TREE TRIMMING OPERATIONS, 16VAC25-73

16VAC25-73-90. Work procedures.

A. Ropes and arborist climbing equipment.

1. A visual hazard assessment, including a root collar inspection, shall be performed prior to climbing, entering, or performing any work in a tree, and an ongoing hazard assessment shall be conducted as operations progress while the arborist is in the tree. If the hazard assessment reveals a serious hazard to the climber or ground personnel, work shall immediately stop and personnel shall be removed from the hazardous area until a work plan is developed to safety remove the hazard/tree. The following items, at a minimum, shall be inspected:

a. Trunk and root hazards including, but not limited to, cracks, cavities, wood decay/rot, cut roots, mushrooms;

b. Lower stem hazards including, but not limited to, loose bark, open cavities, cracks, mushrooms, conks, and depressions or swelling in the stem;

c. Limb hazards including, but not limited to, watersprouts, hangers, cankers, dead branches, lightning damage, and weak crotches; and

d. Storm damage hazards including, but not limited to, cracked stems and crotches, broken limbs supported by cables, points of pressure, and tension on limbs or small trees underneath larger fallen trees.

2. A second arborist or other worker trained in emergency procedures shall be within visual or voice communication during arboricultural operations above 12 feet (3.65 m) that are not subject to the requirements of 16VAC25-73-50 B 4.

3. Climbing lines used in a split-tail system and split-tails shall be terminated with an eye splice or a knot that interfaces appropriately with the connecting link that it is attached to. The termination knot selected shall remain secure under normal loading and unloading. When using a carabiner without a captive eye, the knot or eye splice shall cinch in place to prevent accidental opening and/or side-loading of the carabiner.

4. Arborists shall inspect climbing lines, worklines, lanyards, and other climbing equipment for damage, cuts, abrasion, and/or deterioration before each use and shall remove them from service if signs of excessive wear or damage are found. The items removed from service shall be tagged until repaired or discarded.

5. Arborist saddles and lanyards used for work positioning shall be identified by the manufacturer as suitable for tree climbing.

6. Arborist saddles and lanyards used for work positioning shall not be altered in a manner that would compromise the integrity of the equipment.

7. Hardware used in the manufacture of arborist saddles shall meet the hardware material, strength, and testing requirements outlined in ANSI 359.1.

8. Arborist climbing lines shall have a minimum diameter of 7/16 (11 mm) and be constructed from a synthetic fiber, with a minimum breaking strength of 5,400 pounds (24.02 kilonewtons (kN)) when new. Maximum working elongation shall not exceed 7.0% at a load of 540 pounds (2.402 kN). Arborist climbing lines shall be identified by the manufacturer as suitable for tree climbing.

Virginia Department of Labor and Industry, 2011

TREE TRIMMING OPERATIONS, 16VAC25-73

16VAC25-73-90. Work procedures., <u>CONTINUED</u>.

A. Ropes and arborist climbing equipment, CONTINUED

9. The qualified arborist shall assure that each component of the climbing system is approved by the manufacturer for its intended use as well as its compatibility with other components of the climbing system.

10. Prusik loops, split-tails, and work-positioning lanyards used in a climbing system shall meet the minimum strength standards for arborist climbing lines.

11. Snap hooks (rope snaps) used in climbing shall be self-closing and self-locking, with a minimum tensile strength of 5,000 pounds (22.24 kN).

12. Carabiners used in climbing shall be self-closing and self-locking, with a minimum tensile strength of 5,000 pounds (22.24 kN). Carabiners shall be designed to release the load by requiring at least two consecutive, deliberate actions to prepare the gate for opening.

13. Splicing shall be done in accordance with cordage manufacturers' specifications.

14. All load-bearing components of the climbing system shall meet the minimum standards for arborist climbing equipment.

15. Equipment used to secure an arborist in the tree or from an aerial lift shall not be used for anything other than its intended purpose. The arborist climbing line may be used to raise and lower tools.

16. Rope ends shall be finished in a manner to prevent raveling.

17. Ropes and climbing equipment shall be stored and transported in such a manner to prevent damage through contact with sharp tools, cutting edges, gas, oil, or chemicals.

18. Arborist climbing lines shall never be left in trees unattended.

19. Arborists shall have available a climbing line and at least one other means of being secured while working aloft; for example, an arborist climbing line and a work-positioning lanyard.

20. The arborist shall be secured while ascending the tree. The arborist shall be tied in once the work begins and shall be tied in until the work is completed and he has returned to the ground. The arborist shall be secured when repositioning the climbing line.

21. While ascending a ladder to gain access to a tree, the arborist shall not work from or leave the ladder until he is tied in or otherwise secured.

22. A false crotch and/or false crotch redirect may be used at the discretion of the arborist in lieu of a natural crotch.

23. The tie-in position shall be such that the arborist will not be subjected to an uncontrolled pendulum swing in the event of a slip.

24. When a climber is working at heights greater than one-half the length of the arborist climbing line, a figure-8 knot shall be tied in the end of the arborist climbing line to prevent pulling the rope through the climbing hitch.

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