicant Signature)

(Authorized Instructor Card No./Issue Date)

(Date)

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Attn: PAT Exams