

消防设计专篇

| 一 设计依据 | | | | | 2、安全疏散和消防电梯 | | | | | |
|----------------------------------|--|----------------------|-------------------|-------------|--|-----------|--------|-----------------------|--------------|---|
| 1、《建筑设计防火规范》 | | GB50016–2014(2018年版) | | | 疏散楼梯 | 2 | 出屋面疏散楼 | | 敞开楼梯间数量(个) | |
| 2、《建筑内部装修设计防火规范》 | | GB50222–2017 | | | 数量(个) | | 梯数量(个) | | 封闭楼梯间数量(个) | 2 |
| 3、《消防应急照明和疏散指示技术标准》 | | GB51309–2018 | | | | | | | 防烟楼梯间数量(个) | |
| 4、《建筑给水排水设计标准》 | | GB50015–2019 | | | | | | | 疏散走道最小净宽度(m) | |
| 5、《建筑材料及制品燃烧性能分级》 | | GB 8624–2012 | | | | | | | | |
| 6、《建筑防烟排烟技术标准》 | | GB 51251–2017 | | | 防烟楼梯 | 合用前室数量（个） | | 合用前室最小面积(m2) | | |
| 7、《民用建筑电气设计标准》 | | GB51348–2019 | | | 间前室 | 独用前室数量（个） | | 独用前室最小面积(m2) | | |
| 8、《新疆维吾尔自治区建筑外保温系统材料应用防火暂行规定》的通知 | | | | | 剪刀楼梯间防烟前室设置方式 | | | 分别设置 [/] 合用设置 [/] | | |
| | | | | | 通往前室和楼梯间的门及开向前室的户门 | | | | | |
| 二 项目概况 | | | | | 单元住宅从第十九层起每层相邻单元是否设有连廊 | | | | | |
| 建设单位 | 奇台县第五小学 | | | | 位于两个安全出口之间的最远房间(m) | | | | | |
| 工程名称 | 奇台县第五小学育馨楼、书馨楼暖气管网及德馨楼、芳馨楼、多功能厅消防管网设施改造维修项目–芳馨楼（女生宿舍楼）消防改造 | | | | 位于袋形走道两侧或尽端的最远房间（m） | | | | | |
| | | | | | 厂房内任一点至最近安全出口（m） | | | | | |
| 工程地点 | 奇台县 | 工程号 | HT–YC2026C–015–03 | | 其它房间内最远一点至疏散门(m) | | | 6.5 | | |
| 工程特性及 | 原项目地上三层 | | | | 3、建筑构造 | | | | | |
| 每层使用功能 | 本次消防改造工程为整栋建筑,建筑面积为2530.46m2。 | | | | * 防火构造 | | | | | |
| | 使用功能为宿舍。 | | | | 1)建筑物内的管道井、电缆井每层在楼板处用相当于楼板耐火极限的不燃烧体做防火分 | | | | | |
| | | | | | 隔。室内设备、电气管道、风道等穿防火墙处应采用相当于防火墙耐火极限的不燃烧体 | | | | | |
| 建筑类别 | 多层居住建筑 | 耐火等级 | 地上二级 | | 材料将周围缝隙填塞密实。电缆井、管道井与房间、走道等相连通的孔洞，其空隙应采用防火封堵材料封堵，具体的封堵措施参《建筑防火封堵应用技术标准》 | | | | | |
| 建筑层数 | 地上三层 | 改造总建筑面积:(平方米) | 2530.46平方米 | | GB 51410–2020中的详细要求。 | | | | | |
| 建筑高度 | 11.5米 | 改造地上建筑面积:(平方米) | 2530.46平方米 | | 2)当建筑物的外墙为不燃烧体时，紧靠防火墙两侧的门窗洞之间最近边缘的水平距离 | | | | | |
| | | | | | 不应小于2m，但装有固定窗扇、或火灾时可自动关闭的乙级防火窗时，该距离可不限， | | | | | |
| | | | | | 详建筑该部位设计。垂直单元间防火墙处两单元窗户(或门)须大于等于4米。不满足以 | | | | | |
| | | | | | 上条件的均设乙级防火门窗。 | | | | | |
| | | | | | * 屋面防水层上做30厚C20细石混凝土防火保护层。 | | | | | |
| | | | | | * 屋面与外墙、出屋面竖井及屋面洞口之间设置500宽A级竖丝岩棉板防火隔离带分隔。 | | | | | |
| | | | | | * 室外墙体及屋面伸缩缝处均用岩棉板填实(双墙处入缝300) | | | | | |
| | | | | | * 玻璃幕墙、石材幕墙在每层楼板处采用防火封堵材料封堵，做法为：采用岩棉板 | | | | | |
| | | | | | (A级)封堵，高度不小于300，防火封堵处材料上下以1.5厚镀锌钢板承托封严。 | | | | | |
| | | | | | * 建筑防烟分区用墙、梁、挡烟垂壁(精装修设计中，应采用满足防火时限的材料)进 | | | | | |
| | | | | | 行分隔，防烟分区详设备专业图纸。 | | | | | |
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| | | | | | 1.排烟 | | | | | |
| | | | | | 自然排烟 | 主要自然排烟场所 | 面积 | 所需排烟窗或排烟口面积 | 可开启的外窗或排烟口面积 | |
| | | | | | | 防烟分区：1–1 | 177.59 | 两端各两平方米 | 两端各两平方米 | |
| | | | | | | 防烟分区：2–1 | 136.03 | 两端各两平方米 | 两端各两平方米 | |
| | | | | | | 防烟分区：3–1 | 136.03 | 两端各两平方米 | 两端各两平方米 | |
| 四 建筑设计 | | | | | | | | | | |
| 1、本次室内装修及消防改造工程防火和防烟分区 | | | | | | | | | | |
| 建筑主体 | 标准层 | 防火分区 | 其中最大防火 | 防火分区材料(防火墙、 | | | | | | |
| 层数 | 面积(m2) | 数量(个) | 分区面积(m2) | 防火门或防火卷帘) | | | | | | |
| 1F | 841.38 | 1 | 841.38 | | | | | | | |
| 2F | 844.54 | 1 | 844.54 | | | | | | | |
| 3F | 844.54 | 1 | 844.54 | | | | | | | |
| 最大防烟分区面积(平方米) | | 844.54 | 排 烟 方 式 | | 自然排烟 | | | | | |
| 内走道长度（m） | | | | | | | | | | |
| 建筑防火措施 | | 每层之间岩棉防火隔离带封堵 | | | | | | | | |
| 消防控制室位置 | | | | | | | | | | |
| 消防控制室是否直通室外 | | | | | | | | | | |
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