

受控

山东省建筑标准设计

楼梯配件

DBJT14—2

图集号:L96J401

1998

跟多资料加微信公众号jianzhu118

楼 梯 配 件

批准部门：山东省建设委员会 批准文号：鲁建设发[1997]365号
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目 录	1
设计说明	2
楼梯平面形式示例	3
室内楼梯：木扶手金属栏杆	5
金属扶手金属栏杆	15
木扶手玻璃栏板	18
金属扶手玻璃栏板	19
木扶手木栏杆	22
钢筋混凝土栏板	25
幼儿扶手楼梯栏杆	27
小开间楼梯栏杆	29
楼梯间护窗栏杆	30
室外楼梯：室外楼梯金属栏杆	32
室外楼梯钢筋混凝土栏板	33

录

楼梯配件及通用详图：

靠墙扶手	34
木扶手断面形式	35
扶手末端与墙柱连接	37
栏杆花饰详图	38
栏杆节点大样	39
栏杆与踏步连接大样	40
预埋件	42
踏步防滑条	43
踏步压毡棍	44
楼梯扶手弯头处理	45
栏杆法兰	46

设计说明

一、适用范围：

1. 本图集代替原省标《楼梯》LJ107, 适用于民用及工业建筑。

二、设计依据：

1. 《民用建筑设计通则》JGJ 37-87。

2. 《建筑楼梯模数协调标准》GBJ101-87。

三、设计内容：

1. 楼梯栏杆(板)高度(按踏步宽度中心至扶手上皮的高度)规定室内楼梯1000mm, 室外楼梯1150mm, 幼儿楼梯600mm。

2. 本图集有多种类型和多种材料组成的楼梯栏杆及配件, 可直接采用。

3. 本图集有多种类型的扶手, 可直接采用。如选用不同高度扶手时, 应使栏杆总高度保持不变。

4. 凡采用压毡棍的楼梯, 踏步宽度应不小于300。

四、施工要求：

1. 楼梯配件应制作安装精细, 尺寸准确, 各部位做法应符合现行施工验收规范及操作规程。

2. 木扶手及木花饰采用硬木制作, 含水率 $\leq 12\%$, 油漆及颜色由具体设计确定。

3. 金属配件(不锈钢、铜、铝合金除外)需先除锈刷防锈漆两道, 再刷调合漆两道, 面漆及颜色由具体设计确定。

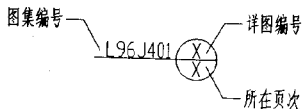
4. 凡木砖及木制品与砌体接触部分均应做防腐处理。

五、选用方法：

1. 本图集所注尺寸除注明外均以毫米为单位。

2. 除图中注明外所有钢管直径均为外径尺寸。

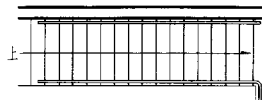
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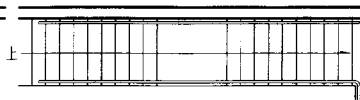
设计说明

图集号 L96

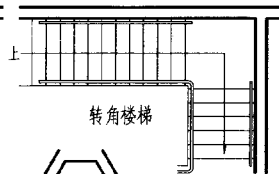
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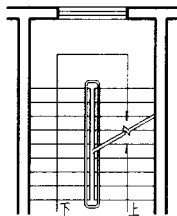
单跑直楼梯



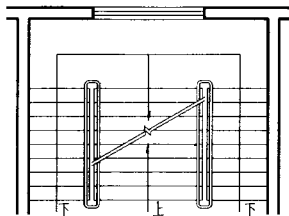
双跑直楼梯



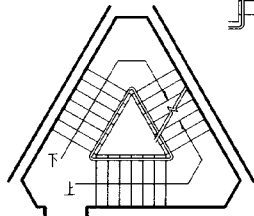
转角楼梯



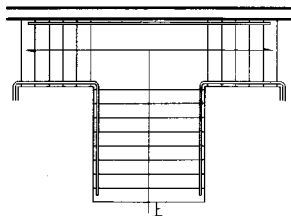
双跑平行楼梯



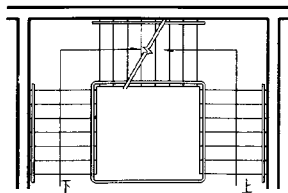
双分平行楼梯



三角形三跑楼梯



双分转角楼梯



三跑楼梯

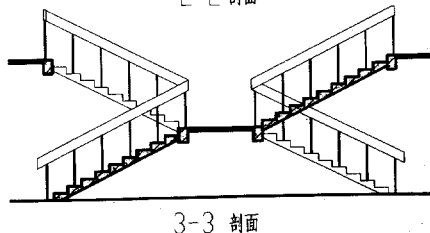
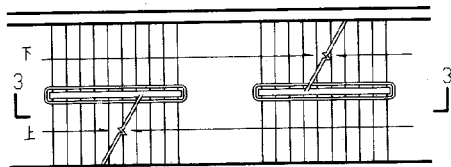
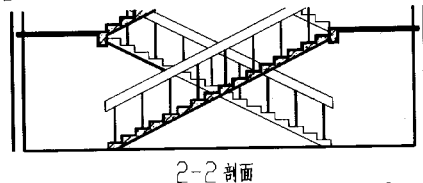
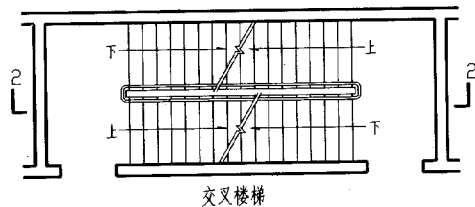
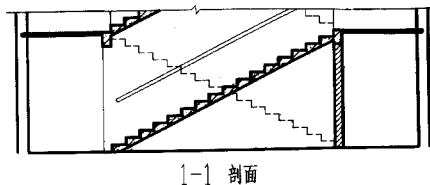
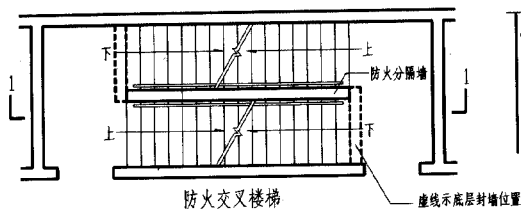
注 1. 本图所列楼梯形式仅为示意, 设计人设计时应符合现行的有关规范和规定。

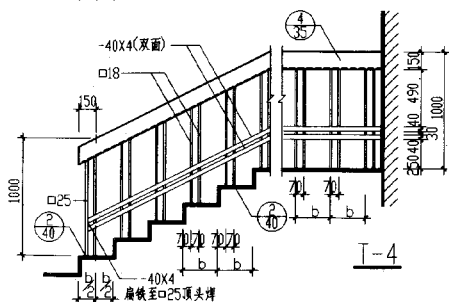
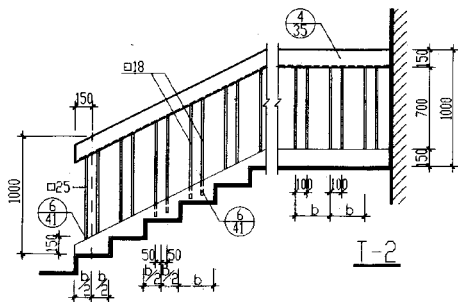
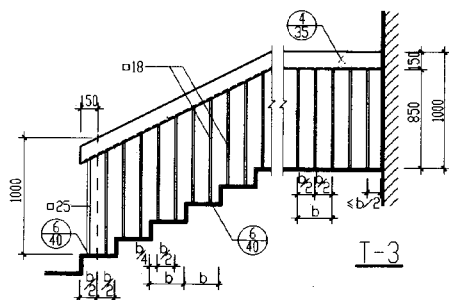
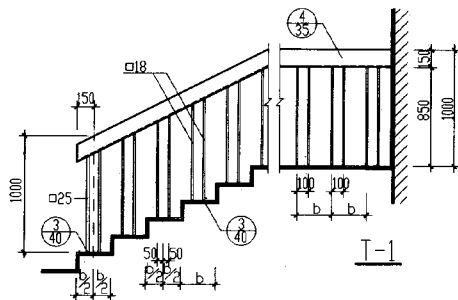
2. 楼梯段宽度大于1500毫米时应设双面扶手。

楼梯平面形式示例(一)

图集号 L96J401

页号 3

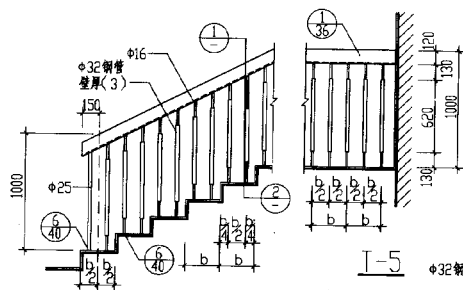




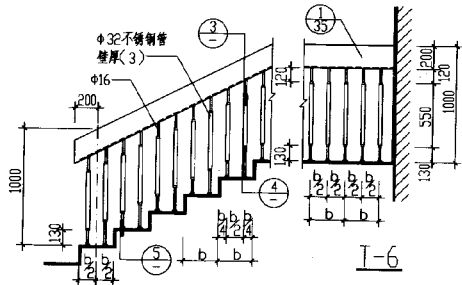
木扶手金属栏杆(-)

图集号 L96J401

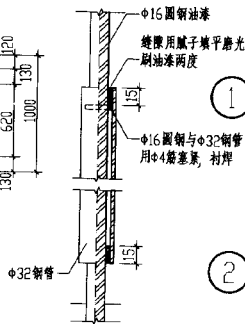
页号 5



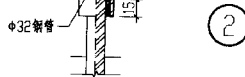
I-5



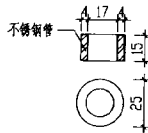
I-6



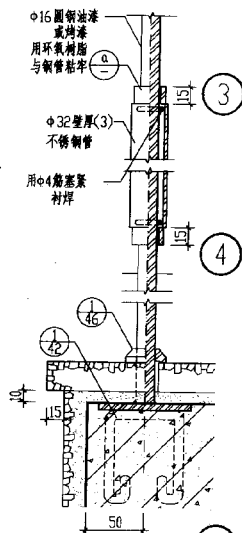
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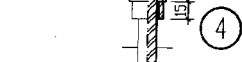
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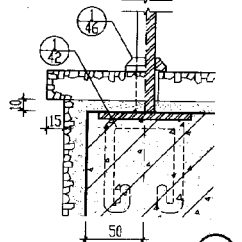
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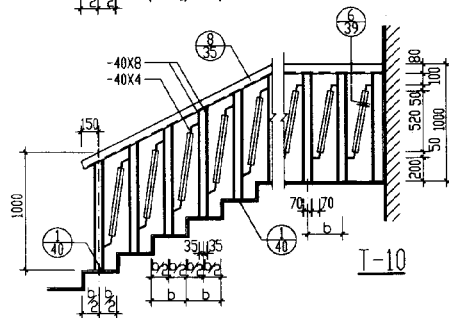
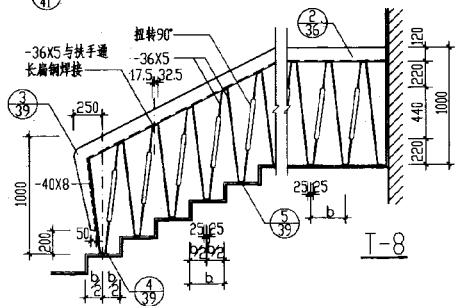
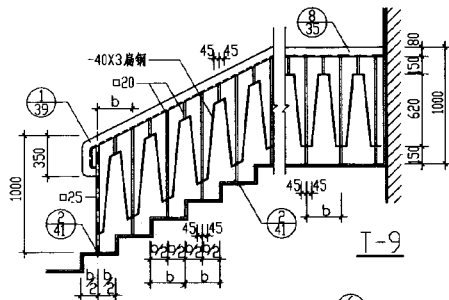
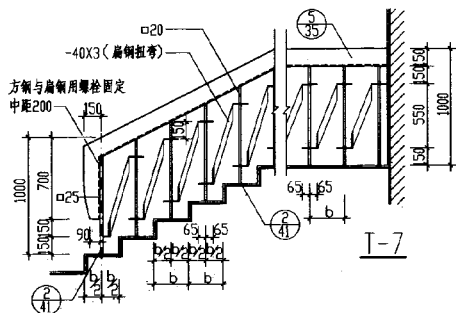
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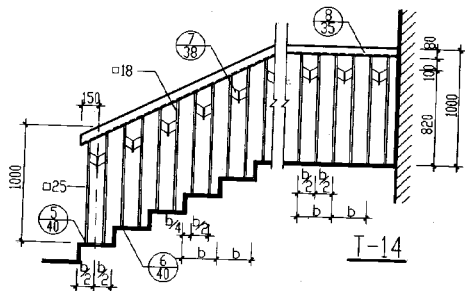
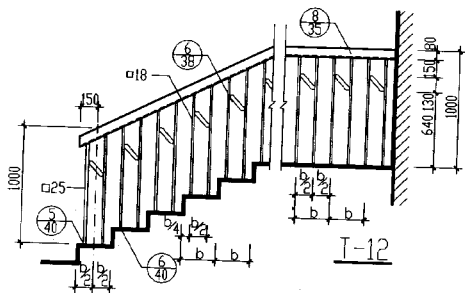
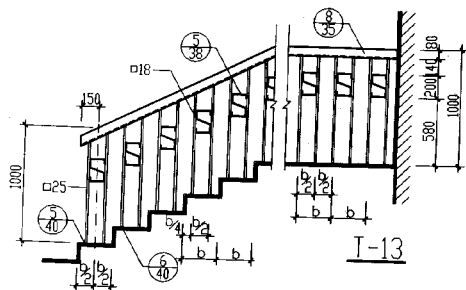
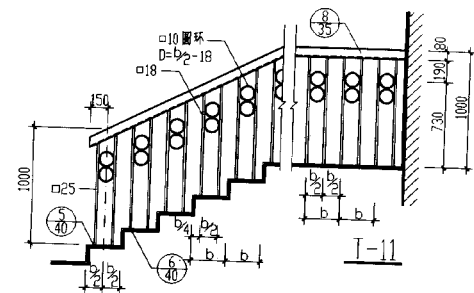
5



木扶手金属栏杆(三)

图集号 L96J401

页号 7

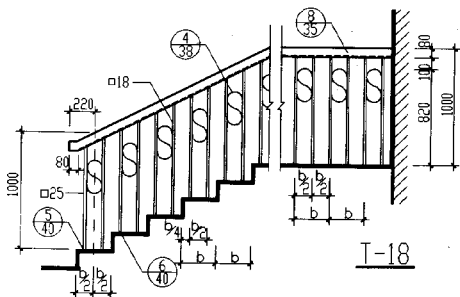
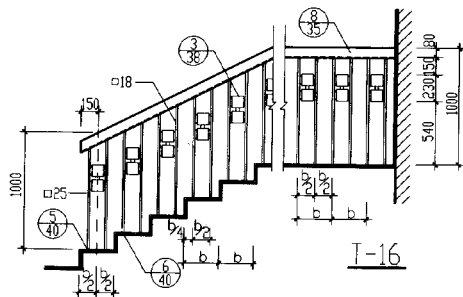
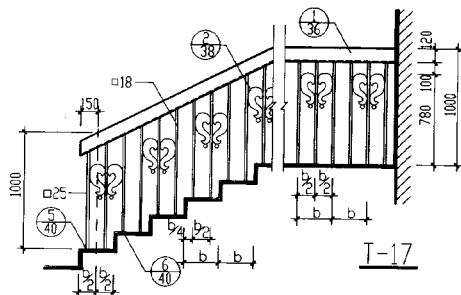
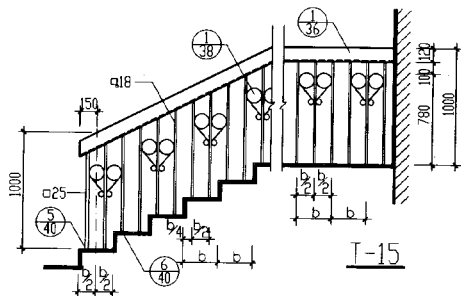


注：栏杆与花饰焊接。

木扶手金属栏杆(四)

图集号 L96.J401

页号 8



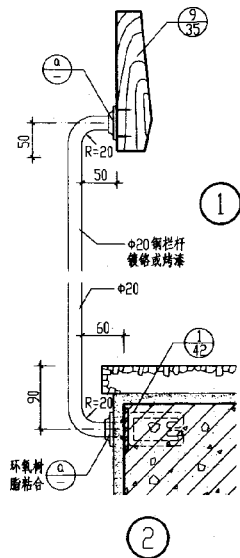
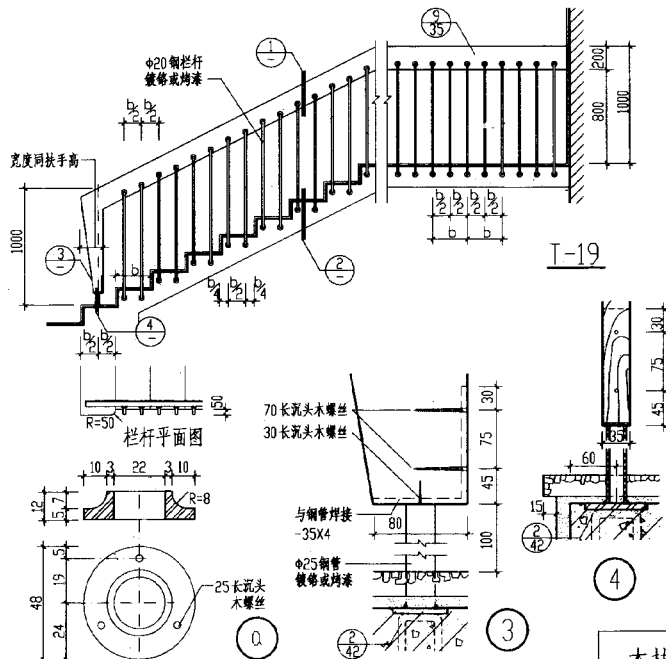
注 栏杆与花饰焊接。

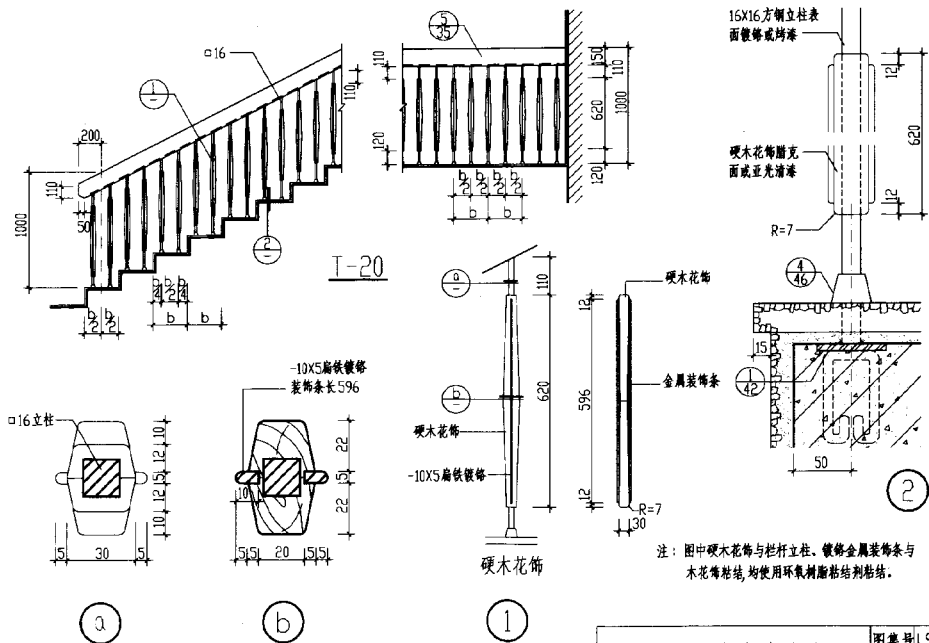
木扶手金属栏杆(五)

图集号	L96J401
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页号 9

工程名称	工程名称	工程名称
设计单位	设计单位	设计单位
设计人	设计人	设计人
审核人	审核人	审核人
日期	日期	日期



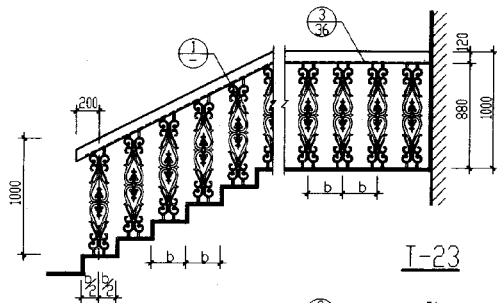


注：图中硬木花饰与栏杆立柱、镀锌金属装饰条与木花饰粘结，均使用环氧树脂粘剂粘结。

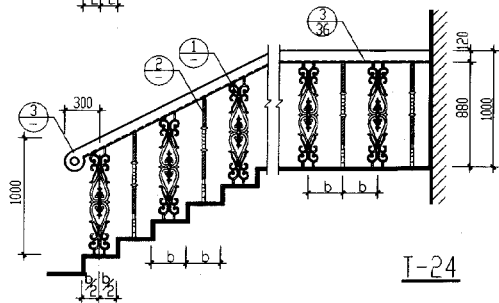
木扶手金属栏杆(七)



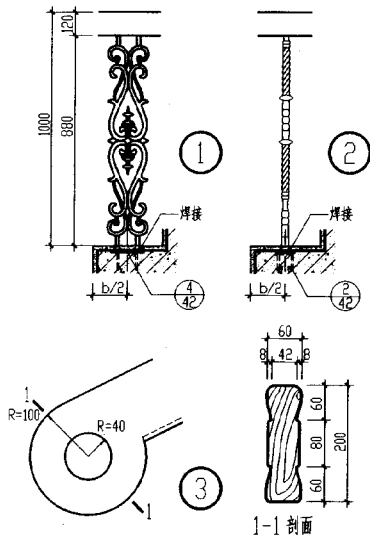
③



I-23



I-24



注: 1. 铸铁栏杆为成品生产。

2. 本图仅为示意, 选用时可直接到厂家订货。

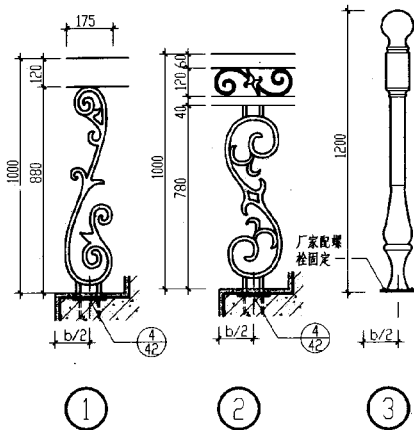
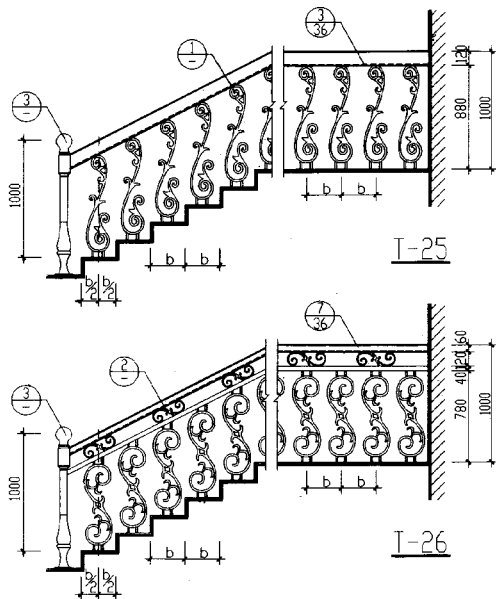
3. 铸铁花饰与预埋件、扁钢连接均用不锈钢焊条或506焊条焊接。

木扶手金属栏杆(九)

图集号 L96J401

页号 13

校核	设计	制图
张	张	张
张	张	张
张	张	张

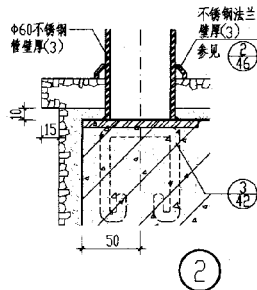
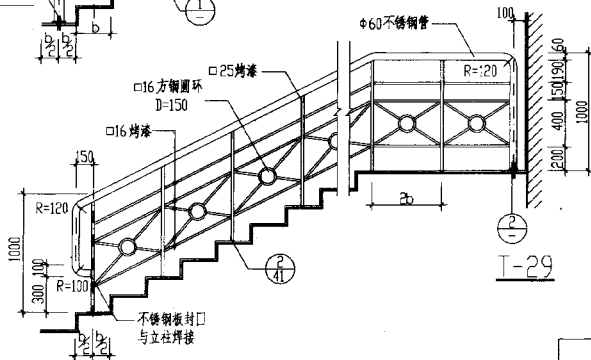
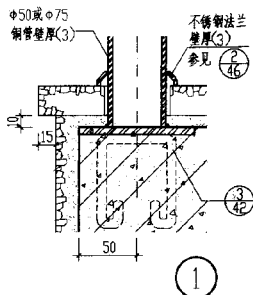
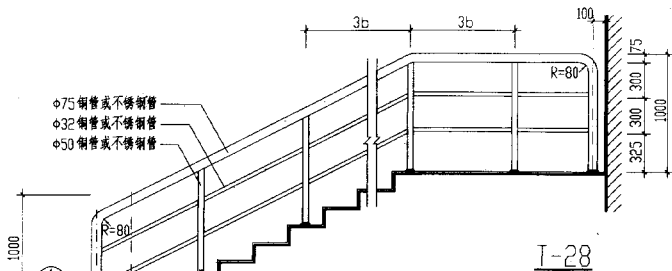


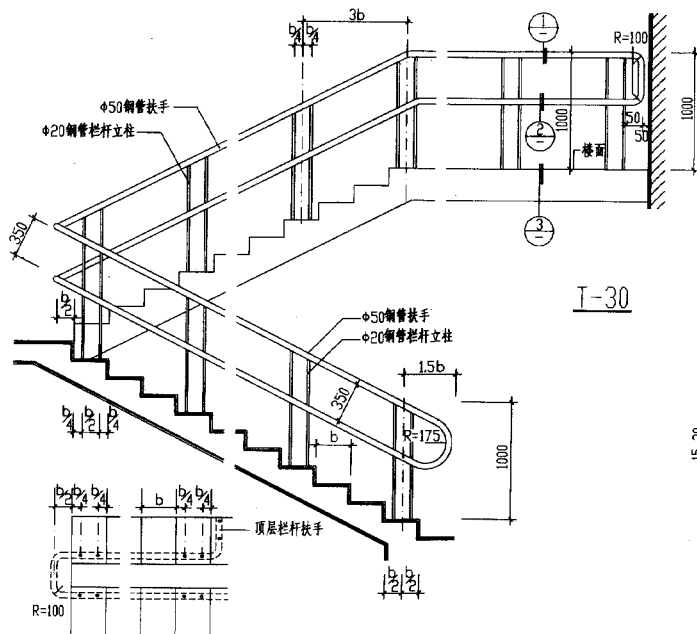
- 注：1. 铸铁栏杆为成品生产。
2. 本图仅为示意，选用时可直接到厂家订货。
3. 铸铁花饰与预埋件、扁钢连接均用不锈钢焊条或506焊条焊接。



金属扶手金属栏杆(一)

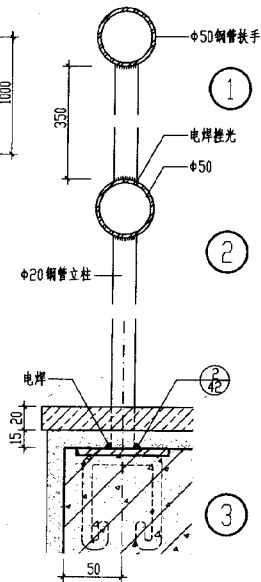
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栏杆立柱平面位置图

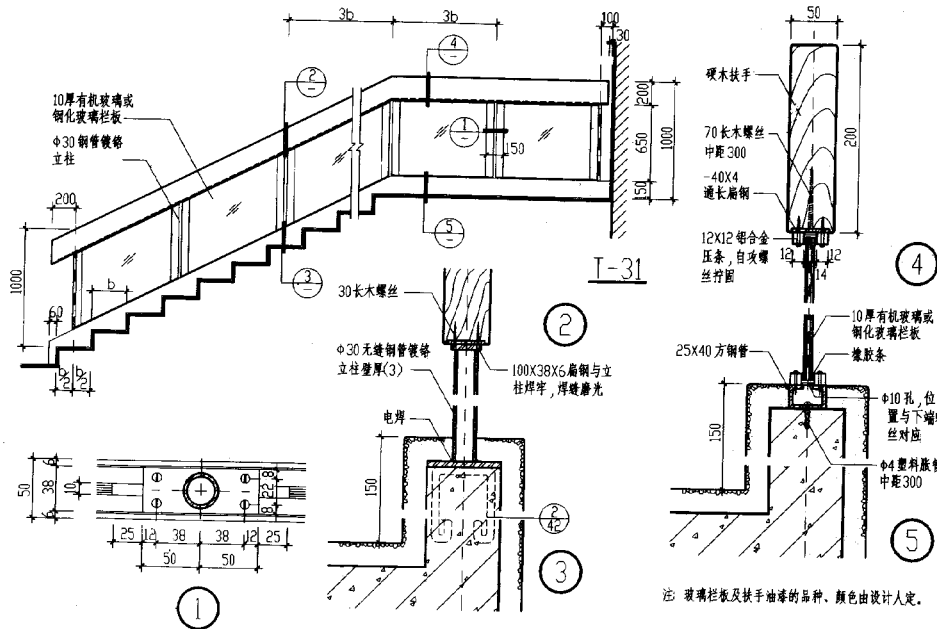
I-30



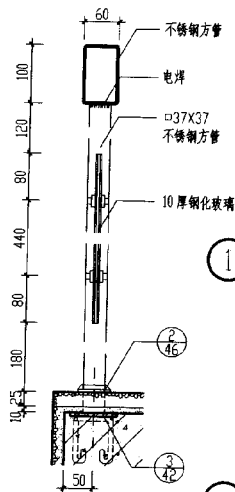
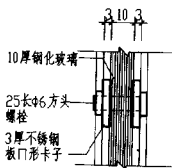
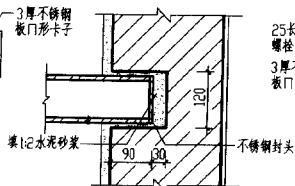
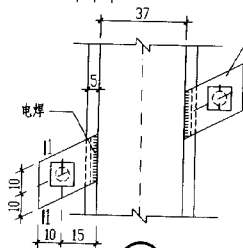
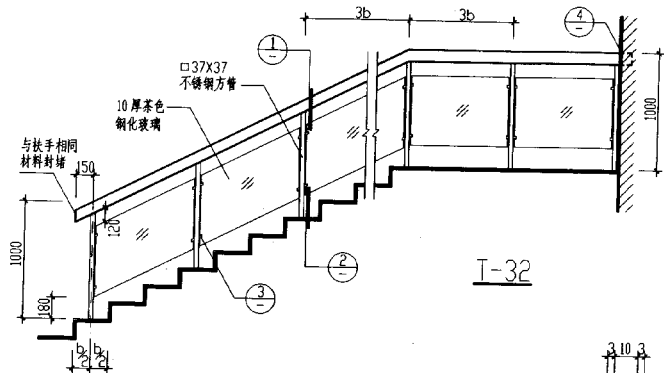
金属扶手金属栏杆(三)

图案号 L96J401

页 号 17



工程图
学

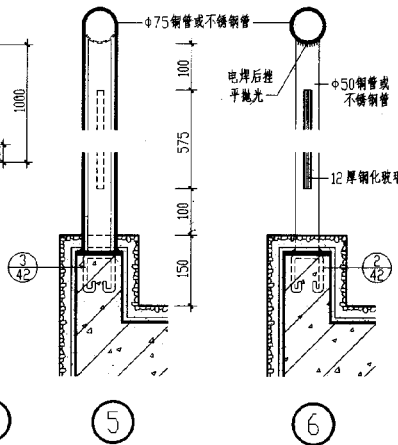
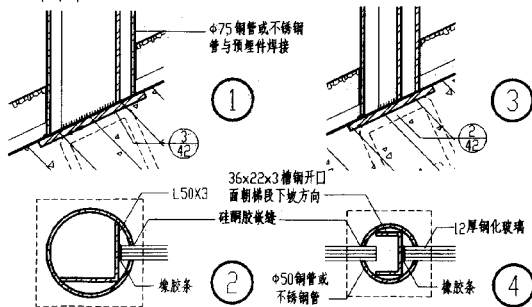
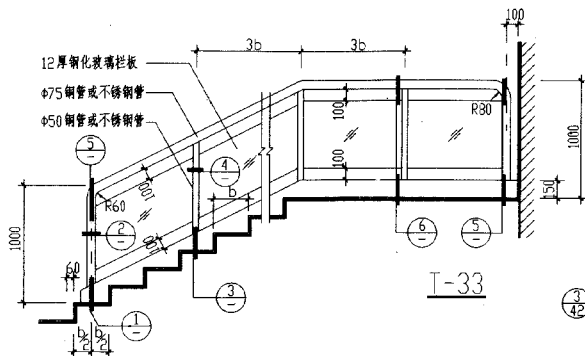


注: 本栏杆较为高级, 扶手选用不锈钢制作, 做工应精细。

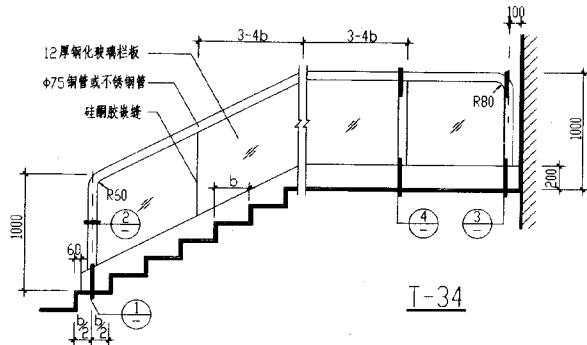
金属扶手玻璃栏板(一)

图集号 L96J401

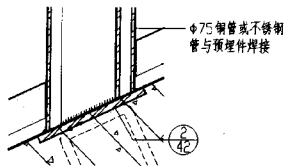
页 号 19



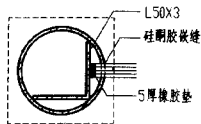
- 注：1. 36x22x3槽钢为加工件，下端与预埋件焊接后刷防锈漆两道。
2. φ75及φ50管材壁厚均为3毫米。
3. 玻璃栏板颜色由设计人定。



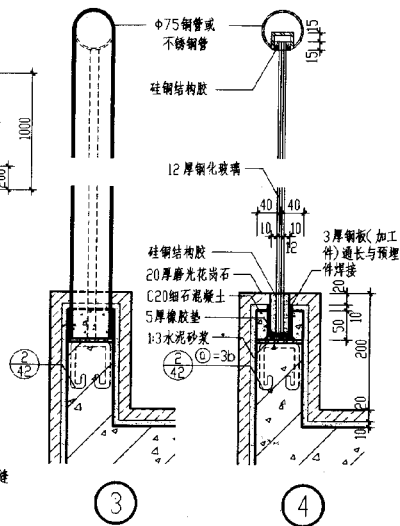
T-34



①



②



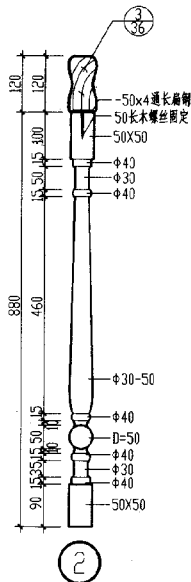
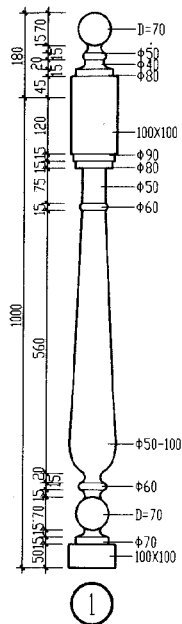
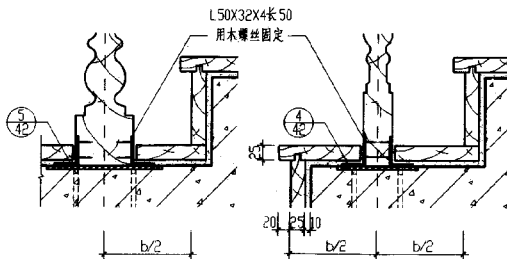
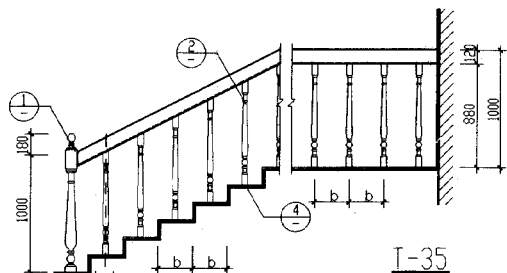
③

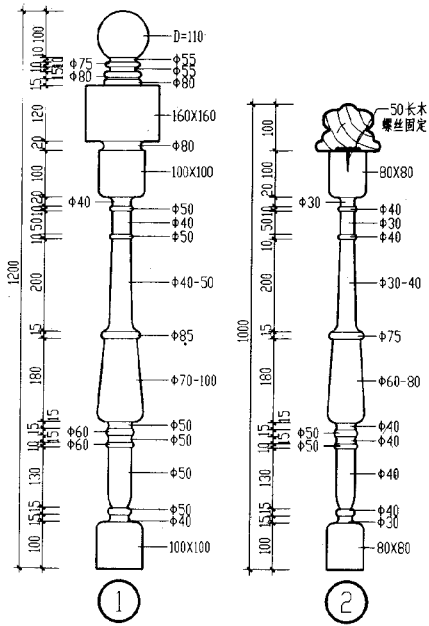
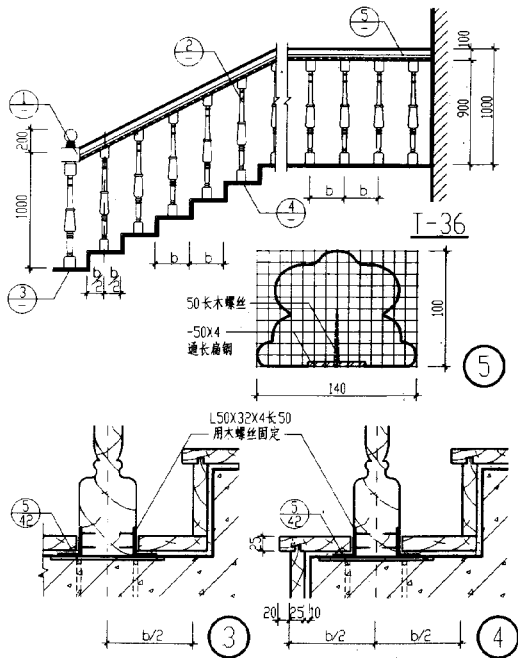
④

注: 1. Φ75及Φ50管材壁厚均为3毫米。
2. 玻璃栏板颜色由设计人定。

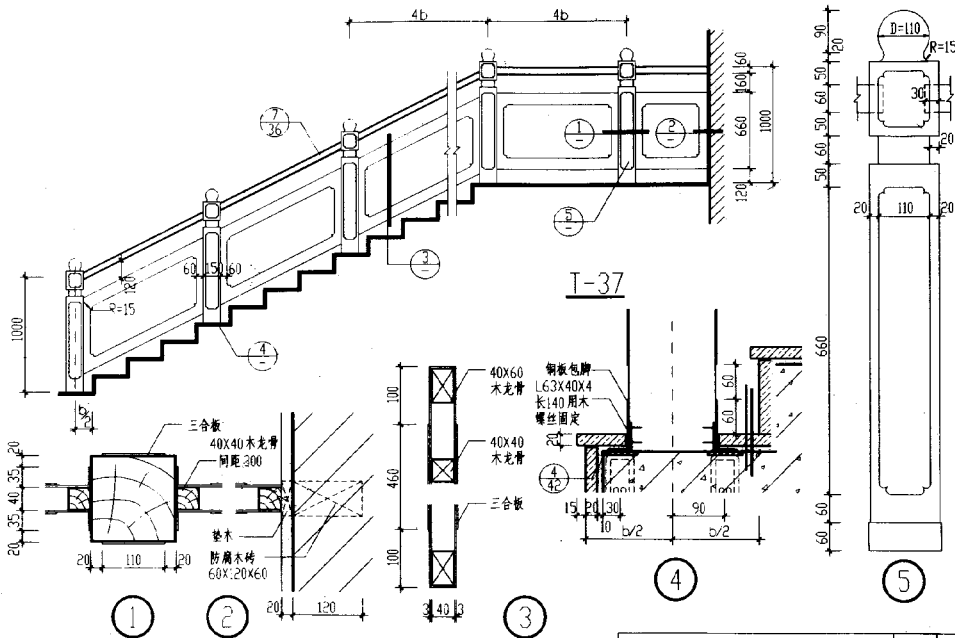
金属扶手玻璃栏板(三)

图集号	L96J401
页号	21

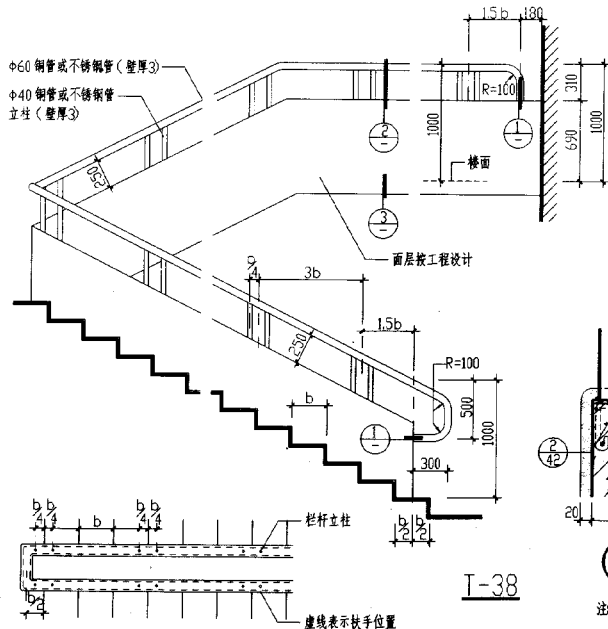




木扶手木栏杆(二)

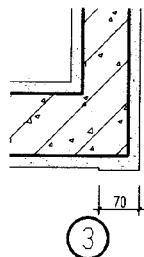
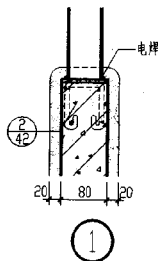
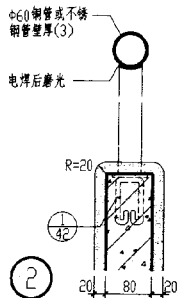


木扶手木栏杆(三)



栏杆立柱平面位置图

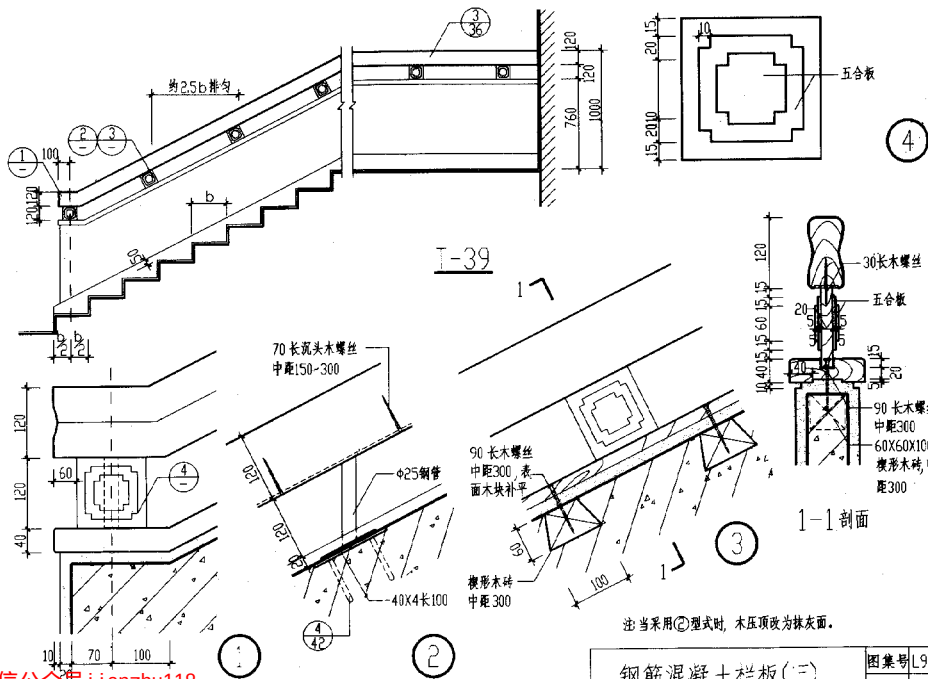
I-38



注: 栏杆配筋按单体结构设计。

钢筋混凝土栏板(一)

图集号	L96J401
页号	25

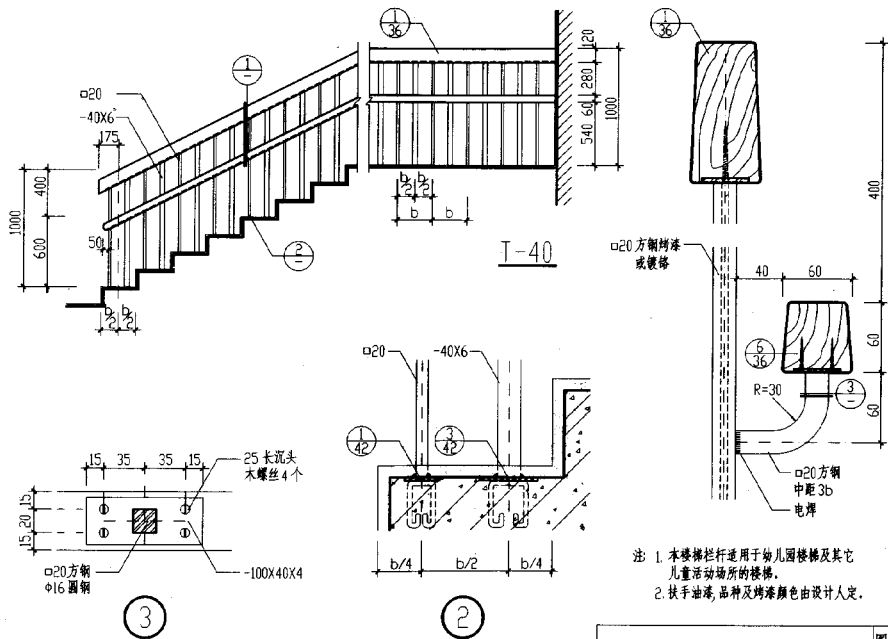


跟多资料加微信公众号j ianzhu118

钢筋混凝土栏板(三)

图集号	L96
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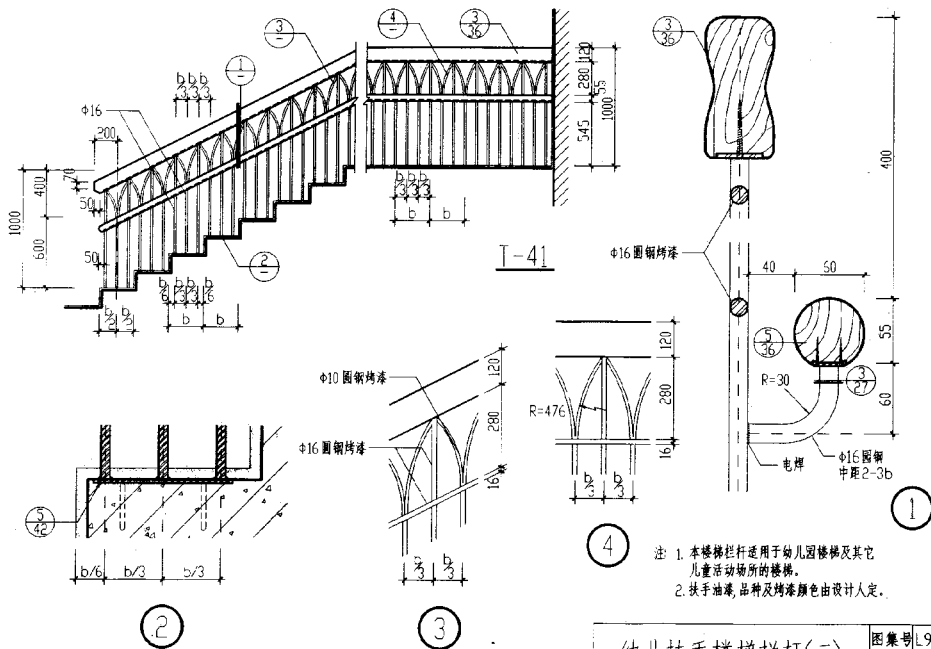
页号	己
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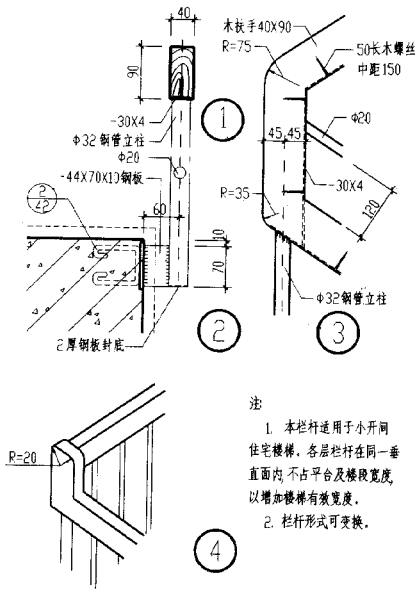
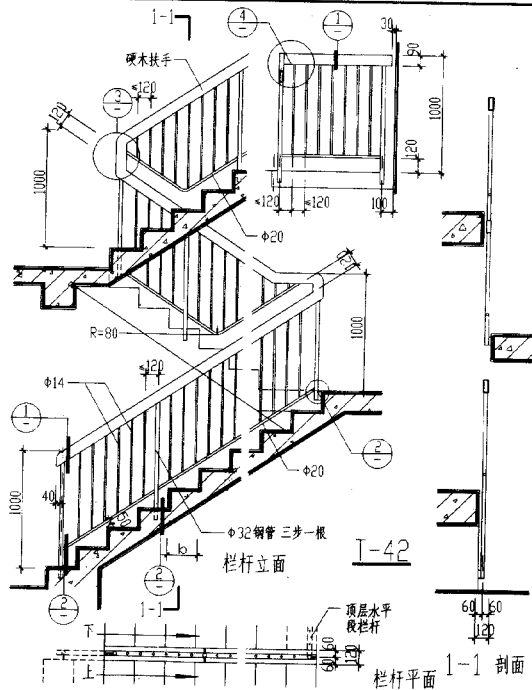


注 1. 本楼梯栏杆适用于幼儿园楼梯及其它
儿童活动场所的楼梯。
2. 扶手油漆, 品种及油漆颜色由设计人定。

幼儿扶手楼梯栏杆(一)

图集号	L96J401
页号	27





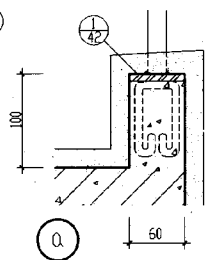
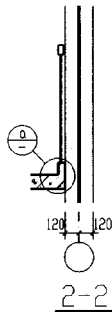
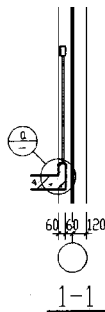
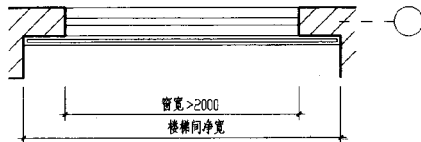
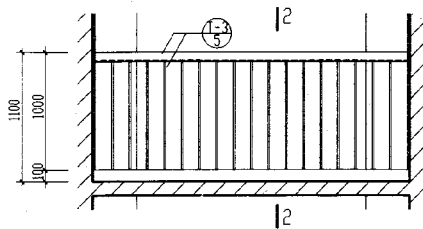
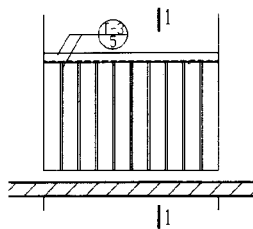
注

1. 本栏杆适用于小开间住宅楼梯,各层栏杆在同一垂直面内,不占平台及楼段宽度,以增加楼梯有效宽度。
2. 栏杆形式可变换。

小开间楼梯栏杆

图集号 L96J401

页号 29



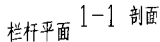
注 1. 若用于楼梯间, 栏杆形式与所选用的楼梯栏杆同。

2. 护窗栏杆间距①×160。

楼梯间护窗栏杆(一)

图集号 L96J401

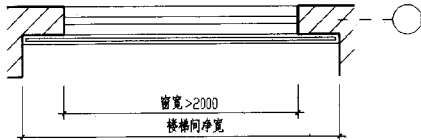
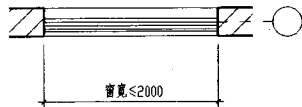
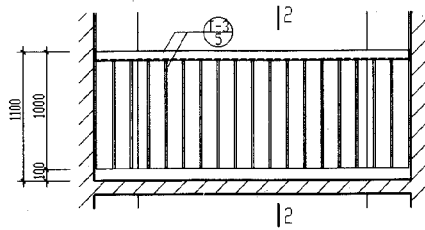
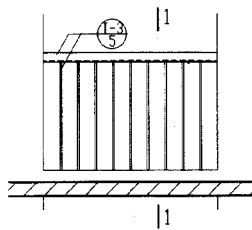
页号 30



小开间楼梯栏杆

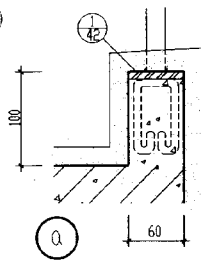
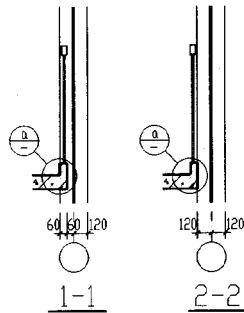
图 集 号 L96J40

页号 29



①

②



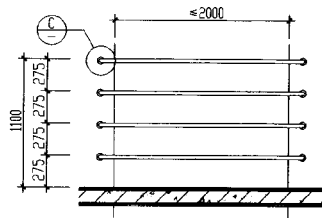
注 1.若用于楼梯间,栏杆形式与所选用的楼梯栏杆同。

2.护栏栏杆间距①≤160。

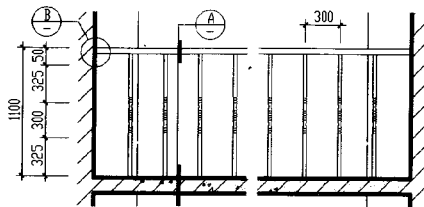
楼梯间护窗栏杆(一)

图集号 L96J401

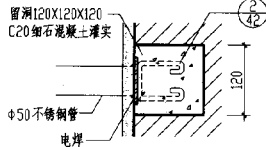
页号 30



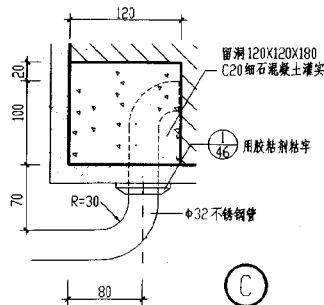
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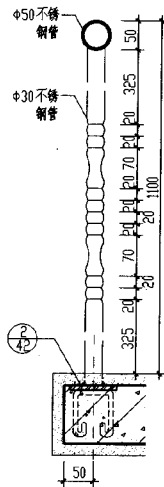
4



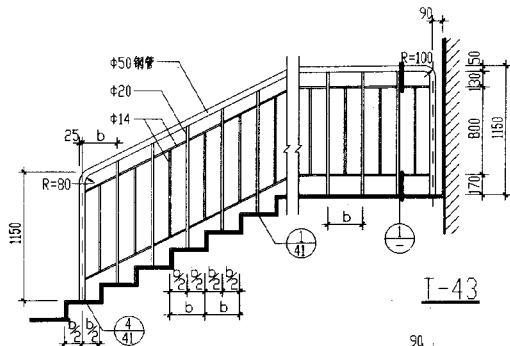
B



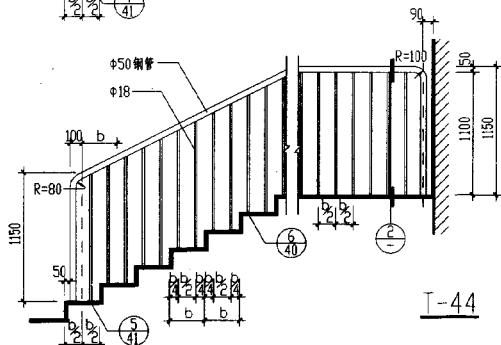
C



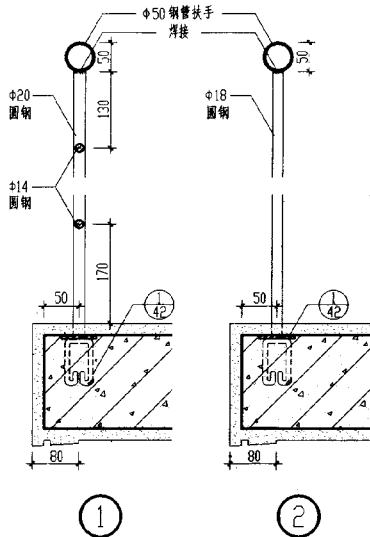
A



T-43

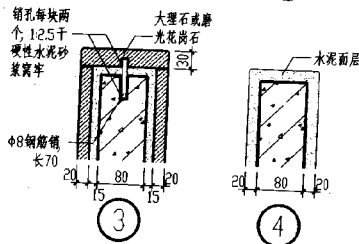
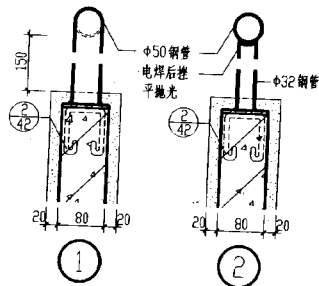
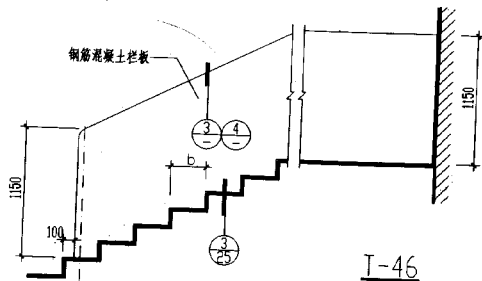
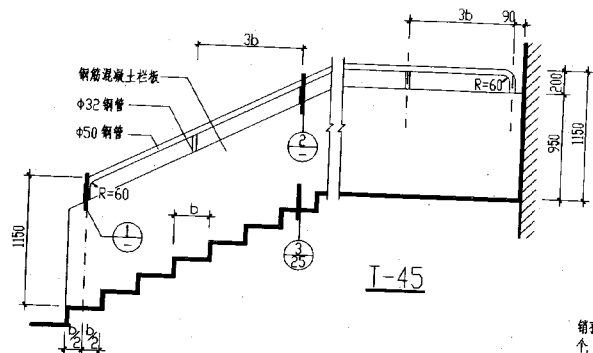


T-44

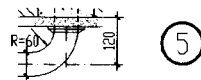
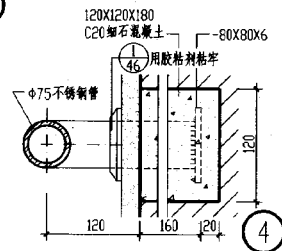
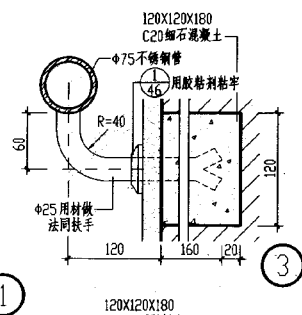
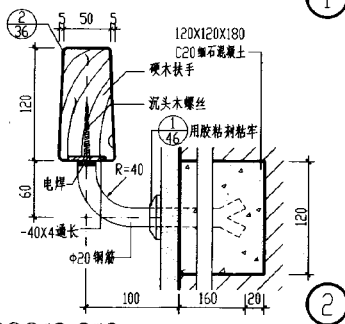
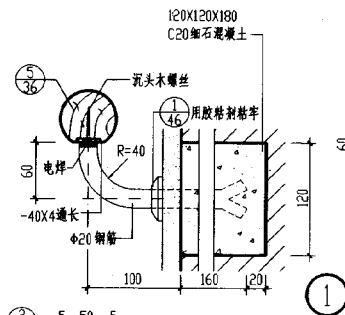
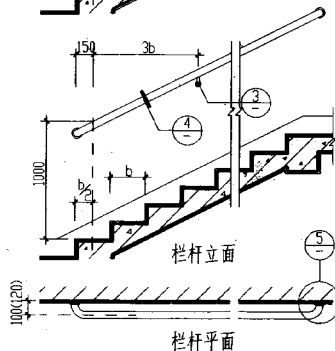
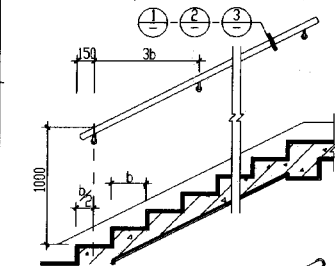


注 1. 楼梯踏步的面层材料及构造, 图中仅为示意, 具体做法按工程设计。

2. 扶手油漆, 品种及油漆颜色由设计人定。

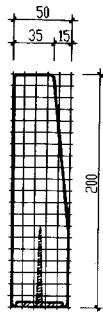


注：1. 钢筋混凝土栏板配筋结构专业设计。
2. 栏板面层做法由设计人员自定。

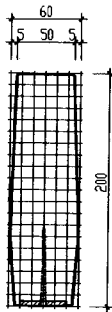


- 注 1. 扶手安装在混凝土墙上时, 固定部位改为预埋件, 节点①②③详④, ④详⑤。
2. 当一侧为临空栏杆, 另一侧为靠墙扶手时, 靠墙扶手与临空栏杆扶手宜选用同一形式。
3. 扶手立柱、扶手管采用钢材, 不锈钢管配用不锈钢附件。法兰用胶剂粘牢。

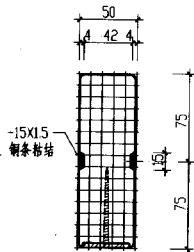
靠墙扶手



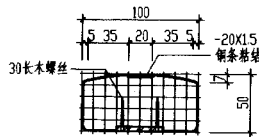
①



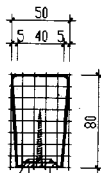
②



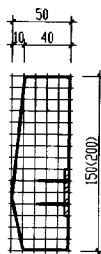
③



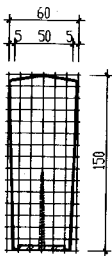
④



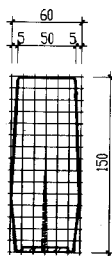
⑤



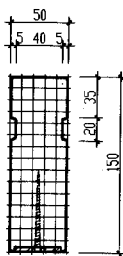
⑥



⑦



⑧

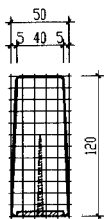


⑨

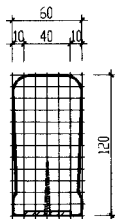
扁钢立柱处打
孔在上面焊牢

- 注：1. 扶手下通长扁钢除⑧为-30X4外，其余均为-40X4。
2. 扶手与扁钢固定木螺丝①②③④⑤⑥用70长，⑧用50长，⑨用30长，中距300。
3. 扶手钢条使用环氧树脂粘结。
4. 木扶手与栏杆固定方法为扁钢打孔与栏杆立柱在上面焊牢，详见⑩。

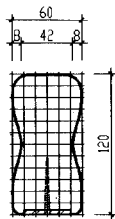
楼梯木扶手断面形式(一)



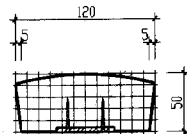
①



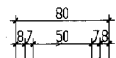
②



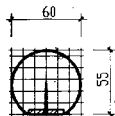
③



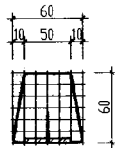
④



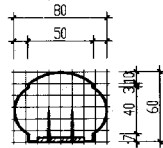
⑤



⑥



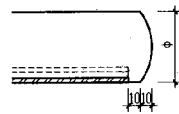
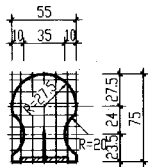
⑦



⑧

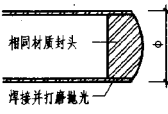


⑨



圆木扶手端头

⑩



相同材质封头

焊接并打磨抛光

金属管扶手端头

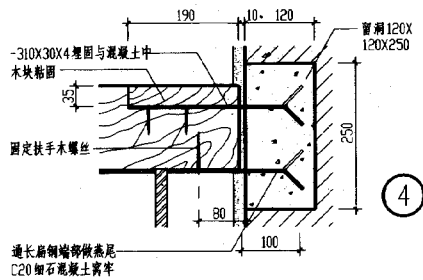
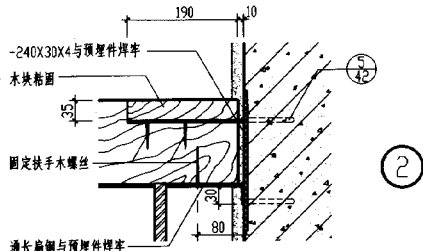
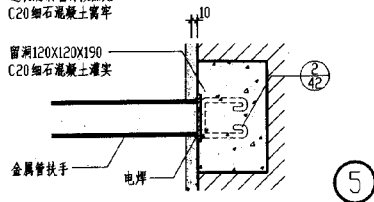
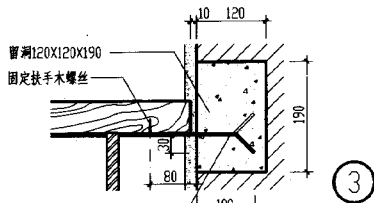
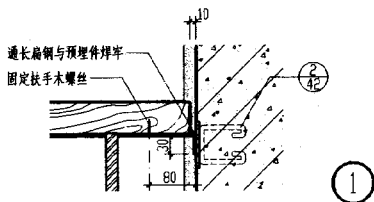
⑪

注：1. 扶手下通长扁钢除④为-50X4，⑤为-30X4外，其余均为-40X4。
2. 扶手与扁钢固定木螺丝①②③用70长，④⑤⑥⑦⑧⑨⑩用30长，中距300。

楼梯木扶手断面形式(二)

图案号 L96J401

页 号 36

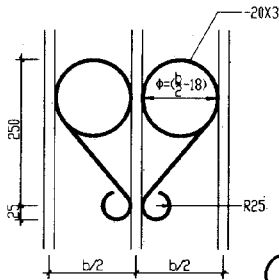


注: 1. 本图集绘制的楼梯扶手末端均与墙体连接, 若设计人需要扶手与墙体分离, 可采用本图做法。

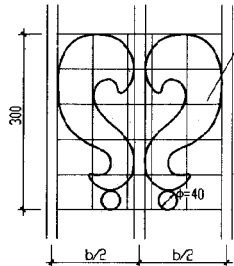
2. ①③节点用于高度 ≤ 120 的扶手, ②④节点用于高度 > 120 的扶手。

扶手末端与墙柱连接

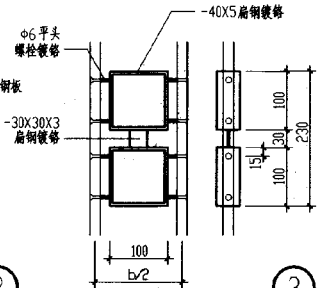
设计	审核	校核
设计	审核	校核
设计	审核	校核



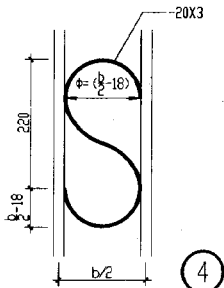
①



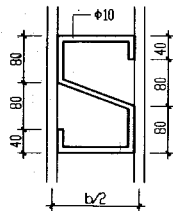
②



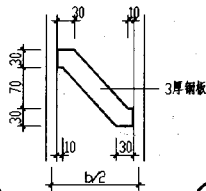
③



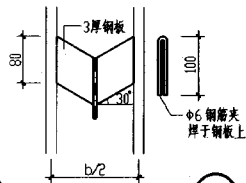
④



⑤



⑥



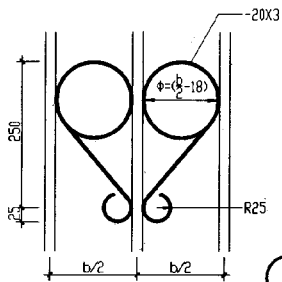
⑦

注: 1. b 为踏步宽。 2. 金属花饰与栏杆焊接。
3. 花饰端头应处理光滑。

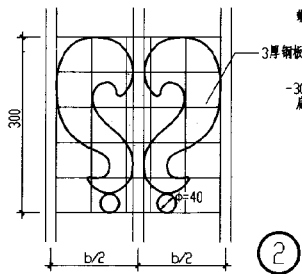
栏杆花饰详图

图集号 L96
页号 3

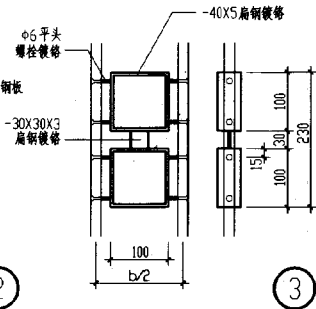
设计	审核
日期	日期
制图	制图



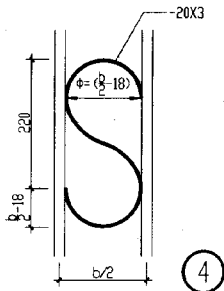
①



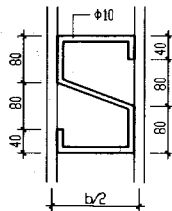
②



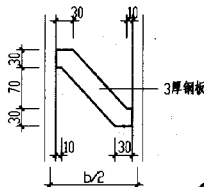
③



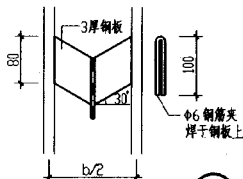
④



⑤



⑥

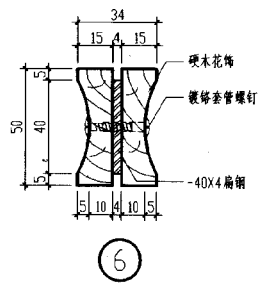
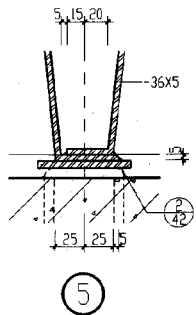
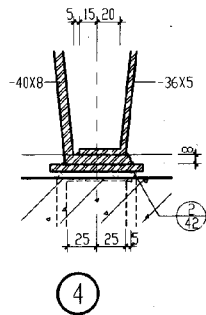
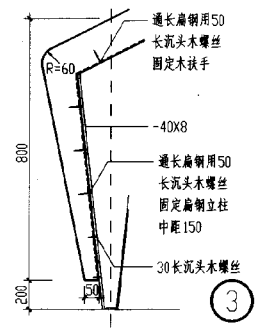
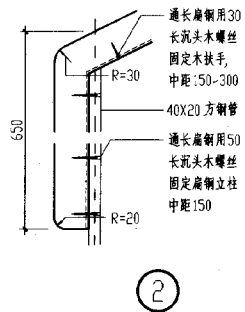
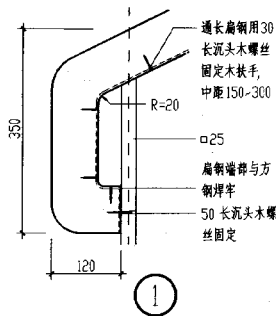


⑦

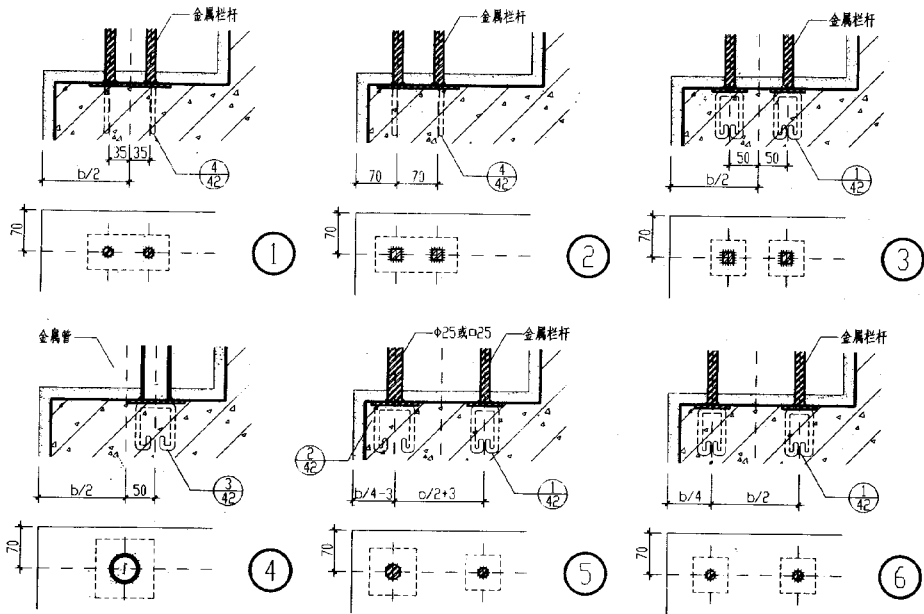
注：1. b 为踏步宽。 2. 金属花饰与栏杆焊接。
3. 花饰端头应处理光滑。

栏杆花饰详图

图集号 L96
页号 3



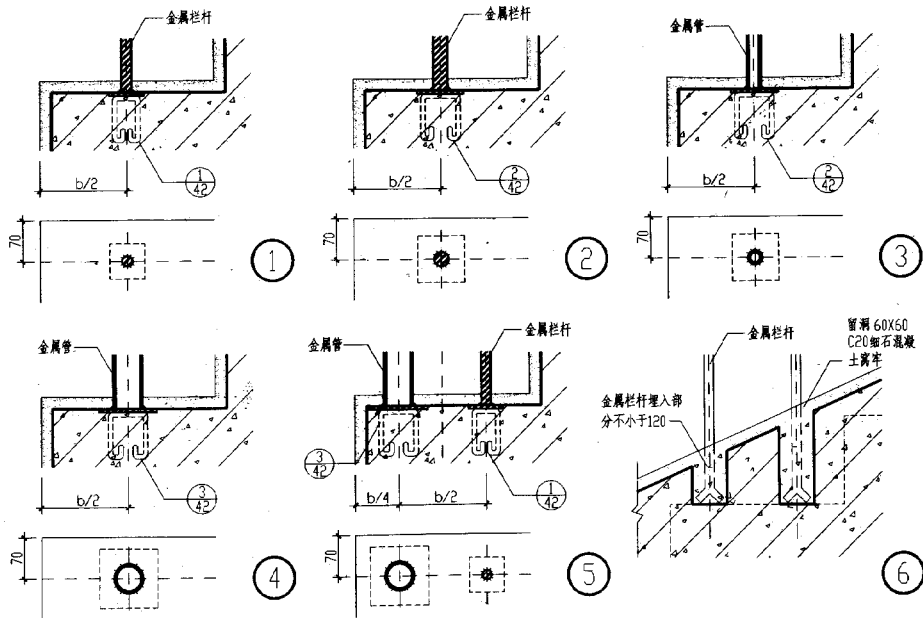
楼梯栏杆节点大样



注 b为踏步宽

栏杆与踏步连接大样(一)

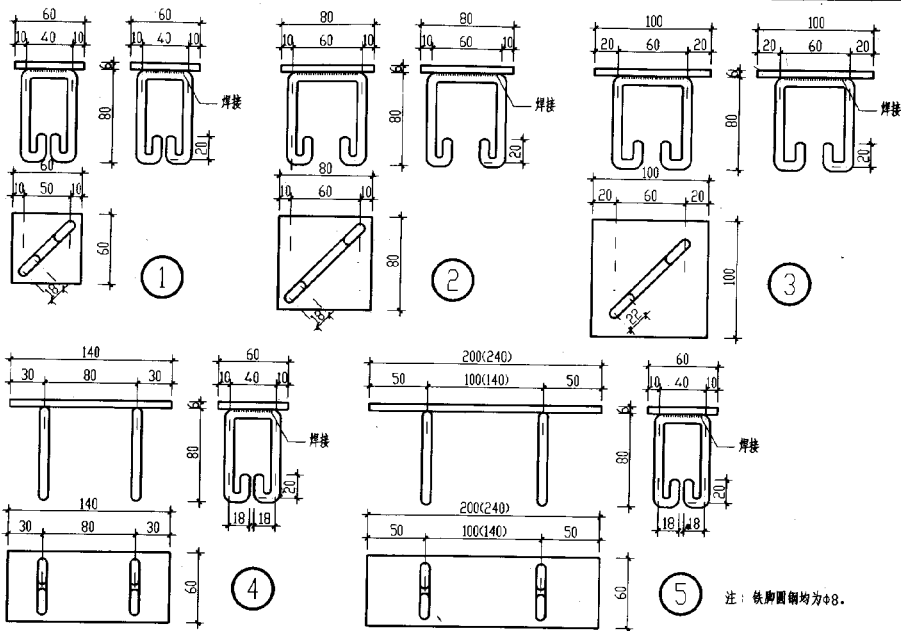
审核
 设计
 制图

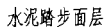


注: b 为踏步宽。

栏杆与踏步连接大样(二)

图集号 L96J401
 页 号 41

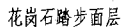




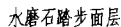
①



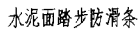
②



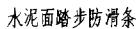
③



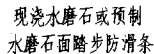
④



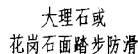
⑤



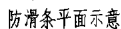
⑥



⑦



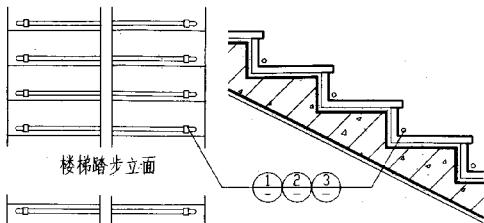
8



防滑条平面示意

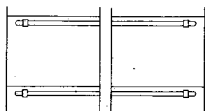
踏步面层及防滑条

图集号	L96J401
页 号	43

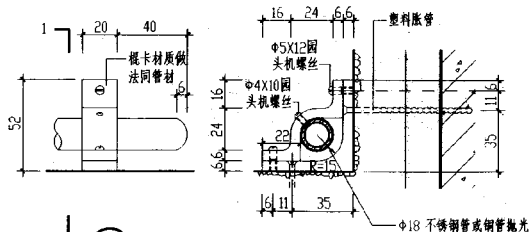


楼梯踏步立面

楼梯踏步剖面

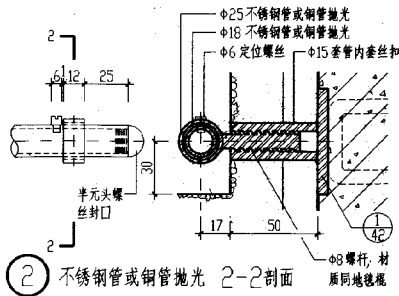


楼梯踏步平面

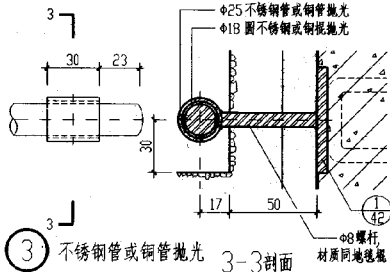


① 不锈钢管或铜管抛光

1-1 剖面

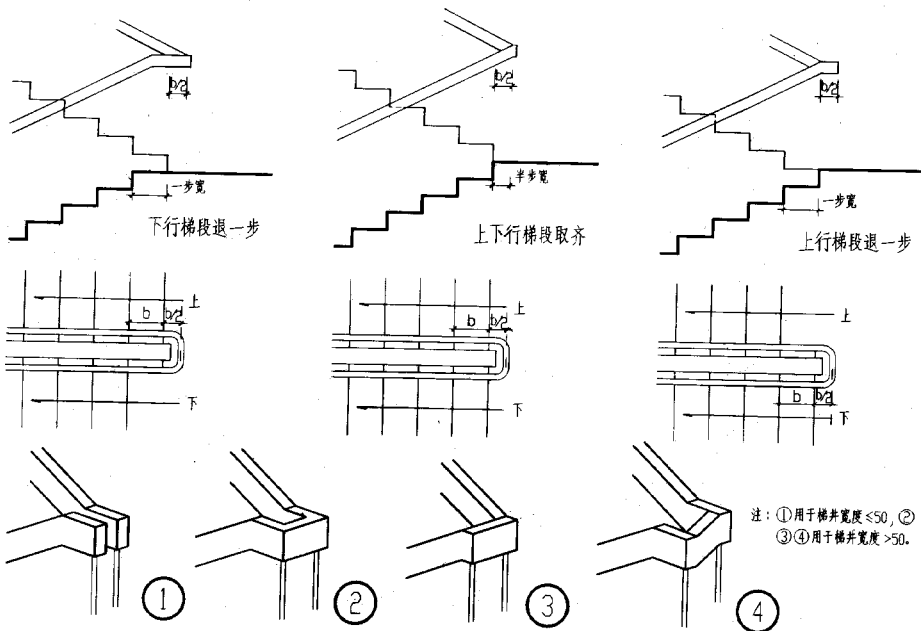


② 不锈钢管或铜管抛光 2-2 剖面



③ 不锈钢管或铜管抛光 3-3 剖面

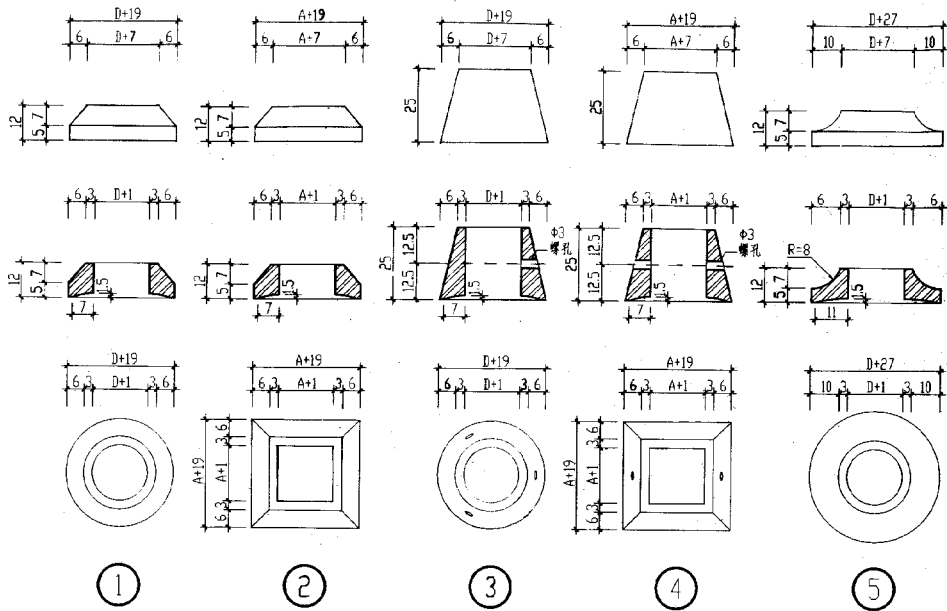
踏步压毡棍



楼梯扶手弯头处理

图集号 L96J401

页号 45



注：1. 本图中A为楼梯栏杆立柱边长，D为楼梯栏杆立柱直径。

2. 法兰属装饰件，要求加工精细，尺寸准确，表面处理除栏杆图中注明者外均镀锌。

栏杆法兰

图号 L96J401

页号 46