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副主编	徐宗伟
技术审定	孙礼恭
设计	卢裕生
制图	

坡 屋 面

批准单位 批准文号 主编单位
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 湖南省建设委员会
 广东省建设委员会
 广西壮族自治区建设厅
 海南省建设厅
 桂林市建筑设计研究院
 实行日期 1999.8.1

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 设计负责人 卢裕生

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说 明

一.适用范围

本图集适用于一般民用建筑和工业辅助建筑

二.设计内容

本图集按屋面类型分类编制,其中包括中式琉璃瓦屋面,筒板瓦屋面,西班牙瓦屋面,日本瓦屋面,英式瓦屋面,波纹装饰瓦屋面和油毡瓦屋面七种,各类屋面又按不同的屋顶形式提供相应的构造节点,供有关人员选用。

三.设计依据

民用建筑设计通则 (JGJ37-87)

屋面工程技术规范 (GB50207-94)

四.采用材料

(一)本图集屋面基层均采用现浇钢筋混凝土,基层结构由单项工程结构设计确定并应注意现浇屋面温度应力对下部结构特别是砖混结构的影响采取相应的构造措施,防止裂缝产生。

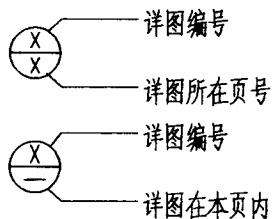
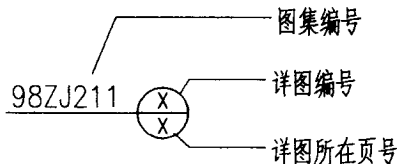
(二)面层选用中式琉璃瓦,筒板瓦,西班牙瓦,日本瓦,英式瓦,波纹装饰瓦及油毡瓦等系列产品。

五.选用方法

详图编号及索引



使用本图集索引方法



六.施工注意事项

(一)屋面处理

1.做好屋面防水处理。

2.盖瓦前屋面必须清扫干净,脚手架应保留到盖瓦完成后拆除。

(二)瓦的安装及要求

清理屋面后按照施工图用墨线正确标出横向纵向铺瓦间距,尽量在有效尺寸内调整到以不切瓦为原则,盖瓦先由檐口右下角起铺设,自右向左自下而上依次盖瓦。

中式琉璃瓦,西班牙瓦,日本瓦,英式瓦固定方式除砂浆坐铺外,另有钉钢钉及铜线绑扎两种,可根据屋面坡度选用。用砂浆坐铺时不应满浆,以免瓦片胀裂。波纹装饰瓦安装必须满浆。油毡瓦的安装用钉子加沥青胶剂粘贴。

施工过程中应尽量减少瓦片污染。污染的瓦片必须及时清理干净,保持瓦片的清洁。刚施工完的瓦片不能立即踩踏,以免影响砂浆粘台。

(三)未尽事宜请按有关厂家施工技术说明。

七.验收及检验要求

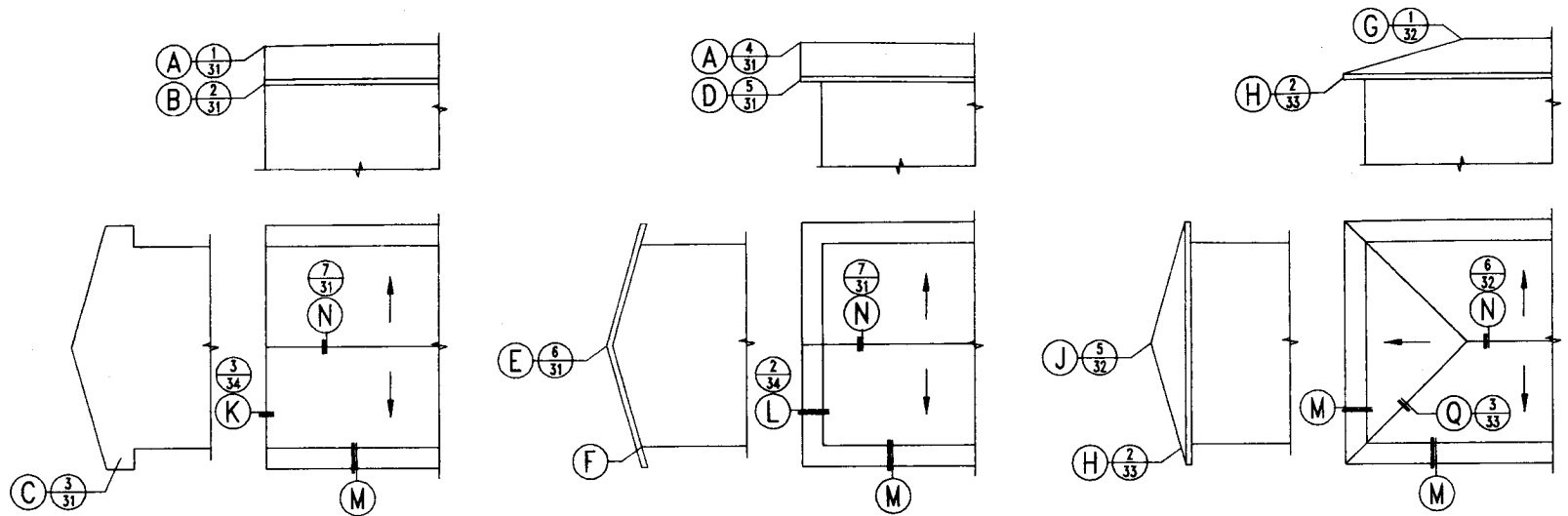
各种屋面的施工验收按国家现行有关施工标准,规范,规程的规定严格执行。

八.其他

(一)屋面坡度可根据不同的屋面材料,构造特点,当地气候条件及建筑造型要求由单项工程设计选定。各种屋面的适宜坡度详分项说明。

(二)本图集未注明单位的尺寸以毫米为单位。

说明	图集号	98ZJ211
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硬山二坡顶

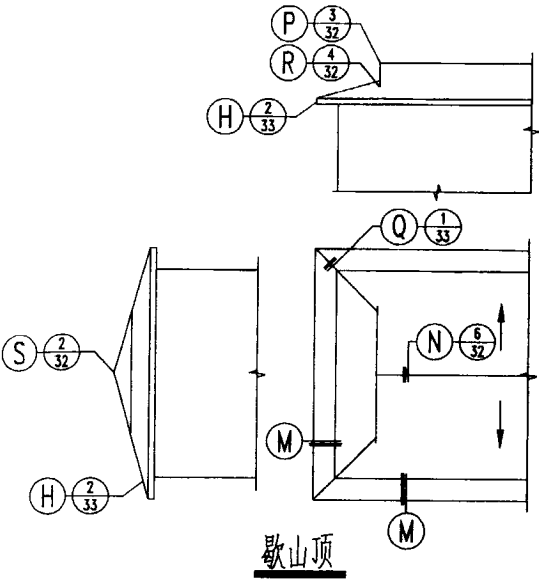
悬山二坡顶

四坡顶

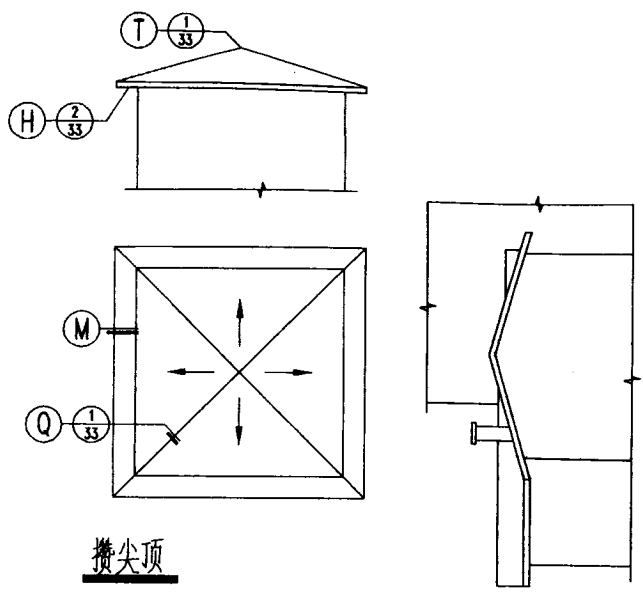
代号 索引号	A	B	C	D	E	F	G	H	J	K	L	M	N	Q
中式琉璃瓦	$\frac{1}{7}$	$\frac{2a}{7}$	$\frac{3a}{7}$	$\frac{2}{7}$	$\frac{4}{7}$	$\frac{3}{7}$	$\frac{1}{8}$	$\frac{4,5}{8}$	$\frac{2}{8}$	$\frac{7a}{7}$	$\frac{7}{7}$	$\frac{6}{7}$	$\frac{5}{7}$	$\frac{5}{7}$
筒板瓦	$\frac{3}{12}$	$\frac{2a}{11}$	$\frac{4a}{11}$	$\frac{2}{11}$	$\frac{3}{11}$	$\frac{4}{11}$	$\frac{1}{12}$	$\frac{7}{12}$	$\frac{2}{12}$	$\frac{5a}{11}$	$\frac{5}{11}$	$\frac{7}{11}$	$\frac{6}{11}$	$\frac{6}{12}$
西班牙瓦(S瓦)	$\frac{1}{15}$	$\frac{2a}{15}$	$\frac{4a}{16}$	$\frac{2}{15}$	$\frac{1}{16}$	$\frac{4}{16}$	$\frac{3}{15}$	$\frac{4}{15}$	$\frac{5}{15}$	$\frac{8a}{16}$	$\frac{8}{16}$	$\frac{3}{16}$	$\frac{2}{16}$	$\frac{2}{16}$
日本瓦(J瓦)	$\frac{1}{19}$	$\frac{4a}{19}$	$\frac{4a}{20}$	$\frac{4}{19}$	$\frac{1}{20}$	$\frac{4}{20}$	$\frac{2}{19}$	$\frac{5}{19}$	$\frac{3}{19}$	$\frac{8a}{20}$	$\frac{8}{20}$	$\frac{3}{20}$	$\frac{2}{20}$	$\frac{2}{20}$
英式瓦	$\frac{1}{23}$	$\frac{2a}{23}$	$\frac{4a}{24}$	$\frac{8}{24}$	$\frac{1}{24}$	$\frac{4}{24}$	$\frac{3}{23}$	$\frac{4}{23}$	$\frac{5}{23}$	$\frac{8a}{24}$	$\frac{8}{24}$	$\frac{3}{24}$	$\frac{2}{24}$	$\frac{2}{24}$
波纹装饰瓦	$\frac{1}{26}$	$\frac{2a}{26}$	$\frac{3a}{26}$	$\frac{2}{26}$	$\frac{2}{27}$	$\frac{3}{26}$	$\frac{4}{26}$	$\frac{5}{26}$	$\frac{6}{26}$	$\frac{4a}{27}$	$\frac{4}{27}$	$\frac{3}{27}$	$\frac{1}{27}$	$\frac{1}{27}$
油毡瓦	$\frac{1}{29}$	$\frac{2a}{29}$	$\frac{3a}{29}$	$\frac{2}{29}$	$\frac{1}{30}$	$\frac{3}{29}$	$\frac{4}{29}$	$\frac{5}{29}$	$\frac{6}{29}$	$\frac{3a}{30}$	$\frac{3}{30}$	$\frac{4}{30}$	$\frac{2}{30}$	$\frac{2}{30}$

说明:
31~33页可用于各种瓦面的砼屋脊。

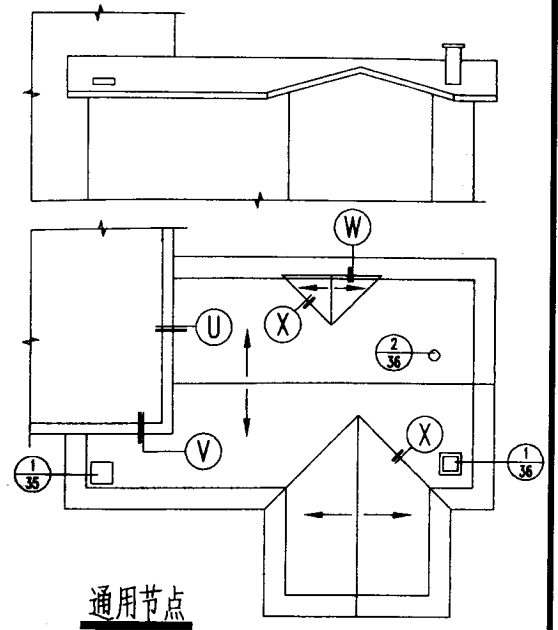
设计人: 卢生
 审核人: 张云
 设计日期: 2011.11.11
 设计地点: 天津



歇山顶

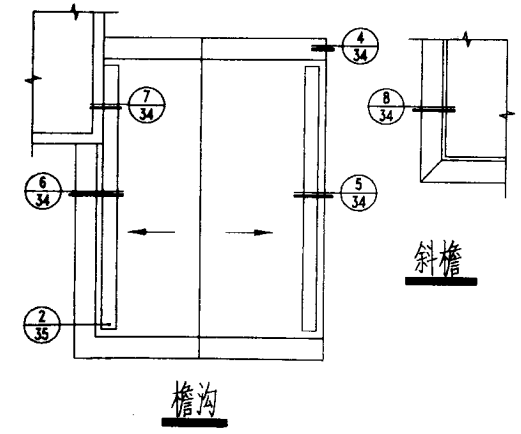


攒尖顶



通用节点

瓦型索引号	H	M	N	Q	P	R	S	T	U	V	W	X
中式琉璃瓦	4,5/8	6/7	5/7	5/7	1/9	2/9	3/9	3/8	4/9	5/9	6/9	7/9
筒板瓦	7/12	7/11	6/11	6/12	3/12	4/12	5/12	1/33	4/9	5/9	6/9	7/9
西班牙瓦(S瓦)	4/15	3/16	2/16	2/16	1/15	6/15	1/16	5/15	5/16	6/16	9/16	7/16
日本瓦(J瓦)	5/19	3/20	2/20	2/20	1/19	6/19	1/20	3/19	5/20	6/20	9/20	7/20
英式瓦	4/23	3/24	2/24	2/24	1/23	6/23	1/24	5/23	5/24	6/24	9/24	7/24
波纹装饰瓦	5/26	3/27	1/27	1/27	1/26	7/26	2/27	6/26	6/27	5/27	8/27	7/27
油毡瓦	5/29	4/30	2/30	2/30	1/29	7/29	1/30	6/29	6/30	5/30	8/30	7/30

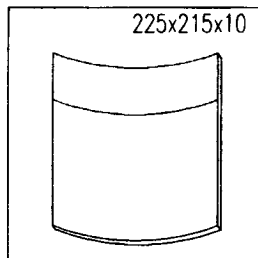


檐沟

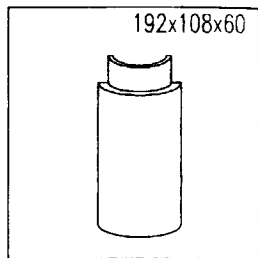
斜檐

屋面索引(二)

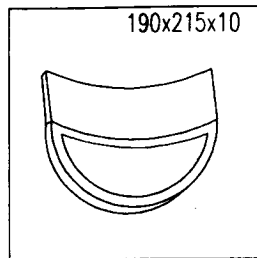
图集号 98ZJ211
 页 4



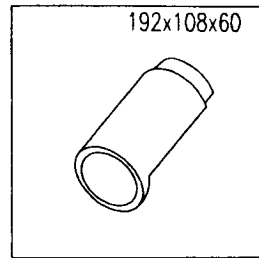
板瓦



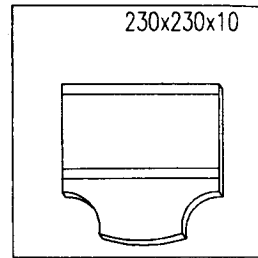
筒瓦



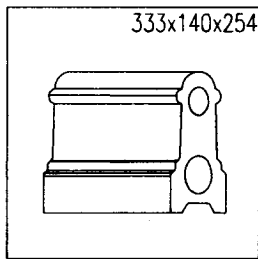
滴水瓦



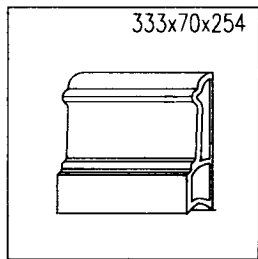
勾头瓦



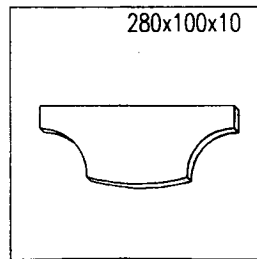
双线盾形瓦



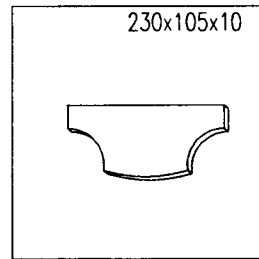
脊瓦



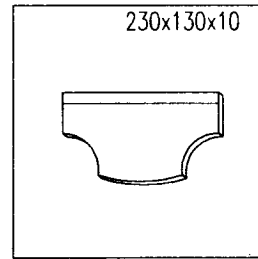
半边脊



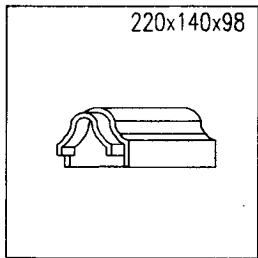
斜线盾形瓦



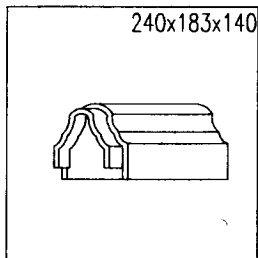
正线盾形瓦



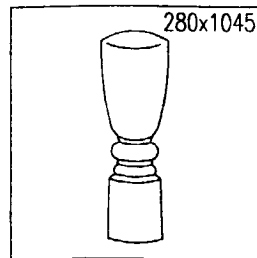
单线盾形瓦



小三星筒



大三星筒



宝顶

说明：
中式琉璃瓦由于构件种类繁多，本图只列出部分构件供参考，其它构件由设计人员根据厂家样本选用。

中式琉璃瓦

品种、规格

图集号

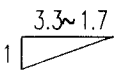
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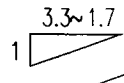
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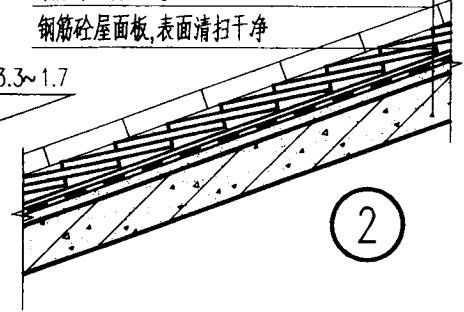
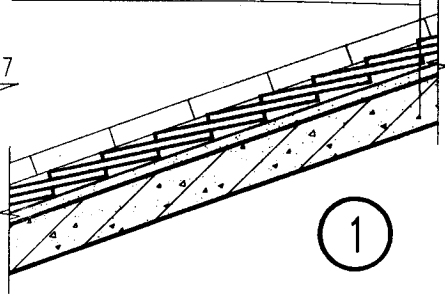
5

中式琉璃瓦，板瓦盖5留5
 25厚(最薄处)1:1:4水泥石灰砂浆坐铺，筒瓦两侧用色料灰浆夹拢抹直
 25厚1:2水泥砂浆加5%防水粉分两次抹平
 刷素水泥浆一道
 钢筋砼屋面板，表面清扫干净

中式琉璃瓦，板瓦盖5留5
 25厚(最薄处)1:1:4水泥石灰砂浆坐铺，筒瓦两侧用色料灰浆夹拢抹直
 20厚1:3干硬水泥砂浆
 隔热防水膏
 20厚1:3水泥砂浆找平
 刷素水泥浆一道
 钢筋砼屋面板，表面清扫干净

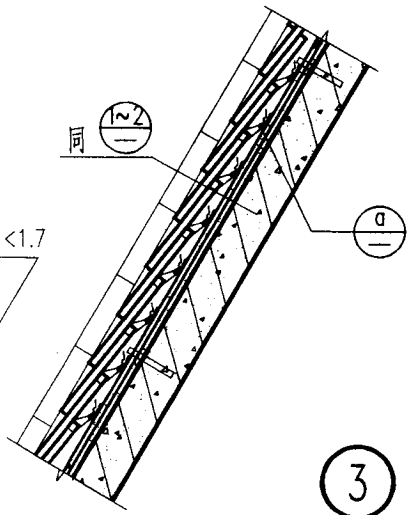
3.3~1.7


3.3~1.7




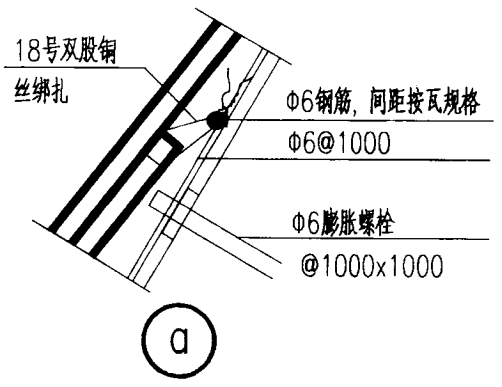
1

2



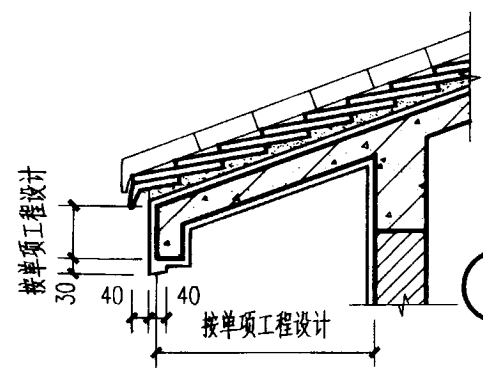
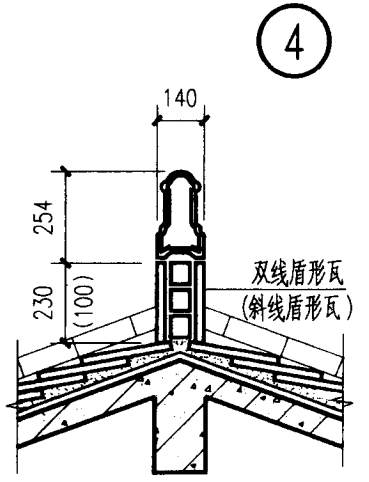
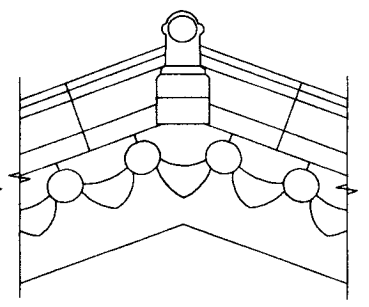
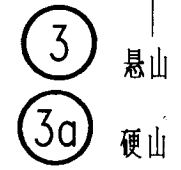
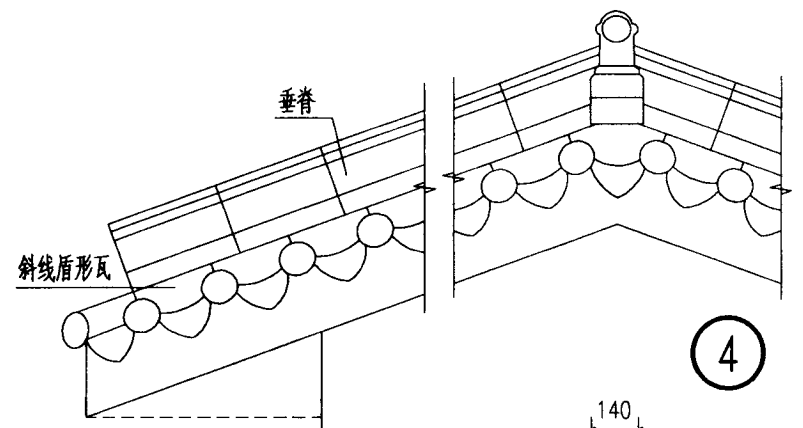
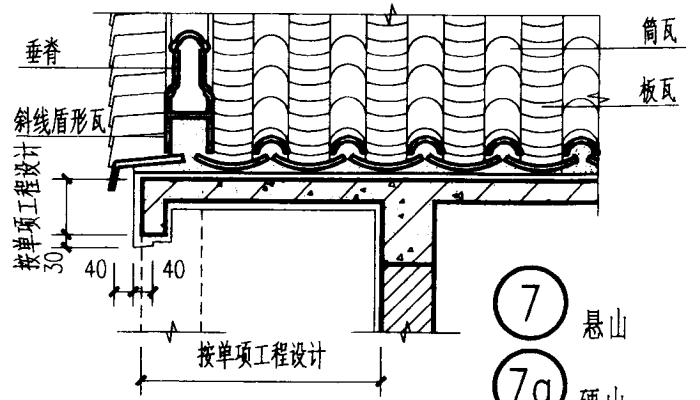
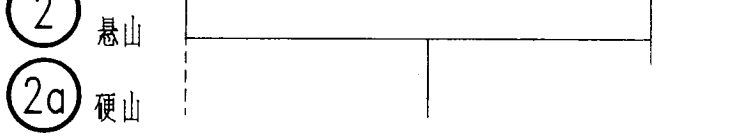
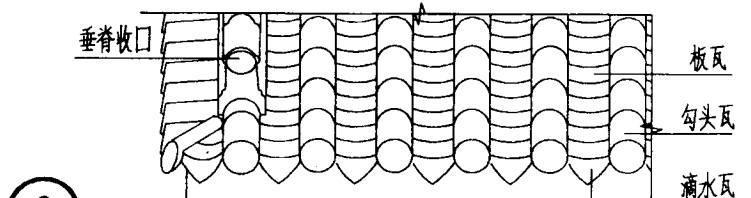
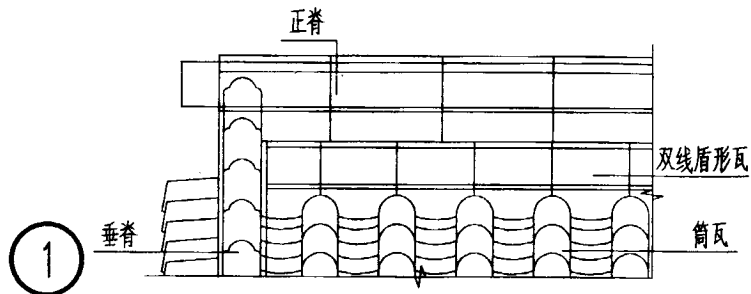
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3



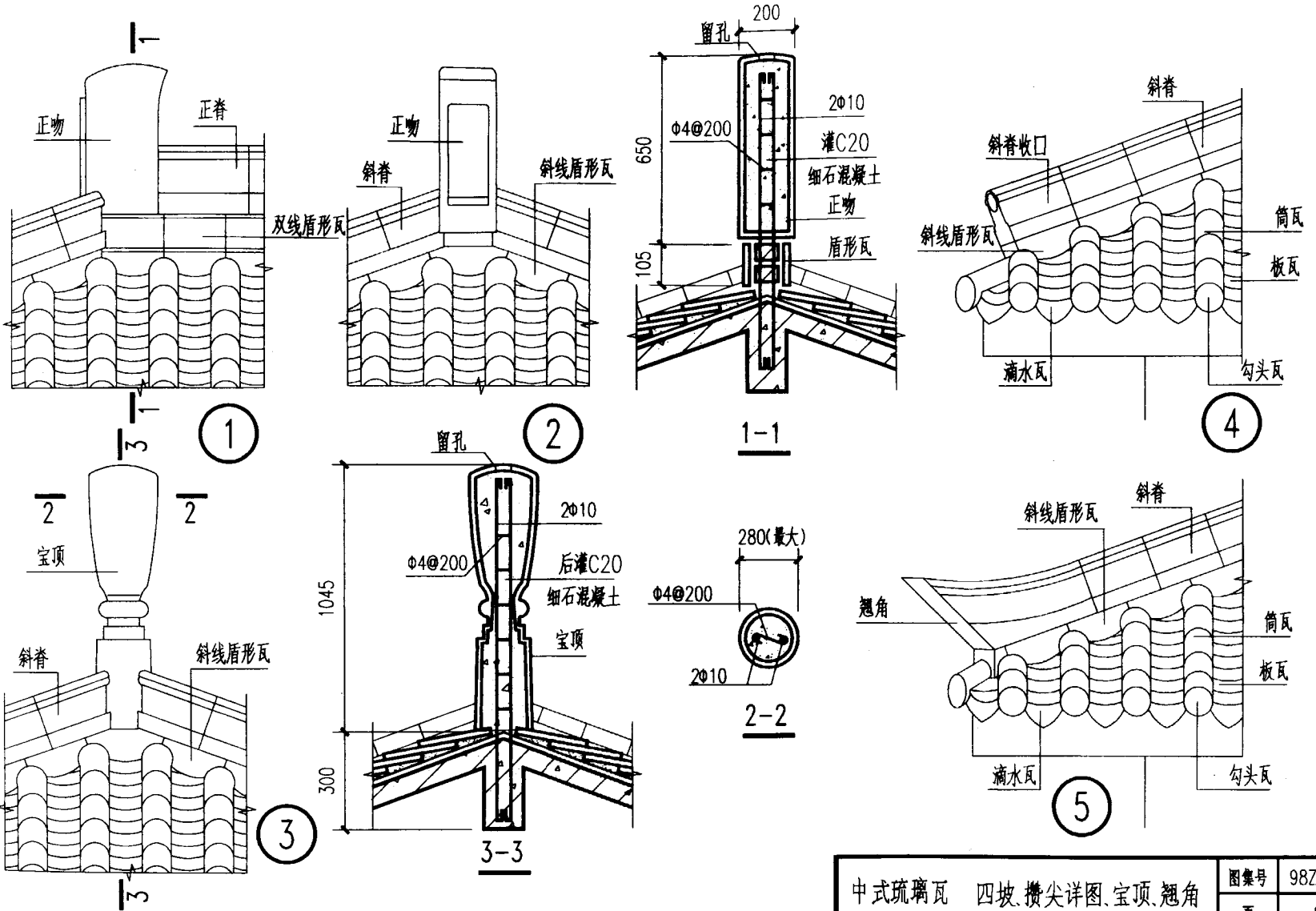
说明：
 1. ①~② 用于屋面坡度30%(1:3.3)~60%(1:1.7)时，
 ③ 用于屋面坡度>60%(1:1.7)。
 2. 砂浆坐铺时不可满浆，以防胀裂。

中式琉璃瓦	屋面做法	图集号	98ZJ211
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说明：
虚线表示硬山。

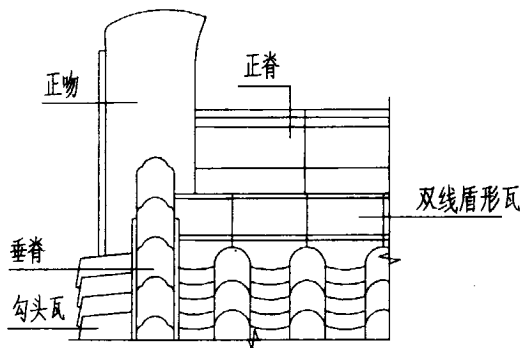
设计	张鹏云
校核	张鹏云
绘图	张鹏云
审核	张鹏云
设计	张鹏云



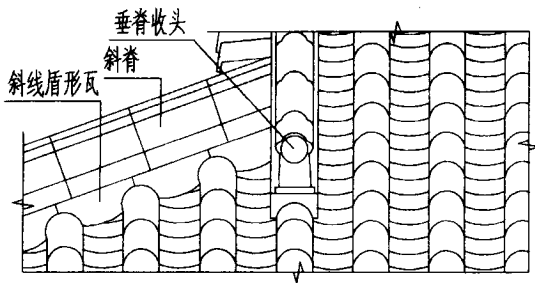
中式琉璃瓦 四坡、攒尖详图、宝顶、翘角	图集号	98ZJ211
	页	8

卢生 卢生
 核计 核计
 张云 张云
 图字 图字
 解字 解字

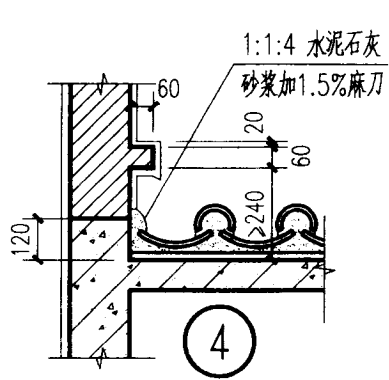
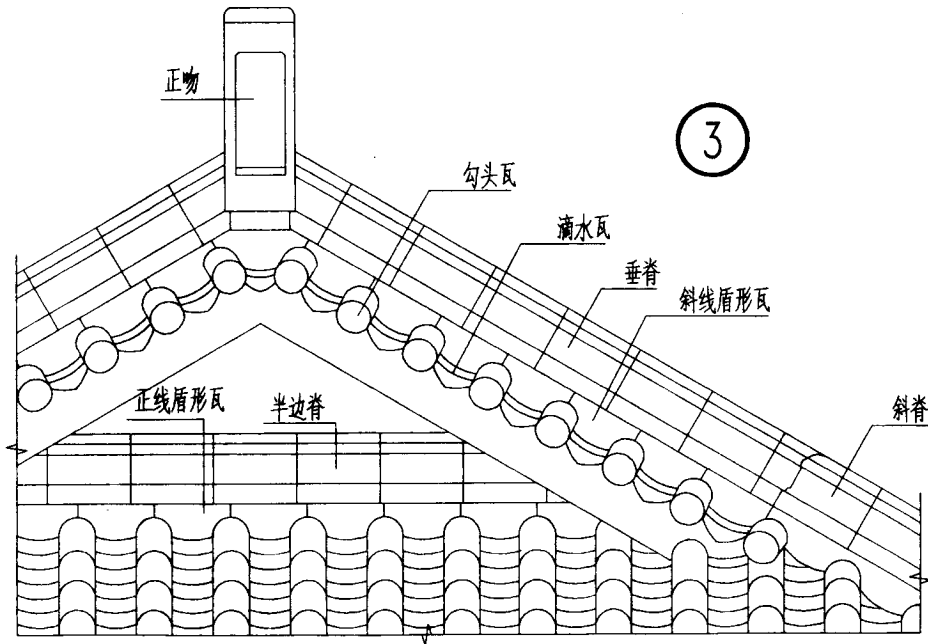
①



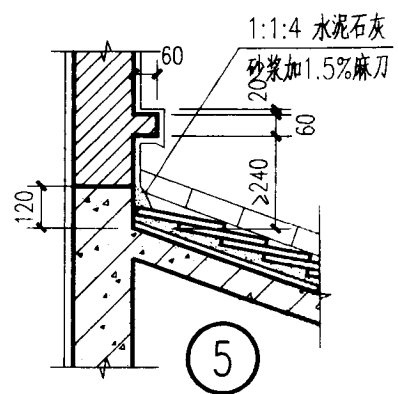
②



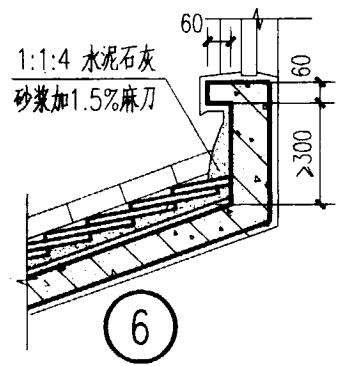
③



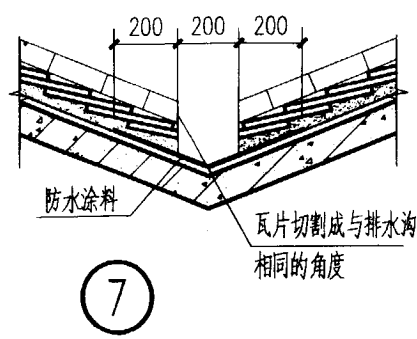
④



⑤



⑥



⑦

中式琉璃瓦 歇山详图. 泛水. 合水沟

图集号	98ZJ211
页	9

筒板瓦, (板瓦盖七留三)

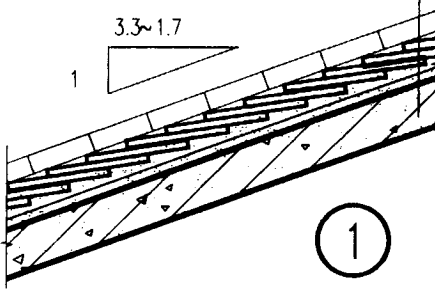
25厚(最薄处)1:1:4水泥石灰砂浆坐铺,

筒瓦两侧用青灰夹找抹直

25厚1:2水泥砂浆加5%防水粉分两次抹平,

刷素水泥浆一道

钢筋砼屋面板, 表面清扫干净



筒板瓦, (板瓦盖七留三)

25厚(最薄处)1:1:4水泥石灰砂浆坐铺,

筒瓦两侧用青灰夹找抹直

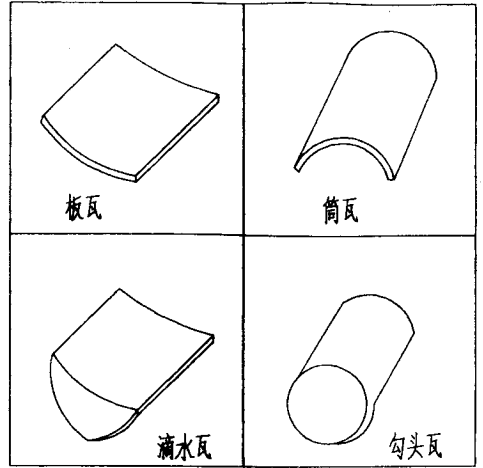
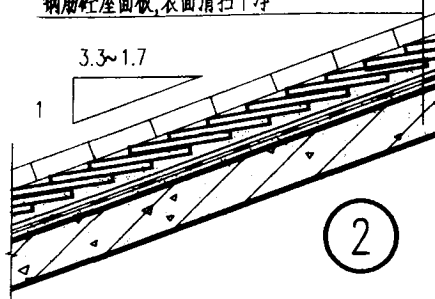
20厚1:3干硬性水泥砂浆

隔热防水膏

20厚1:3水泥砂浆找平

刷素水泥浆一道

钢筋砼屋面板, 表面清扫干净

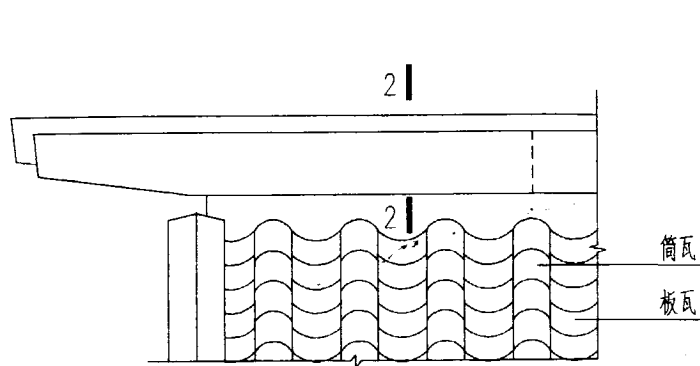


说明:

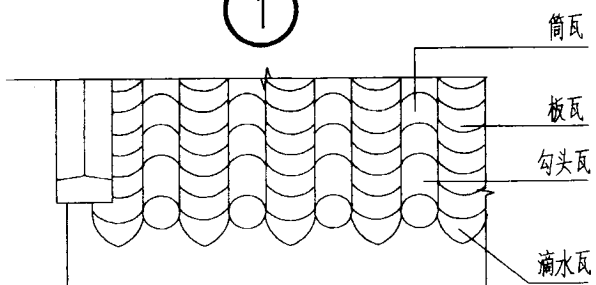
- 筒板瓦各地产品不一致, 亦有大小之分, 构件由设计人员自行选定。
- 适宜坡度为30%(1:3.3)至60%(1:1.7) 选用时应注明坡度。
- 屋脊、檐口板面层材料由单项工程设计定。

筒板瓦	屋面做法、品种	图集号	98ZJ211
		页	10

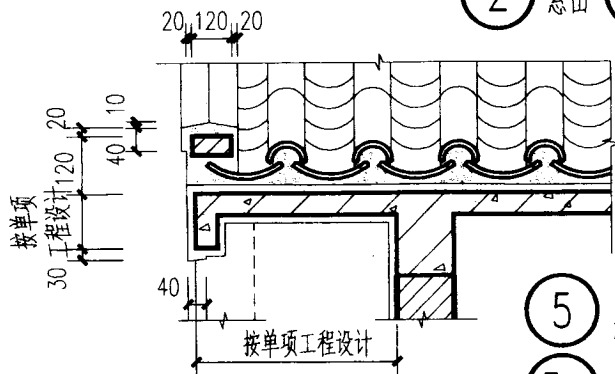
工程名称	工程名称
设计单位	设计单位
设计日期	设计日期
设计人	设计人
审核人	审核人



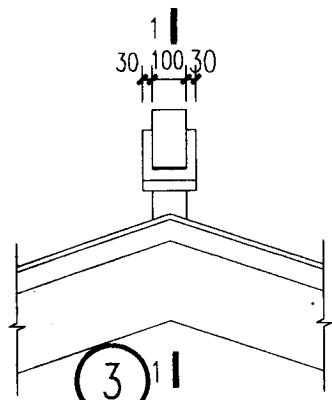
1



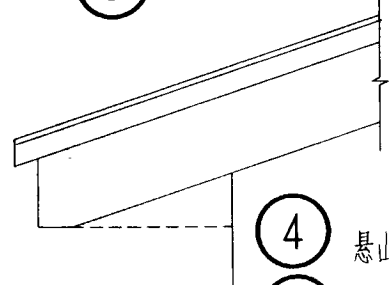
2 悬山 2a 硬山



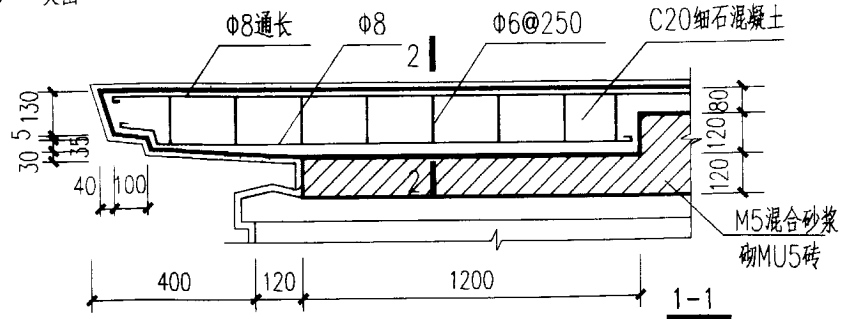
5 悬山
5a 硬山



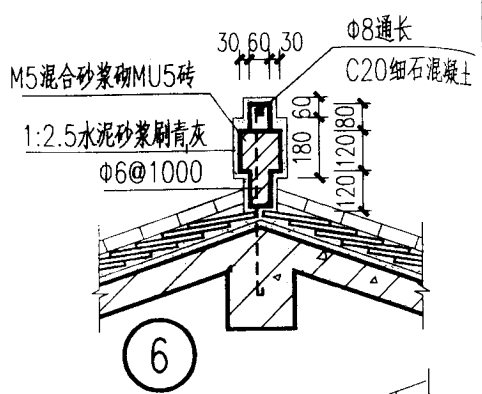
3



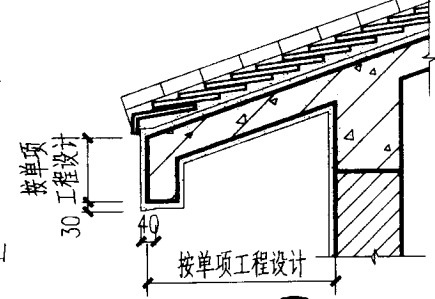
4 悬山
4a 硬山



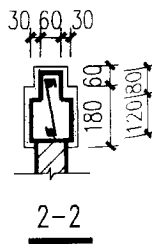
说明:
虚线表示硬山。



6



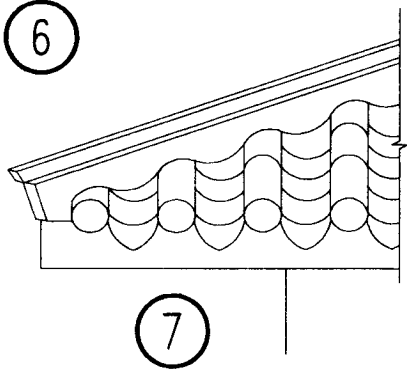
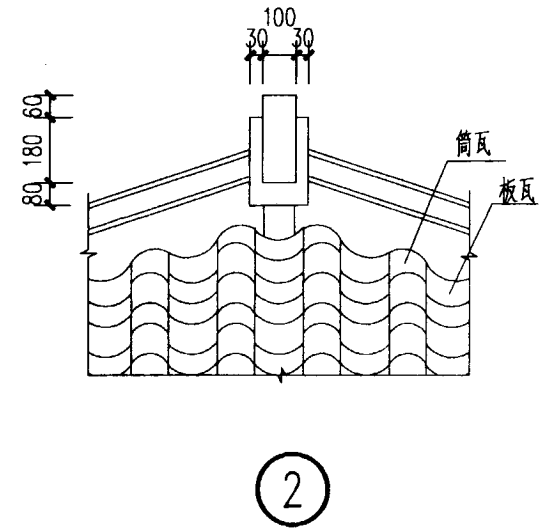
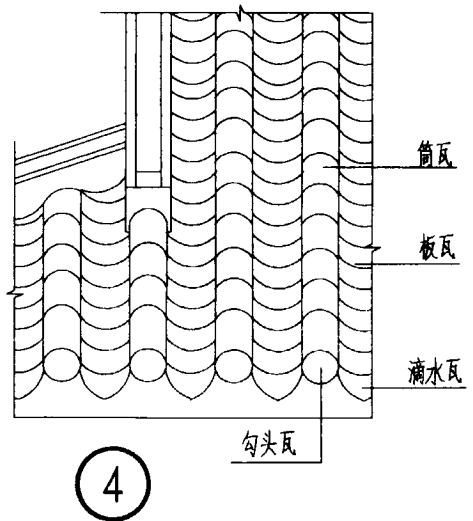
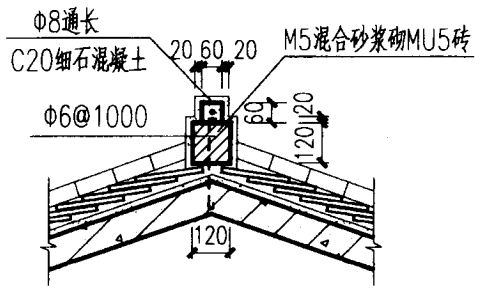
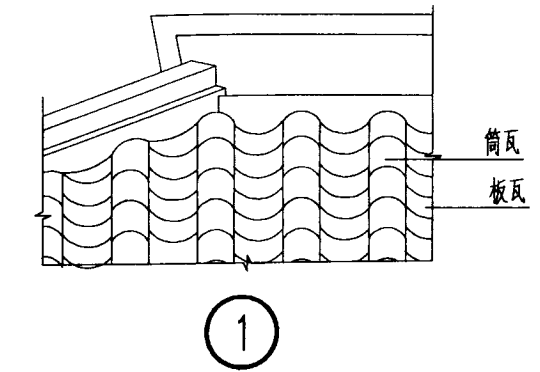
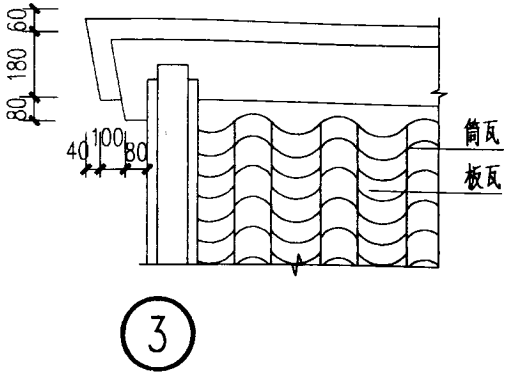
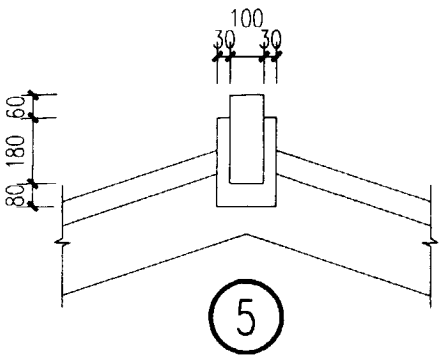
7



2-2

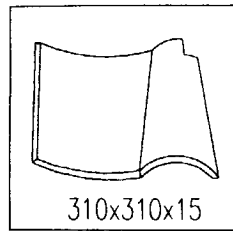
筒板瓦	二坡详图,屋脊(一),挑檐	图案号	98ZJ211
		页	11

张	强	张	强
张	强	张	强
张	强	张	强
张	强	张	强



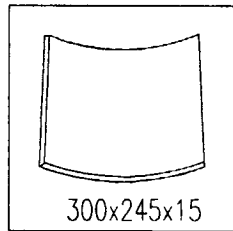
$\phi 8$ 通长
 C20 细石混凝土
 $\phi 6 @ 1000$
 M5 混合砂浆砌 MU5 砖

筒板瓦	四坡歇山详图,屋脊(二)	图集号	98ZJ211
		页	12



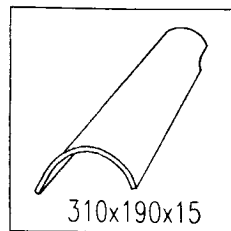
S1

310x310x15



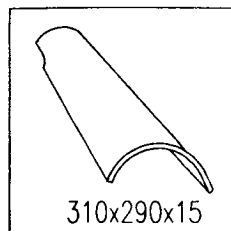
S2

300x245x15



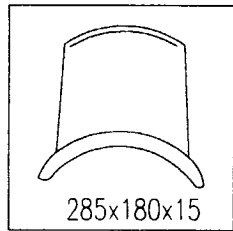
S3

310x190x15



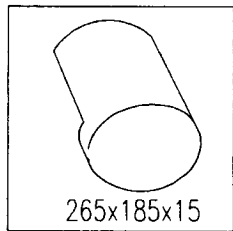
S4

310x290x15



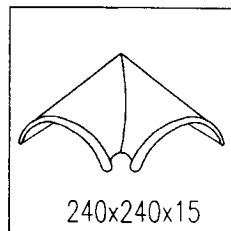
S5

285x180x15



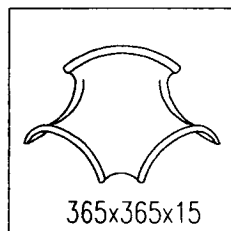
S7

265x185x15



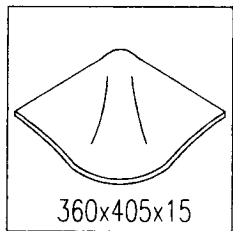
S8

240x240x15



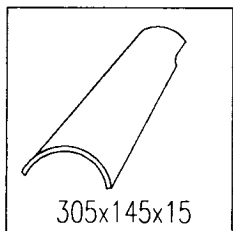
S9

365x365x15



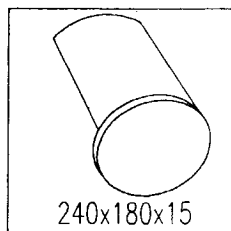
S10

360x405x15



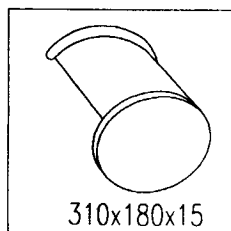
S11

305x145x15



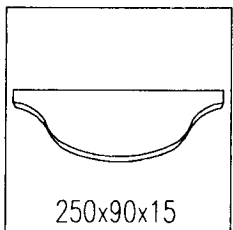
S12

240x180x15



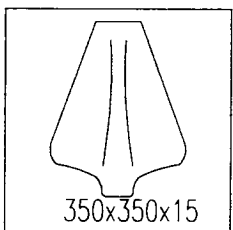
S13

310x180x15



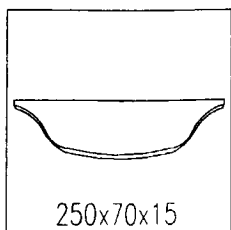
S盾

250x90x15



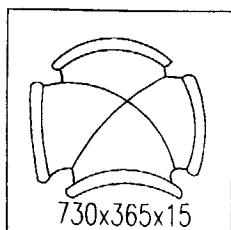
S16

350x350x15



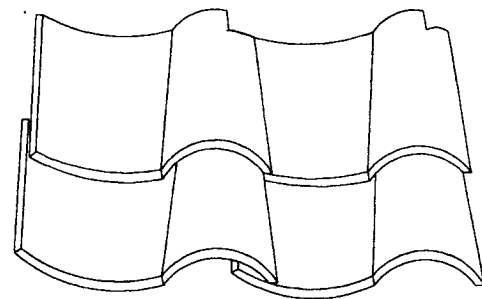
S斜线盾

250x70x15



4叉

730x365x15



说明:

1. 西班牙瓦适宜坡度为30% (1:3.3)

以上, 选用时需注明坡度.

2. 瓦面颜色由单项工程设计定.

3. 封山墙、檐口板面层材料由单项工程设计定.

西班牙瓦(S瓦)

品种、规格

图集号

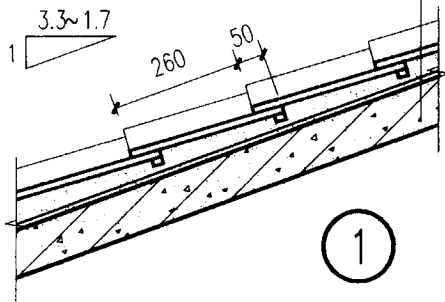
98ZJ211

页

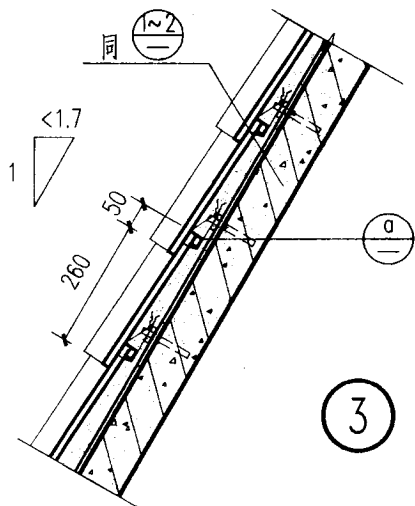
13

西班牙瓦(S瓦)

25厚(最薄处)1:1:4水泥石灰砂浆坐铺
 25厚1:2水泥砂浆加5%防水粉分两次抹平
 刷素水泥浆一道
 钢筋砼屋面板,表面清扫干净



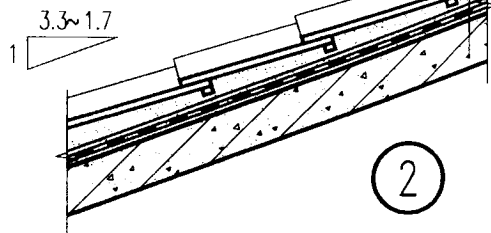
1



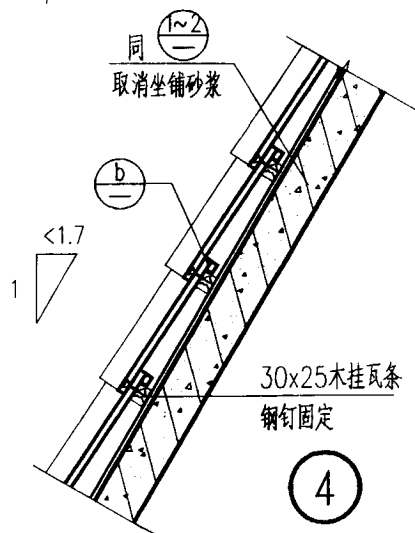
3

西班牙瓦(S瓦)

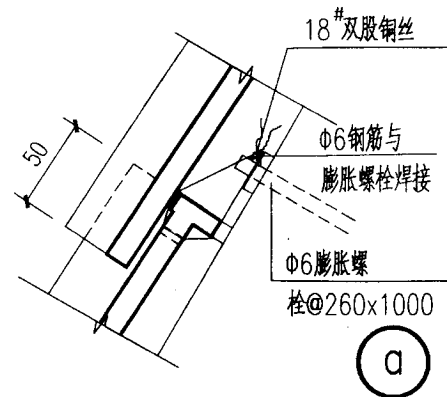
25厚(最薄处)1:1:4水泥石灰砂浆坐铺
 20厚1:3干硬水泥砂浆
 隔热防水膏
 20厚1:3水泥砂浆找平
 刷素水泥浆一道
 钢筋砼屋面板,表面清扫干净



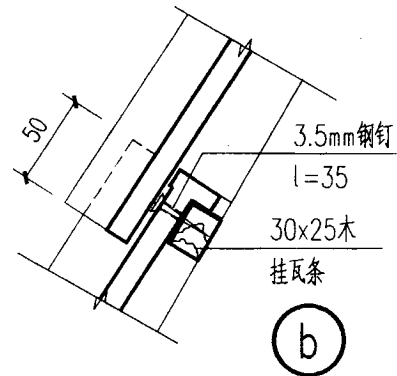
2



4



a



b

说明:

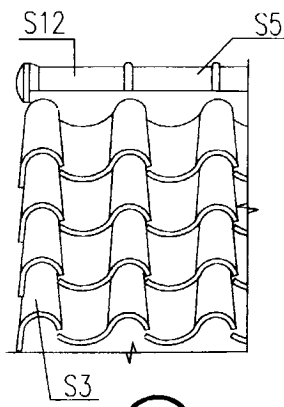
- ①~②用于屋面坡度30%(1:3.3)~60%(1:1.7)时, (屋面边瓦,檐口瓦应加3.5mm钢钉固定).
- ③~④用于屋面坡度>60%(1:1.7).
- 砂浆坐铺时不可满浆,以防胀裂.

西班牙瓦(S瓦)

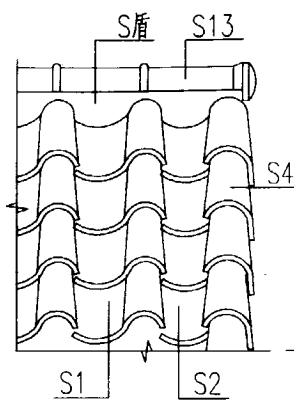
屋面做法

图集号	98ZJ211
页	14

卢裕生
 张碧云
 张深光
 设计
 制图

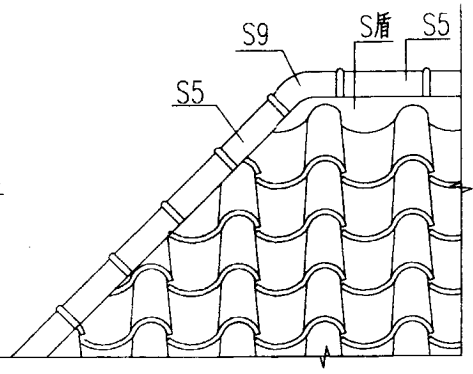


①

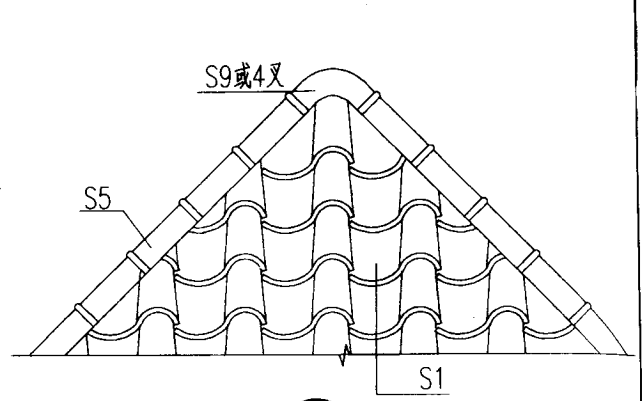


② 悬山

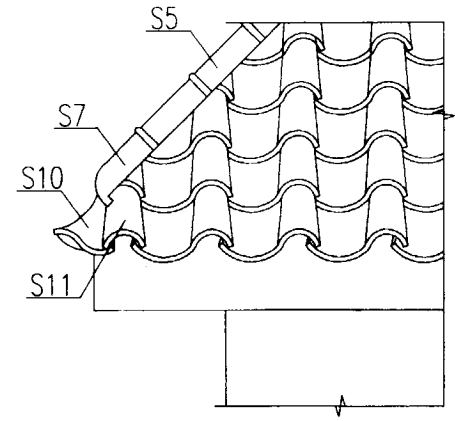
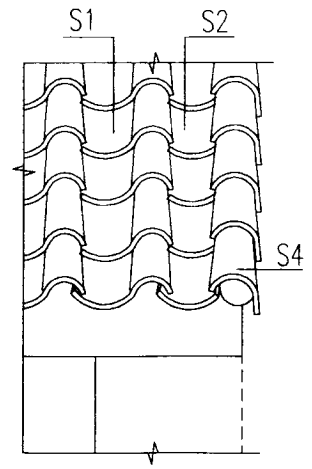
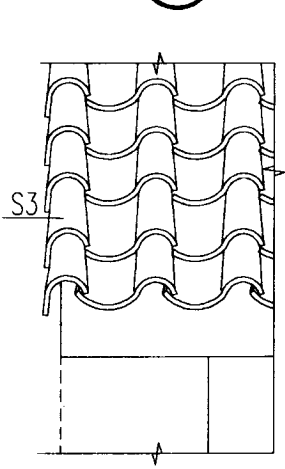
②a 硬山



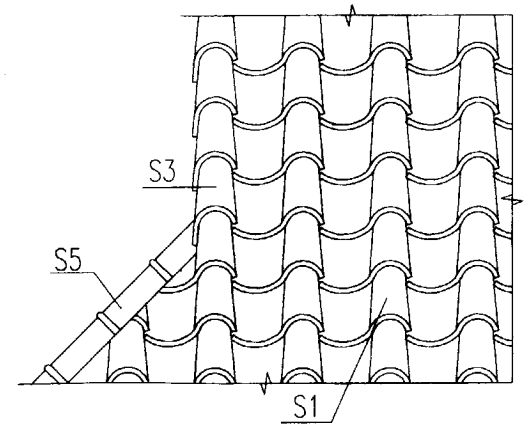
③



④



⑤

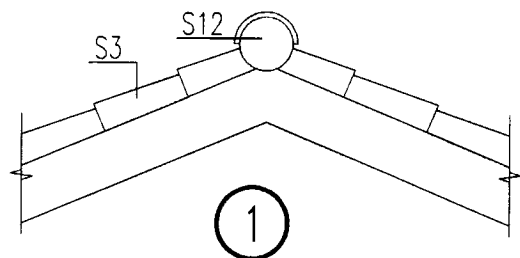


⑥

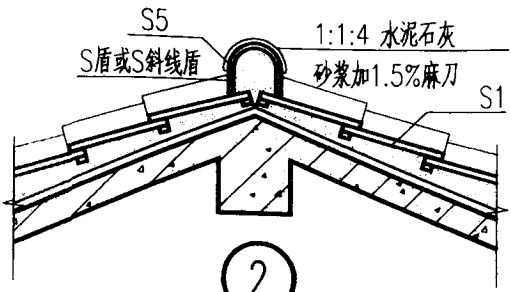
说明：
 虚线表示硬山。

西班牙瓦(S瓦)二坡、四坡、歇山、攒尖详图		图案号	98ZJ211
		页	15

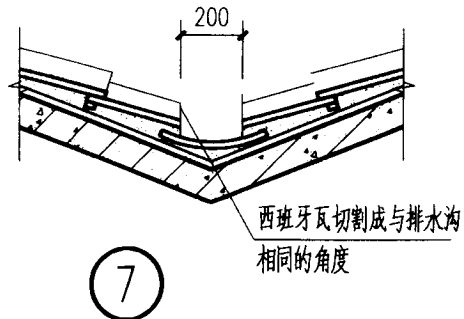
审核人：卢裕生
 设计人：张碧云
 制图人：张光宇



1

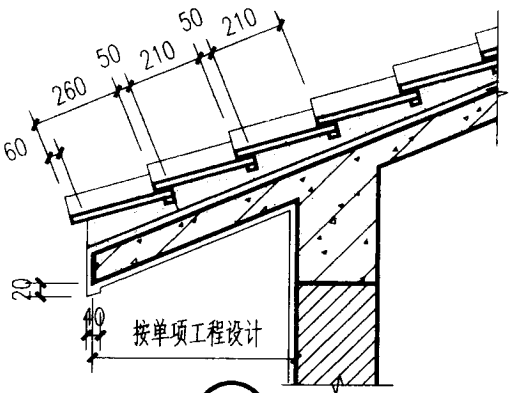


2

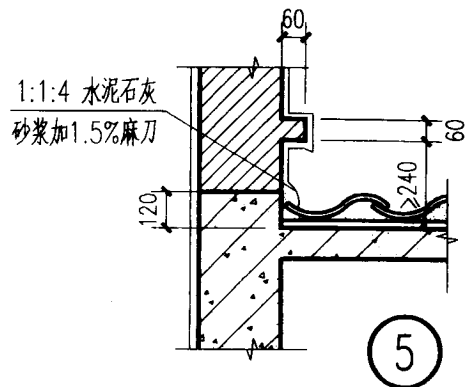


西班牙瓦切割成与排水沟相同的角度

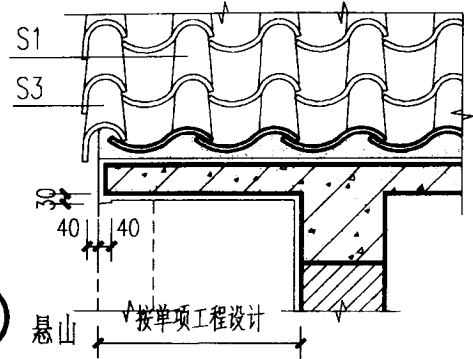
7



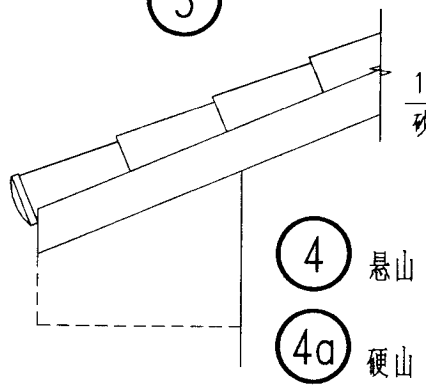
3



5

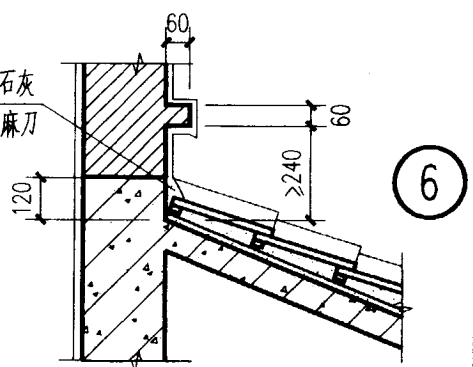


8



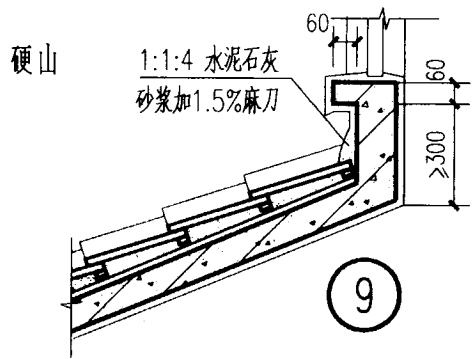
4 悬山

4a 硬山



6

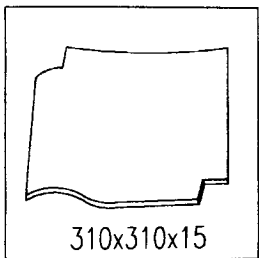
8a



9

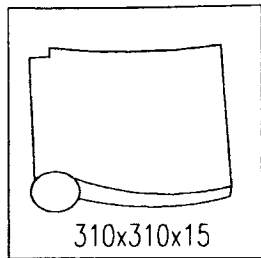
说明：
虚线表示硬山。

西班牙瓦(S瓦)屋脊、挑檐、泛水、合水沟		图集号	98ZJ211
		页	16



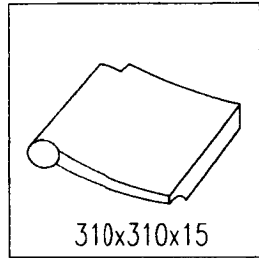
310x310x15

J1



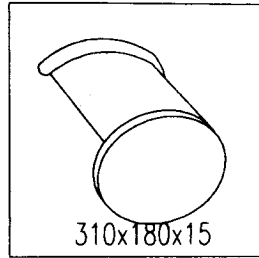
310x310x15

J5



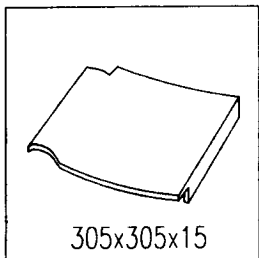
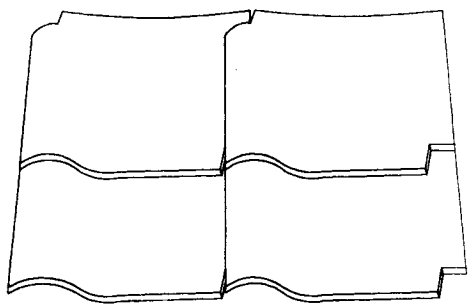
310x310x15

J14



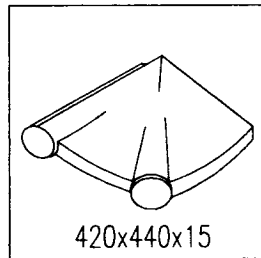
310x180x15

J53



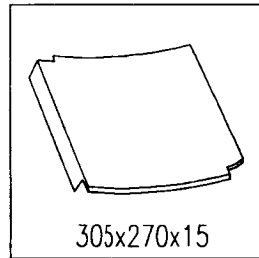
305x305x15

J9



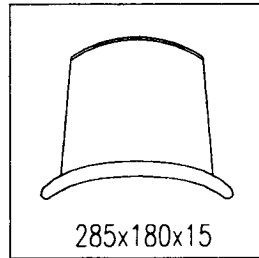
420x440x15

J11



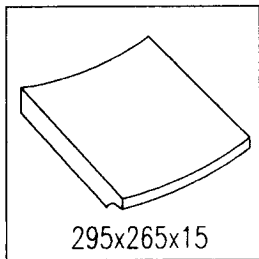
305x270x15

J8



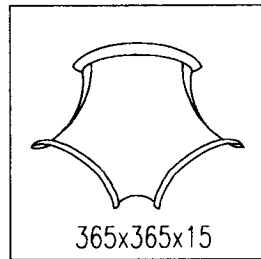
285x180x15

J54



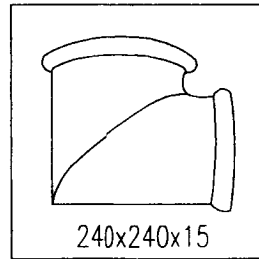
295x265x15

J15



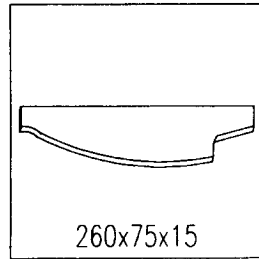
365x365x15

J50



240x240x15

J51



260x75x15

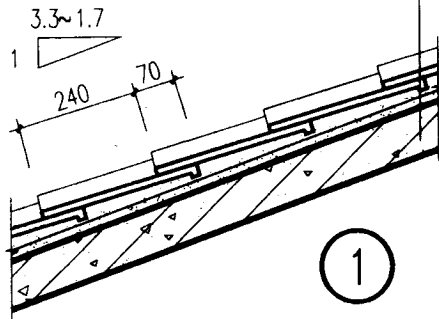
J盾

说明:
 1.日本瓦适宜坡度为30%(1:3.3)
 以上,选用时需注明坡度.
 2.瓦面颜色由单项工程设计定.
 3.封山墙、檐口板面层材料由单项工程设计
 定.

设计	张	云	兵
校核	张	云	兵
审核	张	云	兵
编制	张	云	兵

日本瓦

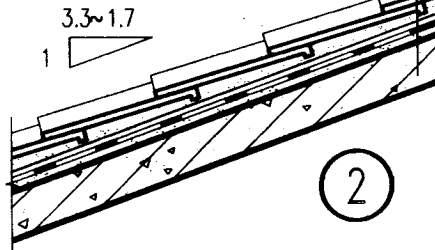
- 25厚(最薄处)1:1:4水泥石灰砂浆坐铺
- 25厚1:2水泥砂浆加5%防水粉分两次抹平
- 刷素水泥浆一道
- 钢筋砼屋面板,表面清扫干净



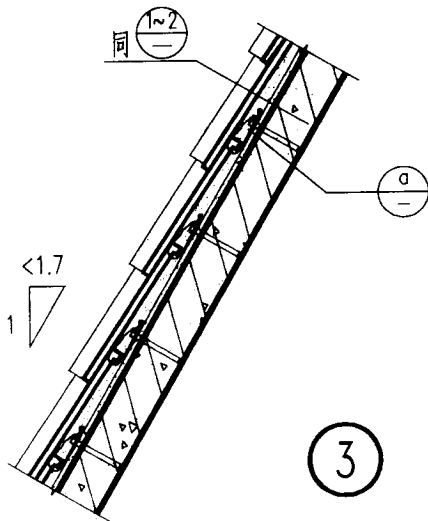
1

日本瓦

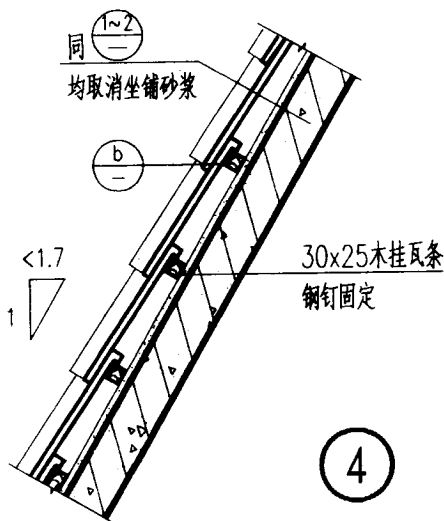
- 25厚(最薄处)1:1:4水泥石灰砂浆坐铺
- 20厚1:3干硬性水泥砂浆
- 隔热防水膏
- 20厚1:3水泥砂浆找平
- 刷素水泥浆一道
- 钢筋砼屋面板,表面清扫干净



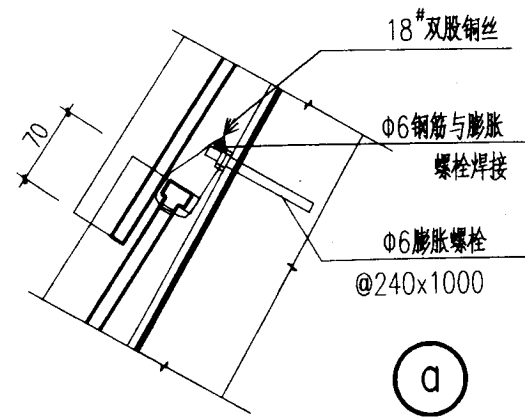
2



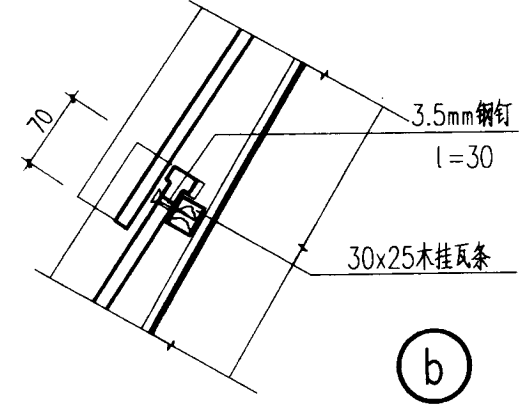
3



4



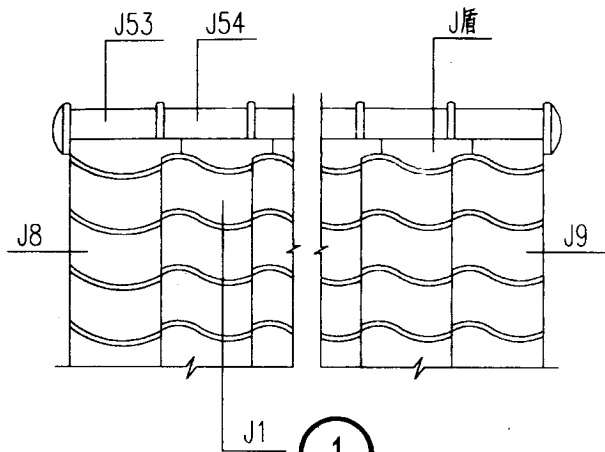
a



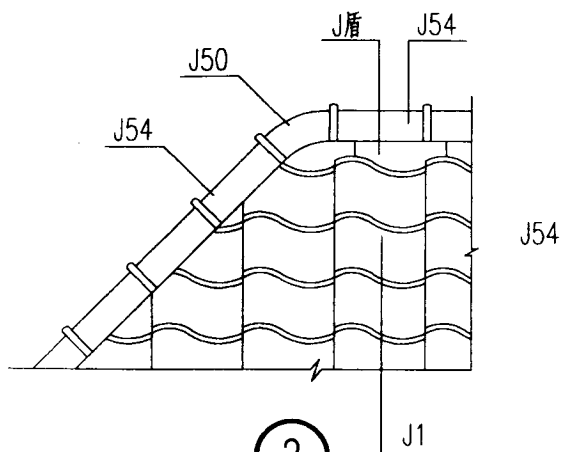
b

说明: 1. ①~②用于屋面坡度30%(1:3.3)~60%(1:1.7)
 屋面边瓦及檐口瓦加3.5mm钢钉固定, ③~④用于屋
 面坡度 $\geq 60\%$ (1:1.7)
 2. 砂浆坐铺时不可满浆,以防胀裂。

日本瓦(J瓦)	屋面做法	图集号	98ZJ211
		页	18



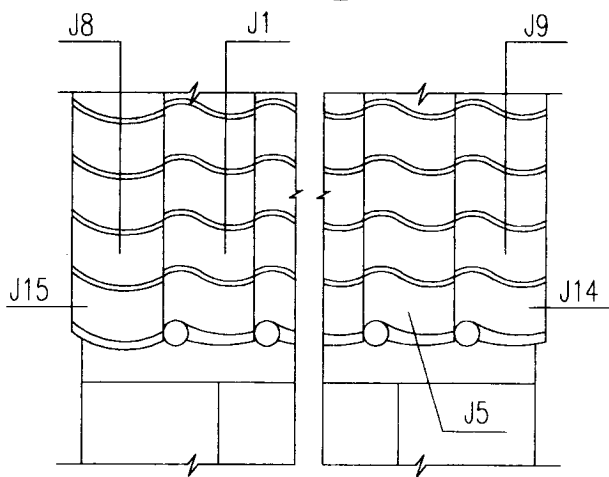
①



②

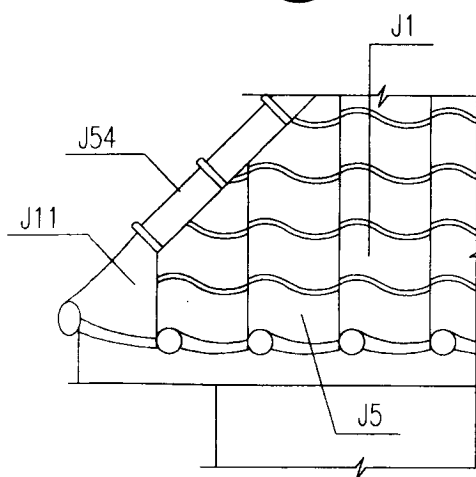
J50或四向脊

③

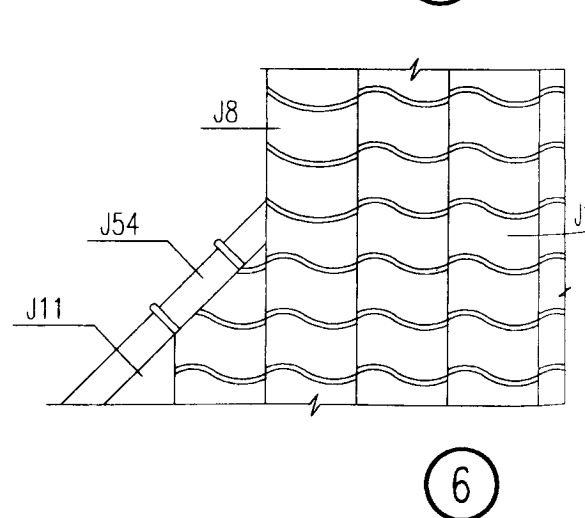


④ 悬山

④a 硬山



⑤



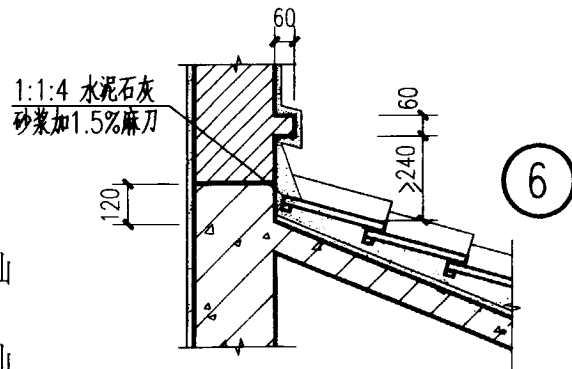
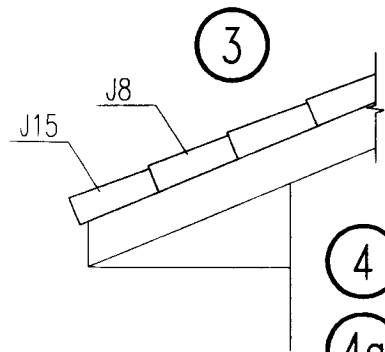
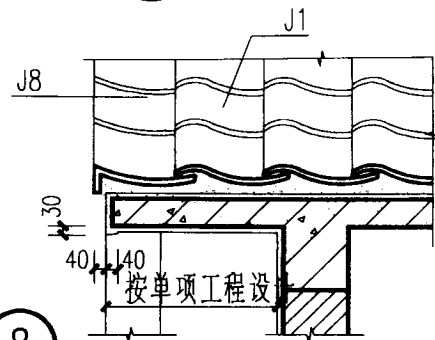
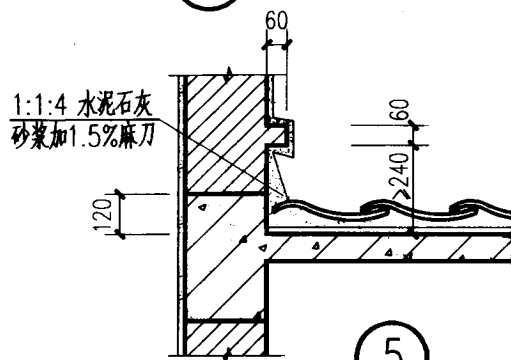
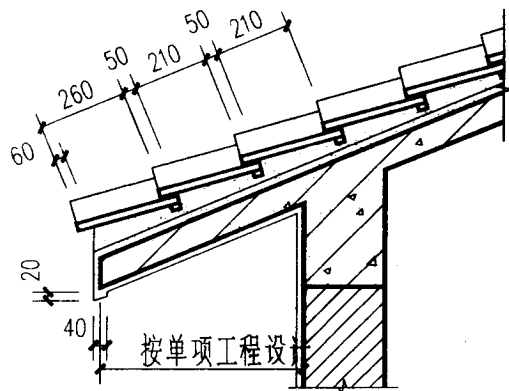
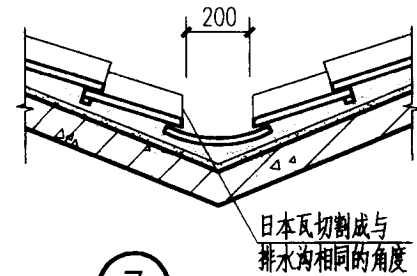
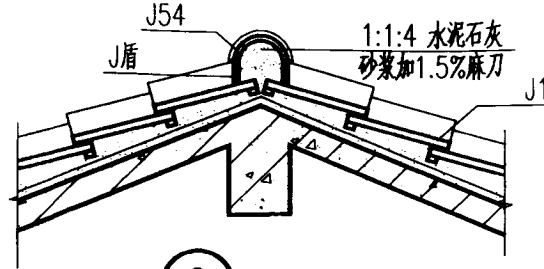
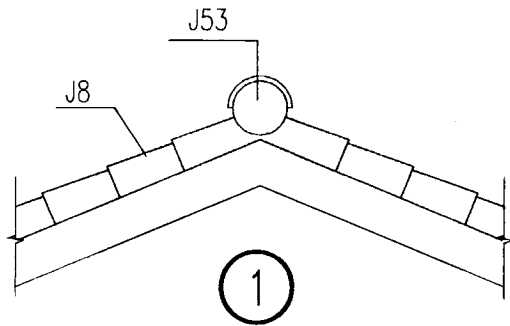
⑥

说明:
虚线表示硬山二坡

日本瓦(J瓦) 二坡、四坡、歇山、攒尖详图

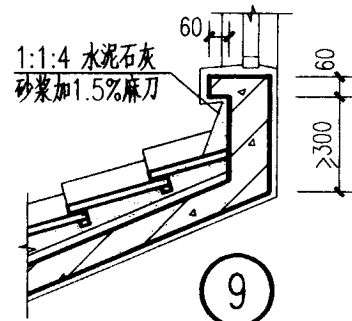
图集号	98ZJ211
页	19

设计
 张
 图
 制



8 悬山

8a 硬山



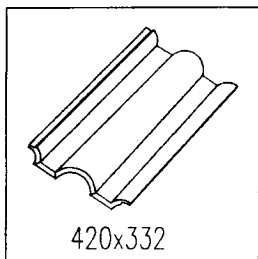
说明：
 虚线表示硬山。

4 悬山

4a 硬山

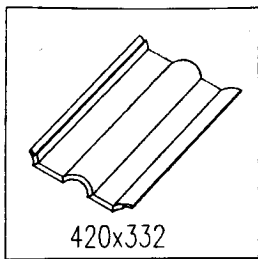
图集号	98ZJ211
页	20

日本瓦(J瓦) 屋脊、挑檐、泛水、合水沟



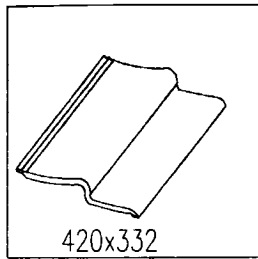
420x332

丽兰瓦



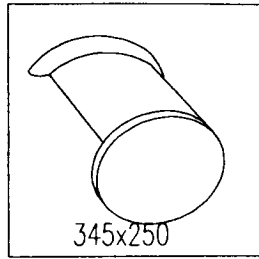
420x332

星兰瓦



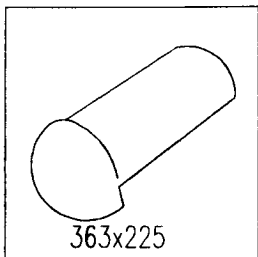
420x332

欧兰瓦



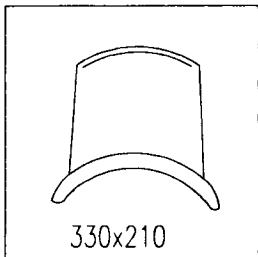
345x250

圆脊封头



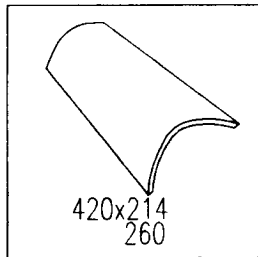
363x225

圆脊斜封



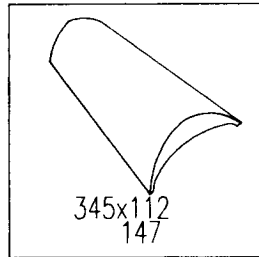
330x210

圆脊



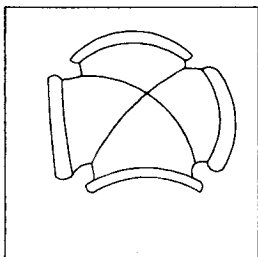
420x214
260

檐口瓦

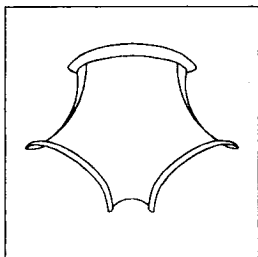


345x112
147

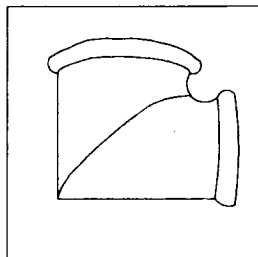
檐口封



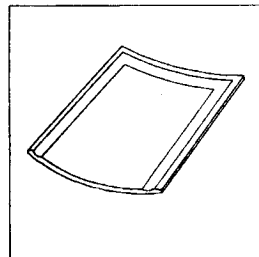
四向圆脊



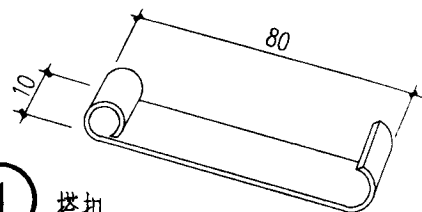
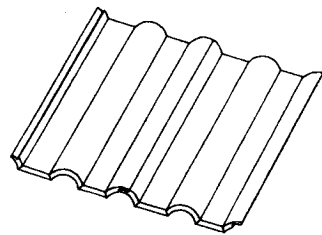
三向圆脊



双向圆脊

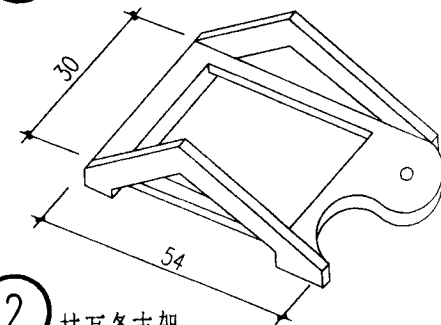


排水瓦



①

搭扣



②

挂瓦条支架

说明:

1. 英式瓦适宜坡度为32%(1:3.1)以上,选用时需注明坡度。
2. 瓦面颜色由单项工程设计定。
3. 封山墙、檐口板面层材料由单项工程设计定。

英式瓦

品种、规格

图集号

98ZJ211

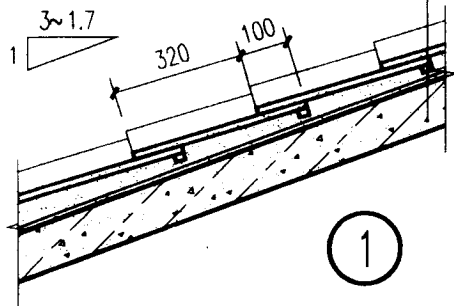
页

21

工程名称
 设计单位
 设计日期
 设计人
 审核人
 校对人

英式瓦

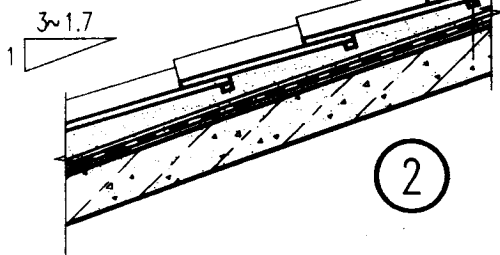
25厚(最薄处)1:1:4水泥石灰砂浆坐铺
 25厚1:2水泥砂浆加5%防水粉分两次抹平
 刷素水泥浆一道
 钢筋砼屋面板,表面清扫干净



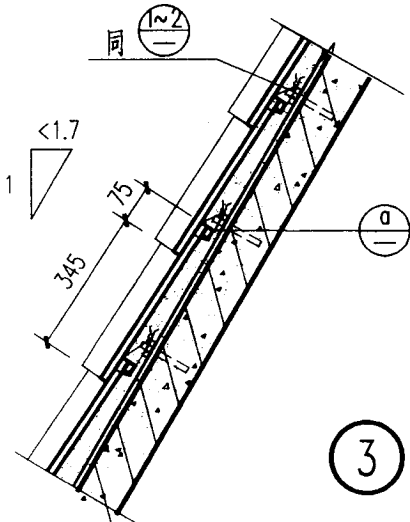
①

英式瓦

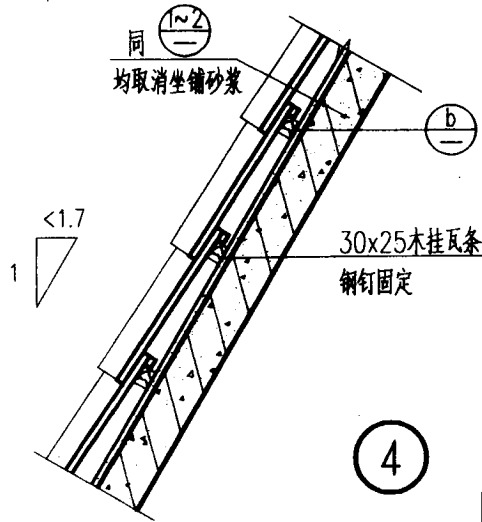
25厚(最薄处)1:1:4水泥石灰砂浆坐铺
 20厚1:3干硬水泥砂浆
 隔热防水膏
 20厚1:3水泥砂浆找平
 刷素水泥浆一道
 钢筋砼屋面板,表面清扫干净



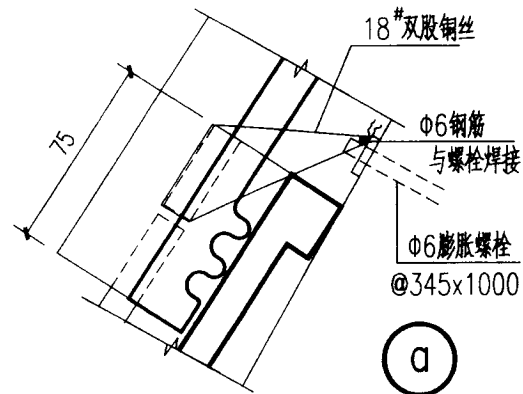
②



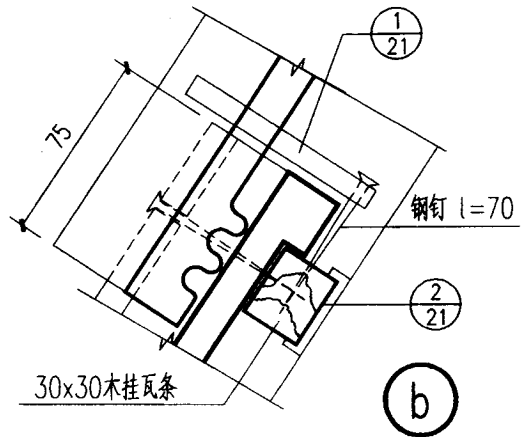
③



④



①



②

说明:

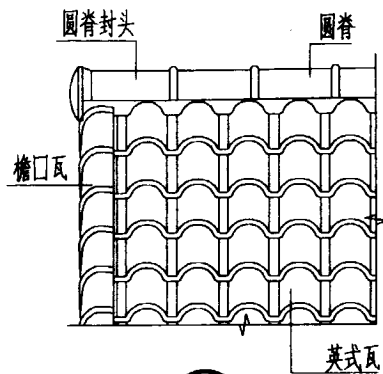
- ①~② 用于屋面坡度33%(1:3)~60%(1:1.7)时,
- ③~④ 用于屋面坡度>60%(1:1.7).
- 砂浆坐铺时不可满浆,以防胀裂。

英式瓦

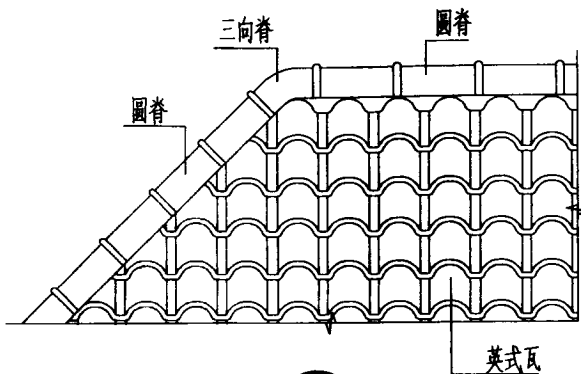
屋面做法

图集号	98ZJ211
页	22

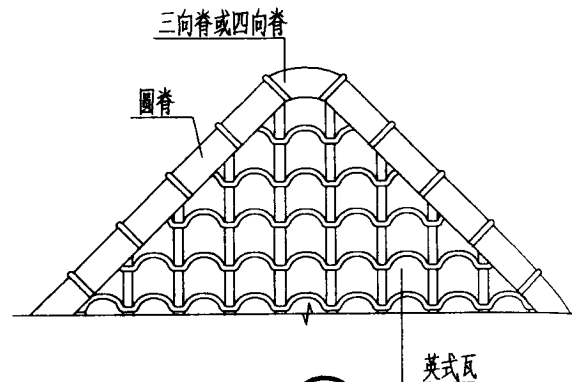
设计	张	光
核计	张	光
校核	张	光
设计	张	光
核计	张	光
校核	张	光



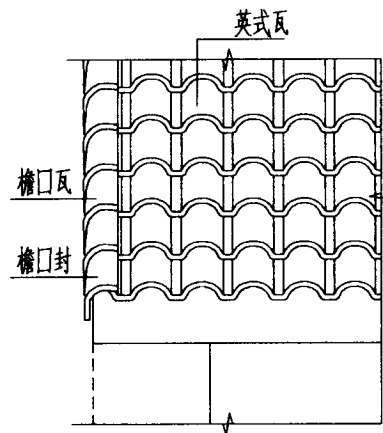
①



③

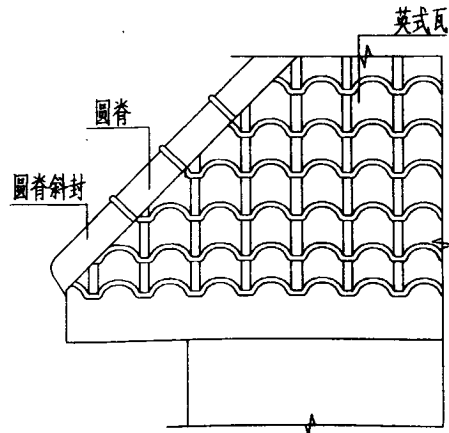


⑤

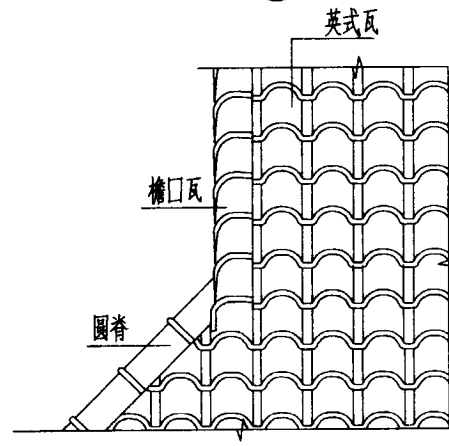


② 悬山

②a 硬山



④



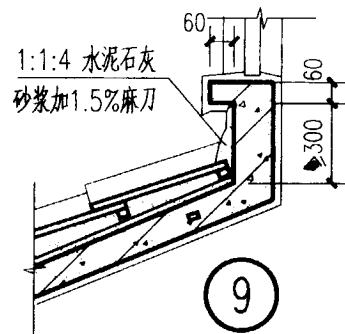
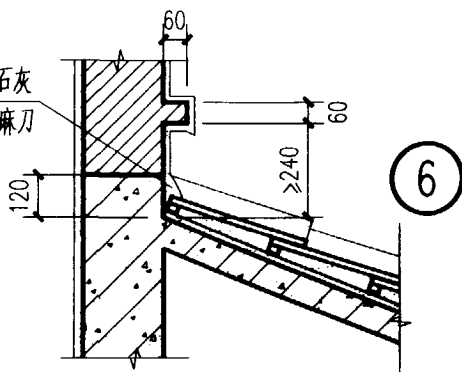
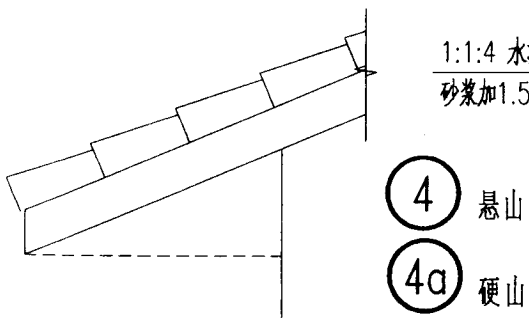
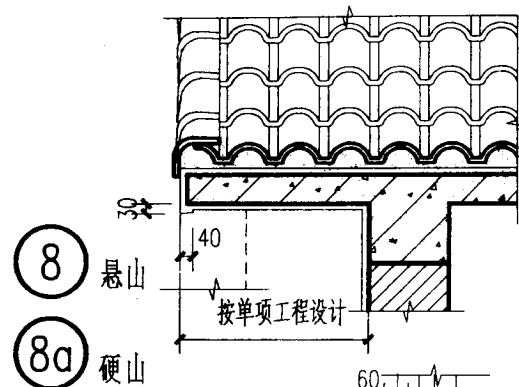
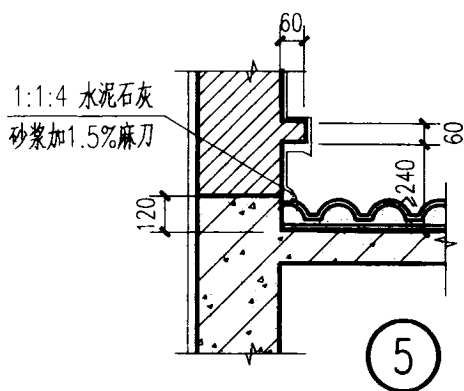
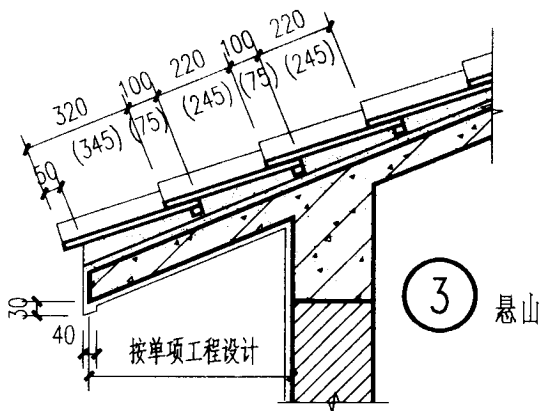
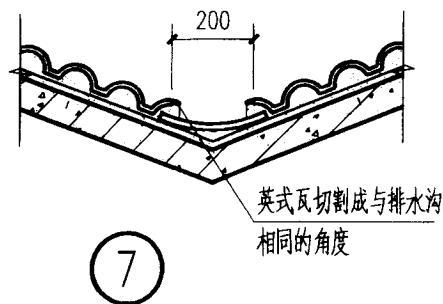
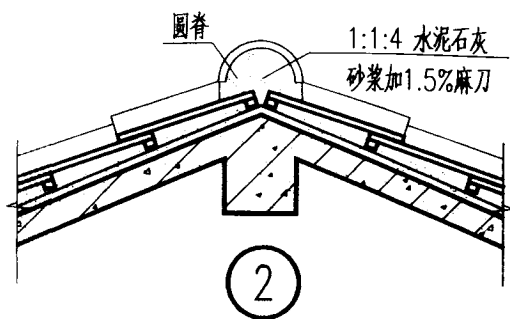
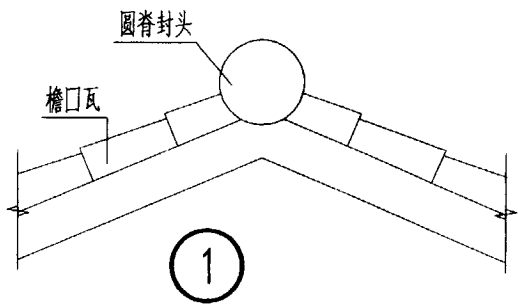
⑥

说明:
虚线表示硬山.

英式瓦 二坡、四坡、歇山、攒尖详图

图集号	98ZJ211
页	23

审核
 张恩光
 设计
 张恩光
 制图
 张恩光
 校对
 张恩光



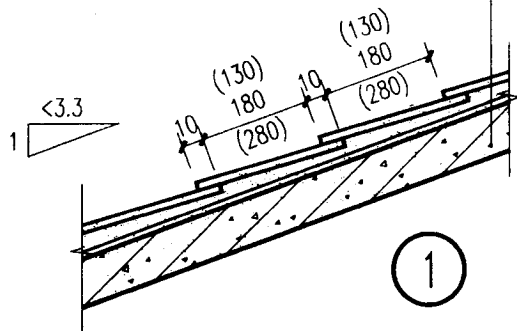
说明：
虚线表示硬山。

英式瓦 屋脊、挑檐、泛水、合水沟

图集号	98ZJ211
页	24

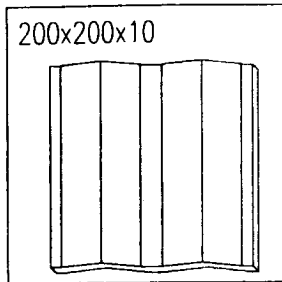
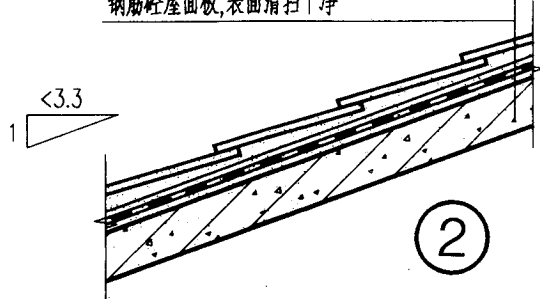
波纹装饰瓦

25厚1:2水泥砂浆加水重20%107胶粘贴
 2厚聚氨酯防水涂料,面上粘黄砂
 刷基层处理剂一道
 钢筋砼屋面板,表面清扫干净

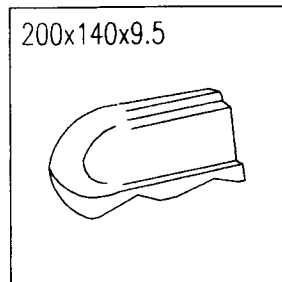


波纹装饰瓦

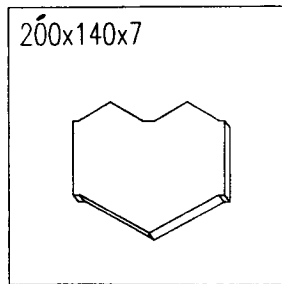
25厚1:2水泥砂浆加水重20%107胶粘贴
 隔热防水膏
 20厚1:3水泥砂浆找平
 刷素水泥浆一道
 钢筋砼屋面板,表面清扫干净



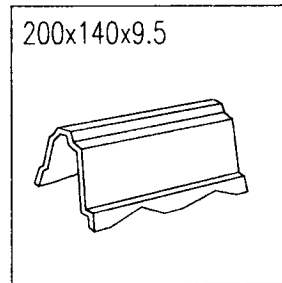
装饰瓦



脊瓦收口



滴水瓦

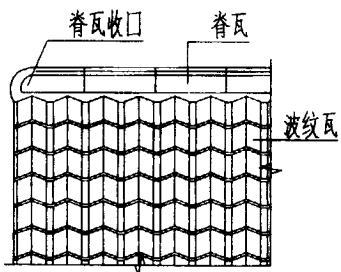


脊瓦

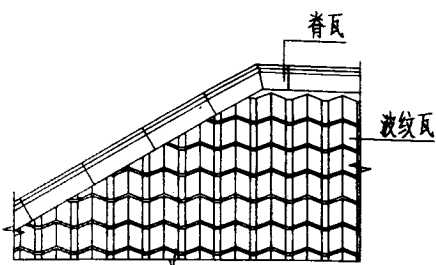
说明:

1. 波纹瓦适宜坡度为30%(1:3.3)以上,选用时需注明坡度。
2. 瓦面颜色,规格由单项工程设计定。
3. 封山墙,檐口板面层材料由单项工程设计定。

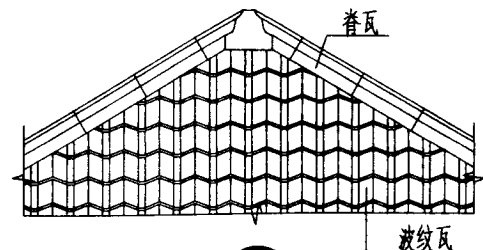
平法图
 生
 占
 核
 校
 审
 制



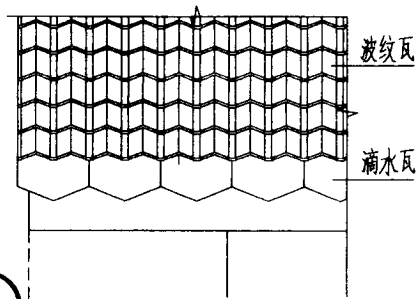
①



④



⑥

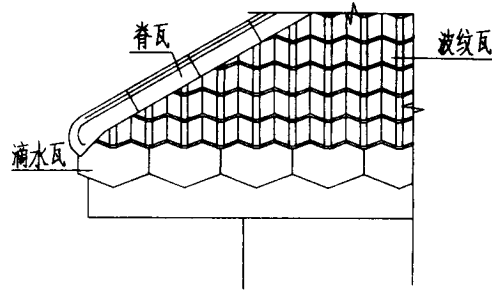


②

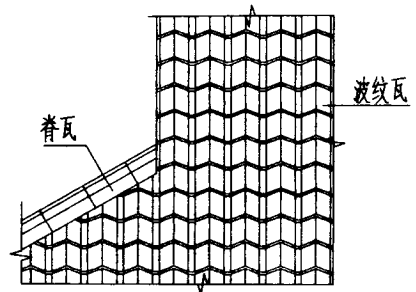
悬山

②a

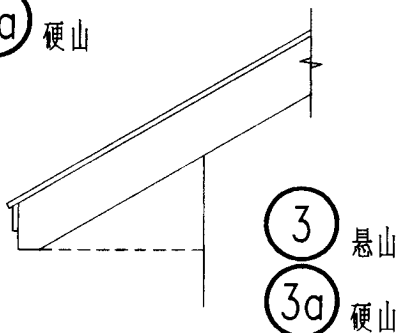
硬山



⑤



⑦



③

悬山

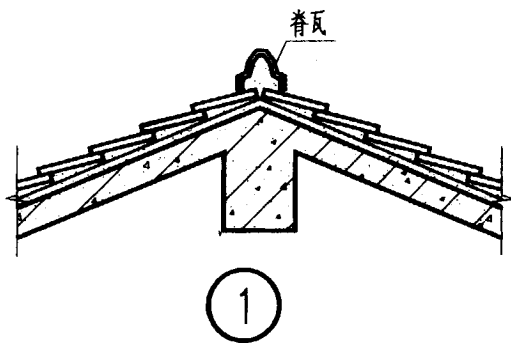
③a

硬山

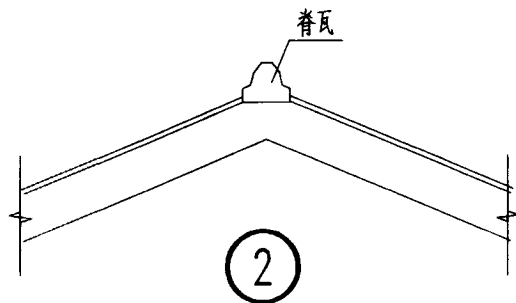
说明：
虚线表示硬山。

波纹装饰瓦 二坡、四坡、歇山、攒尖详图	图集号	98ZJ211
	页	26

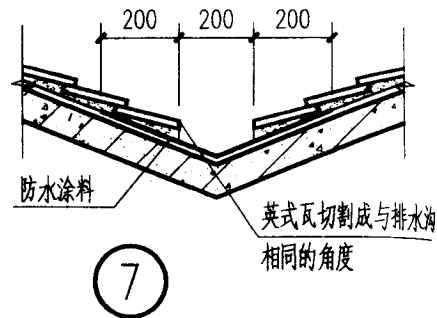
设计	张深
核计	张深
审核	张深
编制	张深



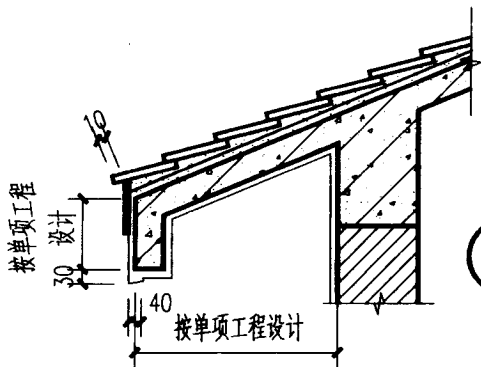
①



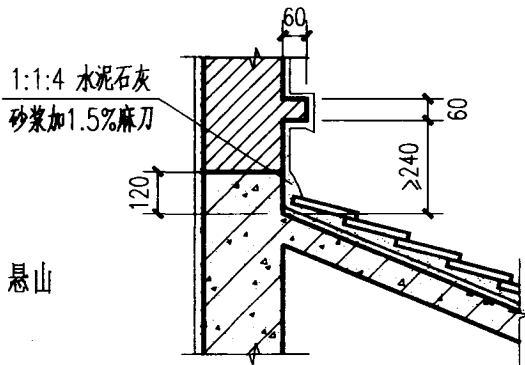
②



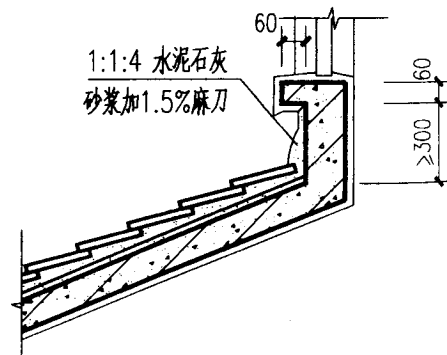
⑦



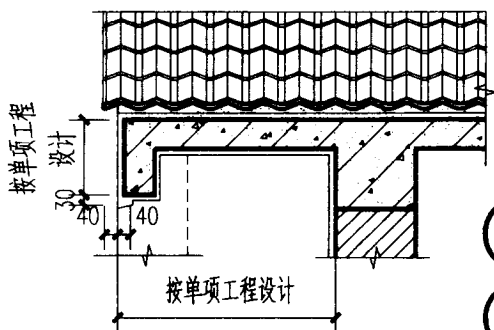
③



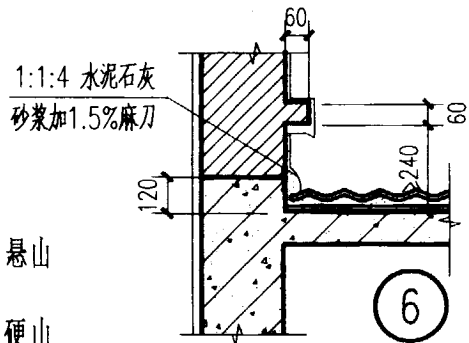
⑤



⑧



④



⑥

④a

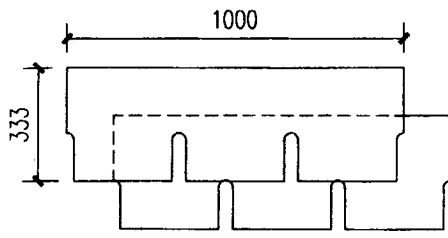
硬山

说明：
虚线表示硬山。

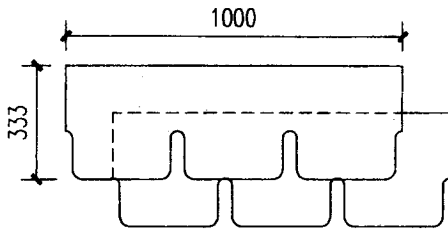
波纹装饰瓦 屋脊、挑檐、泛水、合水沟

图集号	98ZJ211
页	27

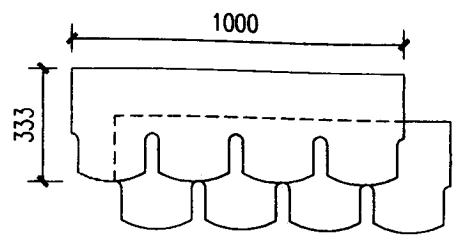
工程名称
设计
审核
日期
图号



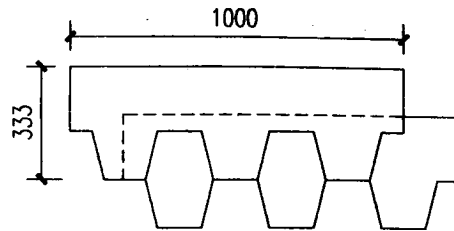
直角瓦



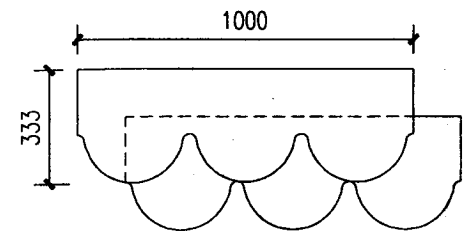
圆角瓦



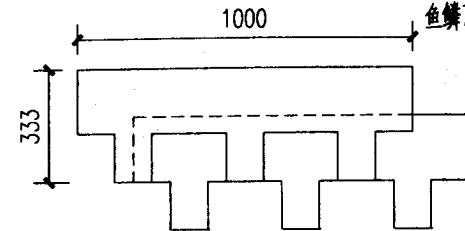
鱼鳞瓦(二)



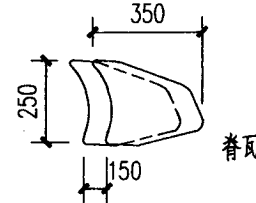
蜂巢瓦



鱼鳞瓦(一)



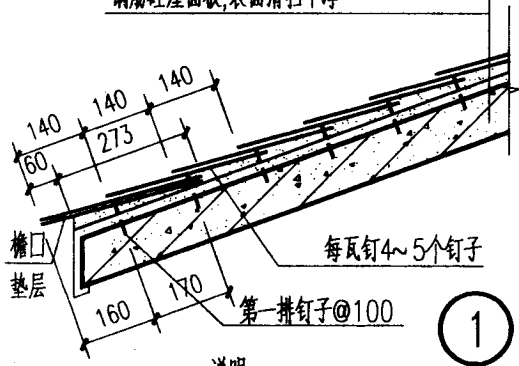
T字瓦



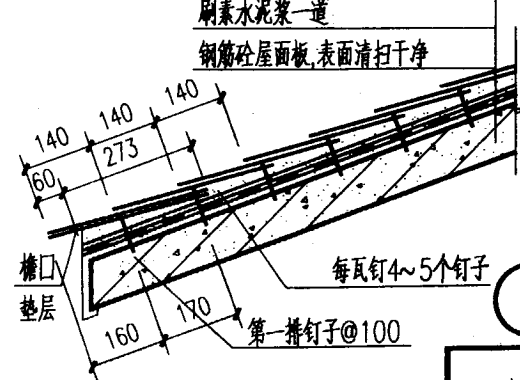
脊瓦

沥青油毡瓦(改性沥青胶粘贴)
25厚1:2水泥砂浆加5%防水粉分两次抹平
刷素水泥浆一道
钢筋砼屋面板,表面清扫干净

沥青油毡瓦(改性沥青胶粘贴)
20厚1:2水泥砂浆
隔热防水膏
20厚1:3水泥砂浆找平
刷素水泥浆一道
钢筋砼屋面板,表面清扫干净

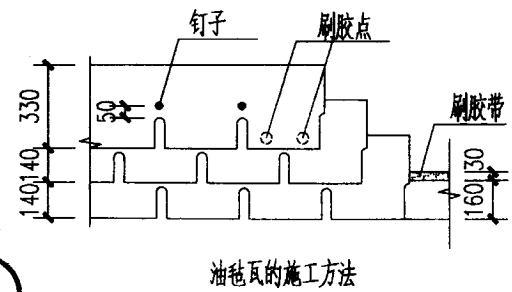


1



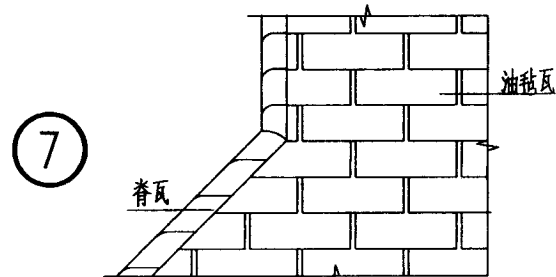
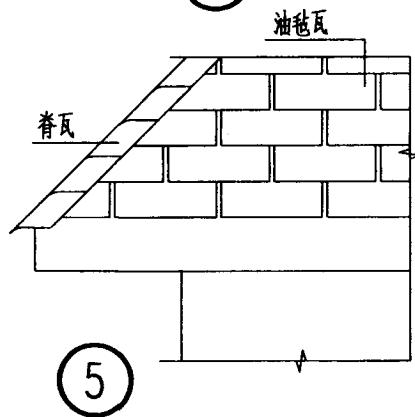
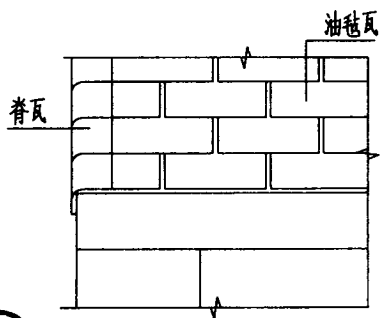
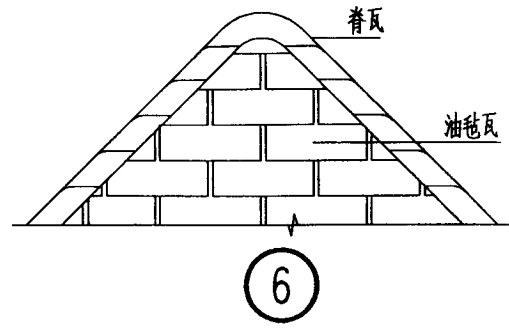
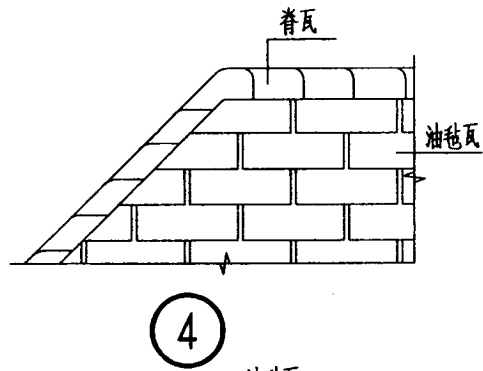
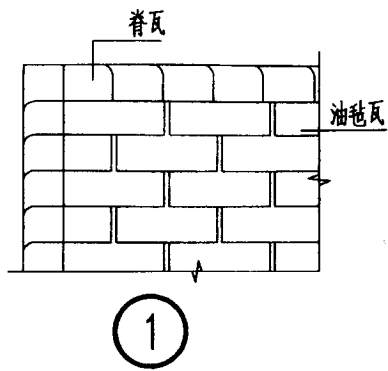
2

说明:
钉子用镀锌钢钉, 钉头 $\phi 10$, $l=25\sim 32$.



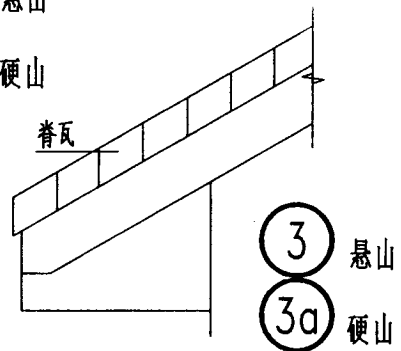
油毡瓦的施工方法

油毡瓦 品种、规格、屋面做法	图集号	98ZJ211
	页	28



② 悬山

②a 硬山



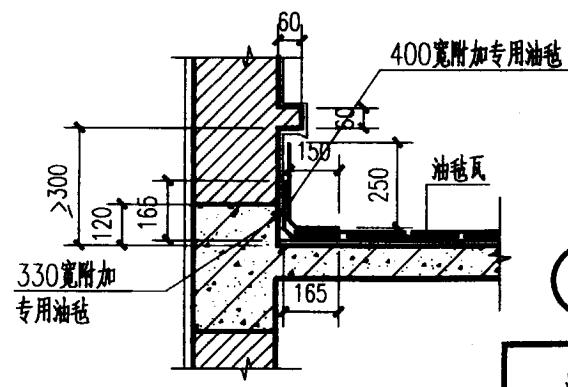
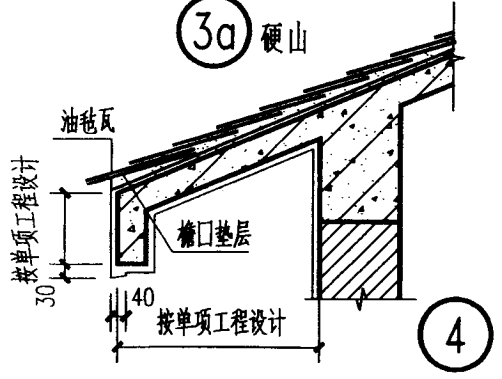
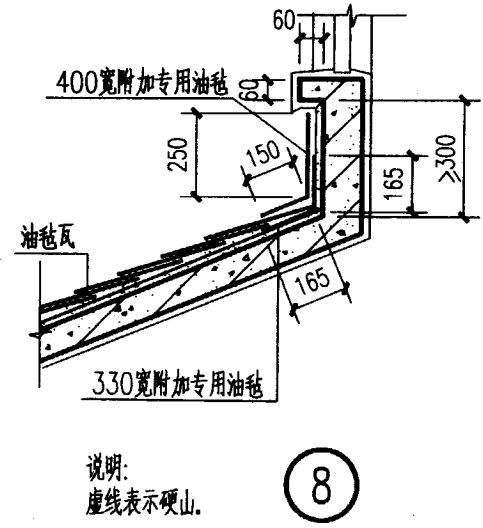
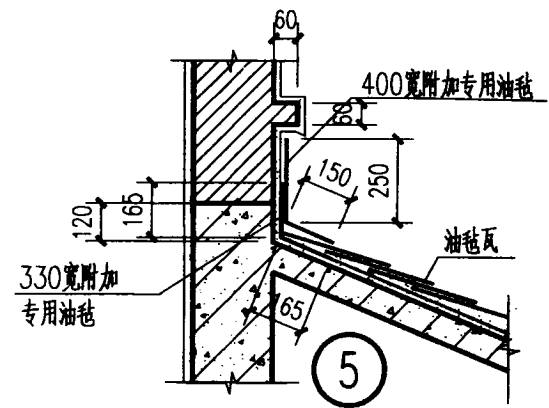
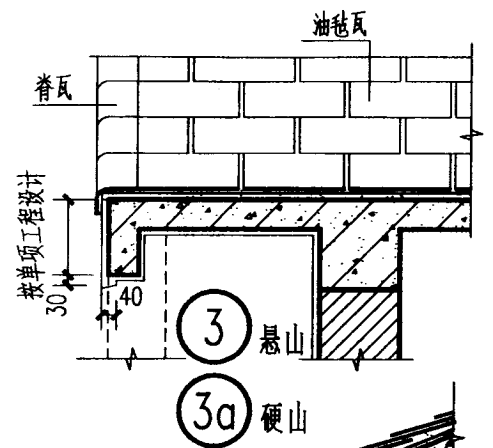
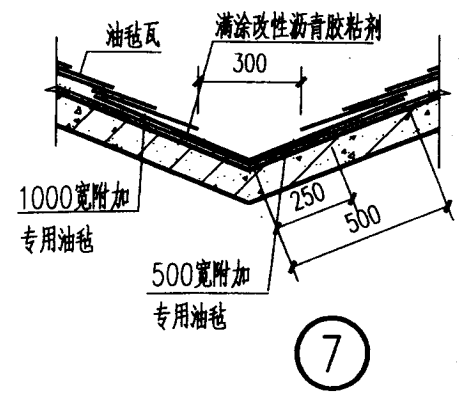
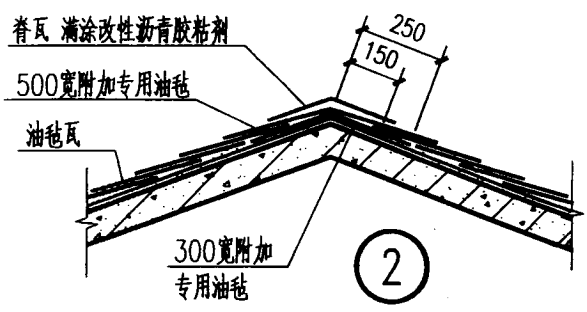
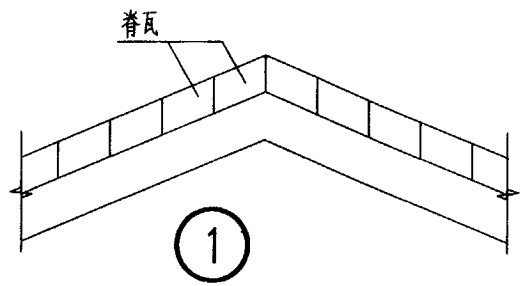
说明:

1. 油毡瓦坡度不宜 $<17\%$ (1:6), 最适宜坡度 $>33\%$ (1:3).
2. 瓦面颜色、形状由单项工程设计定.
3. 封山墙、檐口板面层材料由单项工程设计定.
4. 虚线表示硬山二坡.
5. 检修孔、烟囱、通气管、泛水参照30页⑤⑥.

油毡瓦 二坡、四坡、歇山、攒尖详图

图集号	98ZJ21
页	29

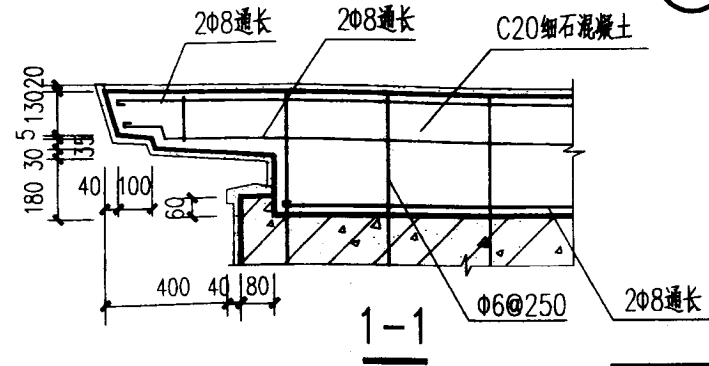
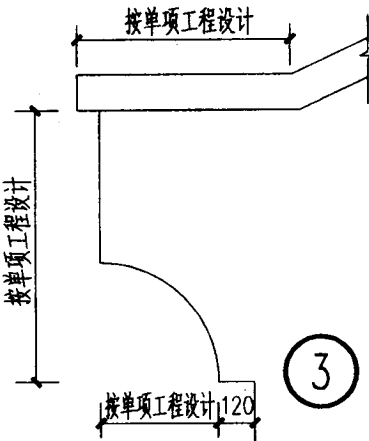
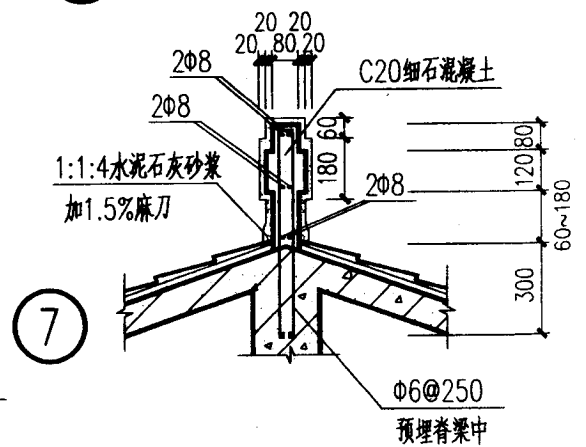
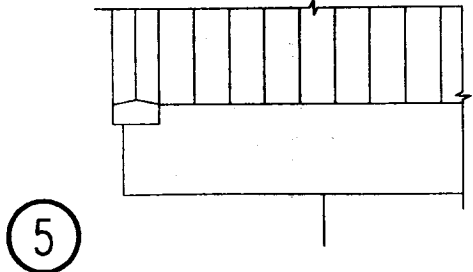
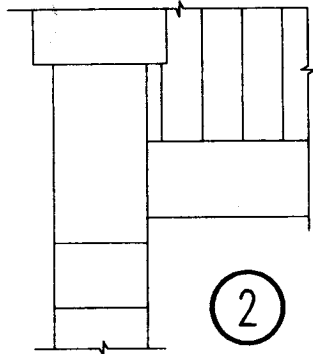
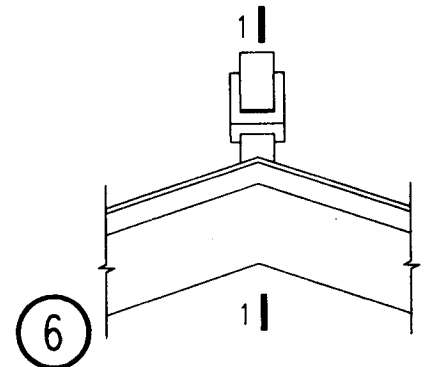
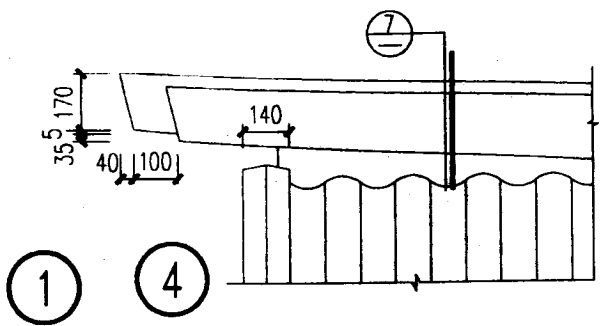
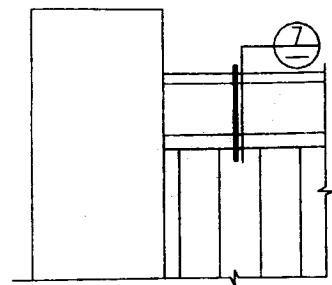
设计
 审核
 校对
 制图
 日期
 姓名
 单位



说明:
虚线表示硬山。

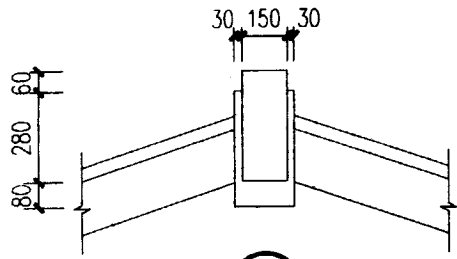
油毡瓦	屋脊、挑檐、泛水、合水沟	图集号	98ZJ211
		页	30

工程名称	屋面工程
设计单位	中国建筑科学研究院
设计人	张强
审核人	张强
日期	

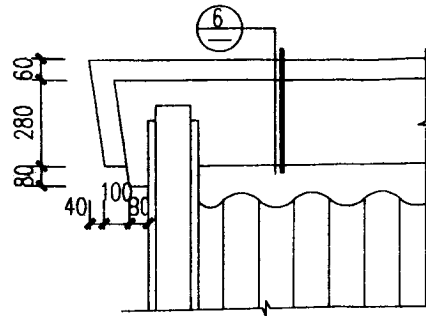


说明:
 1. 屋面瓦种类由单项工程设计选定。
 2. 屋脊, 封檐板, 檐沟面层材料及颜色由单项工程设计选定。

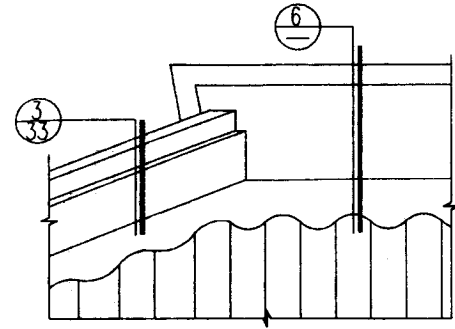
混凝土屋脊 (硬山, 悬山详图)		图集号	98ZJ211
		页	31



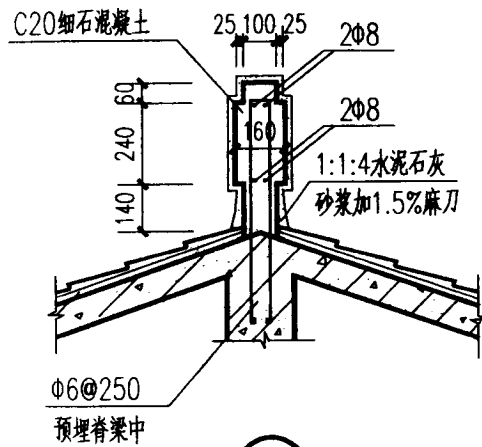
5



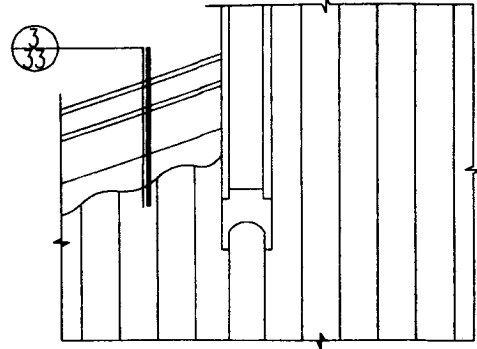
3



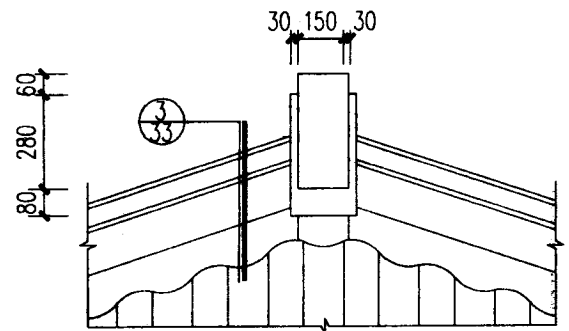
1



6



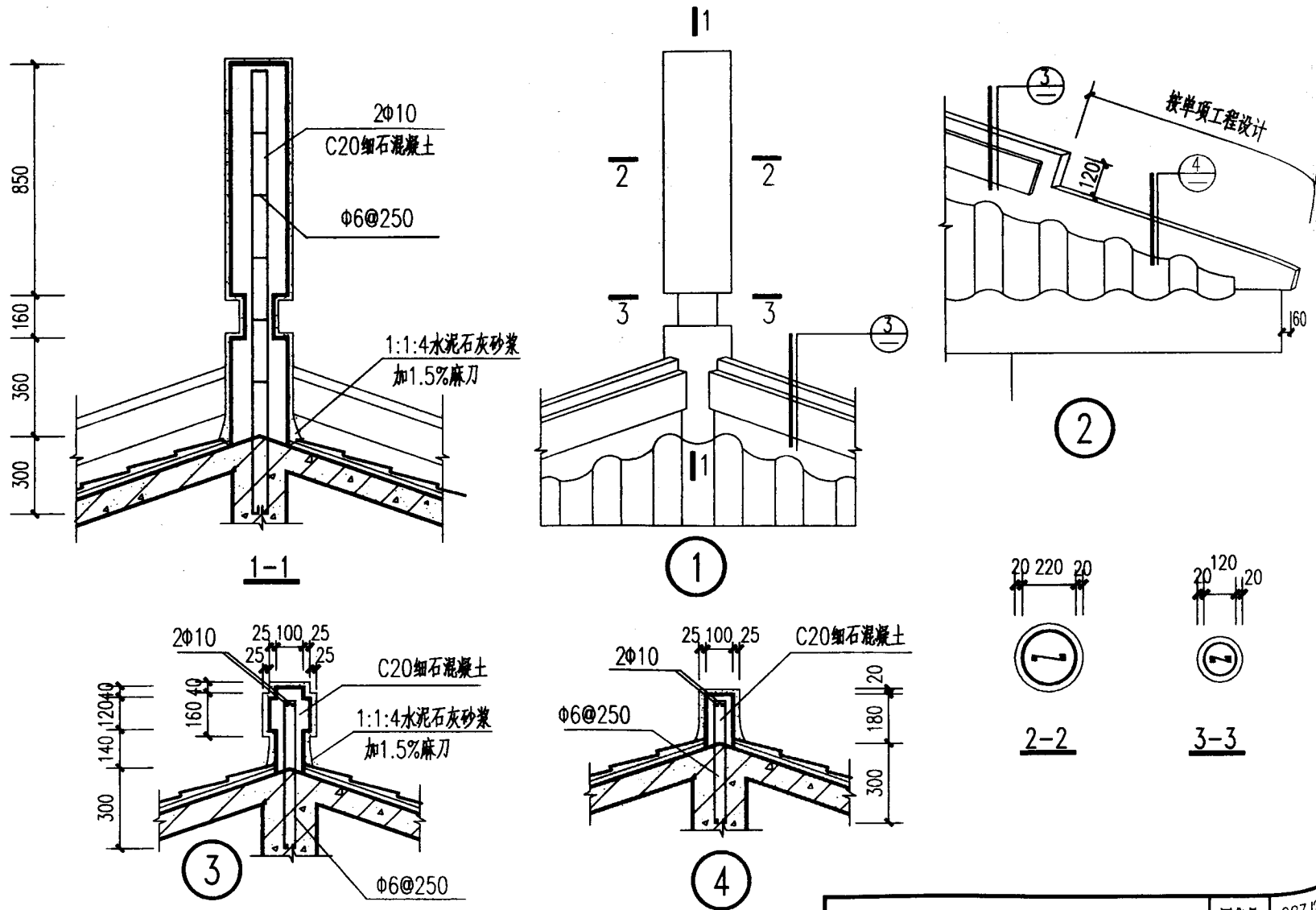
4



2

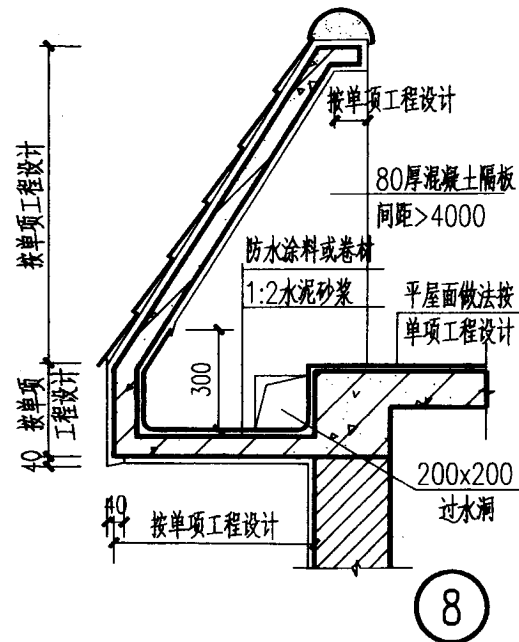
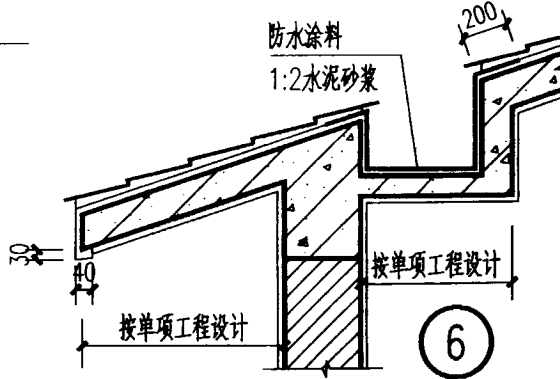
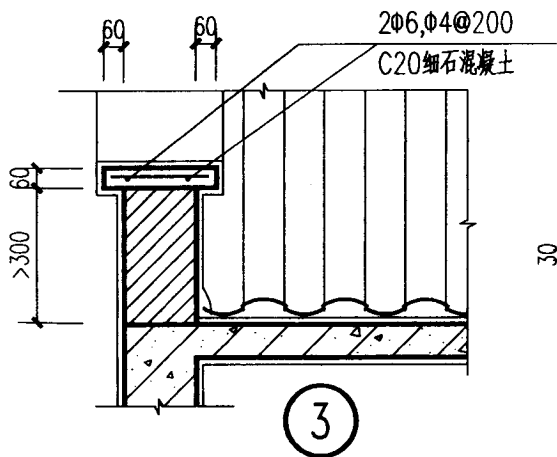
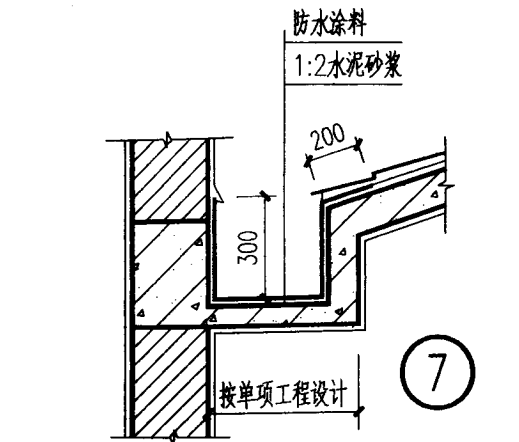
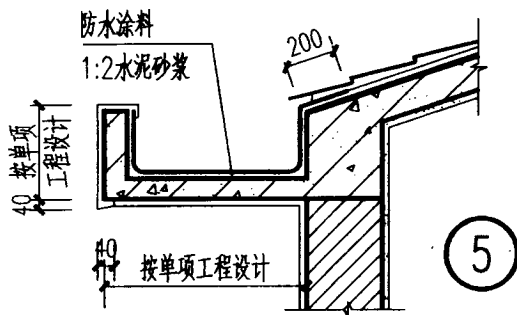
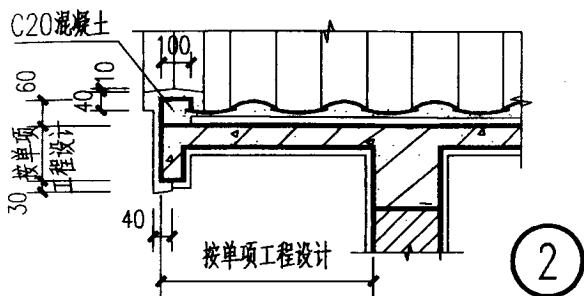
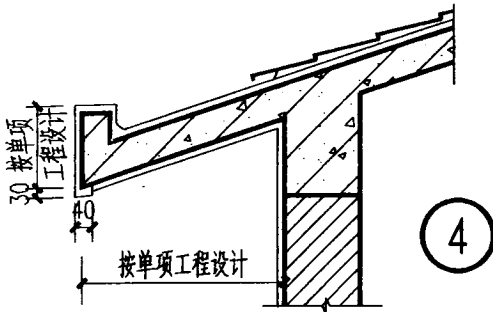
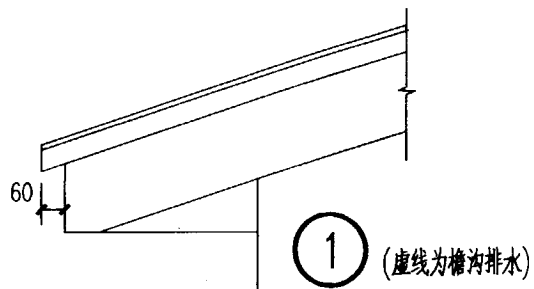
混凝土屋脊 (四坡,歇山详图)

图号	98ZJ211
页	32



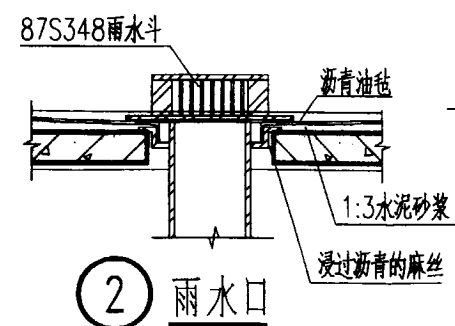
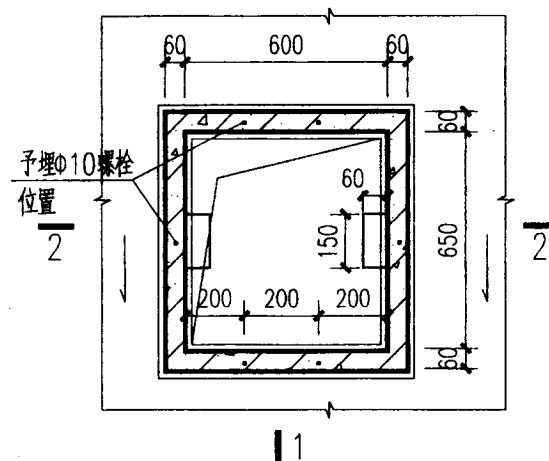
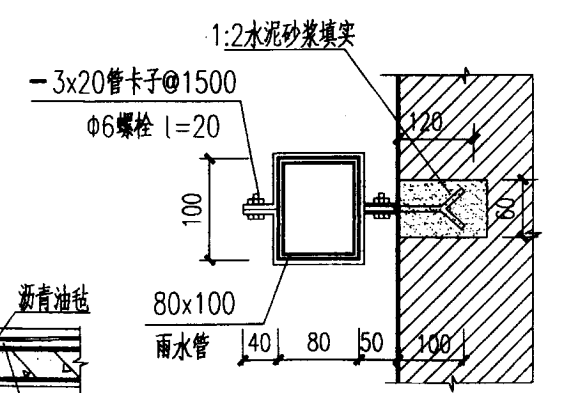
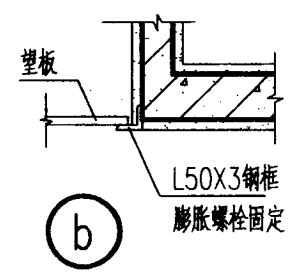
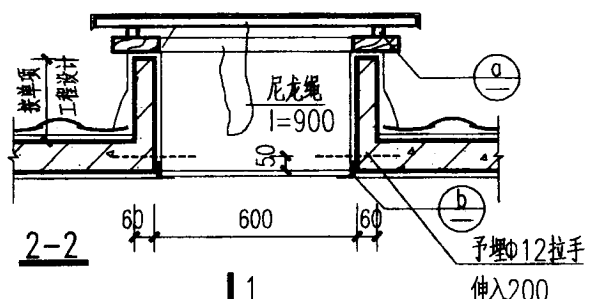
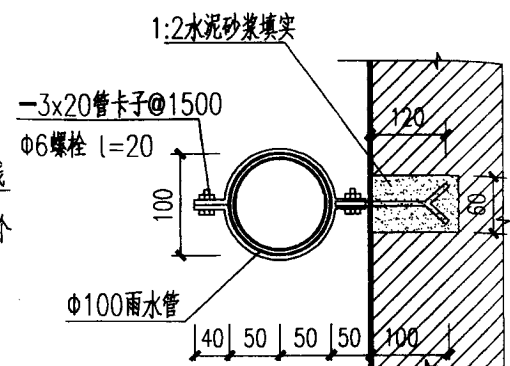
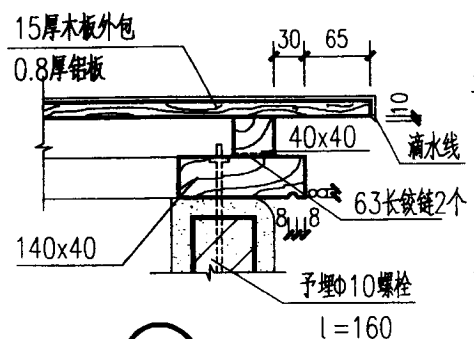
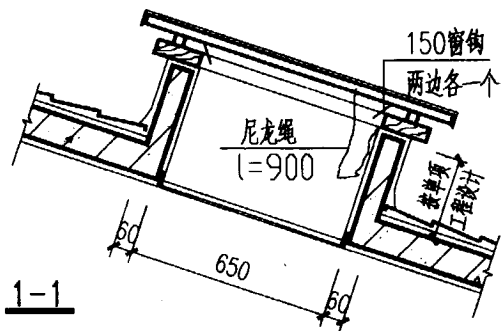
混凝土宝顶 (横尖详图)	图集号	98ZJ211
	页	33

专业	建筑
姓名	张墨云
职称	张
日期	
图名	制



混凝土挑檐、檐沟		图集号	98ZJ211
		页	34

工程名称	工程编号
设计人	审核人
校对人	日期
设计日期	设计地点



① 检修孔

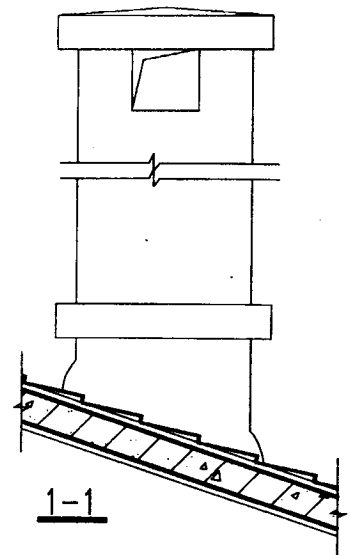
② 雨水口

③ 圆形雨水管

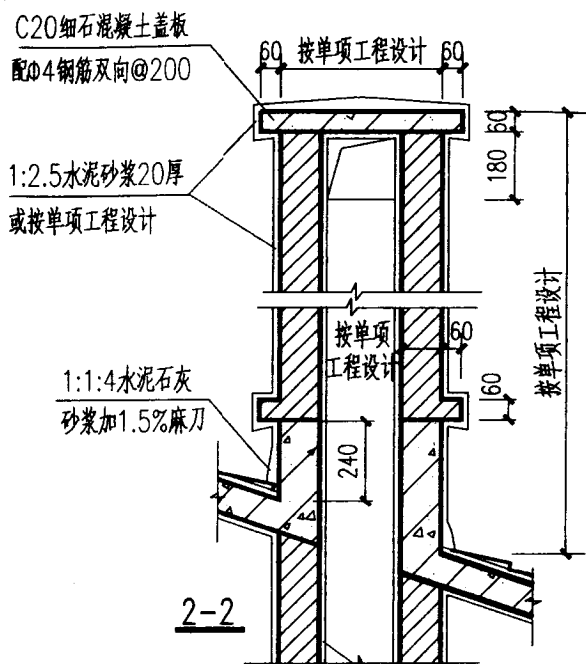
④ 方形雨水管

检修孔	雨水口	雨水管	图集号	98ZJ211
			页	35

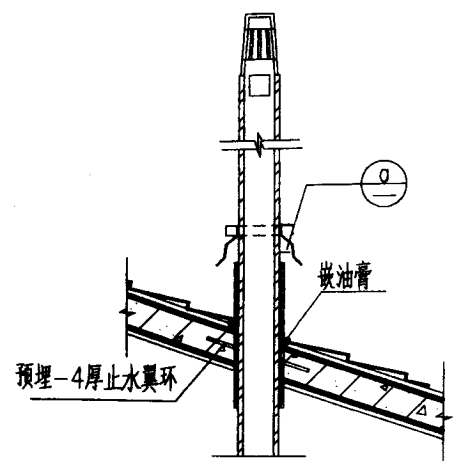
工程名称	工程编号
设计日期	设计人
审核人	校对
张	张
张	张
张	张



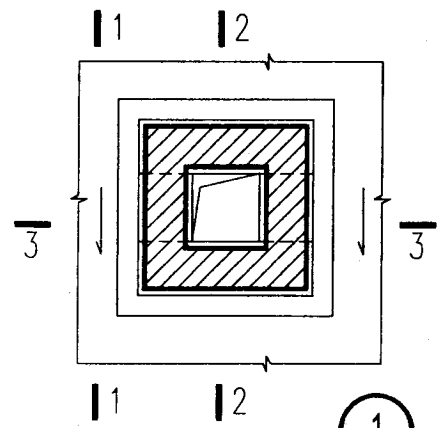
1-1



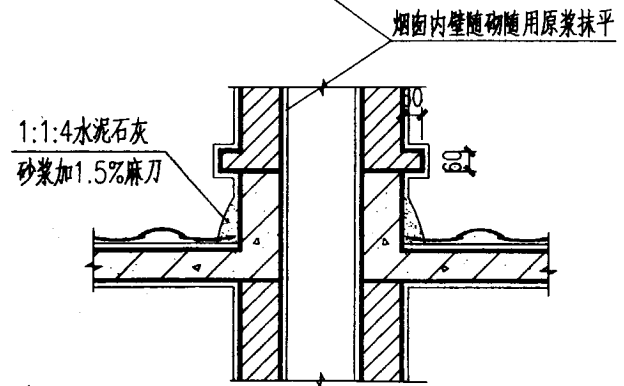
2-2



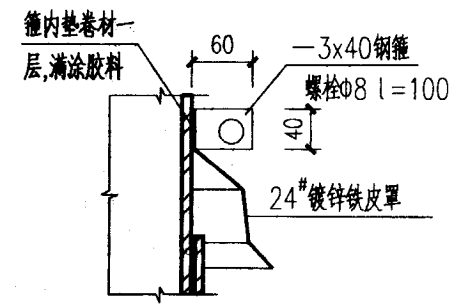
② 排气管



① 烟囱



3-3



④

烟囱,排气管出屋面

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