

Indiana Code History Regarding Secondary Roof Drainage

1. An independent overflow drainage system was originally required by Uniform Building Code Section 3207(c) "*Overflow drains shall be connected to drain lines independent from the roof drains*". Indiana began modifying this requirement in the 1989 Indiana Building Code (1988 UBC). With one exception (see note 4 below), it appears the requirement for an independent overflow system has been amended ever since.
2. During the 90's, Indiana adopted the BOCA National Plumbing Code and there is no mention of a secondary roof drainage system in that code. However, Indiana did amend the BOCA National Plumbing Code and referred to the Indiana Building Code for overflow drains.
3. Indiana then adopted a modified version of 1997 Uniform Plumbing Code (Indiana Plumbing Code 1999 edition). The first sentence of Section 1101.11.2.1 still includes "*independent secondary roof drainage system*" but it refers to "*scuppers, standpipes or roof drains*" and then deletes the second sentence on sizing. It then deletes from the model code 1101.11.2.2 that required secondary roof drains or standpipes to be separate from the primary and deletes 1101.11.2.3. However, it retained 1101.11.3, which appears to be design requirements for combining the primary and secondary drains into a single system.
4. The 1998 Indiana Building Code (1997 UBC), did not amend Section 1506.3 "*Overflow drains shall discharge to an approved location and shall not be connected to roof drain lines*" when it became effective on 4/30/1998 and independent overflow piping was required. However, the 1998 Indiana Building Code was amended 2/25/2000 and Section 1506 was revised to delete the requirement for separate overflow piping.
5. The International Plumbing Code 2012 edition Commentary for Secondary (Emergency) Roof Drains. "This section requires all buildings to have some method for preventing the accumulation of unplanned excessive rainwater. A secondary drainage system is required where the building has a parapet walls or other construction on the building that would cause ponding. The intent is to limit the amount of ponding water that will be placed on the roof by rainfall."

Based on the information above, it appears reverting to model code language requiring independent secondary drains will address the issue in question. Given the history of roof collapse of class 1 structures without secondary drains in accordance with the model code, I believe this issue does qualify as a public safety emergency.