

Frost cracks

A frost crack is a long, deep, narrow crack running up and down the trunk of a tree. The crack is usually on the south or southwest side of the trunk but can occur on any side. Young trees or older trees with smooth bark are most susceptible.

The crack occurs when the sun warms the trunk in winter, causing tissues to expand. When clouds or buildings block the sun or at sunset, the temperature of the trunk drops abruptly to that of the surrounding air and the trunk contracts. The outer part of the trunk cools and contracts faster than the inner tissues. This difference in contraction rates causes the outer trunk to crack from the inside to the outside.

Prevent frost cracks by wrapping young trees with paper tree wrap. The wrap should start at ground level and go all the way up to the first main branches. Fruit trees are sometimes painted with white, latex paint, which reflects the sunlight and prevents the trunk's cracking.

Once a crack occurs, nothing can be done. Fertilizing a low vigor tree may speed up growth and close the crack more quickly. Frost cracks can allow rots or canker diseases to get established in the trunk.