Stability of the orthorhombic Fddd phase in diblocks using Landau theory of weak crystallization AMIT RANJAN, DAVID MORSE, Department of Chemical Engineering and Materials Science, University of Minnesota — Recent numerical SCFT caculations by Tyler and Morse [Phys. Rev. Lett., 94, 208302, 2005] predict a stable orthorhombic network phase with space group Fddd in weakly segregated diblocks. In this work, we examine the stability of the Fddd phase using Landau theory. Our analysis and results suggest that Fddd structure with a special unit cell is expected to be a stable phase not only in weakly segregated diblocks but in any other weakly ordered material.