**居住建筑通风开口面积**

**计算书**

|  |  |
| --- | --- |
| 工程名称 | 新建项目 |
| 工程地点 | 北京 |
| 设计编号 |  |
| 建设单位 |  |
| 设计单位 |  |
| 设 计 人 |  |
| 校 对 人 |  |
| 审 核 人 |  |
| 设计日期 |  |



|  |  |
| --- | --- |
| 采用软件 | 建筑通风Vent2024  |
| 软件版本 | 20240430(SP1) |
| 研发单位 | 北京绿建软件股份有限公司 |
| 正版授权码 | T15631942757 |

# 建筑概况

|  |  |
| --- | --- |
| 工程名称 | 新建项目 |
| 工程地点 | 北京 |
| 建筑热工设计分区 | 寒冷 |
| 建筑面积 | 14458 m2 |
| 建筑层数 | 地上7层 |
| 建筑高度 | 22.5m |

# 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. 《住宅设计规范》GB50096—2011

4. 项目相关建筑图纸

# 参考标准

标准中第5.2.10条第1款规定：住宅建筑通风开口面积与房间地板面积的比例在夏热冬暖地区达到12%, 在夏热冬冷地区达到8%, 在其他地区达到5%, 得5分；每再增加2%, 再得1 分，最高得8分。

表1 通风开口面积与房间地板面积比例得分依据

|  |  |  |
| --- | --- | --- |
| **气候区** | **通风开口面积与房间地板面积比例** | **得分** |
| 夏热冬暖 | 12% | 5 |
| 14% | 6 |
| 16% | 7 |
| 18% | 8 |
| 夏热冬冷 | 8% | 5 |
| 10% | 6 |
| 12% | 7 |
| 14% | 8 |
| 其他地区 | 5% | 5 |
| 7% | 6 |
| 9% | 7 |
| 11% | 8 |

# 计算内容和方法

本项目统计了建筑主要功能房间以及每套住宅的通风开口面积与地板面积比例，并且考虑了门窗开启对通风开口面积的的影响，具体计算方法详见下面小节。

单个房间通风开口面积比例计算：



式中：

— 单个房间通风开口面积比例（%）；

— 单个房间通风开口面积之和（m2）；

— 单个房间地板面积（m2）。

注：通风开口面积即窗扇开启后，窗扇洞口界面上空气可流通的面积。如下图所示。



图1 通风开口面积和可开启面积关系示意图

# 通风开口面积统计

参考《绿色建筑评价技术细则》，并依据上述主要功能房间通风开口面积与地板面积比例的计算，本项目统计出每套住宅的通风开口面积与地板面积的比例，见下表

表2 建筑主要功能房间以及每套住宅通风开口面积统计表

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 层号 | 户型 | 房间 | 门窗编号 | 门窗类型 | 门窗面积(㎡) | 通风开口面积(㎡) | 地板面积(㎡) | 开地比(%) |
| 1层 | 1-A | X002[一系建筑环境智能控制(1)实验室] | C2121 | 推拉窗-向左开 | 4.41 | 13.86 | 146.64 | 9.45 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X005[一系机械工程基础实验室] | C2421 | 推拉窗-向左开 | 5.04 | 10.08 | 99.76 | 10.10 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X006[二系生物工艺] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 83.52 | 6.03 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X007[教务] | C3021 | 推拉窗-向左开 | 6.30 | 6.30 | 65.33 | 9.64 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X008[一系过程装备与过程控制(1)实验室] | C3015 | 推拉窗-向左开 | 4.50 | 6.30 | 65.33 | 9.64 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X014[五系材料工艺(1)实验室] | C2121 | 推拉窗-向左开 | 4.41 | 9.45 | 48.30 | 19.56 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X019[实验室] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 31.80 | 9.91 |
| X033[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| **套内通风开口面积合计** | 116.64 | 59.22 | 556.36 | **10.64** |
| 1-B | X001[门厅] | M1221 | 推拉窗-向左开 | 2.59 | 2.63 | 193.20 | 1.36 |
| M1321 | 推拉窗-向左开 | 2.64 |
| X004[五系材料工艺实验室] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.80 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X009[一系变频调速实验室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X010[教室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X011[教室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X020[上] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| X021[数字校园中心卡务办公室] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.56 | 10.16 |
| X022[中专科] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| X024[中专科] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| X025[中专科] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| X026[中专会议室] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| X027[中专科] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| X028[一系] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.68 | 10.12 |
| **套内通风开口面积合计** | 91.17 | 45.60 | 682.66 | **6.68** |
| 1-C | X012[保卫监控室] | C1515 | 推拉窗-向左开 | 2.25 | 7.27 | 54.75 | 13.29 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C2515 | 推拉窗-向左开 | 3.75 |
| C3915 | 推拉窗-向左开 | 6.30 |
| X015[离退休办公室] | C1515 | 推拉窗-向左开 | 2.25 | 2.25 | 35.75 | 6.29 |
| C1515 | 推拉窗-向左开 | 2.25 |
| X029[房间] | M0821 | 推拉窗-向左开 | 1.58 | 3.15 | 25.38 | 12.41 |
| M0821 | 推拉窗-向左开 | 1.58 |
| M0821 | 推拉窗-向左开 | 1.58 |
| M0821 | 推拉窗-向左开 | 1.58 |
| X030[广播室] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 17.94 | 6.27 |
| X034[房间] | M1521 | 推拉窗-向左开 | 3.15 | 1.57 | 15.50 | 10.16 |
| **套内通风开口面积合计** | 30.75 | 15.37 | 149.33 | **10.30** |
| 2层 | 2-A | 2002[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 116.12 | 0.97 |
| 2004[房间] | C1515 | 推拉窗-向左开 | 2.25 | 14.98 | 115.02 | 13.03 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| 2005[房间] | C3015 | 推拉窗-向左开 | 4.50 | 9.45 | 98.34 | 9.61 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 2006[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.69 | 9.58 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 2007[房间] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 83.52 | 6.03 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 2008[房间] | C2421 | 推拉窗-向左开 | 5.04 | 7.56 | 77.66 | 9.73 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| 2009[房间] | C3021 | 推拉窗-向左开 | 6.30 | 6.30 | 65.16 | 9.67 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 2019[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 32.81 | 9.60 |
| 2021[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 31.97 | 9.85 |
| 2025[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 20.68 | 12.18 |
| 2033[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| **套内通风开口面积合计** | 133.74 | 67.77 | 755.65 | **8.97** |
| 2-B | 2003[房间] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.77 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2010[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2011[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2012[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2013[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2014[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2015[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 2022[房间] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| 2023[房间] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.80 | 10.08 |
| 2024[房间] | C3615 | 推拉窗-向左开 | 5.40 | 2.70 | 26.91 | 10.03 |
| **套内通风开口面积合计** | 91.35 | 45.67 | 520.06 | **8.78** |
| 2-C | 2017[房间] | M0821 | 推拉窗-向左开 | 1.58 | 1.57 | 38.17 | 4.13 |
| M0821 | 推拉窗-向左开 | 1.58 |
| 2018[房间] | C1515 | 推拉窗-向左开 | 2.25 | 5.40 | 35.75 | 15.10 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C4215 | 推拉窗-向左开 | 6.30 |
| 2026[房间] | C3315 | 推拉窗-向左开 | 6.30 | 3.15 | 19.54 | 16.12 |
| 2027[房间] | C4115 | 推拉窗-向左开 | 4.95 | 2.47 | 18.70 | 13.24 |
| 2029[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 17.23 | 6.53 |
| 2031[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 17.35 | 6.49 |
| 2032[房间] | C2515 | 推拉窗-向左开 | 3.75 | 1.87 | 16.46 | 11.39 |
| 2034[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 35.70 | 17.85 | 176.44 | **10.12** |
| 3层 | 3-A | 3002[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 116.12 | 0.97 |
| 3004[房间] | C3015 | 推拉窗-向左开 | 4.50 | 9.45 | 98.34 | 9.61 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 3005[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.52 | 9.59 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 3006[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.69 | 9.58 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 3007[房间] | C2121 | 推拉窗-向左开 | 4.41 | 13.86 | 96.26 | 14.40 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| 3008[房间] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 93.13 | 5.41 |
| C3021 | 推拉窗-向左开 | 6.30 |
| 3020[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 32.81 | 9.60 |
| 3023[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 26.58 | 9.48 |
| 3024[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 24.29 | 10.37 |
| 3025[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 20.68 | 12.18 |
| 3030[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| 3031[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 15.29 | 7.36 |
| 3032[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 16.22 | 15.54 |
| **套内通风开口面积合计** | 133.74 | 67.77 | 752.61 | **9.00** |
| 3-B | 3003[房间] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.77 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3009[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3010[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3011[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3012[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3013[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3014[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3015[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| 3022[房间] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| **套内通风开口面积合计** | 91.35 | 45.67 | 520.76 | **8.77** |
| 3-C | 3017[房间] | C1515 | 推拉窗-向左开 | 2.25 | 7.27 | 53.39 | 13.63 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C2515 | 推拉窗-向左开 | 3.75 |
| C4215 | 推拉窗-向左开 | 6.30 |
| 3018[房间] | M0821 | 推拉窗-向左开 | 1.58 | 1.57 | 38.17 | 4.13 |
| M0821 | 推拉窗-向左开 | 1.58 |
| 3019[房间] | C1515 | 推拉窗-向左开 | 2.25 | 2.25 | 35.75 | 6.29 |
| C1515 | 推拉窗-向左开 | 2.25 |
| 3026[房间] | C3315 | 推拉窗-向左开 | 6.30 | 3.15 | 19.54 | 16.12 |
| 3027[房间] | C4115 | 推拉窗-向左开 | 4.95 | 2.47 | 18.70 | 13.24 |
| 3033[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 35.70 | 17.85 | 178.79 | **9.98** |
| 4层 | 4-A | X002[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 116.12 | 0.97 |
| X004[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.52 | 9.59 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X005[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.69 | 9.58 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X006[房间] | C2121 | 推拉窗-向左开 | 4.41 | 13.86 | 96.26 | 14.40 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X007[房间] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 93.13 | 5.41 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X008[房间] | C2421 | 推拉窗-向左开 | 5.04 | 7.56 | 77.66 | 9.73 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X009[房间] | C3015 | 推拉窗-向左开 | 4.50 | 6.30 | 65.33 | 9.64 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X020[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 32.81 | 9.60 |
| X021[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 31.62 | 9.96 |
| X024[房间] | C2421 | 推拉窗-向左开 | 5.04 | 2.52 | 20.68 | 12.18 |
| X032[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X033[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 15.29 | 7.36 |
| **套内通风开口面积合计** | 133.74 | 67.77 | 761.78 | **8.90** |
| 4-B | X003[房间] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.77 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X010[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X011[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X012[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X013[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X014[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X015[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X016[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X023[房间] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| **套内通风开口面积合计** | 91.35 | 45.67 | 520.76 | **8.77** |
| 4-C | X018[房间] | M0821 | 推拉窗-向左开 | 1.58 | 1.57 | 38.17 | 4.13 |
| M0821 | 推拉窗-向左开 | 1.58 |
| X019[房间] | C1515 | 推拉窗-向左开 | 2.25 | 5.40 | 35.75 | 15.10 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C4215 | 推拉窗-向左开 | 6.30 |
| X025[房间] | C3315 | 推拉窗-向左开 | 6.30 | 3.15 | 19.54 | 16.12 |
| X026[房间] | C4115 | 推拉窗-向左开 | 4.95 | 2.47 | 18.70 | 13.24 |
| X028[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 17.23 | 6.53 |
| X030[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 17.35 | 6.49 |
| X031[房间] | C2515 | 推拉窗-向左开 | 3.75 | 1.87 | 16.46 | 11.39 |
| X034[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 35.70 | 17.85 | 176.44 | **10.12** |
| 5层 | 5-A | X004[一系过程装备与过程控制(1)实验室] | C3015 | 推拉窗-向左开 | 4.50 | 9.45 | 98.34 | 9.61 |
| C3015 | 推拉窗-向左开 | 4.50 |
| C3015 | 推拉窗-向左开 | 4.50 |
| X005[实验室] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.52 | 9.59 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X006[一系建筑环境智能控制(1)实验室] | C3015 | 推拉窗-向左开 | 4.50 | 9.45 | 98.69 | 9.58 |
| C3015 | 推拉窗-向左开 | 4.50 |
| C3015 | 推拉窗-向左开 | 4.50 |
| X007[二系生物工艺] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 93.13 | 5.41 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X017[一系机械工程基础实验室] | C2415 | 推拉窗-向左开 | 3.60 | 3.60 | 50.41 | 7.14 |
| C2415 | 推拉窗-向左开 | 3.60 |
| X018[五系材料工艺(1)实验室] | C2115 | 推拉窗-向左开 | 4.41 | 6.75 | 48.30 | 13.97 |
| C2115 | 推拉窗-向左开 | 4.41 |
| C2415 | 推拉窗-向左开 | 3.60 |
| C2415 | 推拉窗-向左开 | 3.60 |
| X019[房间] | C2115 | 推拉窗-向左开 | 4.41 | 3.15 | 46.57 | 6.76 |
| C2115 | 推拉窗-向左开 | 4.41 |
| X025[一系机械工程基础实验室] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 26.08 | 6.90 |
| X026[房间] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 20.45 | 8.80 |
| X031[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X032[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 15.29 | 7.36 |
| **套内通风开口面积合计** | 107.55 | 56.65 | 611.45 | **9.27** |
| 5-B | X003[五系材料工艺实验室] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.80 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X008[一系变频调速实验室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X009[数字校园中心卡务办公室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X010[教室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X011[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X012[教室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X013[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X014[中专会议室] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X024[上] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| **套内通风开口面积合计** | 91.35 | 45.67 | 520.78 | **8.77** |
| 5-C | X016[房间] | C1515 | 推拉窗-向左开 | 2.25 | 7.28 | 53.39 | 13.63 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C2515 | 推拉窗-向左开 | 3.75 |
| C4015 | 推拉窗-向左开 | 6.30 |
| X020[房间] | M0721 | 推拉窗-向左开 | 1.58 | 1.57 | 38.17 | 4.13 |
| M0821 | 推拉窗-向左开 | 1.58 |
| X021[房间] | C1515 | 推拉窗-向左开 | 2.25 | 2.25 | 35.75 | 6.29 |
| C1515 | 推拉窗-向左开 | 2.25 |
| X027[房间] | C2615 | 推拉窗-向左开 | 6.30 | 3.15 | 19.54 | 16.12 |
| X028[房间] | C3315 | 推拉窗-向左开 | 6.30 | 3.15 | 18.70 | 16.85 |
| X033[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 37.05 | 18.53 | 178.79 | **10.36** |
| 6层 | 6-A | X002[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 115.90 | 0.97 |
| X004[房间] | C3015 | 推拉窗-向左开 | 4.50 | 9.45 | 98.34 | 9.61 |
| C3015 | 推拉窗-向左开 | 4.50 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X005[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.69 | 9.58 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X006[房间] | C3021 | 推拉窗-向左开 | 6.30 | 9.45 | 98.52 | 9.59 |
| C3021 | 推拉窗-向左开 | 6.30 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X007[房间] | C2421 | 推拉窗-向左开 | 5.04 | 10.08 | 99.76 | 10.10 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X008[房间] | C2121 | 推拉窗-向左开 | 4.41 | 13.86 | 96.25 | 14.40 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2121 | 推拉窗-向左开 | 4.41 |
| C2421 | 推拉窗-向左开 | 5.04 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X009[房间] | C1821 | 推拉窗-向左开 | 3.78 | 5.04 | 93.13 | 5.41 |
| C3021 | 推拉窗-向左开 | 6.30 |
| X020[房间] | C3021 | 推拉窗-向左开 | 6.30 | 3.15 | 32.81 | 9.60 |
| X028[房间] | C2421 | 推拉窗-向左开 | 5.04 | 5.04 | 15.68 | 32.15 |
| C2421 | 推拉窗-向左开 | 5.04 |
| X029[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 15.51 | 7.25 |
| **套内通风开口面积合计** | 131.94 | 67.77 | 764.58 | **8.86** |
| 6-B | X003[房间] | C0915 | 推拉窗-向左开 | 1.35 | 6.07 | 110.77 | 5.48 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X010[房间] | C3615 | 推拉窗-向左开 | 5.40 | 8.10 | 75.55 | 10.72 |
| C3615 | 推拉窗-向左开 | 5.40 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X011[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.40 | 9.93 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X012[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X013[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 55.39 | 9.75 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X014[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X015[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 54.52 | 9.90 |
| C3615 | 推拉窗-向左开 | 5.40 |
| X022[房间] | C2415 | 推拉窗-向左开 | 3.60 | 1.80 | 27.71 | 6.50 |
| X032[房间] | C3615 | 推拉窗-向左开 | 5.40 | 5.40 | 9.43 | 57.29 |
| C3615 | 推拉窗-向左开 | 5.40 |
| **套内通风开口面积合计** | 96.75 | 48.37 | 496.80 | **9.74** |
| 6-C | X017[房间] | C1515 | 推拉窗-向左开 | 2.25 | 7.27 | 53.39 | 13.63 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C2515 | 推拉窗-向左开 | 3.75 |
| C4215 | 推拉窗-向左开 | 6.30 |
| X018[房间] | M0821 | 推拉窗-向左开 | 1.58 | 1.57 | 38.17 | 4.13 |
| M0821 | 推拉窗-向左开 | 1.58 |
| X019[房间] | C1515 | 推拉窗-向左开 | 2.25 | 2.25 | 35.75 | 6.29 |
| C1515 | 推拉窗-向左开 | 2.25 |
| X024[房间] | C3315 | 推拉窗-向左开 | 6.30 | 3.15 | 19.54 | 16.12 |
| X025[房间] | C4115 | 推拉窗-向左开 | 4.95 | 2.47 | 18.70 | 13.24 |
| X030[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 35.70 | 17.85 | 178.79 | **9.98** |
| 7层 | 7-A | X001[房间] | 42X15<4> | 推拉窗-向左开 | 6.30 | 10.65 | 107.04 | 9.95 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C1515 | 推拉窗-向左开 | 2.25 |
| C2515 | 推拉窗-向左开 | 3.75 |
| X002[房间] | M0721 | 推拉窗-向左开 | 1.58 | 1.57 | 58.63 | 2.69 |
| M0821 | 推拉窗-向左开 | 1.58 |
| X003[房间] | C3315 | 推拉窗-向左开 | 6.30 | 6.30 | 54.21 | 11.62 |
| C4215 | 推拉窗-向左开 | 6.30 |
| X005[房间] | C1515 | 推拉窗-向左开 | 2.25 | 1.12 | 13.25 | 8.49 |
| **套内通风开口面积合计** | 39.30 | 19.65 | 233.13 | **8.43** |

**注：通风开口面积与地板面积的比例在表中简称开地比。**

# 结论

通过计算该建筑各套住宅的通风开口面积比例，得出其中最小值为6.7%，按照标准要求该项得5分。