**公共建筑换气次数**

**计算书**

|  |  |
| --- | --- |
| 工程名称 | 承旧营新·旧城的活化与绿染 |
| 工程地点 | 武汉 |
| 设计编号 |  |
| 建设单位 | 承旧营新·旧城的活化与绿染 |
| 设计单位 | 承旧营新·旧城的活化与绿染 |
| 设 计 人 |  |
| 校 对 人 |  |
| 审 核 人 |  |
| 设计日期 |  |



|  |  |
| --- | --- |
| 采用软件 | 绿建斯维尔建筑通风Vent202020 |
| 软件版本 | 20190808 |
| 研发单位 | 北京绿建软件有限公司深圳市斯维尔科技有限公司 |
| 正版授权码 | T13972111895 |

# 建筑概况

|  |  |
| --- | --- |
| 工程名称 | 绿色社区 |
| 工程地点 | 武汉 |

# 计算依据

1. 《绿色建筑评价标准》GB/T50378—2019

2. 《绿色建筑评价技术细则》

3. 绿色社区相关建筑图纸

# 参考标准

《绿色建筑评价标准》GB/T50378—2019 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 | 7758.78 | ㎡ |
| 总面积 | 8318.16 | ㎡ |
| 面积比例RR | 93.28 | % |

| 分类 | 体积(m^3) | 面积(m^2) | 换气次数(次/h) |
| --- | --- | --- | --- |
| ○建筑 |  |  |  |
| ├○第1层 |  |  |  |
| ︱├⊙1001[房间] | 524.88 | 87.48 | 5.27 |
| ︱├⊙1002[房间] | 262.44 | 43.74 | 8.81 |
| ︱├⊙1003[房间] | 257.58 | 42.93 | 9.54 |
| ︱├⊙1004[房间] | 1113.48 | 185.58 | 9.92 |
| ︱├⊙1005[房间] | 532.89 | 88.82 | 21.31 |
| ︱├⊙1008[房间] | 136.08 | 22.68 | 8.07 |
| ︱├⊙1009[房间] | 136.08 | 22.68 | 9.78 |
| ︱├⊙1014[房间] | 1712.79 | 285.46 | 14.28 |
| ︱├⊙1015[房间] | 485.46 | 80.91 | 13.18 |
| ︱├⊙1016[房间] | 499.26 | 83.21 | 12.30 |
| ︱├⊙1018[房间] | 313.02 | 52.17 | 7.18 |
| ︱├⊙1019[房间] | 176.67 | 29.44 | 11.12 |
| ︱├⊙1020[房间] | 176.67 | 29.44 | 11.04 |
| ︱├⊙1021[房间] | 202.14 | 33.69 | 40.95 |
| ︱├⊙1022[房间] | 202.14 | 33.69 | 46.81 |
| ︱├⊙1023[房间] | 366.66 | 61.11 | 28.62 |
| ︱├⊙1035[房间] | 313.02 | 52.17 | 8.21 |
| ︱├⊙1036[房间] | 176.67 | 29.44 | 7.47 |
| ︱├⊙1037[房间] | 176.67 | 29.44 | 9.62 |
| ︱└⊙1038[房间] | 176.67 | 29.44 | 13.75 |
| ├○第2层 |  |  |  |
| ︱├⊙2001[房间] | 1173.90 | 243.00 | 15.65 |
| ︱├⊙2002[房间] | 260.74 | 48.48 | 9.60 |
| ︱├⊙2002[房间] | 816.23 | 172.09 | 10.32 |
| ︱├⊙2003[房间] | 260.74 | 48.48 | 6.40 |
| ︱├⊙2003[房间] | 299.32 | 60.78 | 4.77 |
| ︱├⊙2004[房间] | 104.70 | 21.26 | 5.83 |
| ︱├⊙2005[房间] | 866.91 | 288.97 | 30.68 |
| ︱├⊙2006[房间] | 8937.31 | 1941.46 | 16.83 |
| ︱├⊙2010[房间] | 78.23 | 22.96 | 5.57 |
| ︱├⊙2011[房间] | 109.61 | 22.68 | 2.95 |
| ︱└⊙2012[房间] | 113.70 | 23.80 | 4.11 |
| ├○第3层 |  |  |  |
| ︱├⊙3065[非居住用途空间] | 37.02 | 12.34 | 30.21 |
| ︱├⊙3066[房间] | 12.15 | 4.05 | 84.57 |
| ︱├⊙3067[房间] | 12.15 | 4.05 | 103.33 |
| ︱├⊙3068[房间] | 12.15 | 4.05 | 180.77 |
| ︱├⊙3069[房间] | 12.15 | 4.05 | 184.53 |
| ︱├⊙3070[房间] | 12.15 | 4.05 | 187.10 |
| ︱├⊙3071[房间] | 12.15 | 4.05 | 178.67 |
| ︱├⊙3072[房间] | 12.15 | 4.05 | 103.47 |
| ︱├⊙3073[房间] | 42.66 | 14.22 | 24.09 |
| ︱├⊙3074[房间] | 42.66 | 14.22 | 29.43 |
| ︱├⊙3075[房间] | 42.66 | 14.22 | 51.49 |
| ︱├⊙3076[房间] | 42.66 | 14.22 | 59.60 |
| ︱├⊙3077[房间] | 42.66 | 14.22 | 52.56 |
| ︱├⊙3078[房间] | 42.66 | 14.22 | 60.57 |
| ︱├⊙3079[房间] | 42.66 | 14.22 | 53.29 |
| ︱├⊙3080[房间] | 42.66 | 14.22 | 50.89 |
| ︱├⊙3081[房间] | 42.66 | 14.22 | 29.47 |
| ︱├⊙3082[起居室] | 49.48 | 16.49 | 20.55 |
| ︱├⊙3083[卧室] | 49.48 | 16.49 | 8.74 |
| ︱├⊙3084[卧室] | 49.48 | 16.49 | 11.30 |
| ︱├⊙3085[卧室] | 49.48 | 16.49 | 11.30 |
| ︱├⊙3098[房间] | 45.45 | 15.15 | 22.38 |
| ︱├⊙3102[房间] | 45.45 | 15.15 | 24.61 |
| ︱├⊙3118[房间] | 191.52 | 63.84 | 13.77 |
| ︱├⊙3121[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙3124[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙3128[房间] | 31.73 | 10.57 | 55.79 |
| ︱├⊙3130[房间] | 31.73 | 10.57 | 59.23 |
| ︱├⊙3131[房间] | 31.73 | 10.57 | 60.61 |
| ︱├⊙3133[房间] | 31.73 | 10.57 | 61.92 |
| ︱├⊙3134[房间] | 37.80 | 12.60 | 59.15 |
| ︱├⊙3137[房间] | 37.80 | 12.60 | 61.47 |
| ︱├ 3143[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4001[房间] | 18.23 | 6.07 | 47.51 |
| ︱├⊙4002[房间] | 18.23 | 6.07 | 74.36 |
| ︱├⊙4003[房间] | 18.23 | 6.07 | 68.70 |
| ︱├⊙4004[房间] | 18.23 | 6.07 | 53.67 |
| ︱├⊙4005[卧室] | 30.38 | 10.13 | 28.51 |
| ︱├⊙4006[卧室] | 30.38 | 10.13 | 44.61 |
| ︱├⊙4007[卧室] | 30.38 | 10.13 | 56.56 |
| ︱├⊙4008[卧室] | 30.38 | 10.13 | 44.88 |
| ︱├⊙4009[卧室] | 30.38 | 10.13 | 41.22 |
| ︱├⊙4010[卧室] | 30.38 | 10.13 | 32.20 |
| ︱├⊙4011[起居室] | 31.59 | 10.53 | 27.41 |
| ︱├⊙4012[起居室] | 31.59 | 10.53 | 42.90 |
| ︱├⊙4013[起居室] | 31.59 | 10.53 | 54.39 |
| ︱├⊙4014[起居室] | 31.59 | 10.53 | 43.16 |
| ︱├⊙4015[起居室] | 31.59 | 10.53 | 39.63 |
| ︱├⊙4016[起居室] | 31.59 | 10.53 | 30.97 |
| ︱├⊙4017[房间] | 8.77 | 2.92 | 98.67 |
| ︱├⊙4018[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4019[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4020[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4021[房间] | 8.77 | 2.92 | 154.43 |
| ︱├⊙4022[房间] | 8.77 | 2.92 | 195.79 |
| ︱├⊙4023[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4024[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4025[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4026[房间] | 8.77 | 2.92 | 155.37 |
| ︱├⊙4027[房间] | 8.77 | 2.92 | 142.68 |
| ︱├⊙4028[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4029[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4030[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4031[房间] | 8.77 | 2.92 | 111.48 |
| ︱├ 4032[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4033[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4034[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4035[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4036[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4037[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4038[房间] | 153.09 | 51.03 | 88.85 |
| ︱├⊙4039[房间] | 50.40 | 16.80 | 5.91 |
| ︱├⊙4040[房间] | 39.06 | 13.02 | 31.08 |
| ︱├ 4041[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙4042[房间] | 8.77 | 2.92 | 193.97 |
| ︱├⊙4043[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4044[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4045[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4046[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4047[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4048[房间] | 8.77 | 2.92 | 230.78 |
| ︱├⊙4049[房间] | 13.50 | 4.50 | 151.51 |
| ︱├⊙4050[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4051[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4052[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4053[房间] | 13.50 | 4.50 | 160.71 |
| ︱├⊙4054[房间] | 48.60 | 16.20 | 91.48 |
| ︱├⊙4055[起居室] | 31.59 | 10.53 | 53.88 |
| ︱├⊙4056[起居室] | 31.59 | 10.53 | 64.11 |
| ︱├ 4057[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4058[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4059[房间] | 13.86 | 4.62 | 0.00 |
| ︱├ 4060[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4061[卧室] | 24.30 | 8.10 | 84.17 |
| ︱├⊙4062[卧室] | 24.30 | 8.10 | 89.28 |
| ︱├⊙4063[卧室] | 23.08 | 7.70 | 73.73 |
| ︱├⊙4064[卧室] | 23.08 | 7.70 | 87.72 |
| ︱├⊙4065[房间] | 16.74 | 5.58 | 54.73 |
| ︱└⊙4066[房间] | 11.88 | 3.96 | 0.00 |
| ├○第4层 |  |  |  |
| ︱├⊙4001[房间] | 18.23 | 6.07 | 97.44 |
| ︱├⊙4002[房间] | 18.23 | 6.07 | 90.19 |
| ︱├⊙4003[卧室] | 30.38 | 10.13 | 39.71 |
| ︱├⊙4004[卧室] | 30.38 | 10.13 | 25.46 |
| ︱├⊙4005[卧室] | 30.38 | 10.13 | 58.46 |
| ︱├⊙4006[卧室] | 30.38 | 10.13 | 54.12 |
| ︱├⊙4007[卧室] | 30.38 | 10.13 | 68.63 |
| ︱├⊙4008[卧室] | 30.38 | 10.13 | 54.52 |
| ︱├⊙4009[起居室] | 31.59 | 10.53 | 38.18 |
| ︱├⊙4010[起居室] | 31.59 | 10.53 | 24.48 |
| ︱├⊙4011[起居室] | 31.59 | 10.53 | 56.22 |
| ︱├⊙4012[起居室] | 31.59 | 10.53 | 52.03 |
| ︱├⊙4013[起居室] | 31.59 | 10.53 | 65.99 |
| ︱├⊙4014[起居室] | 31.59 | 10.53 | 52.43 |
| ︱├⊙4015[房间] | 8.77 | 2.92 | 137.45 |
| ︱├⊙4016[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4017[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4018[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4019[房间] | 8.77 | 2.92 | 88.13 |
| ︱├⊙4020[房间] | 8.77 | 2.92 | 202.38 |
| ︱├⊙4021[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4022[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4023[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4024[房间] | 8.77 | 2.92 | 187.32 |
| ︱├⊙4025[房间] | 8.77 | 2.92 | 237.56 |
| ︱├⊙4026[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4027[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4028[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙4029[房间] | 8.77 | 2.92 | 188.73 |
| ︱├ 4030[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4031[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4032[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4033[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4034[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4035[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4036[房间] | 153.09 | 51.03 | 93.83 |
| ︱├⊙4037[房间] | 50.40 | 16.80 | 19.70 |
| ︱├⊙4038[房间] | 39.06 | 13.02 | 33.04 |
| ︱├ 4039[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙4040[房间] | 8.77 | 2.92 | 208.06 |
| ︱├⊙4041[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4042[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4043[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4044[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4045[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4046[房间] | 8.77 | 2.92 | 232.77 |
| ︱├⊙4047[房间] | 13.50 | 4.50 | 148.31 |
| ︱├⊙4048[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4049[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 4050[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4051[房间] | 13.50 | 4.50 | 148.47 |
| ︱├⊙4052[房间] | 48.60 | 16.20 | 93.32 |
| ︱├⊙4053[起居室] | 31.59 | 10.53 | 57.80 |
| ︱├⊙4054[起居室] | 31.59 | 10.53 | 64.66 |
| ︱├ 4055[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙4056[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 4057[房间] | 13.86 | 4.62 | 0.00 |
| ︱├ 4058[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4059[卧室] | 24.30 | 8.10 | 82.39 |
| ︱├⊙4060[卧室] | 24.30 | 8.10 | 82.48 |
| ︱├⊙4061[卧室] | 23.08 | 7.69 | 79.09 |
| ︱├⊙4062[卧室] | 23.08 | 7.69 | 88.48 |
| ︱├⊙4063[房间] | 16.74 | 5.58 | 77.09 |
| ︱├⊙4064[房间] | 11.88 | 3.96 | 0.00 |
| ︱├⊙4065[非居住用途空间] | 37.02 | 12.34 | 24.32 |
| ︱├⊙4066[房间] | 12.15 | 4.05 | 78.37 |
| ︱├⊙4067[房间] | 12.15 | 4.05 | 176.73 |
| ︱├⊙4068[房间] | 12.15 | 4.05 | 182.41 |
| ︱├⊙4069[房间] | 12.15 | 4.05 | 221.06 |
| ︱├⊙4070[房间] | 12.15 | 4.05 | 141.08 |
| ︱├⊙4071[房间] | 42.66 | 14.22 | 45.85 |
| ︱├⊙4072[房间] | 42.66 | 14.22 | 22.32 |
| ︱├⊙4073[房间] | 42.66 | 14.22 | 51.60 |
| ︱├⊙4074[房间] | 42.66 | 14.22 | 50.34 |
| ︱├⊙4075[房间] | 42.66 | 14.22 | 51.95 |
| ︱├⊙4076[房间] | 42.66 | 14.22 | 62.96 |
| ︱├⊙4077[房间] | 42.66 | 14.22 | 60.06 |
| ︱├⊙4078[房间] | 42.66 | 14.22 | 40.18 |
| ︱├⊙4079[房间] | 42.66 | 14.22 | 53.43 |
| ︱├⊙4080[起居室] | 49.48 | 16.49 | 9.10 |
| ︱├⊙4081[卧室] | 49.48 | 16.49 | 9.10 |
| ︱├⊙4082[卧室] | 49.48 | 16.49 | 10.58 |
| ︱├⊙4083[卧室] | 49.48 | 16.49 | 35.78 |
| ︱├⊙4096[房间] | 45.45 | 15.15 | 19.81 |
| ︱├⊙4097[房间] | 13.37 | 4.46 | 0.00 |
| ︱├ 4098[房间] | 4.06 | 1.35 | 0.00 |
| ︱├⊙4099[房间] | 13.37 | 4.46 | 0.00 |
| ︱├⊙4100[房间] | 45.45 | 15.15 | 38.95 |
| ︱├⊙4116[房间] | 191.52 | 63.84 | 13.28 |
| ︱├ 4118[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙4119[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙4120[房间] | 8.12 | 2.71 | 0.00 |
| ︱├⊙4121[房间] | 8.16 | 2.72 | 0.00 |
| ︱├⊙4122[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙4123[房间] | 50.40 | 16.80 | 0.00 |
| ︱├⊙4126[房间] | 31.73 | 10.57 | 58.37 |
| ︱├⊙4128[房间] | 31.73 | 10.57 | 59.61 |
| ︱├⊙4129[房间] | 31.73 | 10.57 | 59.98 |
| ︱├⊙4131[房间] | 31.73 | 10.57 | 60.79 |
| ︱├⊙4132[房间] | 37.80 | 12.60 | 58.84 |
| ︱├ 4134[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙4135[房间] | 37.80 | 12.60 | 61.61 |
| ︱├ 4138[房间] | 1.71 | 0.57 | 0.00 |
| ︱├ 4145[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙4148[房间] | 16.74 | 5.58 | 30.16 |
| ︱└ 4149[房间] | 11.88 | 3.96 | 0.00 |
| ├○第5层 |  |  |  |
| ︱├⊙5001[房间] | 18.23 | 6.07 | 47.53 |
| ︱├⊙5002[房间] | 18.23 | 6.07 | 42.28 |
| ︱├⊙5003[房间] | 18.23 | 6.07 | 95.06 |
| ︱├⊙5004[房间] | 18.23 | 6.07 | 80.59 |
| ︱├⊙5005[卧室] | 30.38 | 10.13 | 28.52 |
| ︱├⊙5006[卧室] | 30.38 | 10.13 | 25.37 |
| ︱├⊙5007[卧室] | 30.38 | 10.13 | 62.83 |
| ︱├⊙5008[卧室] | 30.38 | 10.13 | 40.86 |
| ︱├⊙5009[卧室] | 30.38 | 10.13 | 57.04 |
| ︱├⊙5010[卧室] | 30.38 | 10.13 | 48.35 |
| ︱├⊙5011[起居室] | 31.59 | 10.53 | 27.42 |
| ︱├⊙5012[起居室] | 31.59 | 10.53 | 24.39 |
| ︱├⊙5013[起居室] | 31.59 | 10.53 | 60.41 |
| ︱├⊙5014[起居室] | 31.59 | 10.53 | 39.29 |
| ︱├⊙5015[起居室] | 31.59 | 10.53 | 54.84 |
| ︱├⊙5016[起居室] | 31.59 | 10.53 | 46.49 |
| ︱├⊙5017[房间] | 8.77 | 2.92 | 98.71 |
| ︱├⊙5018[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5019[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5020[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙5021[房间] | 8.77 | 2.92 | 87.82 |
| ︱├⊙5022[房间] | 8.77 | 2.92 | 217.48 |
| ︱├⊙5023[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5024[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5025[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙5026[房间] | 8.77 | 2.92 | 141.45 |
| ︱├⊙5027[房间] | 8.77 | 2.92 | 197.44 |
| ︱├⊙5028[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5029[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5030[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙5031[房间] | 8.77 | 2.92 | 167.38 |
| ︱├ 5032[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5033[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5034[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5035[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5036[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5037[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙5038[房间] | 153.09 | 51.03 | 92.96 |
| ︱├⊙5039[房间] | 50.40 | 16.80 | 10.24 |
| ︱├⊙5040[房间] | 39.06 | 13.02 | 44.92 |
| ︱├ 5041[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙5042[房间] | 8.77 | 2.92 | 215.69 |
| ︱├⊙5043[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5044[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5045[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5046[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5047[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙5048[房间] | 8.77 | 2.92 | 236.30 |
| ︱├⊙5049[房间] | 13.50 | 4.50 | 147.32 |
| ︱├⊙5050[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5051[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 5052[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5053[房间] | 13.50 | 4.50 | 147.99 |
| ︱├⊙5054[房间] | 48.60 | 16.20 | 93.63 |
| ︱├⊙5055[起居室] | 31.59 | 10.53 | 59.91 |
| ︱├⊙5056[起居室] | 31.59 | 10.53 | 65.64 |
| ︱├ 5057[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙5058[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 5059[房间] | 13.86 | 4.62 | 0.00 |
| ︱├ 5060[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙5061[卧室] | 24.30 | 8.10 | 81.85 |
| ︱├⊙5062[卧室] | 24.30 | 8.10 | 82.22 |
| ︱├⊙5063[卧室] | 23.08 | 7.70 | 81.99 |
| ︱├⊙5064[卧室] | 23.08 | 7.70 | 89.82 |
| ︱├⊙5065[房间] | 16.74 | 5.58 | 104.80 |
| ︱├⊙5066[房间] | 11.88 | 3.96 | 0.00 |
| ︱├⊙5067[非居住用途空间] | 37.02 | 12.34 | 30.52 |
| ︱├⊙5068[房间] | 12.15 | 4.05 | 134.94 |
| ︱├⊙5069[房间] | 12.15 | 4.05 | 112.00 |
| ︱├⊙5070[房间] | 12.15 | 4.05 | 169.79 |
| ︱├⊙5071[房间] | 12.15 | 4.05 | 181.70 |
| ︱├⊙5072[房间] | 12.15 | 4.05 | 178.64 |
| ︱├⊙5073[房间] | 12.15 | 4.05 | 167.65 |
| ︱├⊙5074[房间] | 12.15 | 4.05 | 129.70 |
| ︱├⊙5075[房间] | 42.66 | 14.22 | 38.43 |
| ︱├⊙5076[房间] | 42.66 | 14.22 | 31.90 |
| ︱├⊙5077[房间] | 42.66 | 14.22 | 48.36 |
| ︱├⊙5078[房间] | 42.66 | 14.22 | 58.16 |
| ︱├⊙5079[房间] | 42.66 | 14.22 | 51.75 |
| ︱├⊙5080[房间] | 42.66 | 14.22 | 64.54 |
| ︱├⊙5081[房间] | 42.66 | 14.22 | 50.88 |
| ︱├⊙5082[房间] | 42.66 | 14.22 | 47.75 |
| ︱├⊙5083[房间] | 42.66 | 14.22 | 36.94 |
| ︱├⊙5084[起居室] | 49.48 | 16.49 | 6.65 |
| ︱├⊙5085[卧室] | 49.48 | 16.49 | 0.85 |
| ︱├⊙5086[卧室] | 49.48 | 16.49 | 11.42 |
| ︱├⊙5087[卧室] | 49.48 | 16.49 | 11.42 |
| ︱├⊙5100[房间] | 45.45 | 15.15 | 8.16 |
| ︱├⊙5101[房间] | 13.37 | 4.46 | 0.00 |
| ︱├ 5102[房间] | 4.06 | 1.35 | 0.00 |
| ︱├⊙5103[房间] | 13.37 | 4.46 | 0.00 |
| ︱├⊙5104[房间] | 45.45 | 15.15 | 24.86 |
| ︱├⊙5120[房间] | 191.52 | 63.84 | 11.48 |
| ︱├ 5122[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙5123[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙5124[房间] | 8.12 | 2.71 | 0.00 |
| ︱├⊙5125[房间] | 8.16 | 2.72 | 0.00 |
| ︱├⊙5126[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙5127[房间] | 50.40 | 16.80 | 0.00 |
| ︱├⊙5130[房间] | 31.73 | 10.57 | 59.38 |
| ︱├⊙5132[房间] | 31.73 | 10.57 | 59.81 |
| ︱├⊙5133[房间] | 31.73 | 10.57 | 61.04 |
| ︱├⊙5135[房间] | 31.73 | 10.57 | 61.74 |
| ︱├⊙5136[房间] | 37.80 | 12.60 | 60.12 |
| ︱├⊙5139[房间] | 37.80 | 12.60 | 62.33 |
| ︱├ 5142[房间] | 1.71 | 0.57 | 0.00 |
| ︱├ 5149[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙5152[房间] | 16.74 | 5.58 | 25.23 |
| ︱└ 5153[房间] | 11.88 | 3.96 | 0.00 |
| ├○第6层 |  |  |  |
| ︱├⊙6001[房间] | 18.23 | 6.07 | 84.78 |
| ︱├⊙6002[房间] | 18.23 | 6.07 | 82.43 |
| ︱├⊙6003[卧室] | 30.38 | 10.13 | 35.82 |
| ︱├⊙6004[卧室] | 30.38 | 10.13 | 28.62 |
| ︱├⊙6005[卧室] | 30.38 | 10.13 | 50.87 |
| ︱├⊙6006[卧室] | 30.38 | 10.13 | 49.46 |
| ︱├⊙6007[卧室] | 30.38 | 10.13 | 86.36 |
| ︱├⊙6008[卧室] | 30.38 | 10.13 | 20.23 |
| ︱├⊙6009[起居室] | 31.59 | 10.53 | 34.45 |
| ︱├⊙6010[起居室] | 31.59 | 10.53 | 27.52 |
| ︱├⊙6011[起居室] | 31.59 | 10.53 | 48.91 |
| ︱├⊙6012[起居室] | 31.59 | 10.53 | 47.56 |
| ︱├⊙6013[起居室] | 31.59 | 10.53 | 83.03 |
| ︱├⊙6014[起居室] | 31.59 | 10.53 | 19.45 |
| ︱├⊙6015[房间] | 8.77 | 2.92 | 124.00 |
| ︱├⊙6016[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6017[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6018[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙6019[房间] | 8.77 | 2.92 | 99.07 |
| ︱├⊙6020[房间] | 8.77 | 2.92 | 176.07 |
| ︱├⊙6021[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6022[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6023[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙6024[房间] | 8.77 | 2.92 | 171.20 |
| ︱├⊙6025[房间] | 8.77 | 2.92 | 298.92 |
| ︱├⊙6026[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6027[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6028[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙6029[房间] | 8.77 | 2.92 | 70.02 |
| ︱├ 6030[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6031[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6032[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6033[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6034[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6035[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙6036[房间] | 153.09 | 51.03 | 93.16 |
| ︱├⊙6037[房间] | 50.40 | 16.80 | 1.85 |
| ︱├⊙6038[房间] | 39.06 | 13.02 | 46.50 |
| ︱├ 6039[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙6040[房间] | 8.77 | 2.92 | 193.19 |
| ︱├⊙6041[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6042[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6043[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6044[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6045[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙6046[房间] | 8.77 | 2.92 | 211.08 |
| ︱├⊙6047[房间] | 13.50 | 4.50 | 130.61 |
| ︱├⊙6048[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6049[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 6050[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6051[房间] | 13.50 | 4.50 | 128.79 |
| ︱├⊙6052[房间] | 48.60 | 16.20 | 95.08 |
| ︱├⊙6053[起居室] | 31.59 | 10.53 | 53.66 |
| ︱├⊙6054[起居室] | 31.59 | 10.53 | 58.63 |
| ︱├ 6055[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙6056[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 6057[房间] | 13.86 | 4.62 | 0.00 |
| ︱├ 6058[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙6059[卧室] | 24.30 | 8.10 | 72.56 |
| ︱├⊙6060[卧室] | 24.30 | 8.10 | 71.55 |
| ︱├⊙6061[卧室] | 23.08 | 7.69 | 73.44 |
| ︱├⊙6062[卧室] | 23.08 | 7.69 | 80.23 |
| ︱├⊙6063[房间] | 16.74 | 5.58 | 108.51 |
| ︱├⊙6064[房间] | 11.88 | 3.96 | 0.00 |
| ︱├⊙9001[非居住用途空间] | 37.02 | 12.34 | 27.28 |
| ︱├⊙9001[房间] | 12.15 | 4.05 | 147.87 |
| ︱├⊙9002[房间] | 12.15 | 4.05 | 104.88 |
| ︱├⊙9003[房间] | 12.15 | 4.05 | 67.70 |
| ︱├⊙9004[房间] | 12.15 | 4.05 | 146.86 |
| ︱├⊙9005[房间] | 12.15 | 4.05 | 166.96 |
| ︱├⊙9006[房间] | 12.15 | 4.05 | 59.67 |
| ︱├⊙9007[卧室] | 42.66 | 14.22 | 42.11 |
| ︱├⊙9008[卧室] | 42.66 | 14.22 | 29.87 |
| ︱├⊙9009[卧室] | 42.66 | 14.22 | 19.28 |
| ︱├⊙9010[卧室] | 42.66 | 14.22 | 41.83 |
| ︱├⊙9011[卧室] | 42.66 | 14.22 | 47.55 |
| ︱├⊙9012[卧室] | 42.66 | 14.22 | 16.99 |
| ︱├⊙9013[房间] | 290.57 | 96.86 | 99.17 |
| ︱├⊙9014[起居室] | 49.48 | 16.49 | 10.21 |
| ︱├⊙9015[卧室] | 49.48 | 16.49 | 10.21 |
| ︱├⊙9016[卧室] | 49.48 | 16.49 | 43.50 |
| ︱├⊙9017[卧室] | 49.48 | 16.49 | 5.99 |
| ︱├⊙9027[房间] | 45.45 | 15.15 | 22.22 |
| ︱├⊙9028[房间] | 13.37 | 4.46 | 0.00 |
| ︱├ 9029[房间] | 4.06 | 1.35 | 0.00 |
| ︱├⊙9030[房间] | 13.37 | 4.46 | 0.00 |
| ︱├⊙9031[房间] | 45.45 | 15.15 | 47.36 |
| ︱├⊙9034[卧室] | 31.73 | 10.57 | 72.50 |
| ︱├⊙9036[卧室] | 31.73 | 10.57 | 69.62 |
| ︱├⊙9037[卧室] | 31.73 | 10.57 | 69.66 |
| ︱├⊙9039[卧室] | 31.73 | 10.57 | 67.83 |
| ︱├⊙9040[卧室] | 37.80 | 12.60 | 65.43 |
| ︱├⊙9042[房间] | 191.52 | 63.84 | 14.96 |
| ︱├⊙9043[卧室] | 37.80 | 12.60 | 67.23 |
| ︱├ 9043[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙9044[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙9045[房间] | 8.12 | 2.71 | 0.00 |
| ︱├⊙9046[房间] | 8.16 | 2.72 | 0.00 |
| ︱├⊙9047[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙9048[房间] | 50.40 | 16.80 | 0.00 |
| ︱├ 9063[房间] | 1.71 | 0.57 | 0.00 |
| ︱├ 9070[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙9073[房间] | 16.74 | 5.58 | 26.07 |
| ︱└ 9074[房间] | 11.88 | 3.96 | 0.00 |
| ├○第7层 |  |  |  |
| ︱├⊙10001[非居住用途空间] | 37.02 | 12.34 | 22.04 |
| ︱├⊙10002[房间] | 12.15 | 4.05 | 118.22 |
| ︱├⊙10003[房间] | 12.15 | 4.05 | 152.46 |
| ︱├⊙10004[房间] | 12.15 | 4.05 | 224.54 |
| ︱├⊙10005[卧室] | 42.66 | 14.22 | 33.67 |
| ︱├⊙10006[卧室] | 42.66 | 14.22 | 43.42 |
| ︱├⊙10007[卧室] | 42.66 | 14.22 | 63.95 |
| ︱├⊙10008[起居室] | 49.48 | 16.49 | 8.25 |
| ︱├⊙10009[卧室] | 49.48 | 16.49 | 8.25 |
| ︱├⊙10010[房间] | 290.57 | 96.86 | 85.23 |
| ︱├⊙10015[房间] | 45.45 | 15.15 | 17.95 |
| ︱├⊙10016[房间] | 15.40 | 5.13 | 0.00 |
| ︱├⊙10022[房间] | 191.52 | 63.84 | 35.14 |
| ︱├ 10023[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙10024[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙10025[房间] | 8.12 | 2.71 | 0.00 |
| ︱├⊙10026[房间] | 8.16 | 2.72 | 0.00 |
| ︱├⊙10027[卧室] | 38.70 | 12.90 | 0.00 |
| ︱├⊙10028[房间] | 50.40 | 16.80 | 0.00 |
| ︱├⊙10031[卧室] | 31.73 | 10.57 | 62.62 |
| ︱├⊙10033[卧室] | 31.73 | 10.57 | 54.08 |
| ︱├⊙10034[卧室] | 31.73 | 10.57 | 50.97 |
| ︱├⊙10036[卧室] | 31.73 | 10.57 | 47.27 |
| ︱├⊙10037[卧室] | 37.80 | 12.60 | 45.19 |
| ︱├⊙10040[卧室] | 37.80 | 12.60 | 47.64 |
| ︱├ 10043[房间] | 1.71 | 0.57 | 0.00 |
| ︱├ 10050[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙10053[房间] | 16.74 | 5.58 | 76.62 |
| ︱├ 10054[房间] | 11.88 | 3.96 | 0.00 |
| ︱├⊙7001[房间] | 18.23 | 6.07 | 76.04 |
| ︱├⊙7002[房间] | 18.23 | 6.07 | 122.97 |
| ︱├⊙7003[卧室] | 30.38 | 10.13 | 45.63 |
| ︱├⊙7004[卧室] | 30.38 | 10.13 | 73.78 |
| ︱├⊙7005[起居室] | 31.59 | 10.53 | 43.87 |
| ︱├⊙7006[起居室] | 31.59 | 10.53 | 70.94 |
| ︱├⊙7007[房间] | 98.42 | 32.81 | 67.13 |
| ︱├⊙7008[房间] | 8.77 | 2.92 | 157.94 |
| ︱├⊙7009[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 7010[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙7011[房间] | 5.55 | 1.85 | 0.00 |
| ︱├⊙7012[房间] | 8.77 | 2.92 | 255.40 |
| ︱├ 7013[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 7014[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙7015[房间] | 153.09 | 51.03 | 221.98 |
| ︱├⊙7016[房间] | 50.40 | 16.80 | 49.25 |
| ︱├⊙7017[房间] | 39.06 | 13.02 | 155.41 |
| ︱├ 7018[房间] | 13.86 | 4.62 | 0.00 |
| ︱├⊙7019[房间] | 8.77 | 2.92 | 274.44 |
| ︱├⊙7020[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 7021[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 7022[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙7023[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 7024[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙7025[房间] | 8.77 | 2.92 | 288.13 |
| ︱├⊙7026[房间] | 13.50 | 4.50 | 171.96 |
| ︱├⊙7027[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 7028[房间] | 2.55 | 0.85 | 0.00 |
| ︱├ 7029[房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙7030[房间] | 13.50 | 4.50 | 176.79 |
| ︱├⊙7031[房间] | 48.60 | 16.20 | 107.24 |
| ︱├⊙7032[起居室] | 31.59 | 10.53 | 76.23 |
| ︱├⊙7033[起居室] | 31.59 | 10.53 | 80.04 |
| ︱├ 7034[无隔声要求房间] | 2.70 | 0.90 | 0.00 |
| ︱├⊙7035[房间] | 5.55 | 1.85 | 0.00 |
| ︱├ 7036[房间] | 13.86 | 4.62 | 0.00 |
| ︱├ 7037[房间] | 2.55 | 0.85 | 0.00 |
| ︱├⊙7038[卧室] | 24.30 | 8.10 | 95.53 |
| ︱├⊙7039[卧室] | 24.30 | 8.10 | 98.22 |
| ︱├⊙7040[卧室] | 23.08 | 7.70 | 104.32 |
| ︱├⊙7041[卧室] | 23.08 | 7.70 | 109.52 |
| ︱├⊙7042[房间] | 16.74 | 5.58 | 214.34 |
| ︱└⊙7043[房间] | 11.88 | 3.96 | 0.00 |
| └ 第8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93.28%，按照绿标5.2.10条款要求得7分。