

Triangular monomers with positive curvature in one direction and negative curvature in another assemble into trumpet shaped objects predicted to have precise self-limited lengths due to frustration-induced stress. However, the continuum theory does not account for potential mechanisms by which the system could “escape” frustration. Computer simulations revealed two escape routes; *runaway*, in which trumpets flatten and *cracked*, in which trumpets escape frustration by forming defects that locally release elastic strain.

