CS 888 : Topics in Computer Graphics - Architecture

STAIRS

Tejas Kajarekar



I measured and examined five different stairs. Of them, only the first one meets all the standards, rise x run = 70 - 75, rise + run = 17 - 17.5 and 2^* rise + run = 24 - 25, rest of them show variance from standard measures (at least some of the measures). To get the real feel of them, I walked up and down, ran up and down and walked up and down with eyes closed. I am presenting the results in descending order of the feel – felt good to felt awkward.

Example 1: Home (Apt) in Cambridge



- rise = 7.5", run = 10.5" (9.5")
- rise x run = 71.25
- rise + run = 17
- 2*rise + run = 24.5
- slope = 38 degrees
- Feel: Very comfortable

Example 2: UW School of Architecture -Cambridge



- rise = 7", run = 13" (12")
- rise x run = 84
- rise + run = 19
- 2*rise + run = 26
- slope = 30 degrees
- Feel: Fine (School of Architecture does not obey standards)

Example 3: Home CLV North



- rise = 7.5", run = 9" (8")
- rise x run = 60
- rise + run = 15.5
- 2*rise + run = 23
- slope = 43 degrees
- Feel: Fine for normal use. While running down, felt I was going to fall.

Example 4: Behind one shopping plaza



- rise = 7", run = 14.5"
- rise x run = 101.5
- rise + run = 21.5
- 2*rise + run = 28.5
- slope = 26 degrees
- Feel: OK (Wasn't really bad to issue a warning)

Example 5: Side-entrance (Apt) in Cambridge



- rise = 5.5", run = 14"
- rise x run = 77
- rise + run = 19.5
- 2*rise + run = 25
- slope = 21 degrees
- Feel: Awkward going down, stressful going up. (*This is the same apt. – Example 1*)