

PhyzGuide: Standing Waves

Standing waves are the result of reflection and interference (superposition) of waves in a medium. Transverse standing waves can be made in a rope; longitudinal standing waves can be formed in a volume of air. In the diagrams below, standing waves are made with a cord of length L or a closed volume of air of length L . The speed of the wave is v , and the wavelength of the standing waves is λ .

BOTH ENDS FIXED

TRANSVERSE

LONGITUDINAL

