**公共建筑换气次数**

**计算书**

|  |  |
| --- | --- |
| 工程名称 | 绿叶新生，健康校园 |
| 工程地点 | 北京 |
| 设计编号 | Tf-1 |
| 建设单位 | 北京联合大学 |
| 设计单位 | 北京联合大学 |
| 设 计 人 | 陈云播 |
| 校 对 人 | 陈云播 |
| 审 核 人 | 陈云播 |
| 设计日期 | 2022.12.20 |

|  |  |
| --- | --- |
| 采用软件 | 建筑通风Vent2022 |
| 软件版本 | 20200808（SP1） |
| 研发单位 | 北京绿建软件股份有限公司 |
| 正版授权码 | T18810228667 |

# 建筑概况

|  |  |
| --- | --- |
| 工程名称 | 绿叶新生，健康校园 |
| 工程地点 | 北京 |

# 计算依据

1. 《绿色建筑评价标准》（京津冀）DB11/T 825-2021

2. 《绿色建筑评价技术细则》

3. 相关建筑图纸

# 参考标准

《绿色建筑评价标准》（京津冀）DB11/T 825-2021 中5.2.10条款 对公共建筑的室内自然通风效果按以下规则评分：

根据在过渡季典型工况下主要功能房间平均自然通风换气次数不小于 2 次/h 的面积比例，按照下表的规则评分，最高得 8 分。

表1 公共建筑过渡季节典型工况下主要功能房间自然通风评分规则

|  |  |
| --- | --- |
| 面积比例 RR | 得分 |
| 70%≤RR＜80% | 5 |
| 80%≤RR＜90% | 6 |
| 90%≤RR＜100% | 7 |
| RR=100% | 8 |

# 计算方法

本项目采用多区域网络法对该建筑室内换气次数进行计算，多区域网络法即把室内各房间分为不同的通风换气区域，以门窗风压作为边界条件，不同区域之间通过联通的门窗作为连接，进行数据的传输，最终获得各个房间的换气次数。

房间换气次数的计算源于通风路径空气质量流量的计算，基于多区域网络法的空气质量流量计算如下式：

$$Q=C\_{d}A\sqrt{\frac{2∆P}{ρ}}$$

$ Q$——房间体积流量（$m^{3}$/s）

∆P——相邻房间之间门窗的风压差；

$C\_{d}$——流量系数，对于大的建筑洞口，取0.5，对于狭小的洞口取0.65，本项目计算取0.6；

*A*——洞口面积（$m^{2}$）

$ρ$——空气密度 （${kg}/{m^{3}}$）

通过上述方法获取一个房间的体积流量$Q$之后，即可进行房间换气次数的计算：

$$Acr=\frac{Q\*3600}{V}$$

$Q$——房间体积流量（$m^{3}$/s）

$Acr$——换气次数（次/h）；

$V$——房间体积（m3）；

# 换气次数计算表

表2 公共建筑过渡季节典型工况下换气次数统计表

|  |
| --- |
| 换气次数大于2次/h的面积比 |
| 换气次数大于2次/h的面积 | 7438.55 | ㎡ |
| 总面积 | 10138.65 | ㎡ |
| 面积比例RR | 73.37 | % |

| 分类 | 体积(m^3) | 面积(m^2) | 换气次数(次/h) |
| --- | --- | --- | --- |
|  建筑 |  |  |  |
|  第1层 |  |  |  |
|  户:1-A | 1089.85 | 279.45 |  |
|  1001[房间] | 106.70 | 27.36 | 71.01 |
|  1003[房间] | 127.94 | 32.81 | 58.25 |
|  1004[房间] | 127.94 | 32.81 | 4.68 |
|  1005[房间] | 127.94 | 32.81 | 43.76 |
|  1007[房间] | 160.70 | 41.20 | 9.31 |
|  1008[房间] | 255.88 | 65.61 | 2.69 |
|  1009[房间] | 31.97 | 8.20 | 28.10 |
|  1010[房间] | 36.39 | 9.33 | 0.00 |
|  1011[房间] | 26.82 | 6.88 | 0.00 |
|  户:1-B | 1928.57 | 494.51 |  |
|  1006[房间] | 1679.80 | 430.72 | 41.73 |
|  1012[过道] | 248.77 | 63.79 | 281.80 |
|  户:1-C | 1574.23 | 403.65 |  |
|  1015[房间] | 1574.23 | 403.65 | 31.81 |
|  户:1-A | 219.55 | 56.29 |  |
|  1013[房间] | 48.17 | 12.35 | 0.00 |
|  1014[房间] | 123.20 | 31.59 | 0.00 |
|  1017[房间] | 48.17 | 12.35 | 0.00 |
|  户:1-B | 213.76 | 54.81 |  |
|  1019[房间] | 109.51 | 28.08 | 0.00 |
|  1022[房间] | 104.25 | 26.73 | 19.04 |
|  户:1-C | 76.73 | 19.68 |  |
|  1020[房间] | 76.73 | 19.68 | 0.00 |
|  户:1-C | 190.94 | 48.96 |  |
|  1016[房间] | 161.11 | 41.31 | 0.00 |
|  第2层 |  |  |  |
|  2001[房间] | 127.94 | 32.81 | 81.09 |
|  2003[房间] | 255.88 | 65.61 | 58.50 |
|  2004[房间] | 127.94 | 32.81 | 42.22 |
|  2005[房间] | 180.06 | 46.17 | 52.65 |
|  2006[房间] | 255.88 | 65.61 | 51.20 |
|  2007[房间] | 75.82 | 19.44 | 79.30 |
|  2008[房间] | 1613.46 | 413.71 | 48.22 |
|  2009[过道] | 248.77 | 63.79 | 261.47 |
|  2010[过道] | 860.65 | 220.68 | 45.97 |
|  2011[房间] | 96.35 | 24.70 | 36.73 |
|  2012[房间] | 246.40 | 63.18 | 21.49 |
|  2013[房间] | 246.40 | 63.18 | 25.15 |
|  2014[房间] | 161.11 | 41.31 | 24.60 |
|  2015[房间] | 109.51 | 28.08 | 27.95 |
|  2016[房间] | 42.12 | 10.80 | 72.67 |
|  2017[房间] | 123.20 | 31.59 | 18.44 |
|  2018[房间] | 415.23 | 106.47 | 16.90 |
|  2020[房间] | 75.29 | 19.31 | 55.59 |
|  2021[房间] | 28.96 | 7.43 | 21.72 |
|  2022[房间] | 50.19 | 12.87 | 5.13 |
|  2023[房间] | 50.19 | 12.87 | 26.02 |
|  2024[房间] | 50.19 | 12.87 | 6.82 |
|  2025[房间] | 50.19 | 12.87 | 69.41 |
|  第3层 |  |  |  |
|  3001[房间] | 450.16 | 115.43 | 44.93 |
|  3002[房间] | 127.94 | 32.81 | 60.00 |
|  3003[房间] | 180.06 | 46.17 | 37.53 |
|  3005[房间] | 255.88 | 65.61 | 57.80 |
|  3006[房间] | 52.43 | 13.44 | 112.51 |
|  3007[房间] | 23.39 | 6.00 | 0.00 |
|  3008[房间] | 1613.46 | 413.71 | 52.72 |
|  3009[过道] | 248.77 | 63.79 | 262.53 |
|  3010[过道] | 925.20 | 237.23 | 48.08 |
|  3011[房间] | 96.35 | 24.70 | 31.51 |
|  3012[房间] | 246.40 | 63.18 | 18.26 |
|  3013[房间] | 123.20 | 31.59 | 0.00 |
|  3014[房间] | 161.11 | 41.31 | 15.83 |
|  3015[房间] | 213.76 | 54.81 | 44.12 |
|  3016[房间] | 148.90 | 38.18 | 19.02 |
|  3017[房间] | 415.23 | 106.47 | 17.20 |
|  3018[房间] | 223.59 | 57.33 | 69.49 |
|  3019[房间] | 75.08 | 19.25 | 16.33 |
|  3020[房间] | 100.39 | 25.74 | 27.55 |
|  第4层 |  |  |  |
|  4003[房间] | 83.11 | 23.08 | 0.00 |
|  4005[房间] | 83.11 | 23.08 | 0.00 |
|  4010[房间] | 118.10 | 32.81 | 72.79 |
|  4011[房间] | 83.11 | 23.08 | 0.00 |
|  4015[房间] | 161.68 | 44.91 | 51.24 |
|  4016[房间] | 83.11 | 23.08 | 0.00 |
|  4021[房间] | 83.11 | 23.08 | 0.00 |
|  4029[房间] | 22.90 | 6.36 | 0.00 |
|  4030[房间] | 83.11 | 23.08 | 0.00 |
|  4031[房间] | 83.11 | 23.08 | 0.00 |
|  4039[房间] | 83.11 | 23.08 | 0.00 |
|  4040[房间] | 83.11 | 23.08 | 0.00 |
|  4046[房间] | 83.11 | 23.08 | 0.00 |
|  4047[房间] | 83.11 | 23.08 | 0.00 |
|  4055[房间] | 83.11 | 23.08 | 0.00 |
|  4056[房间] | 83.11 | 23.08 | 0.00 |
|  4062[房间] | 132.39 | 36.77 | 0.00 |
|  4063[房间] | 83.11 | 23.08 | 0.00 |
|  4069[房间] | 28.67 | 7.96 | 0.00 |
|  4070[房间] | 5.16 | 1.43 | 0.00 |
|  4071[房间] | 83.11 | 23.08 | 0.00 |
|  4074[房间] | 44.47 | 12.35 | 0.00 |
|  4086[房间] | 6.03 | 1.67 | 0.00 |
|  4087[房间] | 6.08 | 1.69 | 0.00 |
|  4088[房间] | 21.52 | 5.98 | 0.00 |
|  4094[房间] | 6.04 | 1.68 | 0.00 |
|  4095[房间] | 6.09 | 1.69 | 0.00 |
|  4098[房间] | 80.03 | 22.23 | 0.00 |
|  4099[房间] | 80.03 | 22.23 | 0.00 |
|  4100[房间] | 80.03 | 22.23 | 0.00 |
|  4101[房间] | 80.03 | 22.23 | 0.00 |
|  4102[房间] | 80.03 | 22.23 | 0.00 |
|  4103[房间] | 80.03 | 22.23 | 0.00 |
|  4104[房间] | 80.03 | 22.23 | 14.34 |
|  4105[房间] | 118.10 | 32.81 | 52.55 |
|  4106[房间] | 59.05 | 16.40 | 0.00 |
|  4107[房间] | 44.47 | 12.35 | 0.00 |
|  4108[房间] | 83.11 | 23.08 | 0.00 |
|  4109[房间] | 83.11 | 23.08 | 0.00 |
|  4110[房间] | 80.03 | 22.23 | 0.00 |
|  4111[房间] | 80.03 | 22.23 | 0.00 |
|  4112[房间] | 80.03 | 22.23 | 0.00 |
|  4113[房间] | 80.03 | 22.23 | 0.00 |
|  4114[房间] | 80.03 | 22.23 | 0.00 |
|  4115[房间] | 80.03 | 22.23 | 0.00 |
|  4116[房间] | 80.03 | 22.23 | 0.00 |
|  4117[房间] | 113.72 | 31.59 | 65.88 |
|  第5层 |  |  |  |
|  5003[房间] | 83.11 | 23.08 | 0.00 |
|  5005[房间] | 83.11 | 23.08 | 0.00 |
|  5010[房间] | 118.10 | 32.81 | 88.41 |
|  5011[房间] | 83.11 | 23.08 | 0.00 |
|  5015[房间] | 168.07 | 46.69 | 59.49 |
|  5016[房间] | 83.11 | 23.08 | 0.00 |
|  5020[房间] | 5.93 | 1.65 | 0.00 |
|  5021[房间] | 83.11 | 23.08 | 0.00 |
|  5029[房间] | 83.11 | 23.08 | 0.00 |
|  5030[房间] | 83.11 | 23.08 | 0.00 |
|  5038[房间] | 83.11 | 23.08 | 0.00 |
|  5039[房间] | 83.11 | 23.08 | 0.00 |
|  5045[房间] | 83.11 | 23.08 | 0.00 |
|  5046[房间] | 83.11 | 23.08 | 0.00 |
|  5054[房间] | 83.11 | 23.08 | 0.00 |
|  5055[房间] | 83.11 | 23.08 | 0.00 |
|  5061[房间] | 132.10 | 36.70 | 0.00 |
|  5062[房间] | 83.11 | 23.08 | 0.00 |
|  5070[房间] | 28.90 | 8.03 | 0.00 |
|  5071[房间] | 5.21 | 1.45 | 0.00 |
|  5072[房间] | 83.11 | 23.08 | 0.00 |
|  5098[房间] | 80.03 | 22.23 | 0.00 |
|  5099[房间] | 80.03 | 22.23 | 0.00 |
|  5100[房间] | 80.03 | 22.23 | 0.00 |
|  5101[房间] | 80.03 | 22.23 | 0.00 |
|  5102[房间] | 80.03 | 22.23 | 0.00 |
|  5103[房间] | 80.03 | 22.23 | 0.00 |
|  5104[房间] | 80.03 | 22.23 | 25.39 |
|  5105[房间] | 118.10 | 32.81 | 52.81 |
|  5106[房间] | 59.05 | 16.40 | 0.00 |
|  5107[房间] | 47.75 | 13.26 | 0.00 |
|  5108[房间] | 83.11 | 23.08 | 0.00 |
|  5109[房间] | 83.11 | 23.08 | 0.00 |
|  5110[房间] | 80.03 | 22.23 | 0.00 |
|  5111[房间] | 80.03 | 22.23 | 0.00 |
|  5112[房间] | 80.03 | 22.23 | 0.00 |
|  5113[房间] | 80.03 | 22.23 | 0.00 |
|  5114[房间] | 80.03 | 22.23 | 0.00 |
|  5115[房间] | 80.03 | 22.23 | 0.00 |
|  5116[房间] | 80.03 | 22.23 | 0.00 |
|  5117[房间] | 111.82 | 31.06 | 65.27 |
|  5118[房间] | 1.91 | 0.53 | 0.00 |
|  5132[房间] | 5.98 | 1.66 | 0.00 |
|  5133[房间] | 6.02 | 1.67 | 0.00 |
|  5134[房间] | 21.65 | 6.01 | 0.00 |
|  5143[房间] | 5.98 | 1.66 | 0.00 |
|  5144[房间] | 6.02 | 1.67 | 0.00 |
|  第6层 |  |  |  |
|  6003[房间] | 83.11 | 23.08 | 0.00 |
|  6005[房间] | 83.11 | 23.08 | 0.00 |
|  6006[房间] | 5.38 | 1.49 | 0.00 |
|  6007[房间] | 6.68 | 1.86 | 0.00 |
|  6010[房间] | 118.10 | 32.81 | 86.05 |
|  6011[房间] | 83.11 | 23.08 | 0.00 |
|  6015[房间] | 168.07 | 46.69 | 57.63 |
|  6016[房间] | 83.11 | 23.08 | 0.00 |
|  6021[房间] | 83.11 | 23.08 | 0.00 |
|  6029[房间] | 83.11 | 23.08 | 0.00 |
|  6030[房间] | 83.11 | 23.08 | 0.00 |
|  6038[房间] | 83.11 | 23.08 | 0.00 |
|  6039[房间] | 83.11 | 23.08 | 0.00 |
|  6045[房间] | 83.11 | 23.08 | 0.00 |
|  6046[房间] | 83.11 | 23.08 | 0.00 |
|  6054[房间] | 83.11 | 23.08 | 0.00 |
|  6055[房间] | 83.11 | 23.08 | 0.00 |
|  6061[房间] | 132.10 | 36.70 | 0.00 |
|  6062[房间] | 83.11 | 23.08 | 0.00 |
|  6070[房间] | 28.90 | 8.03 | 0.00 |
|  6071[房间] | 5.21 | 1.45 | 0.00 |
|  6072[房间] | 83.11 | 23.08 | 0.00 |
|  6098[房间] | 80.03 | 22.23 | 0.00 |
|  6099[房间] | 80.03 | 22.23 | 0.00 |
|  6100[房间] | 80.03 | 22.23 | 0.00 |
|  6101[房间] | 80.03 | 22.23 | 0.00 |
|  6102[房间] | 80.03 | 22.23 | 0.00 |
|  6103[房间] | 80.03 | 22.23 | 0.00 |
|  6104[房间] | 80.03 | 22.23 | 52.29 |
|  6105[房间] | 118.10 | 32.81 | 55.84 |
|  6106[房间] | 59.05 | 16.40 | 0.00 |
|  6107[房间] | 47.75 | 13.26 | 0.00 |
|  6108[房间] | 83.11 | 23.08 | 0.00 |
|  6109[房间] | 83.11 | 23.08 | 0.00 |
|  6110[房间] | 80.03 | 22.23 | 0.00 |
|  6111[房间] | 80.03 | 22.23 | 0.00 |
|  6112[房间] | 80.03 | 22.23 | 0.00 |
|  6113[房间] | 80.03 | 22.23 | 0.00 |
|  6114[房间] | 80.03 | 22.23 | 0.00 |
|  6115[房间] | 80.03 | 22.23 | 0.00 |
|  6116[房间] | 80.03 | 22.23 | 0.00 |
|  6117[房间] | 111.82 | 31.06 | 70.33 |
|  6118[房间] | 1.91 | 0.53 | 0.00 |
|  第7层 |  |  |  |
|  7003[房间] | 85.88 | 23.85 | 111.50 |
|  7005[房间] | 85.16 | 23.66 | 0.00 |
|  7010[房间] | 119.56 | 33.21 | 46.25 |
|  7011[房间] | 83.11 | 23.08 | 91.07 |
|  7013[房间] | 165.31 | 45.92 | 74.47 |
|  7014[房间] | 82.87 | 23.02 | 92.17 |
|  7016[房间] | 83.34 | 23.15 | 0.00 |
|  7023[房间] | 81.65 | 22.68 | 92.73 |
|  7024[房间] | 83.11 | 23.08 | 91.52 |
|  7027[房间] | 81.65 | 22.68 | 111.15 |
|  7028[房间] | 83.11 | 23.08 | 86.41 |
|  7031[房间] | 83.66 | 23.24 | 104.49 |
|  7032[房间] | 85.16 | 23.66 | 79.61 |
|  7035[房间] | 79.63 | 22.12 | 102.56 |
|  7036[房间] | 81.05 | 22.51 | 85.11 |
|  7039[房间] | 81.65 | 22.68 | 90.68 |
|  7040[房间] | 83.11 | 23.08 | 84.70 |
|  7043[房间] | 81.65 | 22.68 | 98.18 |
|  7044[房间] | 83.11 | 23.08 | 84.35 |
|  7047[房间] | 119.56 | 33.21 | 106.71 |
|  7048[房间] | 83.11 | 23.08 | 82.33 |
|  第8层 |  |  |  |
|  8003[房间] | 85.88 | 23.85 | 118.12 |
|  8005[房间] | 85.16 | 23.66 | 0.00 |
|  8010[房间] | 119.56 | 33.21 | 51.45 |
|  8011[房间] | 83.11 | 23.08 | 84.30 |
|  8013[房间] | 165.31 | 45.92 | 79.54 |
|  8014[房间] | 82.87 | 23.02 | 87.53 |
|  8016[房间] | 83.34 | 23.15 | 0.00 |
|  8023[房间] | 81.65 | 22.68 | 99.71 |
|  8024[房间] | 83.11 | 23.08 | 86.00 |
|  8027[房间] | 81.65 | 22.68 | 120.01 |
|  8028[房间] | 83.11 | 23.08 | 83.48 |
|  8031[房间] | 83.66 | 23.24 | 112.09 |
|  8032[房间] | 85.16 | 23.66 | 79.53 |
|  8035[房间] | 79.63 | 22.12 | 0.00 |
|  8036[房间] | 81.05 | 22.51 | 82.14 |
|  8039[房间] | 81.65 | 22.68 | 100.12 |
|  8040[房间] | 83.11 | 23.08 | 78.79 |
|  8043[房间] | 81.65 | 22.68 | 78.84 |
|  8044[房间] | 83.11 | 23.08 | 77.12 |
|  8047[房间] | 119.56 | 33.21 | 96.33 |
|  8048[房间] | 83.11 | 23.08 | 91.56 |
|  第9层 |  |  |  |
|  10003[房间] | 82.74 | 22.98 | 100.74 |
|  10005[房间] | 83.11 | 23.08 | 72.09 |
|  10010[房间] | 118.10 | 32.81 | 90.87 |
|  10011[房间] | 83.11 | 23.08 | 78.85 |
|  10015[房间] | 159.19 | 44.22 | 70.68 |
|  10016[房间] | 83.11 | 23.08 | 80.30 |
|  10021[房间] | 83.11 | 23.08 | 73.57 |
|  10029[房间] | 111.46 | 30.96 | 104.22 |
|  10030[房间] | 83.11 | 23.08 | 81.67 |
|  10036[房间] | 83.11 | 23.08 | 88.96 |
|  10037[房间] | 83.11 | 23.08 | 80.42 |
|  10042[房间] | 83.11 | 23.08 | 86.54 |
|  10043[房间] | 83.11 | 23.08 | 79.54 |
|  10050[房间] | 83.11 | 23.08 | 80.71 |
|  10051[房间] | 83.11 | 23.08 | 78.74 |
|  10056[房间] | 83.11 | 23.08 | 74.75 |
|  10057[房间] | 83.11 | 23.08 | 75.97 |
|  10065[房间] | 83.11 | 23.08 | 65.36 |
|  10066[房间] | 83.11 | 23.08 | 72.42 |
|  10071[房间] | 118.10 | 32.81 | 69.49 |
|  10072[房间] | 83.11 | 23.08 | 96.54 |
|  第10层 |  |  |  |
|  9010[房间] | 118.10 | 32.81 | 89.76 |
|  9011[房间] | 83.11 | 23.08 | 83.02 |
|  9015[房间] | 159.08 | 44.19 | 62.03 |
|  9016[房间] | 83.11 | 23.08 | 84.10 |
|  9021[房间] | 83.11 | 23.08 | 77.25 |
|  9029[房间] | 111.46 | 30.96 | 101.38 |
|  9030[房间] | 83.11 | 23.08 | 86.08 |
|  9037[房间] | 83.11 | 23.08 | 86.05 |
|  9038[房间] | 83.11 | 23.08 | 86.17 |
|  9041[房间] | 22.87 | 6.35 | 298.23 |
|  9042[房间] | 83.11 | 23.08 | 82.08 |
|  9043[房间] | 83.11 | 23.08 | 85.87 |
|  9051[房间] | 83.11 | 23.08 | 77.24 |
|  9052[房间] | 83.11 | 23.08 | 84.44 |
|  9058[房间] | 83.11 | 23.08 | 72.51 |
|  9059[房间] | 83.11 | 23.08 | 81.29 |
|  9067[房间] | 83.11 | 23.08 | 68.67 |
|  9068[房间] | 83.11 | 23.08 | 78.90 |
|  9073[房间] | 118.10 | 32.81 | 76.08 |
|  9074[房间] | 83.11 | 23.08 | 104.82 |
|  第11层 |  |  |  |
|  11003[房间] | 82.74 | 22.98 | 104.93 |
|  11005[房间] | 83.11 | 23.08 | 71.69 |
|  11010[房间] | 118.10 | 32.81 | 92.38 |
|  11011[房间] | 83.11 | 23.08 | 77.70 |
|  11015[房间] | 159.08 | 44.19 | 64.00 |
|  11016[房间] | 83.11 | 23.08 | 78.32 |
|  11021[房间] | 83.11 | 23.08 | 72.08 |
|  11029[房间] | 111.46 | 30.96 | 104.81 |
|  11030[房间] | 83.11 | 23.08 | 80.71 |
|  11036[房间] | 83.11 | 23.08 | 90.33 |
|  11037[房间] | 83.11 | 23.08 | 80.76 |
|  11042[房间] | 83.11 | 23.08 | 87.97 |
|  11043[房间] | 83.11 | 23.08 | 80.22 |
|  11050[房间] | 83.11 | 23.08 | 80.83 |
|  11051[房间] | 83.11 | 23.08 | 77.18 |
|  11056[房间] | 83.11 | 23.08 | 77.11 |
|  11057[房间] | 83.11 | 23.08 | 75.47 |
|  11065[房间] | 83.11 | 23.08 | 81.38 |
|  11066[房间] | 83.11 | 23.08 | 73.33 |
|  11071[房间] | 118.10 | 32.81 | 119.81 |
|  11072[房间] | 83.11 | 23.08 | 96.07 |
|  第12层 |  |  |  |
|  12002[房间] | 82.74 | 22.98 | 83.08 |
|  12004[房间] | 83.11 | 23.08 | 47.71 |
|  12011[房间] | 98.89 | 27.47 | 0.00 |
|  12012[房间] | 83.11 | 23.08 | 51.04 |
|  12017[房间] | 132.05 | 36.68 | 0.00 |
|  12018[房间] | 83.11 | 23.08 | 50.94 |
|  12023[房间] | 83.11 | 23.08 | 46.89 |
|  12033[房间] | 98.89 | 27.47 | 35.10 |
|  12034[房间] | 83.11 | 23.08 | 52.10 |
|  12041[房间] | 83.11 | 23.08 | 37.75 |
|  12042[房间] | 83.11 | 23.08 | 52.38 |
|  12050[房间] | 83.11 | 23.08 | 37.09 |
|  12051[房间] | 83.11 | 23.08 | 49.35 |
|  12059[房间] | 83.11 | 23.08 | 34.66 |
|  12060[房间] | 83.11 | 23.08 | 47.85 |
|  12067[房间] | 83.11 | 23.08 | 72.60 |
|  12068[房间] | 83.11 | 23.08 | 43.21 |
|  12075[房间] | 83.11 | 23.08 | 105.71 |
|  12076[房间] | 83.11 | 23.08 | 41.76 |
|  12081[房间] | 118.10 | 32.81 | 69.53 |
|  12082[房间] | 83.11 | 23.08 | 37.66 |
|  第13层 |  |  |  |
|  第14层 |  |  |  |

# 结论

该建筑主要功能房间换气次数大于2次**/**h的面积比例为73.37%，按照绿标5.2.10条款要求得5.0分。