

Green Roof Working Committee Meeting 26 September 2008

Building Code Subcommittee Update

At the present time, there are no building code requirements for green roofs. Main issues are wind and fire. The industry is currently working on both a fire and wind standard and should be out within the next year.

WIND

There is no wind design guide at the present time that addresses green roofs. The industry is developing a standard which is being built off of the "Wind Design Standard for Ballasted Roof Systems.", the SPRI/ANSI RP-4 national standard. The vegetative area is treated as being equivalent to the #2 ballast so one should apply the green roof under the design provisions of this ballast. If the vegetation covers less than 80% of the soil media and a #2 ballasted system design or greater is required, then a wind erosion mat is required, a design item that applies generally to new garden roofs. The RP-4 is available from the website www.SPRI.ORG.

FIRE

Factory Mutual, the insurance industry construction industry reviewer and approval group has issued guidelines for fire control of green roofs by designing in fire breaks. Fire breaks are to be made of non-combustible materials such as stone or pavers and should be a minimum of 6 feet wide between the vegetation and a combustible structure such as walls, roof top equipment, etc. They also recommend that if the green roof is longer than 1500 feet, a fire break is also installed across the garden area to control a fire. Information on their recommendations should be available on the Factory Mutual website (www.FMGlobal.com).

NEXT STEP

Subcommittee needs to meet to review the current Omaha codes to see if there are any that may hinder the construction of green roofs. Also need to look at additions that would encourage the construction of green roofs (energy standards/savings, LEED design, stormwater management, etc.)