

FAST ACT Highway Barrier Installation, Inspection and Maintenance Training

Pre/Post Assessment

Instructions: Choose one answer for each question. Please mark “Don’t know” if you are uncertain of the answer

1. Barrier systems should be used any time there is a potentially hazardous object in the roadside clear zone.
☐ True
☐ False
☐ Don’t know
2. Post-crash vehicle trajectories vary the most between energy absorbing and non-energy absorbing terminals for what type of impact?
☐ Head-on hit
☐ Angle hit on the nose
☐ Angle hit downstream of post #3
☐ Don’t know
3. Design speed, ADT, and slope ratio are three factors used by AASHTO to determine _____.
☐ Guardrail Height
☐ Clear Zone
☐ Deflection distance of rail
☐ Don’t know
4. Once a barrier is installed any hazard located behind the barrier is adequately shielded.
☐ True
☐ False
☐ Don’t know
5. What is the responsibility of the guardrail inspector?
☐ To determine where guardrail is needed
☐ To allow guardrail installation to be altered from Standard Drawings or Shop Drawings
☐ To assure that guardrail is installed according to Standard Drawings, Shop Drawings, Specifications, or as directed by the Engineer and to document each installation
☐ Don’t know
6. NDDOT recommends that all guardrails be inspected annually.
☐ True
☐ False
☐ Don’t know
7. If a section of guardrail is unfinished at the end of a workday, it may be left as is if the exposed end is delineated.
☐ True
☐ False
☐ Don’t know
8. When guardrail cannot be installed according to Standard Drawings and/or Shop Drawings the Inspector should:
☐ Allow the contractor to alter the installation requirements.
☐ Instruct the contractor to alter the guardrail or installation requirements.
☐ Contact the Project Engineer, follow his recommendations and document recommendations
☐ Don’t know
9. The joint between two rail elements of standard guardrail should be:
☐ Lapped in the direction of traffic flow of the nearest lane
☐ Lapped opposite to traffic flow
☐ Lap doesn’t matter
☐ Don’t know
10. Which of the following slope ratios would be considered non-recoverable?
☐ 3H:1V
☐ 6H:1V
☐ 10H:1V
☐ Don’t know

11. Traffic barriers, terminals and crash cushion should always be installed exactly as shown on the plans.
- ☐ True
☐ False
☐ Don't know
12. A flexible or semi-rigid guardrail system must maintain _____ when struck.
- ☐ Deflection
☐ Compression
☐ Tension
☐ Don't know
13. When replacing a damaged guardrail terminal, you should always install an NCHRP Report 350 or MASH terminal.
- ☐ True
☐ False
☐ Don't know
14. When can the installation of a terminal deviate from the approved manufacturer's shop drawing?
- ☐ When the manufacturer issues a letter for the deviation
☐ When an obstruction to the installation cannot be removed
☐ Don't know
15. Turndown Terminal is not considered crashworthy for Test Level 3.
- ☐ True
☐ False
☐ Don't know
16. Since 2018, NDDOT requires that guardrail and terminals on Major Rehab & New/Reconstruction shall meet _____
- ☐ MASH
☐ NCHRP Report 350
☐ Don't know
17. Any terminal that meets MASH test criteria is appropriate for use at any location.
- ☐ True
☐ False
☐ Don't know
18. A MGS barrier can be placed anywhere on a roadway fill slope no steeper than _____ .
- ☐ 10H:1V
☐ 6H:1V
☐ 3H:1V
☐ Don't know
19. Cutting off posts in the field is allowed.
- ☐ True
☐ False
☐ It Depends
☐ Don't know
20. What is the height of MGS guardrail above the ground line?
- ☐ 28 inches
☐ 29 inches
☐ 31 inches
☐ Don't know

This is the end of the assessment.