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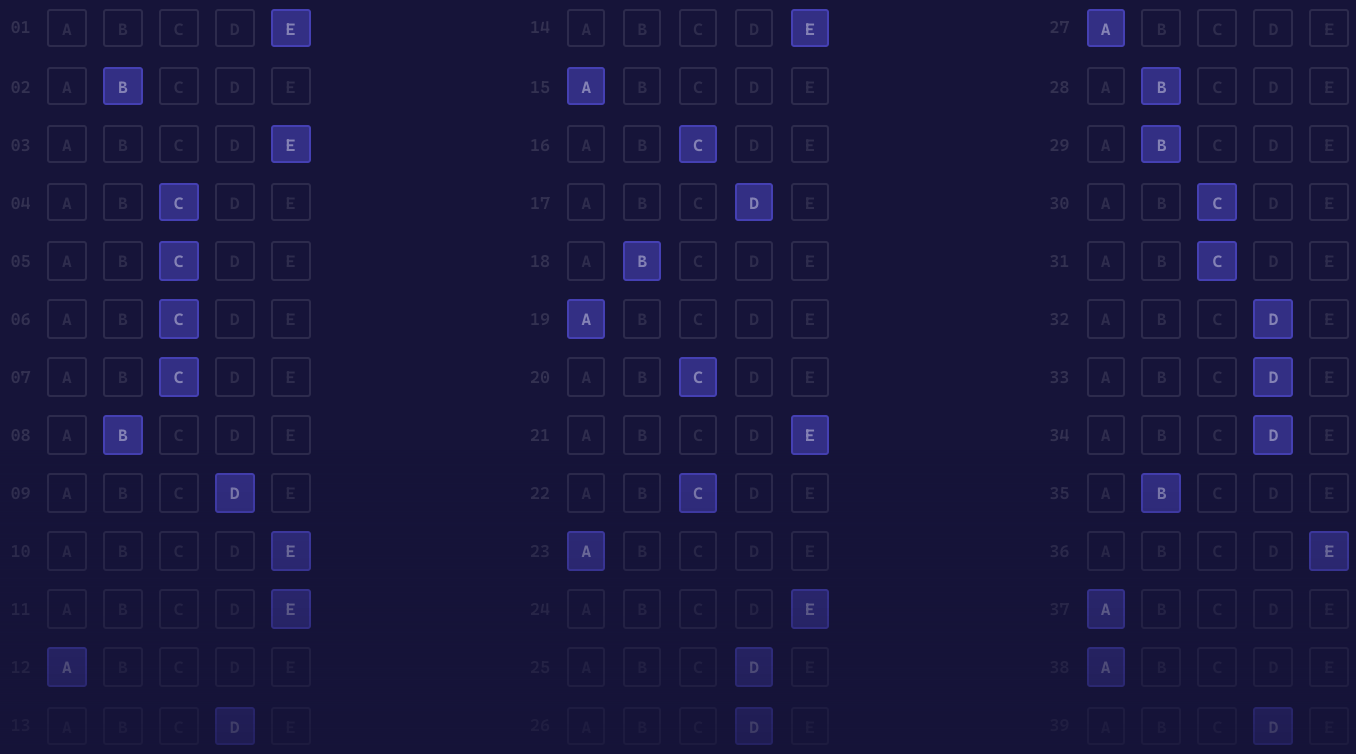


PRACTICE QUESTIONS

## ALABAMA CONSTRUCTION

# HRX6UXFN

AL Roofing and Sheet Metal Contractor

| EDITION | QUESTIONS | FORMAT |
| --- | --- | --- |
| Demo | 9 | Limited Edition PDF |

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# Before you begin

## What this is

9 practice questions for ALABAMA CONSTRUCTION `HRX6UXFN`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

## If something looks wrong

Send us three things and we will check it:

- the exam code, `HRX6UXFN`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

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**QUESTION 1** MULTIPLE CHOICE

For a steep-slope roof covered with asphalt shingles installed over a wood deck, which components must be present at the eaves, rakes, and valleys according to the IRC? (Choose two.)

**A** **Self-adhering polymer-modified bitumen ice and water barrier membrane at the eaves extending up the slope at least 24 inches inside the warm wall line**

B Continuous ridge vent cut within 6 inches of the ridge ends to prevent weather infiltration

**C** **Woven or open metal valley flashing installed prior to the underlayment**

D Drip edge flashing installed at rakes and eaves beneath the underlayment at the eaves and over the underlayment at the rakes

ANSWER **A · C**

WHY The IRC R905.2.7 requires an ice barrier (typically self-adhering membrane) at eaves in climates where average daily January temperature is 25°F or less, extending a minimum of 24 inches inside the warm wall. Open or closed-cut metal valley flashing is required for shingle valleys per R905.2.8.2. Ridge vents do not belong at edges, and drip edge at eaves must be installed over the underlayment (not beneath it) so water sheds over the edge; at rakes it goes beneath the underlayment. Therefore B and D are incorrect as worded.

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**QUESTION 2** SINGLE CHOICE

Which sheet metal material is required by SMACNA standards for use in architectural exposed flashings on commercial roofing projects where long-term corrosion resistance and paint adhesion are critical?

A Cold-rolled steel sheet, commercial quality (CSQ)

**B Galvannealed steel sheet, coating designation A60**

C Aluminum-zinc alloy coated steel sheet, coating designation AZ55

D Electrolytic tin-coated sheet, coating designation ETP

**ANSWER B**

**WHY** SMACNA architectural sheet metal manuals specify galvannealed steel (a zinc-iron alloy coating, designation A40 or A60) as the preferred substrate for architectural flashings requiring paint adhesion, because the matte gray coating accepts and holds paint systems well. Cold-rolled steel (CSQ) lacks corrosion protection and will fail quickly. AZ55 (Galvalume) is widely used for concealed structural panels but has paint-adhesion limitations and edge-creep concerns on exposed flashings. Electrolytic tin plate (ETP) is a packaging-grade material not intended for roofing.

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**QUESTION 3** SINGLE CHOICE

Under OSHA 29 CFR 1926.501(b)(13), residential construction workers performing roofing work on a roof with a pitch greater than 4:12 and unprotected sides or edges 6 feet or more above a lower level must be protected by which fall protection system?

A A safety monitor system with a designated competent person on the ground

B **Personal fall arrest system (PFAS) or guardrail system, with safety nets permitted as an alternative**

C Slide guards installed in the eave area of the roof only

D No fall protection is required when the area below is restricted to other trades only

**ANSWER** **B**

**WHY** OSHA 1926.501(b)(13) requires conventional fall protection (guardrails, safety nets, or a personal fall arrest system) for roofing work on residential structures where the roof slope is greater than 4:12 and the work area is 6 feet or more above a lower level. The 'residential fall protection exception' under 1926.501(b)(13) was substantially narrowed and only applies to very low-slope work meeting specific criteria. Safety monitor systems are not permitted for this work, and slide guards alone are not compliant. Restricting access below does not eliminate the fall hazard to the worker above.

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**QUESTION 4** SINGLE CHOICE

According to the IRC, what is the minimum required slope for asphalt shingle roof coverings to provide positive roof drainage?

A 1:48 (1/4 inch per foot)

B 1:24 (1/2 inch per foot)

**C 1:12 (1 inch per foot)**

D 2:12 (2 inches per foot)

**ANSWER C**

**WHY** IRC R905.2 requires asphalt shingles to be installed on slopes of 2:12 or greater. For low slopes between 2:12 and 4:12, the IRC requires a double underlayment application per R905.2.7. Slopes below 2:12 are not permitted for asphalt shingles because they do not provide adequate drainage, leading to wind-driven water infiltration and premature shingle failure. The 1:48 and 1:24 slopes are minimums for membrane-type roof systems, not shingles.

**QUESTION 5** SINGLE CHOICE

Which fastener pattern is required by manufacturer instructions and the IRC for asphalt shingles in normal wind regions when the roof slope is between 4:12 and 21:12?

A Four nails per shingle, placed above the upper edge of the cutout

**B Four nails per shingle, placed below the adhesive strip with one nail 1 inch in from each end and two nails equally spaced above the cutouts**

C Six nails per shingle placed 2 inches above the cutout in a straight line

D Two nails per shingle at the midpoint only

**ANSWER B**

**WHY** Standard asphalt shingle nailing pattern is four fasteners per shingle (six on mansard or high-wind zones), placed approximately 1 inch in from each end and two equally spaced above the cutouts, just below the self-sealing adhesive strip. Placing nails above the cutout or above the adhesive strip is incorrect and can cause blow-offs and water leaks. Two-nail fastening is insufficient for shingle classification and not permitted. Six-nail patterns are used in high-wind zones, not as a normal default.

**QUESTION 6** SINGLE CHOICE

When installing a double-locked (mechanically seamed) standing seam metal roof system on a low-slope commercial roof, what is the function of the fixed clip versus the sliding clip?

A Both clips serve identical purposes and may be used interchangeably along the same panel run

**B The fixed clip anchors the panel to the substrate and resists movement; the sliding clip allows thermal expansion while maintaining panel engagement**

C The fixed clip is used only at the ridge; the sliding clip is used at the eave

D The sliding clip is a structural anchor against uplift, while the fixed clip is purely decorative

**ANSWER B**

**WHY** In standing seam metal roof systems, fixed clips anchor the panel at one point (typically mid-span or at a designated point) so the panel cannot move at that location, while sliding (or floating) clips allow the panel to expand and contract thermally along its length while remaining engaged with the seam cap. Using only fixed clips would cause the panels to buckle from thermal movement; using only sliding clips would allow the entire panel to migrate and fail at terminations. The fixed clip also provides primary uplift resistance while the sliding clip maintains engagement without transferring load.

**QUESTION 7** SINGLE CHOICE

Per the IRC, the minimum net free ventilation area for an attic space with a vapor retarder is what fraction of the area to be ventilated?

A 1/300 of the attic floor area, with no reduction permitted

B 1/150 of the attic floor area

**C 1/300 of the attic area when a vapor retarder is present; 1/150 otherwise**

D 1/600 of the attic area, with half at the ridge and half at the soffit

**ANSWER C**

**WHY** IRC R806.2 requires a minimum net free ventilating area of 1/150 of the area of the space ventilated, except that this ratio may be reduced to 1/300 where a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling. The reduced ratio recognizes that the vapor retarder reduces moisture entering the attic from the conditioned space below, allowing less ventilation. The 1/300 ratio is not a flat requirement regardless of vapor retarder, and 1/600 has no basis in the IRC.

**QUESTION 8** SINGLE CHOICE

Class A fire-rated roof coverings are required by the IBC for what scope of construction?

A Only commercial buildings classified as Group A occupancies

**B All construction types unless specifically exempted, such as certain agricultural buildings**

C Only buildings exceeding 40 feet in height

D Only buildings within 10 feet of a property line

**ANSWER B**

**WHY** The IBC Table 1505.1 requires Class A roof assemblies for all construction types (I through V) and all occupancies except where a Class B or C roof is specifically permitted, such as for certain noncombustible construction (Type I and II) under specific conditions, or for minor buildings like agricultural structures and nonhabitable accessory buildings. Class A roof coverings must be tested per ASTM E108 or UL 790 and resist severe fire exposure. The 'within 10 feet of property line' provision is for exterior wall fire resistance, not roof classification.

**QUESTION 9** SINGLE CHOICE

A subcontractor who furnishes labor or materials for a roofing project in Alabama and who is not paid must record a Notice of Lien (mechanic's lien) within what time period after the last labor or material is furnished?

A 30 days

B 60 days

**C 6 months**

D 1 year

**ANSWER C**

**WHY** Under Alabama Code § 35-11-213, a subcontractor (and any other lien claimant other than the original contractor) must file the notice of lien within 6 months after the last item of work or material is furnished. The lien must be foreclosed (lawsuit filed to enforce) within 6 months after the lien is recorded. General contractors have a 6-month window as well, though they must give preliminary notice on certain projects. The 30-day and 60-day figures are common in other states' lien laws but not in Alabama.

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