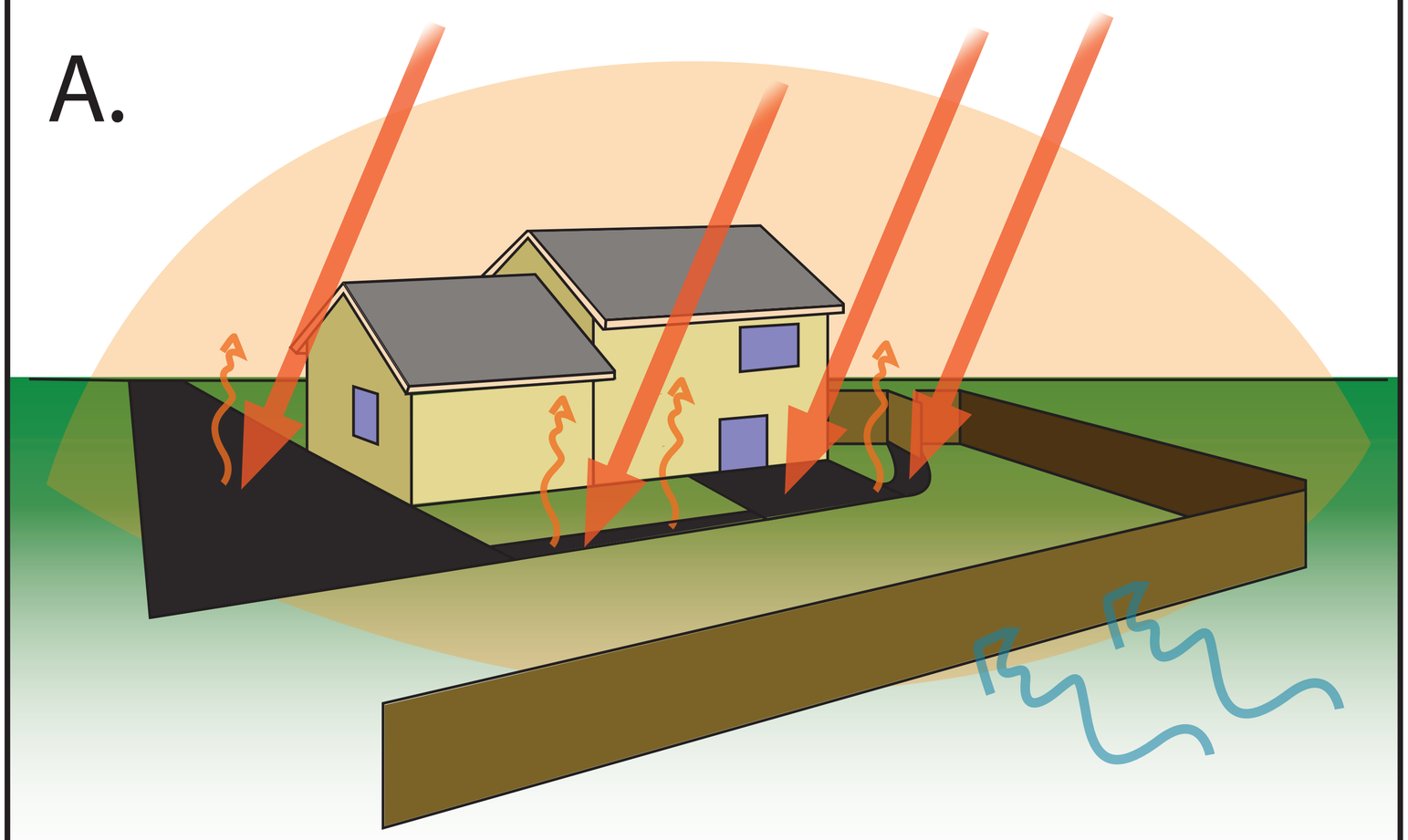
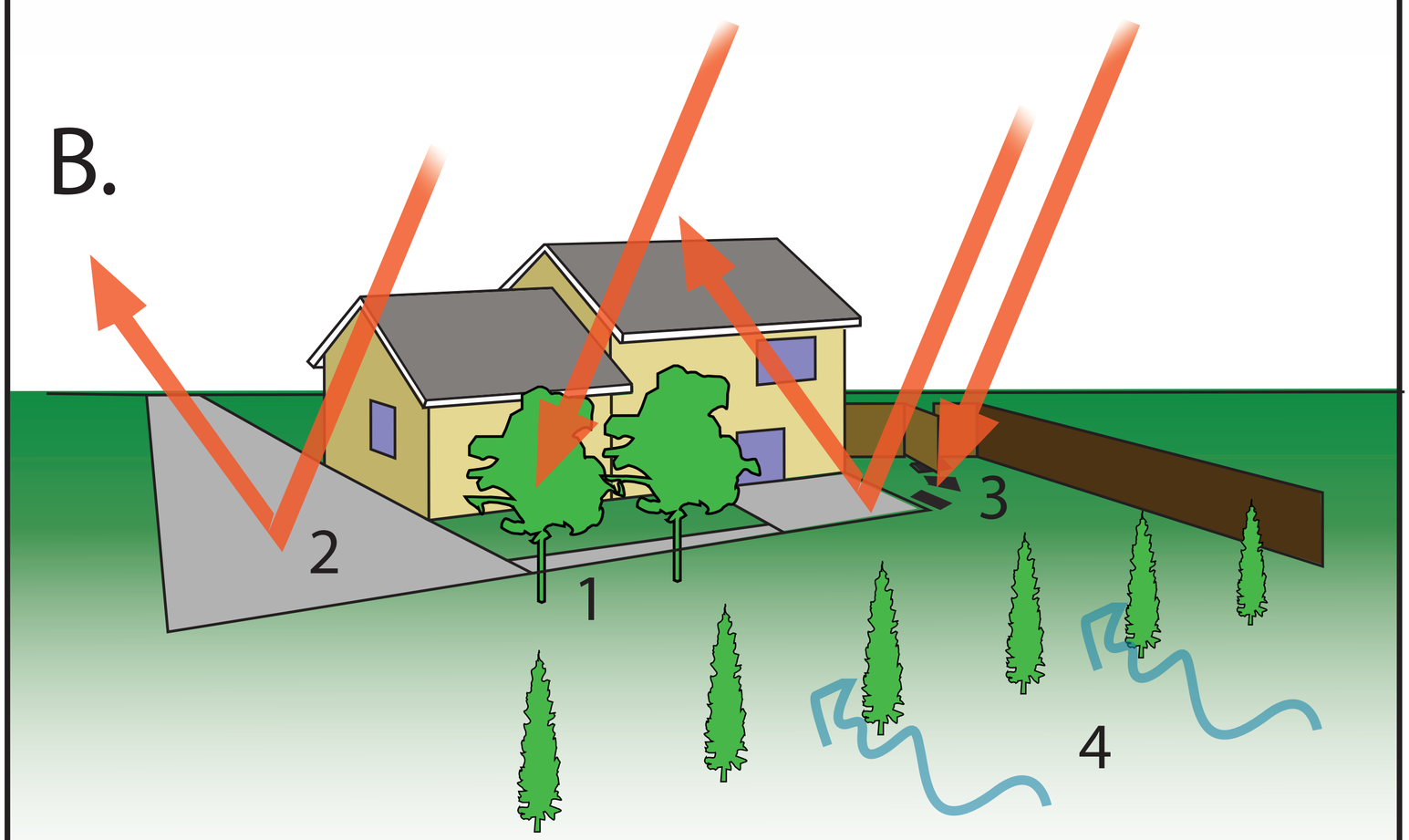
AAA

SS.3: REDUCE HEAT ISLAND EFFECTS



A: Heat Island Effect

-Area around a building that is warmer than its surrounding rural area
-Caused by sun's rays being absorbed through dark materials with low Solar Reflectance Index (SRI)
-The Urban Heat "dome" can be as much as 10 degrees hotter that areas without dark materials



B: Design Prevention

-1. Locate trees or other plants to shade 50% of sidewalks, patios, and driveways within 50 feet of the building
  -trees provide shade for your building
  -trees absorb sunlight and make the area around your building cooler
-2. Use light colored (white, gray) concrete, or other materials with SRI indexes of 29 or higher for your sidewalks, patios, driveways, and roof
-3. Use open pavers.
-4. Locate fences to capture or deter seasonal breezes.

SS.4: SURFACE WATER MANAGEMENT

To minimize runoff and erosion from the site, have all runoff from home managed through an on-site design element. Consider the following in the design:
-1. Design a lot that 70% of the built environment is permeable (it captures runoff on site). This includes:
  -vegetation (grass, trees, shrubs)
  -permeable paving
  -impermeable surfaces designed to direct runoff to a cistern, rain-garden, or swale
-2. If portions are on a steep slope:
  -use terracing or retaining walls
  -plant 4 five gallon shrubs, 1 tree, or 50 sq-ft of native groundcover per 500 sq-ft of disturbed lot area
-3. Install a vegetative roof
-4. Have the site designed by a licensed or certified landscape proffessional.