

GUOJI AJI ANZHUBIAOZHUNSHENJI 04G329-2

04G329-2

建筑物抗震构造详图

(单层砌体房屋)

中国建筑标准设计研究院出版

建筑物抗震构造详图 (单层砌体房屋)

批准部门 中华人民共和国建设部 批准文号 建质[2004]116号
 主编单位 中国建筑西北设计研究院 统一编号 GJB T-760
 实行日期 二〇〇四年八月十五日 图集号 04G329-2

主编单位负责人

张彦平

主编单位技术负责人

杨翠如

技术审定人

杨翠如

设计负责人

刘大海

目 录

目录、总说明	M1 ~ M2
1 砖墙平房	
6 度	
瓦木屋盖结构平面和节点 (6 度)	1
空心板屋盖结构平面和节点 (6 度)	2
7 度	
瓦木屋盖结构平面示例 (7 度)	3
瓦木屋盖的构件连接 (7 度)	4
空心板屋盖结构平面示例 (7 度)	5
板底圈梁节点 (6、7 度)	6
板底圈梁截面 (7~9 度)	7
8 度	
瓦木屋盖结构平面和节点 (8 度)	8
空心板屋盖结构平面示例 (8 度)	9
板底圈梁节点 (8、9 度)	10
构造柱的截面和配筋 (8 度)	11
9 度	
瓦木屋盖结构平面和节点 (9 度)	12
空心板屋盖结构平面示例 (9 度)	13
高低圈梁节点平面 (9 度)	14

高低圈梁的剖面 and 截面 (9 度)	15
现浇钢筋混凝土屋盖的构造柱拉梁 (9 度)	16
构造柱的截面和配筋 (9 度)	17
2 砖夹心墙	
内、外叶墙的拉结 (6~8 度)	18
内、外叶墙的拉结 (9 度)	19
6~8 度	
板底圈梁的外墙节点 (6、7 度)	20
板底圈梁的外墙节点 (8、9 度)	21
构造柱的截面和配筋 (8 度)	22
9 度	
结构平面节点选用示例 (9 度)	23
高低圈梁 (外墙) 节点 (9 度)	24
高低圈梁的剖面 and 截面 (9 度)	25
构造柱的截面和配筋 (9 度)	26
现浇屋盖的构造柱拉梁 (9 度)	27

目 录					图 集 号	04 G329-2
审核	陶峰	陶峰	校对	杨翠如	设计	刘大海
页	M1					

目

录

总 说 明

3 砌块墙平房

拉结钢筋

承重墙的拉结钢筋网片(6~9度).....28

隔墙的拉结钢筋网片(6~9度).....29

6、7 度

结构平面节点选用示例(6、7度).....30

板底圈梁节点和截面(6、7度).....31

8、9 度

结构平面节点选用示例(6、7度).....32

板底圈梁节点和截面(6、7度).....33

高低圈梁(空心板屋盖)节点(9度).....34

高低圈梁截面(9度).....35

芯柱的截面和配筋(6~9度).....36

4 砌块夹心墙

拉结钢筋

“夹心墙”内、外叶墙的拉结(6~9度).....37

“夹心墙”承重外墙的拉结钢筋网片(7~9度).....38

6、7 度

结构平面节点选用示例(6、7度).....39

“夹心墙”板底圈梁节点和截面(6、7度).....40

8、9 度

结构平面节点选用示例(8、9度).....41

“夹心墙”板底圈梁节点和截面(8、9度).....42

“夹心墙”高低圈梁节点和截面(8、9度).....43

“夹心墙”芯柱的截面和配筋(8、9度).....44

1. 编制依据

1.1 建筑抗震设计规范(GB 50011-2001);

1.2 混凝土结构设计规范(GB 50010-2002);

1.3 砌体结构设计规范(GB 50003-2003);

1.4 多孔砖砌体结构技术规范(JGJ 137-2001);

1.5 木结构设计规范(GB 50005-2003);

1.6 混凝土小型空心砌块建筑技术规范(JGJ/T 14-2004);

1.7 混凝土小型空心砌块砌筑砂浆(JC 860-2000);

1.8 混凝土小型空心砌块灌孔混凝土(JC 861-2000)。

2. 适用范围

2.1 抗震设防烈度为6~9度的单层砌体房屋;

2.2 采用烧结普通砖、烧结多孔砖(P型、M型)、混凝土小型空心砌块等砌筑的墙体。

3. 使用说明

3.1 本图集中的结构平、剖面图及节点编号,仅表示节点构造详图选用示例;

3.2 工程中各承力构件的截面和配筋,应按抗震验算结果确定。本图集各节点详图所示尺寸和数量为最低构造要求。

目 录、总 说 明

图集号

04 G329-2

审核 陶曙曦

设计 陶曙曦

校对 陶曙曦

设计 陶曙曦

设计 陶曙曦

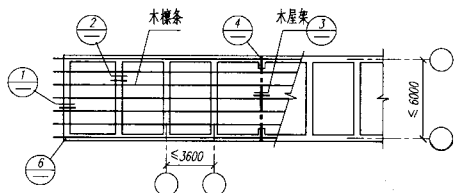
设计 陶曙曦

设计 陶曙曦

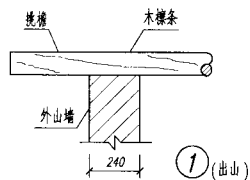
设计 陶曙曦

设计 陶曙曦

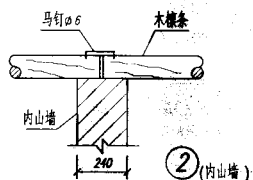
设计 陶曙曦



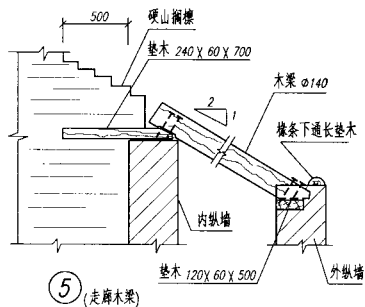
单排办公室



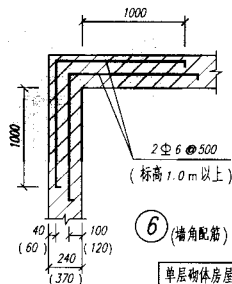
① (出山)



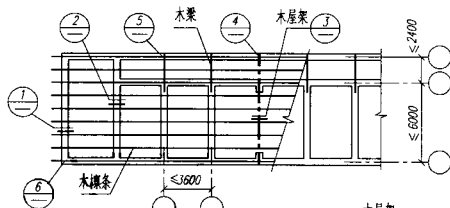
② (内山墙)



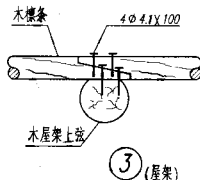
⑤ (走廊木梁)



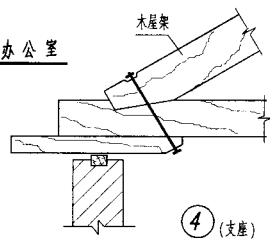
⑥ (墙角配筋)



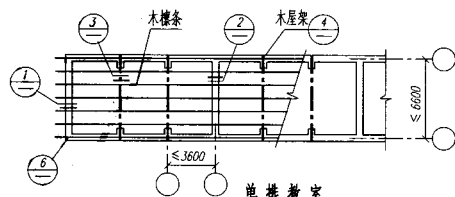
偏廊办公室



③ (屋架)



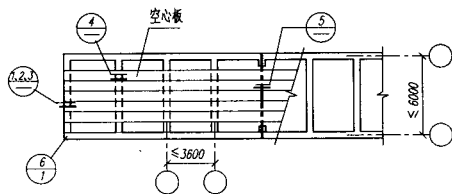
④ (支座)



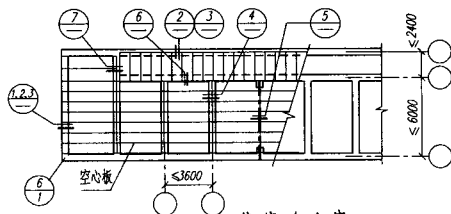
单排教室

注: 1. 本页适用于烧结普通砖或烧结多孔砖(P型、M型等)砌筑的砖墙平房, 墙厚按工程设计图纸;
2. 纵、横墙必须同时并交槎砌筑, 砂浆强度等级不应低于M5。

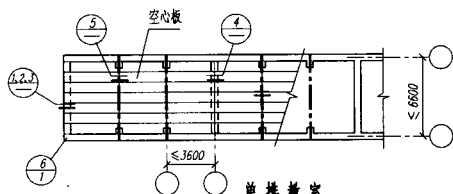
单层砌体房屋	瓦木屋盖结构平面和节点(6度)	图编号	04 G329-2
(1) 砖墙平房			
审核 陶曙晖	设计 杨翠如	校对 杨翠如	页 1



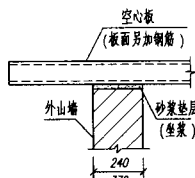
单排办公室



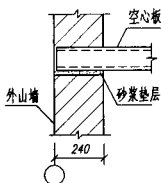
偏廊办公室



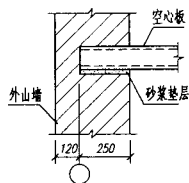
单排教室



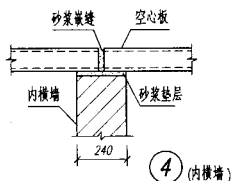
① (出山)



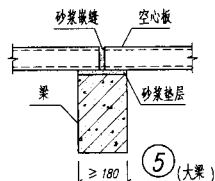
② (240墙)



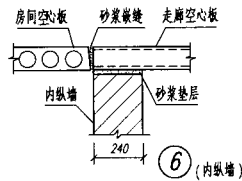
③ (370墙)



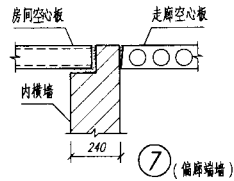
④ (内横墙)



⑤ (大梁)



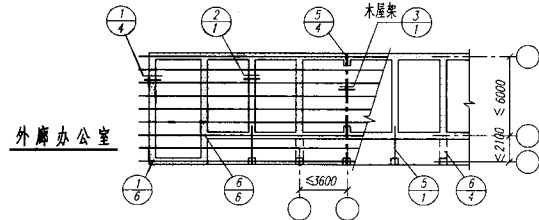
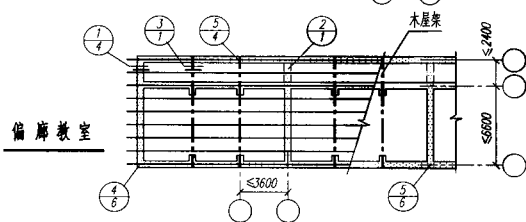
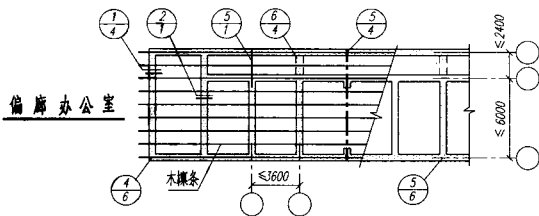
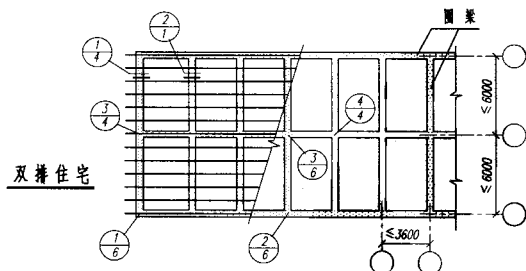
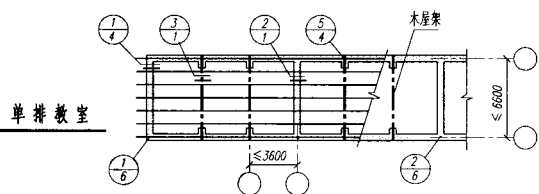
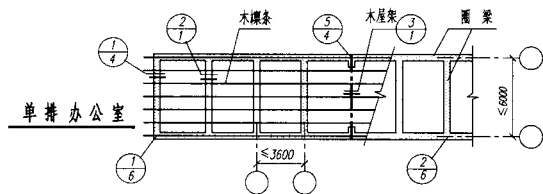
⑥ (内纵墙)



⑦ (偏廊端墙)

注: 1. 本页适用于烧结普通砖或烧结多孔砖(P型、W型等)砌筑的砖墙平房, 墙厚按工程设计图纸;
2. 纵、横墙必须同时并咬槎砌筑, 砂浆强度等级不应低于M 5。

单层砌体房屋	空心板屋盖结构平面和节点 (6度)	图集号	04 GJ29-2
(1) 砖墙平房			
审核 陶瑞刚	校对 杨翠如	设计 刘大海	页 2

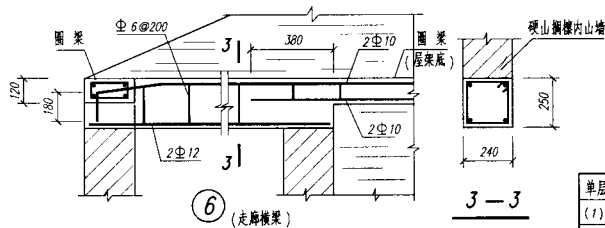
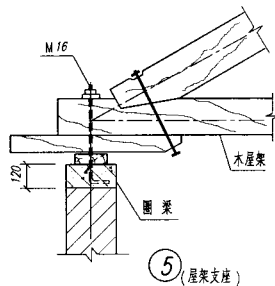
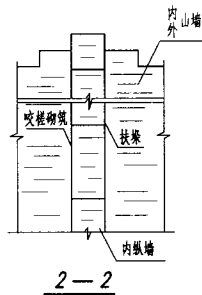
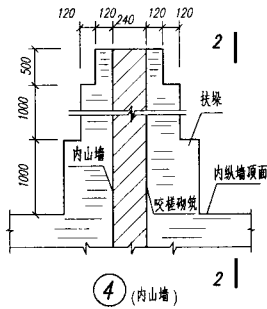
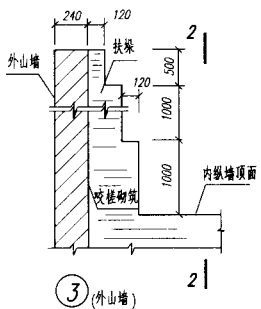
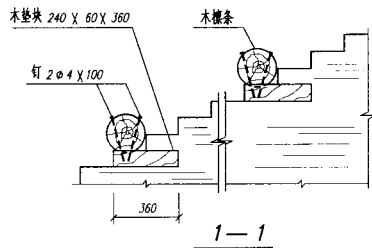
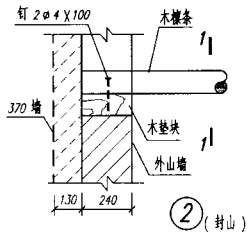
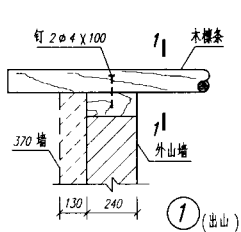


注: 1. 结构平面图中, 上半部为屋盖节点编号, 下半部为圈梁节点编号; 阴影部位表示有圈梁;

2. 本页适用于烧结普通砖或烧结多孔砖(P型、M型等)砌筑的砖墙平房, 墙厚按工程设计图纸;

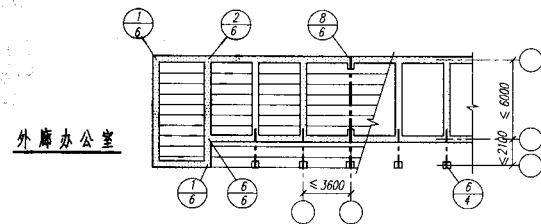
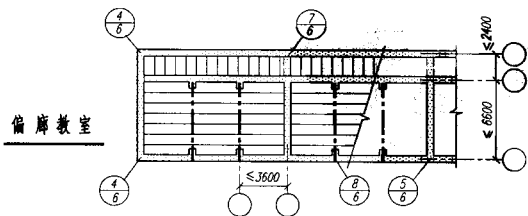
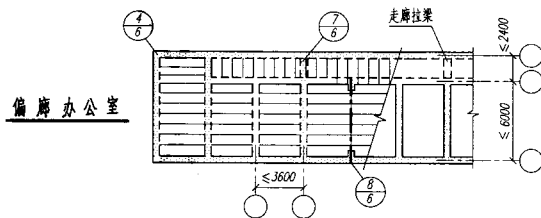
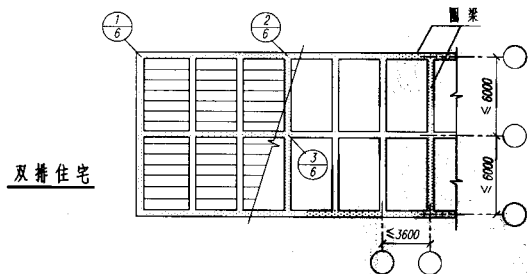
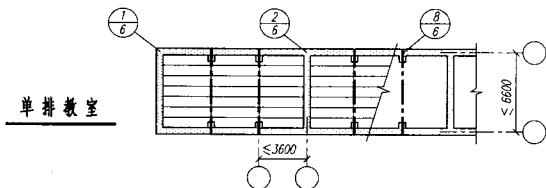
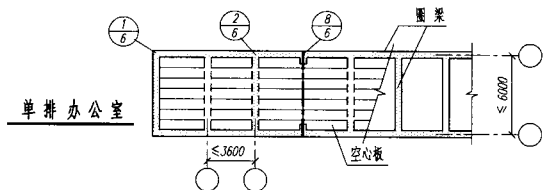
3. 纵、横墙应同时并咬槎砌筑, 砂浆强度等级不应低于M5。

单层物体房屋	瓦木屋盖结构平面示例 (7度)			图集号	04 G329-2
(1) 砖墙平房					
审核	陶咏璐	校对	杨翠如	设计	刘大海
				页	3



- 注: 1. 本页适用于烧结普通砖或烧结多孔砖(P型、M型等)砌筑的砖墙平房;
2. 纵、横墙必须同时并咬槎砌筑, 砂浆强度等级不应低于M5;
3. 与砖砌体接触的木构件, 应采取涂刷防腐剂等方法防腐;
4. 当采用M型多孔砖和混凝土砌块时, 各节点详图中的墙厚应由240改为190。

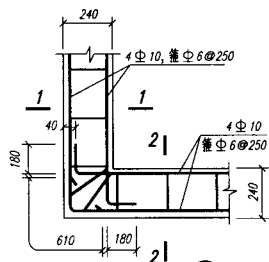
单层砌体房屋	瓦木屋盖的构件连接 (7度)	图样号	04 G329-2
(1) 砖墙平房			
审核 陶峙琛	校对 邵军如	设计 刘大海	页 4



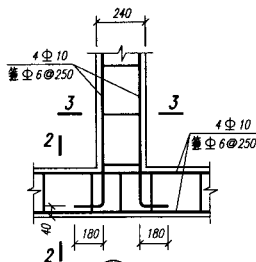
(7度砖房的现浇钢筋混凝土屋盖,可按非震区的要求设计。)

- 注: 1. 阴影部位表示有圈梁或拉梁;
2. 走廊拉梁的截面尺寸、配筋数量和底面标高均与圈梁相同;
3. 砖墙厚度按工程设计图纸。

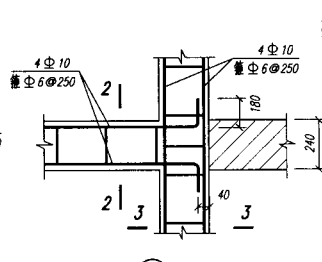
单层砌体房屋	空心板屋盖结构平面示例 (7度)			图集号	04 G.329-2
(1) 砖墙平房				页	5
审核 陶峰	校对 杨军	设计 刘大海			



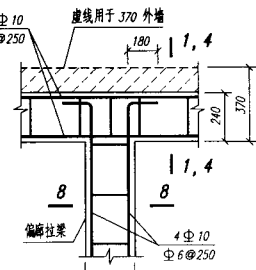
① (转角)



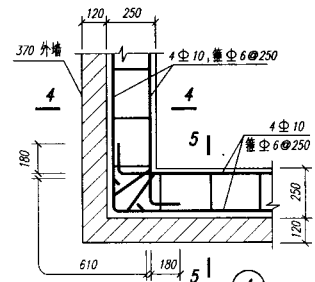
② (T字墙)



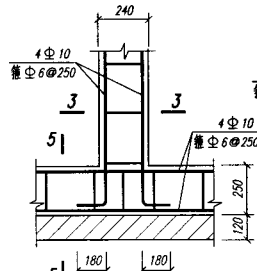
③ (内纵墙)



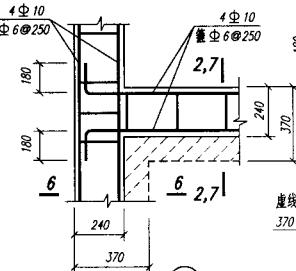
⑦ (偏锚拉梁)



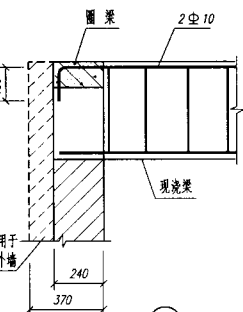
④ (清水墙)



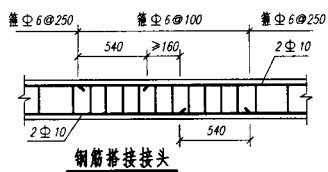
⑤ (清水墙)



⑥ (外墙)



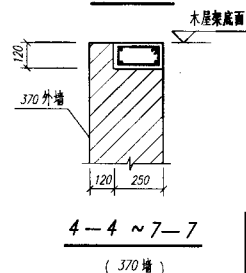
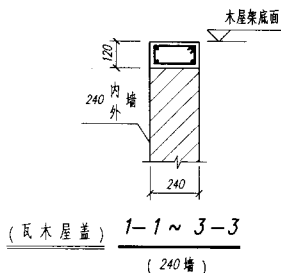
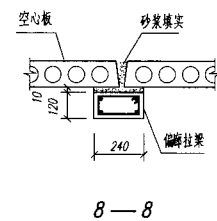
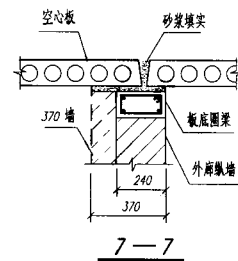
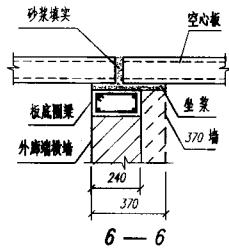
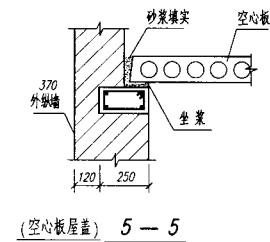
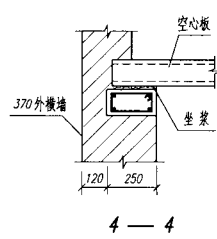
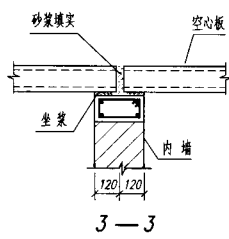
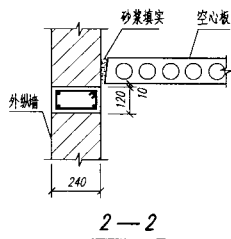
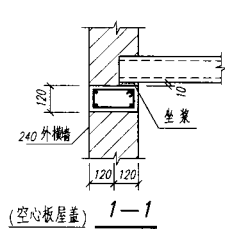
⑧ (现浇梁)



钢筋搭接接头

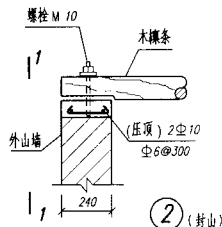
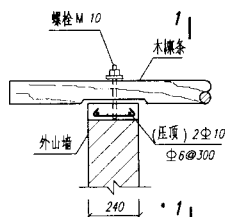
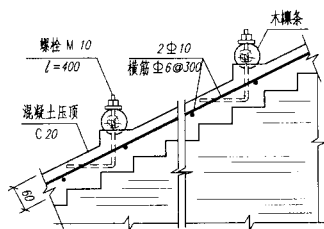
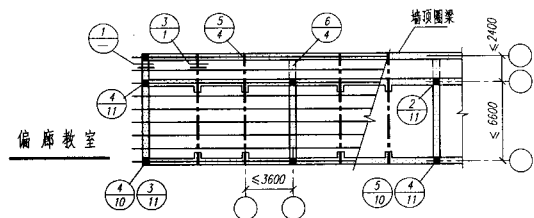
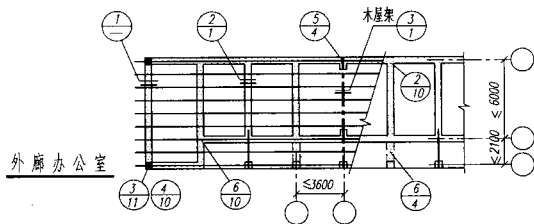
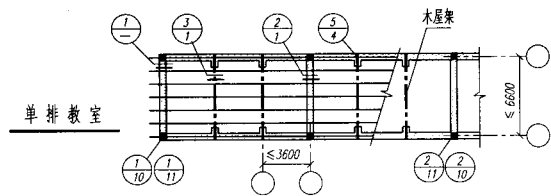
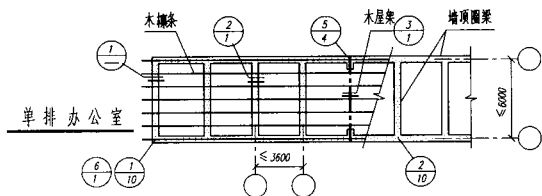
注: 1. 本页适用于瓦木屋盖和空心板屋盖;
2. 本页与第 1、2、3、5 页配合使用;
3. 圈梁截面见第 7 页; 混凝土强度等级为 C 20。

单层砌体房屋	板底圈梁节点 (6、7 度)				图样号	04 G329-2
(1) 砖墙平房					页	6
审核 陶晴原	校对 杨翠如	杨翠如	设计 刘大海	刘大海		



- 注：1. 本页适用于瓦木屋盖（7~9度）和空心板屋盖（7、8度）；
2. 本页与第 6、10 页配合使用；
3. 混凝土强度等级为 C20；
4. 空心板板缝中不配拉结钢筋，空心板端头空洞也不填堵块。

单层砌体房屋 (1) 砖墙平房	板底圈梁截面 (7~9度)				图集号	04 G329-2
审核 陶瑞明	校对 杨翠如	设计 刘大海	制图 刘大海	页	7	



注: 1. 结构平面图中, 上半部为屋盖节点编号, 下半部为圈梁节点编号; 阴影部位表示有圈梁或拉梁;

2. 本页适用于烧结普通砖或烧结多孔砖(P型、M型)等砌筑的砖墙平房, 墙厚按工程设计图纸;

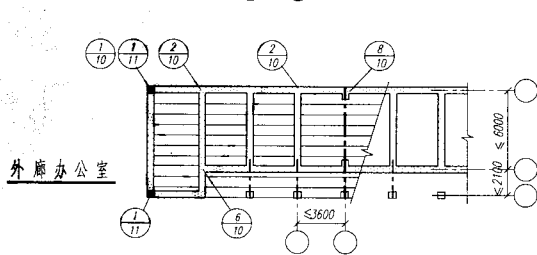
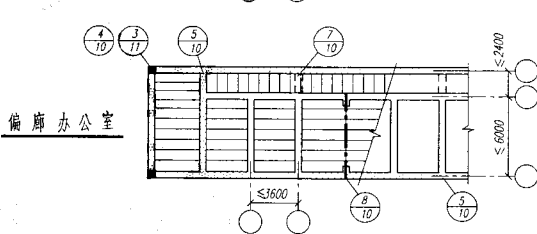
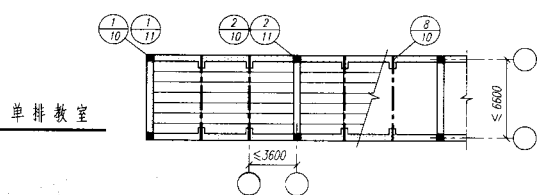
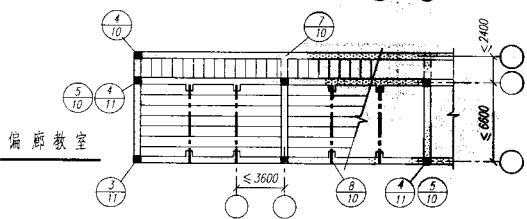
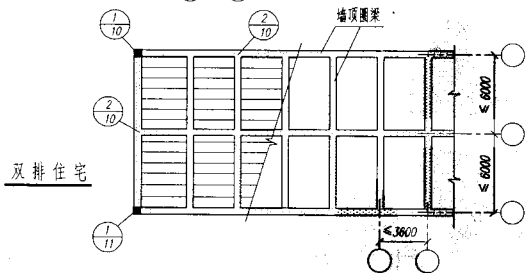
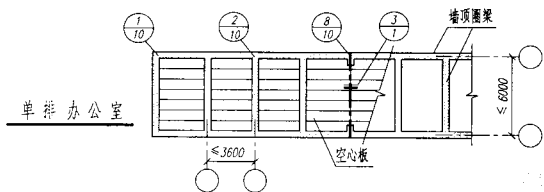
3. 纵、横墙应同时并咬槌砌筑, 砂浆强度等级不应低于M5。

1-1

1 (出山)

2 (封山)

单层砌体房屋	瓦木屋盖结构平面和节点 (8度)	图集号	04 G329-2
(1) 砖墙平房		页	8
审核 陶曙晖	校对 杨军	设计 刘大海	



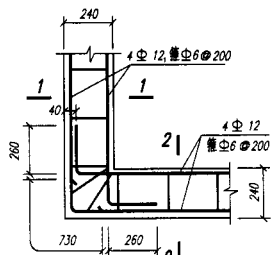
注：1. 平面示例图中阴影部位表示有圈梁或拉梁；

2. 走廊梁的截面尺寸、配筋数量和底面标高均与圈梁相同；

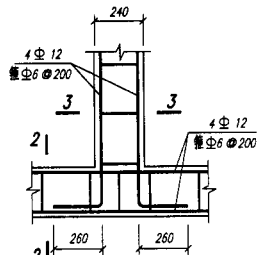
3. 砖墙厚度按工程设计图纸。

(8度砖房的现浇钢筋混凝土屋盖,可按非震区的要求设计,不增设构造柱的拉梁。)

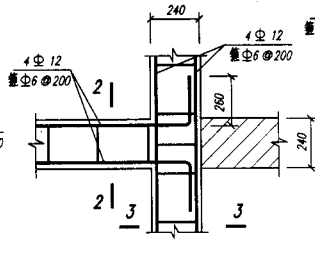
单层砌体房屋	空心板屋盖结构平面示例(8度)		图集号	04 G329-2
(1) 砖墙平房			页	9
审核	陶晓琪	校对	杨翠如	设计
			刘大海	大海



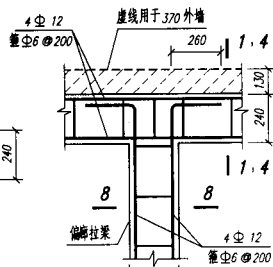
① (转角)



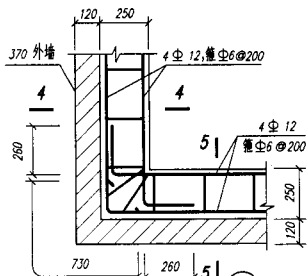
② (丁字墙)



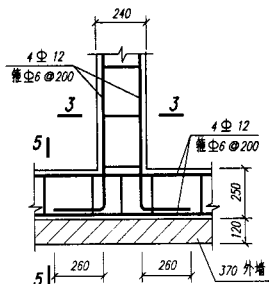
③ (内纵墙)



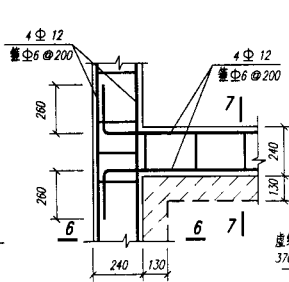
④ (偏拉梁)



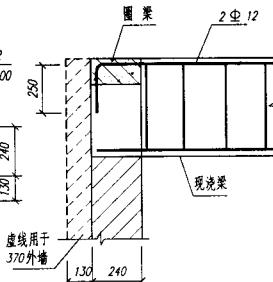
⑤ (清水墙)



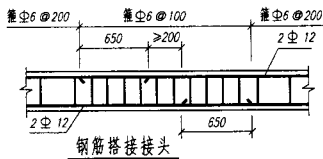
⑥ (清水墙)



⑦ (清水墙)



⑧ (现浇梁)



钢筋搭接接头

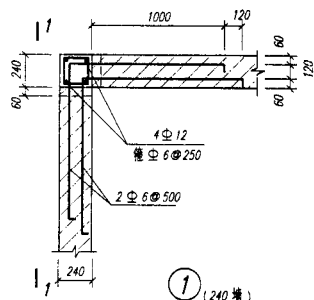
注: 1. 本页适用于瓦木屋盖(8、9度)和空心板屋盖(8度);

2. 本页与第 8、9、12 页配合使用;

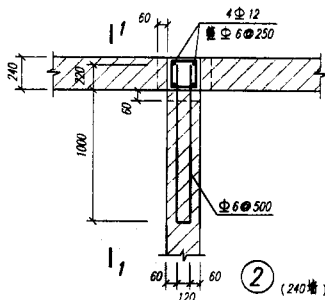
3. 图例截面见第 7 页;

混凝土强度等级为 C 20。

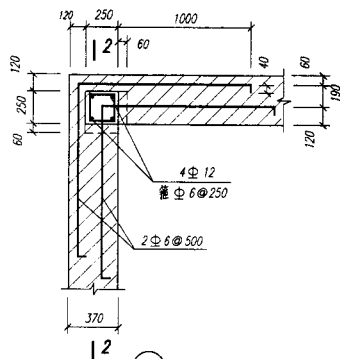
单层砌体房屋	板底圈梁节点(8、9度)				图例号	04 G329-2
(1) 砖墙平房	审核	陶峰强	校对	杨军	设计	刘大海
					页	10



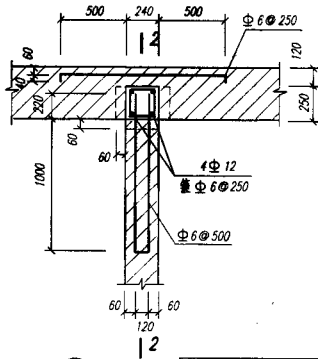
① (240 墙)



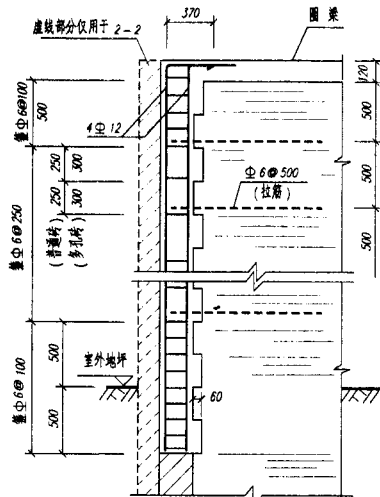
② (240 墙)



③ (370 外墙)



④ (370 外墙)



1-1 2-2
(240 墙) (370 外墙)

- 注：1. 构造柱的混凝土强度等级为 C20；
2. 先砌墙，后浇筑；
3. 浇筑前，应先清除基槽底部的残渣。

单层物体房屋

(1) 砖墙平房

构造柱的截面和配筋 (8 度)

图案号

04 G329-2

审核 陶瑞刚

设计 杨军如

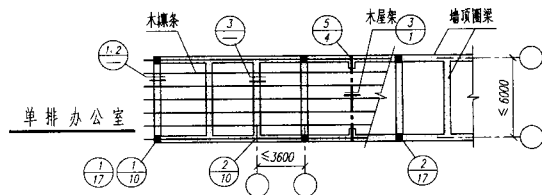
校对 杨军如

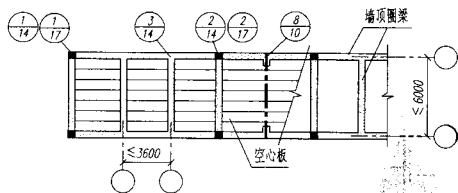
设计 刘大海

设计 刘大海

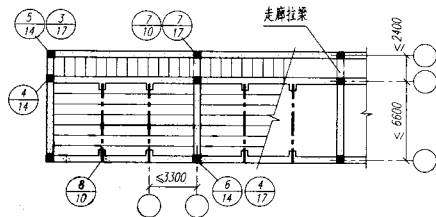
页

11

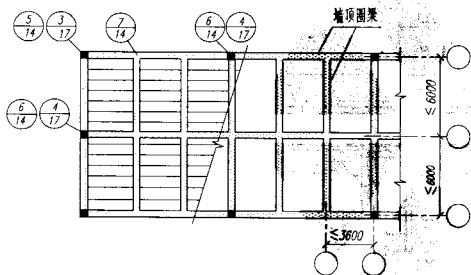




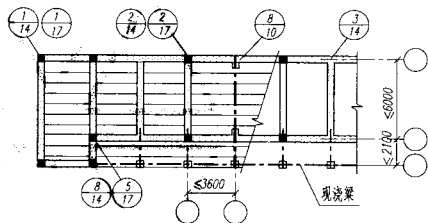
单排办公室



偏廊教室



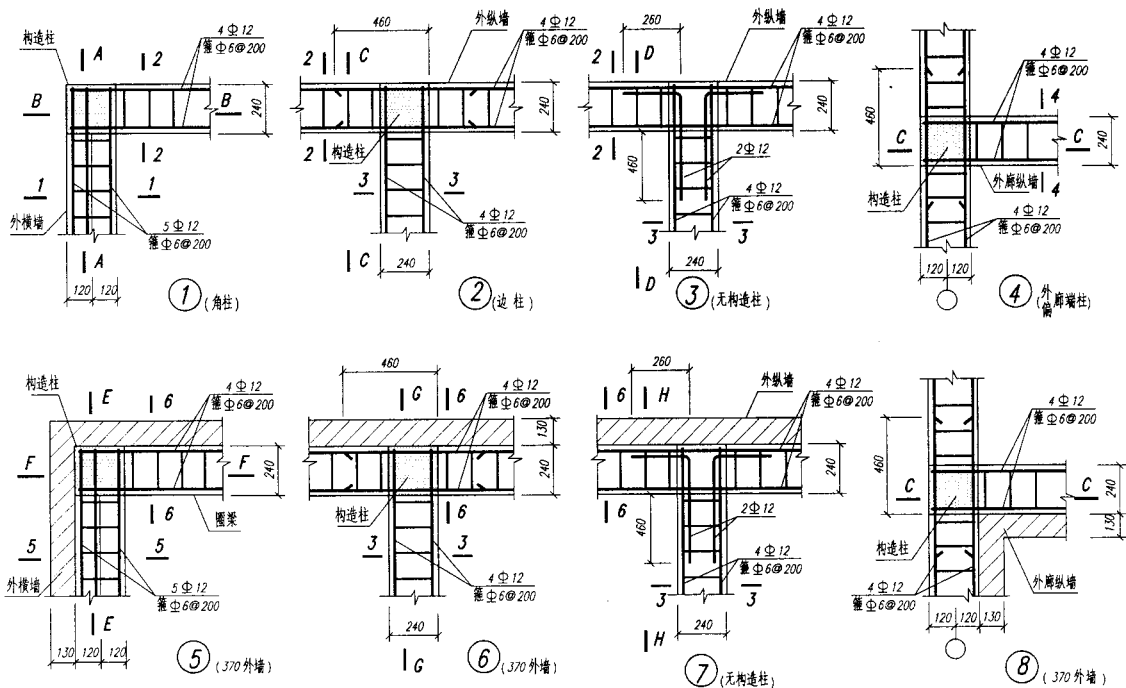
双排住宅



外廊办公室

- 注: 1. 结构平面图中, 阴影部位表示有圈梁或拉梁;
2. 走廊拉梁的截面尺寸、配筋数量和底面标高均与圈梁相同;
3. 砖墙厚度按工程设计图纸。

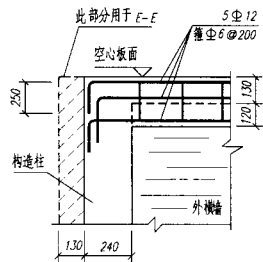
单层砌体房屋	空心板屋盖结构平面示例 (9度)			图集号	04 G329-2
(1) 砖墙平房				页	13
审核: 陶喈	校对: 杨草如	设计: 刘大库	刘大库	页	13



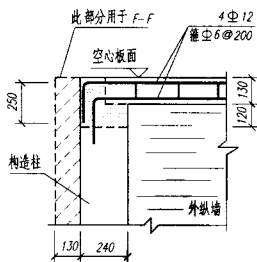
注：1. 剖面 A-A ~ H-H、圈梁截面 1-1 ~ 6-6 见第 15 页；

2. 本页仅用于空心板屋盖；内墙上的圈梁节点采用第 10 页中的节点 ①、②。

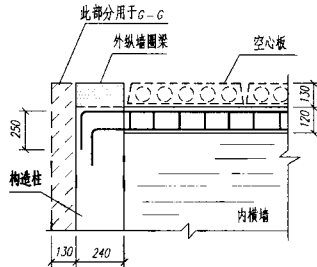
单层砌体房屋	高低圈梁节点平面 (9 度)				图集号	04 G329-2
(1) 砖墙平房					页	14
审核	陶瑞明	校对	徐慧如	杨翠如	设计	刘大海 大海



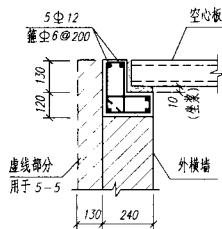
A — A、E — E



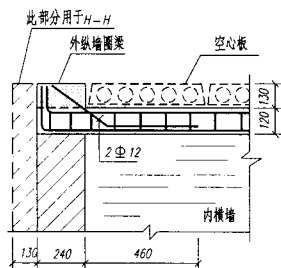
B — B、F — F



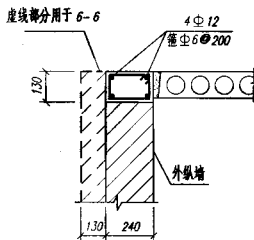
C — C、G — G



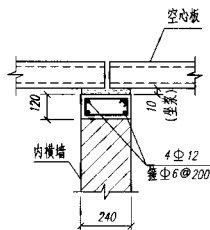
1 — 1、5 — 5



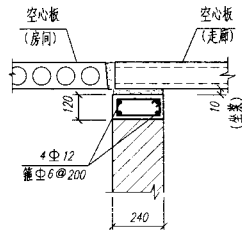
D — D、H — H



2 — 2、6 — 6



3 — 3

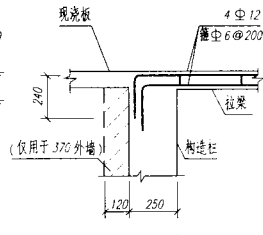
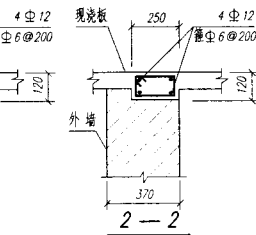
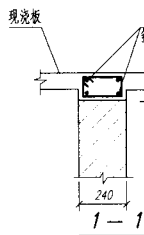
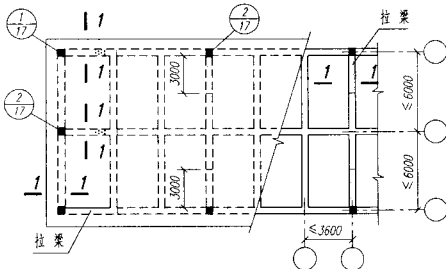
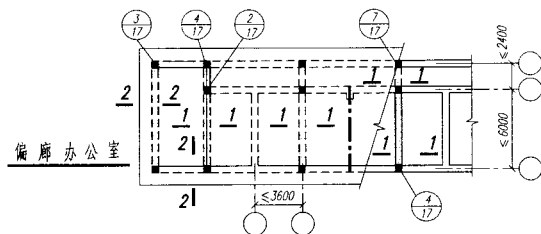
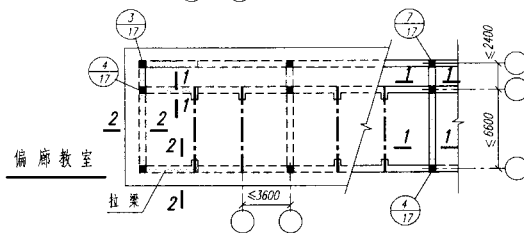
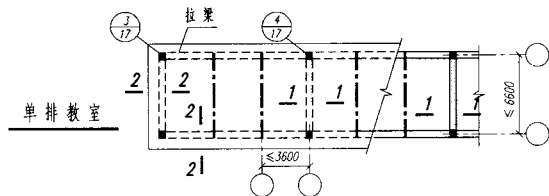
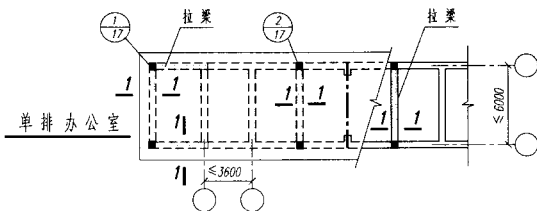


4 — 4

注：1. 本页与第 14 页配合使用；

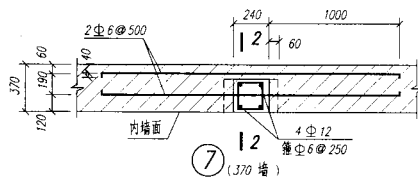
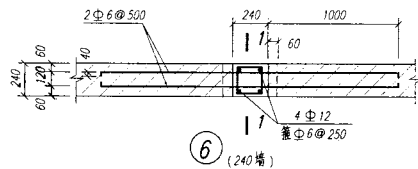
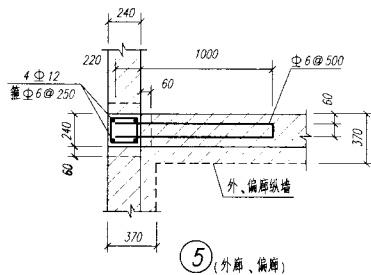
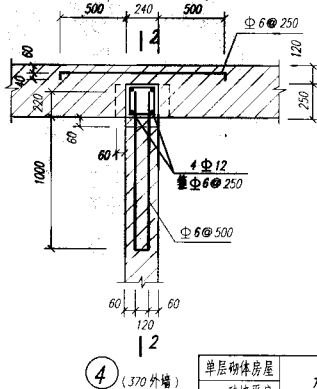
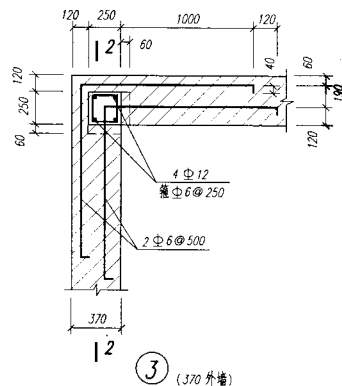
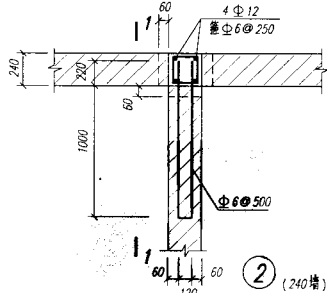
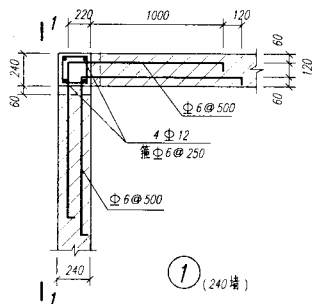
2. 混凝土强度等级为 C 20。

单层砌体房屋	高低圈梁的剖面和截面 (9 度)				图集号	04 G329-2
(1) 砖墙平房					页	15
审核 陶瑞强	2008.02	校对 刘大海	刘大海	设计 杨军如	杨军如	



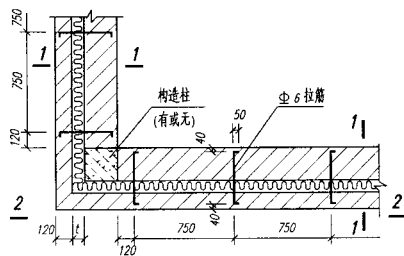
注: 1. 平面图中阴影部位表示有拉梁;
2. 砖墙厚度按工程设计图纸。

单层砌体房屋	现浇钢筋混凝土屋盖的构造柱拉梁 (g 度)	图样号	04 G.329-2
(1) 砖墙平房			
审核 陶曙明	校对 杨军如	设计 刘大海	页 16

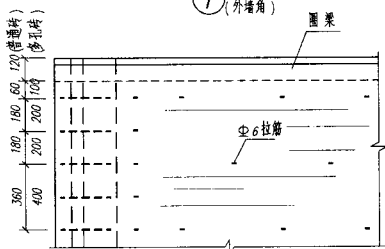


注: 1. 剖面 1-1、2-2 参见第 11 页; 构造柱的混凝土强度等级为 C20;
2. 先砌墙, 后浇筑; 浇筑前, 应先清除基槽底部的残渣。

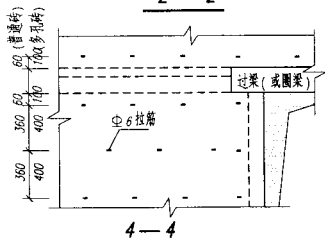
单层砌体房屋	构造柱的截面和配筋 (9 度)			图集号	04 G329-2
(1) 砖墙平房				页	17
审核 陶晓晖	设计 刘大海	校核 杨军	设计 刘大海		



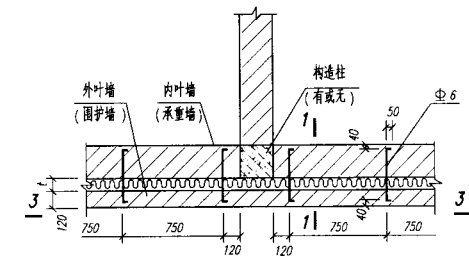
① (外墙角)



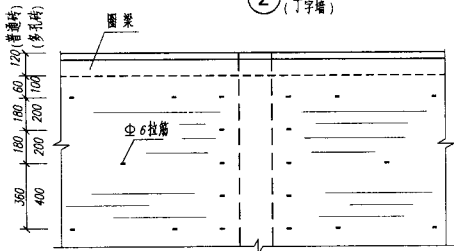
2-2



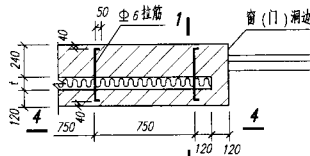
4-4



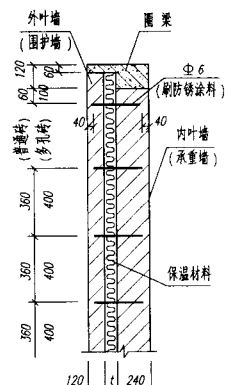
② (丁字墙)



3-3



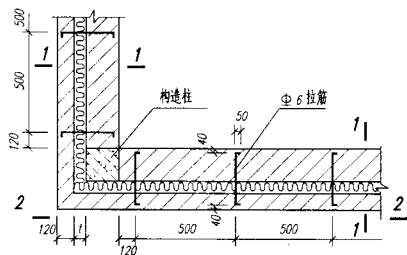
③ (窗边)



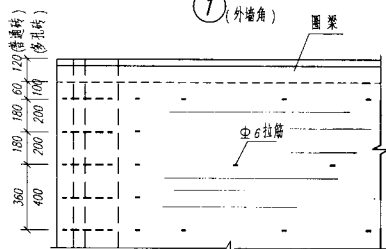
1-1
(夹心墙)

- 注: 1. 内、外叶墙之间空隙的宽度 (t) 具体取值按工程图纸确定;
2. 外叶墙的砌筑进度宜比内叶墙落后几皮砖, 并随砌随在空隙内填放保温材料;
3. 砂浆的强度等级不应低于 M5;
4. 圈梁应在内、外叶墙均砌至梁底后再浇筑。

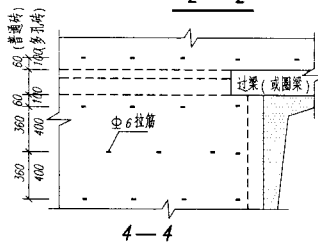
单层砌体房屋	内、外叶墙的拉结 (6~8度)					图集号	04 G329-2
(2) 砖夹心墙						页	18
审核	陶曙照	校对	杨军如	杨军如	设计	刘大海	24



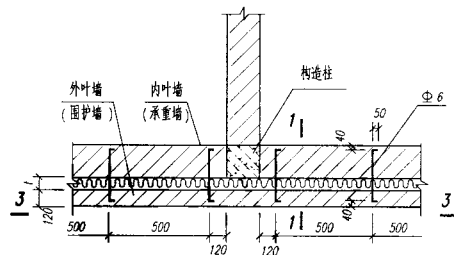
① (外墙角)



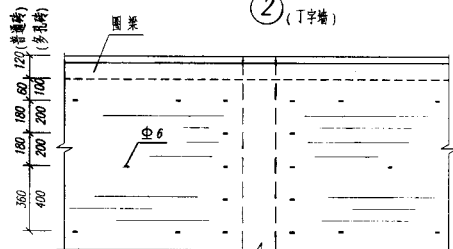
2—2



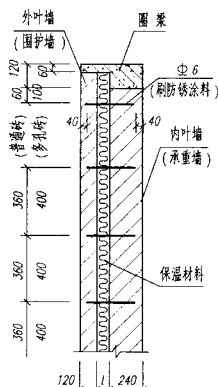
4—4



② (T字墙)



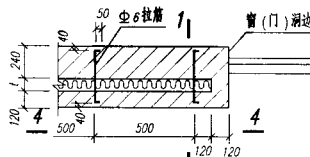
3—3



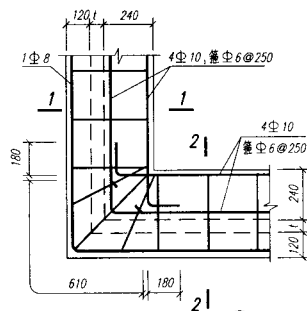
1—1
(夹心墙)

- 注: 1. 内、外叶墙之间空隙的宽度 (t) 具体取值按工程图纸确定;
2. 外叶墙的砌筑进度宜比内叶墙滞后几皮砖, 并随砌在空腔内填放保温材料;
3. 砂浆的强度等级不应低于 M 5;
4. 圈梁应在内、外叶墙均砌至梁底后再浇筑。

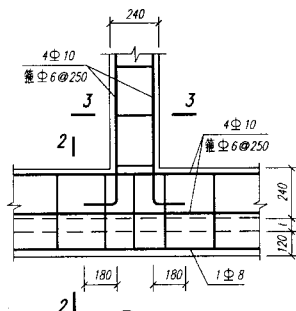
③ (洞边)



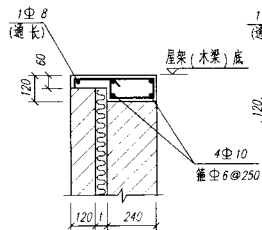
单层砌体房屋	内、外叶墙的拉结 (9 度)				图集号	04 G329-2
(2) 砖夹心墙					页	19
审核 陶瑞琪	设计 刘大海	校核 杨翠如	杨翠如	设计 刘大海		



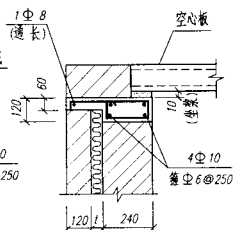
① (转角)



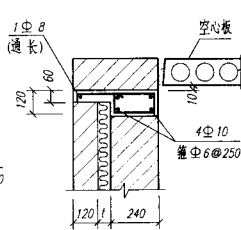
② (T字墙)



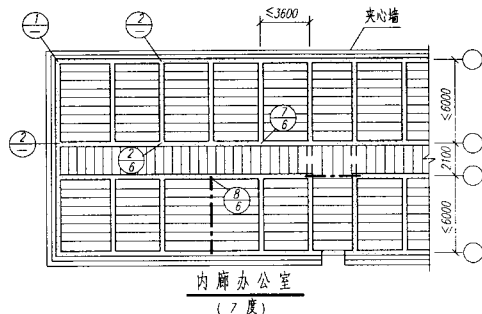
1-1, 2-2
(瓦木屋盖)



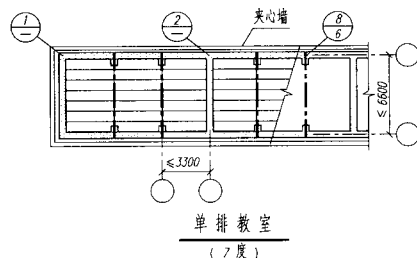
1-1
(空心板)



2-2
(空心板)



内廊办公室
(7度)



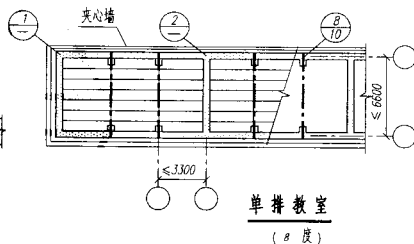
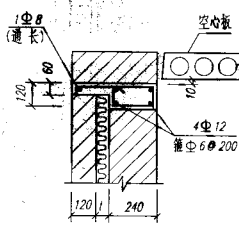
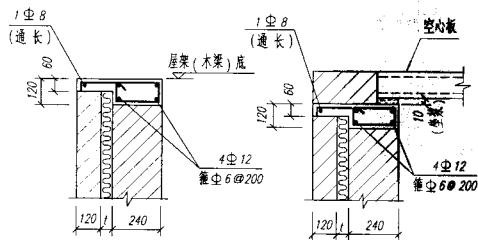
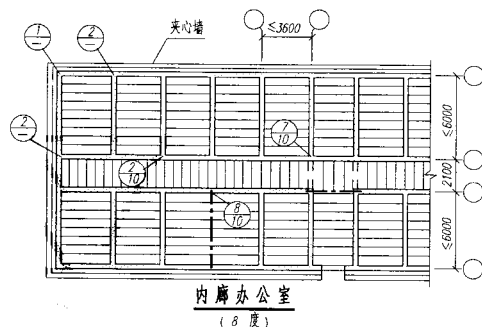
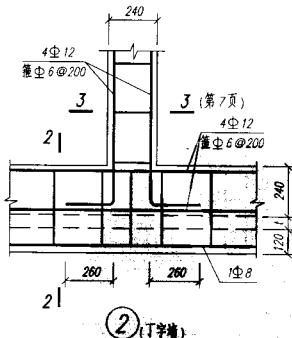
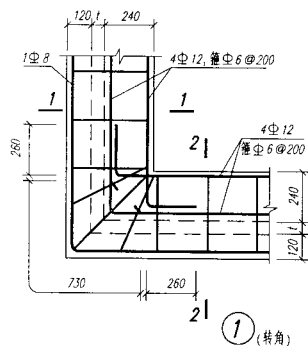
单排教室
(7度)

注: 1. 本页适用于瓦木屋盖和空心板屋盖; 平面图示例图中阴影部位表示有圈梁;

2. 内墙上的圈梁节点和截面3-3见第6、7页;

3. 混凝土强度等级为C20。

单层砌体房屋	板底圈梁外墙节点(6、7度)	图集号	04 G329-2
(2) 砖夹心墙			
审核 陶峰强	校对 杨翠如	设计 刘大海	页 20



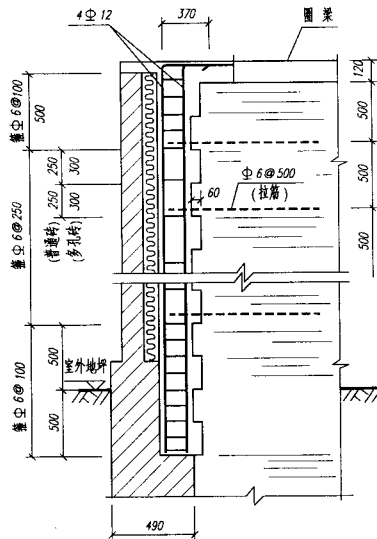
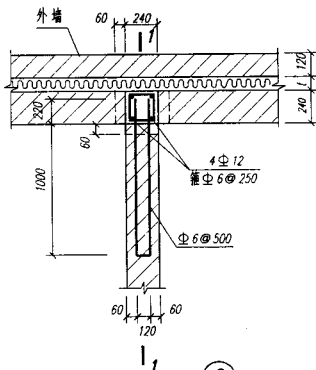
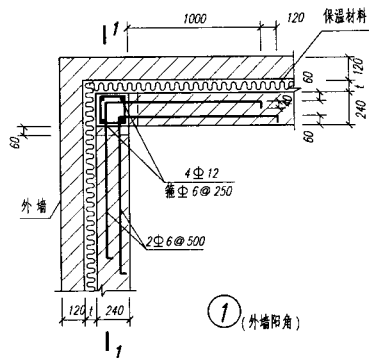
- 注: 1. 本页适用于瓦木屋盖 (8、9度) 和空心板屋盖 (8度); 平面示例图中阴影部位表示有圈梁;
2. 圈梁的混凝土强度等级为 C20; 内墙上的圈梁节点见第 10 页;
3. 当有构造柱时, 节点 ①、② 中伸入节点内的纵向钢筋改为向下弯折。

1-1.2-2
(瓦木屋盖)

1-1
(空心板)

2-2
(空心板)

单层砌体房屋	板底圈梁外墙节点 (8、9度)	图号	04 G329-2
审核 陶曙霞	设计 刘大海	页	21



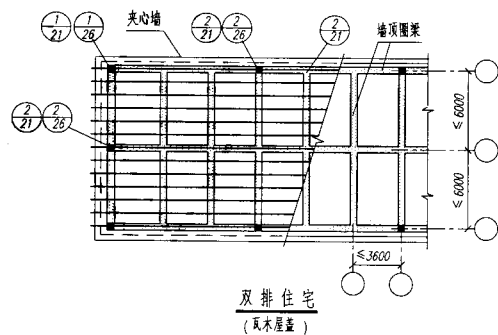
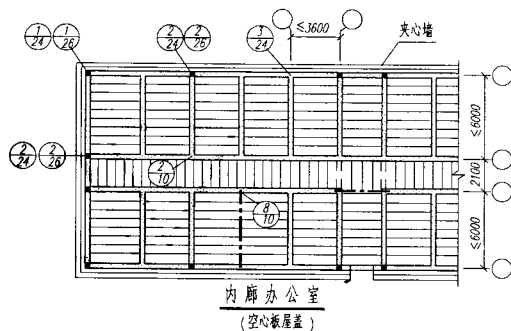
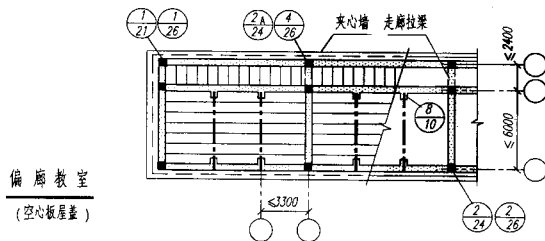
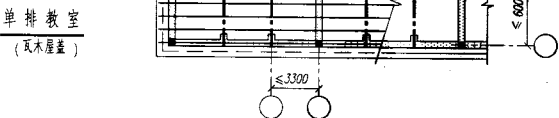
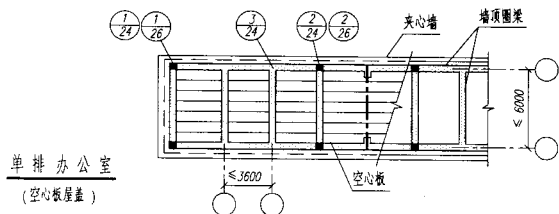
1—1
(夹心墙)

注：1. 构造柱的混凝土强度等级为 C20；

2. 先砌墙，后浇柱；

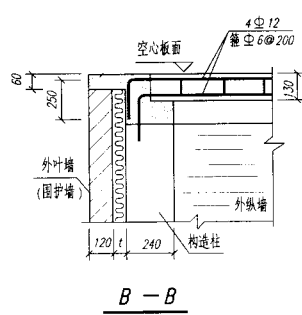
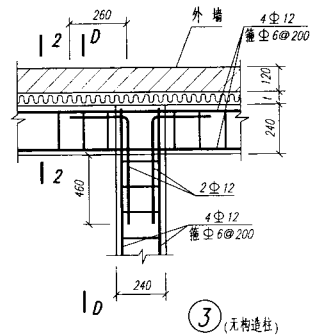
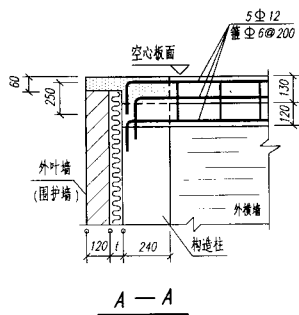
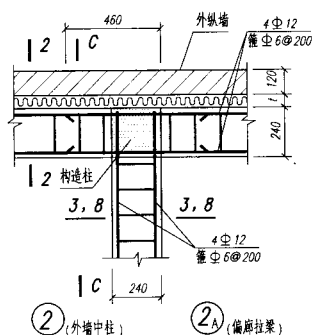
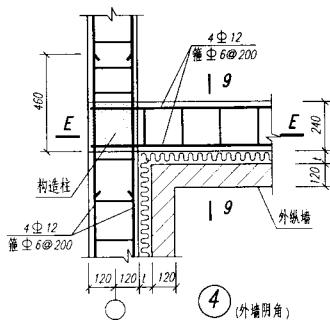
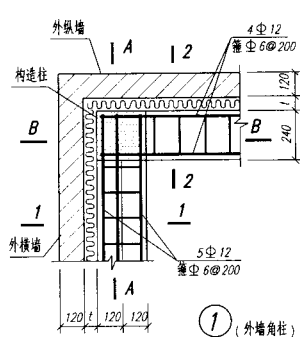
3. 浇柱前，应先清除墙体底部的残渣。

单层砌体房屋	构造柱的截面和配筋 (8度)				图集号	04 G329-2
(2) 砖夹心墙					页	22
审核 陶瑞照	校对 刘大海	设计 杨翠如	杨翠如	杨翠如		



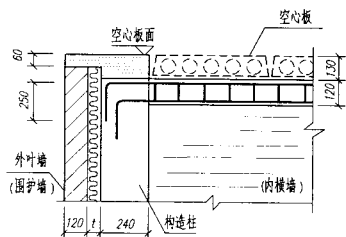
- 注: 1. 平面示例图中, 阴影部位表示有圈梁或拉梁;
2. 走廊拉梁的截面尺寸、配筋数量和底面标高均与圈梁相同;
3. 砖墙厚度按工程设计图纸。

单层砌体房屋	结构平面节点选用示例 (9度)			图集号	04 G329-2
(2) 砖夹心墙	审核	陶峰	校对	徐翠如	设计
	刘大海	王大海	页	23	

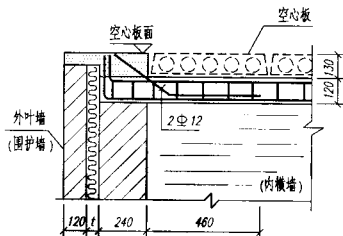


- 注: 1. 本页用于空心板屋盖; 圈梁的混凝土强度等级为 C 20;
2. 内墙上的圈梁节点采用第 10 页的节点 ①、②; 截面 3-3、8-8 见第 7 页;
3. 剖面 C-C~E-E, 截面 1-1、2-2、9-9 见第 25 页。

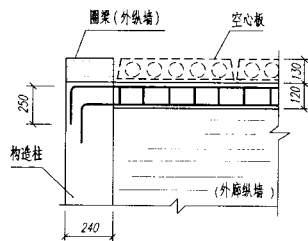
单层砌体房屋 (2) 砖夹心墙	高低圈梁 (外墙) 节点 (9 度)				图编号	04 G329-2
审核 陶瑞琪	校对 杨翠如	设计 刘大满	大 陆	页	24	



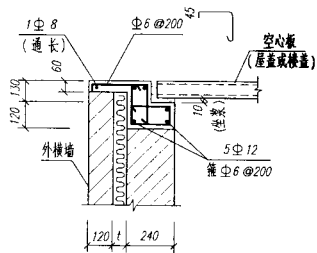
C—C



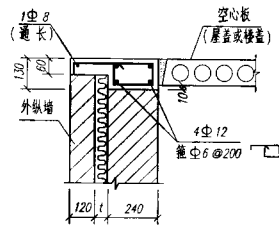
D—D



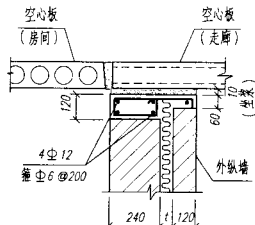
E—E



1—1



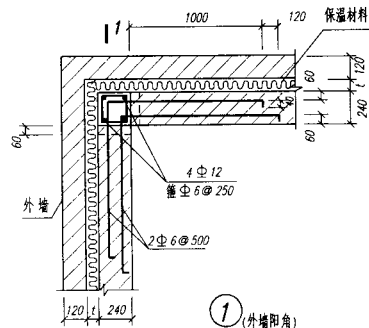
2—2



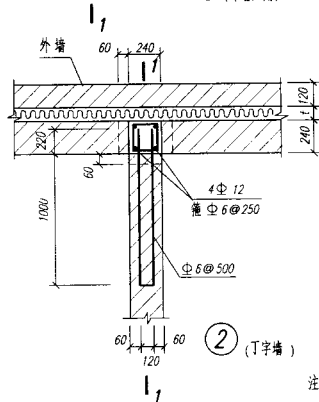
9—9

注：本页与第 24 页配合使用。

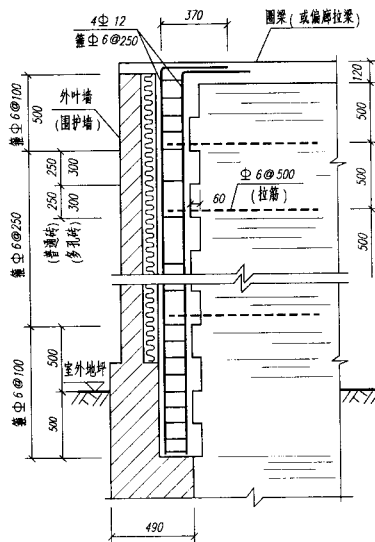
单层砌体房屋	高低圈梁的剖面 and 截面 (9 度)	图集号	04 G329-2
(2) 砖夹心墙		页	25
审核 陶唯明	校对 杨翠如	设计 刘大海	



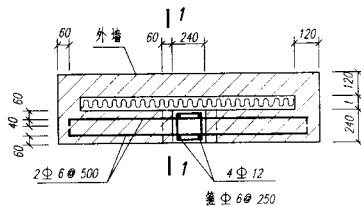
① (外墙阳角)



② (T字墙)



③ (外墙阴角)



④ (窗间墙)

注: 1. 构造柱的混凝土强度等级为 C20;

2. 先砌墙, 后浇柱;

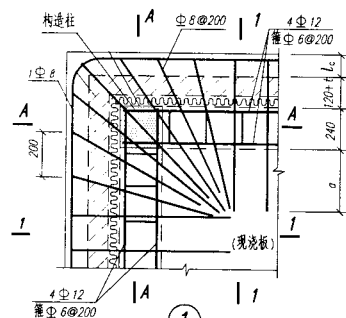
3. 浇柱前, 应先清除墙底部的残渣。

单层砌体房屋
(2) 砖夹心墙
审核 陶瑞琪 2012.2 校对 杨翠如 杨翠如 设计 刘大海 刘大海

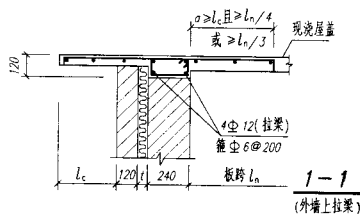
构造柱的截面和配筋 (9 度)

图集号 04 G329-2

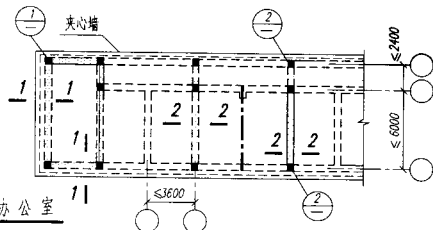
页 26



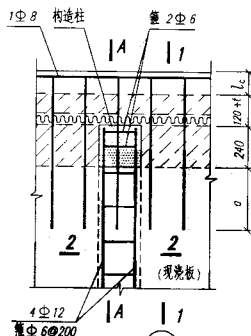
① (角柱拉梁)



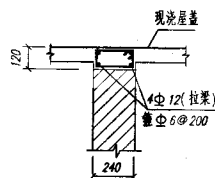
1-1
(外墙上拉梁)



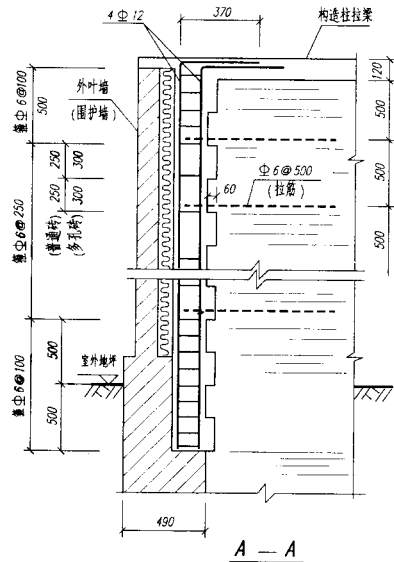
2-2
(内墙上拉梁)



② (柱拉梁)



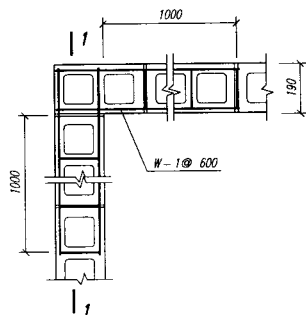
2-2
(内墙上拉梁)



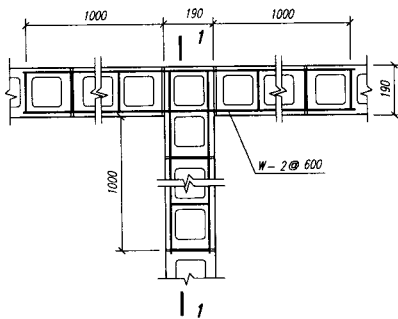
- 注：1. 夹心墙的内、外叶墙之间的拉结详见第 19 页；
2. 其他结构平面的构造柱拉梁的布置参见第 16 页；
3. 现浇屋盖的混凝土强度等级为 C 20；
4. 平面示意图中右图部位示有拉梁。

编 办 公 室

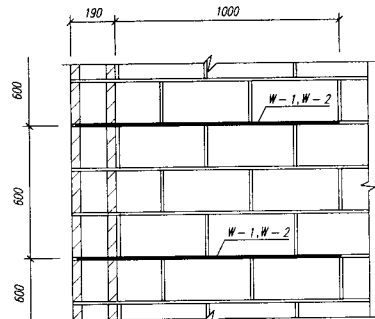
单层砌体房屋	现浇屋盖的构造柱拉梁 (9 度)	图 案 号	04 GJ29-2
(2) 砖夹心墙			
审核 陶瑞明	校对 杨翠如	设计 刘大海	页 27



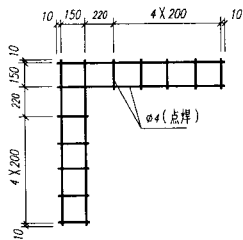
①



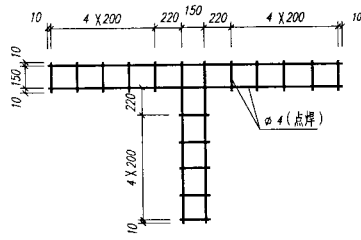
②



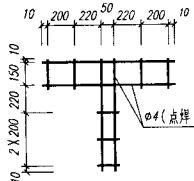
1 — 1



W — 1



W — 2



W — 3

注:

1. W-1 ~ W-3 为镀锌的 $\phi 4$ 钢筋点焊网片;
2. 钢筋网片遇门窗洞口时, 可在洞边截断;
3. 墙体砂浆强度等级不应低于 Mb 7.5;
4. 承重主砌块的外形尺寸 (长 $\times$ 宽 $\times$ 高) 为 390 $\times$ 190 $\times$ 190 (90);
5. 非承重主砌块的外形尺寸为 390 $\times$ 90 $\times$ 190 (90);
6. 纵、横墙交接处, 砌块应交错咬槎砌筑。

单层砌体房屋
(3) 砌块墙平房
审核 陶瑞麒

承重墙的拉结钢筋网片 (6 ~ 9 度)

图集号

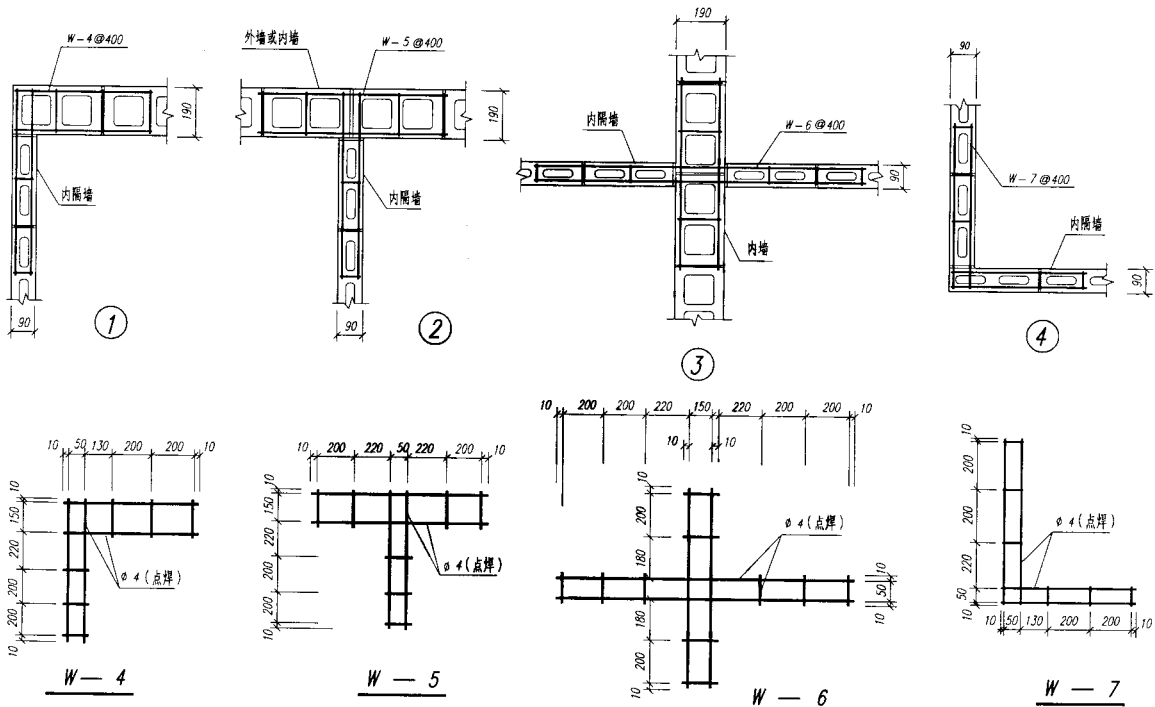
04 G329-2

校对 杨翠如

设计 刘大海

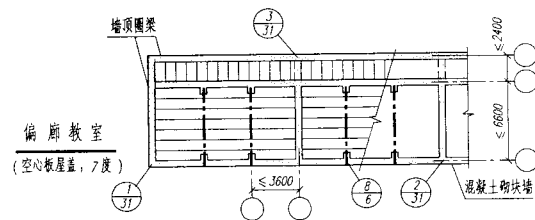
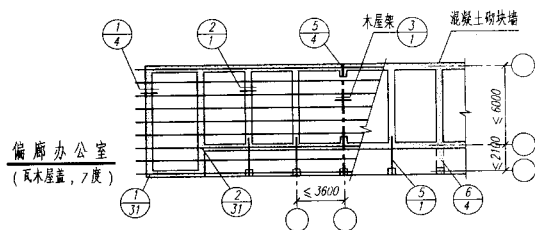
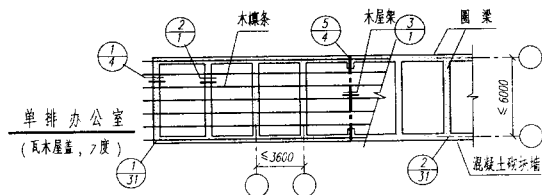
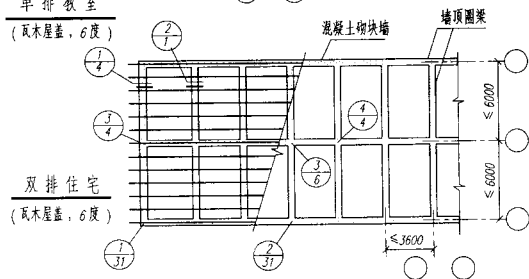
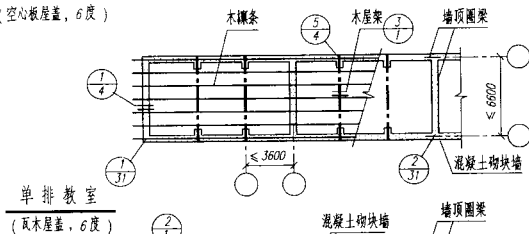
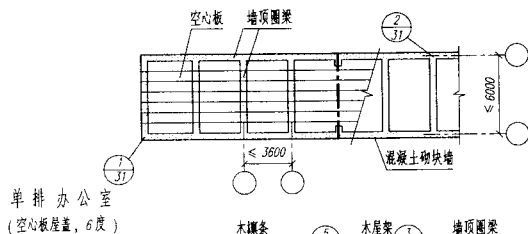
页

28



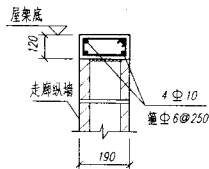
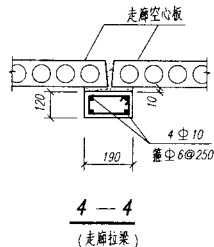
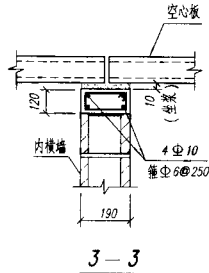
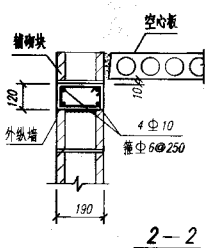
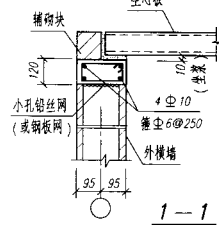
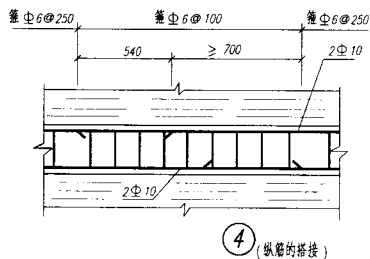
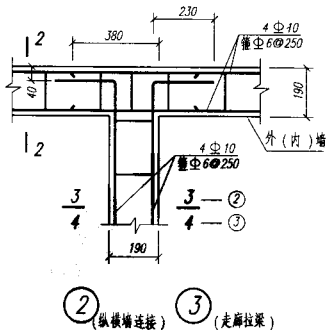
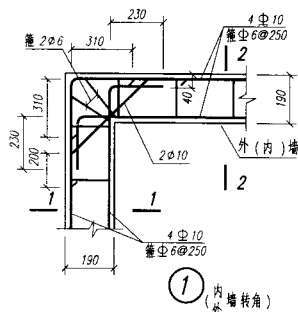
- 注: 1. 非承重主砌块的外形尺寸为 390 X 90 X 190 (90);
2. 隔墙的砂浆强度等级不应低于 M5.7.5; W-4 ~ W-7 为镀锌的 $\phi 4$ 钢筋点焊网片。

单层砌体房屋	隔墙的拉结钢筋网片 (6~9度)	图集号	04 G329-2
(3) 砌块墙平层		页	29
审核 陶峰	校对 杨翠如	设计 刘大海	页



- 注: 1. 瓦木屋盖结构平面图中, 上半部为屋盖节点编号, 下半部为圈梁节点编号;
2. 本图用于混凝土小型砌块砌筑的平房; 平面示意图中阴影部位表示有圈梁或拉梁;
3. 纵、横墙应同时并咬槎砌筑, 砂浆强度等级不应低于 M7.5。

单层砌体房屋	结构平面节点选用示例 (6、7度)				图集号	04 G329-2
(3)砌块墙平房					页	30
审核 陶瑞顺	校对 杨翠如	设计 刘大海	大 验			



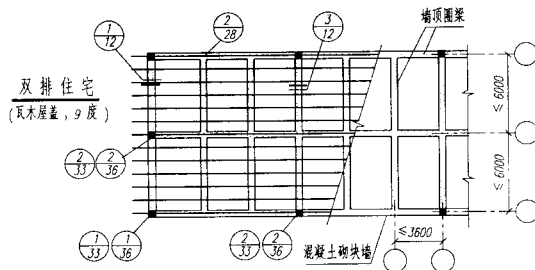
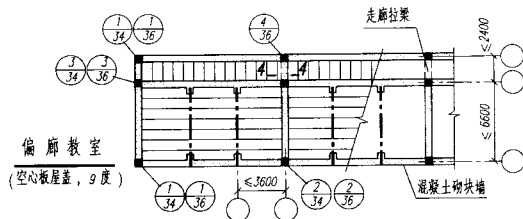
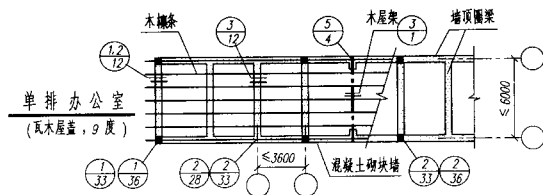
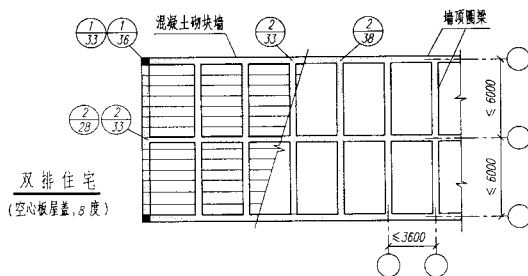
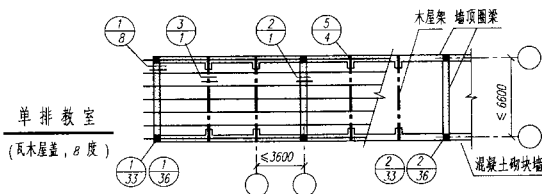
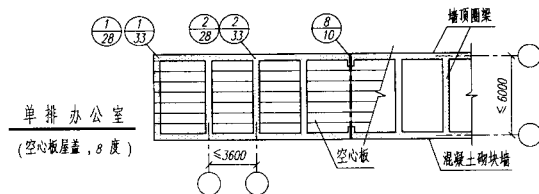
- 注: 1. 混凝土强度等级为 C20;
2. 纵向钢筋采取整根通过节点时, 图示的节点内钢筋搭接头取消;
3. 图案兼作过梁时, 应按计算另配钢筋和增大截面高度。

单层砌体房屋
(3) 砌块墙平房
审核 陶晓原 校对 杨翠如 设计 刘大海 王大海

板底圈梁节点和截面(6、7度)

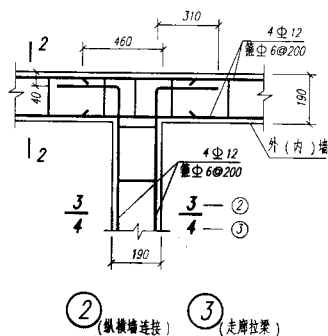
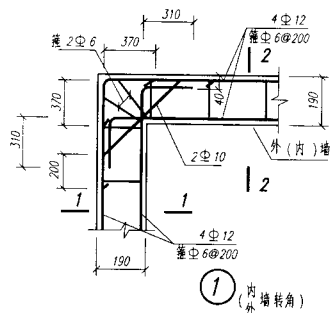
图集号 04 G329-2

页 31

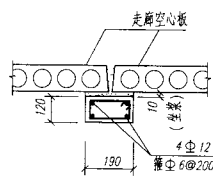
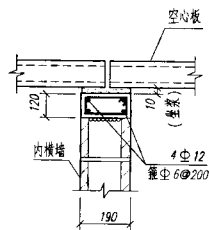
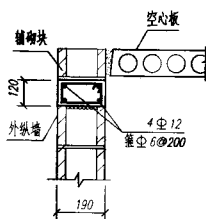
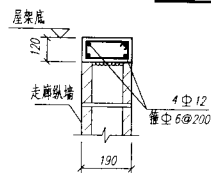
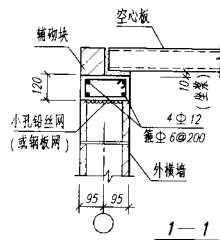
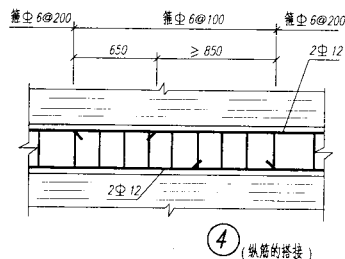


- 注: 1. 平面示例图中, 阴影部位表示有圈梁或拉梁;
2. 瓦木屋盖结构平面图中, 上半部为屋盖节点编号, 下半部为圈梁节点编号;
3. 圈梁节点和截面分别见第 10 页和第 7 页, 截面 4—4 见第 33 页。

单层砌体房屋	结构平面节点选用示例 (8、9 度)	图集号	04 G329-2
(3) 砌块墙平房			
审核 陶曙明	校对 杨军如 杨军如 设计 刘大海 刘大海	页	32

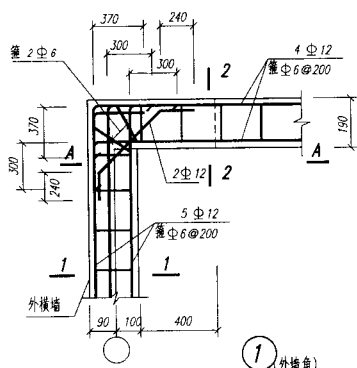


3 (走廊拉梁)

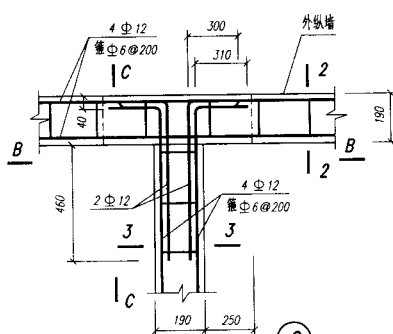


- 注：1. 本页用于8度的空心板屋盖和8、9度的瓦木屋盖；
2. 纵向钢筋采取整根通过节点时，图示的节点内钢筋搭接接头取消；
3. 圈梁兼作过梁时，应按计算另配钢筋和增大截面高度；
4. 混凝土强度等级为C20。

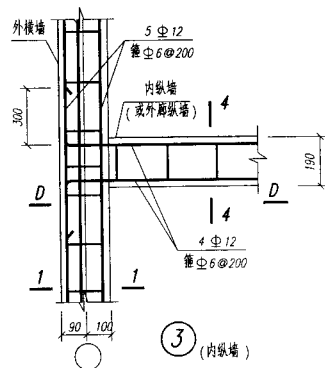
单层砌体房屋	板底圈梁节点和截面(8、9度)	图集号	04 G329-2
(3)砌块墙平房		页	33
审核 陶晓明	校对 张军如	设计 刘大海	



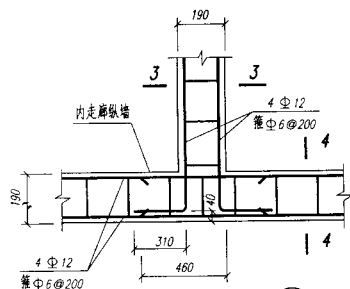
① (外墙角)



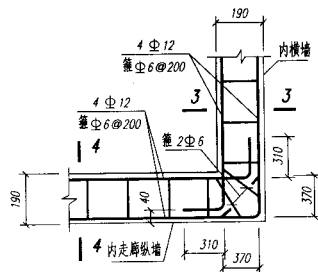
② (内外墙交点)



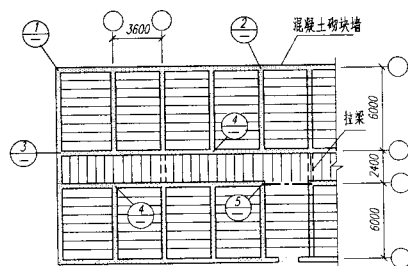
③ (内墙角)



④ (内墙交点)



⑤ (内墙角)

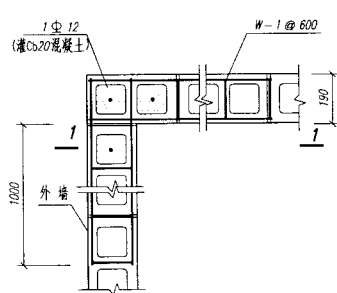


节点选用示例

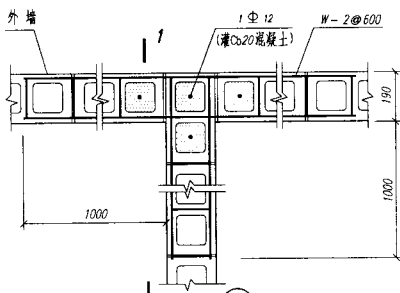
注:

1. 平面示意图中, 布网部位表示有圈梁; 混凝土强度等级为 C 20;
2. 剖面 A-A 至 D-D 及截面 1-1 至 4-4 见第 35 页; 圈梁纵筋的搭接见第 33 页;
3. 纵向钢筋采取整根通过节点时, 图示的节点内钢筋搭接接头取消。

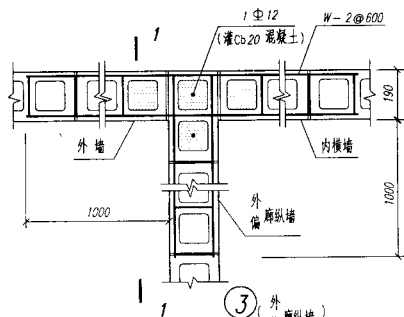
单层砌体房屋	高低圈梁 (空心板屋盖) 节点 (9 度)	图集号	04 G329-2
(3) 砌块墙平房			
审核 陶瑞琪	校对 杨翠如	设计 刘大海	页 34



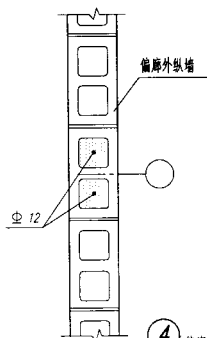
① (填充3孔)



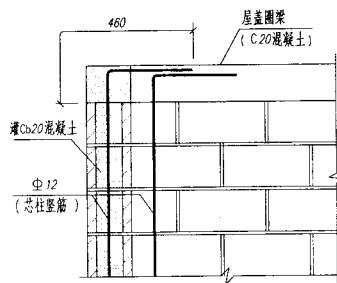
② (填充4孔)



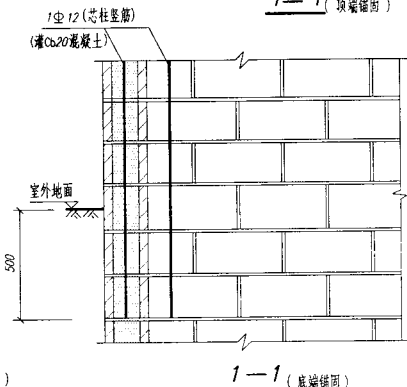
③ (外偏纵墙)



④ (偏廊外墙)



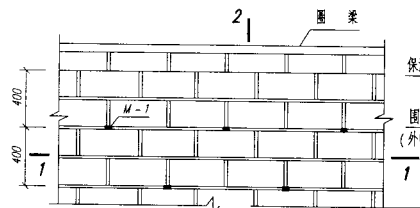
1-1 (顶端俯视图)



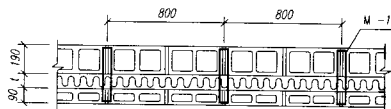
1-1 (底端俯视图)

- 注：1. 本图表示 8、9 度的芯柱配筋情况，6、7 度时，各接点详图中的竖向钢筋取消；
2. W-1、W-2 见第 28 页；
3. 纵、横墙连接处，砌块交错咬槎砌筑，并保持各个混凝土砌块的竖孔上下对齐贯通；
4. 配置竖向钢筋的孔洞宜采用 C20 级细石混凝土分段填灌并振实，每次填灌高度不宜大于 1.5m。

单层砌体房屋	芯柱的截面和配筋 (6~9 度)				图集号	04 G329-2
(3) 砌块墙平房					页	36
审核 陶峰	校对 杨军	设计 刘大海				

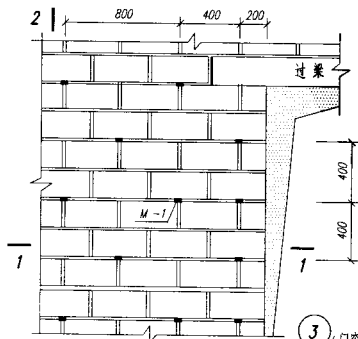


正立面 2 |

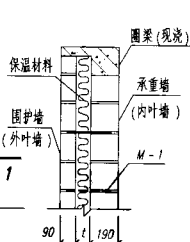


1 — 1

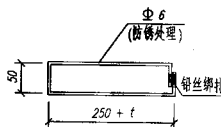
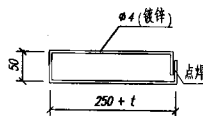
① (夹墙面及圈梁上下)



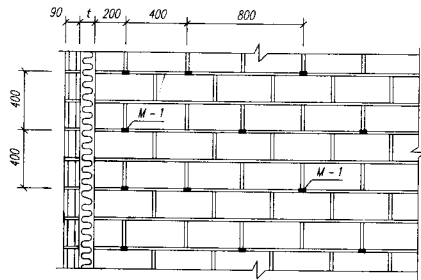
3 | ③ (门窗洞口)



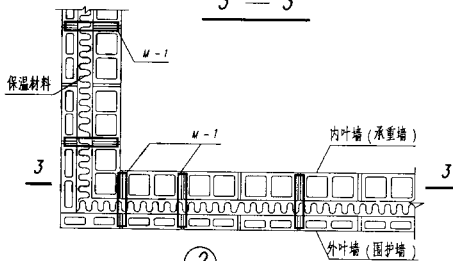
2 — 2



M-1 (方案二)



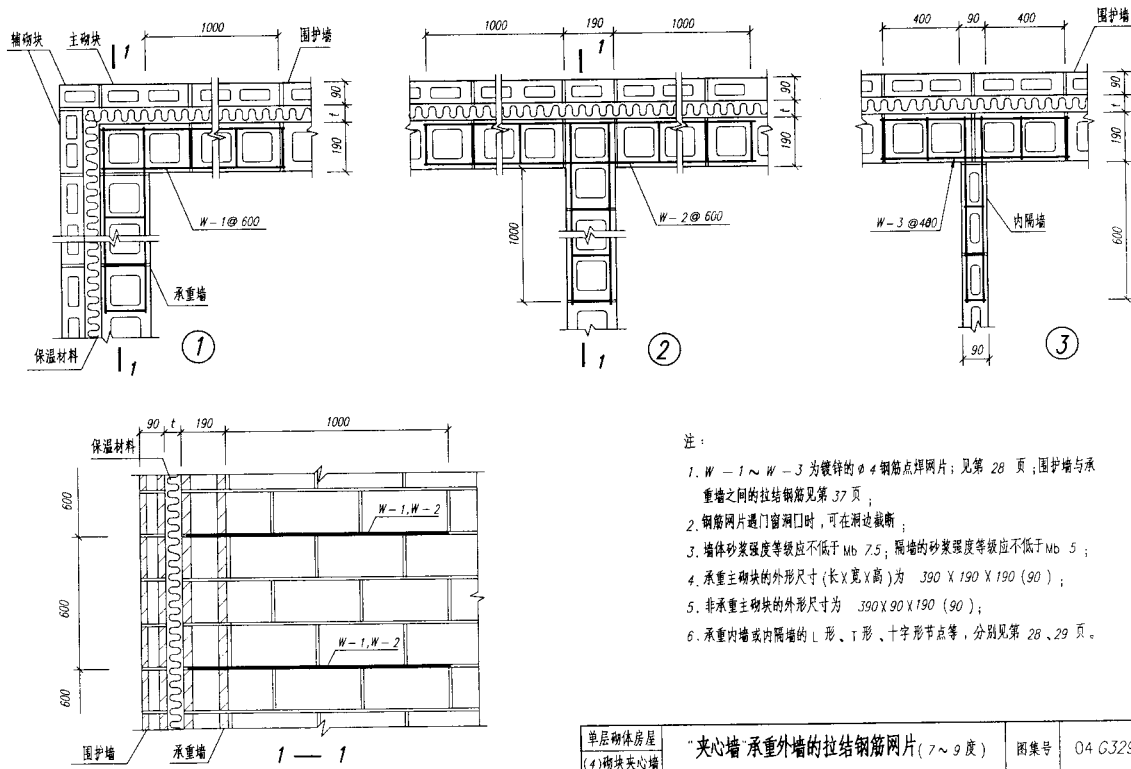
3 — 3



② (外墙转角)

- 注: 1. 本页与第 38 ~ 44 页配合使用;
2. 内、外叶墙之间空隙的宽度 (t) 为 60 mm 左右, 具体取值见工程设计图纸;
3. 外叶墙的砌筑进度宜比内叶墙滞后二皮砌块, 并随砌块在空腔内填放保温材料;
4. 上、下皮砌块的竖孔必须对齐; 砂浆强度等级应不低于 Mb 7.5。

单层砌体房屋	“夹心墙”内、外叶墙的拉结 (6 ~ 9 度)	图集号	04 G329-2
(4) 砌块夹心墙			
审核 陶峙敏	校对 张翠如	设计 刘大海	页 37



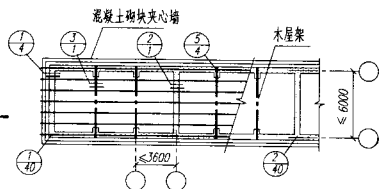
注:

1. $W-1 \sim W-3$ 为镀锌的 $\phi 4$ 钢筋点焊网片; 见第 28 页; 围护墙与承重墙之间的拉结钢筋见第 37 页;
2. 钢筋网片进门窗洞口时, 可在洞边截断;
3. 墙体砂浆强度等级应不低于 Mb 7.5; 隔墙的砂浆强度等级应不低于 Mb 5;
4. 承重主砌块的外形尺寸 (长 $\times$ 宽 $\times$ 高) 为 $390 \times 190 \times 190$ (90);
5. 非承重主砌块的外形尺寸为 $390 \times 90 \times 190$ (90);
6. 承重内墙或内隔墙的 L 形、T 形、十字形节点等, 分别见第 28、29 页。

单层砌体房屋	“夹心墙”承重外墙的拉结钢筋网片 (7~9 度)	图集号	04 G329-2
(4) 砌块夹心墙			
审核 陶峰	校对 杨翠	设计 刘大海	页 38

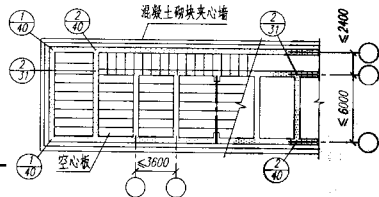
单排教室

(瓦木屋蓋, 6度)



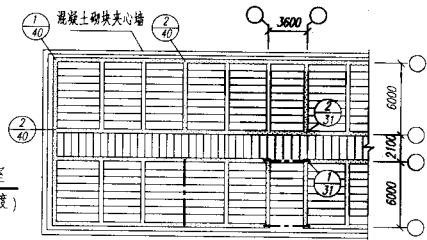
偏廂辦公室

(空心板屋盖, 6度)



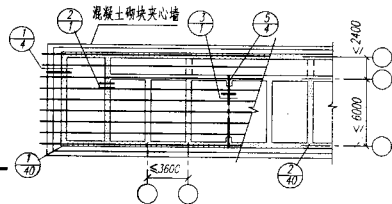
內廊辦公室

(空心板屋蓋, 6 度)



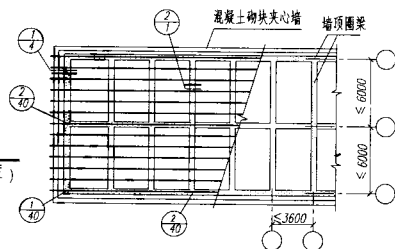
偏庫辦公室

(瓦木屋蓋, 7度)



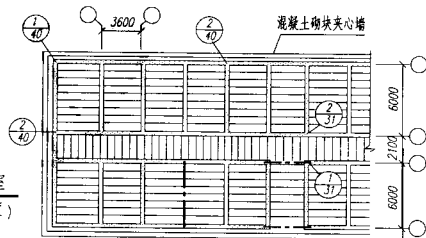
双排住宅

(瓦木屋蓋，7度)



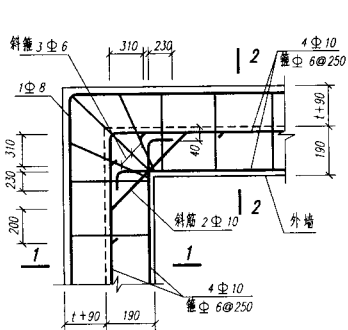
內廊办公室

(空心板屋盖, 7度)

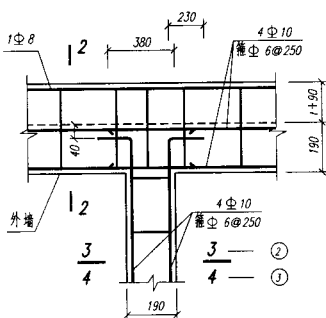


- 注: 1. 瓦木屋盖结构平面图中, 上半部为屋盖节点编号, 下半部为圈梁节点编号;
2. 本页适用于混凝土小型砌块砌筑的平房; 平面示例图中, 布网部位表示有圈梁或拉梁;
3. 纵、横墙应同时并交处砌筑, 砂浆强度等级不宜低于 Mb 7.5。

单层砌体房屋	结构平面节点选用示例 (6.7度)	图集号	04 G329-2
(4)砌块夹心墙			
审核 陶瑞娟	校对 杨军如	设计 刘大海 刘大海	页 39

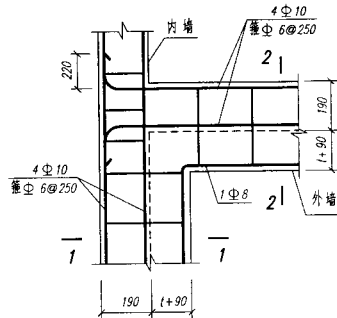


① (外墙阳角)

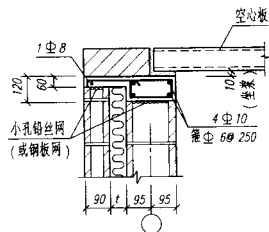


② (纵横墙连接)

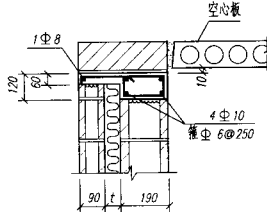
③ (偏锚拉梁)



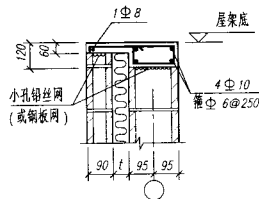
④ (外墙阴角)



1-1
(空心板屋盖)



2-2
(空心板屋盖)

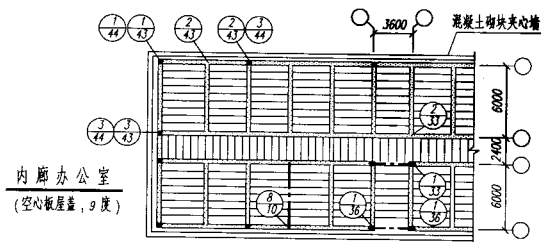
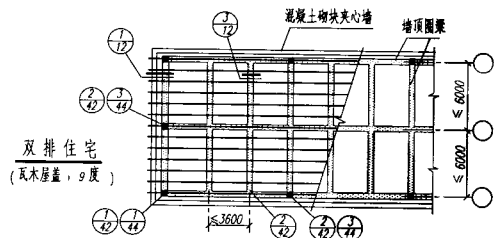
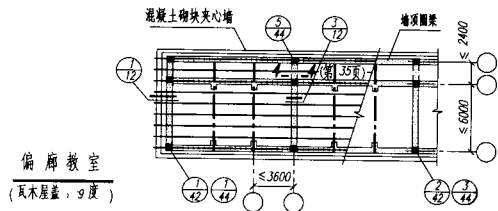


1-1, 2-2
(瓦木屋盖)

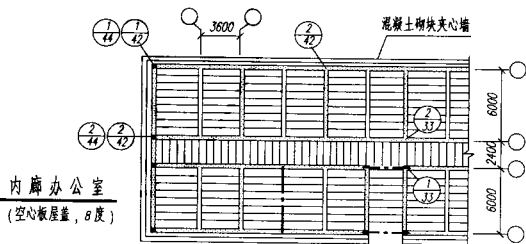
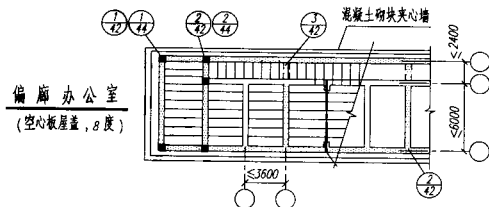
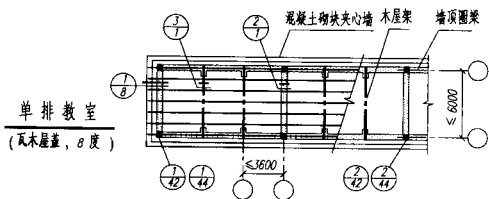
注: 1. 混凝土的强度等级为 C 20;

2. 内墙上圈梁的 L 形、T 形、十字形连接及圈梁截面见第 31 页。

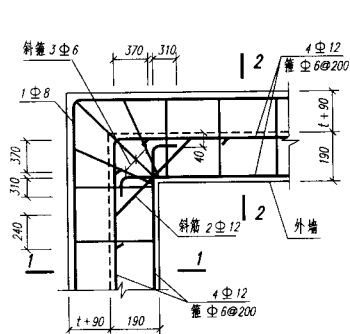
单层砌体房屋	“夹心墙”板底圈梁节点和截面 (6、7 度)	图集号	04 G329-2
(4) 砌块夹心墙			
审核 陶瑞明	校对 杨翠如	设计 刘大海	页 40



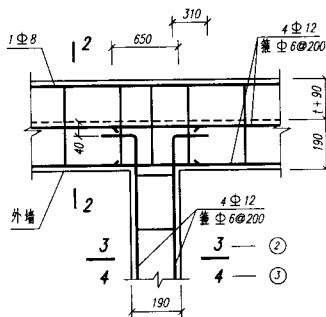
注: (见第39页)。



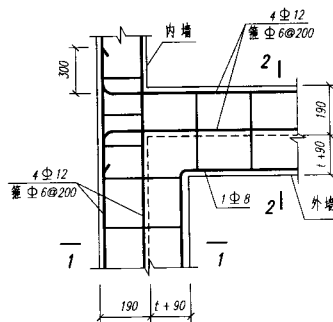
单层砌体房屋	结构平面节点选用示例 (8、9度)	图集号	04 G329-2
(4) 砌块夹心墙			
审核 陶晴眼	校对 杨军如	设计 郑大海	页 41



① (外墙阳角)

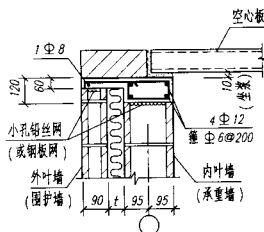


② (纵横墙连接)

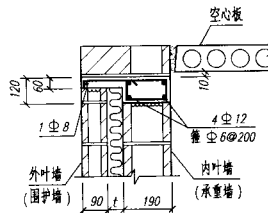


③ (走廊拉梁)

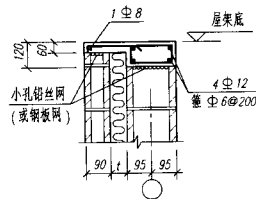
④ (外墙阴角)



1-1
(空心板屋盖)



2-2
(空心板屋盖)

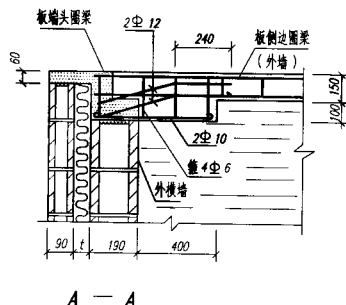
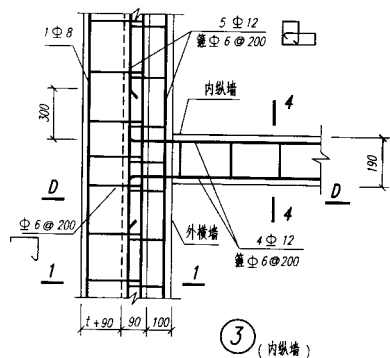
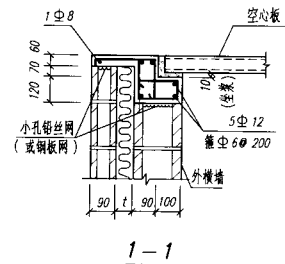
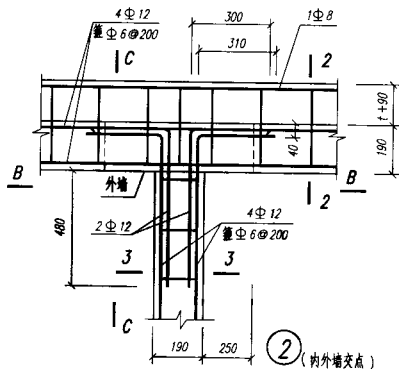
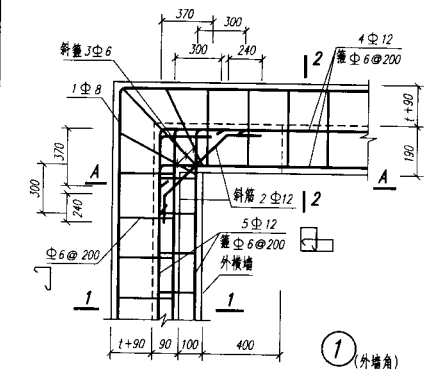


1-1, 2-2
(瓦木屋盖)

注: 1. 本页用于 θ 度的空心板屋盖和 θ 、 9 度的瓦木屋盖;

2. 混凝土的强度等级为 C 20; 内墙上圈梁的 L 形、T 形、十字形连接及圈梁截面见第 33 页。

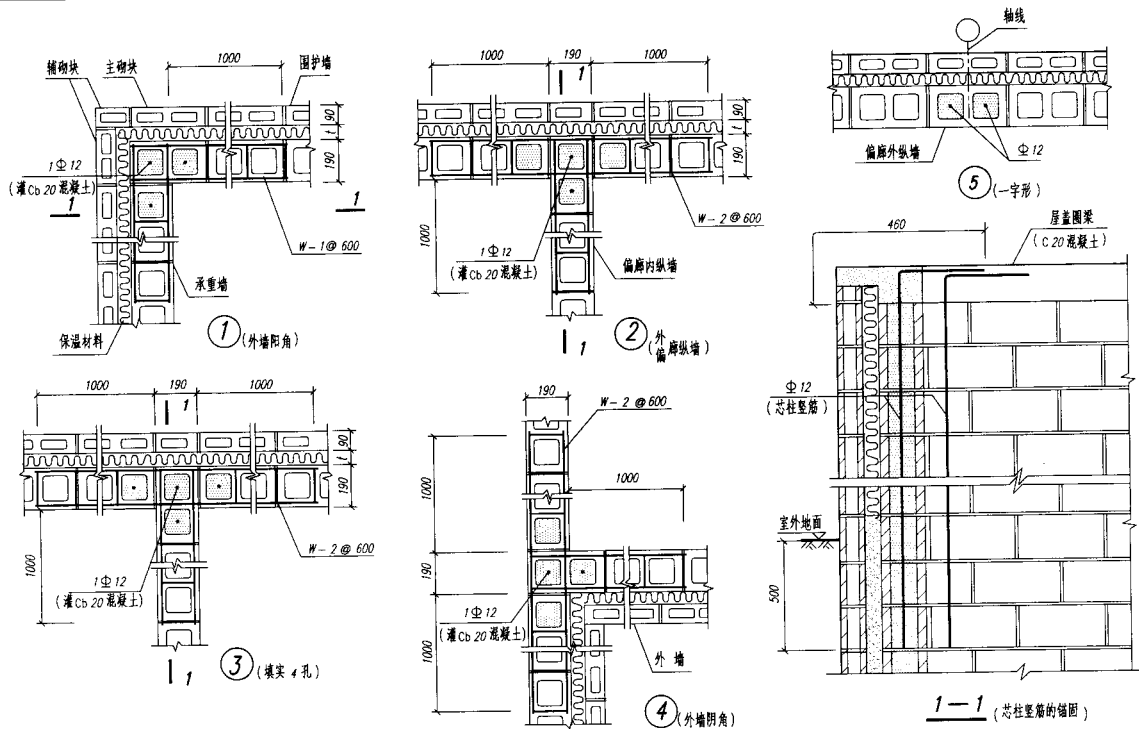
单层砌体房屋	夹心墙 板底圈梁节点和截面 (θ 、 9 度)				图编号	04 G329-2
(3) 砌块夹心墙						
审核	陶峰	校对	杨平	设计	刘大海	页 42



注:

1. 砌强度等级为 C 20 ;
2. 剖面 B-B~D-D, 截面 3-3、4-4 的圈梁位置和连接, 以及内墙上的节点和截面, 参见第 34、35 页。

单层砌体房屋 (J)砌块夹心墙	“夹心墙”高低圈梁节点和截面 (空心板屋盖, g 度)	图样号	04 G329-2
审核 陶瑞祺	校对 杨翠如	设计 刘大海	页 43



注: 1. W-1、W-2 见第 28 页;

2. 纵、横墙连接处, 砌块交错咬槎砌筑, 并保持各个砌块的竖孔上下对齐贯通;

3. 配置竖向钢筋的孔洞应采用 C20 级细石混凝土分段填满并振实, 每次填满高度不宜大于 1.5 m。

单层砌体房屋	“夹心墙”芯柱的截面和配筋 (8、9 度)	图案号	04 G329-2
(4) 砌体夹心墙			
审核: 陶峙琛	校对: 杨军如	设计: 刘大海	页: 44