SAMPLE APERTURES CALCULATION FOR FENCES OVER FIVE FEET IN HEIGHT

- Use a "sample" fence with the following design parameters:
  - Picket fence with 3 ½" wide pickets and 2 ½" wide spacing between pickets
  - Basic 8' long fence section (96")
  - 5' fence height (60")
- Calculate area of fence panel (in square inches)
  - Area = Length x Height
  - Area = 96" x 60"
  - Area = 5,720 square inches
- Calculate # of openings between pickets in fence section
  - Width of picket interval is the sum of the picket width and the width of the space between pickets
    - (3 ½" + 2 ½") = 6"
  - Length of fence section divided by picket interval = # of pickets and # of spaces
    - 96" / 6" = 16
  - Therefore, there are 16 openings (at 2 ½" each) in each 8' long fence section
- Calculate area of openings in fence section (in square inches)
  - Area of each opening = Width x Height
    - 2 ½" x 60" = 150 square inches
  - Total area of openings per fence section = Number of openings x area of each opening
    - = 16 x 150 square inches
    - = 2,400 square inches
  - Therefore, there is a total of 2,400 sq. in. of "opening" or aperture per fence section
- Finally, calculate percentage of "effective aperture" for one fence section
  - % Effective Aperture = Area of openings per section divided by total area of fence section
  - % Effective Aperture = 2,400 sq. in. / 5,720 sq. in.
  - % Effective Aperture = 41.96% (round to 42%)
- Therefore, the Effective Aperture of the "sample" fence is 42%, which would be permitted by the ordinance.