**建筑全能耗报告书**

公共建筑

|  |  |
| --- | --- |
| 工程名称 | 社区活动中心改造建筑 |
| 工程地点 | 四川-成都 |
| 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 | 2021年1月3日 |



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| --- | --- |
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# 建筑概况

|  |  |  |
| --- | --- | --- |
| 工程名称 | 社区活动中心改造建筑 | |
| 工程地点 | 四川-成都 | |
| 地理位置 | 北纬：31.00° | 东经：104.01° |
| 建筑面积(m2) | 地上9948 地下0 | |
| 建筑层数 | 地上5 地下0 | |
| 建筑高度（m） | 地上24.2 地下0.0 | |
| 建筑体积(m3) | 43599.47 | |
| 建筑外表面积(m2) | 12799.89 | |
| 北向角度 | 119 | |
| 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 | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | | 设计建筑 | | |
| 屋顶传热系数K [W/(m2·K)] | | | 0.50(D:3.03) | | |
| 外墙（包括非透明幕墙）传热系数K [W/(m2·K)] | | | 0.72(D:4.35) | | |
| 屋顶透明部分传热系数  K [W/(m2·K)] | | | 2.30 | | |
| 屋顶透明部分太阳得热系数 | | | 0.22 | | |
| 底面接触室外的架空或外挑楼板传热系数K [W/(m2·K)] | | | 0.60 | | |
| 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 | 0.47 | 1.60 | 0.33 |
| 北向 | 北-默认立面 | 0.33 | 1.60 | 0.33 |
| 东向 | 东-默认立面 | 0.22 | 1.60 | 0.33 |
| 西向 | 西-默认立面 | 0.22 | 1.60 | 0.33 |

# 计算依据

1. 《绿色建筑评价标准》(GB/T50378-2019)

2. 《民用建筑绿色性能计算标准》(JGJ/T 449-2018)

3. 《建筑能效标识技术标准》(JGJ/T 288-2012)

4. 《公共建筑节能设计标准》(GB50189-2015)

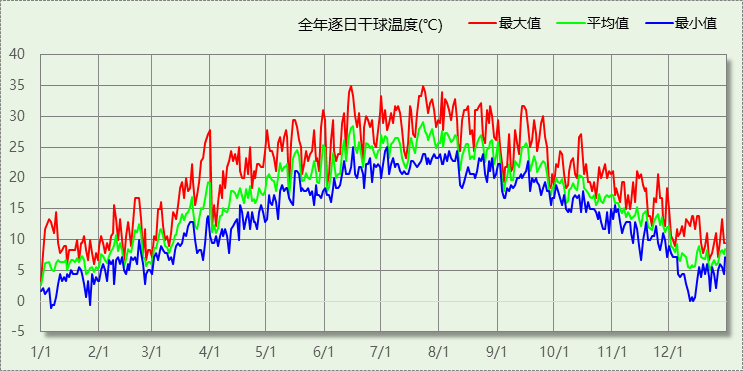
5. 《民用建筑热工设计规范》(GB50176)

# 气象数据

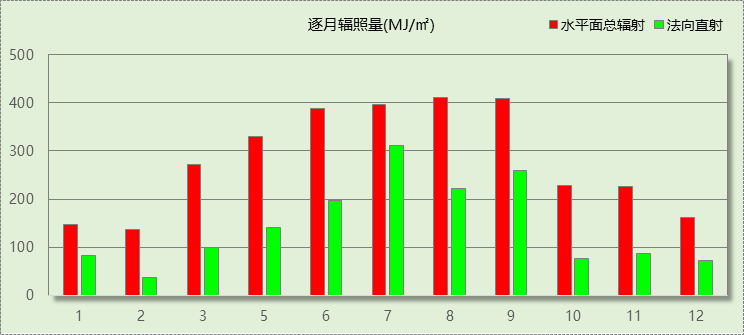
## 气象地点

四川-成都, 《中国建筑热环境分析专用气象数据集》

## 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) |
| 最大值 | 06月14日14时 | 35.0 | 25.0 | 17.2 | 79.3 |
| 最小值 | 01月05日06时 | -1.1 | -1.1 | 3.4 | 7.4 |

# 建筑大样



立面图例



1层平面



2层平面



3层平面



4层平面



5层平面

# 围护结构

## 工程材料

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 | 备注 |
| 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 | 来源：《民用建筑热工设计规范》GB50176-2016 |
| 节能型烧结空心砌块（孔排数≥9排，孔洞率≥50%）砌体（ρ=801~900） | 0.250 | 4.130 | 850.0 | 1050.0 | 0.0000 |  |
| 石灰砂浆 | 0.810 | 10.070 | 1600.0 | 1050.0 | 0.0443 | 来源：《民用建筑热工设计规范》GB50176-2016 |
| 钢筋混凝土 | 1.740 | 17.200 | 2500.0 | 920.0 | 0.0158 | 来源：《民用建筑热工设计规范》GB50176-2016 |
| 碎石、卵石混凝土(ρ=2300) | 1.510 | 15.360 | 2300.0 | 920.0 | 0.0173 | 来源：《民用建筑热工设计规范》GB50176-2016 |
| 混凝土多孔砖(190六孔砖） | 0.750 | 7.490 | 1450.0 | 709.4 | 0.0000 |  |
| 无机保温砂浆(ρ≤400) | 0.085 | 1.610 | 400.0 | 1050.0 | 0.0000 |  |
| 抗裂砂浆（网格布） | 0.930 | 11.306 | 1800.0 | 1050.0 | 0.0000 |  |
| 玻化微珠保温浆料 | 0.080 | 1.462 | 350.0 | 1050.0 | 0.0000 | 蒸汽渗透系数没有给出 |
| 挤塑聚苯板 | 0.033 | 0.347 | 28.0 | 1790.0 | 0.0000 |  |
| 防水珍珠岩板(ρ=150-200) | 0.060 | 1.060 | 175.0 | 1320.0 | 0.0561 |  |

## 围护结构作法简要说明

**1. 屋顶构造：**屋顶构造一：（由上到下）

碎石、卵石混凝土(ρ=2300) 40mm＋水泥砂浆 20mm＋挤塑聚苯板 40mm＋防水珍珠岩板(ρ=150-200) 30mm＋钢筋混凝土 120mm＋水泥砂浆 20mm

**2. 外墙构造：**外墙构造一：（由外到内）

抗裂砂浆（网格布） 5mm＋玻化微珠保温浆料 30mm＋节能型烧结空心砌块（孔排数≥9排，孔洞率≥50%）砌体（ρ=801~900） 200mm＋无机保温砂浆(ρ≤400) 20mm＋抗裂砂浆（网格布） 5mm

**3. 挑空楼板构造：**挑空楼板构造一：（由上到下）

水泥砂浆 20mm＋钢筋混凝土 120mm＋水泥砂浆 20mm＋挤塑聚苯板 45mm＋水泥砂浆 20mm

**4. 幕墙：**6中透光Low-E+12氩气+6透明-多腔塑料窗框：

传热系数1.600W/m^2.K，太阳得热系数0.326

**5. 外窗：**6中透光Low-E+12氩气+6透明-多腔塑料窗框：

传热系数1.600W/m^2.K，太阳得热系数0.326

**6. 天窗：**6中透光热反射+12A+6透明-多腔塑料窗框：

传热系数2.300W/m^2.K，太阳得热系数0.222

## 体形系数

|  |  |
| --- | --- |
| 外表面积 | 12799.89 |
| 建筑体积 | 43599.47 |
| 体形系数 | 0.29 |

## 窗墙比

### 窗墙比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 朝向 | 立面 | 窗面积(㎡) | 墙面积(㎡) | 窗墙比 |
| 南向 | 南-默认立面 | 900.95 | 1915.83 | 0.47 |
| 北向 | 北-默认立面 | 642.50 | 1959.29 | 0.33 |
| 东向 | 东-默认立面 | 249.54 | 1120.82 | 0.22 |
| 西向 | 西-默认立面 | 255.66 | 1167.79 | 0.22 |

### 外窗表

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 朝向 | 立面 | 编号 | 尺寸 | 楼层 | 数量 | 单个面积 （㎡） | 合计面积 （㎡） |
| 南向 | 南-默认立面 900.95 |  | 18.80×4.20 | 1 | 1 | 78.96 | 78.96 |
|  | 1.35×4.20 | 1 | 1 | 5.67 | 5.67 |
|  | 1.60×2.10 | 1 | 4 | 3.36 | 13.44 |
|  | 1.55×4.20 | 1 | 1 | 6.51 | 6.51 |
|  | 0.68×4.20 | 1 | 1 | 2.84 | 2.84 |
|  | 0.88×4.20 | 1 | 1 | 3.68 | 3.68 |
|  | 0.63×4.20 | 1 | 1 | 2.63 | 2.63 |
|  | 0.43×4.20 | 1 | 1 | 1.79 | 1.79 |
|  | 7.55×4.20 | 1 | 1 | 31.71 | 31.71 |
|  | 1.88×3.00 | 2 | 1 | 5.65 | 5.65 |
|  | 1.60×0.90 | 2 | 2 | 1.44 | 2.88 |
|  | 1.97×3.00 | 2 | 1 | 5.90 | 5.90 |
|  | 0.30×4.00 | 2 | 1 | 1.20 | 1.20 |
|  | 1.80×1.90 | 2 | 2 | 3.42 | 6.84 |
|  | 22.60×4.00 | 2 | 1 | 90.40 | 90.40 |
|  | 0.50×4.00 | 2 | 1 | 2.00 | 2.00 |
|  | 1.86×4.00 | 2 | 1 | 7.44 | 7.44 |
|  | 1.50×0.90 | 2 | 10 | 1.35 | 13.50 |
|  | 1.50×1.60 | 2 | 10 | 2.40 | 24.00 |
|  | 1.10×4.00 | 2 | 1 | 4.40 | 4.40 |
|  | 1.22×4.00 | 2 | 1 | 4.89 | 4.89 |
|  | 1.20×4.00 | 2 | 1 | 4.78 | 4.78 |
|  | 1.17×4.00 | 2 | 1 | 4.68 | 4.68 |
|  | 1.22×4.00 | 2 | 1 | 4.89 | 4.89 |
|  | 1.02×4.00 | 2 | 1 | 4.08 | 4.08 |
|  | 1.63×4.00 | 2 | 1 | 6.52 | 6.52 |
|  | 0.73×4.00 | 2 | 1 | 2.92 | 2.92 |
|  | 0.91×4.00 | 2 | 1 | 3.65 | 3.65 |
|  | 1.79×4.00 | 2 | 1 | 7.15 | 7.15 |
|  | 4.65×4.00 | 2 | 1 | 18.60 | 18.60 |
|  | 0.05×4.00 | 3 | 1 | 0.18 | 0.18 |
|  | 1.00×0.90 | 3 | 26 | 0.90 | 23.40 |
|  | 1.00×1.60 | 3 | 26 | 1.60 | 41.60 |
|  | 0.40×4.00 | 3 | 1 | 1.59 | 1.59 |
|  | 0.39×4.00 | 3 | 1 | 1.54 | 1.54 |
|  | 0.25×4.00 | 3 | 4 | 1.00 | 4.00 |
|  | 0.74×4.00 | 3 | 1 | 2.96 | 2.96 |
|  | 0.34×4.00 | 3 | 1 | 1.36 | 1.36 |
|  | 0.25×4.00 | 3 | 7 | 1.00 | 6.97 |
|  | 0.34×4.00 | 3 | 1 | 1.36 | 1.36 |
|  | 0.11×4.00 | 3 | 1 | 0.42 | 0.42 |
|  | 0.15×4.00 | 3 | 1 | 0.58 | 0.58 |
|  | 0.12×4.00 | 3 | 1 | 0.49 | 0.49 |
|  | 0.13×4.00 | 3 | 1 | 0.51 | 0.51 |
|  | 0.14×4.00 | 3 | 1 | 0.56 | 0.56 |
|  | 0.11×4.00 | 3 | 1 | 0.45 | 0.45 |
|  | 0.13×4.00 | 3 | 1 | 0.50 | 0.50 |
|  | 0.13×4.00 | 3 | 1 | 0.50 | 0.50 |
|  | 0.19×4.00 | 3 | 1 | 0.75 | 0.75 |
|  | 0.06×4.00 | 3 | 1 | 0.26 | 0.26 |
|  | 0.14×4.00 | 3 | 1 | 0.58 | 0.58 |
|  | 0.11×4.00 | 3 | 1 | 0.43 | 0.43 |
|  | 0.10×4.00 | 3 | 1 | 0.40 | 0.40 |
|  | 0.15×4.00 | 3 | 1 | 0.60 | 0.60 |
|  | 0.13×4.00 | 3 | 1 | 0.52 | 0.52 |
|  | 0.12×4.00 | 3 | 1 | 0.48 | 0.48 |
|  | 0.14×4.00 | 3 | 1 | 0.54 | 0.54 |
|  | 0.12×4.00 | 3 | 1 | 0.46 | 0.46 |
|  | 0.09×4.00 | 3 | 1 | 0.34 | 0.34 |
|  | 0.09×4.00 | 3 | 1 | 0.37 | 0.37 |
|  | 0.07×4.00 | 3 | 1 | 0.29 | 0.29 |
|  | 2.38×4.00 | 4 | 1 | 9.54 | 9.54 |
|  | 1.30×0.80 | 4 | 17 | 1.04 | 17.68 |
|  | 1.30×1.70 | 4 | 17 | 2.21 | 37.57 |
|  | 0.13×4.00 | 4 | 4 | 0.53 | 2.11 |
|  | 0.22×4.00 | 4 | 1 | 0.87 | 0.87 |
|  | 0.22×4.00 | 4 | 1 | 0.86 | 0.86 |
|  | 0.17×4.00 | 4 | 1 | 0.67 | 0.67 |
|  | 0.20×4.00 | 4 | 3 | 0.81 | 2.42 |
|  | 0.30×4.00 | 4 | 1 | 1.22 | 1.22 |
|  | 0.22×4.00 | 4 | 2 | 0.86 | 1.73 |
|  | 0.17×4.00 | 4 | 2 | 0.67 | 1.34 |
|  | 0.36×4.00 | 4 | 1 | 1.42 | 1.42 |
|  | 0.71×4.00 | 4 | 1 | 2.82 | 2.82 |
|  | 1.60×1.90 | 4 | 2 | 3.04 | 6.08 |
|  | 0.80×4.00 | 4 | 1 | 3.20 | 3.20 |
| C0715 | 0.70×1.50 | 1~2 | 16 | 1.05 | 16.80 |
| C0915 | 0.90×1.50 | 1~4 | 19 | 1.35 | 25.65 |
| C1015 | 1.00×1.50 | 3 | 26 | 1.50 | 39.00 |
| C1315 | 1.30×1.50 | 1~2,4~5 | 41 | 1.95 | 79.95 |
| C1515 | 1.50×1.50 | 2 | 14 | 2.25 | 31.50 |
| C2121 | 2.10×2.10 | 1~4 | 34 | 4.41 | 149.94 |
| 北向 | 北-默认立面 642.50 |  | 0.49×4.20 | 1 | 1 | 2.05 | 2.05 |
|  | 1.00×0.90 | 1 | 10 | 0.90 | 9.00 |
|  | 1.00×1.80 | 1 | 10 | 1.80 | 18.00 |
|  | 0.25×4.20 | 1 | 1 | 1.05 | 1.05 |
|  | 0.45×4.20 | 1 | 1 | 1.87 | 1.87 |
|  | 0.25×4.20 | 1 | 2 | 1.05 | 2.09 |
|  | 0.41×4.20 | 1 | 1 | 1.71 | 1.71 |
|  | 0.66×4.20 | 1 | 1 | 2.76 | 2.76 |
|  | 1.23×4.20 | 1 | 1 | 5.18 | 5.18 |
|  | 0.29×4.20 | 1 | 1 | 1.23 | 1.23 |
|  | 0.22×4.20 | 1 | 1 | 0.93 | 0.93 |
|  | 0.28×4.20 | 1 | 1 | 1.17 | 1.17 |
|  | 0.22×4.20 | 1 | 1 | 0.94 | 0.94 |
|  | 12.42×4.20 | 1 | 1 | 52.17 | 52.17 |
|  | 0.45×4.20 | 1 | 1 | 1.91 | 1.91 |
|  | 1.60×2.10 | 1 | 8 | 3.36 | 26.88 |
|  | 0.26×4.20 | 1 | 1 | 1.07 | 1.07 |
|  | 1.13×4.20 | 1 | 1 | 4.73 | 4.73 |
|  | 1.12×4.20 | 1 | 1 | 4.72 | 4.72 |
|  | 0.04×4.20 | 1 | 1 | 0.17 | 0.17 |
|  | 0.70×0.80 | 1 | 4 | 0.56 | 2.24 |
|  | 0.70×1.90 | 1 | 4 | 1.33 | 5.32 |
|  | 0.88×4.20 | 1 | 1 | 3.70 | 3.70 |
|  | 1.50×0.80 | 1,4 | 8 | 1.20 | 9.60 |
|  | 1.50×1.90 | 1 | 3 | 2.85 | 8.55 |
|  | 0.88×4.20 | 1 | 1 | 3.68 | 3.68 |
|  | 0.90×0.80 | 1 | 1 | 0.72 | 0.72 |
|  | 0.90×1.90 | 1,4 | 7 | 1.71 | 11.97 |
|  | 0.72×4.20 | 1 | 1 | 3.03 | 3.03 |
|  | 0.76×4.20 | 1 | 1 | 3.18 | 3.18 |
|  | 0.63×4.20 | 1 | 1 | 2.63 | 2.63 |
|  | 0.38×4.20 | 1 | 1 | 1.58 | 1.58 |
|  | 0.37×4.20 | 1 | 1 | 1.57 | 1.57 |
|  | 0.46×4.20 | 1 | 1 | 1.92 | 1.92 |
|  | 0.35×4.20 | 1 | 1 | 1.48 | 1.48 |
|  | 1.75×4.20 | 1 | 1 | 7.33 | 7.33 |
|  | 0.05×4.00 | 3 | 1 | 0.20 | 0.20 |
|  | 2.50×1.90 | 3 | 8 | 4.75 | 37.98 |
|  | 0.00×1.90 | 3 | 4 | 0.00 | 0.01 |
|  | 2.50×1.90 | 3 | 4 | 4.75 | 19.00 |
|  | 0.60×4.00 | 3 | 1 | 2.40 | 2.40 |
|  | 0.58×4.00 | 3 | 1 | 2.30 | 2.30 |
|  | 0.63×4.00 | 3 | 1 | 2.50 | 2.50 |
|  | 0.20×4.00 | 3 | 1 | 0.80 | 0.80 |
|  | 2.90×4.00 | 3 | 1 | 11.60 | 11.60 |
|  | 2.15×4.00 | 3 | 2 | 8.60 | 17.20 |
|  | 1.60×1.90 | 3 | 2 | 3.04 | 6.08 |
|  | 0.70×4.00 | 4 | 1 | 2.79 | 2.79 |
|  | 1.10×0.90 | 4 | 6 | 0.99 | 5.94 |
|  | 1.10×1.00 | 4 | 6 | 1.10 | 6.60 |
|  | 1.05×4.00 | 4 | 1 | 4.21 | 4.21 |
|  | 0.78×4.00 | 4 | 1 | 3.11 | 3.11 |
|  | 1.07×4.00 | 4 | 1 | 4.29 | 4.29 |
|  | 0.40×4.00 | 4 | 1 | 1.60 | 1.60 |
|  | 0.81×4.00 | 4 | 1 | 3.24 | 3.24 |
|  | 1.14×4.00 | 4 | 1 | 4.56 | 4.56 |
|  | 0.73×4.00 | 4 | 1 | 2.91 | 2.91 |
|  | 0.82×4.00 | 4 | 1 | 3.29 | 3.29 |
|  | 0.62×4.00 | 4 | 1 | 2.49 | 2.49 |
|  | 1.13×4.00 | 4 | 1 | 4.51 | 4.51 |
|  | 0.70×4.00 | 4 | 1 | 2.80 | 2.80 |
|  | 0.85×4.00 | 4 | 1 | 3.40 | 3.40 |
| C0715 | 0.70×1.50 | 1~2 | 8 | 1.05 | 8.40 |
| C0915 | 0.90×1.50 | 1~4 | 20 | 1.35 | 27.00 |
| C0921 | 0.90×2.10 | 2 | 4 | 1.89 | 7.56 |
| C1015 | 1.00×1.50 | 1 | 10 | 1.50 | 15.00 |
| C1021 | 1.00×2.10 | 2 | 2 | 2.10 | 4.20 |
| C1121 | 1.10×2.10 | 4 | 6 | 2.31 | 13.86 |
| C1215 | 1.20×1.50 | 1,3 | 20 | 1.80 | 36.00 |
| C1221 | 1.20×2.10 | 2 | 2 | 2.52 | 5.04 |
| C1315 | 1.30×1.50 | 1,4~5 | 16 | 1.95 | 31.20 |
| C1515 | 1.50×1.50 | 1~2 | 19 | 2.25 | 42.75 |
| C1521 | 1.50×2.10 | 1 | 4 | 3.15 | 12.60 |
| C2121 | 2.10×2.10 | 2 | 9 | 4.41 | 39.69 |
| C2715 | 2.70×1.50 | 3 | 1 | 4.05 | 4.05 |
| C3615 | 3.60×1.50 | 2 | 1 | 5.40 | 5.40 |
| C4015 | 4.00×1.50 | 3 | 1 | 6.00 | 6.00 |
| C6615 | 6.60×1.50 | 2~3 | 2 | 9.90 | 19.80 |
| 东向 | 东-默认立面 249.54 |  | 0.85×4.20 | 1 | 2 | 3.57 | 7.14 |
|  | 1.60×2.10 | 1 | 4 | 3.36 | 13.44 |
|  | 4.10×4.20 | 1 | 1 | 17.22 | 17.22 |
|  | 0.10×4.20 | 1 | 1 | 0.42 | 0.42 |
|  | 0.30×4.20 | 1 | 1 | 1.26 | 1.26 |
|  | 3.95×4.20 | 1 | 1 | 16.59 | 16.59 |
|  | 5.18×4.20 | 1 | 1 | 21.76 | 21.76 |
|  | 5.15×4.00 | 2,4 | 2 | 20.60 | 41.20 |
|  | 5.00×4.00 | 3 | 1 | 20.00 | 20.00 |
|  | 0.48×4.00 | 3 | 2 | 1.90 | 3.80 |
|  | 1.80×1.90 | 3 | 1 | 3.42 | 3.42 |
| C0715 | 0.70×1.50 | 3 | 1 | 1.05 | 1.05 |
| C0915 | 0.90×1.50 | 1~5 | 15 | 1.35 | 20.25 |
| C1015 | 1.00×1.50 | 4~5 | 4 | 1.50 | 6.00 |
| C1315 | 1.30×1.50 | 4~5 | 21 | 1.95 | 40.95 |
| C1415 | 1.38×1.50 | 2 | 2 | 2.07 | 4.14 |
| C1515 | 1.50×1.50 | 3 | 1 | 2.25 | 2.25 |
| C4015 | 4.00×1.50 | 2 | 2 | 6.00 | 12.00 |
| C4515 | 4.50×1.50 | 2 | 1 | 6.75 | 6.75 |
| C6615 | 6.60×1.50 | 3 | 1 | 9.90 | 9.90 |
| 西向 | 西-默认立面 255.66 |  | 0.86×4.20 | 1 | 1 | 3.59 | 3.59 |
|  | 1.50×2.10 | 1 | 2 | 3.15 | 6.30 |
|  | 0.10×4.20 | 1 | 1 | 0.42 | 0.42 |
|  | 0.70×4.20 | 1 | 1 | 2.92 | 2.92 |
|  | 4.95×4.20 | 1 | 1 | 20.79 | 20.79 |
|  | 0.80×4.20 | 1 | 3 | 3.36 | 10.08 |
|  | 1.20×4.20 | 1 | 1 | 5.04 | 5.04 |
|  | 0.30×4.20 | 1 | 1 | 1.26 | 1.26 |
|  | 1.80×2.10 | 1 | 1 | 3.78 | 3.78 |
|  | 0.50×4.20 | 1 | 1 | 2.10 | 2.10 |
|  | 1.82×4.20 | 1 | 1 | 7.64 | 7.64 |
|  | 4.50×0.80 | 1 | 1 | 3.60 | 3.60 |
|  | 4.50×1.90 | 1 | 1 | 8.55 | 8.55 |
|  | 1.18×4.20 | 1 | 1 | 4.96 | 4.96 |
|  | 8.65×4.00 | 2 | 1 | 34.60 | 34.60 |
|  | 0.20×4.00 | 2 | 1 | 0.81 | 0.81 |
|  | 1.00×0.80 | 2 | 1 | 0.80 | 0.80 |
|  | 1.00×1.70 | 2 | 1 | 1.70 | 1.70 |
|  | 0.06×4.00 | 2 | 1 | 0.25 | 0.25 |
|  | 1.20×0.80 | 2 | 3 | 0.96 | 2.88 |
|  | 1.20×1.70 | 2 | 3 | 2.04 | 6.12 |
|  | 0.10×4.00 | 2 | 1 | 0.39 | 0.39 |
|  | 0.09×4.00 | 2 | 1 | 0.37 | 0.37 |
|  | 0.10×4.00 | 2 | 1 | 0.38 | 0.38 |
| C0715 | 0.70×1.50 | 2~4 | 8 | 1.05 | 8.40 |
| C0915 | 0.90×1.50 | 1~5 | 28 | 1.35 | 37.80 |
| C1015 | 1.00×1.50 | 2 | 1 | 1.50 | 1.50 |
| C1215 | 1.20×1.50 | 2~3 | 6 | 1.80 | 10.80 |
| C1315 | 1.30×1.50 | 2,4~5 | 13 | 1.95 | 25.35 |
| C1415 | 1.38×1.50 | 1~3 | 10 | 2.07 | 20.70 |
| C1515 | 1.50×1.50 | 2~3 | 5 | 2.25 | 11.25 |
| C2118 | 2.10×1.80 | 1 | 1 | 3.78 | 3.78 |
| C4515 | 4.50×1.50 | 1 | 1 | 6.75 | 6.75 |

## 可见光透射比

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 朝向 | 立面 | 窗墙比 | 最不利窗编号 | 最不利透射比 | 透射比限值 |
| 南向 | 南-默认立面 | 0.47 | C1315 | 0.62 | 0.40 |
| 北向 | 北-默认立面 | 0.33 | C1315 | 0.62 | 0.60 |
| 东向 | 东-默认立面 | 0.22 | C1015 | 0.62 | 0.60 |
| 西向 | 西-默认立面 | 0.22 | C0915 | 0.62 | 0.60 |

## 天窗

### 天窗屋顶比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 房间 | 天窗编号 | 天窗面积（㎡） | 屋顶面积（㎡） | 面积比 |
| 3001 |  | 58.53 | 808.27 | 0.07 |
| 整栋建筑 | | 58.53 | 4528.64 | 0.01 |

### 天窗类型

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 序号 | 构造名称 | 构造编号 | 传热系数 | 综合太阳得热系数 | 备注 |
| 1 | 6中透光热反射+12A+6透明-多腔塑料窗框 | 66 | 2.30 | 0.22 | 可见光透射比=0.280 |
| 平均 | |  | 2.30 | 0.22 |  |

## 屋顶构造

### 屋顶构造一

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料名称 （由上到下） | 厚度δ | 导热系数λ | 蓄热系数S | 修正系数 | 热阻R | 热惰性指标 |
| (mm) | W/(m.K) | W/(㎡.K) | α | (㎡K)/W | D=R\*S |
| 碎石、卵石混凝土(ρ=2300) | 40 | 1.510 | 15.360 | 1.00 | 0.026 | 0.407 |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 挤塑聚苯板 | 40 | 0.033 | 0.347 | 1.00 | 1.212 | 0.421 |
| 防水珍珠岩板(ρ=150-200) | 30 | 0.060 | 1.060 | 1.00 | 0.500 | 0.530 |
| 钢筋混凝土 | 120 | 1.740 | 17.200 | 1.00 | 0.069 | 1.186 |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 各层之和∑ | 270 | － | － | － | 1.851 | 3.033 |
| 外表面太阳辐射吸收系数 | 0.75[默认] | | | | | |
| 传热系数K=1/(0.16+∑R) | 0.50 | | | | | |

## 外墙构造

### 外墙相关构造

#### 外墙构造一

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料名称 （由外到内） | 厚度δ | 导热系数λ | 蓄热系数S | 修正系数 | 热阻R | 热惰性指标 |
| (mm) | W/(m.K) | W/(㎡.K) | α | (㎡K)/W | D=R\*S |
| 抗裂砂浆（网格布） | 5 | 0.930 | 11.306 | 1.00 | 0.005 | 0.061 |
| 玻化微珠保温浆料 | 30 | 0.080 | 1.462 | 1.15 | 0.326 | 0.548 |
| 节能型烧结空心砌块（孔排数≥9排，孔洞率≥50%）砌体（ρ=801~900） | 200 | 0.250 | 4.130 | 1.00 | 0.800 | 3.304 |
| 无机保温砂浆(ρ≤400) | 20 | 0.085 | 1.610 | 1.00 | 0.235 | 0.379 |
| 抗裂砂浆（网格布） | 5 | 0.930 | 11.306 | 1.00 | 0.005 | 0.061 |
| 各层之和∑ | 260 | － | － | － | 1.372 | 4.353 |
| 外表面太阳辐射吸收系数 | 0.75[默认] | | | | | |
| 传热系数K=1/(0.16+∑R) | 0.65 | | | | | |

#### 热桥柱构造一

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料名称 （由外到内） | 厚度δ | 导热系数λ | 蓄热系数S | 修正系数 | 热阻R | 热惰性指标 |
| (mm) | W/(m.K) | W/(㎡.K) | α | (㎡K)/W | D=R\*S |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 玻化微珠保温浆料 | 30 | 0.080 | 1.462 | 1.15 | 0.326 | 0.548 |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 钢筋混凝土 | 200 | 1.740 | 17.200 | 1.00 | 0.115 | 1.977 |
| 石灰砂浆 | 20 | 0.810 | 10.070 | 1.00 | 0.025 | 0.249 |
| 各层之和∑ | 290 | － | － | － | 0.509 | 3.263 |
| 外表面太阳辐射吸收系数 | 0.75[默认] | | | | | |
| 传热系数K=1/(0.16+∑R) | 1.50 | | | | | |

### 外墙主断面传热系数的修正系数ψ

### 外墙平均热工特性

1.　南向

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 构造名称 | 构件类型 | 面积(㎡) | 面积所占比例 | 传热系数K W / (㎡K) | 热惰性指标D | 太阳辐射吸收系数 |
| 外墙构造一 | 主墙体 | 976.03 | 1.000 | 0.65 | 4.35 | 0.75 |
| 考虑线性热桥后K | 0.65 × 1.10 = 0.72 | | | | | |

2.　北向

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 构造名称 | 构件类型 | 面积(㎡) | 面积所占比例 | 传热系数K W / (㎡K) | 热惰性指标D | 太阳辐射吸收系数 |
| 外墙构造一 | 主墙体 | 1199.62 | 1.000 | 0.65 | 4.35 | 0.75 |
| 考虑线性热桥后K | 0.65 × 1.10 = 0.72 | | | | | |

3.　东向

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 构造名称 | 构件类型 | 面积(㎡) | 面积所占比例 | 传热系数K W / (㎡K) | 热惰性指标D | 太阳辐射吸收系数 |
| 外墙构造一 | 主墙体 | 844.19 | 1.000 | 0.65 | 4.35 | 0.75 |
| 考虑线性热桥后K | 0.65 × 1.10 = 0.72 | | | | | |

4.　西向

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 构造名称 | 构件类型 | 面积(㎡) | 面积所占比例 | 传热系数K W / (㎡K) | 热惰性指标D | 太阳辐射吸收系数 |
| 外墙构造一 | 主墙体 | 880.21 | 1.000 | 0.65 | 4.35 | 0.75 |
| 考虑线性热桥后K | 0.65 × 1.10 = 0.72 | | | | | |

5.　总体

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 构造名称 | 构件类型 | 面积(㎡) | 面积所占比例 | 传热系数K W / (㎡K) | 热惰性指标D | 太阳辐射吸收系数 |
| 外墙构造一 | 主墙体 | 3900.05 | 1.000 | 0.65 | 4.35 | 0.75 |
| 考虑线性热桥后K | 0.65 × 1.10 = 0.72 | | | | | |

## 挑空楼板构造

### 挑空楼板构造一

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 材料名称 （由上到下） | 厚度δ | 导热系数λ | 蓄热系数S | 修正系数 | 热阻R | 热惰性指标 |
| (mm) | W/(m.K) | W/(㎡.K) | α | (㎡K)/W | D=R\*S |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 钢筋混凝土 | 120 | 1.740 | 17.200 | 1.00 | 0.069 | 1.186 |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 挤塑聚苯板 | 45 | 0.033 | 0.347 | 1.00 | 1.364 | 0.473 |
| 水泥砂浆 | 20 | 0.930 | 11.370 | 1.00 | 0.022 | 0.245 |
| 各层之和∑ | 225 | － | － | － | 1.497 | 2.393 |
| 传热系数K=1/(0.16+∑R) | 0.60 | | | | | |

## 外窗热工

### 外窗构造

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 序号 | 构造名称 | 构造编号 | 传热系数 | 太阳得热系数 | 可见光透射比 | 备注 |
| 1 | 6中透光Low-E+12氩气+6透明-多腔塑料窗框 | 65 | 1.60 | 0.33 | 0.620 | 可见光透射比=0.620 |
| 2 | 6中透光Low-E+12氩气+6透明-多腔塑料窗框 | 18 | 1.60 | 0.33 | 0.620 | 可见光透射比=0.620 |

### 外遮阳类型

已启用环境遮阳

### 平均传热系数

1. 南向：

南-默认立面

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 传热系数 |
| 1 |  | 1 | 1 | 78.960 | 78.960 | 65 | 1.600 |
| 2 |  | 1 | 1 | 5.670 | 5.670 | 65 | 1.600 |
| 3 |  | 1 | 4 | 3.360 | 13.440 | 65 | 1.600 |
| 4 |  | 1 | 1 | 6.510 | 6.510 | 65 | 1.600 |
| 5 |  | 1 | 1 | 2.835 | 2.835 | 65 | 1.600 |
| 6 |  | 1 | 1 | 3.675 | 3.675 | 65 | 1.600 |
| 7 |  | 1 | 1 | 2.625 | 2.625 | 65 | 1.600 |
| 8 |  | 1 | 1 | 1.785 | 1.785 | 65 | 1.600 |
| 9 |  | 1 | 1 | 31.710 | 31.710 | 65 | 1.600 |
| 10 |  | 2 | 1 | 5.649 | 5.649 | 65 | 1.600 |
| 11 |  | 2 | 2 | 1.440 | 2.880 | 65 | 1.600 |
| 12 |  | 2 | 1 | 5.901 | 5.901 | 65 | 1.600 |
| 13 |  | 2 | 1 | 1.200 | 1.200 | 65 | 1.600 |
| 14 |  | 2 | 2 | 3.420 | 6.840 | 65 | 1.600 |
| 15 |  | 2 | 1 | 90.400 | 90.400 | 65 | 1.600 |
| 16 |  | 2 | 1 | 2.000 | 2.000 | 65 | 1.600 |
| 17 |  | 2 | 1 | 7.436 | 7.436 | 65 | 1.600 |
| 18 |  | 2 | 10 | 1.350 | 13.500 | 65 | 1.600 |
| 19 |  | 2 | 10 | 2.400 | 24.000 | 65 | 1.600 |
| 20 |  | 2 | 1 | 4.400 | 4.400 | 65 | 1.600 |
| 21 |  | 2 | 1 | 4.892 | 4.892 | 65 | 1.600 |
| 22 |  | 2 | 1 | 4.784 | 4.784 | 65 | 1.600 |
| 23 |  | 2 | 1 | 4.676 | 4.676 | 65 | 1.600 |
| 24 |  | 2 | 1 | 4.888 | 4.888 | 65 | 1.600 |
| 25 |  | 2 | 1 | 4.084 | 4.084 | 65 | 1.600 |
| 26 |  | 2 | 1 | 6.520 | 6.520 | 65 | 1.600 |
| 27 |  | 2 | 1 | 2.920 | 2.920 | 65 | 1.600 |
| 28 |  | 2 | 1 | 3.648 | 3.648 | 65 | 1.600 |
| 29 |  | 2 | 1 | 7.152 | 7.152 | 65 | 1.600 |
| 30 |  | 2 | 1 | 18.600 | 18.600 | 65 | 1.600 |
| 31 |  | 3 | 1 | 0.184 | 0.184 | 65 | 1.600 |
| 32 |  | 3 | 26 | 0.900 | 23.400 | 65 | 1.600 |
| 33 |  | 3 | 26 | 1.600 | 41.600 | 65 | 1.600 |
| 34 |  | 3 | 1 | 1.592 | 1.592 | 65 | 1.600 |
| 35 |  | 3 | 1 | 1.544 | 1.544 | 65 | 1.600 |
| 36 |  | 3 | 4 | 1.000 | 4.000 | 65 | 1.600 |
| 37 |  | 3 | 1 | 2.960 | 2.960 | 65 | 1.600 |
| 38 |  | 3 | 1 | 1.364 | 1.364 | 65 | 1.600 |
| 39 |  | 3 | 7 | 0.996 | 6.972 | 65 | 1.600 |
| 40 |  | 3 | 1 | 1.360 | 1.360 | 65 | 1.600 |
| 41 |  | 3 | 1 | 0.420 | 0.420 | 65 | 1.600 |
| 42 |  | 3 | 1 | 0.580 | 0.580 | 65 | 1.600 |
| 43 |  | 3 | 1 | 0.492 | 0.492 | 65 | 1.600 |
| 44 |  | 3 | 1 | 0.508 | 0.508 | 65 | 1.600 |
| 45 |  | 3 | 1 | 0.556 | 0.556 | 65 | 1.600 |
| 46 |  | 3 | 1 | 0.448 | 0.448 | 65 | 1.600 |
| 47 |  | 3 | 1 | 0.504 | 0.504 | 65 | 1.600 |
| 48 |  | 3 | 1 | 0.500 | 0.500 | 65 | 1.600 |
| 49 |  | 3 | 1 | 0.748 | 0.748 | 65 | 1.600 |
| 50 |  | 3 | 1 | 0.256 | 0.256 | 65 | 1.600 |
| 51 |  | 3 | 1 | 0.576 | 0.576 | 65 | 1.600 |
| 52 |  | 3 | 1 | 0.428 | 0.428 | 65 | 1.600 |
| 53 |  | 3 | 1 | 0.404 | 0.404 | 65 | 1.600 |
| 54 |  | 3 | 1 | 0.600 | 0.600 | 65 | 1.600 |
| 55 |  | 3 | 1 | 0.524 | 0.524 | 65 | 1.600 |
| 56 |  | 3 | 1 | 0.480 | 0.480 | 65 | 1.600 |
| 57 |  | 3 | 1 | 0.540 | 0.540 | 65 | 1.600 |
| 58 |  | 3 | 1 | 0.460 | 0.460 | 65 | 1.600 |
| 59 |  | 3 | 1 | 0.340 | 0.340 | 65 | 1.600 |
| 60 |  | 3 | 1 | 0.368 | 0.368 | 65 | 1.600 |
| 61 |  | 3 | 1 | 0.292 | 0.292 | 65 | 1.600 |
| 62 |  | 4 | 1 | 9.536 | 9.536 | 65 | 1.600 |
| 63 |  | 4 | 17 | 1.040 | 17.680 | 65 | 1.600 |
| 64 |  | 4 | 17 | 2.210 | 37.570 | 65 | 1.600 |
| 65 |  | 4 | 4 | 0.528 | 2.112 | 65 | 1.600 |
| 66 |  | 4 | 1 | 0.872 | 0.872 | 65 | 1.600 |
| 67 |  | 4 | 1 | 0.860 | 0.860 | 65 | 1.600 |
| 68 |  | 4 | 1 | 0.672 | 0.672 | 65 | 1.600 |
| 69 |  | 4 | 3 | 0.808 | 2.424 | 65 | 1.600 |
| 70 |  | 4 | 1 | 1.216 | 1.216 | 65 | 1.600 |
| 71 |  | 4 | 2 | 0.864 | 1.728 | 65 | 1.600 |
| 72 |  | 4 | 2 | 0.668 | 1.336 | 65 | 1.600 |
| 73 |  | 4 | 1 | 1.424 | 1.424 | 65 | 1.600 |
| 74 |  | 4 | 1 | 2.820 | 2.820 | 65 | 1.600 |
| 75 |  | 4 | 2 | 3.040 | 6.080 | 65 | 1.600 |
| 76 |  | 4 | 1 | 3.200 | 3.200 | 65 | 1.600 |
| 77 | C0715 | 1~2 | 16 | 1.050 | 16.800 | 18 | 1.600 |
| 78 | C0915 | 1~4 | 19 | 1.350 | 25.650 | 18 | 1.600 |
| 79 | C1015 | 3 | 26 | 1.500 | 39.000 | 18 | 1.600 |
| 80 | C1315 | 1~2,4~5 | 41 | 1.950 | 79.950 | 18 | 1.600 |
| 81 | C1515 | 2 | 14 | 2.250 | 31.500 | 18 | 1.600 |
| 82 | C2121 | 1~4 | 34 | 4.410 | 149.940 | 18 | 1.600 |
| 立面总面积(㎡) | | | 900.950 | 立面平均传热系数 | | | 1.600 |

2. 北向：

北-默认立面

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 传热系数 |
| 1 |  | 1 | 1 | 2.054 | 2.054 | 65 | 1.600 |
| 2 |  | 1 | 10 | 0.900 | 9.000 | 65 | 1.600 |
| 3 |  | 1 | 10 | 1.800 | 18.000 | 65 | 1.600 |
| 4 |  | 1 | 1 | 1.050 | 1.050 | 65 | 1.600 |
| 5 |  | 1 | 1 | 1.873 | 1.873 | 65 | 1.600 |
| 6 |  | 1 | 2 | 1.046 | 2.092 | 65 | 1.600 |
| 7 |  | 1 | 1 | 1.714 | 1.714 | 65 | 1.600 |
| 8 |  | 1 | 1 | 2.764 | 2.764 | 65 | 1.600 |
| 9 |  | 1 | 1 | 5.183 | 5.183 | 65 | 1.600 |
| 10 |  | 1 | 1 | 1.235 | 1.235 | 65 | 1.600 |
| 11 |  | 1 | 1 | 0.928 | 0.928 | 65 | 1.600 |
| 12 |  | 1 | 1 | 1.172 | 1.172 | 65 | 1.600 |
| 13 |  | 1 | 1 | 0.937 | 0.937 | 65 | 1.600 |
| 14 |  | 1 | 1 | 52.172 | 52.172 | 65 | 1.600 |
| 15 |  | 1 | 1 | 1.907 | 1.907 | 65 | 1.600 |
| 16 |  | 1 | 8 | 3.360 | 26.880 | 65 | 1.600 |
| 17 |  | 1 | 1 | 1.071 | 1.071 | 65 | 1.600 |
| 18 |  | 1 | 1 | 4.729 | 4.729 | 65 | 1.600 |
| 19 |  | 1 | 1 | 4.721 | 4.721 | 65 | 1.600 |
| 20 |  | 1 | 1 | 0.168 | 0.168 | 65 | 1.600 |
| 21 |  | 1 | 4 | 0.560 | 2.240 | 65 | 1.600 |
| 22 |  | 1 | 4 | 1.330 | 5.320 | 65 | 1.600 |
| 23 |  | 1 | 1 | 3.696 | 3.696 | 65 | 1.600 |
| 24 |  | 1,4 | 8 | 1.200 | 9.600 | 65 | 1.600 |
| 25 |  | 1 | 3 | 2.850 | 8.550 | 65 | 1.600 |
| 26 |  | 1 | 1 | 3.679 | 3.679 | 65 | 1.600 |
| 27 |  | 1 | 1 | 0.720 | 0.720 | 65 | 1.600 |
| 28 |  | 1,4 | 7 | 1.710 | 11.970 | 65 | 1.600 |
| 29 |  | 1 | 1 | 3.032 | 3.032 | 65 | 1.600 |
| 30 |  | 1 | 1 | 3.175 | 3.175 | 65 | 1.600 |
| 31 |  | 1 | 1 | 2.625 | 2.625 | 65 | 1.600 |
| 32 |  | 1 | 1 | 1.575 | 1.575 | 65 | 1.600 |
| 33 |  | 1 | 1 | 1.567 | 1.567 | 65 | 1.600 |
| 34 |  | 1 | 1 | 1.915 | 1.915 | 65 | 1.600 |
| 35 |  | 1 | 1 | 1.478 | 1.478 | 65 | 1.600 |
| 36 |  | 1 | 1 | 7.329 | 7.329 | 65 | 1.600 |
| 37 |  | 3 | 1 | 0.204 | 0.204 | 65 | 1.600 |
| 38 |  | 3 | 8 | 4.748 | 37.985 | 65 | 1.600 |
| 39 |  | 3 | 4 | 0.002 | 0.008 | 65 | 1.600 |
| 40 |  | 3 | 4 | 4.750 | 19.000 | 65 | 1.600 |
| 41 |  | 3 | 1 | 2.404 | 2.404 | 65 | 1.600 |
| 42 |  | 3 | 1 | 2.304 | 2.304 | 65 | 1.600 |
| 43 |  | 3 | 1 | 2.504 | 2.504 | 65 | 1.600 |
| 44 |  | 3 | 1 | 0.800 | 0.800 | 65 | 1.600 |
| 45 |  | 3 | 1 | 11.600 | 11.600 | 65 | 1.600 |
| 46 |  | 3 | 2 | 8.600 | 17.200 | 65 | 1.600 |
| 47 |  | 3 | 2 | 3.040 | 6.080 | 65 | 1.600 |
| 48 |  | 4 | 1 | 2.792 | 2.792 | 65 | 1.600 |
| 49 |  | 4 | 6 | 0.990 | 5.940 | 65 | 1.600 |
| 50 |  | 4 | 6 | 1.100 | 6.600 | 65 | 1.600 |
| 51 |  | 4 | 1 | 4.208 | 4.208 | 65 | 1.600 |
| 52 |  | 4 | 1 | 3.112 | 3.112 | 65 | 1.600 |
| 53 |  | 4 | 1 | 4.288 | 4.288 | 65 | 1.600 |
| 54 |  | 4 | 1 | 1.600 | 1.600 | 65 | 1.600 |
| 55 |  | 4 | 1 | 3.240 | 3.240 | 65 | 1.600 |
| 56 |  | 4 | 1 | 4.560 | 4.560 | 65 | 1.600 |
| 57 |  | 4 | 1 | 2.908 | 2.908 | 65 | 1.600 |
| 58 |  | 4 | 1 | 3.292 | 3.292 | 65 | 1.600 |
| 59 |  | 4 | 1 | 2.492 | 2.492 | 65 | 1.600 |
| 60 |  | 4 | 1 | 4.508 | 4.508 | 65 | 1.600 |
| 61 |  | 4 | 1 | 2.796 | 2.796 | 65 | 1.600 |
| 62 |  | 4 | 1 | 3.404 | 3.404 | 65 | 1.600 |
| 63 | C0715 | 1~2 | 8 | 1.050 | 8.400 | 18 | 1.600 |
| 64 | C0915 | 1~4 | 20 | 1.350 | 27.000 | 18 | 1.600 |
| 65 | C0921 | 2 | 4 | 1.890 | 7.560 | 18 | 1.600 |
| 66 | C1015 | 1 | 10 | 1.500 | 15.000 | 18 | 1.600 |
| 67 | C1021 | 2 | 2 | 2.100 | 4.200 | 18 | 1.600 |
| 68 | C1121 | 4 | 6 | 2.310 | 13.860 | 18 | 1.600 |
| 69 | C1215 | 1,3 | 20 | 1.800 | 36.000 | 18 | 1.600 |
| 70 | C1221 | 2 | 2 | 2.520 | 5.040 | 18 | 1.600 |
| 71 | C1315 | 1,4~5 | 16 | 1.950 | 31.200 | 18 | 1.600 |
| 72 | C1515 | 1~2 | 19 | 2.250 | 42.750 | 18 | 1.600 |
| 73 | C1521 | 1 | 4 | 3.150 | 12.600 | 18 | 1.600 |
| 74 | C2121 | 2 | 9 | 4.410 | 39.690 | 18 | 1.600 |
| 75 | C2715 | 3 | 1 | 4.050 | 4.050 | 18 | 1.600 |
| 76 | C3615 | 2 | 1 | 5.400 | 5.400 | 18 | 1.600 |
| 77 | C4015 | 3 | 1 | 6.000 | 6.000 | 18 | 1.600 |
| 78 | C6615 | 2~3 | 2 | 9.900 | 19.800 | 18 | 1.600 |
| 立面总面积(㎡) | | | 642.498 | 立面平均传热系数 | | | 1.600 |

3. 东向：

东-默认立面

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 传热系数 |
| 1 |  | 1 | 2 | 3.570 | 7.140 | 65 | 1.600 |
| 2 |  | 1 | 4 | 3.360 | 13.440 | 65 | 1.600 |
| 3 |  | 1 | 1 | 17.220 | 17.220 | 65 | 1.600 |
| 4 |  | 1 | 1 | 0.420 | 0.420 | 65 | 1.600 |
| 5 |  | 1 | 1 | 1.260 | 1.260 | 65 | 1.600 |
| 6 |  | 1 | 1 | 16.590 | 16.590 | 65 | 1.600 |
| 7 |  | 1 | 1 | 21.756 | 21.756 | 65 | 1.600 |
| 8 |  | 2,4 | 2 | 20.600 | 41.200 | 65 | 1.600 |
| 9 |  | 3 | 1 | 20.000 | 20.000 | 65 | 1.600 |
| 10 |  | 3 | 2 | 1.900 | 3.800 | 65 | 1.600 |
| 11 |  | 3 | 1 | 3.420 | 3.420 | 65 | 1.600 |
| 12 | C0715 | 3 | 1 | 1.050 | 1.050 | 18 | 1.600 |
| 13 | C0915 | 1~5 | 15 | 1.350 | 20.250 | 18 | 1.600 |
| 14 | C1015 | 4~5 | 4 | 1.500 | 6.000 | 18 | 1.600 |
| 15 | C1315 | 4~5 | 21 | 1.950 | 40.950 | 18 | 1.600 |
| 16 | C1415 | 2 | 2 | 2.070 | 4.140 | 18 | 1.600 |
| 17 | C1515 | 3 | 1 | 2.250 | 2.250 | 18 | 1.600 |
| 18 | C4015 | 2 | 2 | 6.000 | 12.000 | 18 | 1.600 |
| 19 | C4515 | 2 | 1 | 6.750 | 6.750 | 18 | 1.600 |
| 20 | C6615 | 3 | 1 | 9.900 | 9.900 | 18 | 1.600 |
| 立面总面积(㎡) | | | 249.536 | 立面平均传热系数 | | | 1.600 |

4. 西向：

西-默认立面

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 传热系数 |
| 1 |  | 1 | 1 | 3.591 | 3.591 | 65 | 1.600 |
| 2 |  | 1 | 2 | 3.150 | 6.300 | 65 | 1.600 |
| 3 |  | 1 | 1 | 0.420 | 0.420 | 65 | 1.600 |
| 4 |  | 1 | 1 | 2.919 | 2.919 | 65 | 1.600 |
| 5 |  | 1 | 1 | 20.790 | 20.790 | 65 | 1.600 |
| 6 |  | 1 | 3 | 3.360 | 10.080 | 65 | 1.600 |
| 7 |  | 1 | 1 | 5.040 | 5.040 | 65 | 1.600 |
| 8 |  | 1 | 1 | 1.260 | 1.260 | 65 | 1.600 |
| 9 |  | 1 | 1 | 3.780 | 3.780 | 65 | 1.600 |
| 10 |  | 1 | 1 | 2.100 | 2.100 | 65 | 1.600 |
| 11 |  | 1 | 1 | 7.640 | 7.640 | 65 | 1.600 |
| 12 |  | 1 | 1 | 3.600 | 3.600 | 65 | 1.600 |
| 13 |  | 1 | 1 | 8.550 | 8.550 | 65 | 1.600 |
| 14 |  | 1 | 1 | 4.960 | 4.960 | 65 | 1.600 |
| 15 |  | 2 | 1 | 34.600 | 34.600 | 65 | 1.600 |
| 16 |  | 2 | 1 | 0.812 | 0.812 | 65 | 1.600 |
| 17 |  | 2 | 1 | 0.800 | 0.800 | 65 | 1.600 |
| 18 |  | 2 | 1 | 1.700 | 1.700 | 65 | 1.600 |
| 19 |  | 2 | 1 | 0.252 | 0.252 | 65 | 1.600 |
| 20 |  | 2 | 3 | 0.960 | 2.880 | 65 | 1.600 |
| 21 |  | 2 | 3 | 2.040 | 6.120 | 65 | 1.600 |
| 22 |  | 2 | 1 | 0.388 | 0.388 | 65 | 1.600 |
| 23 |  | 2 | 1 | 0.368 | 0.368 | 65 | 1.600 |
| 24 |  | 2 | 1 | 0.380 | 0.380 | 65 | 1.600 |
| 25 | C0715 | 2~4 | 8 | 1.050 | 8.400 | 18 | 1.600 |
| 26 | C0915 | 1~5 | 28 | 1.350 | 37.800 | 18 | 1.600 |
| 27 | C1015 | 2 | 1 | 1.500 | 1.500 | 18 | 1.600 |
| 28 | C1215 | 2~3 | 6 | 1.800 | 10.800 | 18 | 1.600 |
| 29 | C1315 | 2,4~5 | 13 | 1.950 | 25.350 | 18 | 1.600 |
| 30 | C1415 | 1~3 | 10 | 2.070 | 20.700 | 18 | 1.600 |
| 31 | C1515 | 2~3 | 5 | 2.250 | 11.250 | 18 | 1.600 |
| 32 | C2118 | 1 | 1 | 3.780 | 3.780 | 18 | 1.600 |
| 33 | C4515 | 1 | 1 | 6.750 | 6.750 | 18 | 1.600 |
| 立面总面积(㎡) | | | 255.660 | 立面平均传热系数 | | | 1.600 |

### 综合太阳得热系数

1. 南向：

南-默认立面

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 窗太阳得热系数 | 外遮阳编号 | 外遮阳系数(含环境遮阳) | 综合太阳得热系数 |
| 1 |  | 1 | 1 | 78.960 | 78.960 | 65 | 0.326 |  | 1.000 | 0.326 |
| 2 |  | 1 | 1 | 5.670 | 5.670 | 65 | 0.326 |  | 1.000 | 0.326 |
| 3 |  | 1 | 4 | 3.360 | 13.440 | 65 | 0.326 |  | 1.000 | 0.326 |
| 4 |  | 1 | 1 | 6.510 | 6.510 | 65 | 0.326 |  | 1.000 | 0.326 |
| 5 |  | 1 | 1 | 2.835 | 2.835 | 65 | 0.326 |  | 1.000 | 0.326 |
| 6 |  | 1 | 1 | 3.675 | 3.675 | 65 | 0.326 |  | 1.000 | 0.326 |
| 7 |  | 1 | 1 | 2.625 | 2.625 | 65 | 0.326 |  | 1.000 | 0.326 |
| 8 |  | 1 | 1 | 1.785 | 1.785 | 65 | 0.326 |  | 1.000 | 0.326 |
| 9 |  | 1 | 1 | 31.710 | 31.710 | 65 | 0.326 |  | 1.000 | 0.326 |
| 10 |  | 2 | 1 | 5.649 | 5.649 | 65 | 0.326 |  | 1.000 | 0.326 |
| 11 |  | 2 | 2 | 1.440 | 2.880 | 65 | 0.326 |  | 1.000 | 0.326 |
| 12 |  | 2 | 1 | 5.901 | 5.901 | 65 | 0.326 |  | 1.000 | 0.326 |
| 13 |  | 2 | 1 | 1.200 | 1.200 | 65 | 0.326 |  | 1.000 | 0.326 |
| 14 |  | 2 | 2 | 3.420 | 6.840 | 65 | 0.326 |  | 1.000 | 0.326 |
| 15 |  | 2 | 1 | 90.400 | 90.400 | 65 | 0.326 |  | 1.000 | 0.326 |
| 16 |  | 2 | 1 | 2.000 | 2.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 17 |  | 2 | 1 | 7.436 | 7.436 | 65 | 0.326 |  | 1.000 | 0.326 |
| 18 |  | 2 | 10 | 1.350 | 13.500 | 65 | 0.326 |  | 1.000 | 0.326 |
| 19 |  | 2 | 10 | 2.400 | 24.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 20 |  | 2 | 1 | 4.400 | 4.400 | 65 | 0.326 |  | 1.000 | 0.326 |
| 21 |  | 2 | 1 | 4.892 | 4.892 | 65 | 0.326 |  | 1.000 | 0.326 |
| 22 |  | 2 | 1 | 4.784 | 4.784 | 65 | 0.326 |  | 1.000 | 0.326 |
| 23 |  | 2 | 1 | 4.676 | 4.676 | 65 | 0.326 |  | 1.000 | 0.326 |
| 24 |  | 2 | 1 | 4.888 | 4.888 | 65 | 0.326 |  | 1.000 | 0.326 |
| 25 |  | 2 | 1 | 4.084 | 4.084 | 65 | 0.326 |  | 1.000 | 0.326 |
| 26 |  | 2 | 1 | 6.520 | 6.520 | 65 | 0.326 |  | 1.000 | 0.326 |
| 27 |  | 2 | 1 | 2.920 | 2.920 | 65 | 0.326 |  | 1.000 | 0.326 |
| 28 |  | 2 | 1 | 3.648 | 3.648 | 65 | 0.326 |  | 1.000 | 0.326 |
| 29 |  | 2 | 1 | 7.152 | 7.152 | 65 | 0.326 |  | 1.000 | 0.326 |
| 30 |  | 2 | 1 | 18.600 | 18.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 31 |  | 3 | 1 | 0.184 | 0.184 | 65 | 0.326 |  | 1.000 | 0.326 |
| 32 |  | 3 | 26 | 0.900 | 23.400 | 65 | 0.326 |  | 1.000 | 0.326 |
| 33 |  | 3 | 26 | 1.600 | 41.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 34 |  | 3 | 1 | 1.592 | 1.592 | 65 | 0.326 |  | 1.000 | 0.326 |
| 35 |  | 3 | 1 | 1.544 | 1.544 | 65 | 0.326 |  | 1.000 | 0.326 |
| 36 |  | 3 | 4 | 1.000 | 4.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 37 |  | 3 | 1 | 2.960 | 2.960 | 65 | 0.326 |  | 1.000 | 0.326 |
| 38 |  | 3 | 1 | 1.364 | 1.364 | 65 | 0.326 |  | 1.000 | 0.326 |
| 39 |  | 3 | 7 | 0.996 | 6.972 | 65 | 0.326 |  | 1.000 | 0.326 |
| 40 |  | 3 | 1 | 1.360 | 1.360 | 65 | 0.326 |  | 1.000 | 0.326 |
| 41 |  | 3 | 1 | 0.420 | 0.420 | 65 | 0.326 |  | 1.000 | 0.326 |
| 42 |  | 3 | 1 | 0.580 | 0.580 | 65 | 0.326 |  | 1.000 | 0.326 |
| 43 |  | 3 | 1 | 0.492 | 0.492 | 65 | 0.326 |  | 1.000 | 0.326 |
| 44 |  | 3 | 1 | 0.508 | 0.508 | 65 | 0.326 |  | 1.000 | 0.326 |
| 45 |  | 3 | 1 | 0.556 | 0.556 | 65 | 0.326 |  | 1.000 | 0.326 |
| 46 |  | 3 | 1 | 0.448 | 0.448 | 65 | 0.326 |  | 1.000 | 0.326 |
| 47 |  | 3 | 1 | 0.504 | 0.504 | 65 | 0.326 |  | 1.000 | 0.326 |
| 48 |  | 3 | 1 | 0.500 | 0.500 | 65 | 0.326 |  | 1.000 | 0.326 |
| 49 |  | 3 | 1 | 0.748 | 0.748 | 65 | 0.326 |  | 1.000 | 0.326 |
| 50 |  | 3 | 1 | 0.256 | 0.256 | 65 | 0.326 |  | 1.000 | 0.326 |
| 51 |  | 3 | 1 | 0.576 | 0.576 | 65 | 0.326 |  | 1.000 | 0.326 |
| 52 |  | 3 | 1 | 0.428 | 0.428 | 65 | 0.326 |  | 1.000 | 0.326 |
| 53 |  | 3 | 1 | 0.404 | 0.404 | 65 | 0.326 |  | 1.000 | 0.326 |
| 54 |  | 3 | 1 | 0.600 | 0.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 55 |  | 3 | 1 | 0.524 | 0.524 | 65 | 0.326 |  | 1.000 | 0.326 |
| 56 |  | 3 | 1 | 0.480 | 0.480 | 65 | 0.326 |  | 1.000 | 0.326 |
| 57 |  | 3 | 1 | 0.540 | 0.540 | 65 | 0.326 |  | 1.000 | 0.326 |
| 58 |  | 3 | 1 | 0.460 | 0.460 | 65 | 0.326 |  | 1.000 | 0.326 |
| 59 |  | 3 | 1 | 0.340 | 0.340 | 65 | 0.326 |  | 1.000 | 0.326 |
| 60 |  | 3 | 1 | 0.368 | 0.368 | 65 | 0.326 |  | 1.000 | 0.326 |
| 61 |  | 3 | 1 | 0.292 | 0.292 | 65 | 0.326 |  | 1.000 | 0.326 |
| 62 |  | 4 | 1 | 9.536 | 9.536 | 65 | 0.326 |  | 1.000 | 0.326 |
| 63 |  | 4 | 17 | 1.040 | 17.680 | 65 | 0.326 |  | 1.000 | 0.326 |
| 64 |  | 4 | 17 | 2.210 | 37.570 | 65 | 0.326 |  | 1.000 | 0.326 |
| 65 |  | 4 | 4 | 0.528 | 2.112 | 65 | 0.326 |  | 1.000 | 0.326 |
| 66 |  | 4 | 1 | 0.872 | 0.872 | 65 | 0.326 |  | 1.000 | 0.326 |
| 67 |  | 4 | 1 | 0.860 | 0.860 | 65 | 0.326 |  | 1.000 | 0.326 |
| 68 |  | 4 | 1 | 0.672 | 0.672 | 65 | 0.326 |  | 1.000 | 0.326 |
| 69 |  | 4 | 3 | 0.808 | 2.424 | 65 | 0.326 |  | 1.000 | 0.326 |
| 70 |  | 4 | 1 | 1.216 | 1.216 | 65 | 0.326 |  | 1.000 | 0.326 |
| 71 |  | 4 | 2 | 0.864 | 1.728 | 65 | 0.326 |  | 1.000 | 0.326 |
| 72 |  | 4 | 2 | 0.668 | 1.336 | 65 | 0.326 |  | 1.000 | 0.326 |
| 73 |  | 4 | 1 | 1.424 | 1.424 | 65 | 0.326 |  | 1.000 | 0.326 |
| 74 |  | 4 | 1 | 2.820 | 2.820 | 65 | 0.326 |  | 1.000 | 0.326 |
| 75 |  | 4 | 2 | 3.040 | 6.080 | 65 | 0.326 |  | 1.000 | 0.326 |
| 76 |  | 4 | 1 | 3.200 | 3.200 | 65 | 0.326 |  | 1.000 | 0.326 |
| 77 | C0715 | 1~2 | 16 | 1.050 | 16.800 | 18 | 0.326 |  | 1.000 | 0.326 |
| 78 | C0915 | 1~4 | 19 | 1.350 | 25.650 | 18 | 0.326 |  | 1.000 | 0.326 |
| 79 | C1015 | 3 | 26 | 1.500 | 39.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 80 | C1315 | 1~2,4~5 | 41 | 1.950 | 79.950 | 18 | 0.326 |  | 1.000 | 0.326 |
| 81 | C1515 | 2 | 14 | 2.250 | 31.500 | 18 | 0.326 |  | 1.000 | 0.326 |
| 82 | C2121 | 1~4 | 34 | 4.410 | 149.940 | 18 | 0.326 |  | 1.000 | 0.326 |
| 立面总面积(㎡) | | | | | 900.950 | 综合太阳得热系数 | | | 1.000 | 0.326 |

2. 北向：

北-默认立面

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 窗太阳得热系数 | 外遮阳编号 | 外遮阳系数(含环境遮阳) | 综合太阳得热系数 |
| 1 |  | 1 | 1 | 2.054 | 2.054 | 65 | 0.326 |  | 1.000 | 0.326 |
| 2 |  | 1 | 10 | 0.900 | 9.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 3 |  | 1 | 10 | 1.800 | 18.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 4 |  | 1 | 1 | 1.050 | 1.050 | 65 | 0.326 |  | 1.000 | 0.326 |
| 5 |  | 1 | 1 | 1.873 | 1.873 | 65 | 0.326 |  | 1.000 | 0.326 |
| 6 |  | 1 | 2 | 1.046 | 2.092 | 65 | 0.326 |  | 1.000 | 0.326 |
| 7 |  | 1 | 1 | 1.714 | 1.714 | 65 | 0.326 |  | 1.000 | 0.326 |
| 8 |  | 1 | 1 | 2.764 | 2.764 | 65 | 0.326 |  | 1.000 | 0.326 |
| 9 |  | 1 | 1 | 5.183 | 5.183 | 65 | 0.326 |  | 1.000 | 0.326 |
| 10 |  | 1 | 1 | 1.235 | 1.235 | 65 | 0.326 |  | 1.000 | 0.326 |
| 11 |  | 1 | 1 | 0.928 | 0.928 | 65 | 0.326 |  | 1.000 | 0.326 |
| 12 |  | 1 | 1 | 1.172 | 1.172 | 65 | 0.326 |  | 1.000 | 0.326 |
| 13 |  | 1 | 1 | 0.937 | 0.937 | 65 | 0.326 |  | 1.000 | 0.326 |
| 14 |  | 1 | 1 | 52.172 | 52.172 | 65 | 0.326 |  | 1.000 | 0.326 |
| 15 |  | 1 | 1 | 1.907 | 1.907 | 65 | 0.326 |  | 1.000 | 0.326 |
| 16 |  | 1 | 8 | 3.360 | 26.880 | 65 | 0.326 |  | 1.000 | 0.326 |
| 17 |  | 1 | 1 | 1.071 | 1.071 | 65 | 0.326 |  | 1.000 | 0.326 |
| 18 |  | 1 | 1 | 4.729 | 4.729 | 65 | 0.326 |  | 1.000 | 0.326 |
| 19 |  | 1 | 1 | 4.721 | 4.721 | 65 | 0.326 |  | 1.000 | 0.326 |
| 20 |  | 1 | 1 | 0.168 | 0.168 | 65 | 0.326 |  | 1.000 | 0.326 |
| 21 |  | 1 | 4 | 0.560 | 2.240 | 65 | 0.326 |  | 1.000 | 0.326 |
| 22 |  | 1 | 4 | 1.330 | 5.320 | 65 | 0.326 |  | 1.000 | 0.326 |
| 23 |  | 1 | 1 | 3.696 | 3.696 | 65 | 0.326 |  | 1.000 | 0.326 |
| 24 |  | 1,4 | 8 | 1.200 | 9.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 25 |  | 1 | 3 | 2.850 | 8.550 | 65 | 0.326 |  | 1.000 | 0.326 |
| 26 |  | 1 | 1 | 3.679 | 3.679 | 65 | 0.326 |  | 1.000 | 0.326 |
| 27 |  | 1 | 1 | 0.720 | 0.720 | 65 | 0.326 |  | 1.000 | 0.326 |
| 28 |  | 1,4 | 7 | 1.710 | 11.970 | 65 | 0.326 |  | 1.000 | 0.326 |
| 29 |  | 1 | 1 | 3.032 | 3.032 | 65 | 0.326 |  | 1.000 | 0.326 |
| 30 |  | 1 | 1 | 3.175 | 3.175 | 65 | 0.326 |  | 1.000 | 0.326 |
| 31 |  | 1 | 1 | 2.625 | 2.625 | 65 | 0.326 |  | 1.000 | 0.326 |
| 32 |  | 1 | 1 | 1.575 | 1.575 | 65 | 0.326 |  | 1.000 | 0.326 |
| 33 |  | 1 | 1 | 1.567 | 1.567 | 65 | 0.326 |  | 1.000 | 0.326 |
| 34 |  | 1 | 1 | 1.915 | 1.915 | 65 | 0.326 |  | 1.000 | 0.326 |
| 35 |  | 1 | 1 | 1.478 | 1.478 | 65 | 0.326 |  | 1.000 | 0.326 |
| 36 |  | 1 | 1 | 7.329 | 7.329 | 65 | 0.326 |  | 1.000 | 0.326 |
| 37 |  | 3 | 1 | 0.204 | 0.204 | 65 | 0.326 |  | 1.000 | 0.326 |
| 38 |  | 3 | 8 | 4.748 | 37.985 | 65 | 0.326 |  | 1.000 | 0.326 |
| 39 |  | 3 | 4 | 0.002 | 0.008 | 65 | 0.326 |  | 1.000 | 0.326 |
| 40 |  | 3 | 4 | 4.750 | 19.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 41 |  | 3 | 1 | 2.404 | 2.404 | 65 | 0.326 |  | 1.000 | 0.326 |
| 42 |  | 3 | 1 | 2.304 | 2.304 | 65 | 0.326 |  | 1.000 | 0.326 |
| 43 |  | 3 | 1 | 2.504 | 2.504 | 65 | 0.326 |  | 1.000 | 0.326 |
| 44 |  | 3 | 1 | 0.800 | 0.800 | 65 | 0.326 |  | 1.000 | 0.326 |
| 45 |  | 3 | 1 | 11.600 | 11.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 46 |  | 3 | 2 | 8.600 | 17.200 | 65 | 0.326 |  | 1.000 | 0.326 |
| 47 |  | 3 | 2 | 3.040 | 6.080 | 65 | 0.326 |  | 1.000 | 0.326 |
| 48 |  | 4 | 1 | 2.792 | 2.792 | 65 | 0.326 |  | 1.000 | 0.326 |
| 49 |  | 4 | 6 | 0.990 | 5.940 | 65 | 0.326 |  | 1.000 | 0.326 |
| 50 |  | 4 | 6 | 1.100 | 6.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 51 |  | 4 | 1 | 4.208 | 4.208 | 65 | 0.326 |  | 1.000 | 0.326 |
| 52 |  | 4 | 1 | 3.112 | 3.112 | 65 | 0.326 |  | 1.000 | 0.326 |
| 53 |  | 4 | 1 | 4.288 | 4.288 | 65 | 0.326 |  | 1.000 | 0.326 |
| 54 |  | 4 | 1 | 1.600 | 1.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 55 |  | 4 | 1 | 3.240 | 3.240 | 65 | 0.326 |  | 1.000 | 0.326 |
| 56 |  | 4 | 1 | 4.560 | 4.560 | 65 | 0.326 |  | 1.000 | 0.326 |
| 57 |  | 4 | 1 | 2.908 | 2.908 | 65 | 0.326 |  | 1.000 | 0.326 |
| 58 |  | 4 | 1 | 3.292 | 3.292 | 65 | 0.326 |  | 1.000 | 0.326 |
| 59 |  | 4 | 1 | 2.492 | 2.492 | 65 | 0.326 |  | 1.000 | 0.326 |
| 60 |  | 4 | 1 | 4.508 | 4.508 | 65 | 0.326 |  | 1.000 | 0.326 |
| 61 |  | 4 | 1 | 2.796 | 2.796 | 65 | 0.326 |  | 1.000 | 0.326 |
| 62 |  | 4 | 1 | 3.404 | 3.404 | 65 | 0.326 |  | 1.000 | 0.326 |
| 63 | C0715 | 1~2 | 8 | 1.050 | 8.400 | 18 | 0.326 |  | 1.000 | 0.326 |
| 64 | C0915 | 1~4 | 20 | 1.350 | 27.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 65 | C0921 | 2 | 4 | 1.890 | 7.560 | 18 | 0.326 |  | 1.000 | 0.326 |
| 66 | C1015 | 1 | 10 | 1.500 | 15.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 67 | C1021 | 2 | 2 | 2.100 | 4.200 | 18 | 0.326 |  | 1.000 | 0.326 |
| 68 | C1121 | 4 | 6 | 2.310 | 13.860 | 18 | 0.326 |  | 1.000 | 0.326 |
| 69 | C1215 | 1,3 | 20 | 1.800 | 36.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 70 | C1221 | 2 | 2 | 2.520 | 5.040 | 18 | 0.326 |  | 1.000 | 0.326 |
| 71 | C1315 | 1,4~5 | 16 | 1.950 | 31.200 | 18 | 0.326 |  | 1.000 | 0.326 |
| 72 | C1515 | 1~2 | 19 | 2.250 | 42.750 | 18 | 0.326 |  | 1.000 | 0.326 |
| 73 | C1521 | 1 | 4 | 3.150 | 12.600 | 18 | 0.326 |  | 1.000 | 0.326 |
| 74 | C2121 | 2 | 9 | 4.410 | 39.690 | 18 | 0.326 |  | 1.000 | 0.326 |
| 75 | C2715 | 3 | 1 | 4.050 | 4.050 | 18 | 0.326 |  | 1.000 | 0.326 |
| 76 | C3615 | 2 | 1 | 5.400 | 5.400 | 18 | 0.326 |  | 1.000 | 0.326 |
| 77 | C4015 | 3 | 1 | 6.000 | 6.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 78 | C6615 | 2~3 | 2 | 9.900 | 19.800 | 18 | 0.326 |  | 1.000 | 0.326 |
| 立面总面积(㎡) | | | | | 642.498 | 综合太阳得热系数 | | | 1.000 | 0.326 |

3. 东向：

东-默认立面

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 窗太阳得热系数 | 外遮阳编号 | 外遮阳系数(含环境遮阳) | 综合太阳得热系数 |
| 1 |  | 1 | 2 | 3.570 | 7.140 | 65 | 0.326 |  | 1.000 | 0.326 |
| 2 |  | 1 | 4 | 3.360 | 13.440 | 65 | 0.326 |  | 1.000 | 0.326 |
| 3 |  | 1 | 1 | 17.220 | 17.220 | 65 | 0.326 |  | 1.000 | 0.326 |
| 4 |  | 1 | 1 | 0.420 | 0.420 | 65 | 0.326 |  | 1.000 | 0.326 |
| 5 |  | 1 | 1 | 1.260 | 1.260 | 65 | 0.326 |  | 1.000 | 0.326 |
| 6 |  | 1 | 1 | 16.590 | 16.590 | 65 | 0.326 |  | 1.000 | 0.326 |
| 7 |  | 1 | 1 | 21.756 | 21.756 | 65 | 0.326 |  | 1.000 | 0.326 |
| 8 |  | 2,4 | 2 | 20.600 | 41.200 | 65 | 0.326 |  | 1.000 | 0.326 |
| 9 |  | 3 | 1 | 20.000 | 20.000 | 65 | 0.326 |  | 1.000 | 0.326 |
| 10 |  | 3 | 2 | 1.900 | 3.800 | 65 | 0.326 |  | 1.000 | 0.326 |
| 11 |  | 3 | 1 | 3.420 | 3.420 | 65 | 0.326 |  | 1.000 | 0.326 |
| 12 | C0715 | 3 | 1 | 1.050 | 1.050 | 18 | 0.326 |  | 1.000 | 0.326 |
| 13 | C0915 | 1~5 | 15 | 1.350 | 20.250 | 18 | 0.326 |  | 1.000 | 0.326 |
| 14 | C1015 | 4~5 | 4 | 1.500 | 6.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 15 | C1315 | 4~5 | 21 | 1.950 | 40.950 | 18 | 0.326 |  | 1.000 | 0.326 |
| 16 | C1415 | 2 | 2 | 2.070 | 4.140 | 18 | 0.326 |  | 1.000 | 0.326 |
| 17 | C1515 | 3 | 1 | 2.250 | 2.250 | 18 | 0.326 |  | 1.000 | 0.326 |
| 18 | C4015 | 2 | 2 | 6.000 | 12.000 | 18 | 0.326 |  | 1.000 | 0.326 |
| 19 | C4515 | 2 | 1 | 6.750 | 6.750 | 18 | 0.326 |  | 1.000 | 0.326 |
| 20 | C6615 | 3 | 1 | 9.900 | 9.900 | 18 | 0.326 |  | 1.000 | 0.326 |
| 立面总面积(㎡) | | | | | 249.536 | 综合太阳得热系数 | | | 1.000 | 0.326 |

4. 西向：

西-默认立面

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 序号 | 门窗编号 | 楼层 | 数量 | 单个面积（㎡） | 总面积（㎡） | 构造编号 | 窗太阳得热系数 | 外遮阳编号 | 外遮阳系数(含环境遮阳) | 综合太阳得热系数 |
| 1 |  | 1 | 1 | 3.591 | 3.591 | 65 | 0.326 |  | 1.000 | 0.326 |
| 2 |  | 1 | 2 | 3.150 | 6.300 | 65 | 0.326 |  | 1.000 | 0.326 |
| 3 |  | 1 | 1 | 0.420 | 0.420 | 65 | 0.326 |  | 1.000 | 0.326 |
| 4 |  | 1 | 1 | 2.919 | 2.919 | 65 | 0.326 |  | 1.000 | 0.326 |
| 5 |  | 1 | 1 | 20.790 | 20.790 | 65 | 0.326 |  | 1.000 | 0.326 |
| 6 |  | 1 | 3 | 3.360 | 10.080 | 65 | 0.326 |  | 1.000 | 0.326 |
| 7 |  | 1 | 1 | 5.040 | 5.040 | 65 | 0.326 |  | 1.000 | 0.326 |
| 8 |  | 1 | 1 | 1.260 | 1.260 | 65 | 0.326 |  | 1.000 | 0.326 |
| 9 |  | 1 | 1 | 3.780 | 3.780 | 65 | 0.326 |  | 1.000 | 0.326 |
| 10 |  | 1 | 1 | 2.100 | 2.100 | 65 | 0.326 |  | 1.000 | 0.326 |
| 11 |  | 1 | 1 | 7.640 | 7.640 | 65 | 0.326 |  | 1.000 | 0.326 |
| 12 |  | 1 | 1 | 3.600 | 3.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 13 |  | 1 | 1 | 8.550 | 8.550 | 65 | 0.326 |  | 1.000 | 0.326 |
| 14 |  | 1 | 1 | 4.960 | 4.960 | 65 | 0.326 |  | 1.000 | 0.326 |
| 15 |  | 2 | 1 | 34.600 | 34.600 | 65 | 0.326 |  | 1.000 | 0.326 |
| 16 |  | 2 | 1 | 0.812 | 0.812 | 65 | 0.326 |  | 1.000 | 0.326 |
| 17 |  | 2 | 1 | 0.800 | 0.800 | 65 | 0.326 |  | 1.000 | 0.326 |
| 18 |  | 2 | 1 | 1.700 | 1.700 | 65 | 0.326 |  | 1.000 | 0.326 |
| 19 |  | 2 | 1 | 0.252 | 0.252 | 65 | 0.326 |  | 1.000 | 0.326 |
| 20 |  | 2 | 3 | 0.960 | 2.880 | 65 | 0.326 |  | 1.000 | 0.326 |
| 21 |  | 2 | 3 | 2.040 | 6.120 | 65 | 0.326 |  | 1.000 | 0.326 |
| 22 |  | 2 | 1 | 0.388 | 0.388 | 65 | 0.326 |  | 1.000 | 0.326 |
| 23 |  | 2 | 1 | 0.368 | 0.368 | 65 | 0.326 |  | 1.000 | 0.326 |
| 24 |  | 2 | 1 | 0.380 | 0.380 | 65 | 0.326 |  | 1.000 | 0.326 |
| 25 | C0715 | 2~4 | 8 | 1.050 | 8.400 | 18 | 0.326 |  | 1.000 | 0.326 |
| 26 | C0915 | 1~5 | 28 | 1.350 | 37.800 | 18 | 0.326 |  | 1.000 | 0.326 |
| 27 | C1015 | 2 | 1 | 1.500 | 1.500 | 18 | 0.326 |  | 1.000 | 0.326 |
| 28 | C1215 | 2~3 | 6 | 1.800 | 10.800 | 18 | 0.326 |  | 1.000 | 0.326 |
| 29 | C1315 | 2,4~5 | 13 | 1.950 | 25.350 | 18 | 0.326 |  | 1.000 | 0.326 |
| 30 | C1415 | 1~3 | 10 | 2.070 | 20.700 | 18 | 0.326 |  | 1.000 | 0.326 |
| 31 | C1515 | 2~3 | 5 | 2.250 | 11.250 | 18 | 0.326 |  | 1.000 | 0.326 |
| 32 | C2118 | 1 | 1 | 3.780 | 3.780 | 18 | 0.326 |  | 1.000 | 0.326 |
| 33 | C4515 | 1 | 1 | 6.750 | 6.750 | 18 | 0.326 |  | 1.000 | 0.326 |
| 立面总面积(㎡) | | | | | 255.660 | 综合太阳得热系数 | | | 1.000 | 0.326 |

### 总体热工性能

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 朝向 | 立面 | 面积 | 传热系数 | 综合太阳得热系数 | 窗墙比 |
| 南向 | 南-默认立面 | 900.95 | 1.60 | 0.33 | 0.47 |
| 北向 | 北-默认立面 | 642.50 | 1.60 | 0.33 | 0.33 |
| 东向 | 东-默认立面 | 249.54 | 1.60 | 0.33 | 0.22 |
| 西向 | 西-默认立面 | 255.66 | 1.60 | 0.33 | 0.22 |
| 综合平均 |  | 2048.64 | 1.60 | 0.33 | 0.33 |

注：本表所统计的外窗包含凸窗。

# 房间类型

## 房间表

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 房间类型 | 空调温度 ℃ | 供暖温度 ℃ | 新风量 | 人员密度 | 照明功率 密度 | 电器设备 功率 |
| 办公-会议室 | 26 | 20 | 30(m3/h.人) | 2.5(㎡/人) | 11(W/㎡) | 5(W/㎡) |
| 办公-其它 | 26 | 20 | 30(m3/h.人) | 20(㎡/人) | 11(W/㎡) | 5(W/㎡) |
| 办公-普通办公室 | 26 | 20 | 30(m3/h.人) | 8(㎡/人) | 9(W/㎡) | 15(W/㎡) |
| 办公-走廊 | 26 | 20 | 30(m3/h.人) | 50(㎡/人) | 5(W/㎡) | 0(W/㎡) |
| 宾馆-4星级客房 | 25 | 22 | 40(m3/h.人) | 30(㎡/人) | 15(W/㎡) | 13(W/㎡) |
| 空房间 | － | － | 20(m3/h.人) | 50(㎡/人) | 0(W/㎡) | 0(W/㎡) |

## 作息时间表

详见附录

# 暖通空调系统

## 系统类型

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 系统编号 | 系统类型 | 供冷 能效比 | 供热 能效比 | 面积(㎡) | 包含的房间 |
| 默认 | 双管制风机盘管 | － | － | 9062.25 | 所有房间 |

## 制冷系统

### 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 |
| 水冷-螺杆式冷水机组 | 水冷-螺杆式冷水机组 | 100 | 500 | 5.00 | 1 |

### 水泵系统

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 类型 | 轴功率(kW) | 扬程(m) | 供回水温差(°C) | 设计工作点效率(%) | 台数 |
| 冷却水泵 | 10 | 25 | 5 | 80 | 1 |
| 冷冻水泵 | 8 | 30 | 5 | 80 | 1 |

### 运行工况

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 负荷率 (%) | 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) |
| 25 | 125 | 30 | 4.17 | 10 | 8 | 0 |
| 50 | 250 | 55 | 4.55 | 10 | 8 | 0 |
| 75 | 375 | 75 | 5.00 | 10 | 8 | 0 |
| 100 | 500 | 100 | 5.00 | 10 | 8 | 0 |

### 制冷能耗

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 负荷区间 (%) | 区间负荷 (kWh) | 运行时长(h) | 性能系数 (COP) | 制冷机组 (kWh) | 冷却水泵 (kWh) | 冷冻水泵 (kWh) | 冷却塔 (kWh) |
| 0~25 | 12031 | 468 | 4.17 | 2887 | 4680 | 3744 | 0 |
| 25~50 | 26570 | 141 | 4.55 | 5845 | 1410 | 1128 | 0 |
| 50~75 | 55970 | 177 | 5.00 | 11194 | 1770 | 1416 | 0 |
| 75~100 | 96535 | 219 | 5.00 | 19307 | 2190 | 1752 | 0 |
| >100 | 217073 | 361 | － | 36100 | 3610 | 2888 | 0 |
| 合计 | 408178 | 1366 |  | 75334 | 13660 | 10928 | 0 |

## 供暖系统

### 热泵系统

#### 热泵机组

|  |  |  |  |
| --- | --- | --- | --- |
| 名称 | 额定制热量(kW) | 额定性能系数 COP | 台数 |
| 风冷-螺杆式 | 500 | 4.00 | 1 |

#### 热水循环泵

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 类型 | 轴功率(kW) | 扬程(m) | 供回水温差(°C) | 设计工作点效率(%) | 台数 |
| 单速 | 8 | 30 | 15 | 80 | 1 |

#### 运行工况

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 负荷率(%) | 机组制热量(kW) | 机组功率(kW) | 性能系数(COP) | 供暖水泵功率(kW) |
| 25 | 125 | 31.25 | 4.00 | 8 |
| 50 | 250 | 62.5 | 4.00 | 8 |
| 75 | 375 | 93.75 | 4.00 | 8 |
| 100 | 500 | 125 | 4.00 | 8 |

#### 制热能耗

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 负荷区间 (%) | 区间负荷 (kWh) | 运行时长 (h) | 性能系数 (COP) | 热泵机组 (kWh) | 供暖水泵 (kWh) |
| 0~25 | 22455 | 719 | 4.00 | 5614 | 5752 |
| 25~50 | 48122 | 249 | 4.00 | 12031 | 1992 |
| 50~75 | 97197 | 315 | 4.00 | 24299 | 2520 |
| 75~100 | 59712 | 140 | 4.00 | 14928 | 1120 |
| >100 | 130766 | 185 | － | 23125 | 1480 |
| 合计 | 358252 | 1608 |  | 79996 | 12864 |

## 空调风机

### 独立新排风

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 系统编号 | 新风量 (m3/h) | 单位风量耗功率 W/(m3/h) | 风机功率(W) | 运行时长(h) | 新风电耗(kWh) |
| 默认 | 31081 | 0.24 | 7459 | 8760 | 65344 |
| 合计 | | | | | 65344 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 系统编号 | 排风量 (m3/h) | 排风比 | 单位风量耗功率W/(m3/h) | 风机功率(W) | 运行时长(h) | 排风电耗 (kWh) |
| 默认 | 24865 | 0.8 | 0.24 | 5968 | 8760 | 52275 |
| 合计 | | | | | | 52275 |

### 风机盘管

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 系统编号 | 总功率(W) | 同时使用系数 | 运行时长(h) | 风机盘管电耗(kWh) |
| 默认 | 400 | 1 | 2973 | 1189 |
| 合计 | | | | 1189 |

# 照明

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 房间类型 | 单位面积电耗 (kWh/㎡) | 房间个数 | 房间合计面积 (㎡) | 合计电耗 (kWh) |
| 办公-会议室 | 25.99 | 2 | 179 | 4653 |
| 办公-其它 | 25.99 | 9 | 142 | 3683 |
| 办公-普通办公室 | 15.12 | 81 | 7268 | 109896 |
| 办公-走廊 | 11.81 | 11 | 1555 | 18363 |
| 宾馆-4星级客房 | 50.37 | 18 | 398 | 20056 |
| 空房间 | 0.00 | 54 | 1085 | 0 |
| 总计 | | | | 156651 |

# 插座设备

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 房间类型 | 单位面积电耗 (kWh/㎡) | 房间个数 | 房间合计面积 (㎡) | 合计电耗 (kWh) |
| 办公-会议室 | 11.06 | 2 | 179 | 1981 |
| 办公-其它 | 11.06 | 9 | 142 | 1568 |
| 办公-普通办公室 | 35.25 | 81 | 7268 | 256207 |
| 办公-走廊 | 0.00 | 11 | 1555 | 0 |
| 宾馆-4星级客房 | 18.98 | 18 | 398 | 7557 |
| 空房间 | 0.00 | 54 | 1085 | 0 |
| 总计 | | | | 267312 |

# 排风机

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 额定功率 (kW) | 台数 | 使用系数 | 运行时间 (h/天) | 年运行天数 | 全年电耗 (kWh) |
| 5 | 10 | 0.8 | 5 | 365 | 73000 |
| 总计 | | | | | 73000 |

注：此类风机指非空调区域排风机

# 生活热水

热水温差(℃)：45, 日照辐照量(kJ/㎡.天)：16340，年运行天数：365

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 分区 | 用水 定额 (L·人/d) | 供应 人数 | 年使用 天数 | 所需 能耗 (kWh) | 集热器 面积 (㎡) | 集热器 效率 | 热损失 系数 | 太阳能 供热 (kWh) |
| 办公 | 10 | 100 | 365 | 6408.15 | 100 | 0.45 | 0.15 | 6408.15 |
| 总计 | | | | 6408 |  | | | 6408 |

# 电梯

无

# 光伏发电

日照辐照量(kJ/㎡.天)：16340，年运行天数：365

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 光伏板面积 (㎡) | 单位面积 发电参数 | 光伏系统效率 | 光伏电池性能衰减修正系数 | 全年电耗 (kWh) |
| 330 | 0.4 | 0.8 | 0.9 | 157 |
| 总计 | | | | 157 |

# 计算结果

## 逐月电耗

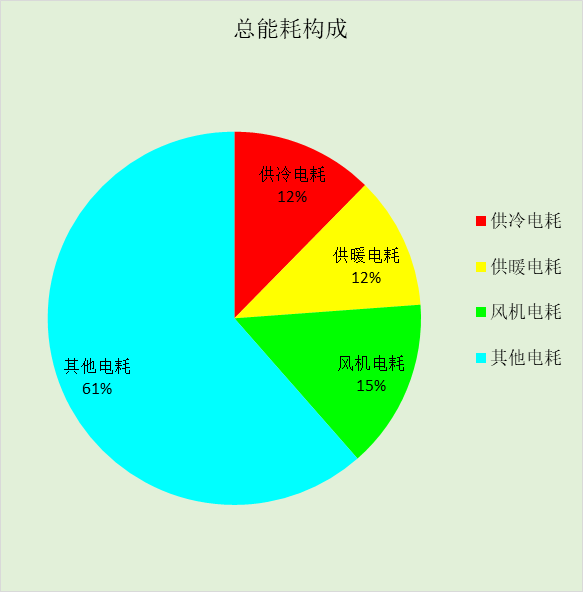
注:供冷供暖为冷热源及输配水泵电耗，热水为扣减太阳能后电耗，所有数据单位kWh/㎡。

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 月 | 供冷 | 供暖 | 空调风机 | 照明 | 插座设备 | 排风机 | 电梯 | 热水 |
| 1 | 0.00 | 3.19 | 1.01 | 1.38 | 2.36 | － | － | － |
| 2 | 0.00 | 2.04 | 0.92 | 1.09 | 1.83 |
| 3 | 0.02 | 1.27 | 1.01 | 1.32 | 2.26 |
| 4 | 0.06 | 0.43 | 0.98 | 1.32 | 2.26 |
| 5 | 1.08 | 0.00 | 1.01 | 1.38 | 2.36 |
| 6 | 1.78 | 0.00 | 0.98 | 1.21 | 2.05 |
| 7 | 3.31 | 0.00 | 1.02 | 1.43 | 2.47 |
| 8 | 3.05 | 0.00 | 1.01 | 1.38 | 2.36 |
| 9 | 1.31 | 0.02 | 0.98 | 1.26 | 2.15 |
| 10 | 0.18 | 0.12 | 1.01 | 1.27 | 2.15 |
| 11 | 0.00 | 0.68 | 0.98 | 1.32 | 2.26 |
| 12 | 0.00 | 2.54 | 1.01 | 1.38 | 2.36 |
| 合计 | 10.78 | 10.30 | 11.94 | 15.75 | 26.87 | 7.34 | 0.00 | 0.00 |

## 全年能耗

注:负荷和电耗均为考虑热回收后的值

|  |  |  |  |
| --- | --- | --- | --- |
| 能耗分类 | 能耗子类 | 设计建筑  (kWh/㎡) | 备注 |
| 建筑负荷 | 耗冷量 | 41.03 |  |
| 耗热量 | 36.01 |  |
| 冷热合计 | 77.04 |  |
| 热回收 | 供冷 | 0.00 |  |
| 供暖 | 0.00 |  |
| 冷热合计 | 0.00 |  |
| 供冷电耗  (Ec) | 中央冷源 | 7.57 |  |
| 冷却水泵 | 1.37 |  |
| 冷冻水泵 | 1.10 |  |
| 冷却塔 | 0.00 |  |
| 多联机/单元式空调 | 0.00 |  |
| 供冷合计 | 10.04 |  |
| 供暖电耗  (Eh) | 中央热源 | 8.04 |  |
| 供暖水泵 | 1.29 |  |
| 多联机/单元式热泵 | 0.00 |  |
| 供暖合计 | 9.33 |  |
| 风机电耗  (Ef) | 新排风 | 11.82 |  |
| 风机盘管 | 0.12 |  |
| 多联机室内机 | 0.00 |  |
| 全空气系统 | 0.00 |  |
| 风机合计 | 11.94 |  |
| 其他电耗  (Eo) | 照明 | 15.75 |  |
| 插座设备 | 26.87 |  |
| 电梯 | 0.00 |  |
| 独立排风机 | 7.34 |  |
| 生活热水 | 0.00 | 扣减了太阳能热水 |
| 其他合计 | 49.95 |  |
| 可再生能源  (Er) | 太阳能热水(Es) | 0.64 |  |
| 光伏发电(Ep) | 15.83 |  |
| 合计 | 16.47 |  |
| 建筑总能耗(E1)：电耗(kWh/㎡) | | 65.45 | E1=Ec+Eh+Ef+Eo-Ep |



# 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 |
| 办公-会议室 | 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 |
| 办公-其它 | 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 |
| 办公-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 |
| 办公-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 |
| 宾馆-4星级客房 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 70 | 70 | 70 | 70 | 70 | 70 |
| 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 70 | 70 | 70 | 70 | 70 | 70 |
| 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 | 20 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 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 |
| 办公-会议室 | 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 |
| 办公-其它 | 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 |
| 办公-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 |
| 办公-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 |
| 宾馆-4星级客房 | 10 | 10 | 10 | 10 | 10 | 10 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 50 | 50 | 60 | 90 | 90 | 90 | 90 | 80 | 10 | 10 |
| 10 | 10 | 10 | 10 | 10 | 10 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 50 | 50 | 60 | 90 | 90 | 90 | 90 | 80 | 10 | 10 |
| 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 |
| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 50 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 80 | 90 | 100 | 100 | 100 | 10 | 10 | 10 |

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 |
| 办公-会议室 | 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 |
| 办公-其它 | 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 |
| 办公-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 |
| 办公-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 |
| 宾馆-4星级客房 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 80 | 80 | 80 | 80 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 80 | 80 | 80 | 80 | 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 | 30 | 50 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 70 | 50 | 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)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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