
Part 34 Forestry

Highlights

- Section 521 requires skidders, grapple skidders and crawlers to be equipped with operator protective structures that meet the requirements of the Society of Automotive Engineers (SAE) Recommended Practice J1084-APR80 (R2002), *Operator Protective Structure Performance Criteria for Certain Forestry Equipment*.
- Section 524 allows logging trucks to exceed their manufacturer-specified load weights if the listed conditions are met.

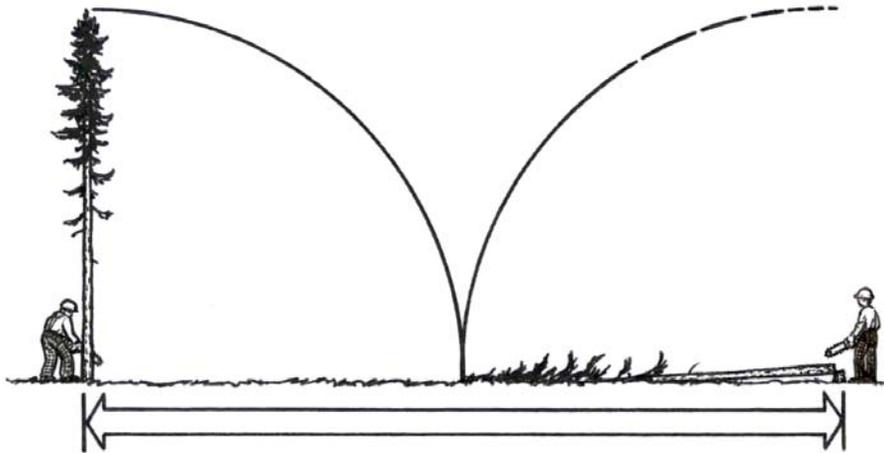
Requirements

Section 518 Felling and bucking

Felling is the activity of cutting a standing tree and having it fall to the ground. Bucking is the cutting of a fallen tree into specific lengths. Limbing is the activity of cutting limbs or branches from a tree trunk.

A falling tree must never be allowed to strike a worker. Enough space needs to be provided so that workers can easily get out of the way when a tree falls. Workers not directly involved in cutting down a particular tree must keep a safe distance away – at least twice the distance of the height of the tallest tree in the area where cutting is taking place (see Figure 34.1). This safe distance may be greater in cases where a self-propelled mechanized feller is used. The feller manufacturer's instructions usually specify a minimum distance of 100 metres.

Figure 34.1 Workers must remain at least two tree-lengths apart from each other at all times



All branches and trees that could create a danger to a worker must be removed before a particular tree is cut. A notch, $\frac{1}{4}$ to $\frac{1}{3}$ of the tree's diameter deep, must be made near the base of the tree. The undercut must be completely cleaned out.

Trees must fall in a planned direction and not break, slip or twist off the stump. Enough holding wood must be left between the undercut and backcut to control the line of fall (see Figure 34.2). Workers who fell trees by hand must use wedges to topple the tree in the correct direction (see Figure 34.3).

Figure 34.2 Undercut, holding wood, and backcut

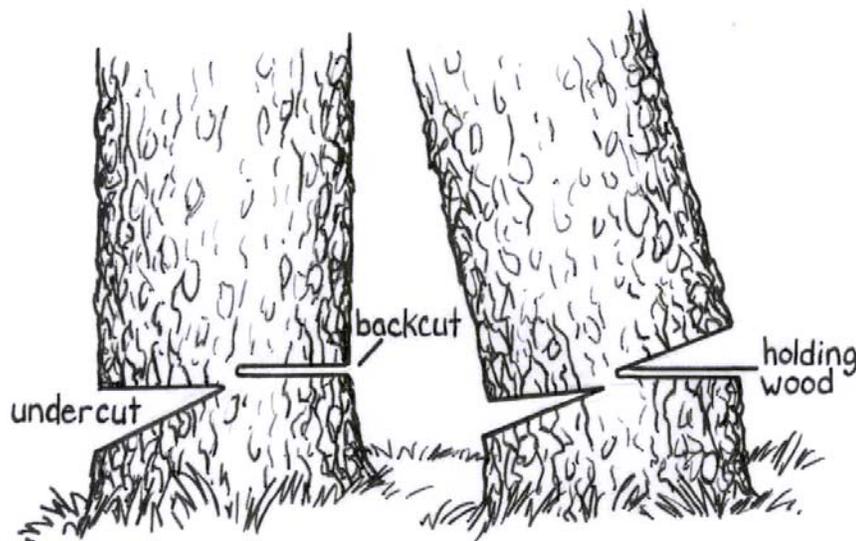
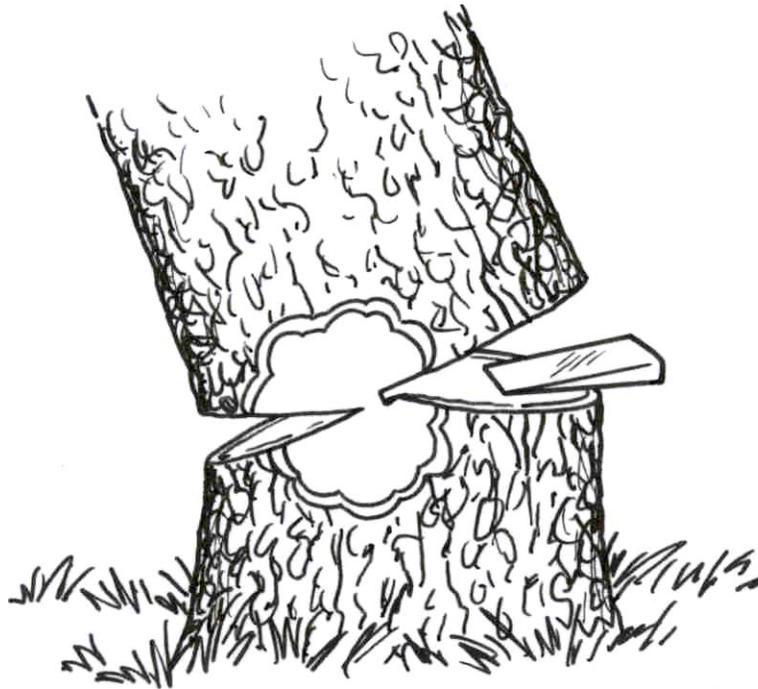


Figure 34.3 Use of wedge

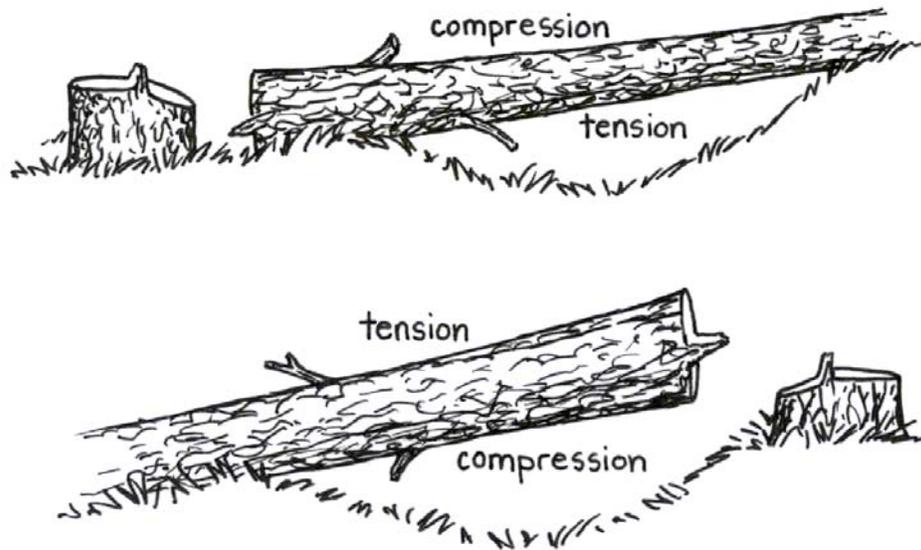


Before bucking a log, the worker must clear away all brush and other objects that could get caught in the chainsaw. Doing this reduces the likelihood of the chainsaw kicking back at the operator.

Employers must protect workers from trees that may move while being cut. Workers must not work on hillsides directly below a faller where there is a danger of trees or logs striking them. When working on inclines or hillsides, a worker must stand on the uphill side to prevent being hit by a moving tree or log.

It is important that buckers determine where the tension is in a tree they are about to buck. Doing so ensures that the tree does not spring up and towards workers once the tension is released (see Figure 34.4).

Figure 34.4 Trees in compression and tension



Section 519 Hand felling

Hand cutting of trees is not permitted during adverse weather conditions. Strong winds and lightning in or near the immediate area could be hazardous to workers.

Section 520 Mechanized feller or limber

The cabs of feller bunchers and limbers must have two exits through which an operator can escape in case of an emergency. Both exits must function properly.

Section 521 Operator protective structures

SAE Recommended Practice J1084-APR80 (R2002), *Operator Protective Structure Performance Criteria for Certain Forestry Equipment*, establishes a consistent, repeatable means of evaluating operator protective structures (OPS) on skidders, grapple skidders, and crawlers used to harvest trees.

OPS are structures/enclosures that minimize the possibility of operator injury from hazards such as whipping saplings, branches, jill-poking (spear-like objects), and snapping winch lines. OPS must do this without adversely affecting operator visibility, comfort, and protection from other hazards. The Recommended Practice

describes test procedures and the minimum performance criteria that the OPS must meet.

Depending on the type of equipment, it may also be equipped with a rollover protective structure (ROPS). See sections 270 and 271 of the OHS Code for information about ROPS.

Section 522 Road warnings

Trees cannot be felled within range of a travelled road unless specific precautions are taken. These precautions involve

- (a) placing a designated signaller (see section 191 of the OHS Code for requirements that apply to signallers) on the road, or
- (b) locating flags or warning signs at the side of the road at a distance of 30 metres to 90 metres from each approach to the place where the tree is to be felled.

Section 523 Partially cut trees

A tree that has had its branches removed can be left standing. Once the trunk of a tree has been cut however, the tree must be felled. This eliminates the possibility of the tree falling over at some later time. A tree left standing with a cut in its trunk poses a danger to workers.

Section 524 Logging trucks

Subsection 524(1)

Repealed

Subsection 524(2)

Repealed

Subsection 524(3)

Instead of complying with the manufacturer's specifications requirements of section 12 of the OHS Code, logging trucks that exceed their manufacturer-specified load weights can be operated if

- (a) a written hazard assessment meeting the requirements of Part 2 has been completed, and
- (b) controls that ensure safe operation of the logging truck have been implemented.

The assessment and controls do not need to be reviewed by a Director of Inspection prior to being implemented. If an officer inspects a work site and considers the assessment or controls insufficient, then the assessment and controls may need to be reviewed by a Director of Inspection. A Director of Inspection is a member of the professional staff of Alberta Employment and Immigration, appointed by the Minister under section 5 of the *OHS Act*.

To be acceptable, the hazard assessment must address each of the following topics:

- (a) weight monitoring;
- (b) speed monitoring and control;
- (c) route control and communications;
- (d) signage;
- (e) driver management;
- (f) truck and trailer mechanical inspection;
- (g) truck and trailer maintenance;
- (h) any other factors affecting safety.

The controls used must be based on the outcome of the hazard assessment and must ensure that workers are safe.

The Alberta Forest Products Association (AFPA) has developed a *Log Truck Hazard Assessment Checklist* to help its members with this process. Non-members can purchase the checklist by contacting the AFPA. The AFPA's Web site address is:

 www.albertaforestproducts.ca

Section 525 Traffic safety

Subsection 525(1)

All bridges, platforms and other structures used by vehicles in forestry operations must be engineered, constructed, and maintained so that they are safe for use. It may be necessary for these structures to be certified by a professional engineer.

Subsections 525(2), 525(3) and 525(4)

Logging roads often include sections that are too narrow for two or more vehicles to pass one another at the same time. Where this is the case, an effective traffic control system must be installed for use by all vehicles on the road. Subsection (4) further requires that vehicles involved in forestry operations operate with their headlights turned on at all times.