**建筑碳排放报告书**

公共建筑

|  |  |
| --- | --- |
| 工程名称 | 新建项目 |
| 工程地点 | 浙江-杭州 |
| 设计编号 |  |
| 建设单位 |  |
| 设计单位 |  |
| 设 计 人 |  |
| 审 核 人 |  |
| 审 定 人 |  |
| 设计日期 | 2024年12月30日 |



|  |  |
| --- | --- |
| 采用软件 | 建筑碳排放CEEB2024 |
| 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 | T13957075297  |

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# 建筑概况

|  |  |
| --- | --- |
| 工程名称 | 新建项目 |
| 工程地点 | 浙江-杭州 |
| 地理位置 | 北纬：30.23° | 东经：120.17° |
| 建筑寿命(年) | 50 |
| 建筑面积(m2) | 地上5657 地下0 |
| 建筑层数 | 地上2 地下0 |
| 建筑高度（m） | 地上10.8 地下0.0 |
| 建筑体积(m3) | 24365.44 |
| 建筑外表面积(m2) | 8364.00 |
| 北向角度 | 72.1 |
| 结构类型 |  |
| 外墙太阳辐射吸收系数 | 0.75 |
| 屋顶太阳辐射吸收系数 | 0.75 |
| 控温期 | 供冷期:6.14-8.31,供暖期:11.30-2.28 |

#  标准依据

1. 《建筑节能与可再生能源利用通用规范》GB 55015-2021

2. 《建筑碳排放计算标准》GB/T 51366-2019

3. 《绿色建筑评价标准》GB/T50378-2019

4. 《民用建筑绿色性能计算标准》JGJ/T 449-2018

# 软件介绍

本报告内容由建筑碳排放CEEB2024计算并输出，建筑碳排放CEEB以CAD为平台，可与建筑节能模型无缝对接，以国家标准《建筑碳排放计算标准》为主要依据，完整支持建筑全生命周期的碳排放计算，包括建材生产运输、建造拆除、建筑运行和碳汇的计算，以及详细的结果数据分析。

# 气象数据

## 逐日干球温度表



## 逐月辐照量表



## 峰值工况

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 气象数据 | 时刻 | 干球温度(℃) | 湿球温度(℃) | 含湿量(g/kg) | 焓值(kj/kg) |
| 最热 | 08月04日15时 | 37.2 | 27.2 | 19.1 | 86.5 |
| 最冷 | 02月01日07时 | -6.1 | -6.7 | 1.7 | -1.9 |

# 围护结构

## 工程材料

### 普通材料

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料名称 | 导热系数λ | 蓄热系数S | 密度ρ | 比热容Cp | 蒸汽渗透系数u | 数据来源 |
| W/(m.K) | W/(㎡.K) | kg/m3 | J/(kg.K) | g/(m.h.kPa) |
| 水泥砂浆 | 0.930 | 11.370 | 1800.0 | 1050.0 | 0.0210 |  |
| 石灰砂浆 | 0.810 | 10.070 | 1600.0 | 1050.0 | 0.0443 |  |
| 钢筋混凝土 | 1.740 | 17.200 | 2500.0 | 920.0 | 0.0158 |  |
| 细石混凝土（双向配筋） | 1.740 | 17.060 | 2500.0 | 920.0 | 0.0158 | 民用建筑热工设计规范 GB50176-2016 |
| 蒸压砂加气混凝土砌块B07 | 0.180 | 3.598 | 700.0 | 1412.8 | 0.1110 | GB/T11968-2020 |
| 蒸压砂加气混凝土砌块B05 | 0.140 | 2.800 | 500.0 | 1540.0 | 0.1110 | GB/T11968-2020 |
| 加气混凝土找坡 | 0.220 | 3.429 | 700.0 | 1050.0 | 0.1110 | 05系列建筑标准设计图集 DBJT03-22-2005 |
| 岩棉板(ρ0≥80) | 0.044 | 0.750 | 80.0 | 2200.0 | 0.4880 | 民用建筑热工设计规范 GB50176-2016 |
| 天然花岗岩板材 | 3.490 | 25.569 | 2800.0 | 920.0 | 0.0113 | 民用建筑热工设计规范 GB50176-2016 |
| 聚合物水泥砂浆 | 0.930 | 11.306 | 1800.0 | 1050.0 | 0.0100 | DB23-T120-2001 |
| 挤塑聚苯板（XPS）(屋面楼板) | 0.030 | 0.320 | 35.0 | 1340.0 | 0.0162 | 民用建筑热工设计规范 GB50176-2016 |
| 水泥砂浆找平 | 0.930 | 11.370 | 1800.0 | 1050.0 | 0.0210 | 民用建筑热工设计规范 GB50176-2016 |
| 混凝土瓦(挂瓦条) | 0.930 | 11.306 | 1800.0 | 1050.0 | 0.0158 |  |
| 通风空气层 | 1.177 | 0.171 | 1.2 | 598.4 | 0.1000 |  |
| 纤维增强水泥板 | 0.520 | 8.520 | 1800.0 | 1066.0 | 0.1910 | 浙江省居住建筑楼板构造(2018浙J76) |

### 其他材料

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 材料名称 | 厚度 | 热阻R | 太阳辐射吸收系数 | 备注 |
| mm | (㎡K)/W |
| 胶黏剂 | － | － | － |  |
| 金属龙骨 | － | － | － |  |
| 高分子卷材防水层 | － | － | － |  |
| 外墙界面剂 | － | － | － |  |

## 围护结构作法简要说明

**1. 屋顶：**坡屋顶 (K=0.244,D=4.272)：（由上到下）

 混凝土瓦(挂瓦条) 20mm＋通风空气层 60mm＋细石混凝土（双向配筋） 50mm＋高分子卷材防水层 2mm＋水泥砂浆找平 20mm＋挤塑聚苯板（XPS）(屋面楼板) 130mm＋水泥砂浆找平 20mm＋加气混凝土找坡 30mm＋钢筋混凝土 120mm

**2. 外墙（填充墙）：**花岗岩外墙（B07） (K=0.386,D=5.728)：（由外到内）

 天然花岗岩板材 25mm＋金属龙骨 0mm＋岩棉板(ρ0≥80) 80mm＋胶黏剂 2mm＋聚合物水泥砂浆 5mm＋水泥砂浆 10mm＋外墙界面剂 0mm＋蒸压砂加气混凝土砌块B07 200mm

**3. 外墙（剪力墙）：**花岗岩外墙（剪力墙） (K=0.551,D=3.707)：（由外到内）

 天然花岗岩板材 25mm＋金属龙骨 0mm＋岩棉板(ρ0≥80) 80mm＋胶黏剂 2mm＋聚合物水泥砂浆 5mm＋水泥砂浆 10mm＋外墙界面剂 0mm＋钢筋混凝土 200mm

**4. 屋顶：**坡屋顶 (K=0.244,D=4.272)：（由上到下）

 混凝土瓦(挂瓦条) 20mm＋通风空气层 60mm＋细石混凝土（双向配筋） 50mm＋高分子卷材防水层 2mm＋水泥砂浆找平 20mm＋挤塑聚苯板（XPS）(屋面楼板) 130mm＋水泥砂浆找平 20mm＋加气混凝土找坡 30mm＋钢筋混凝土 120mm

**5. 挑空楼板：**挑空楼板 (K=0.461,D=3.415)：（由上到下）

 细石混凝土（双向配筋） 20mm＋钢筋混凝土 120mm＋岩棉板(ρ0≥80) 100mm＋纤维增强水泥板 20mm

**6. 外窗：**

 （1） 80系列平开隔热铝合金窗(5+12Ar+5Low\_E+12Ar+5Low\_E)(高透光) (K=1.100)：

 传热系数1.100W/㎡.K，窗太阳得热系数0.300

 （2） 70系列平开隔热铝合金窗(5+12Ar+5+12Ar+5Low\_E)(高透光) (K=1.700)：

 传热系数1.700W/㎡.K，窗太阳得热系数0.340

**7. 幕墙：**铝合金平开窗(5中透Low\_E+12A+5)(双银)(34mm隔热条) (K=2.000)：

 传热系数2.000W/㎡.K，窗太阳得热系数0.370

**8. 天窗：**70系列平开隔热铝合金窗(5+12A+5Low\_E+12A+5Low\_E)(中低透) (K=1.600)：

 传热系数1.600W/㎡.K，窗太阳得热系数0.240

# 围护结构概况

|  |  |
| --- | --- |
|  | 设计建筑 |
| 体形系数S | 0.34 |
| 屋顶传热系数K和热惰性指标 D | 0.244.27 |
| 外墙传热系数K和热惰性指标 D | 0.465.55 |
| 挑空(或架空)楼板传热系数K和热惰性指标 D | 0.463.42 |
| 天窗传热系数K和太阳得热系数 SHGC | 1.600.24 |
| 外窗（包括透明幕墙） | 朝向 | 立面 | 窗墙比 | 传热系数 | 太阳得热系数 |
| 南向 | 南-默认立面 | 0.18 | 1.47 | 0.33 |
| 北向 | 北-默认立面 | 0.20 | 1.44 | 0.32 |
| 东向 | 东-默认立面 | 0.08 | 1.79 | 0.35 |
| 西向 | 西-默认立面 | 0.06 | 1.56 | 0.34 |

# 房间类型

## 房间参数表

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 空调温度℃ | 供暖温度℃ | 新风量 | 渗透风换气次数 | 人员密度 | 照明功率密度 | 电器设备功率 |
| 卫生间 | 28 | 18 | 20(m3/h.人) | 0(次/h) | 20(㎡/人) | 5(W/㎡) | 15(W/㎡) |
| 多媒体区 | 26 | 20 | 30(m3/h.人) | 0(次/h) | 2.5(㎡/人) | 13.5(W/㎡) | 15(W/㎡) |
| 大厅 | 26 | 18 | 20(m3/h.人) | 0(次/h) | 30(㎡/人) | 10(W/㎡) | 15(W/㎡) |
| 展示区 | 26 | 20 | 30(m3/h.人) | 0(次/h) | 2.5(㎡/人) | 8(W/㎡) | 15(W/㎡) |
| 报告厅 | 26 | 18 | 14(m3/h.人) | 0(次/h) | 2.5(㎡/人) | 8(W/㎡) | 15(W/㎡) |
| 接待室 | 26 | 20 | 30(m3/h.人) | 0(次/h) | 8(㎡/人) | 8(W/㎡) | 15(W/㎡) |
| 普通办公室 | 26 | 20 | 30(m3/h.人) | 0(次/h) | 8(㎡/人) | 8(W/㎡) | 15(W/㎡) |
| 楼梯间 | － | － | 0(m3/h.人) | 0(次/h) | 0(人) | 3.5(W/㎡) | 15(W/㎡) |
| 空房间 | － | － | 0(m3/h.人) | 0(次/h) | 0(人) | 0(W/㎡) | 0(W/㎡) |
| 设备间 | － | － | 0(次/h) | 0(次/h) | 0(人) | 6(W/㎡) | 15(W/㎡) |
| 走廊 | 26 | 16 | 20(m3/h.人) | 0(次/h) | 50(㎡/人) | 3.5(W/㎡) | 15(W/㎡) |
| 餐厅 | 26 | 18 | 30(m3/h.人) | 0(次/h) | 2.5(㎡/人) | 8(W/㎡) | 15(W/㎡) |

## 作息时间表

详见附录

# 暖通空调系统

## 系统类型

### 系统分区

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 系统编号 | 系统类型 | 制冷SEER | 制热HSPF | 面积(㎡) | 包含的房间 |
| 默认 | 双管制风机盘管 | － | － | 4932.68 | 所有房间 |

### 热回收参数

|  |  |  |  |
| --- | --- | --- | --- |
| 系统编号 | 热回收 | 供冷 | 供暖 |
| 回收效率 | 启动温(焓)差 | 回收效率 | 启动温(焓)差 |
| 默认 | 无 | － | － | － | － |

## 制冷系统

### 默认冷源

#### 供应的系统

|  |  |
| --- | --- |
| 系统编号 | 默认 |

#### 冷水机组

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 名称 | 类型 | 额定耗电量(kW) | 额定制冷量(kW) | 额定性能系数(COP) | 台数 |
| 机组1 | 水冷-螺杆式冷水机组 | 100 | 500 | 5.00 | 1 |

#### 水泵系统

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 类型 | 调节 | 流量(m3/h) | 扬程(m) | 设计工作效率(%) | 输入功率(kW) | 冷却塔耗电比(kWh/m3) | 台数 |
| 冷却水泵 | 单速 | 320 | 25 | 80 | 31.3 | 0.03 | 1 |
| 冷冻水泵 | 单速 | 320 | 30 | 80 | 37.6 | － | 1 |

#### 运行工况

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 负载率(%) | 机组制冷量(kW) | 机组功率(kW) | 性能系数(COP) | 冷却水泵功率(kW) | 冷冻水泵功率(kW) | 冷却塔功率(kW) |
| 20 | 100 | 25 | 4.00 | 31.3 | 37.6 | 10 |
| 40 | 200 | 48 | 4.17 | 31.3 | 37.6 | 10 |
| 60 | 300 | 68 | 4.41 | 31.3 | 37.6 | 10 |
| 80 | 400 | 80 | 5.00 | 31.3 | 37.6 | 10 |
| 100 | 500 | 100 | 5.00 | 31.3 | 37.6 | 10 |

#### 制冷能耗

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 负荷区间(%) | 区间负荷(kWh) | 运行时长(h) | 制冷机组(kWh) | 平均性能系数(COP) | 冷却水泵(kWh) | 冷冻水泵(kWh) | 冷却塔(kWh) |
| 0~20 | 848 | 45 | 212 | 4.00 | 1409 | 1692 | 450 |
| 20~40 | 3538 | 23 | 863 | 4.10 | 720 | 865 | 230 |
| 40~60 | 11526 | 46 | 2677 | 4.30 | 1440 | 1730 | 460 |
| 60~80 | 30438 | 86 | 6426 | 4.74 | 2692 | 3234 | 860 |
| 80~100 | 99093 | 217 | 19819 | 5.00 | 6792 | 8159 | 2170 |
| >100 | 108867 | 200 | 20000 | － | 6260 | 7520 | 2000 |
| 合计 | 254309 | 617 | 49997 |  | 19312 | 23199 | 6170 |

|  |  |  |  |
| --- | --- | --- | --- |
| 类别 | 电耗(kWh/a) | 碳排放因子(kgCO2/kWh) | 碳排放量(tCO2/a) |
| 制冷机组 | 49997 | 0.5703 | 28.513 |
| 冷却水泵 | 19312 | 11.014 |
| 冷却塔 | 6170 | 3.519 |
| 冷冻水泵 | 23199 | 13.231 |
| 合计 | 56.276 |

## 供暖系统

### 默认热源

#### 供应的系统

|  |  |
| --- | --- |
| 系统编号 | 默认 |

#### 热水锅炉系统

##### 热水锅炉

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 燃料类型 | 容量(MW) | 台数 | 锅炉负荷(kWh/a) | 锅炉热效率 | 外网热输送效率 | 碳排放因子(tCO2/TJ) | 碳排放量(tCO2/a) |
| 烟煤II | 1.00 | 1 | 68341 | 0.78 | 0.92 | 89 | 30.514 |

##### 热水循环泵

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 类型 | 流量(m3/h) | 扬程(m) | 设计工作效率(%) | 输入功率(kW) | 台数 |
| 单速 | 320 | 30 | 80 | 37.6 | 1 |

##### 热水循环水泵能耗

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 负荷率(%) | 锅炉负荷(kW) | 供暖水泵功率(kW) | 热水输送能效比EHR | 区间负荷(kWh) | 区间时长(h) | 供暖水泵电耗(kWh) |
| 20 | 200 | 37.6 | 0.1880 | 53005 | 644 | 24214 |
| 40 | 400 | 37.6 | 0.0940 | 14507 | 58 | 2181 |
| 60 | 600 | 37.6 | 0.0627 | 829 | 2 | 75 |
| 80 | 800 | 37.6 | 0.0470 | 0 | 0 | 0 |
| 100 | 1000 | 37.6 | 0.0376 | 0 | 0 | 0 |
| 综合 | 68341 | 704 | 26470 |

|  |  |  |
| --- | --- | --- |
| 供暖水泵电耗(kWh/a) | 碳排放因子(kgCO2/kWh) | 碳排放量(tCO2/a) |
| 26470 | 0.5703 | 15.096 |

## 空调风机

|  |  |  |  |
| --- | --- | --- | --- |
| 类别 | 电耗(kWh/a) | 碳排放因子(kgCO2/kWh) | 碳排放量(tCO2/a) |
| 独立新排风 | 15523 | 0.5703 | 8.853 |
| 风机盘管 | 528 | 0.301 |
| 全空气机组 | 0 | 0.0000 |
| 合计 | 9.154 |

# 照明

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 单位面积电耗(kWh/㎡.a) | 房间个数 | 房间合计面积(㎡) | 合计电耗(kWh/a) | 碳排放因子(kgCO2/kWh) | 碳排放量(tCO2/a) |
| 卫生间 | 8.40 | 45 | 179 | 1505 | 0.5703 | 0.858 |
| 多媒体区 | 22.68 | 2 | 272 | 6159 | 3.513 |
| 大厅 | 16.80 | 1 | 75 | 1263 | 0.720 |
| 展示区 | 13.44 | 3 | 432 | 5806 | 3.311 |
| 报告厅 | 13.44 | 1 | 122 | 1633 | 0.931 |
| 接待室 | 13.44 | 6 | 356 | 4782 | 2.727 |
| 普通办公室 | 13.44 | 21 | 2701 | 36303 | 20.704 |
| 楼梯间 | 9.63 | 20 | 268 | 2584 | 1.474 |
| 空房间 | 0.00 | 2 | 3 | 0 | 0.000 |
| 设备间 | 36.00 | 1 | 5 | 184 | 0.105 |
| 走廊 | 8.27 | 13 | 716 | 5921 | 3.377 |
| 餐厅 | 13.44 | 3 | 374 | 5029 | 2.868 |
| 总计 | 40.588 |

# 光伏发电

日照辐照量(kJ/㎡.天)：16340，年运行天数：365

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 光伏板面积(㎡) | 光电转换效率(%) | 光伏系统效率 | 光伏电池性能衰减修正系数 | 全年供电(kWh/a) | 碳排放因子(kgCO2/kWh) | 可减少碳排放量(tCO2/a) |
| 745 | 15 | 0.75 | 0.85 | 118024 | 0.5703 | 67.309 |
| 总计 | 67.309 |

# 计算结果

## 建材生产运输碳排放

### 建材生产阶段

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料 | 单位 | 用量 | 拆除后回收比例 | 寿命(年) | 碳排放因子(kgCO2e/单位) | 碳排放量(tCO2e) |
| 混凝土 | m3 | 3286.69 | 0 | 全生命周期 | 340 | 1117.475 |
| 钢筋 | t | 390.33 | 0 | 全生命周期 | 2340 | 913.372 |
| 型钢 | t | 62.23 | 0 | 全生命周期 | 2365 | 147.174 |
| 水泥 | t | 186.68 | 0 | 全生命周期 | 735 | 137.210 |
| 预拌砂浆 | t | 893.80 | 0 | 全生命周期 | 370 | 330.706 |
| 砂 | m3 | 435.59 | 0 | 全生命周期 | 3 | 1.307 |
| 挤塑聚苯板（XPS）(屋面楼板) | m3 | 384.41 | 0 | 全生命周期 | 534 | 205.275 |
| 岩棉板(ρ0≥80) | m3 | 496.65 | 0 | 全生命周期 | 534 | 265.211 |
| 砌块 | m3 | 486.50 | 0 | 全生命周期 | 349 | 169.789 |
| 砖 | m3 | 424.27 | 0 | 全生命周期 | 336 | 142.555 |
| 铝合金平开窗(5中透Low\_E+12A+5)(双银)(34mm隔热条) | m2 | 191.58 | 0 | 全生命周期 | 129.5 | 24.810 |
| 70系列平开隔热铝合金窗(5+12Ar+5+12Ar+5Low\_E)(高透光) | m2 | 272.25 | 0 | 全生命周期 | 129.5 | 35.256 |
| 80系列平开隔热铝合金窗(5+12Ar+5Low\_E+12Ar+5Low\_E)(高透光) | m2 | 308.25 | 0 | 全生命周期 | 129.5 | 39.918 |
| 70系列平开隔热铝合金窗(5+12A+5Low\_E+12A+5Low\_E)(中低透) | m2 | 34.08 | 0 | 全生命周期 | 129.5 | 4.413 |
| 金属三防门(复合硅酸盐制品保温) | m2 | 65.81 | 0 | 全生命周期 | 48.3 | 3.179 |
| 新构造67 | m2 | 177.00 | 0 | 全生命周期 | 48.3 | 8.549 |
| 陶瓷 | m2 | 5787.07 | 0 | 全生命周期 | 19.5 | 112.848 |
| 涂料 | t | 73.54 | 0 | 全生命周期 | 6550 | 481.687 |
| 电缆 | kg | 973.00 | 0 | 全生命周期 | 94.1 | 91.559 |
| 管材 | kg | 8485.44 | 0 | 全生命周期 | 3.6 | 30.548 |
| 合计 | 4262.841 |

### 建材运输阶段

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 材料 | 重量(t) | 运输距离(km) | 寿命(年) | 碳排放因子(kgCO2e/t·km) | 碳排放量(tCO2e) |
| 混凝土 | 7756.59 | 40 | 全生命周期 | 0.115 | 35.680 |
| 钢筋 | 390.33 | 500 | 全生命周期 | 0.115 | 22.444 |
| 型钢 | 62.23 | 500 | 全生命周期 | 0.115 | 3.578 |
| 水泥 | 186.68 | 500 | 全生命周期 | 0.115 | 10.734 |
| 预拌砂浆 | 893.80 | 40 | 全生命周期 | 0.115 | 4.111 |
| 砂 | 696.94 | 500 | 全生命周期 | 0.115 | 40.074 |
| 挤塑聚苯板（XPS）(屋面楼板) | 13.45 | 500 | 全生命周期 | 0.115 | 0.773 |
| 岩棉板(ρ0≥80) | 39.73 | 500 | 全生命周期 | 0.115 | 2.284 |
| 砌块 | 486.50 | 500 | 全生命周期 | 0.115 | 27.974 |
| 砖 | 615.19 | 500 | 全生命周期 | 0.115 | 35.373 |
| 铝合金平开窗(5中透Low\_E+12A+5)(双银)(34mm隔热条) | 3.83 | 500 | 全生命周期 | 0.115 | 0.220 |
| 70系列平开隔热铝合金窗(5+12Ar+5+12Ar+5Low\_E)(高透光) | 5.45 | 500 | 全生命周期 | 0.115 | 0.313 |
| 80系列平开隔热铝合金窗(5+12Ar+5Low\_E+12Ar+5Low\_E)(高透光) | 6.17 | 500 | 全生命周期 | 0.115 | 0.355 |
| 70系列平开隔热铝合金窗(5+12A+5Low\_E+12A+5Low\_E)(中低透) | 0.68 | 500 | 全生命周期 | 0.115 | 0.039 |
| 金属三防门(复合硅酸盐制品保温) | 1.97 | 500 | 全生命周期 | 0.115 | 0.113 |
| 新构造67 | 5.31 | 500 | 全生命周期 | 0.115 | 0.305 |
| 陶瓷 | 173.61 | 500 | 全生命周期 | 0.115 | 9.983 |
| 涂料 | 73.54 | 500 | 全生命周期 | 0.115 | 4.229 |
| 电缆 | 0.97 | 500 | 全生命周期 | 0.115 | 0.056 |
| 管材 | 8.49 | 500 | 全生命周期 | 0.115 | 0.488 |
| 总计 | 199.126 |

## 建筑建造拆除碳排放

### 建筑建造

根据广东省《建筑碳排放计算导则（试行）》，采用经验公式法进行估算，公式如下：

Y = X + 1.99

其中X 为地上层数，Y 为单位面积的碳排放量，单位为：kgCO2/㎡,

则建造阶段碳排放估算值 Cjz=Y×A, 其中A——建筑总面积，㎡。

|  |  |  |  |
| --- | --- | --- | --- |
| 建筑面积(㎡) | 地上层数 | 单位面积碳排放量(kgCO2/㎡) | 建造碳排放量(tCO2) |
| 5656.96 | 2 | 3.99 | 22.571 |

### 建筑拆除

根据广东省《建筑碳排放计算导则（试行）》，建议粗略估算拆除阶段的碳排放，计算方法与建造阶段公式一致即可，公式如下：

Y = X + 1.99

其中X 为地上层数，Y 为单位面积的碳排放量，单位为：kgCO2/㎡,

则拆除阶段碳排放估算值 Ccc=Y×A, 其中A——建筑总面积，㎡。

|  |  |  |  |
| --- | --- | --- | --- |
| 建筑面积(㎡) | 地上层数 | 单位面积碳排放量(kgCO2/㎡) | 拆除碳排放量(tCO2) |
| 5656.96 | 2 | 3.99 | 22.571 |

## 碳汇

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 绿植 | 生长期修正因子 | CO2固定量(kg/㎡·a) | 面积(㎡) | 年数 | 碳固定量(tCO2) |
| 合计 | 0.000 |

## 建筑运行碳排放

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 电力 | 类别 | 耗电 (kWh/㎡) | 碳排放因子(kgCO2/kWh) | 碳排放量(tCO2) |
| 供冷(Ec) | 中央冷源 | 441.91 | 0.5703 | 2813.807 |
|  | 冷却水泵 | 170.69 |  |  |
|  | 冷冻水泵 | 205.05 |  |  |
|  | 冷却塔 | 54.53 |  |  |
|  | 多联机/单元式空调 | 0.00 |  |  |
|  | 供冷合计 | 872.18 |  |  |
| 供暖(Eh) | 中央热源 | 0.00 | 0.5703 | 754.803 |
|  | 供暖水泵 | 233.96 |  |  |
|  | 热源侧水泵 | 0.00 |  |  |
|  | 多联机/单元式热泵 | 0.00 |  |  |
|  | 供暖合计 | 233.96 |  |  |
| 空调风机(Ef) | 新排风 | 137.20 | 0.5703 | 457.696 |
|  | 风机盘管 | 4.67 |  |  |
|  | 全空气系统 | 0.00 |  |  |
|  | 风机合计 | 141.87 |  |  |
| 照明 | 629.04 | 0.5703 | 2029.392 |
| 其他(Eo) | 电梯 | 0.00 | 0.5703 | 0.000 |
|  | 排风机 | 0.00 |  |  |
|  | 生活热水(扣减了太阳能) | 0.00 |  |  |
|  | 其他设备 | 0.00 |  |  |
|  | 合计 | 0.00 |  |  |
| 化石燃料 | 所属类别 | 消耗量 | 碳排放因子(tCO2/TJ) | 碳排放量(tCO2) |
| 烟煤II  | 供暖:：热源锅炉 | 841.759(kWh/㎡) | 89 | 1525.678 |
| 其他 | 所属类别 | 消耗量(kg) | 碳排放量(tCO2) |
| 制冷剂 | 供冷 | 0 | 0.000 |
| 可再生 | 类别 | 供电(kWh/㎡) | 碳排放因子(kgCO2/kWh) | 碳减排量(tCO2) |
| 可再生能源(Er) | 光伏(Ep) | 1043.17 | 0.5703 | 3365.452 |
|  | 风力(Ew) | 0.00 |  | 0.000 |
| 建筑运行碳排放合计 | 4215.923 |

## 全生命周期

### 单位面积指标

|  |  |  |
| --- | --- | --- |
| 类别 | 年碳排放量(kgCO2/㎡·a) | 碳排放量(kgCO2/㎡) |
| 建筑材料生产 | 15.07 | 753.56 |
| 建筑材料运输 | 0.70 | 35.20 |
| 建筑建造 | 0.08 | 3.99 |
| 建筑拆除 | 0.08 | 3.99 |
| 建筑运行 | 14.91 | 745.26 |
| 碳汇 | 0 | 0 |
| 合计 | 30.84 | 1542.00 |

### 总碳排放量

|  |  |  |
| --- | --- | --- |
| 类别 | 年碳排放量(tCO2/a) | 碳排放量(tCO2) |
| 建筑材料生产 | 85.257 | 4262.841 |
| 建筑材料运输 | 3.983 | 199.126 |
| 建筑建造 | 0.451 | 22.571 |
| 建筑拆除 | 0.451 | 22.571 |
| 建筑运行 | 84.318 | 4215.923 |
| 碳汇 | 0 | 0 |
| 合计 | 174.460 | 8723.032 |





# 附录

## 工作日/节假日人员逐时在室率(%)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 卫生间 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 多媒体区 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 大厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 展示区 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 报告厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 接待室 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 普通办公室 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 楼梯间 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 空房间 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 设备间 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 走廊 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 95 | 95 | 95 | 80 | 80 | 95 | 95 | 95 | 95 | 30 | 30 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 餐厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 30 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

注：上行：工作日；下行：节假日

## 工作日/节假日照明开关时间表(%)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 卫生间 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 多媒体区 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 大厅 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 展示区 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 报告厅 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 接待室 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 普通办公室 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 楼梯间 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 50 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 80 | 90 | 100 | 100 | 100 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 空房间 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 50 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 80 | 90 | 100 | 100 | 100 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 设备间 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 走廊 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 95 | 95 | 95 | 80 | 80 | 95 | 95 | 95 | 95 | 30 | 30 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 餐厅 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 36 | 62 | 56 | 54 | 43 | 53 | 55 | 58 | 67 | 40 | 18 | 10 | 10 | 10 | 10 | 10 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

注：上行：工作日；下行：节假日

## 工作日/节假日设备逐时使用率(%)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 卫生间 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 多媒体区 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 大厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 展示区 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 报告厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 接待室 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 普通办公室 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 楼梯间 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 空房间 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 设备间 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 走廊 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 95 | 95 | 95 | 50 | 50 | 95 | 95 | 95 | 95 | 30 | 30 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 餐厅 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 | 20 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

注：上行：工作日；下行：节假日

## 工作日/节假日空调系统运行时间表(1:开,0:关)

采暖期：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 系统编号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 默认 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

供冷期：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 系统编号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 默认 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

注：上行：工作日；下行：节假日

## 工作日/节假日新风运行时间表(%)

采暖期：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 系统编号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 默认 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

供冷期：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 系统编号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 默认 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

注：上行：工作日；下行：节假日