Other systems

a) Green Living Technologies Green Living Wall system (USA)

The Green Living Wall panels are each made from aluminum or stainless steel, so there is no threat of expansion and contraction or the degradation of materials which could become a health, safety and maintenance concern. The patented design allows free water flow and drainage, and unlimited root migration [23].

Figure 28: Green Living Technologies interior living wall
Source: http://www.agreenroof.com/wp-content/uploads/2013/02/Bridge-Street-final-1.jpg

b) Geogreen system (PT)

The Geogreen interlocking modular system with dripline irrigation was developed in 2011-2014 by the University of Beira Interior, Portugal, to minimize its environmental impact and irrigation needs. It comprises a geopolymer base plate made from a blend of recycled mine waste and other recycled alumina- and silica-rich waste materials. By increasing the water absorption capacity of the geopolymer plate, the system is able to absorb water and slowly supply it to the plants, minimizing water loss and irrigation needs. The upper plate is made of Expanded Cork Board (ICB), a lightweight natural insulation and sustainable material made from the agglomeration of expanded cork granules. The choice of materials is intended to reduce heat loss through the building envelope in winter, and protect it from direct solar radiation during summer, avoiding excessive thermal gains that would overheat the interior. The growing medium is a lightweight composition with 60% organic and 40% inorganic components that was specially developed for green roofs. The modules are planted with endemic vegetation resistant to dry Mediterranean conditions [24].

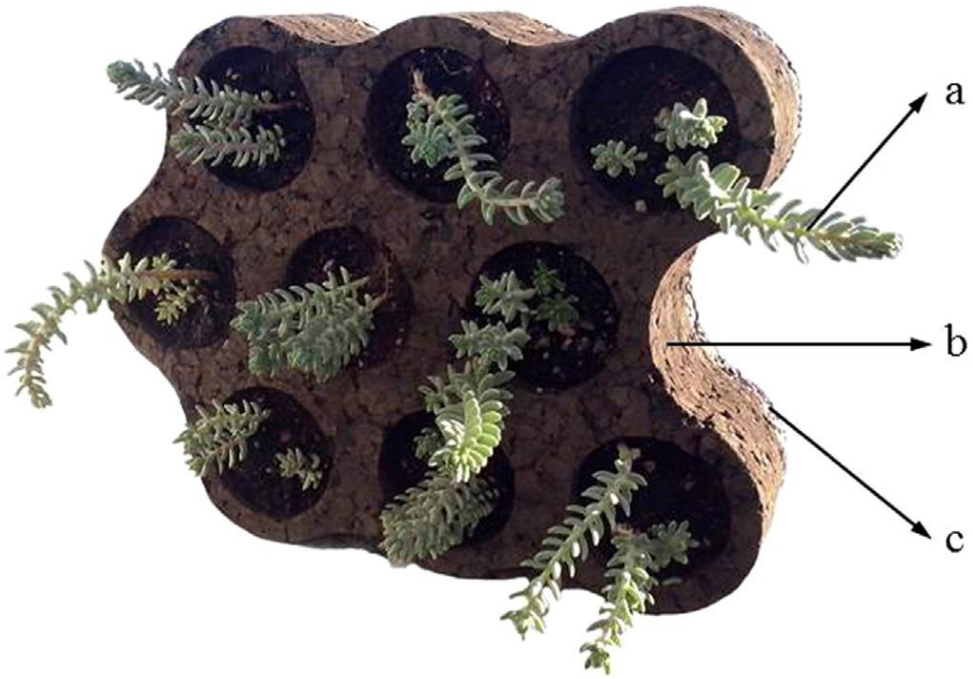

Figure 29: Geogreen module: a) Adapted plant species; b.Upper plate in expanded cork board; c. Base plate in geopolymer binder
Source: **http://dx.doi.org/10.1016/j.jobe.2016.03.006**

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