

#### Abstract:

Rapid reduction of fruit temperature has long been recognized as a key parameter in extending post harvest fruit quality. Research documenting times required to cool apples and pears at various locations in two 1000 bin controlled atmosphere storage rooms provided evidence of non-uniform air circulation patterns (Hellickson, et al. 1996, 1997). Video documentation of neutrally buoyant helium filled soap bubble movement in one of the same rooms verified the non-uniform air circulation patterns. Bin spacing throughout the room and bin placement beneath the evaporator coil directly influenced air distribution uniformity and quantities that did not circulate through the cooling unit. Improved bin placement within storerooms may result in shorter cooling times, reduced energy consumption and improved fruit quality after extended storage periods.