

**Preliminary Code Analysis**  
**International Building Code 2003**  
**Calculations for Maximum Area of Exterior Wall Openings Per IBC Section 704.8**

| <u>Size of Opening &amp; Type</u> | Overall Width (Ft) | Overall Height (Ft) | Area of Opening (SqFt) |
|-----------------------------------|--------------------|---------------------|------------------------|
| Window "A"                        | 3.3333             | 4.9167              | 21.7101                |
| Window "B"                        | 3.0000             | 5.6667              | 44.4792                |
| Window "C"                        | 3.6666             | 0.0400              | 14.6667                |
| Entry Door                        | 5.4167             | 9.3333              | 36.4722                |

| <u>Area Calculations for Openings</u>     | North    | East     | South    | West     | Inside South | Inside North | Inside West | Totals Per Floor (All Faces) |
|---|----------|----------|----------|----------|--------------|--------------|-------------|------------------------------|
| # of "A" Windows                          | 26       | 5        | 28       | 4        | 24           | 23           | 2           | 112                          |
| Total Area of All Type "A" Windows (SqFt) | 564.4626 | 108.5505 | 607.8828 | 86.8404  | 521.0424     | 499.3323     | 43.4202     | 2432                         |
| # of "B" Windows                          | 7        | 2        | 7        | 0        | 6            | 7            | 0           | 29                           |
| Total Area of All Type "B" Windows (SqFt) | 311.3544 | 88.9584  | 311.3544 | 0.0000   | 266.8752     | 311.3544     | 0.0000      | 1290                         |
| # of "C" Windows                          | 0        | 0        | 0        | 4        | 0            | 0            | 0           | 4                            |
| Total Area of All Type "C" Windows (SqFt) | 0.0000   | 0.0000   | 0.0000   | 58.6668  | 0.0000       | 0.0000       | 0.0000      | 59                           |
| # of Entry Door                           | 0        | 0        | 0        | 0        | 1            | 1            | 0           | 2                            |
| Total Area of All Entry Door (SqFt)       | 0.0000   | 0.0000   | 0.0000   | 0.0000   | 36.4722      | 36.4722      | 0.0000      | 73                           |
| Total # of Windows per Face               | 33       | 7        | 35       | 8        | 31           | 31           | 2           | 147                          |
| Total Area of Openings per Face (SqFt)    | 875.8170 | 197.5089 | 919.2372 | 145.5072 | 824.3898     | 847.1589     | 43.4202     | 3853.0392                    |

| <u>Area Calculations for Exterior Wall</u>  | North     | East      | South     | West         | Inside South | Inside North | Inside West | Totals Per Floor (All Faces) |
|---|-----------|-----------|-----------|--------------|--------------|--------------|-------------|------------------------------|
| Facade Facing:                              | I-295     | Chestnut  | Marginal  | Office Bldg. | Courtyard    | Courtyard    | Courtyard   |                              |
| Total Area of Exterior Wall per Face (SqFt) | 3695.8823 | 1037.7278 | 3774.4667 | 1242.8630    | 3781.2778    | 3515.8409    | 230.4090    | 17278.47                     |
| Total Area of Openings per Face (SqFt)      | 875.8170  | 197.5089  | 919.2372  | 145.5072     | 824.3898     | 847.1589     | 43.4202     | 3853.0392                    |
| Percentage                                  | 23.70%    | 19.03%    | 24.35%    | 11.71%       | 21.80%       | 24.10%       | 18.84%      | 22.30%                       |