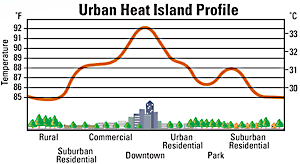
**2.6.3b Heat Islands**

* What is an Urban Heat Island?
* The term "heat island" refers to air and **surface** that are than nearby areas.
* What factors can cause a Heat Island?
* Heat Islands
  + The principal reason for the nighttime is that buildings block surface heat from into the relatively cold night sky.
  + Tar, , brick and concrete absorb and release it as heat, rather than reflecting it (without heat) like soil does.
* Rural vs Urban
  + During the day in areas, the solar energy absorbed near the ground evaporates from the vegetation and soil. Thus, causes .
  + In , where there is less , the buildings, streets and sidewalks absorb the majority of solar energy input.
* What about the buildings and the people in them?
  + Remember, the way the heat island effect works, is that it the overall temperature of the city.
    - Like the effect: trapping heat on the surface
  + But in particular, it raises night time temperatures (not always day time) by the of heat, which makes an overall increase
  + Example: Night temperatures in Phoenix are degrees F warmer than before 1970
* Effects of Heat Islands
  + Can raise temperatures over 1 to more than 10 degrees F over that of surrounding areas.
  + Can increase peak demand
  + Air costs increase
  + Air increase
  + -related illness and increase