湖南大學

HUNAN UNIVERSITY

土木建筑工程检测报告

REPORT OF CIVIL ENGINEERING INSPECTION AND TESTS

湖南湖大土木建筑工程检测有限公司

CIVIL ENGINEERING INSPECTION AND TEST
LIMITED COMPANY OF HUNAN UNIVERSITY

嘉宇西苑 3#栋住宅楼裂缝等缺陷及缺陷对结构安全影响检测鉴定报告

湖南湖大土木建筑工程检测有限公司

2019 年 8 月 5 日

注 意 事 项

(Notices)

1、报告无检测报告专用章无效。

(The report is invalid without stamp of inspection report on it.)

2、复制报告未重新加盖检测报告专用章无效。

(Duplication of the report is invalid without stamp of inspection report re-stamped on it.)

3、报告无负责人、审核人、批准人签名无效。

(The report is invalid without the signatures of the persons for project management, verification and approval.)

4、报告涂改无效。

(Test report is invalid if altered.)

5、对检测报告若有异议，应在报告发出后 15 个工作日内提出。

(Different opinions about the report should be reported to the test department within 15 days from the date of receiving the report.)

6、本报告对项目提出的任何处理或加固等建议均不能作为施工文件，其实施必须以有效设计文件为依据。

(Any proposed handling or reinforcing suggestions for the project in this report can not be used as formal construction documents. The construction should be performed on basis of licensed design documents.)

嘉宇西苑3#栋住宅楼裂缝等缺陷及缺陷对结构安全影响检测鉴定报告

委托单位：望城区月亮岛街道天鹅塘社区
湖南嘉宇房地产开发有限公司
嘉宇西苑业主代表

建设单位：湖南嘉宇房地产开发有限公司

勘察单位：湖南省建筑设计院有限公司

设计单位：深圳市华纳国际建筑设计有限公司

施工单位：湖南中智建筑工程有限公司

监理单位：湖南环宇建设工程咨询监理有限责任公司

项目负责人：

现场检测人：

报告审核人：

批告批准人：

湖南湖大土木建筑工程检测有限公司

2019年8月5日

嘉宇西苑3#栋住宅楼裂缝等缺陷及缺陷对结构安全影响检测鉴定报告

受望城区月亮岛街道天鹅塘社区、湖南嘉宇房地产开发有限公司及嘉宇西苑业主代表的共同委托，湖南湖大土木建筑工程检测有限公司组织人员于2019年6月对嘉宇西苑3#栋住宅楼进行检测。根据检测结果，提出如下报告。

一、概况

1、工程概况

嘉宇西苑3#栋位于长沙市望城区银杉路与金萧路交叉口西南角，该房屋为地下1层+地上33层住宅楼，该工程主体结构为框架剪力墙结构，建筑主体高度为94.1m，屋面为可上人平屋面。该工程主楼基础采用预应力高强混凝土管桩基础，桩端持力层为强风化粉砂岩层，极限端阻力标准值为8000kPa。建筑设计使用年限为50年，建筑结构安全等级为二级，抗震设防烈度为6度。墙体均采用混凝土加气块，混凝土设计强度等级：墙柱：负1层~4层为C50，5层~9层为C45，10层~14层为C40，15层~19层为C35，19层以上为C30；梁板：1层为C40，其余各层均为C25。该工程主体于2015年10月开工，于2018年7月完工，现场检测时，大部分房间已交付，少部分已装修入住。

2、工程需要进行检测的原因

因业主发现房屋墙体、楼板存在裂缝等情况，为确定房屋裂缝等缺陷产生的原因及对房屋主体结构安全的影响，望城区月亮岛街道天鹅塘社区、湖南嘉宇房地产开发有限公司及嘉宇西苑业主代表特共同委托我公司对嘉宇西苑3#栋住宅楼进行检测。

3、检测范围和内容

本次是对嘉宇西苑3#栋住宅楼垂直度、混凝土强度、钢筋根数及间距、保护层厚度、裂缝等情况进行检测。

二、主要依据

1、《建筑结构检测技术标准》GB/T50344-2004；

2、《混凝土结构工程施工质量验收规范》GB50204-2015；

3、《混凝土结构现场检测技术标准》GB/T50784-2013；

4、《回弹法检测混凝土抗压强度技术规程》JGJ/T23-2011；

5、《混凝土结构设计规范》GB 50010-2010（2015 年版）；

6、《混凝土中钢筋检测技术规程》JGJ/T152-2008；

7、《混凝土结构加固设计规范》 GB50367-2013；

8、《砌体工程现场检测技术标准》GB/T50315-2011

9、《建筑装饰装修工程质量验收规范》GB50210-2018

10、《建筑地基基础设计规范》GB 50007-2011；

11、《建筑变形测量规范》JGJ8-2016；

12、嘉宇西苑 3#栋设计图，深圳市华纳国际建筑设计有限公司，2014 年 6 月；

13、《嘉宇西苑岩土工程详细勘察报告》（工程编号 2015-KC002），湖南省建筑设计院，2015 年 1 月；

14、《嘉宇西苑 3#栋、2#栋、3#栋、7#栋、8#栋、9#栋主体沉降观测总结性报告》（报告编号 15C-180010），湖南中科工程检测有限公司，2018 年 12 月 31 日；

15、《嘉宇西苑 3#栋主体沉降观测阶段性报告》（报告编号 15C-180026、15C-190005），湖南中科工程检测有限公司；

16、《嘉宇西苑 3#栋单桩竖向抗压静载试验报告》（报告编号 HNHS-ZJJZ20160050），湖南省宏尚检测技术股份有限公司，2016 年 4 月；

17、《嘉宇西苑 3#栋基桩低应变检测报告》（报告编号 HNHS-DYB20160126），湖南省宏尚检测技术股份有限公司，2016 年 6 月。

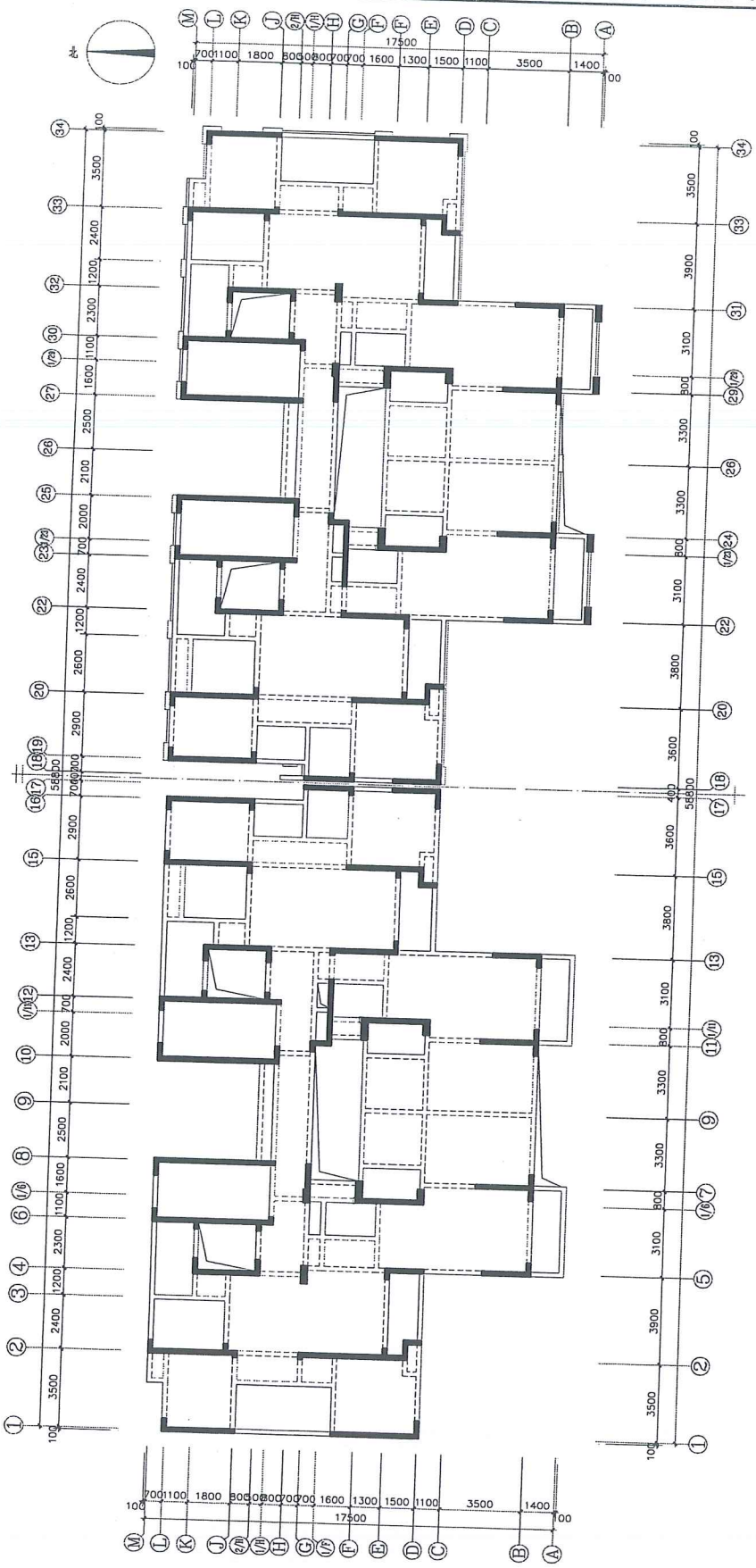


图 1　标准层平面布置图

三、检测结果

1、裂缝情况调查

经现场对嘉宇西苑3#栋住宅楼裂缝等情况进行检测，该栋房屋多层墙体、楼板发现裂缝，墙体裂缝主要形态为水平裂缝、竖直裂缝、斜裂缝，楼板裂缝主要形态为切角裂缝、板面跨中裂缝，结果如下：

（1）墙体裂缝

1）墙体水平裂缝：对3#栋住宅楼抽测各房间进行入户检测，根据水平裂缝发生的部位，查阅图纸和选取部分裂缝凿除粉刷层可知，水平裂缝发生的位置为：钢筋混凝土梁与填充墙交界部位、填充墙水平灰缝部位，钢筋混凝土梁与填充墙交界部位布置有钢丝网，钢丝网宽度在250mm~300mm之间，钢丝网大致对中界面布置，钢丝网眼大小为15mm×15mm。水平裂缝典型情况如17层18-20/(1/F)轴梁与填充墙交界、22层15-17/(1/F)轴填充墙，现场典型情况见照片1~照片4；

2）墙体竖直裂缝：对3#栋住宅楼抽测各房间进行入户检测，根据竖直裂缝发生的部位，查阅图纸和选取部分裂缝凿除粉刷层可知，竖直裂缝发生的位置为：钢筋混凝土剪力墙与填充墙交界部位、填充墙内埋线管部位，钢筋混凝土剪力墙与填充墙交界部位布置有钢丝网，钢丝网宽度在250mm~300mm之间，钢丝网大致对中界面布置，钢丝网眼大小为15mm×15mm。竖直裂缝典型情况如16层22-23/K轴墙、16层1-2/D轴墙，现场典型情况见照片5~照片8；

3）墙体斜裂缝：部分墙体存在斜裂缝，斜裂缝均出现在填充墙墙体部位，大部分裂缝呈墙体两侧对称开裂，裂缝宽度一般在0.1mm~0.3mm左右，选取部分墙体凿除粉刷层确认混凝土加气块开裂。斜裂缝典型情况如32层26-29/C轴填充墙、32层26/B-(1/B)轴填充墙，现场典型情况见照片9~照片10；

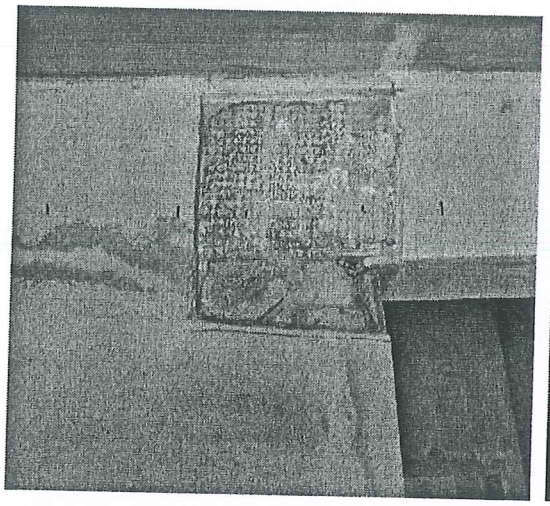
4）墙体除上述几种裂缝外，尚存在门窗洞口附近为主的水平和斜向裂缝，裂缝宽度一般在0.1mm~0.3mm左右，选取部分门窗洞口墙体凿除粉刷层确认砖块未开裂，裂缝典型情况如22层15-17/D轴窗角、16层1-2/L轴窗角，现场典型情况见照片11~照片12。

（2）楼板裂缝

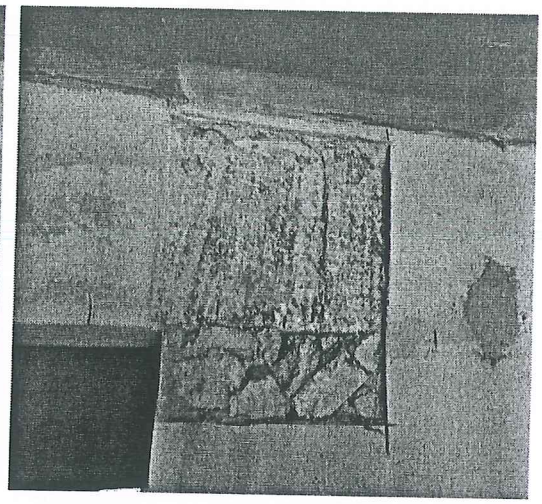
对3#栋住宅楼抽测各房间进行入户检测，部分楼板存在裂缝，裂缝主要为楼

板切角裂缝，以及板面跨中平行两侧梁方向的裂缝，裂缝宽度在 0.1mm~0.2mm 左右。楼板裂缝典型情况如 23 层板 G-E/11-12 轴板底、10 层板 B-C/11-13 轴板面，现场典型情况见照片 13~照片 16。

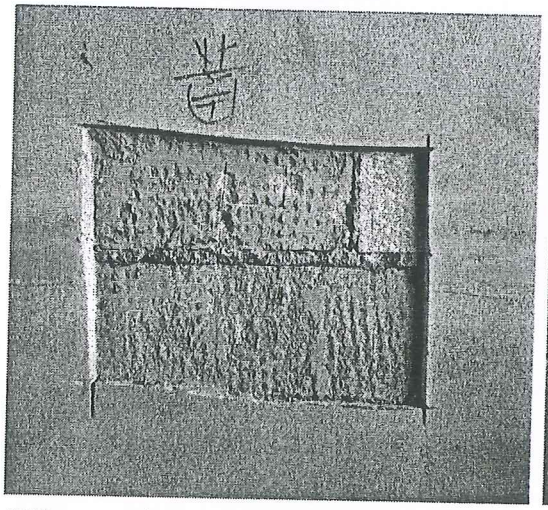
墙体、楼板裂缝详细情况见表 1~表 3。



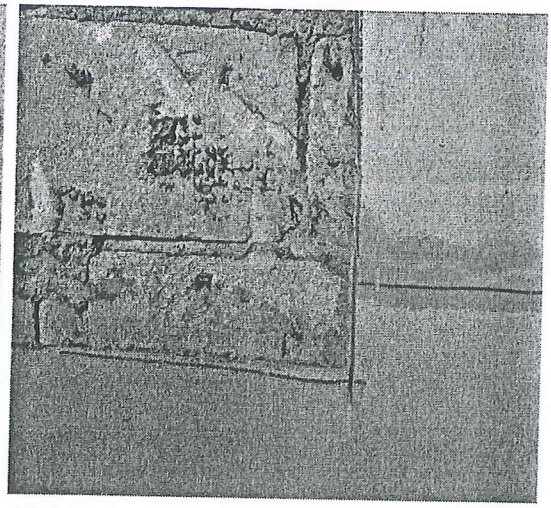
照片 1　17 层 18-20/(1/F)轴梁与填充墙交界处裂缝情况



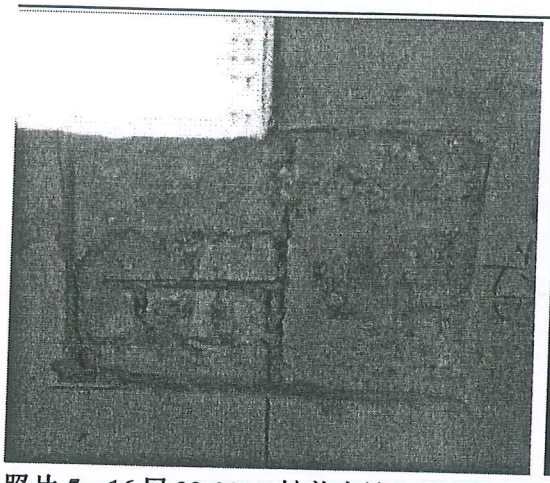
照片 2　22 层 15-17/(1/F)梁与填充墙交界处裂缝情况



照片 3　22 层 14/K-M 轴填充墙水平灰缝开裂情况

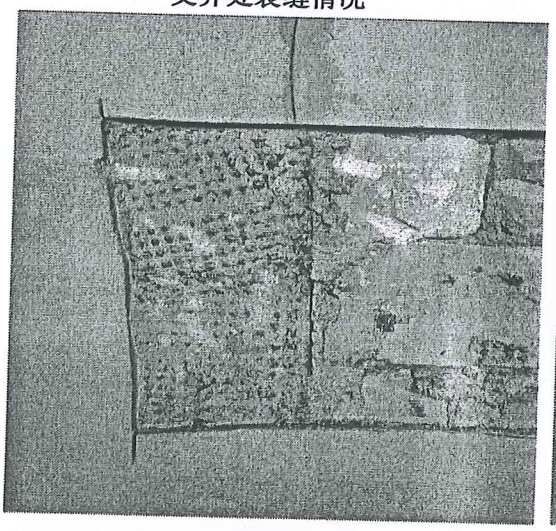


照片 4　22 层 12-13/K 轴填充墙水平灰缝开裂情况

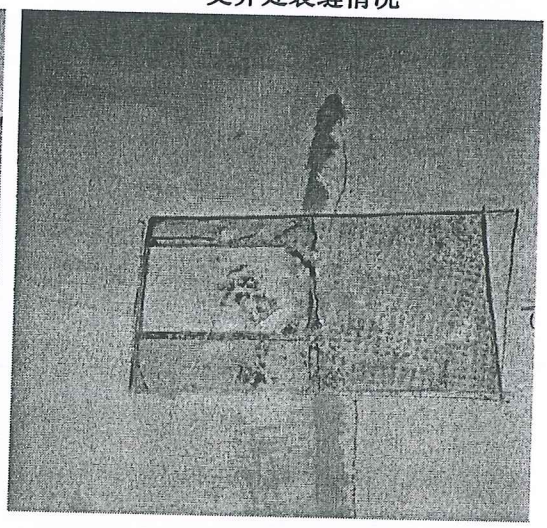


照片 5　16 层 22-23/K 轴剪力墙与填充墙交界处裂缝情况

照片 6　16 层 1-2/D 轴剪力墙与填充墙交界处裂缝情况

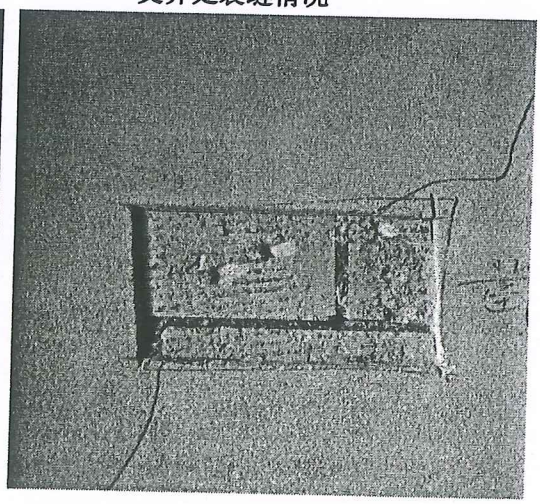


照片 7　22 层 22-23/K 轴剪力墙与填充墙交界处裂缝情况

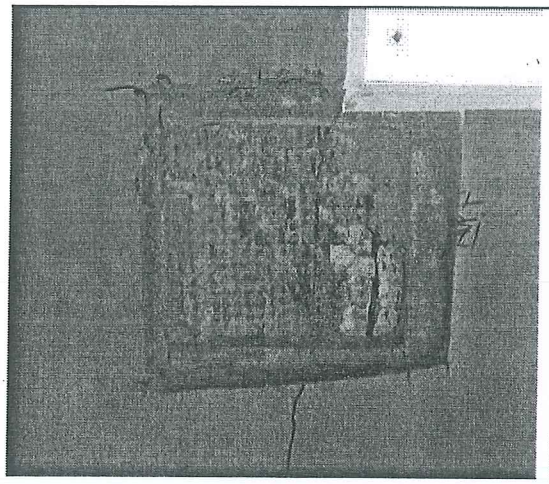


照片 8　12 层 4-6/K 轴剪力墙与填充墙交界处裂缝情况

照片 9　32 层 26-29/C 轴填充墙斜裂缝情况

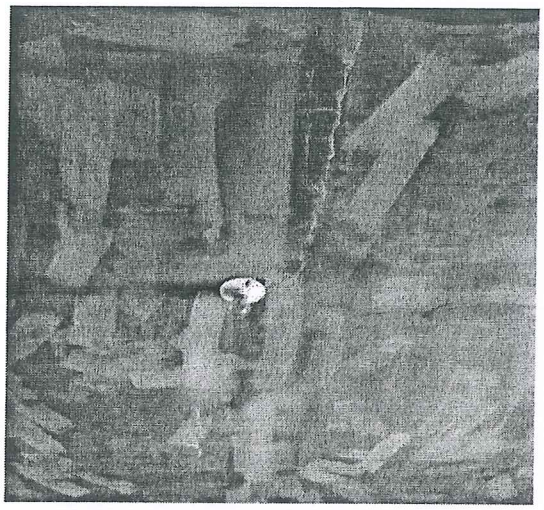


照片 10　32 层 26/B-(1/B)轴填充墙斜裂缝情况

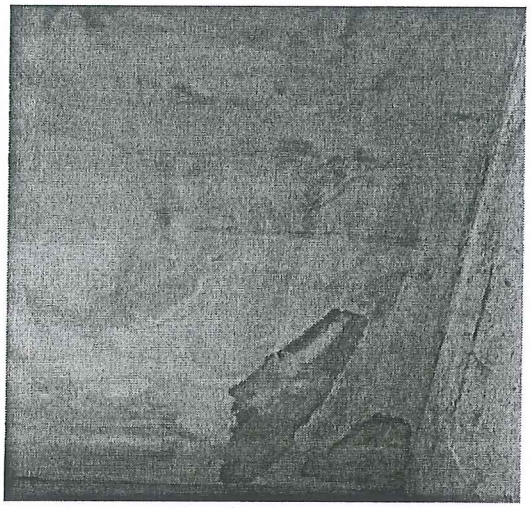


照片 11　22 层 15-17/D 轴墙
窗角裂缝情况

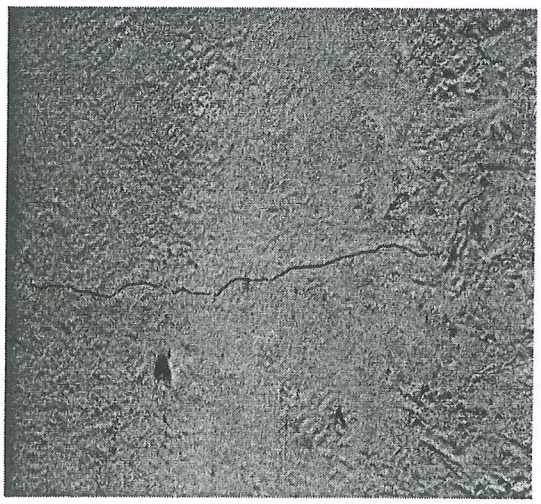
照片 12　16 层 1-2/L 轴墙
窗角裂缝情况



照片 13　23 层 G-E/11-12 轴楼板
裂缝情况



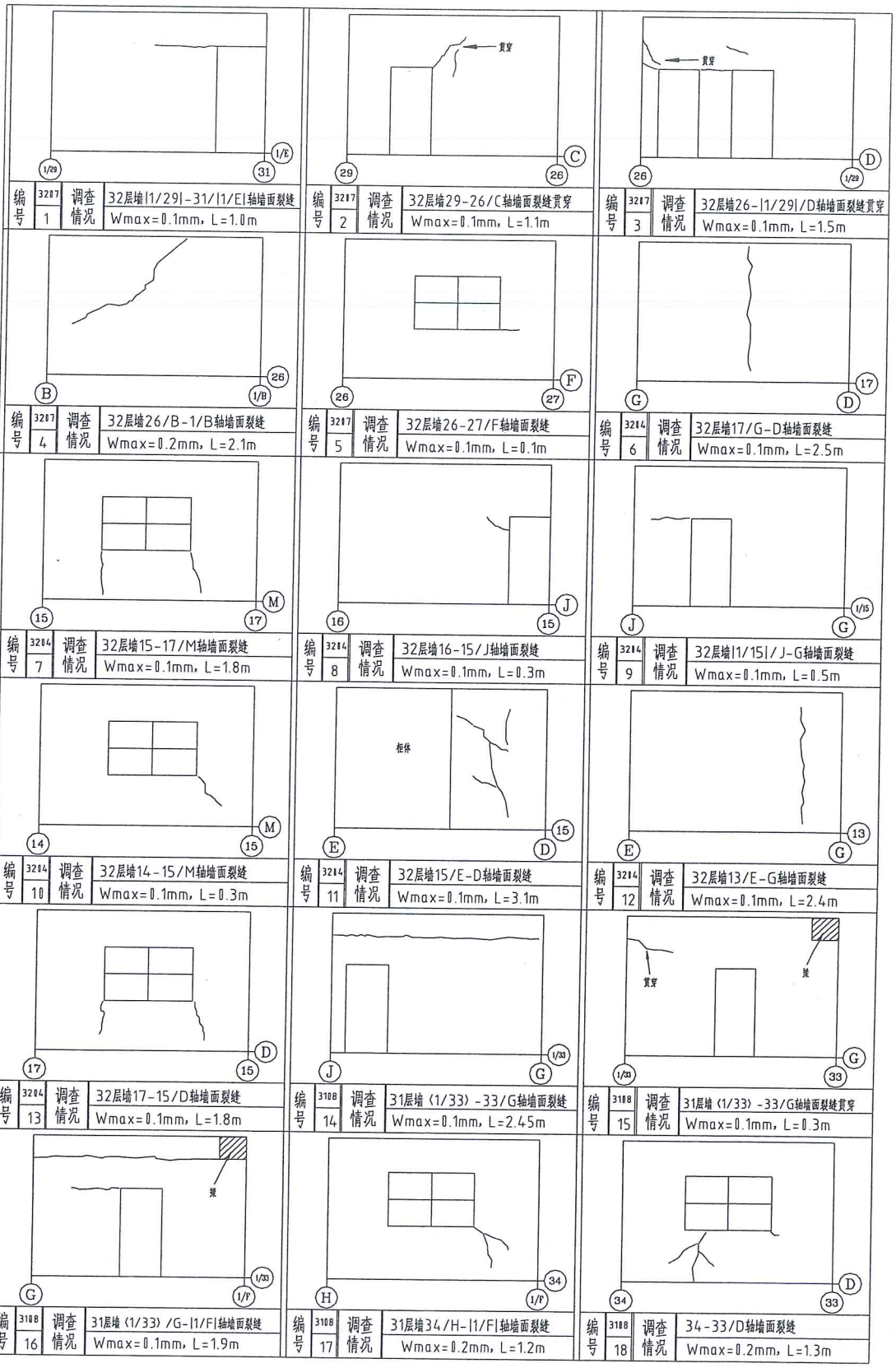
照片 14　17 层 1-2/D-(1/F)轴楼板
切角裂缝情况



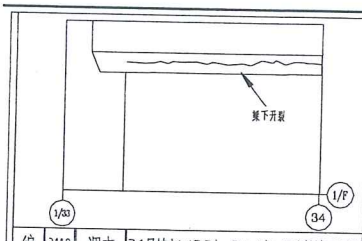
照片 15　12 层 2-4/G-J 轴楼板
板面裂缝情况

照片 16　10 层 B-C/11-13 轴楼板
板面切角裂缝情况

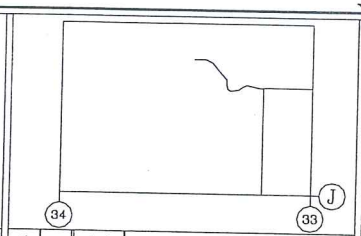
表1　各层各户墙体裂缝情况



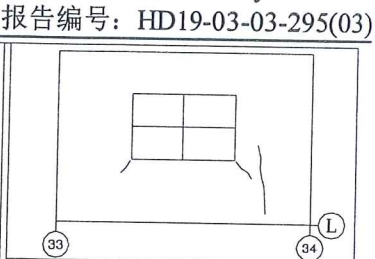
编号	调查情况
3207 1	32层墙1/29-31/1/E轴墙面裂缝 Wmax=0.1mm，L=1.0m
3207 2	32层墙29-26/C轴墙面裂缝贯穿 Wmax=0.1mm，L=1.1m
3207 3	32层墙26-1/29/D轴墙面裂缝贯穿 Wmax=0.1mm，L=1.5m
3207 4	32层墙26/B-1/B轴墙面裂缝 Wmax=0.2mm，L=2.1m
3207 5	32层墙26-27/F轴墙面裂缝 Wmax=0.1mm，L=0.1m
3214 6	32层墙17/G-D轴墙面裂缝 Wmax=0.1mm，L=2.5m
3214 7	32层墙15-17/M轴墙面裂缝 Wmax=0.1mm，L=1.8m
3214 8	32层墙16-15/J轴墙面裂缝 Wmax=0.1mm，L=0.3m
3214 9	32层墙1/15/J-G轴墙面裂缝 Wmax=0.1mm，L=0.5m
3214 10	32层墙14-15/M轴墙面裂缝 Wmax=0.1mm，L=0.3m
3214 11	32层墙15/E-D轴墙面裂缝 Wmax=0.1mm，L=3.1m
3214 12	32层墙13/E-G轴墙面裂缝 Wmax=0.1mm，L=2.4m
3214 13	32层墙17-15/D轴墙面裂缝 Wmax=0.1mm，L=1.8m
3108 14	31层墙（1/33）-33/G轴墙面裂缝 Wmax=0.1mm，L=2.45m
3108 15	31层墙（1/33）-33/G轴墙面裂缝贯穿 Wmax=0.1mm，L=0.3m
3108 16	31层墙（1/33）/G-1/F轴墙面裂缝 Wmax=0.1mm，L=1.9m
3108 17	31层墙34/H-1/F轴墙面裂缝 Wmax=0.2mm，L=1.2m
3108 18	34-33/D轴墙面裂缝 Wmax=0.2mm，L=1.3m



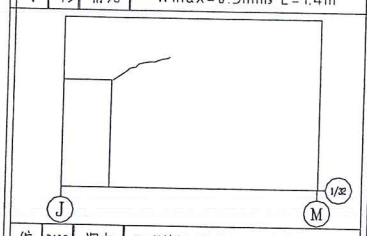
编号	3118 19	调查情况	31层墙|1/33|-34/|1/F|轴墙面裂缝 Wmax=0.5mm，L=1.4m



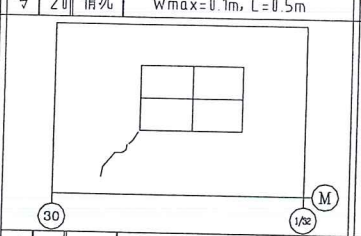
编号	3108 20	调查情况	31层墙34-33/J轴墙面裂缝 Wmax=0.1m，L=0.5m



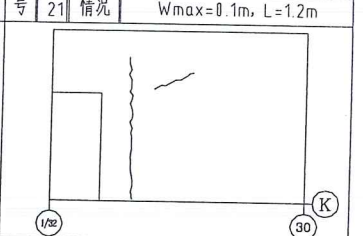
编号	3118 21	调查情况	31层墙33-34/L轴墙面裂缝 Wmax=0.1m，L=1.2m



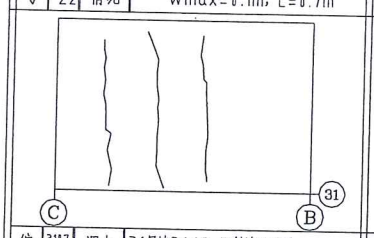
编号	3118 22	调查情况	31层墙|1/32|/J-M轴墙面裂缝 Wmax=0.1m，L=0.7m



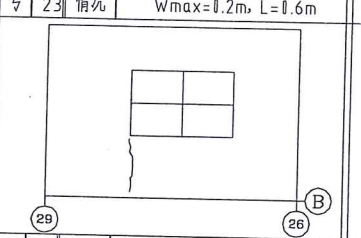
编号	3108 23	调查情况	31层墙30-|1/32|/M轴墙面裂缝 Wmax=0.2m，L=0.6m



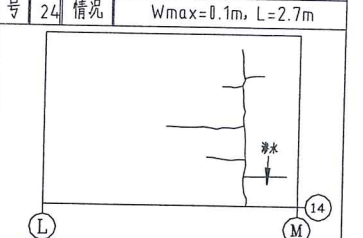
编号	3118 24	调查情况	31层墙|1/32|-30/K轴墙面裂缝 Wmax=0.1m，L=2.7m



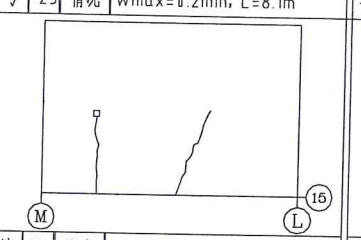
编号	3117 25	调查情况	31层墙31/C-B轴墙面开裂 Wmax=0.2mm，L=8.1m



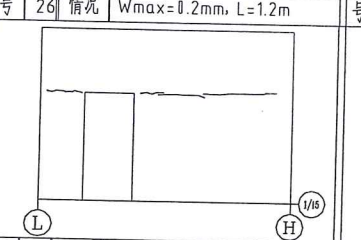
编号	3107 26	调查情况	31层墙29-26/B轴墙面开裂 Wmax=0.2mm，L=1.2m



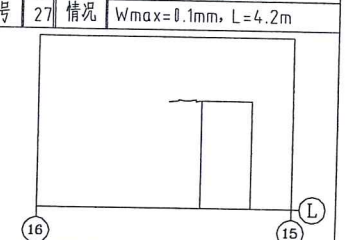
编号	3114 27	调查情况	31层墙14/L-M轴墙面裂缝 Wmax=0.1mm，L=4.2m



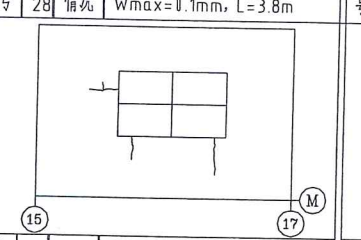
编号	3114 28	调查情况	31层墙15/M-L轴墙面裂缝 Wmax=0.1mm，L=3.8m



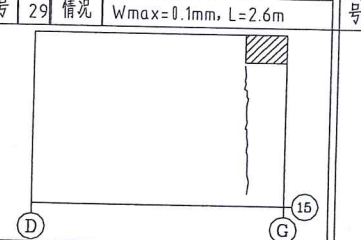
编号	3114 29	调查情况	31层墙|1/15|/L-H轴墙面裂缝 Wmax=0.1mm，L=2.6m



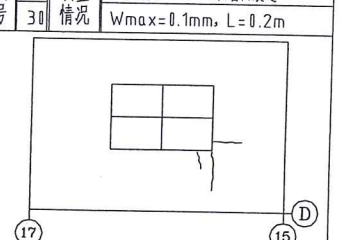
编号	3104 30	调查情况	31层墙16-15/L轴墙面裂缝 Wmax=0.1mm，L=0.2m



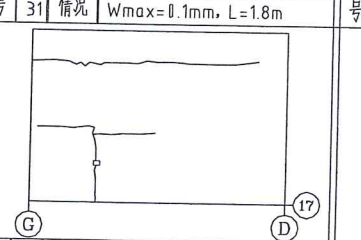
编号	3114 31	调查情况	31层墙15-17/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



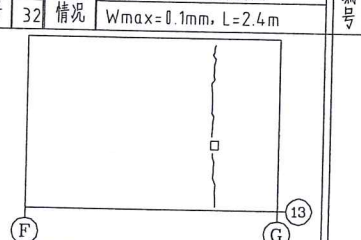
编号	3114 32	调查情况	31层墙15/D-G轴墙面裂缝 Wmax=0.1mm，L=2.4m



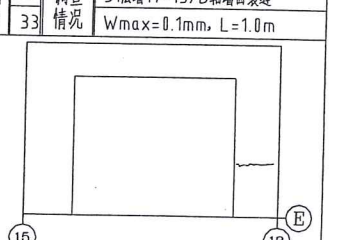
编号	3104 33	调查情况	31层墙17-15/D轴墙面裂缝 Wmax=0.1mm，L=1.0m



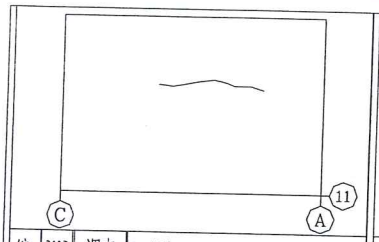
编号	3114 34	调查情况	31层墙17/G-D轴墙面裂缝 Wmax=0.1mm，L=3.5m



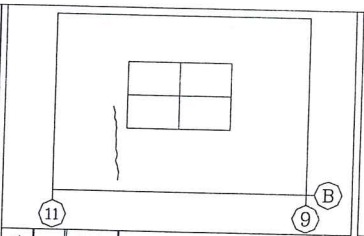
编号	3114 35	调查情况	31层墙13/F-G轴墙面裂缝 Wmax=0.1mm，L=2.7m



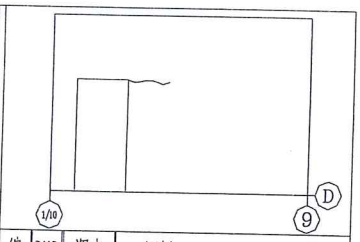
编号	3104 36	调查情况	31层墙15-13/E轴墙面裂缝 Wmax=0.1mm，L=0.4m



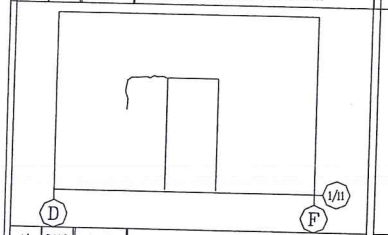
编号	3103	调查情况	31层墙11/C-A轴墙面横向裂缝
	37		Wmax=0.1mm，L=0.4m



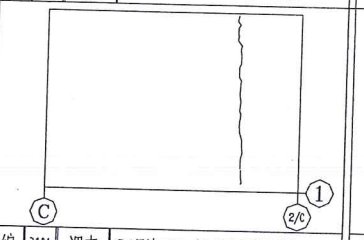
编号	3103	调查情况	31层墙11-9/B轴墙面裂缝
	38		Wmax=0.2mm，L=1.2m



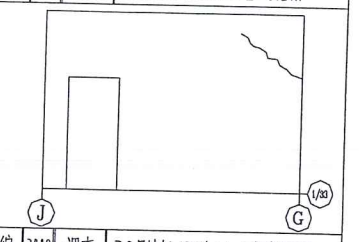
编号	3103	调查情况	31层墙|1/10|-9/D轴墙面裂缝
	39		Wmax=0.1mm，L=0.3m



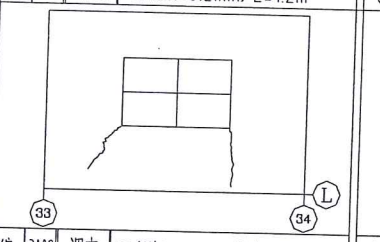
编号	3103	调查情况	31层墙（1/11）/D-F轴墙面裂缝
	40		Wmax=0.2mm，L=1.2m



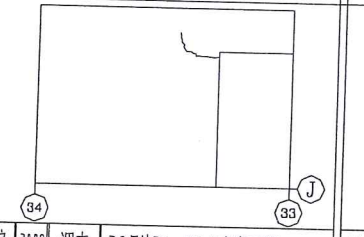
编号	3101	调查情况	31层墙1/C-|2/C|轴墙面裂缝
	41		Wmax=0.1mm，L=2.6m



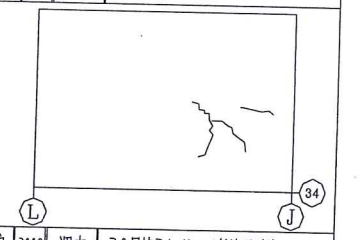
编号	3008	调查情况	30层墙|1/33|/J-G轴墙面裂缝
	42		Wmax=0.1mm，L=0.7m



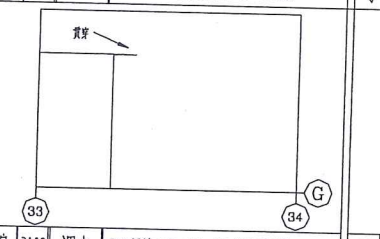
编号	3008	调查情况	30层墙33-34/L轴墙面裂缝
	43		Wmax=0.1mm，L=1.7m



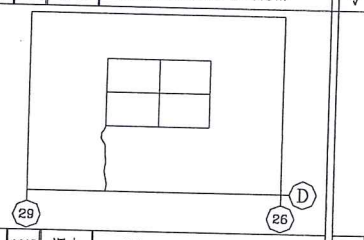
编号	3008	调查情况	30层墙34-33/J轴墙面裂缝
	44		Wmax=0.2mm，L=0.8m



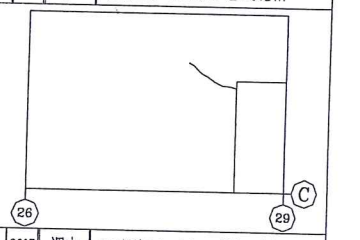
编号	3008	调查情况	30层墙34/L-J轴墙面裂缝
	45		Wmax=0.1mm，L=0.5m



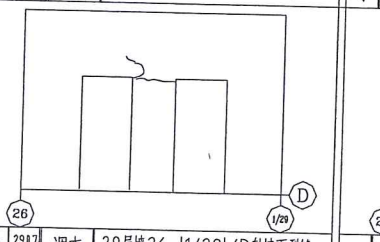
编号	3008	调查情况	30层墙33-34/D轴墙面裂缝
	46		Wmax=0.2mm，L=0.9m



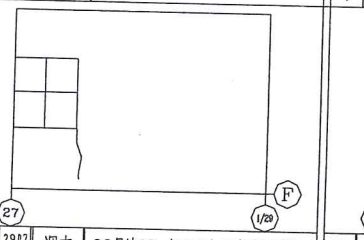
编号	2907	调查情况	29层墙29-26/D轴墙面裂缝
	47		Wmax=0.3mm，L=1.3m



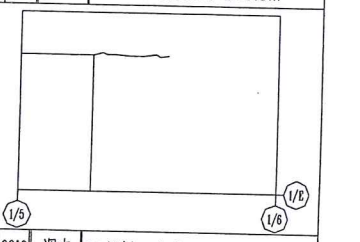
编号	2907	调查情况	29层墙26-29/C轴墙面裂缝
	48		Wmax=0.2mm，L=0.8m



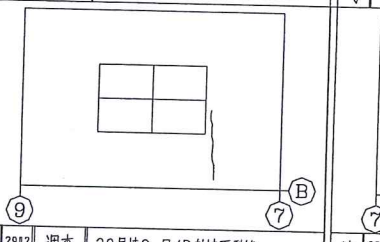
编号	2907	调查情况	29层墙26-|1/29|/D轴墙面裂缝
	49		Wmax=0.1mm，L=0.9m



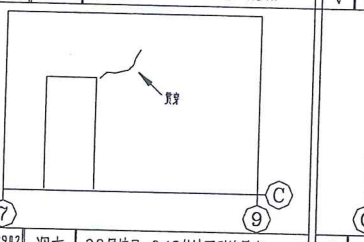
编号	2907	调查情况	29层墙27-|1/29|/F轴墙面裂缝
	50		Wmax=0.2mm，L=1.3m



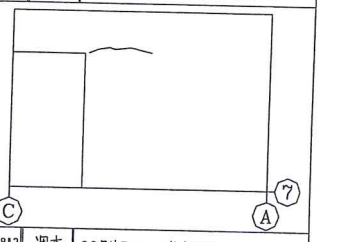
编号	2912	调查情况	29层墙|1/5|-|1/6|/|1/E|轴墙面裂缝
	51		Wmax=0.1mm，L=1.20m



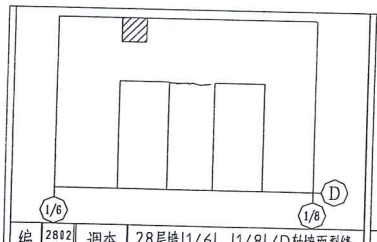
编号	2902	调查情况	29层墙9-7/B轴墙面裂缝
	52		Wmax=0.1mm，L=1.3m



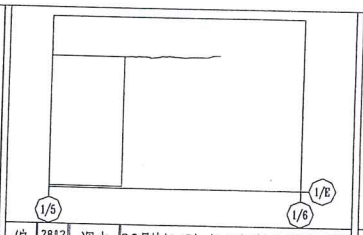
编号	2902	调查情况	29层墙7-9/C轴墙面裂缝贯穿
	53		Wmax=0.1mm，L=0.7m



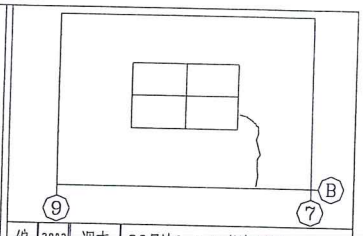
编号	2812	调查情况	28层墙7/C-A轴墙面裂缝
	54		Wmax=0.1mm，L=0.8m



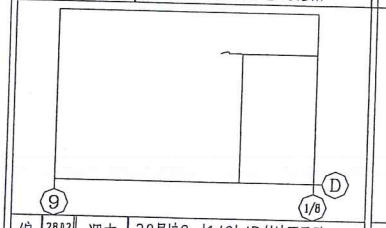
编号	2802 55	调查情况	28层墙1/6-1/8/D轴墙面裂缝 Wmax=0.1mm，L=0.3m



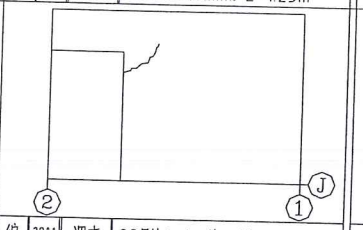
编号	2802 56	调查情况	28层墙1/5-1/6/1/E轴墙面裂缝 Wmax=0.1mm，L=1.25m



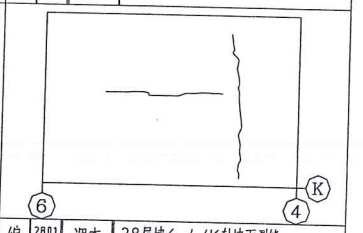
编号	2802 57	调查情况	28层墙9-7/B轴墙面裂缝 Wmax=0.2mm，L=1.3m



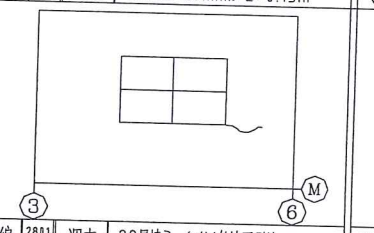
编号	2802 58	调查情况	28层墙9-1/8/D轴墙面开裂 Wmax=0.1mm，L=0.15m



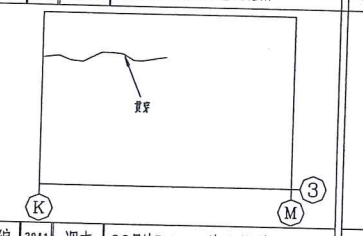
编号	2801 59	调查情况	28层墙2-1/J墙面裂缝 Wmax=0.1mm，L=0.3m



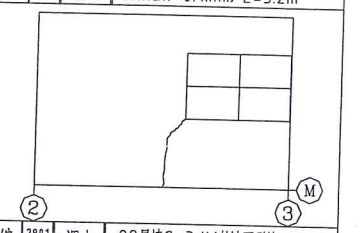
编号	2801 60	调查情况	28层墙6-4/K轴墙面裂缝 Wmax=0.1mm，L=5.2m



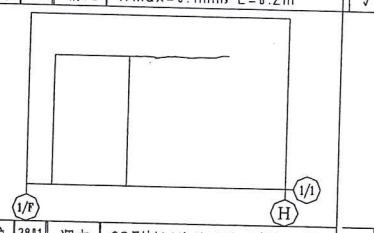
编号	2801 61	调查情况	28层墙3-6/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



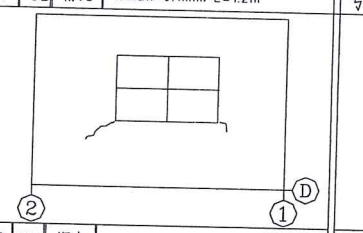
编号	2801 62	调查情况	28层墙3/K-M墙面裂缝贯穿 Wmax=0.1mm，L=1.2m



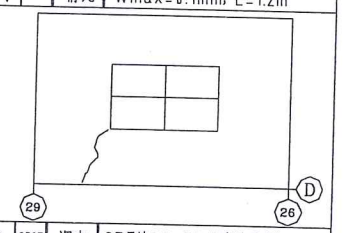
编号	2801 63	调查情况	28层墙2-3/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



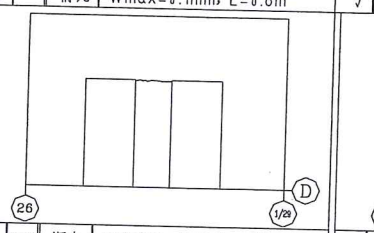
编号	2801 64	调查情况	28层墙1/1/1/F-H轴墙面裂缝 Wmax=0.1mm，L=0.8m



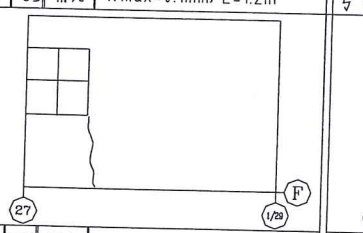
编号	2801 65	调查情况	28层墙2-1/D墙面裂缝 Wmax=0.1mm，L=1.2m



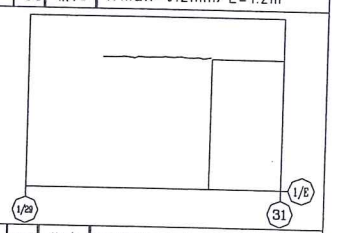
编号	2707 66	调查情况	27层墙29-26/D轴墙面裂缝 Wmax=0.2mm，L=1.2m



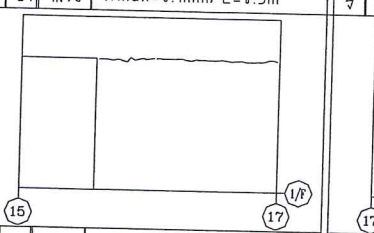
编号	2707 67	调查情况	27层墙26-1/29/D轴墙面裂缝 Wmax=0.1mm，L=0.5m



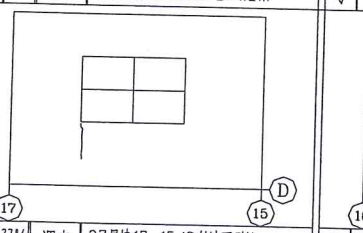
编号	2707 68	调查情况	27层墙27-1/29/F轴墙面裂缝 Wmax=0.2mm，L=1.2m



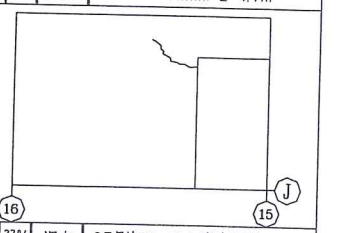
编号	2707 69	调查情况	27层墙1/29-31/1/E轴墙面裂缝 Wmax=0.1mm，L=1.7m



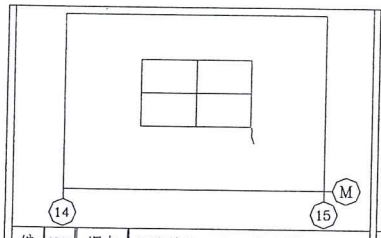
编号	2704 70	调查情况	27层墙15-17/1/F轴墙面裂缝 Wmax=0.1mm，L=2.8m



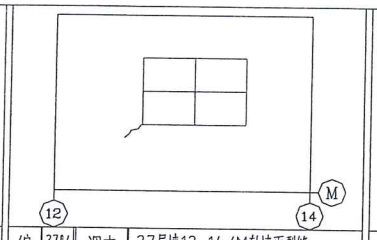
编号	2704 71	调查情况	27层墙17-15/D轴墙面裂缝 Wmax=0.1mm，L=0.4m



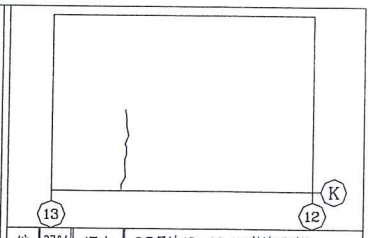
编号	2704 72	调查情况	27层墙16-15/J轴墙面裂缝 Wmax=0.1mm，L=0.6m



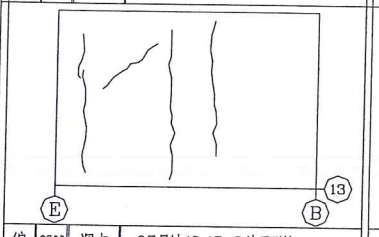
编号	2704	调查情况	27层墙14-15/M墙面裂缝
	73		Wmax=0.1mm，L=0.2m



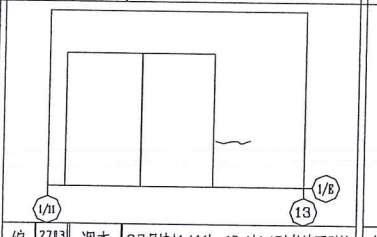
编号	2704	调查情况	27层墙12-14/M轴墙面裂缝
	74		Wmax=0.1mm，L=0.2m



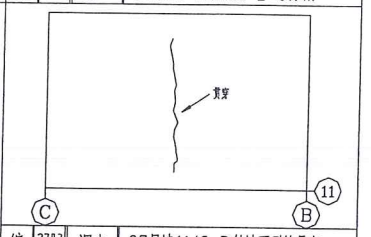
编号	2704	调查情况	27层墙13-12/K轴墙面裂缝
	75		Wmax=0.1mm，L=0.9m



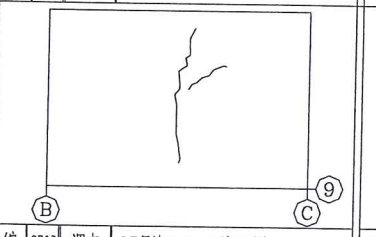
编号	2703	调查情况	27层墙13/E-B墙面裂缝
	76		Wmax=0.1mm，L=8.4m



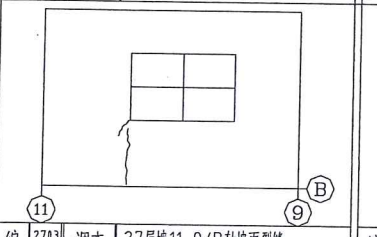
编号	2703	调查情况	27层墙1/11-13/1/E轴墙面裂缝
	77		Wmax=0.1mm，L=0.2m



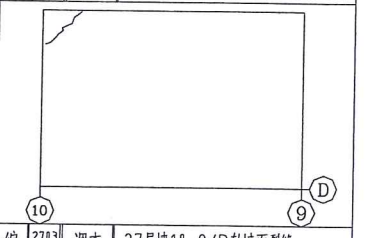
编号	2703	调查情况	27层墙11/C-B轴墙面裂缝贯穿
	78		Wmax=0.1mm，L=1.2m



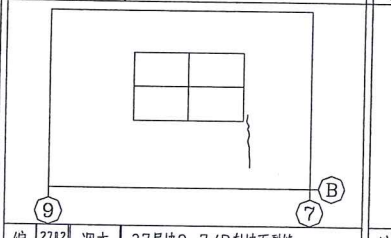
编号	2703	调查情况	27层墙9/B-C墙面裂缝
	79		Wmax=0.1mm，L=1.5m



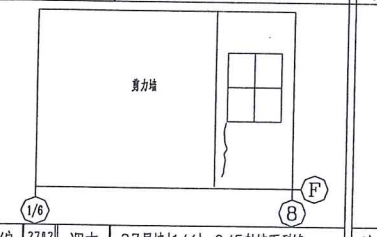
编号	2703	调查情况	27层墙11-9/B轴墙面裂缝
	80		Wmax=0.1mm，L=1.1m



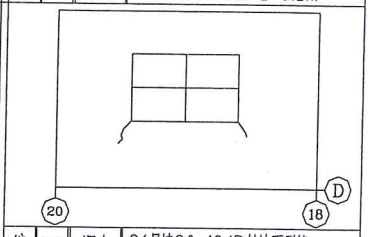
编号	2703	调查情况	27层墙10-9/D轴墙面裂缝
	81		Wmax=0.1mm，L=0.2m



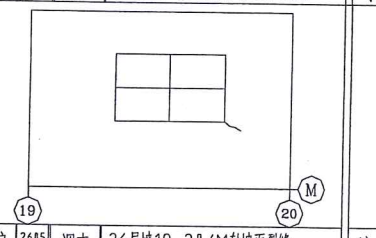
编号	2702	调查情况	27层墙9-7/B轴墙面裂缝
	82		Wmax=0.1mm，L=0.75m



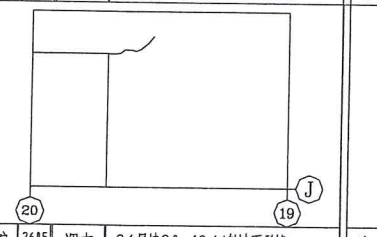
编号	2702	调查情况	27层墙1/6-8/F轴墙面裂缝
	83		Wmax=0.2mm，L=1.0m



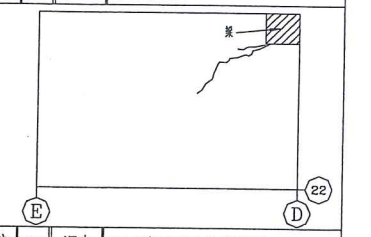
编号	2605	调查情况	26层墙20-18/D轴墙面裂缝
	84		Wmax=0.1mm，L=0.5m



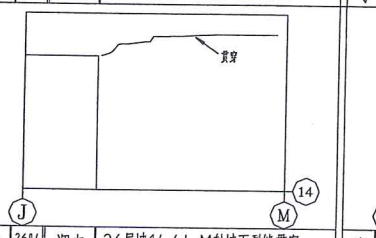
编号	2605	调查情况	26层墙19-20/M轴墙面裂缝
	85		Wmax=0.1mm，L=0.2m



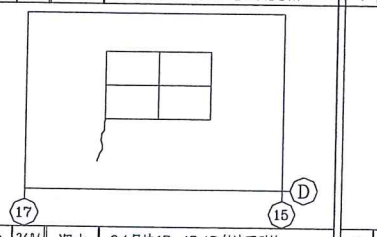
编号	2605	调查情况	26层墙20-19/J轴墙面裂缝
	86		Wmax=0.1mm，L=0.55m



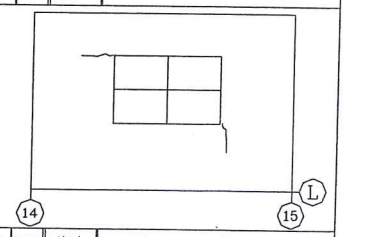
编号	2605	调查情况	26层墙22/E-D墙面裂缝
	87		Wmax=0.2mm，L=0.9m



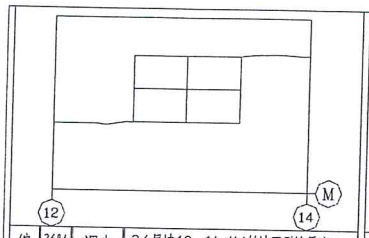
编号	2604	调查情况	26层墙14/J-M轴墙面裂缝贯穿
	88		Wmax=0.2mm，L=1.9m



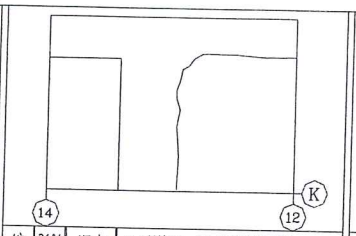
编号	2604	调查情况	26层墙17-15/D轴墙面裂缝
	89		Wmax=0.1mm，L=0.5m



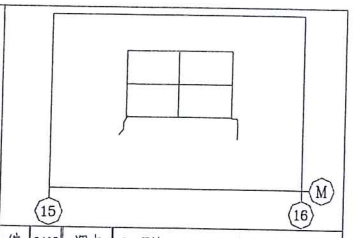
编号	2604	调查情况	26层墙14-15/L墙面裂缝
	90		Wmax=0.2mm，L=0.5m



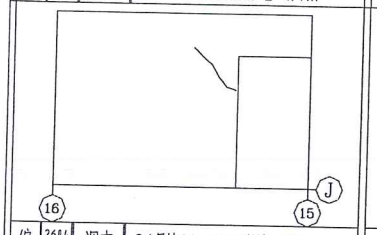
编号	2604 91	调查情况	26层墙12-14/M轴墙面裂缝贯穿 Wmax=0.2mm，L=1.4m



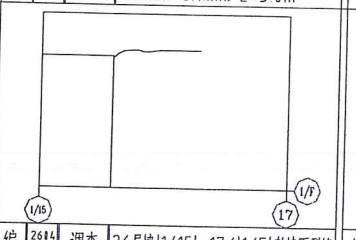
编号	2604 92	调查情况	26层墙14-12/K轴墙面裂缝 Wmax=0.1mm，L=3.0m



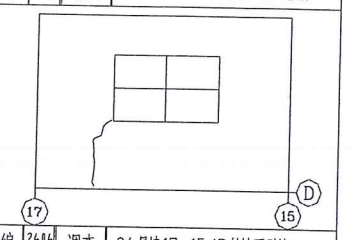
编号	2605 93	调查情况	26层墙15-16/M墙面裂缝 Wmax=0.1mm，L=0.45m



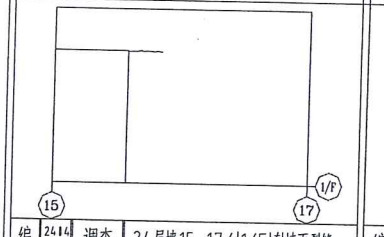
编号	2604 94	调查情况	26层墙16-15/J轴墙面裂缝 Wmax=0.1mm，L=0.5m



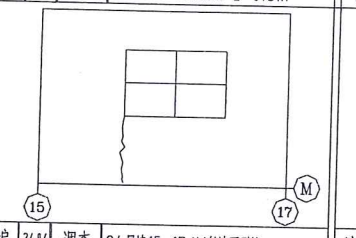
编号	2604 95	调查情况	26层墙|1/15|-17/|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.6m



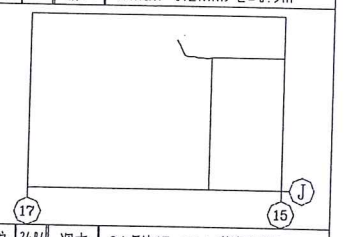
编号	2404 96	调查情况	24层墙17-15/D轴墙面裂缝 Wmax=0.2mm，L=0.9m



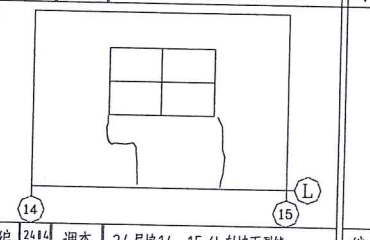
编号	2404 97	调查情况	24层墙15-17/|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.4m



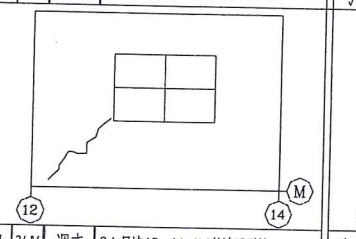
编号	2404 98	调查情况	24层墙15-17/M轴墙面裂缝 Wmax=0.1mm，L=0.9m



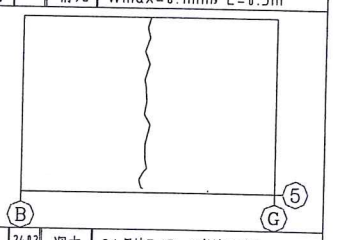
编号	2404 99	调查情况	24层墙17-15/J轴墙面裂缝 Wmax=0.1mm，L=0.3m



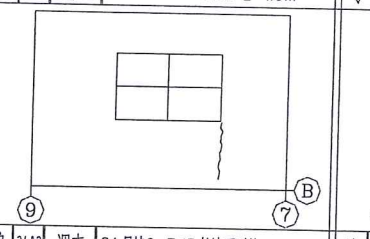
编号	2404 100	调查情况	24层墙14-15/L轴墙面裂缝 Wmax=0.1mm，L=1.8m



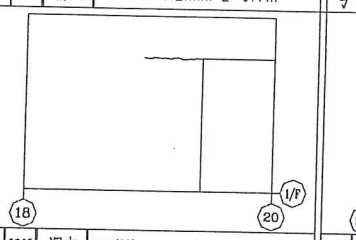
编号	2404 101	调查情况	24层墙12-14/M轴墙面裂缝 Wmax=0.2mm，L=0.7m



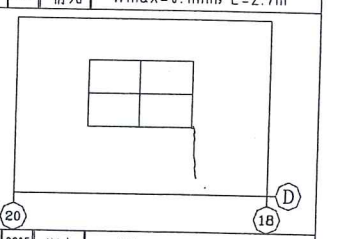
编号	2402 102	调查情况	24层墙5/B-G轴墙面裂缝 Wmax=0.1mm，L=2.7m



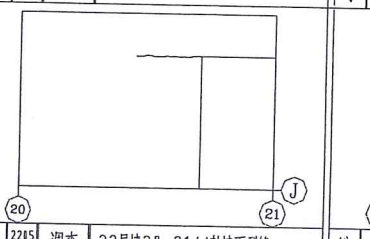
编号	2402 103	调查情况	24层墙9-7/B轴墙面裂缝 Wmax=0.1mm，L=1.1m



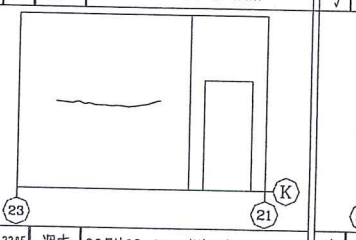
编号	2205 104	调查情况	22层墙18-20/|1/F|墙面裂缝 Wmax=0.1mm，L=1.1m



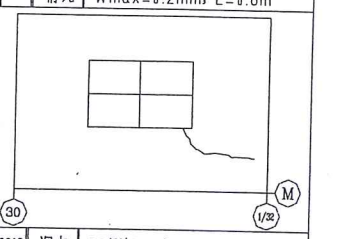
编号	2205 105	调查情况	22层墙20-18/D轴墙面裂缝 Wmax=0.2mm，L=0.8m



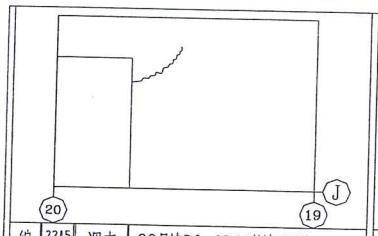
编号	2205 106	调查情况	22层墙20-21/J轴墙面裂缝 Wmax=0.1mm，L=0.3m



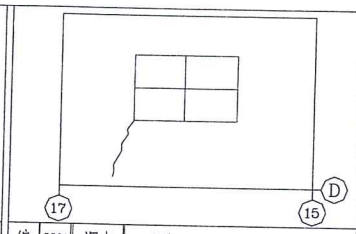
编号	2205 107	调查情况	22层墙23-21/K轴墙面裂缝 Wmax=0.1mm，L=1.5m



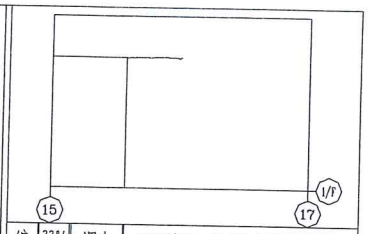
编号	2205 108	调查情况	22层墙30-|1/32|/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



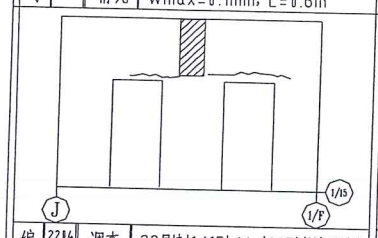
编号	2215 109	调查情况	22层墙20-19/J轴墙面裂缝 Wmax=0.1mm，L=0.6m



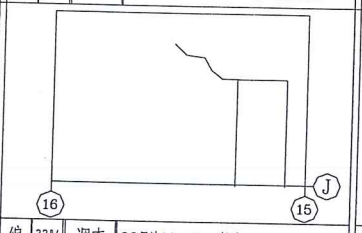
编号	2204 110	调查情况	22层墙17-15/D墙面裂缝 Wmax=0.2mm，L=0.35m



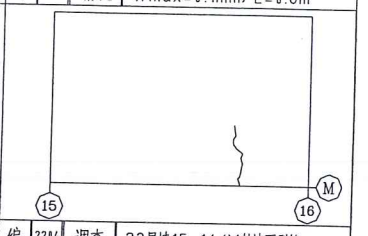
编号	2204 111	调查情况	22层墙15-17/|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.6m



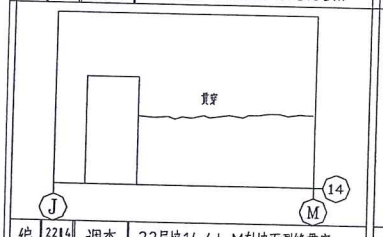
编号	2204 112	调查情况	22层墙|1/15|/J-|1/F|轴墙面裂缝 Wmax=0.1mm，L=3.85m



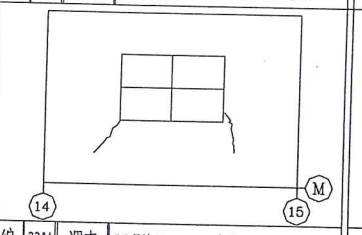
编号	2204 113	调查情况	22层墙16-15/J轴墙面裂缝 Wmax=0.1mm，L=0.45m



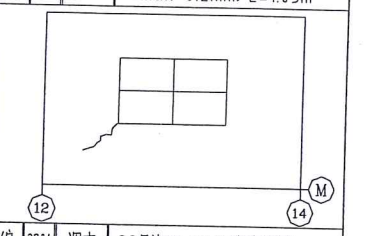
编号	2204 114	调查情况	22层墙15-16/M轴墙面裂缝 Wmax=0.2mm，L=1.05m



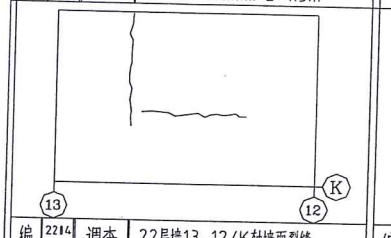
编号	2204 115	调查情况	22层墙14/J-M轴墙面裂缝贯穿 Wmax=0.1mm，L=1.5m



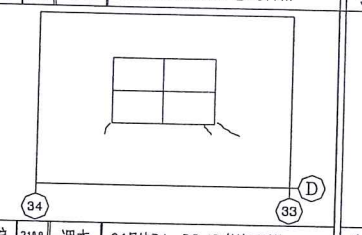
编号	2204 116	调查情况	22层墙14-15/M轴墙面裂缝 Wmax=0.1mm，L=0.7m



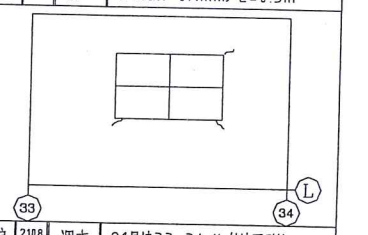
编号	2204 117	调查情况	22层墙12-14/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



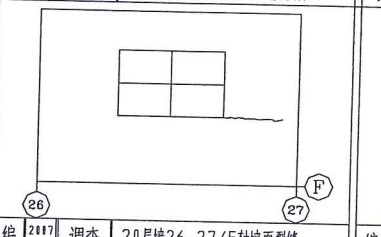
编号	2204 118	调查情况	22层墙13-12/K轴墙面裂缝 Wmax=0.1mm，L=2.6m



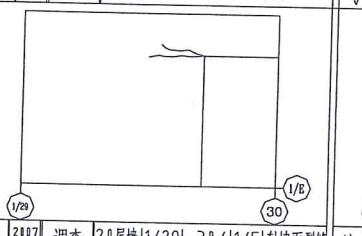
编号	2108 119	调查情况	21层墙34-33/D轴墙面裂缝 Wmax=0.1mm，L=0.2m



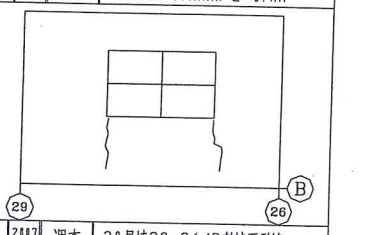
编号	2108 120	调查情况	21层墙33-34/L轴墙面裂缝 Wmax=0.1mm，L=0.1m



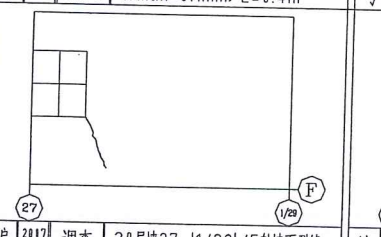
编号	2007 121	调查情况	20层墙26-27/F轴墙面裂缝 Wmax=0.1mm，L=0.4m



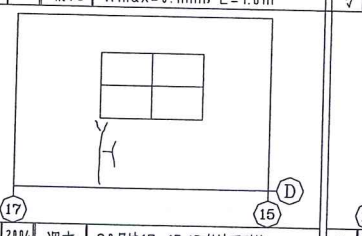
编号	2007 122	调查情况	20层墙|1/29|-30/|1/E|轴墙面裂缝 Wmax=0.1mm，L=1.0m



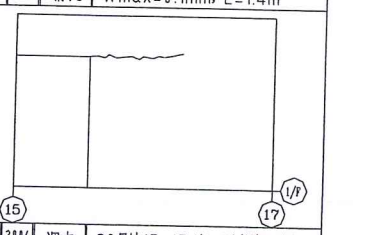
编号	2007 123	调查情况	20层墙29-26/B轴墙面裂缝 Wmax=0.1mm，L=1.4m



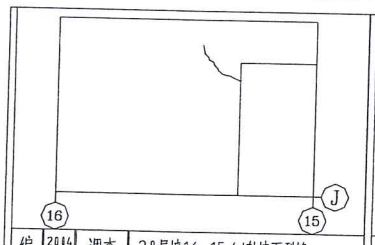
编号	2007 124	调查情况	20层墙27-|1/29|/F轴墙面裂缝 Wmax=0.1mm，L=0.8m



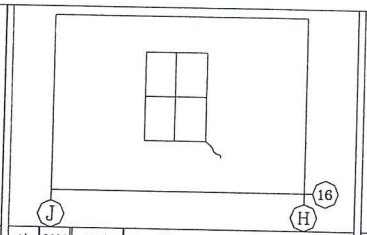
编号	2004 125	调查情况	20层墙17-15/D轴墙面裂缝 Wmax=0.1mm，L=1.4m



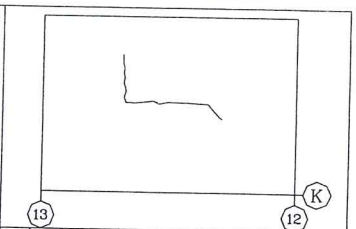
编号	2004 126	调查情况	20层墙15-17/|1/F|轴墙面裂缝 Wmax=0.1mm，L=1.2m



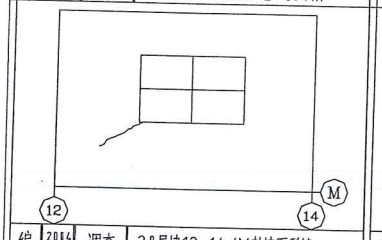
编号	2004 127	调查情况	20层墙16-15/J轴墙面裂缝 Wmax=0.1mm，L=0.4m



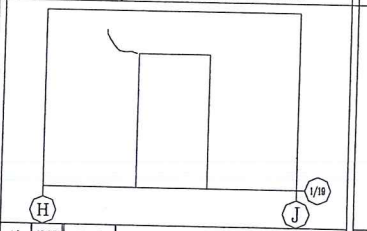
编号	2004 128	调查情况	20层墙16/J-H轴墙面裂缝 Wmax=0.1mm，L=0.2m



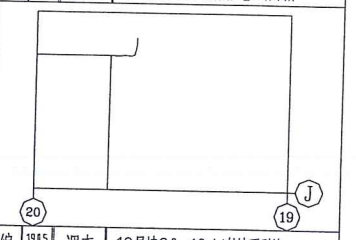
编号	2004 129	调查情况	20层墙13-12/K轴墙面裂缝 Wmax=0.1mm，L=1.4m



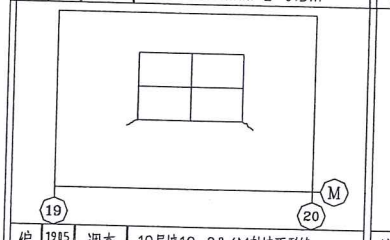
编号	2004 130	调查情况	20层墙12-14/M轴墙面裂缝 Wmax=0.1mm，L=0.3m



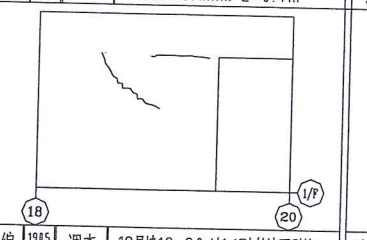
编号	1905 131	调查情况	19层墙1/19/H-J轴墙面裂缝 Wmax=0.1mm，L=0.4m



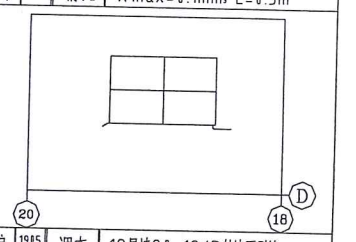
编号	1905 132	调查情况	19层墙20-19/J轴墙面裂缝 Wmax=0.1mm，L=0.5m



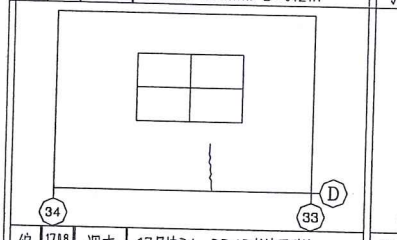
编号	1905 133	调查情况	19层墙19-20/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



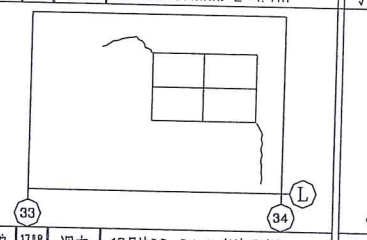
编号	1905 134	调查情况	19层墙18-20/1/F轴墙面裂缝 Wmax=0.1mm，L=1.4m



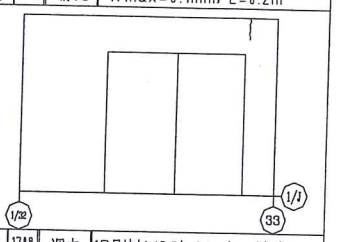
编号	1905 135	调查情况	19层墙20-18/D轴墙面裂缝 Wmax=0.1mm，L=0.2m



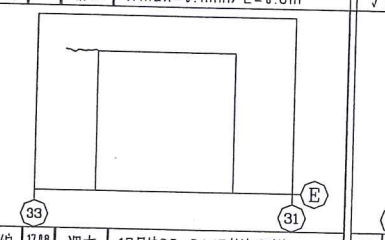
编号	1708 136	调查情况	17层墙34-33/D轴墙面裂缝 Wmax=0.1mm，L=0.6m



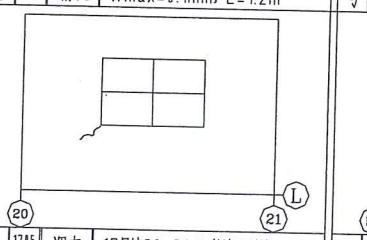
编号	1708 137	调查情况	17层墙33-34/L轴墙面裂缝 Wmax=0.1mm，L=1.2m



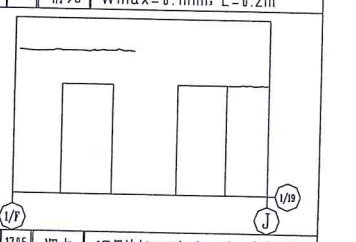
编号	1708 138	调查情况	17层墙1/32-33/1/J轴墙面裂缝 Wmax=0.1mm，L=0.2m



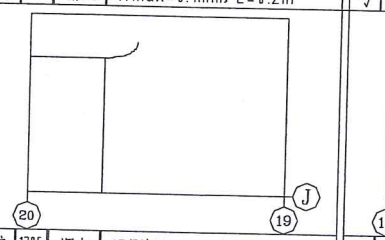
编号	1708 139	调查情况	17层墙33-31/E轴墙面裂缝 Wmax=0.1mm，L=0.2m



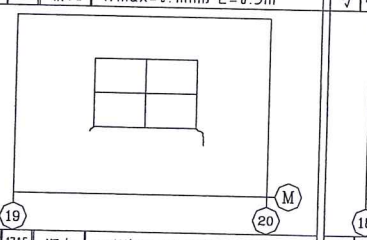
编号	1705 140	调查情况	17层墙20-21/L轴墙面裂缝 Wmax=0.1mm，L=0.3m



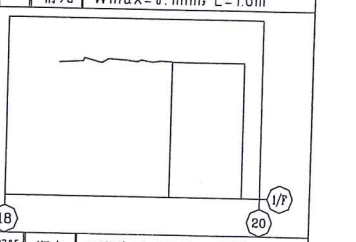
编号	1705 141	调查情况	17层墙1/19/1/F-J轴墙面裂缝 Wmax=0.1mm，L=1.6m



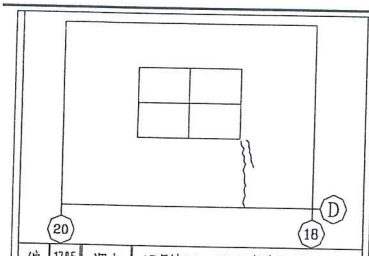
编号	1705 142	调查情况	17层墙20-19/J轴墙面裂缝 Wmax=0.1mm，L=0.4m



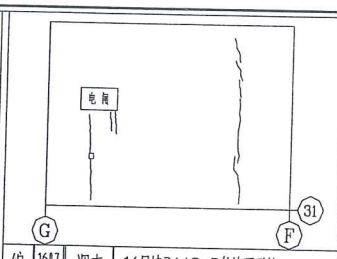
编号	1715 143	调查情况	17层墙19-20/M轴墙面裂缝 Wmax=0.1mm，L=0.3m



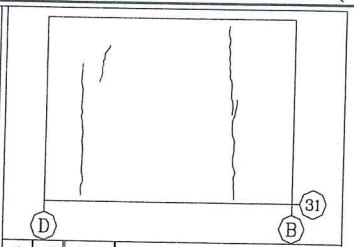
编号	1705 144	调查情况	17层墙18-20/1/F轴墙面裂缝 Wmax=0.1mm，L=1.8m



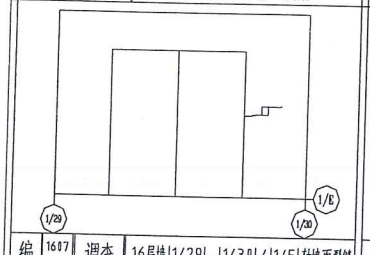
编号	1705 145	调查情况	17层墙20-18/D轴墙面裂缝 Wmax=0.1mm，L=1.1m



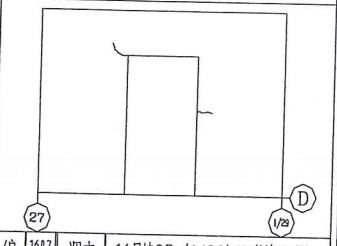
编号	1607 146	调查情况	16层墙31/G-F轴墙面裂缝 Wmax=0.1mm，L=4.5m



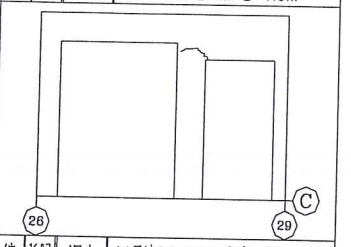
编号	1607 147	调查情况	16层墙31/D-B轴墙面裂缝 Wmax=0.2mm，L=4.6m



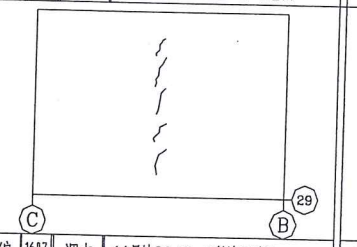
编号	1607 148	调查情况	16层墙|1/29|-|1/30|/|1/E|轴墙面裂缝 Wmax=0.1mm，L=0.2m



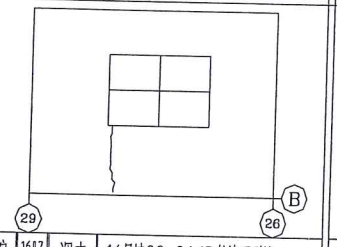
编号	1607 149	调查情况	16层墙27-|1/29|/D轴墙面裂缝 Wmax=0.1mm，L=0.2m



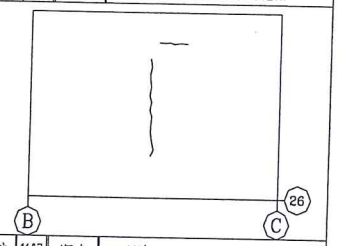
编号	1607 150	调查情况	16层墙26-29/C轴墙面裂缝 Wmax=0.1mm，L=0.2m



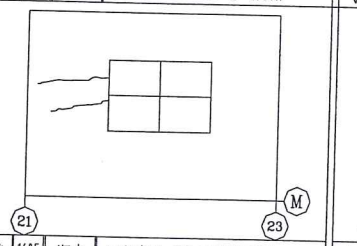
编号	1607 151	调查情况	16层墙29/C-B轴墙面裂缝 Wmax=0.1mm，L=1.6m



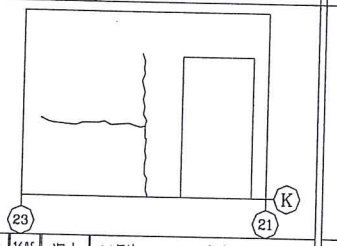
编号	1607 152	调查情况	16层墙29-26/B轴墙面裂缝 Wmax=0.2mm，L=0.9m



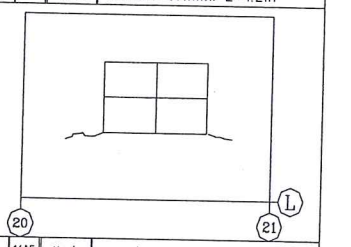
编号	1607 153	调查情况	16层墙26/B-C轴墙面裂缝 Wmax=0.1mm，L=1.2m



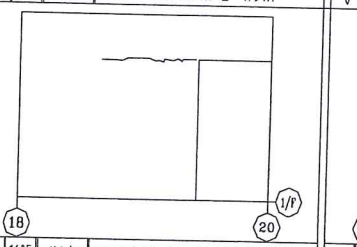
编号	1605 154	调查情况	16层墙21-23/M轴墙面裂缝 Wmax=0.1mm，L=1.9m



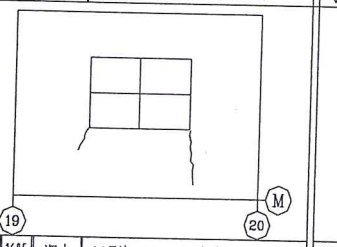
编号	1605 155	调查情况	16层墙23-21/K轴墙面裂缝 Wmax=0.1mm，L=4.1m



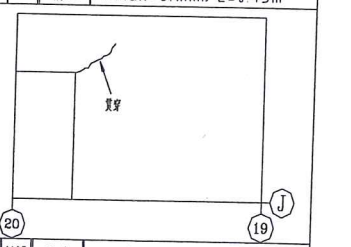
编号	1615 156	调查情况	16层墙20-21/L轴墙面裂缝 Wmax=0.1mm，L=0.45m



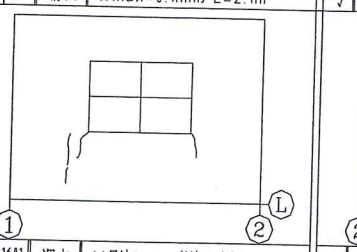
编号	1605 157	调查情况	16层墙18-20/|1/F|轴墙面裂缝 Wmax=0.1mm，L=2.1m



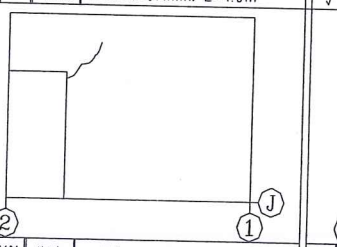
编号	1605 158	调查情况	16层墙19-20/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



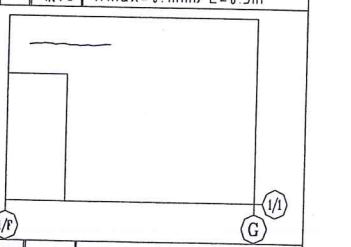
编号	1615 159	调查情况	16层墙20-19/J轴墙面裂缝贯穿 Wmax=0.1mm，L=0.3m



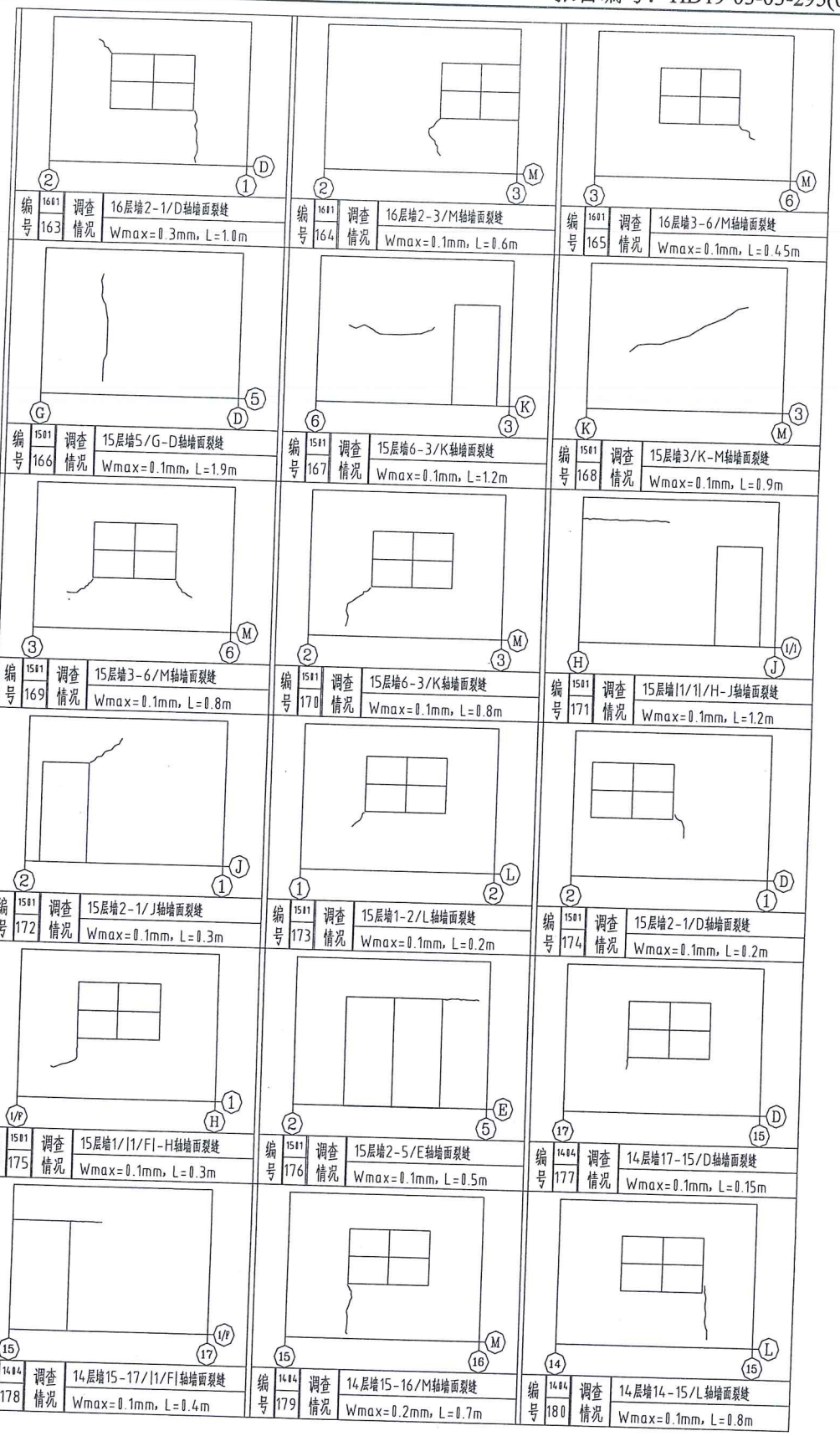
编号	1601 160	调查情况	16层墙1-2/L轴墙面裂缝 Wmax=0.2mm，L=0.4m

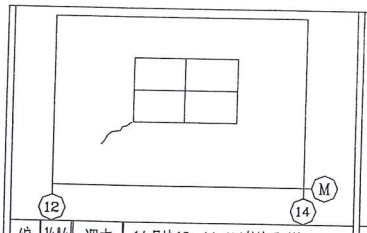


编号	1601 161	调查情况	16层墙2-1/J轴墙面裂缝 Wmax=0.1mm，L=0.5m

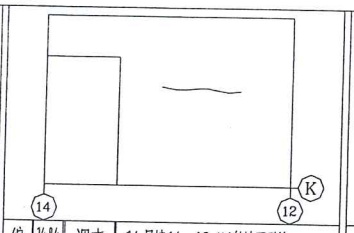


编号	1601 162	调查情况	16层墙|1/1|/|1/F|-G轴墙面裂缝 Wmax=0.1mm，L=1.2m

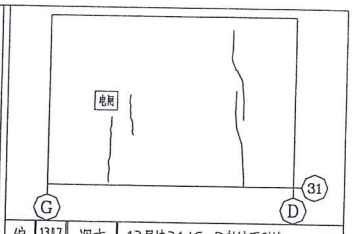

2
1
D
编号 1601 163 调查情况 16层墙2-1/D轴墙面裂缝 Wmax=0.3mm，L=1.0m
2
3
M
编号 1601 164 调查情况 16层墙2-3/M轴墙面裂缝 Wmax=0.1mm，L=0.6m
3
6
M
编号 1601 165 调查情况 16层墙3-6/M轴墙面裂缝 Wmax=0.1mm，L=0.45m
G
5
D
编号 1501 166 调查情况 15层墙5/G-D轴墙面裂缝 Wmax=0.1mm，L=1.9m
6
3
K
编号 1501 167 调查情况 15层墙6-3/K轴墙面裂缝 Wmax=0.1mm，L=1.2m
K
3
M
编号 1501 168 调查情况 15层墙3/K-M轴墙面裂缝 Wmax=0.1mm，L=0.9m
3
6
M
编号 1501 169 调查情况 15层墙3-6/M轴墙面裂缝 Wmax=0.1mm，L=0.8m
2
3
M
编号 1501 170 调查情况 15层墙6-3/K轴墙面裂缝 Wmax=0.1mm，L=0.8m
H
1/1
J
编号 1501 171 调查情况 15层墙1/1|/H-J轴墙面裂缝 Wmax=0.1mm，L=1.2m
2
1
J
编号 1501 172 调查情况 15层墙2-1/J轴墙面裂缝 Wmax=0.1mm，L=0.3m
1
2
L
编号 1501 173 调查情况 15层墙1-2/L轴墙面裂缝 Wmax=0.1mm，L=0.2m
2
1
D
编号 1501 174 调查情况 15层墙2-1/D轴墙面裂缝 Wmax=0.1mm，L=0.2m
1/F
1
H
编号 1501 175 调查情况 15层墙1/|1/F|-H轴墙面裂缝 Wmax=0.1mm，L=0.3m
2
5
E
编号 1501 176 调查情况 15层墙2-5/E轴墙面裂缝 Wmax=0.1mm，L=0.5m
17
15
D
编号 1404 177 调查情况 14层墙17-15/D轴墙面裂缝 Wmax=0.1mm，L=0.15m
15
17
1/F
编号 1404 178 调查情况 14层墙15-17/|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.4m
15
16
M
编号 1404 179 调查情况 14层墙15-16/M轴墙面裂缝 Wmax=0.2mm，L=0.7m
14
15
L
编号 1404 180 调查情况 14层墙14-15/L轴墙面裂缝 Wmax=0.1mm，L=0.8m



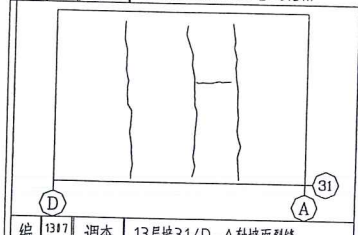
编号	1404 181	调查情况	14层墙12-14/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



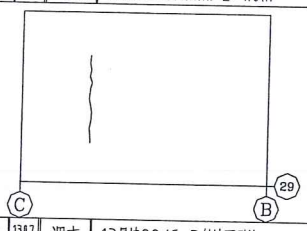
编号	1404 182	调查情况	14层墙14-12/K轴墙面裂缝 Wmax=0.1mm，L=1.0m



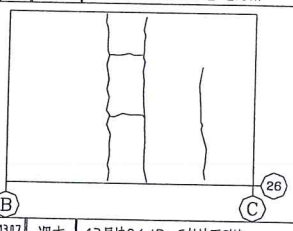
编号	1307 183	调查情况	13层墙31/G-D轴墙面裂缝 Wmax=0.1mm，L=2.8m



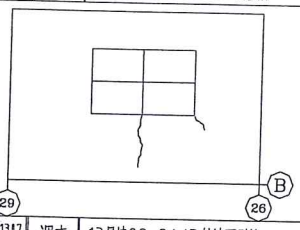
编号	1307 184	调查情况	13层墙31/D-A轴墙面裂缝 Wmax=0.1mm，L=8.5m



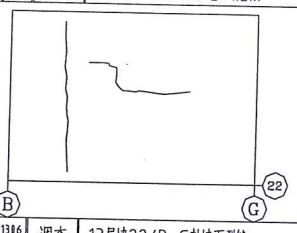
编号	1307 185	调查情况	13层墙29/C-B轴墙面裂缝 Wmax=0.1mm，L=1.2m



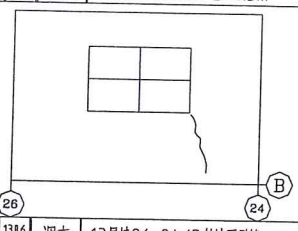
编号	1307 186	调查情况	13层墙26/B-C轴墙面裂缝 Wmax=0.1mm，L=4.5m



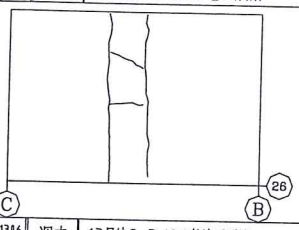
编号	1307 187	调查情况	13层墙29-26/B轴墙面裂缝 Wmax=0.1mm，L=1.1m



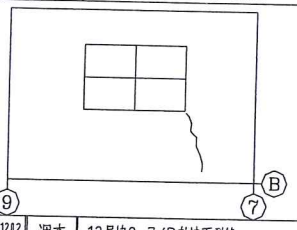
编号	1306 188	调查情况	13层墙22/B-G轴墙面裂缝 Wmax=0.2mm，L=5.4m



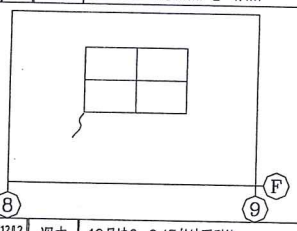
编号	1306 189	调查情况	13层墙26-24/B轴墙面裂缝 Wmax=0.3mm，L=1.1m



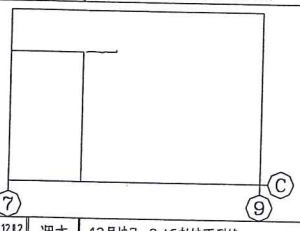
编号	1306 190	调查情况	13层墙C-B/26轴墙面裂缝 Wmax=0.2mm，L=6.4m



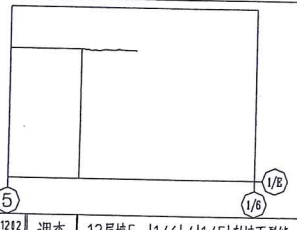
编号	1202 191	调查情况	12层墙9-7/B轴墙面裂缝 Wmax0.2mm，L=1.2m



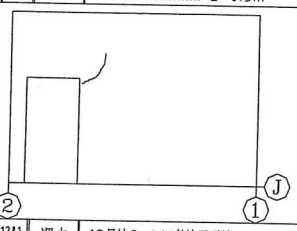
编号	1202 192	调查情况	12层墙8-9/F轴墙面裂缝 Wmax=0.1mm，L=0.3m



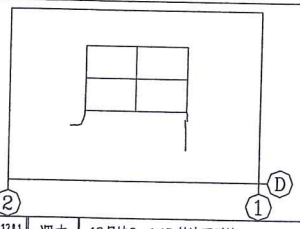
编号	1202 193	调查情况	12层墙7-9/C轴墙面裂缝 Wmax=0.1mm，L=0.2m



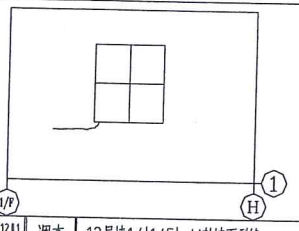
编号	1202 194	调查情况	12层墙5-|1/6|/|1/E|轴墙面裂缝 Wmax=0.1mm，L=0.4m



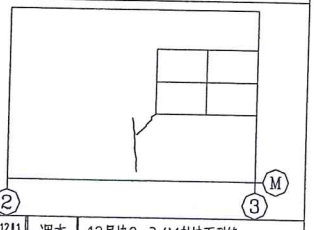
编号	1211 195	调查情况	12层墙2-1/J轴墙面裂缝 Wmax=0.1mm，L=0.2m



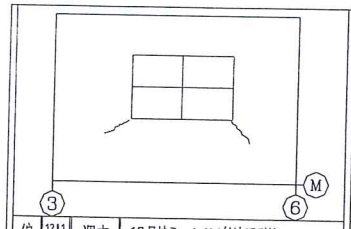
编号	1211 196	调查情况	12层墙2-1/D轴墙面裂缝 Wmax=0.1mm，L=0.7m



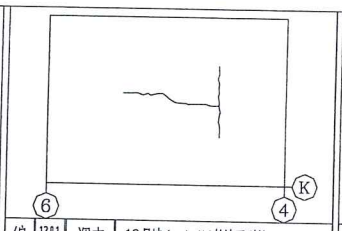
编号	1211 197	调查情况	12层墙1/|1/F|-H轴墙面裂缝 Wmax=0.1mm，L=0.6m



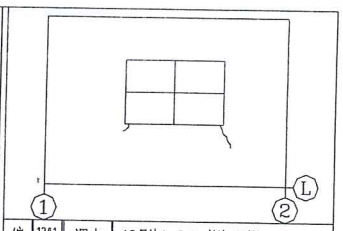
编号	1211 198	调查情况	12层墙2-3/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



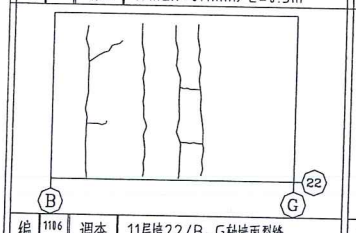
编号	1211 199	调查情况	12层墙3-6/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



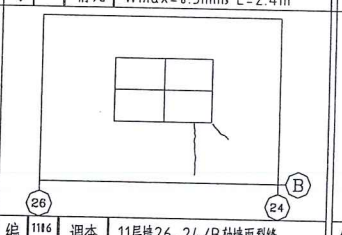
编号	1201 200	调查情况	12层墙6-4/K轴墙面裂缝 Wmax=0.3mm，L=2.4m



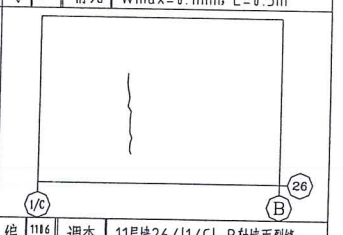
编号	1201 201	调查情况	12层墙1-2/L轴墙面裂缝 Wmax=0.1mm，L=0.5m



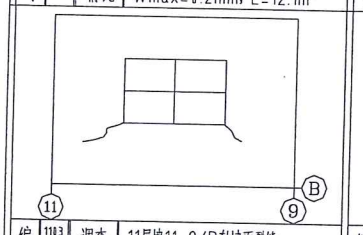
编号	1106 202	调查情况	11层墙22/B-G轴墙面裂缝 Wmax=0.2mm，L=12.1m



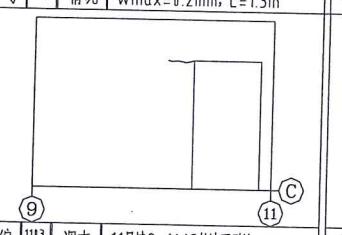
编号	1106 203	调查情况	11层墙26-24/B轴墙面裂缝 Wmax=0.2mm，L=1.3m



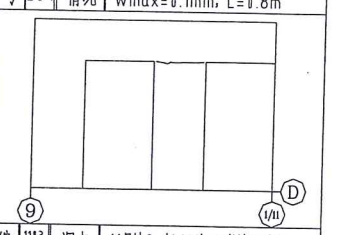
编号	1106 204	调查情况	11层墙26/|1/C|-B轴墙面裂缝 Wmax=0.1mm，L=0.8m



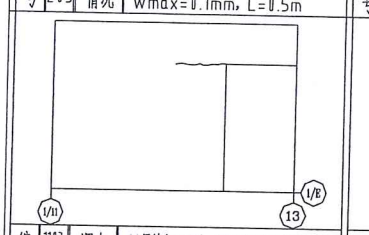
编号	1103 205	调查情况	11层墙11-9/B轴墙面裂缝 Wmax=0.1mm，L=0.5m



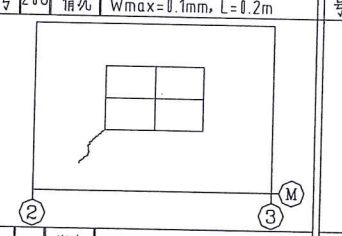
编号	1103 206	调查情况	11层墙9-11/C轴墙面裂缝 Wmax=0.1mm，L=0.2m



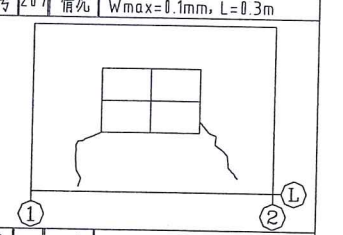
编号	1103 207	调查情况	11层墙9-|1/11|/B轴墙面裂缝 Wmax=0.1mm，L=0.3m



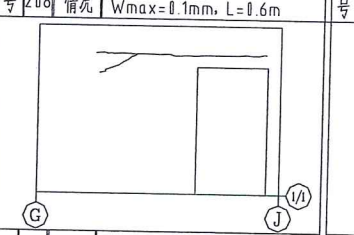
编号	1103 208	调查情况	11层墙|1/11|-13/|1/E|轴墙面裂缝 Wmax=0.1mm，L=0.6m



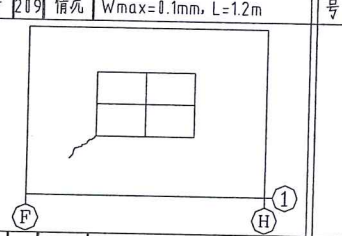
编号	1101 209	调查情况	11层墙2-3/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



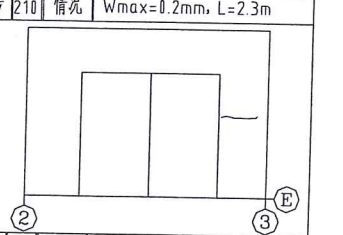
编号	1101 210	调查情况	11层墙1-2/L轴墙面裂缝 Wmax=0.2mm，L=2.3m



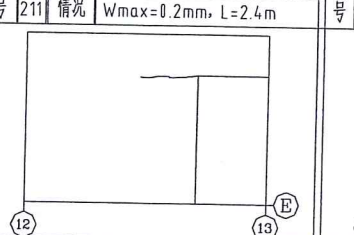
编号	1101 211	调查情况	11层墙|1/11|/G-J轴墙面裂缝 Wmax=0.2mm，L=2.4m



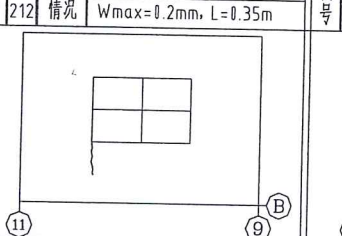
编号	1101 212	调查情况	11层墙1/F-H轴墙面裂缝 Wmax=0.2mm，L=0.35m



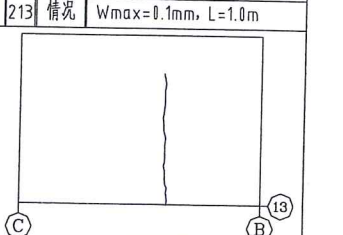
编号	1101 213	调查情况	11层墙2-3/E轴墙面裂缝 Wmax=0.1mm，L=1.0m



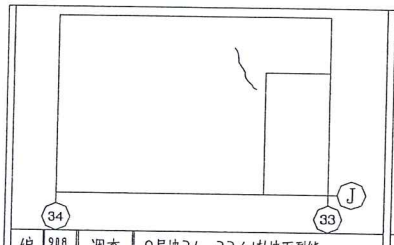
编号	1003 214	调查情况	10层墙12-13/E轴墙面裂缝 Wmax=0.1mm，L=0.8m



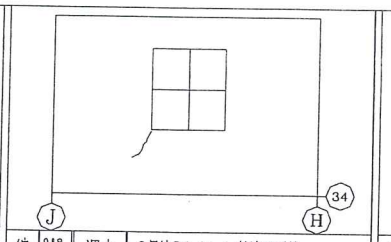
编号	1003 215	调查情况	10层墙11-9/B轴墙面裂缝 Wmax=0.1mm，L=0.4m



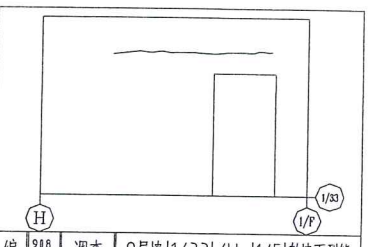
编号	1003 216	调查情况	10层墙13/C-B轴墙面裂缝 Wmax=0.1mm，L=1.8m



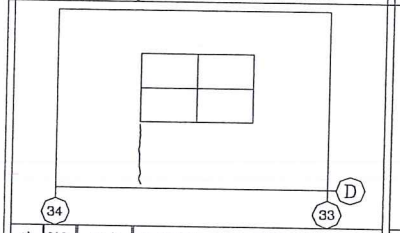
编号	918 217	调查情况	9层墙34-33/J轴墙面裂缝 Wmax=0.1mm，L=0.3m



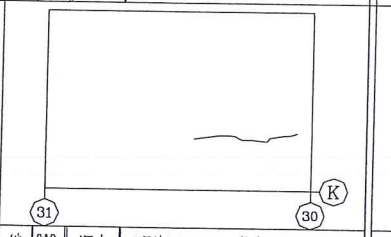
编号	918 218	调查情况	9层墙34/J-H轴墙面裂缝 Wmax=0.1mm，L=0.3m



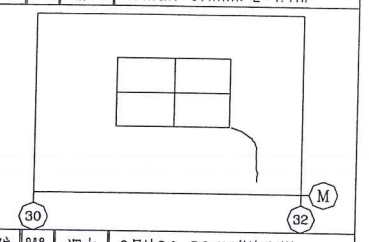
编号	918 219	调查情况	9层墙|1/33|/H-|1/F|轴墙面裂缝 Wmax=0.1mm，L=1.4m



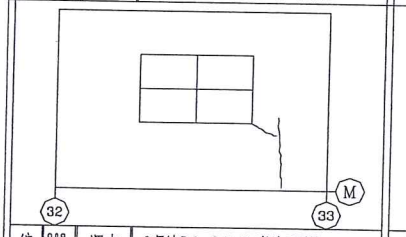
编号	918 220	调查情况	9层墙34-33/D轴墙面裂缝 Wmax=0.1mm，L=1.0m



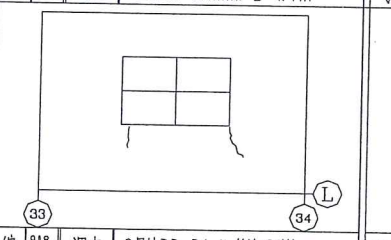
编号	918 221	调查情况	9层墙31-30/K轴墙面裂缝 Wmax=0.1mm，L=1.4m



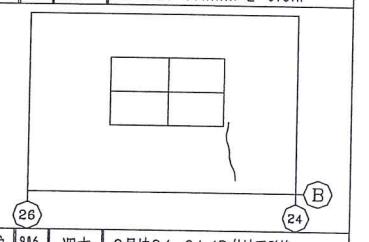
编号	918 222	调查情况	9层墙30-32/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



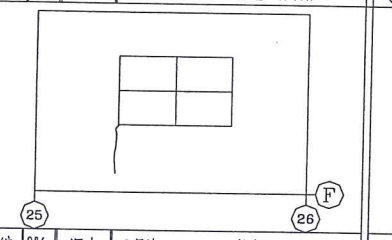
编号	918 223	调查情况	9层墙32-33/M轴墙面裂缝 Wmax=0.1mm，L=1.4m



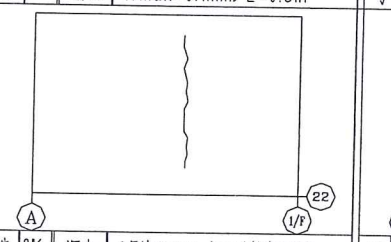
编号	918 224	调查情况	9层墙33-34/L轴墙面裂缝 Wmax=0.1mm，L=0.6m



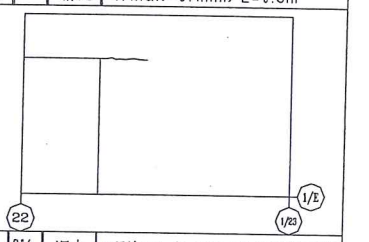
编号	916 225	调查情况	9层墙26-24/B轴墙面裂缝 Wmax=0.1mm，L=0.6m



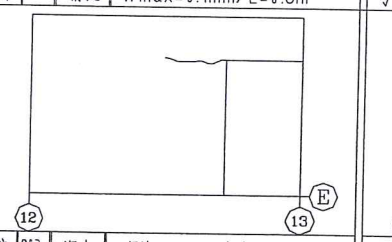
编号	916 226	调查情况	9层墙25-26/F轴墙面裂缝 Wmax=0.1mm，L=0.6m



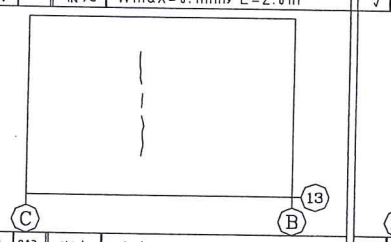
编号	916 227	调查情况	9层墙22/A-|1/F|轴墙面裂缝 Wmax=0.1mm，L=2.0m



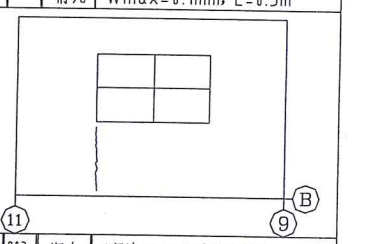
编号	916 228	调查情况	9层墙22-|1/23|/|1/E|轴墙面裂缝 Wmax=0.1mm，L=0.3m



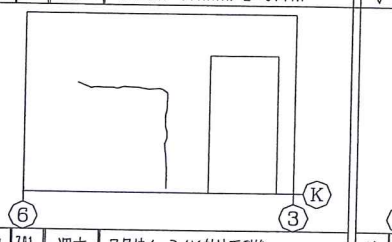
编号	813 229	调查情况	8层墙12-13/E轴墙面裂缝 Wmax=0.1mm，L=0.4m



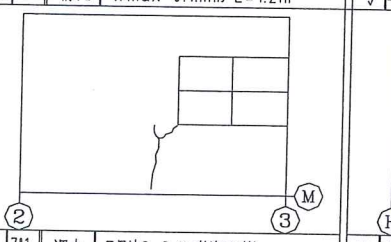
编号	813 230	调查情况	8层墙13/C-B轴墙面裂缝 Wmax=0.1mm，L=1.2m



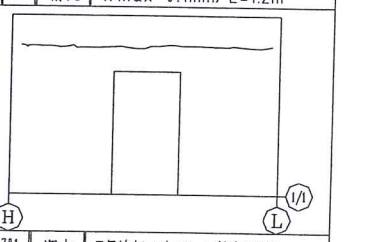
编号	813 231	调查情况	8层墙11-9/B轴墙面裂缝 Wmax=0.1mm，L=1.2m



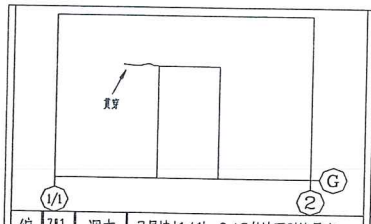
编号	711 232	调查情况	7层墙6-3/K轴墙面裂缝 Wmax=0.1mm，L=3.5m



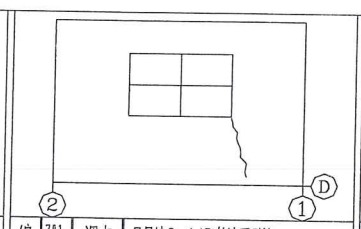
编号	711 233	调查情况	7层墙2-3/M轴墙面裂缝 Wmax=0.2mm，L=1.2m



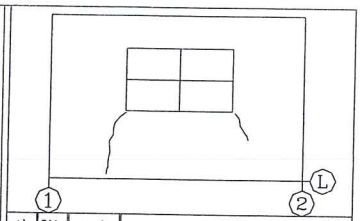
编号	711 234	调查情况	7层墙|1/1|/H-L轴墙面裂缝 Wmax=0.2mm，L=3.2m



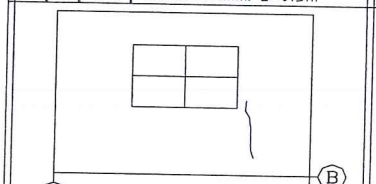
编号	781 235	调查情况	7层墙1/1-2/G轴墙面裂缝贯穿 Wmax=0.1mm，L=0.3m



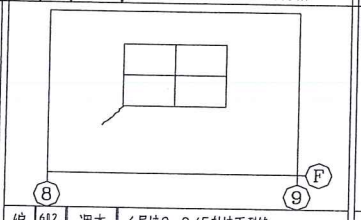
编号	781 236	调查情况	7层墙2-1/D轴墙面裂缝 Wmax=0.2mm，L=0.8m



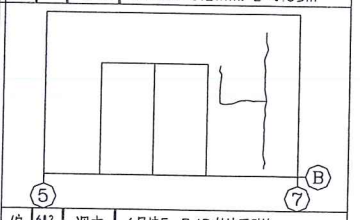
编号	781 237	调查情况	7层墙1-2/L轴墙面裂缝 Wmax=0.2mm，L=0.85m



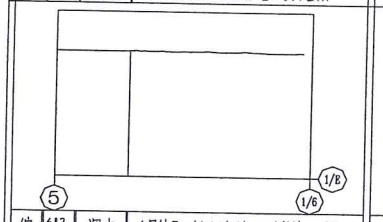
编号	612 238	调查情况	6层墙9-7/B轴墙面裂缝 Wmax=0.1mm，L=0.75m



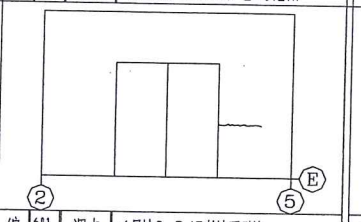
编号	602 239	调查情况	6层墙8-9/F轴墙面裂缝 Wmax=0.1mm，L=0.2m



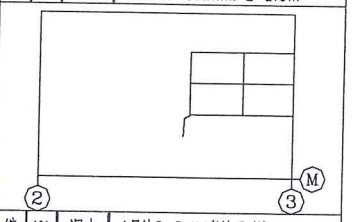
编号	612 240	调查情况	6层墙5-7/B轴墙面裂缝 Wmax=0.1mm，L=2.0m



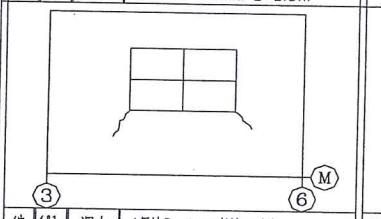
编号	612 241	调查情况	6层墙5-|1/6|/|1/E|轴墙面裂缝 Wmax=0.1mm，L=2.3m



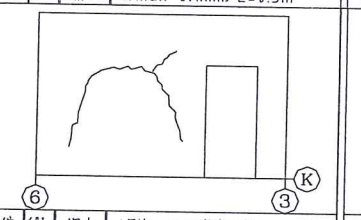
编号	601 242	调查情况	6层墙2-5/E轴墙面裂缝 Wmax=0.1mm，L=0.5m



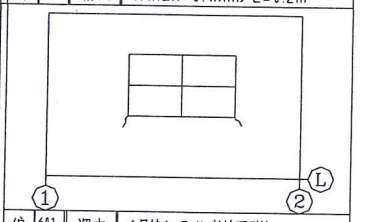
编号	601 243	调查情况	6层墙2-3/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



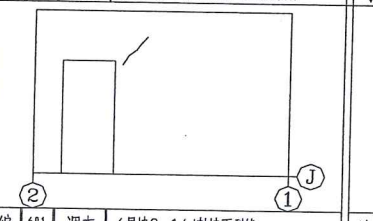
编号	601 244	调查情况	6层墙3-6/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



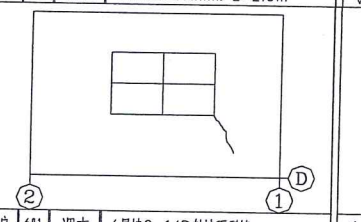
编号	601 245	调查情况	6层墙6-3/K轴墙面裂缝 Wmax=0.1mm，L=2.6m



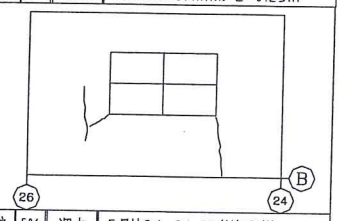
编号	601 246	调查情况	6层墙1-2/L轴墙面裂缝 Wmax=0.1mm，L=0.25m



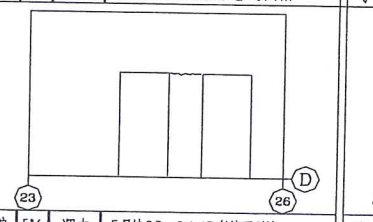
编号	601 247	调查情况	6层墙2-1/J轴墙面裂缝 Wmax=0.1mm，L=0.4m



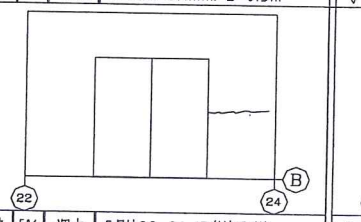
编号	601 248	调查情况	6层墙2-1/D轴墙面裂缝 Wmax=0.1mm，L=0.5m



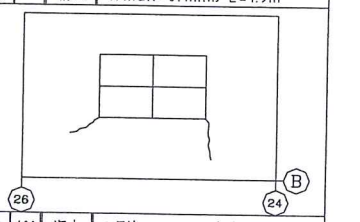
编号	506 249	调查情况	5层墙26-24/B轴墙面裂缝 Wmax=0.1mm，L=1.9m



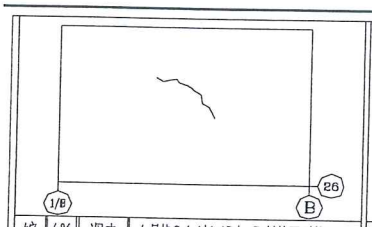
编号	516 250	调查情况	5层墙23-26/D轴墙面裂缝 Wmax=0.1mm，L=0.3m



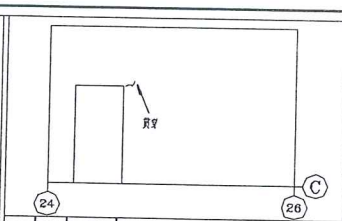
编号	506 251	调查情况	5层墙22-24/B轴墙面裂缝 Wmax=0.1mm，L=0.8m



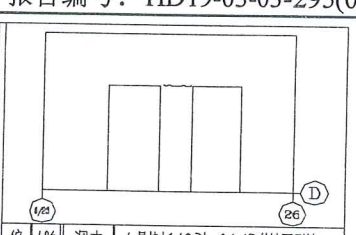
编号	486 252	调查情况	4层墙26-24/B轴墙面裂缝 Wmax=0.2mm，L=1.4m



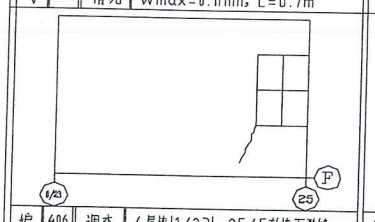
编号	406 253	调查情况	4层墙26/[1/B]-B轴墙面裂缝 Wmax=0.1mm，L=0.7m



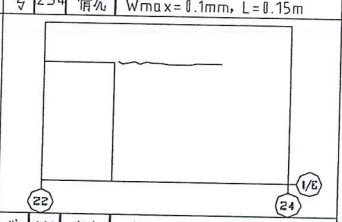
编号	416 254	调查情况	4层墙24-26/C轴墙面裂缝 Wmax=0.1mm，L=0.15m



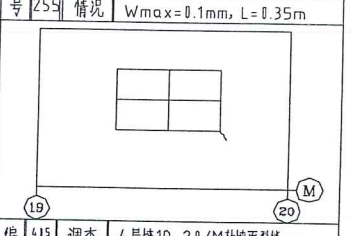
编号	406 255	调查情况	4层墙[1/23]-26/D轴墙面裂缝 Wmax=0.1mm，L=0.35m



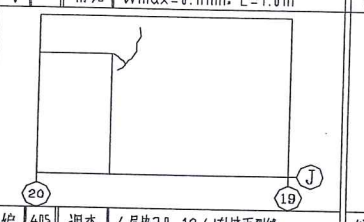
编号	406 256	调查情况	4层墙[1/23]-25/F轴墙面裂缝 Wmax=0.1mm，L=1.0m



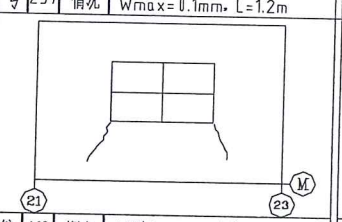
编号	416 257	调查情况	4层墙22-24/[1/E]轴墙面裂缝 Wmax=0.1mm，L=1.2m



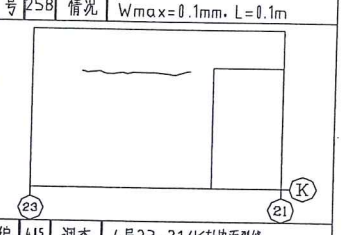
编号	415 258	调查情况	4层墙19-20/M轴墙面裂缝 Wmax=0.1mm，L=0.1m



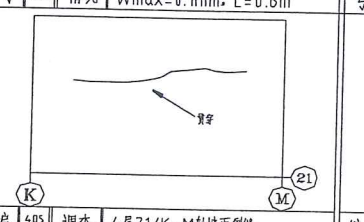
编号	405 259	调查情况	4层墙20-19/J轴墙面裂缝 Wmax=0.1mm，L=0.6m



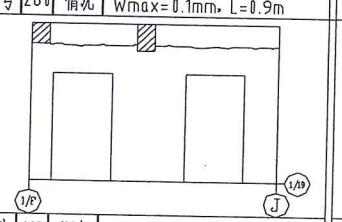
编号	415 260	调查情况	4层墙21-23/M轴墙面裂缝 Wmax=0.1mm，L=0.9m



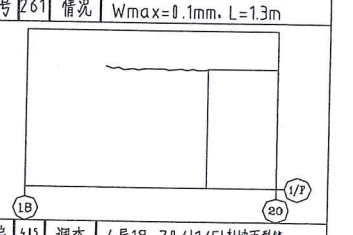
编号	415 261	调查情况	4层23-21/K轴墙面裂缝 Wmax=0.1mm，L=1.3m



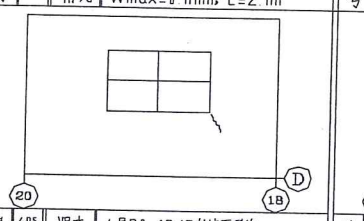
编号	405 262	调查情况	4层21/K-M轴墙面裂缝 Wmax=0.1mm，L=2.1m



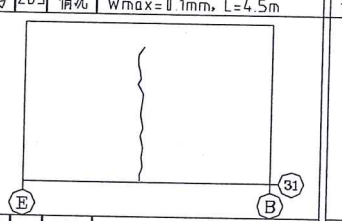
编号	415 263	调查情况	4层[1/19]/[1/F]-J轴墙面裂缝 Wmax=0.1mm，L=4.5m



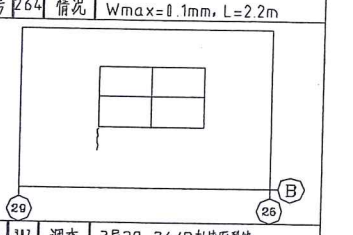
编号	415 264	调查情况	4层18-20/[1/F]轴墙面裂缝 Wmax=0.1mm，L=2.2m



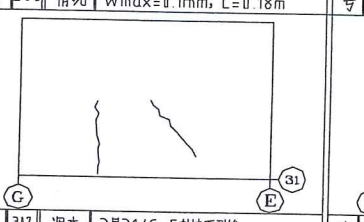
编号	405 265	调查情况	4层20-18/D轴墙面裂缝 Wmax=0.1mm，L=0.18m



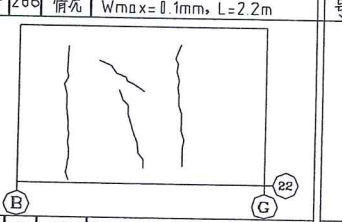
编号	307 266	调查情况	3层31/E-B轴墙面裂缝 Wmax=0.1mm，L=2.2m



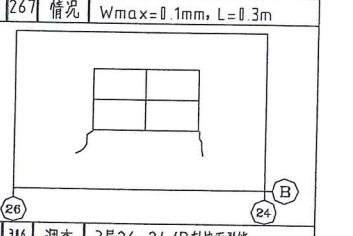
编号	317 267	调查情况	3层29-26/B轴墙面裂缝 Wmax=0.1mm，L=0.3m



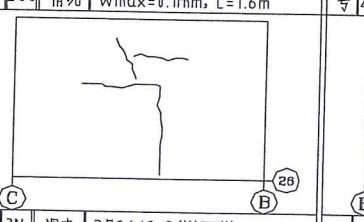
编号	317 268	调查情况	3层31/G-E轴墙面裂缝 Wmax=0.1mm，L=1.6m



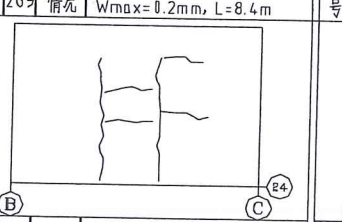
编号	306 269	调查情况	3层22/B-G轴墙面裂缝 Wmax=0.2mm，L=8.4m



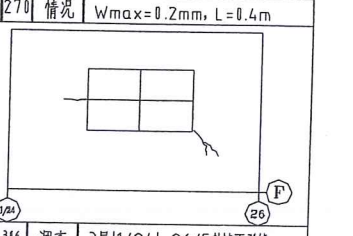
编号	316 270	调查情况	3层26-24/B轴墙面裂缝 Wmax=0.2mm，L=0.4m



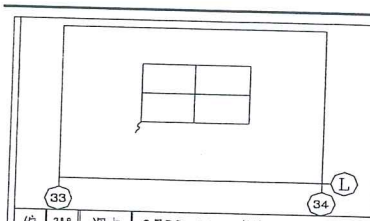
编号	316 271	调查情况	3层26/C-B轴墙面裂缝 Wmax=0.2mm，L=5.2m



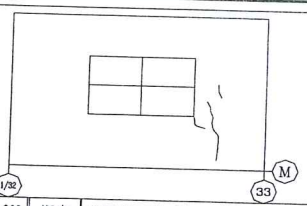
编号	306 272	调查情况	3层24/B-C轴墙面裂缝 Wmax=0.1mm，L=5.4m



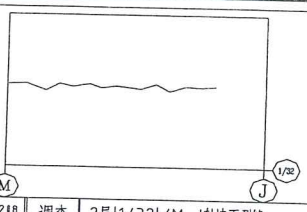
编号	316 273	调查情况	3层[1/24]-26/F轴墙面裂缝 Wmax=0.1mm，L=0.8m



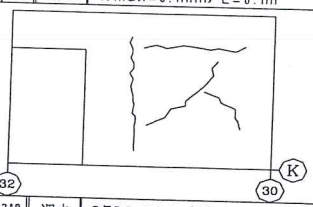
编号	208 274	调查情况	2层33-34/L轴墙面裂缝 Wmax=0.1mm，L=0.1m



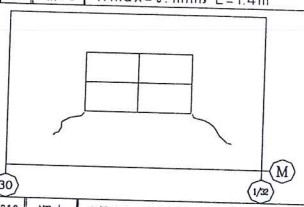
编号	208 275	调查情况	2层|1/32|-33/M轴墙面裂缝 Wmax=0.1mm，L=1.4m



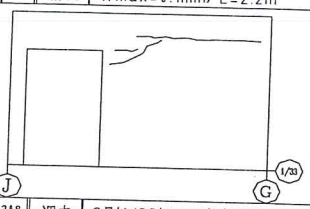
编号	208 276	调查情况	2层|1/32|/M-J轴墙面裂缝 Wmax=0.1mm，L=2.2m



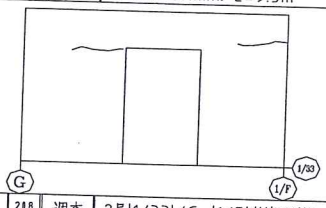
编号	208 277	调查情况	2层32-30/K轴墙面裂缝 Wmax=0.1mm，L=9.5m



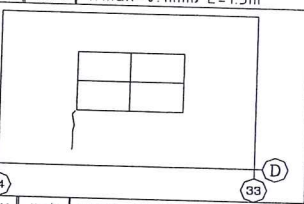
编号	208 278	调查情况	2层30-|1/32|/M轴墙面裂缝 Wmax=0.1mm，L=1.3m



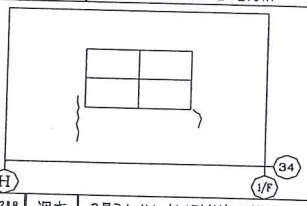
编号	208 279	调查情况	2层|1/33|/J-G轴墙面裂缝 Wmax=0.1mm，L=2.0m



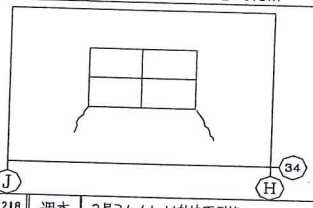
编号	208 280	调查情况	2层|1/33|/G-|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.8m



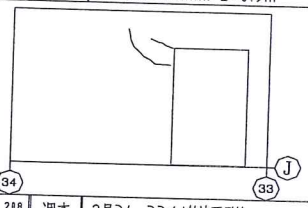
编号	208 281	调查情况	2层34-33/D轴墙面裂缝 Wmax=0.1mm，L=0.9m



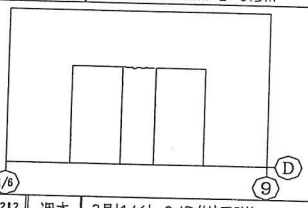
编号	208 282	调查情况	2层34/H-|1/F|轴墙面裂缝 Wmax=0.1mm，L=0.3m



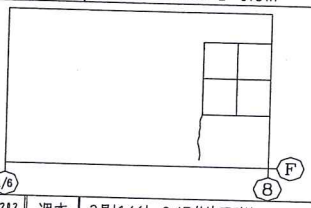
编号	208 283	调查情况	2层34/J-H轴墙面裂缝 Wmax=0.1mm，L=0.6m



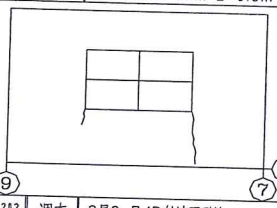
编号	208 284	调查情况	2层34-33/J轴墙面裂缝 Wmax=0.1mm，L=0.8m



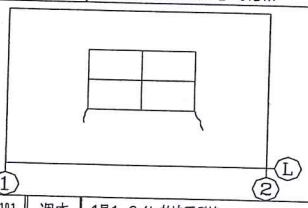
编号	212 285	调查情况	2层|1/6|-9/D轴墙面裂缝 Wmax=0.1mm，L=0.3m



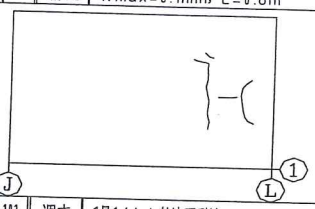
编号	212 286	调查情况	2层|1/6|-8/F轴墙面裂缝 Wmax=0.1mm，L=0.8m



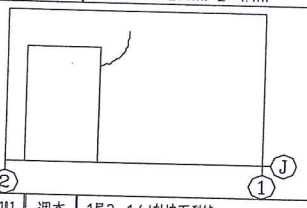
编号	212 287	调查情况	2层9-7/B轴墙面裂缝 Wmax=0.2mm，L=1.1m



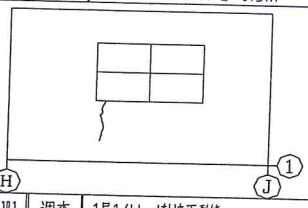
编号	101 288	调查情况	1层1-2/L轴墙面裂缝 Wmax=0.1mm，L=0.3m



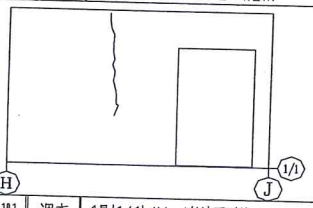
编号	101 289	调查情况	1层1/J-L轴墙面裂缝 Wmax=0.1mm，L=1.2m



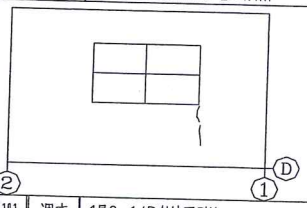
编号	101 290	调查情况	1层2-1/J轴墙面裂缝 Wmax=0.2mm，L=1.1m



编号	101 291	调查情况	1层1/H-J轴墙面裂缝 Wmax=0.1mm，L=0.5m



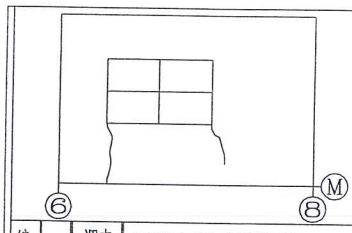
编号	101 292	调查情况	1层|1/1|/H-J轴墙面裂缝 Wmax=0.2mm，L=3.1m



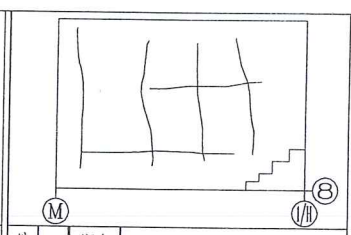
编号	101 293	调查情况	1层2-1/D轴墙面裂缝 Wmax=0.1mm，L=0.7m

注：未注明缝宽的为已进行修补。

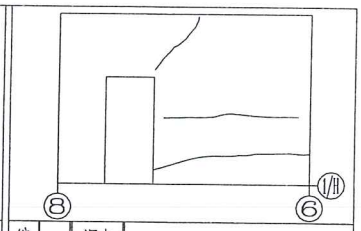
表 2　各层公共区域墙体裂缝情况



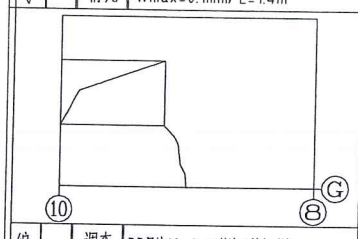
编号	01	调查情况	屋面层墙6-8/M轴墙面斜向裂缝 Wmax=0.1mm，L=1.4m



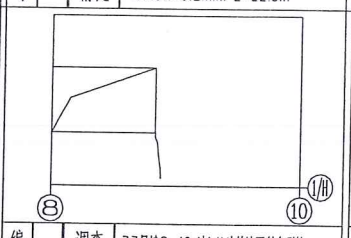
编号	02	调查情况	屋面层墙M-(1/H)/8轴墙面裂缝 Wmax=0.2mm，L=22.8m



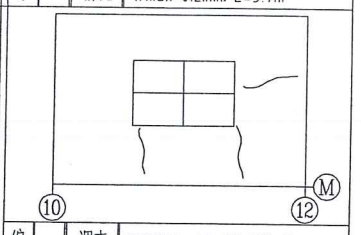
编号	03	调查情况	屋面层墙8-6/(1/H)轴墙面斜向裂缝 Wmax=0.2mm，L=3.7m



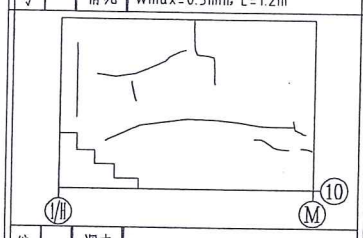
编号	04	调查情况	33层墙10-8/G轴墙面斜向裂缝 Wmax=0.3mm，L=1.2m



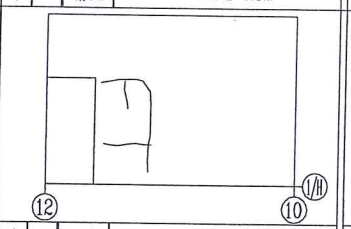
编号	05	调查情况	33层墙8-10/(1/H)轴墙面斜向裂缝 Wmax=0.1mm，L=0.6m



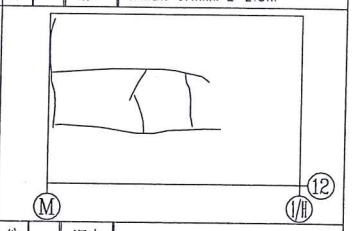
编号	06	调查情况	屋面层墙10-12/M轴墙面斜向裂缝 Wmax=0.1mm，L=2.8m



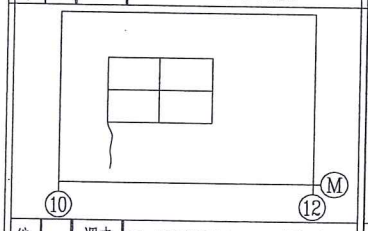
编号	07	调查情况	屋面层墙(1/H)-M/10轴墙面斜向裂缝 Wmax=0.2mm，L=14.2m



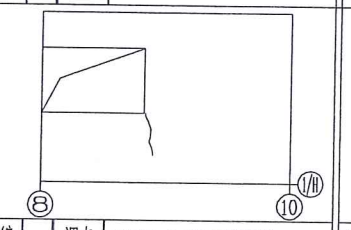
编号	08	调查情况	屋面层墙12-10/(1/H)轴墙面裂缝 Wmax=0.2mm，L=5.2m



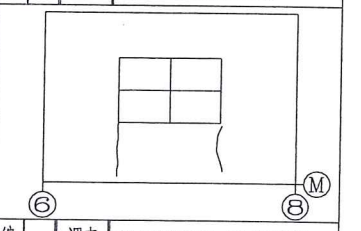
编号	09	调查情况	屋面层墙M-(1/H)/12轴墙面裂缝 Wmax=0.2mm，L=7.7m



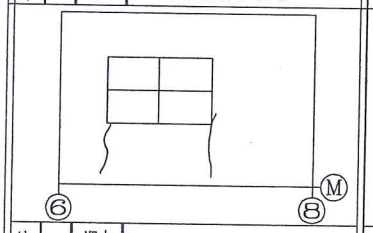
编号	10	调查情况	33-32层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.7m



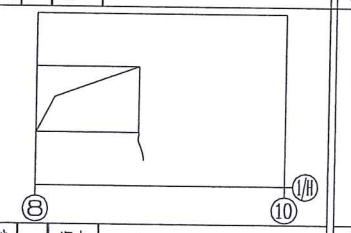
编号	11	调查情况	32层墙8-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.7m



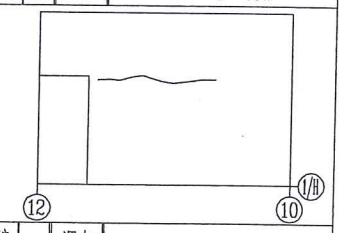
编号	12	调查情况	33-32层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.85m



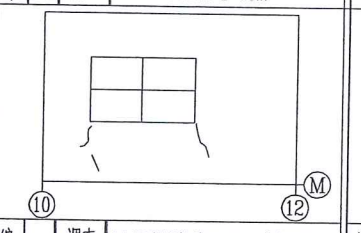
编号	12	调查情况	32-31层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



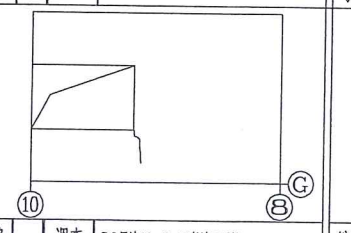
编号	14	调查情况	31层墙8-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.6m



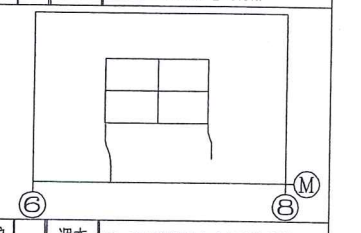
编号	15	调查情况	31层楼梯间墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.8m



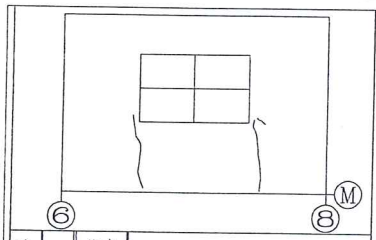
编号	16	调查情况	31-30层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



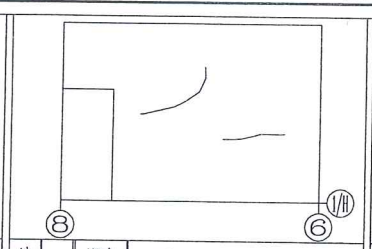
编号	17	调查情况	30层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



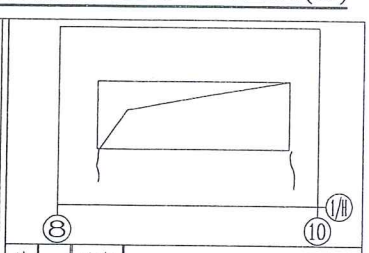
编号	18	调查情况	31-30层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.7m



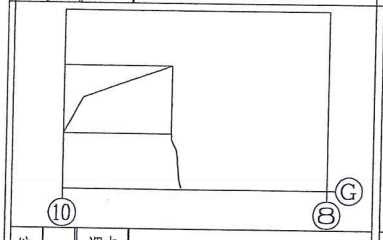
编号	19	调查情况	30-29层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



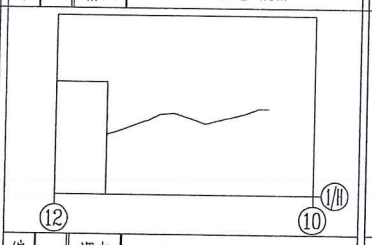
编号	20	调查情况	29层墙8-6/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.0m



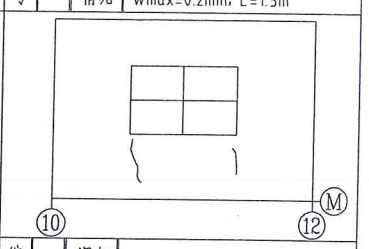
编号	21	调查情况	29层墙8-10/(1/H)轴墙面裂缝 Wmax=0.2mm，L=1.5m



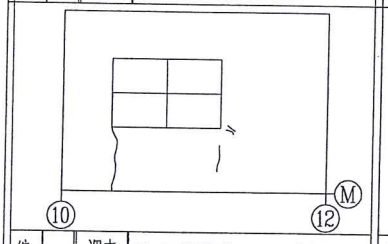
编号	22	调查情况	29层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=1.1m



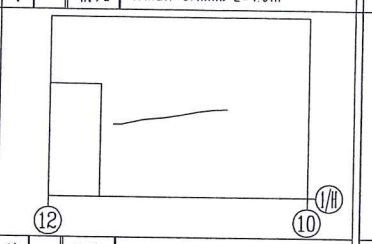
编号	23	调查情况	29层墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.0m



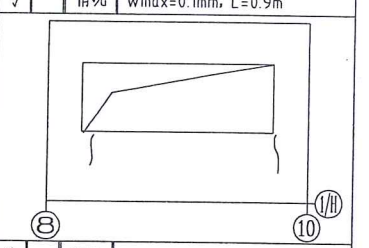
编号	24	调查情况	30-29层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.9m



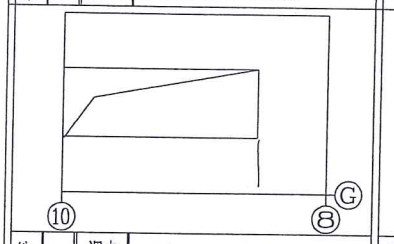
编号	25	调查情况	29-28层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.6m



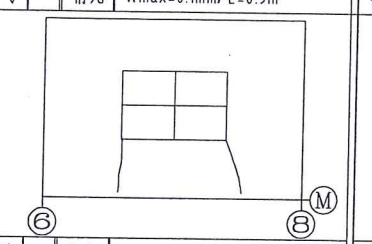
编号	26	调查情况	28层墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.9m



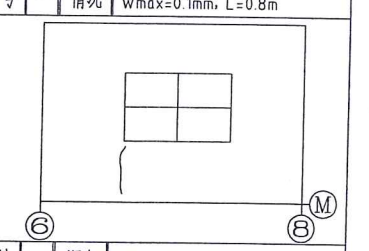
编号	27	调查情况	28层墙8-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.8m



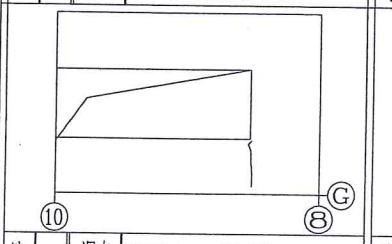
编号	28	调查情况	28层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=1.1m



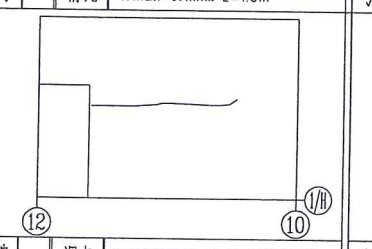
编号	29	调查情况	29-28层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



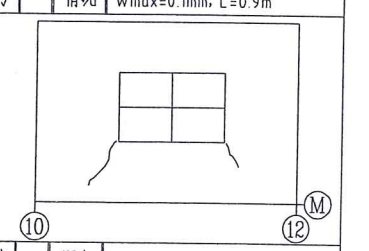
编号	30	调查情况	28-27层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.9m



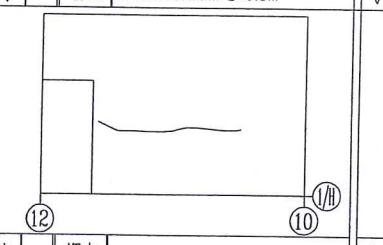
编号	31	调查情况	27层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



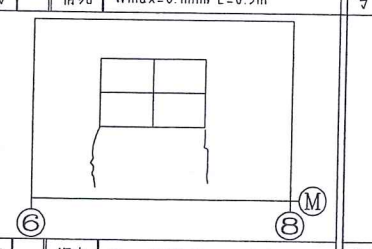
编号	32	调查情况	27层楼梯间墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.9m



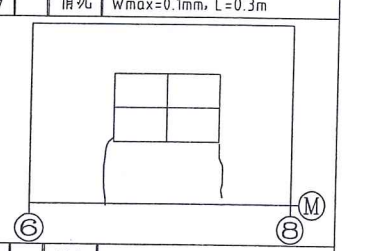
编号	33	调查情况	27-26层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.3m



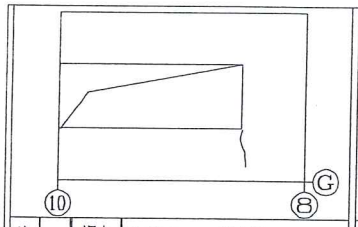
编号	34	调查情况	26层12-10(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.85m



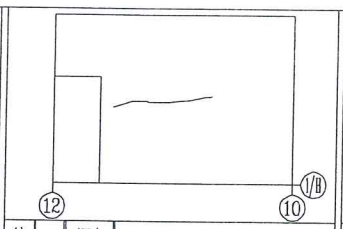
编号	35	调查情况	27-26层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



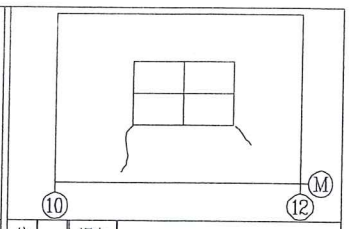
编号	36	调查情况	26-25层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.9m



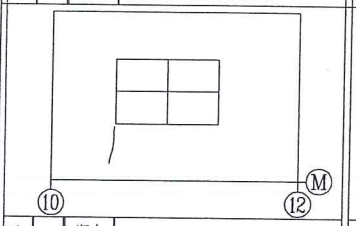
编号	37	调查情况	25层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



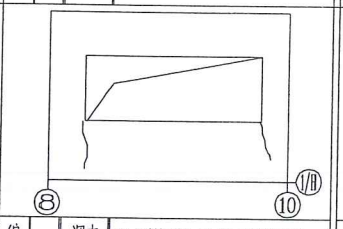
编号	38	调查情况	25层楼梯间墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.9m



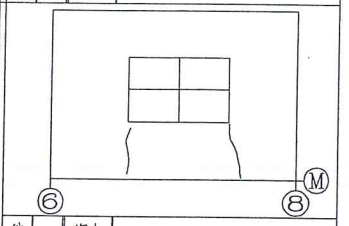
编号	39	调查情况	26-25层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



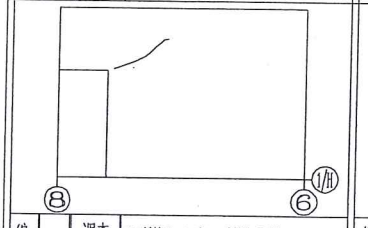
编号	40	调查情况	25-24层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



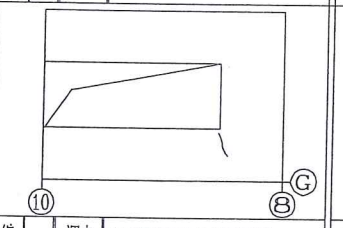
编号	41	调查情况	24层楼梯间墙8-10/(1/H)轴墙面裂缝 Wmax=0.2mm，L=1.6m



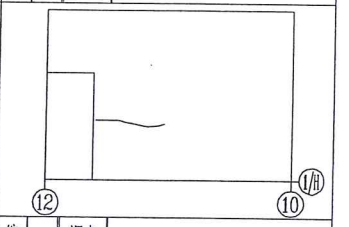
编号	42	调查情况	25-24层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



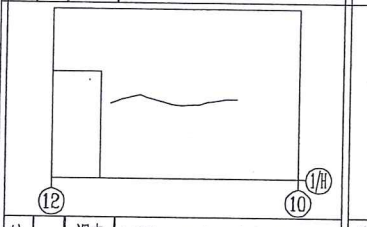
编号	43	调查情况	25层墙8-6/(1/H)轴墙面裂缝 Wmax=0.2mm，L=0.6m



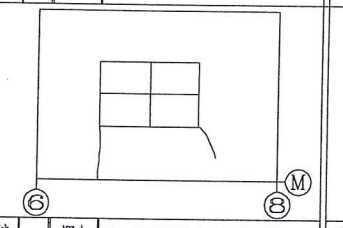
编号	44	调查情况	25层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



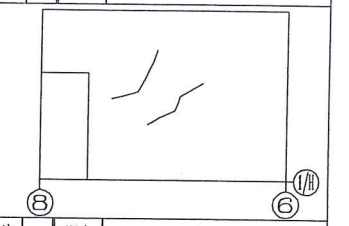
编号	45	调查情况	23层楼梯间墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.9m



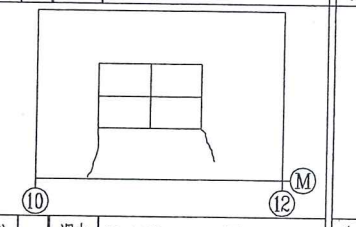
编号	46	调查情况	22层墙12-10/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.1m



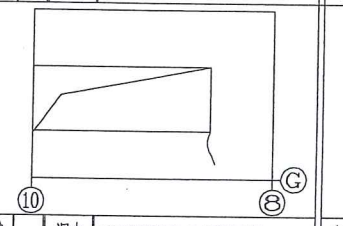
编号	47	调查情况	22-21层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



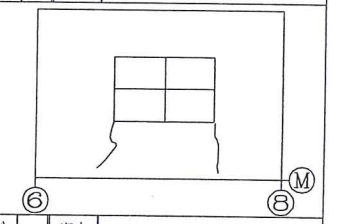
编号	48	调查情况	21层楼梯间墙8-6/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.0m



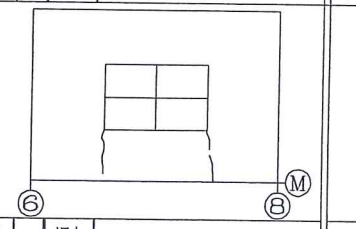
编号	49	调查情况	22-21层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



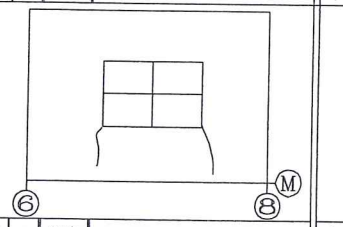
编号	50	调查情况	20层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



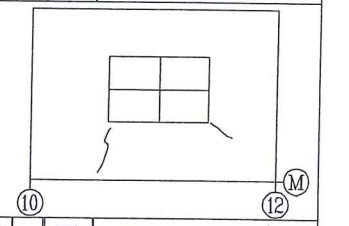
编号	51	调查情况	21-20层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.5m



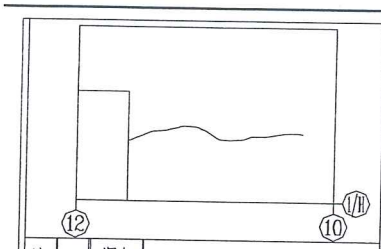
编号	52	调查情况	20-19层墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.7m



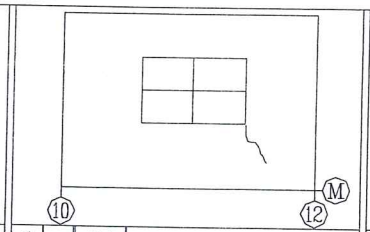
编号	53	调查情况	19-18层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.3m



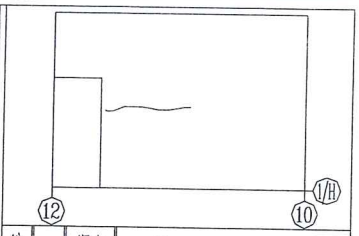
编号	54	调查情况	19-18层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



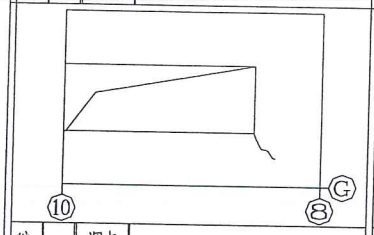
编号	55	调查情况	18层墙12-10/|1/H|轴墙面裂缝 Wmax=0.1mm，L=1.2m



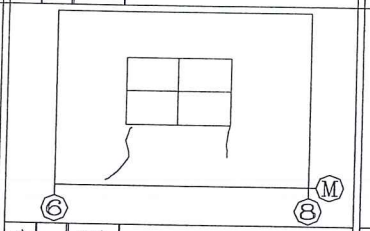
编号	56	调查情况	18-17层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.4m



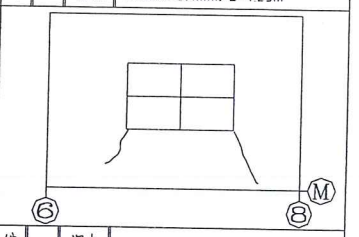
编号	57	调查情况	17层楼梯间墙12-10/|1/H|轴墙面裂缝 Wmax=0.1mm，L=1.25m



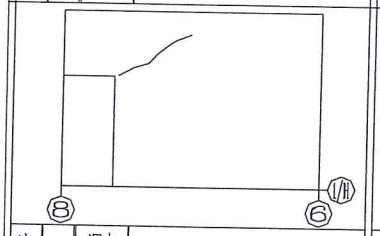
编号	58	调查情况	17层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.3m



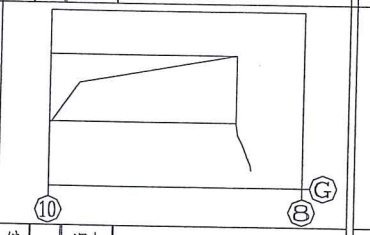
编号	59	调查情况	18-17层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



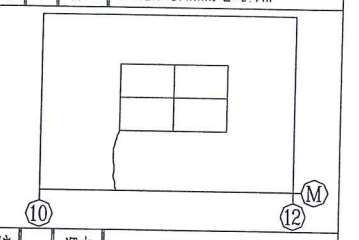
编号	60	调查情况	17-16层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.7m



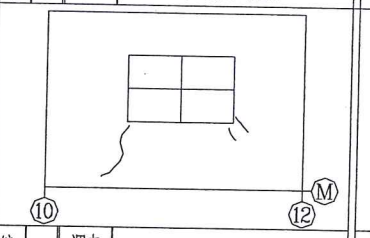
编号	61	调查情况	17层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.5m



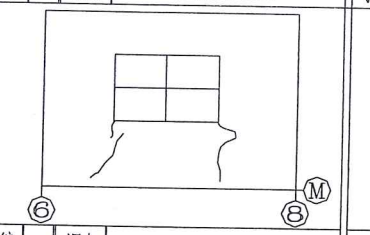
编号	62	调查情况	17层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



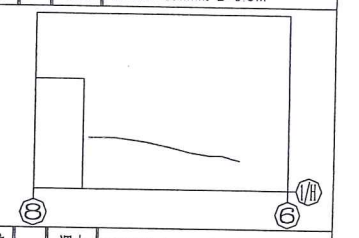
编号	63	调查情况	17-16层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



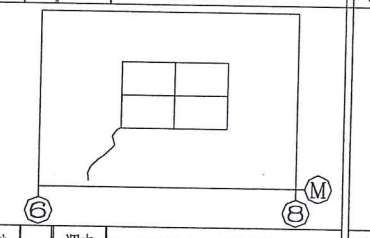
编号	64	调查情况	15-16层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.15m



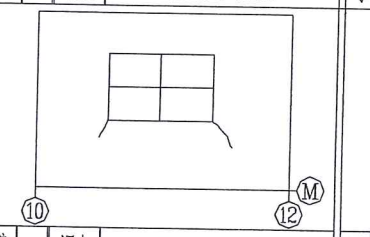
编号	65	调查情况	16-15层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.75m



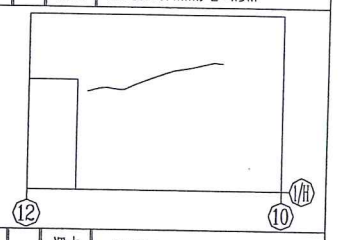
编号	66	调查情况	15层楼梯间墙8-6/|1/H|轴墙面裂缝 Wmax=0.1mm，L=1.3m



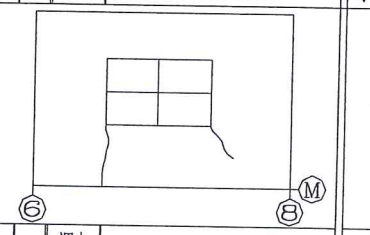
编号	67	调查情况	15-14层墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.5m



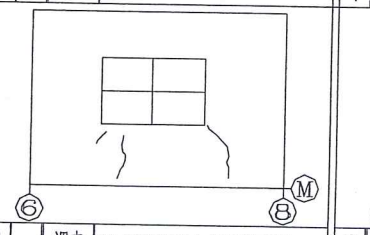
编号	68	调查情况	14-13层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.25m



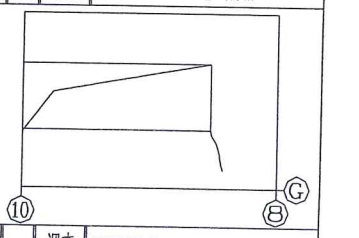
编号	69	调查情况	13层楼梯间墙12-10/|1/H|轴墙面裂缝 Wmax=0.1mm，L=0.9m



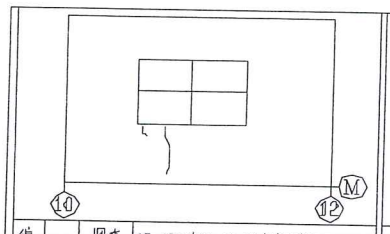
编号	70	调查情况	14-13层墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=0.95m



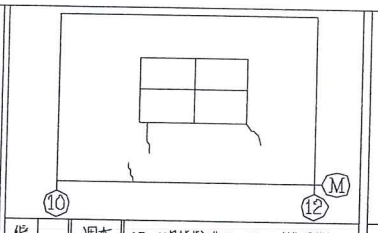
编号	71	调查情况	13-12层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.25m



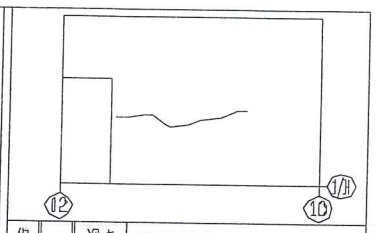
编号	72	调查情况	12层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.65m



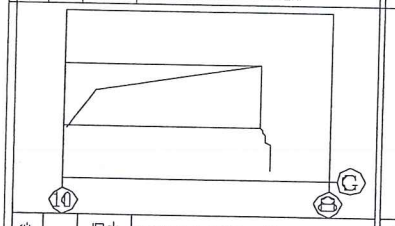
编号	73	调查情况	13-12层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.8m



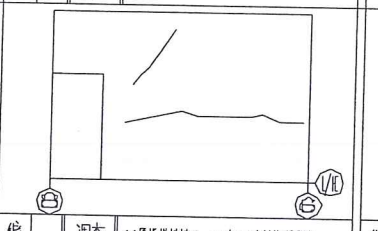
编号	74	调查情况	12-11层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.65m



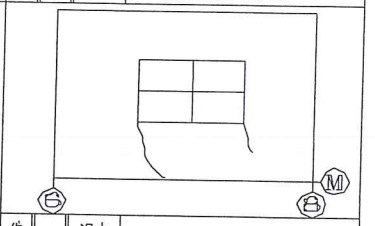
编号	75	调查情况	11层楼梯间墙12-10/1/H轴墙面裂缝 Wmax=0.1mm，L=0.9m



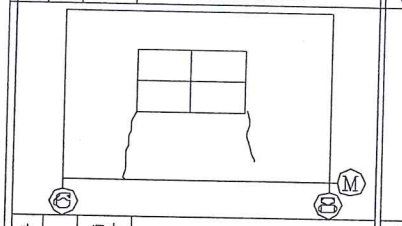
编号	76	调查情况	11层墙10-8/G轴墙面裂缝 Wmax=0.2mm，L=0.7m



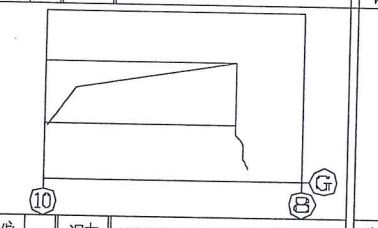
编号	77	调查情况	11层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.1mm，L=1.5m



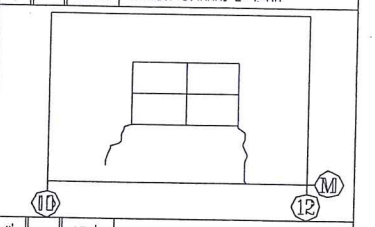
编号	78	调查情况	12-11层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.4m



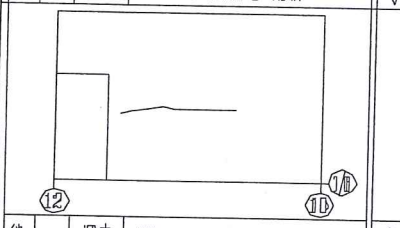
编号	79	调查情况	11-10层墙6-8/M轴墙面裂缝 Wmax=0.15mm，L=1.3m



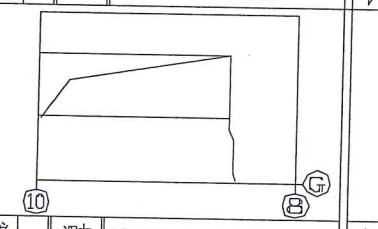
编号	80	调查情况	10层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



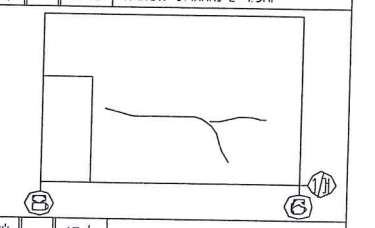
编号	81	调查情况	10-9层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.3m



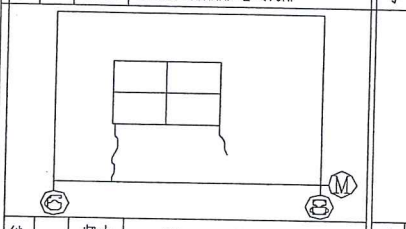
编号	82	调查情况	9层墙12-10/1/H轴墙面裂缝 Wmax=0.1mm，L=0.8m



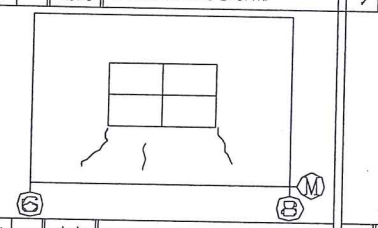
编号	83	调查情况	9层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.7m



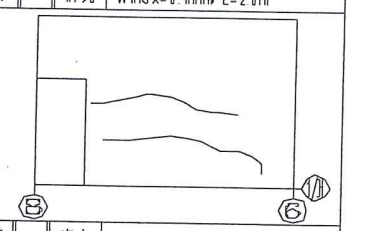
编号	84	调查情况	9层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.1mm，L=2.0m



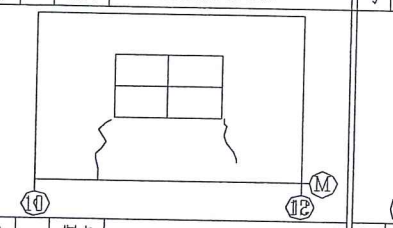
编号	85	调查情况	10-9层墙6-8/M轴墙面裂缝 Wmax=0.2mm，L=1.2m



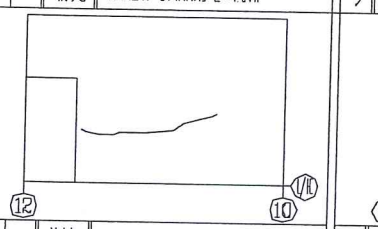
编号	86	调查情况	9-8层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



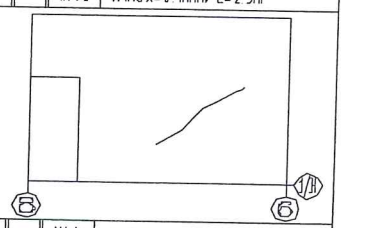
编号	87	调查情况	8层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.1mm，L=2.3m



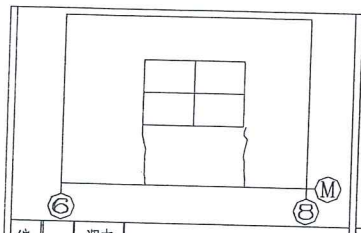
编号	88	调查情况	9-8层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



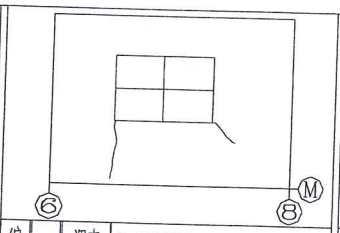
编号	89	调查情况	7层楼梯间墙12-10/1/H轴墙面裂缝 Wmax=0.1mm，L=1.1m



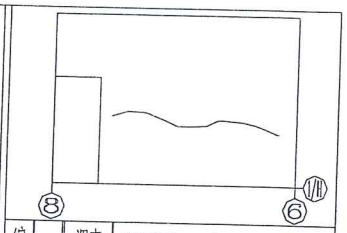
编号	90	调查情况	7层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.1mm，L=0.8m



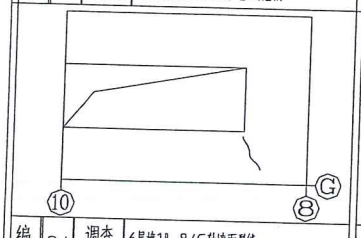
编号	91	调查情况	8-7层墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



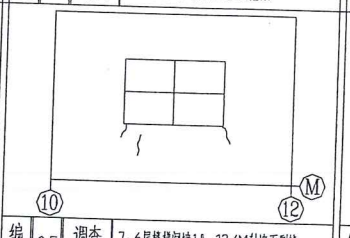
编号	92	调查情况	7-6层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



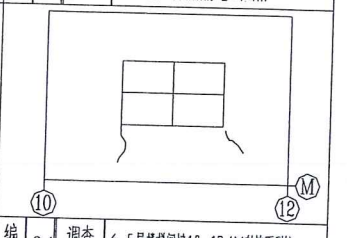
编号	93	调查情况	6层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.1mm，L=1.4m



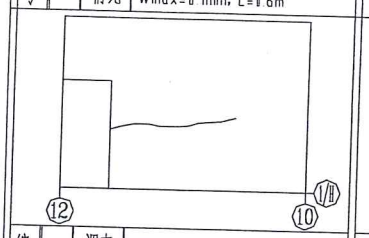
编号	94	调查情况	6层墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.6m



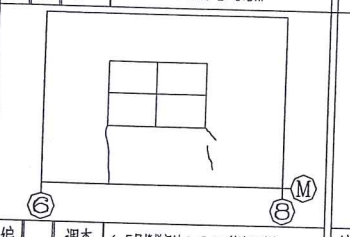
编号	95	调查情况	7-6层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.3m



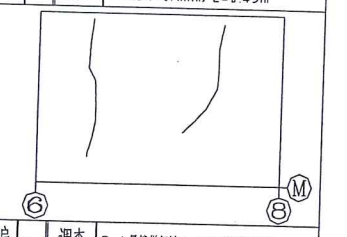
编号	96	调查情况	6-5层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.45m



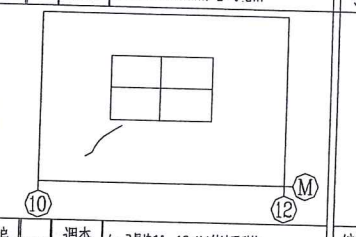
编号	97	调查情况	5层墙12-10/1/H轴墙面裂缝 Wmax=0.1mm，L=0.8m



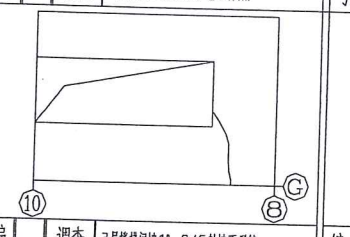
编号	98	调查情况	6-5层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



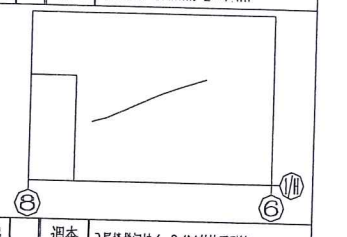
编号	99	调查情况	5-4层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=4.1m



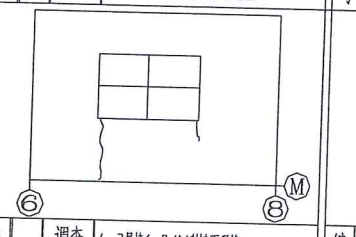
编号	100	调查情况	4-3层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



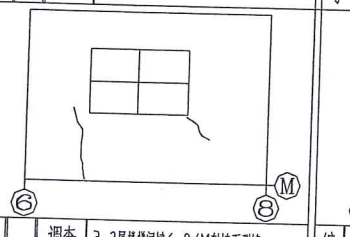
编号	101	调查情况	3层楼梯间墙10-8/G轴墙面裂缝 Wmax=0.1mm，L=0.8m



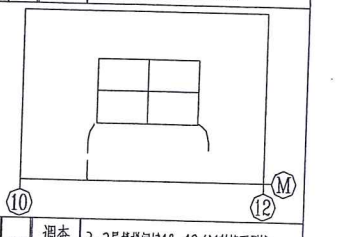
编号	102	调查情况	3层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



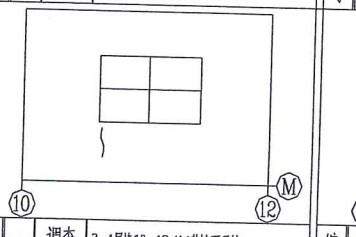
编号	103	调查情况	4-3层墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



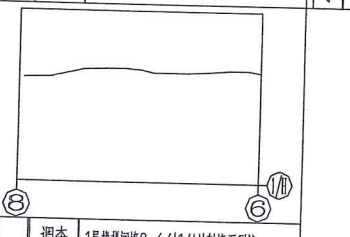
编号	104	调查情况	3-2层楼梯间墙6-8/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



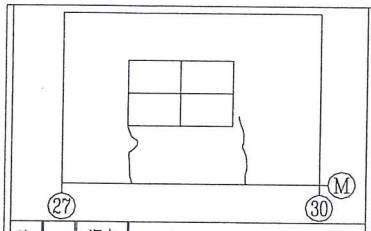
编号	105	调查情况	3-2层楼梯间墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.7m



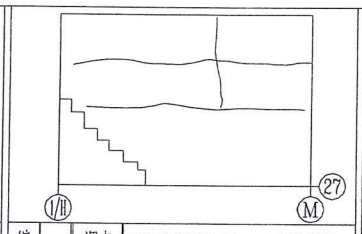
编号	106	调查情况	2-1层墙10-12/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



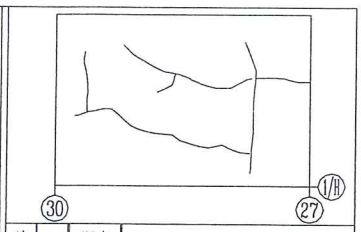
编号	107	调查情况	1层楼梯间墙8-6/1/H轴墙面裂缝 Wmax=0.2mm，L=2.4m



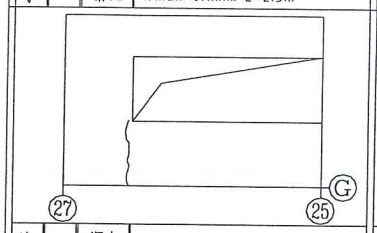
编号	01	调查情况	屋面层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=2.3m



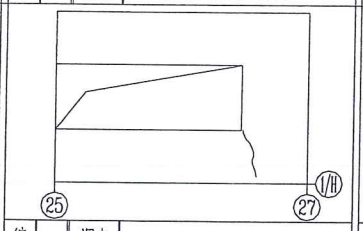
编号	02	调查情况	屋面层楼梯间墙1/H-M/27轴墙面裂缝 Wmax=0.2mm，L=13.2m



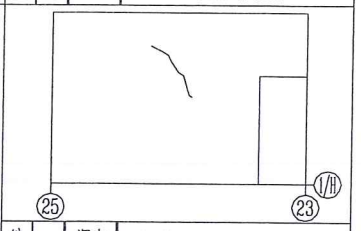
编号	03	调查情况	33层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.2mm，L=3.9m



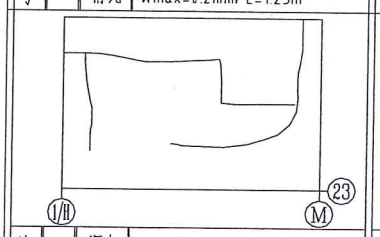
编号	04	调查情况	33层墙27-25/G轴墙面裂缝 Wmax=0.2mm，L=1.25m



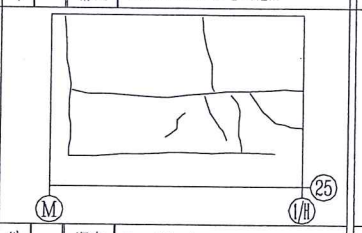
编号	05	调查情况	33层楼梯间墙25-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.2m



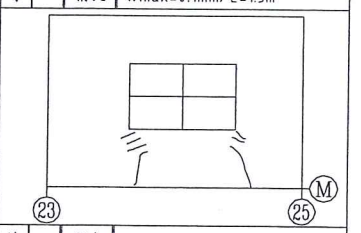
编号	06	调查情况	33层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=1.5m



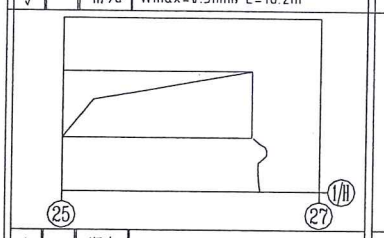
编号	07	调查情况	屋面层墙1/H-M/23轴墙面裂缝 Wmax=0.3mm，L=16.2m



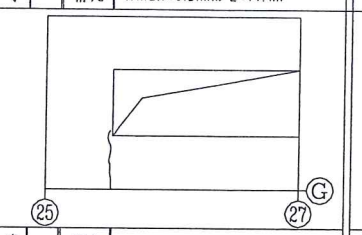
编号	08	调查情况	屋面层楼梯间墙M-1/H/25轴墙面裂缝 Wmax=0.3mm，L=14.1m



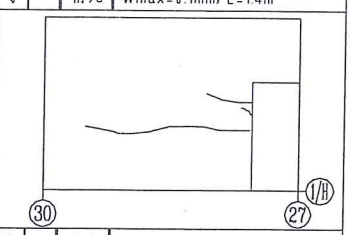
编号	09	调查情况	屋面层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.4m



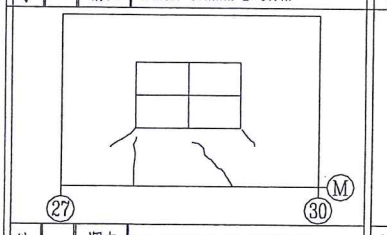
编号	10	调查情况	32层墙25-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.9m



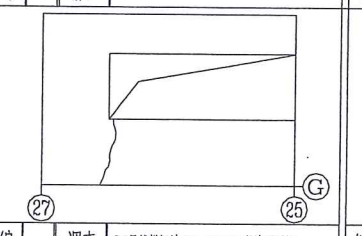
编号	11	调查情况	32层楼梯间墙25-27/G轴墙面裂缝 Wmax=0.2mm，L=0.85m



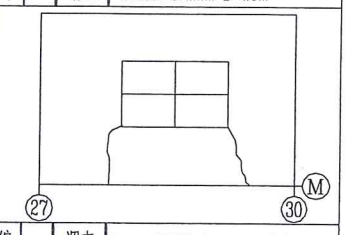
编号	12	调查情况	32层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.6m



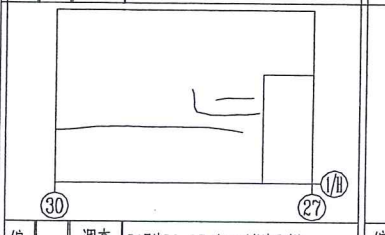
编号	13	调查情况	33-32层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



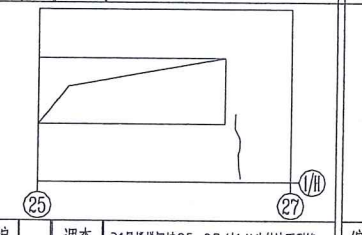
编号	14	调查情况	31层楼梯间墙27-25/G轴墙面裂缝 Wmax=0.2mm，L=0.8m



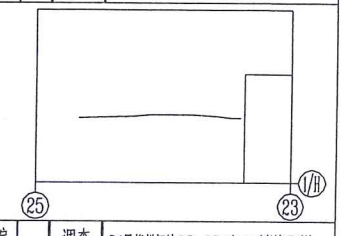
编号	15	调查情况	32-31层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.9m



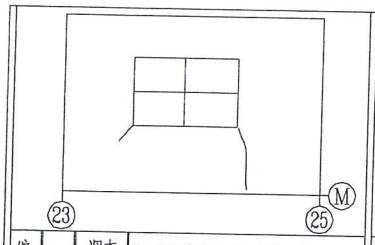
编号	16	调查情况	31层墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.9m



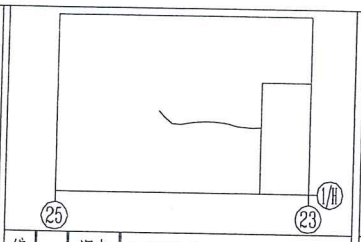
编号	17	调查情况	31层楼梯间墙25-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.9m



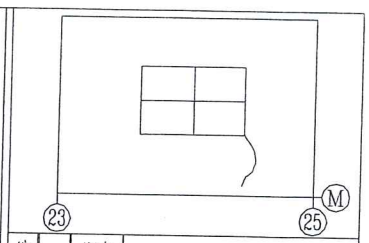
编号	18	调查情况	31层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=1.1m



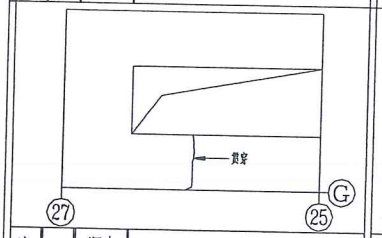
编号	19	调查情况	31-30层墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



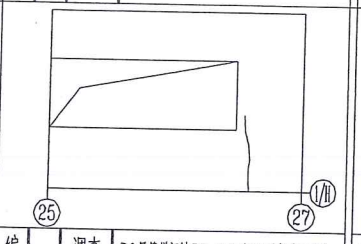
编号	20	调查情况	30层楼梯间墙25-23/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.8m



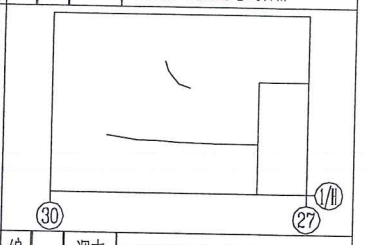
编号	21	调查情况	30-29层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.2mm，L=0.7m



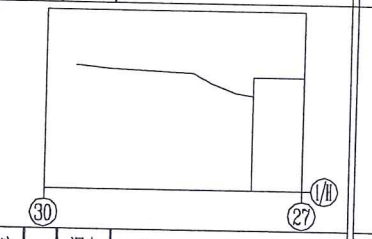
编号	22	调查情况	30层墙27-25/G轴墙面裂缝 Wmax=0.3mm，L=1.2m



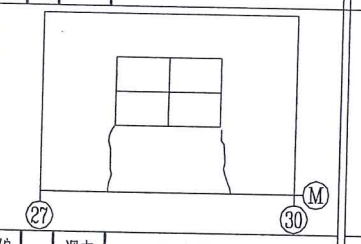
编号	23	调查情况	30层楼梯间墙25-27/(1/H)轴墙面裂缝 Wmax=0.2mm，L=1.1m



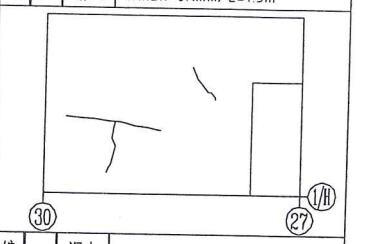
编号	24	调查情况	30层楼梯间墙30-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.5m



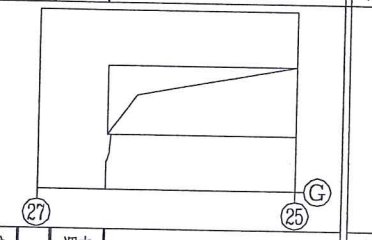
编号	25	调查情况	28层墙30-27/(1/H)轴墙面裂缝 Wmax=0.2mm，L=1.3m



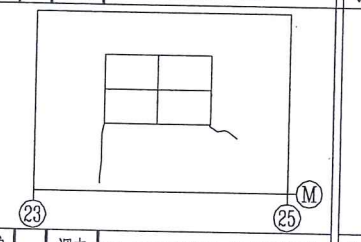
编号	26	调查情况	28-27层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



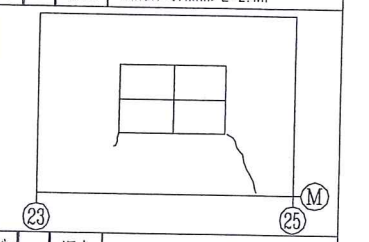
编号	27	调查情况	27层楼梯间墙30-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=2.1m



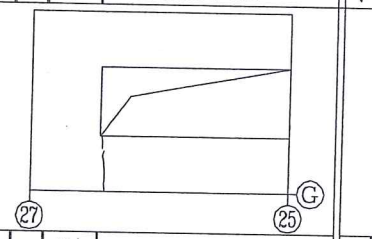
编号	28	调查情况	27层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.1m



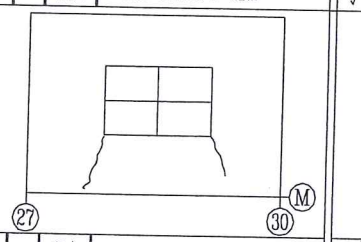
编号	29	调查情况	28-27层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



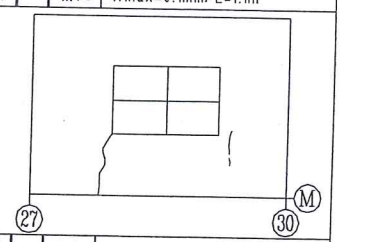
编号	30	调查情况	27-26层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



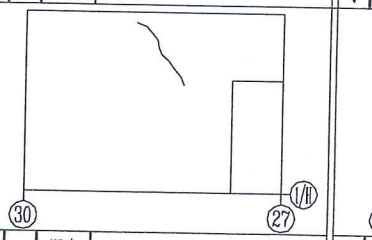
编号	31	调查情况	26层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=0.8m



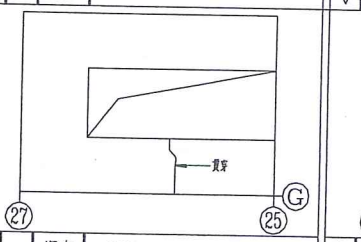
编号	32	调查情况	27-26层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



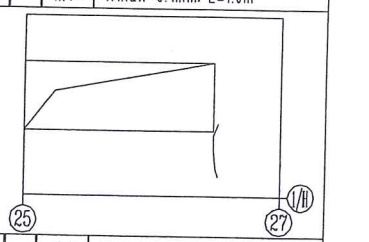
编号	33	调查情况	26-25层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.0m



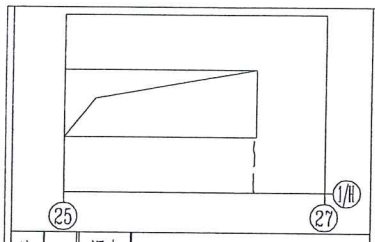
编号	34	调查情况	25层墙30-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.5m



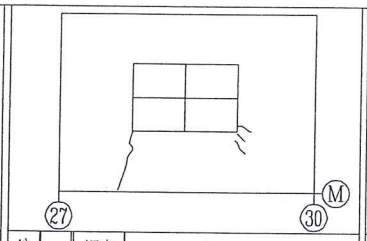
编号	35	调查情况	25楼梯间墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.1m



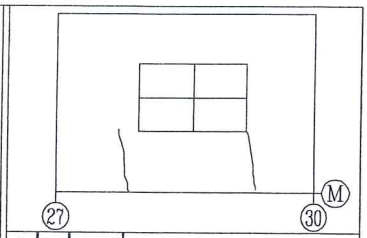
编号	36	调查情况	25层楼梯间墙25-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.4m



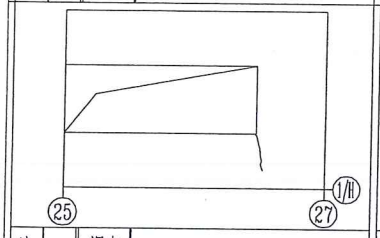
编号	37	调查情况	24层墙25-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.5m



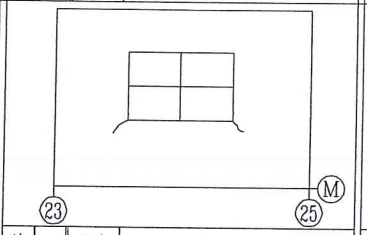
编号	38	调查情况	25-24层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



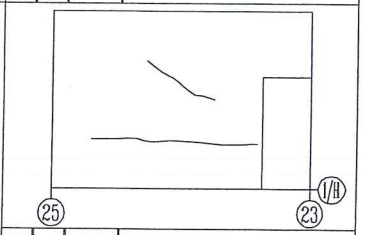
编号	39	调查情况	24-23层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.5m



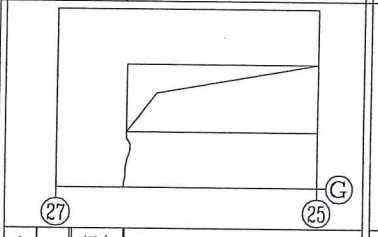
编号	40	调查情况	23层墙25-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.3m



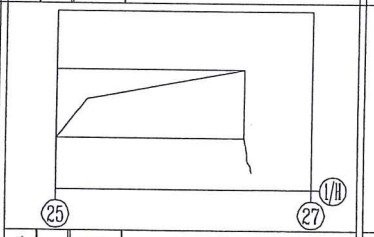
编号	41	调查情况	24-23层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=0.2m



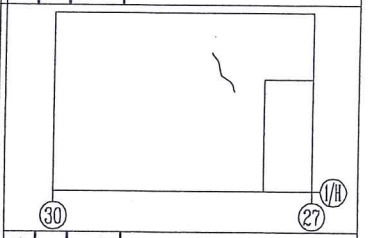
编号	42	调查情况	22层楼梯间墙25-23/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.4m



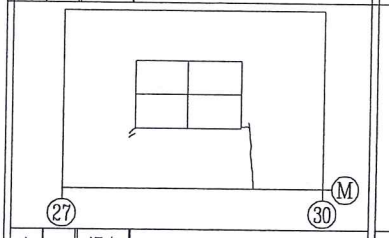
编号	43	调查情况	22层墙27-25/G轴墙面裂缝 Wmax=0.2mm，L=1.2m



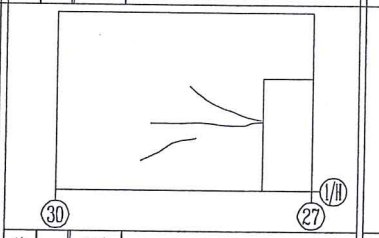
编号	44	调查情况	22层楼梯间墙25-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.7m



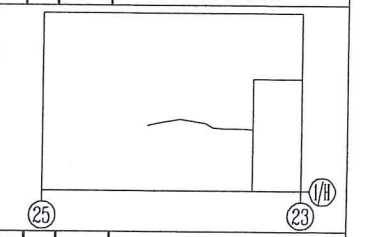
编号	45	调查情况	22层楼梯间墙30-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.4m



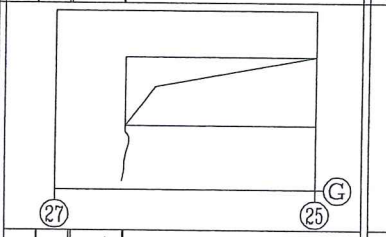
编号	46	调查情况	22-21层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.2m



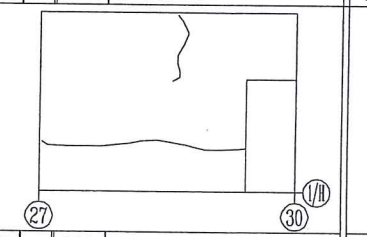
编号	47	调查情况	21层楼梯间墙30-27/(1/H)轴墙面裂缝 Wmax=0.1mm，L=2.3m



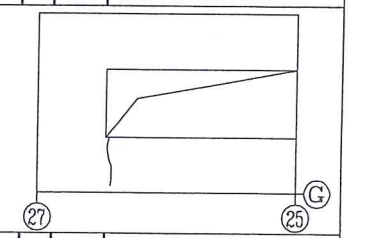
编号	48	调查情况	21层楼梯间墙25-23/(1/H)轴墙面裂缝 Wmax=0.1mm，L=0.7m



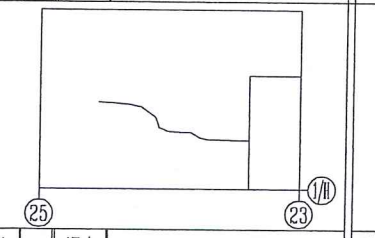
编号	49	调查情况	21层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.2m



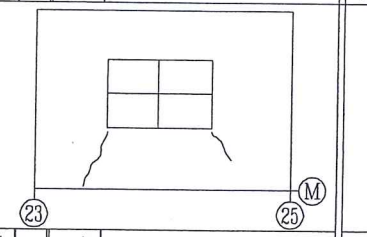
编号	50	调查情况	19层楼梯间墙27-30/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.5m



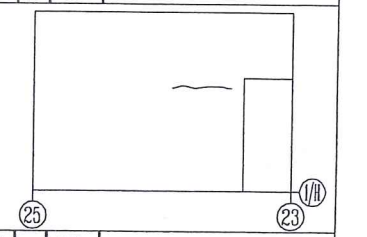
编号	51	调查情况	19层楼梯间墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=0.5m



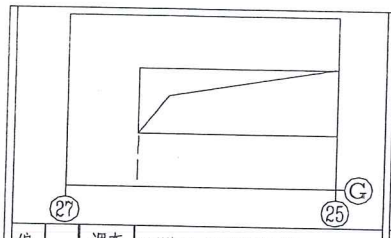
编号	52	调查情况	19层墙25-23/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.1m



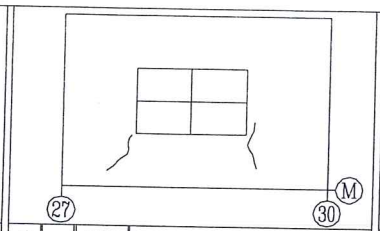
编号	53	调查情况	19-18层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.5m



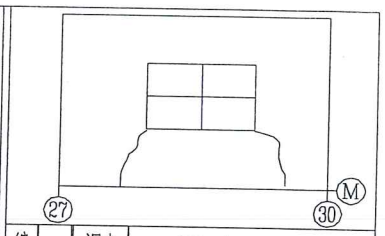
编号	54	调查情况	18层楼梯间墙25-23/(1/H)轴墙面裂缝 Wmax=0.1mm，L=1.0m



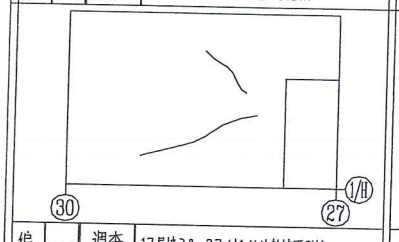
编号	55	调查情况	18层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=0.5m



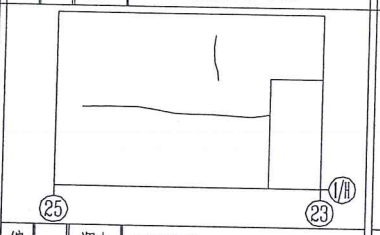
编号	56	调查情况	19-18层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.4m



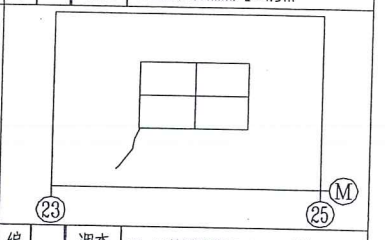
编号	57	调查情况	18-17层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.5m



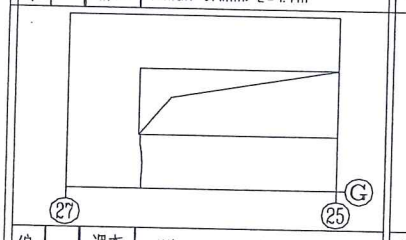
编号	58	调查情况	17层墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.7m



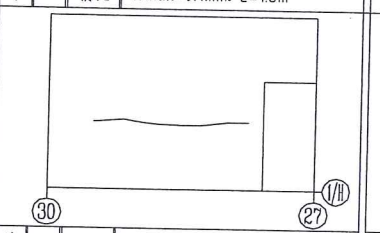
编号	59	调查情况	17层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=1.6m



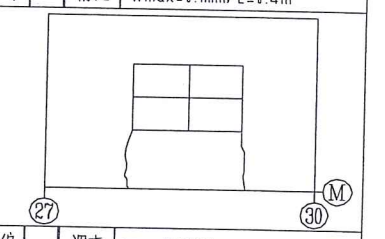
编号	60	调查情况	17-16层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=0.4m



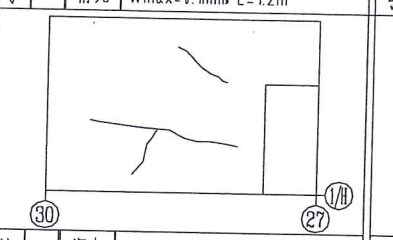
编号	61	调查情况	16层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.2m



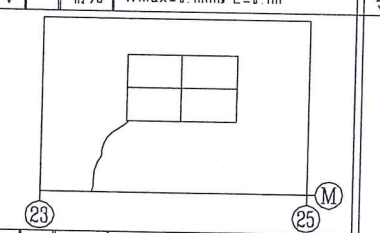
编号	62	调查情况	16层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.1m



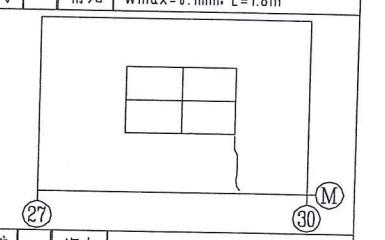
编号	63	调查情况	16-15层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



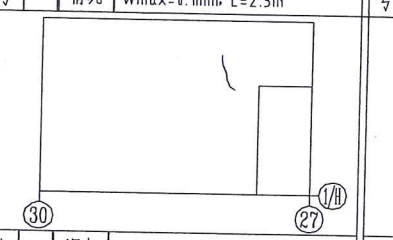
编号	64	调查情况	15层墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=2.3m



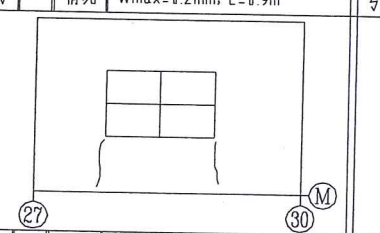
编号	65	调查情况	16-15层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.2mm，L=0.9m



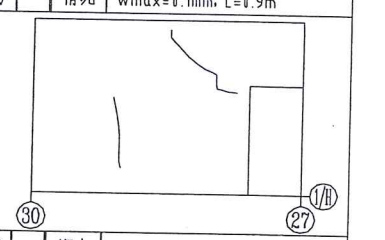
编号	66	调查情况	15-14层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=0.9m



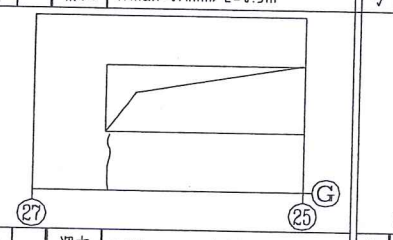
编号	67	调查情况	14层墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.5m



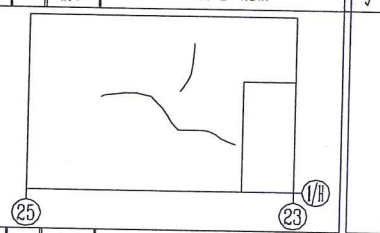
编号	68	调查情况	14层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



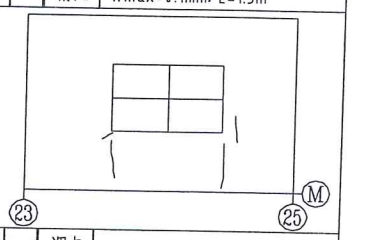
编号	69	调查情况	13层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.5m



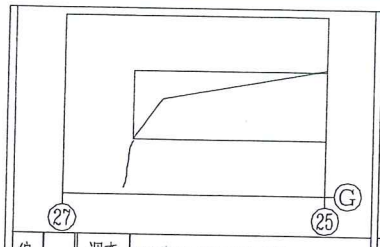
编号	70	调查情况	13层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.2m



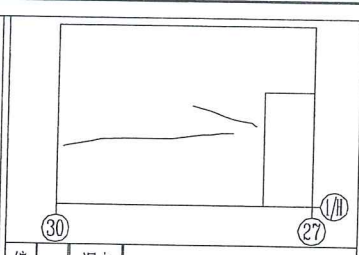
编号	71	调查情况	13层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=1.5m



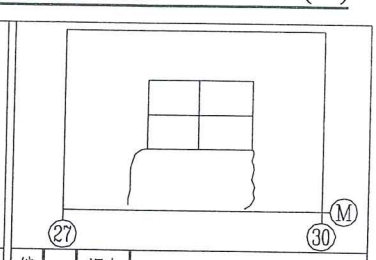
编号	72	调查情况	13-12层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



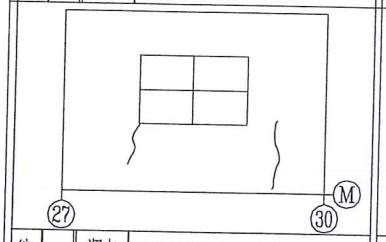
编号	73	调查情况	12层墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=1.2m



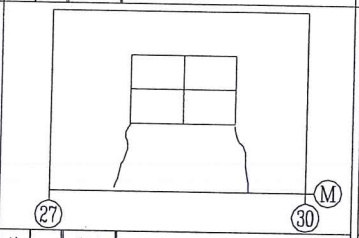
编号	74	调查情况	12层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.8m



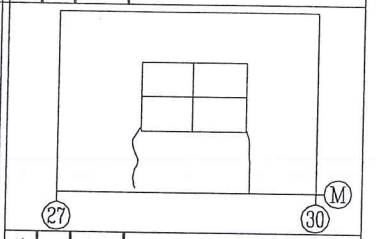
编号	75	调查情况	13-12层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



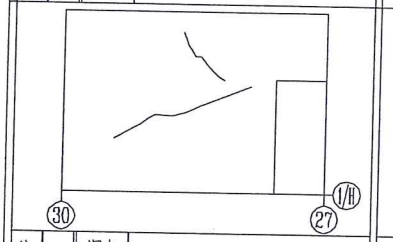
编号	76	调查情况	12-11层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.7m



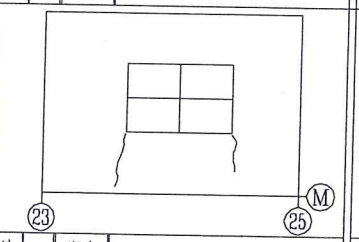
编号	77	调查情况	11-10层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



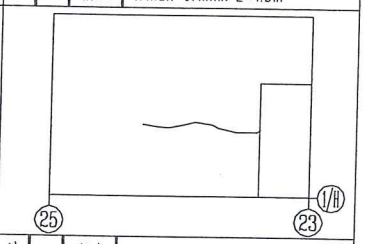
编号	78	调查情况	10-9层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.6m



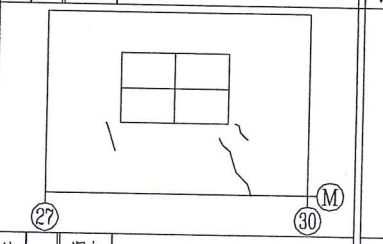
编号	79	调查情况	9层墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=1.3m



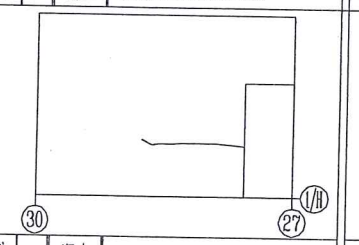
编号	80	调查情况	10-9层楼梯间墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=1.1m



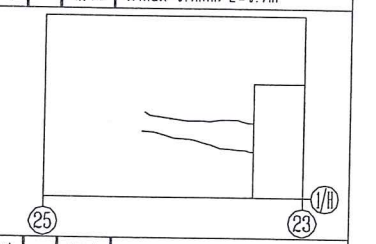
编号	81	调查情况	8层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=0.7m



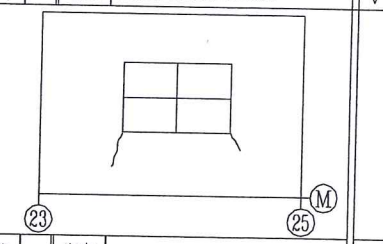
编号	82	调查情况	9-8层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.3m



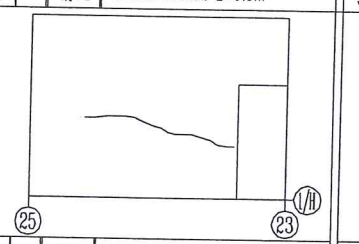
编号	83	调查情况	7层楼梯间墙30-27/1/H轴墙面裂缝 Wmax=0.1mm，L=0.6m



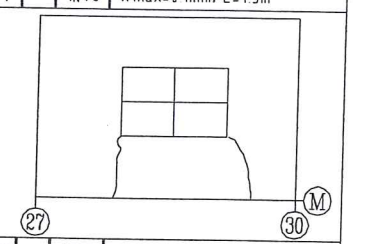
编号	84	调查情况	7层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=1.5m



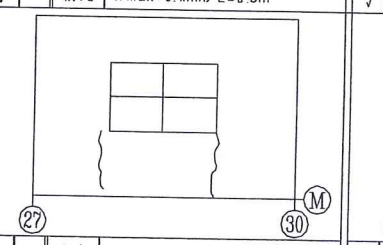
编号	85	调查情况	7-6层墙23-25/M轴墙面裂缝 Wmax=0.1mm，L=0.6m



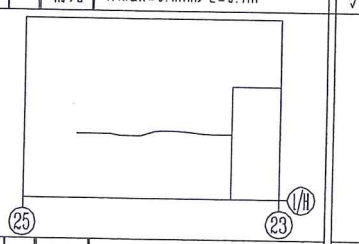
编号	86	调查情况	6层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=0.7m



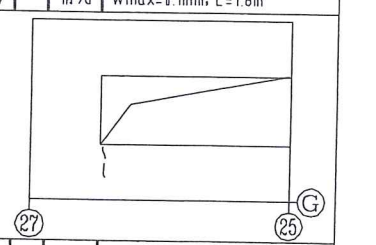
编号	87	调查情况	7-6层楼梯间墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.8m



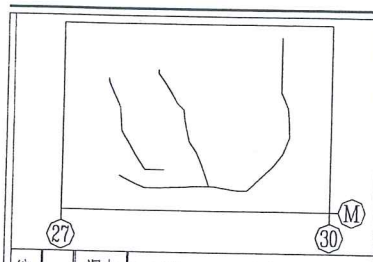
编号	88	调查情况	6-5层墙27-30/M轴墙面裂缝 Wmax=0.1mm，L=1.7m



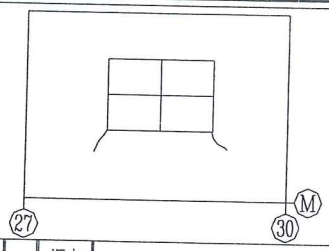
编号	89	调查情况	5层楼梯间墙25-23/1/H轴墙面裂缝 Wmax=0.1mm，L=0.9m



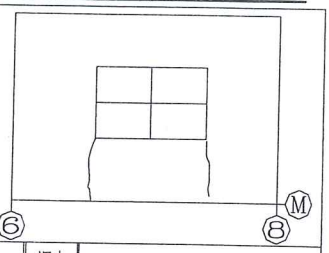
编号	90	调查情况	4层楼梯间墙27-25/G轴墙面裂缝 Wmax=0.1mm，L=0.3m



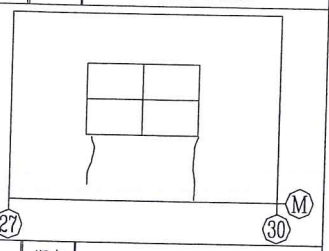
编号	91	调查情况	5-4层墙27-30/M轴墙面裂缝
			Wmax=0.2mm，L=5.5m



编号	92	调查情况	4-3层楼梯间墙27-30/M轴墙面裂缝
			Wmax=0.1mm，L=0.3m

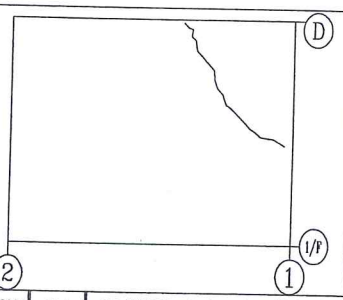


编号	93	调查情况	27-26层楼梯间墙6-8/M轴墙面裂缝
			Wmax=0.1mm，L=1.8m

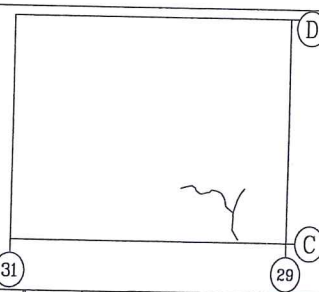


编号	94	调查情况	3-2层墙27-30/M轴墙面裂缝
			Wmax=0.2mm，L=1.5m

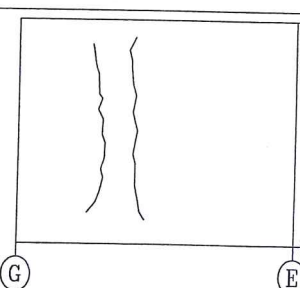
表3　各层楼板裂缝情况



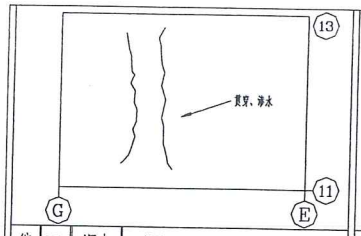
编号	2801	调查情况	28层板面2-1/(1/F)-D轴板面裂缝
	1		Wmax=0.1mm，L=1.4m



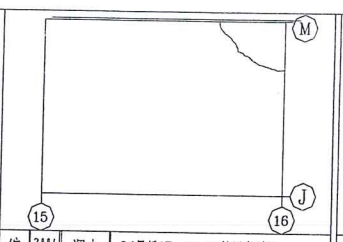
编号	2707	调查情况	27层板31-29/C-D轴板面裂缝
	2		Wmax=0.2mm，L=1.1m



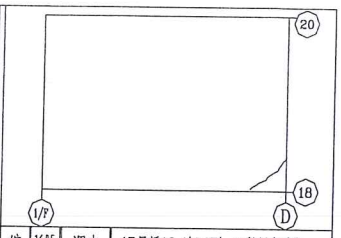
编号	2204	调查情况	22层板11-13/G-E轴板面裂缝
	3		Wmax=0.1mm，L=5.9m



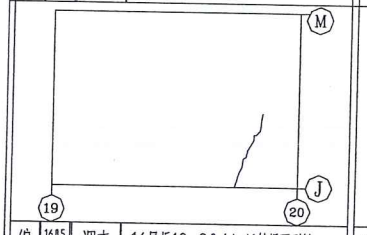
编号	2204	调查情况	23层板11-13/G-E轴板底裂缝
	4		Wmax=0.1mm，L=5.9m



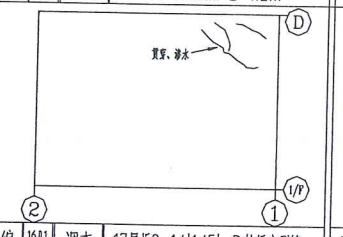
编号	2004	调查情况	21层板17-15/D轴板底裂缝
	5		Wmax=0.1mm，L=1.2m



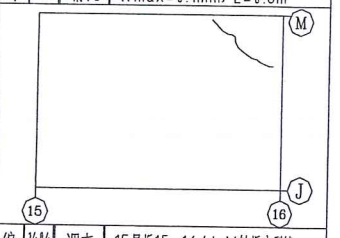
编号	1605	调查情况	17层板18/11/F1-D轴板底裂缝
	6		Wmax=0.1mm，L=0.6m



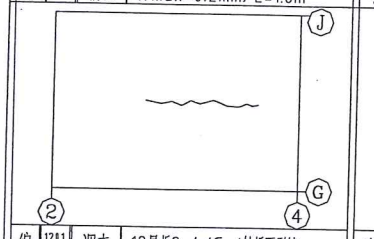
编号	1605	调查情况	16层板19-20/J-K轴板面裂缝
	7		Wmax=0.2mm，L=1.6m



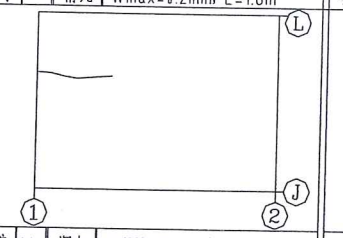
编号	1601	调查情况	17层板2-1/11/F1-D轴板底裂缝
	8		Wmax=0.2mm，L=1.6m



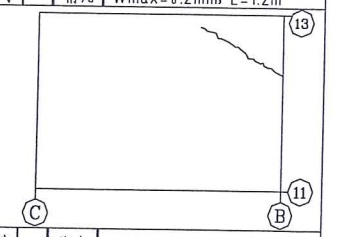
编号	1404	调查情况	15层板15-16/J-M轴板底裂缝
	9		Wmax=0.2mm，L=1.2m



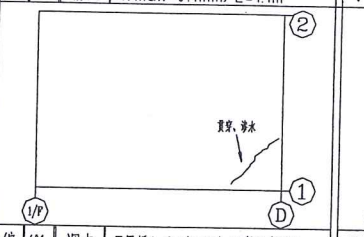
编号	1201	调查情况	12层板2-4/G-J轴板面裂缝
	10		Wmax=0.1mm，L=1.1m



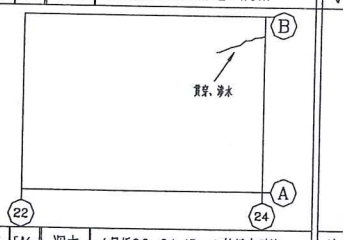
编号	1101	调查情况	12层板1-2/L-J轴板底裂缝
	11		Wmax=0.3mm，L=1.0m



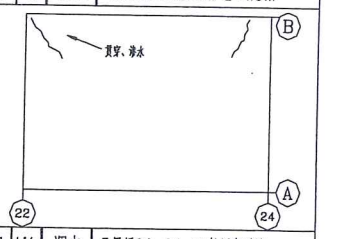
编号	1003	调查情况	10层板11-13/C-B轴板面裂缝
	12		Wmax=0.2mm，L=1.6m



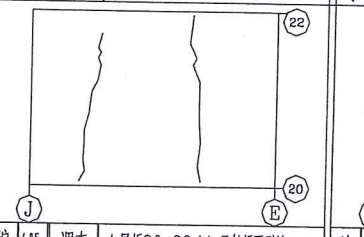
编号	601	调查情况	7层板1-2/11/F1-D轴板底裂缝
	13		Wmax=0.1mm，L=0.5m



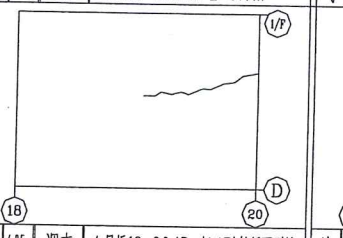
编号	516	调查情况	6层板22-24/B-A轴板底裂缝
	14		Wmax=0.1mm，L=0.7m



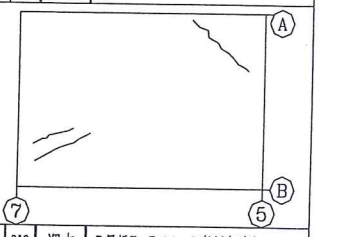
编号	416	调查情况	5层板22-24/A轴板底裂缝
	15		Wmax=0.1mm，L=1.5m



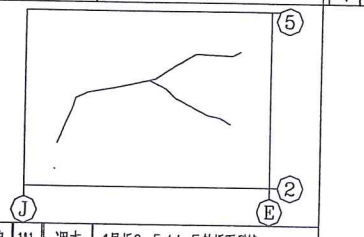
编号	405	调查情况	4层板20-22/J-E轴板面裂缝
	16		已修复



编号	405	调查情况	4层板18-20/D-11/F1轴板面裂缝
	17		已修复



编号	212	调查情况	3层板7-5/A-B轴板底裂缝
	18		已修复



编号	111	调查情况	1层板2-5/J-E轴板面裂缝
	19		Wmax=0.1mm，L=5.7m

注：未注明缝宽的为已进行修补。

2、混凝土抗压强度检测

依据《回弹法检测混凝土抗压强度技术规程》JGJ/T23-2011，采用山东省乐陵市制造的 ZC3A 型混凝土回弹仪对嘉宇西苑 3#栋住宅楼混凝土构件检测其强度，结果见表 4（JGJ/T23-2011 中 4.4.1 条规定，检测泵送混凝土强度时，测区应选在混凝土浇筑侧面，故对楼面梁进行回弹检测来作为楼面板混凝土强度结果）。结果表明，抽检部位构件的混凝土强度推定值均满足原设计强度等级要求。

表 4　混凝土强度回弹法检测结果

构件名称	强度平均值（MPa）	强度标准差（MPa）	强度最小值（MPa）	强度推定值（MPa）	设计强度等级
33 层梁(1/29)-31/(1/E)	51.7	1.9	49.5	48.6	C25
23 层梁(1/15)/(1/F)-J	52.1	2.5	48.6	48.0	C25
23 层梁 15-17/(1/F)	43.9	2.0	40.7	40.6	C25
17 层梁(1/1)/(1/F)-G	45.8	1.9	42.2	42.7	C25
17 层梁 18-20/(1/F)	46.2	1.3	43.8	44.1	C25
22 层剪力墙 15-17/D	38.0	1.0	36.6	36.4	C30
22 层剪力墙 13/(2/H)-K	43.5	1.3	42.0	41.4	C30
16 层剪力墙 22/(2/H)-K	46.5	1.9	42.3	43.4	C35
16 层剪力墙 1/D-F	45.8	1.7	43.5	43.0	C35
16 层剪力墙 1/J-L	49.7	2.6	44.7	45.4	C35
12 层剪力墙 2/E-G	50.0	1.1	47.4	48.2	C40
10 层剪力墙 13/B-(1/B)	47.8	2.2	44.2	44.2	C40
10 层剪力墙 11/B-(1/B)	47.5	2.3	43.8	43.7	C40
6 层剪力墙 6/(1/H)-M	52.2	2.4	47.4	48.2	C45

3、钢筋根数、间距及保护层厚度检测结果

采用北京智博联科技有限公司 ZBL-R630 型钢筋位置测定仪对嘉宇西苑 3#栋住宅楼混凝土构件钢筋间距、根数、混凝土保护层厚度进行检测，结果见表 5、表 6。依据《混凝土结构工程施工质量验收规范》GB50204-2015，混凝土保护层厚度的允许偏差，对梁柱类构件为+10mm，-7mm（梁设计保护层厚度为

25mm），对墙板类构件为+8mm，-5mm（剪力墙设计保护层厚度为 15mm），受力钢筋间距允许偏差为±10mm，箍筋间距允许偏差为±20mm。结果表明，抽测部位钢筋根数满足施工质量验收规范要求，钢筋间距存在排布不均现象，但其最大偏差小于《混凝土结构现场检测技术标准》GB/T50784-2013 中 9.2.8 条第 3 条的 1.5 倍设计值的规定；部分剪力墙测区保护层厚度偏厚。

表 5　剪力墙、板钢筋及保护层厚度检测结果

检测部位或构件名称	设计配筋规格	实测钢筋间距（mm）	最外层钢筋实测保护层厚度（mm）					
22 层剪力墙 13/(2/H)-K	竖向钢筋: C8@200 横向钢筋: C8@200	176 176	22	18	24	20	19	21
16 层剪力墙 22/(2/H)-K	竖向钢筋: C8@200 横向钢筋: C8@200	202 163	28	26	30	33	28	32
12 层剪力墙 2/E-G	竖向钢筋: C8@200 横向钢筋: C8@200	168 205	28	26	26	23	21	25
10 层剪力墙 11/B-(1/B)	竖向钢筋: C8@200 横向钢筋: C8@200	168 183	28	29	30	24	28	26
6 层剪力墙 6/(1/H)-M	竖向钢筋: C8@200 横向钢筋: C8@200	161 191	24	25	22	26	27	25
屋面板 29-31/B-D	板底筋 X 向: C8@150 板底筋 Y 向: C8@200	159 163	17	15	15	14	16	16
29 层板 5-7/B-D	板底筋 X 向: C8@150 板底筋 Y 向: C8@200	178 156	20	17	16	15	14	13
29 层板 8-9/D-F	板底筋 X 向: C8@200 板底筋 Y 向: C8@200	204 182	11	10	11	14	12	13
17 层板 18-20/D-(1/F)	板底筋 X 向: C8@200 板底筋 Y 向: C8@200	192 191	17	16	17	15	18	18

表 6　梁钢筋及保护层厚度检测结果

检测部位或构件名称	设计配筋规格	实测主筋根数及箍筋间距（mm）	主筋实测保护层厚度（mm）					
屋面梁 (1/29)-31/(1/E)	纵筋:2C14 箍筋 C6@200	2 194	25	20	\	\	\	\
23 层梁 (1/15)/(1/F)-J	纵筋:3C16 箍筋 C6@200	3 170	20	24	18	\	\	\

23 层梁 15-17/(1/F)	纵筋:2C18 箍筋 C6@200	2 191	18	20	\	\	\	\
17 层梁 (1/1)/(1/F)-G	纵筋:2C16 箍筋 C6@200	2 201	20	17	\	\	\	\
17 层梁 18-20/(1/F)	纵筋:2C18 箍筋 C6@200	2 190	26	30	\	\	\	\

注：上表中梁纵筋均为梁单侧纵筋，主筋保护层厚度设计值为最外层钢筋保护层设计厚度+箍筋直径。

4、楼板厚度检测

采用楼板测厚仪对嘉宇西苑 3#栋住宅楼板构件尺寸进行检测，结果详见表 7。依据《混凝土结构工程施工质量验收规范》GB50204-2015，构件尺寸允许偏差为+10mm，-5mm。结果表明，抽测部位楼板部分板厚偏厚，因楼面板偏厚有利于结构安全，可视为满足施工质量验收规范要求。

表 7　楼板厚度检测结果　单位：mm

构件名称	实测厚度			平均值	设计值	偏差
29 层板 5-7/B-D	128	125	121	125	120	+5
29 层板 8-9/D-F	106	107	95	103	100	+3
12 层板 20-22/E-G	120	128	122	123	120	+3
12 层板 20-21/J-L	112	111	118	114	100	+14
5 层板 22-24/B-D	118	122	115	118	120	-2
5 层板 25-26/D-F	101	112	110	108	100	+8

5、房屋垂直度检测结果

采用全站仪对嘉宇西苑 3#栋住宅楼垂直度进行测量，测量结果见图 2 和表 8 所示（检测值中包含装修误差）。结果表明，房屋主体结构倾斜测量值未超过《建筑地基基础设计规范》GB 50007-2011 允许值要求[0.0025Hg]，房屋四周地面也未发现有沉降裂缝等异常情况。

表 8　垂直度检测结果

测点	偏移量（mm）	测段高度（m）	偏移方向	垂直度偏差（‰）	容许偏差（‰）
①	26	97.0	西	0.27	2.5

	40	97.0	北	0.41	2.5
②	40	97.0	西	0.41	2.5
③	25	97.0	南	0.26	2.5
	25	97.0	西	0.26	2.5

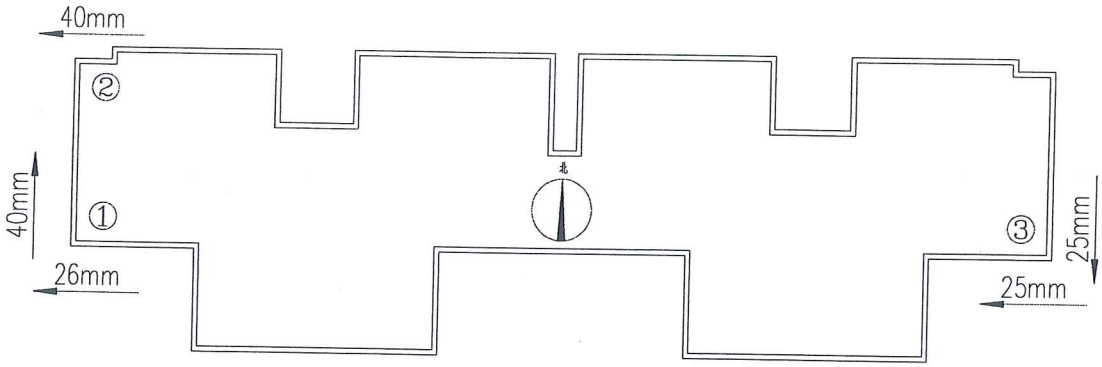


图 2　垂直度测点布置示意

6、砂浆强度检测

采用回弹仪对嘉宇西苑 3#栋住宅楼填充墙砂浆强度进行现场抽样检测。依照《砌体工程现场检测技术标准》GB/T50315-2011 有关规定，在被检测的构件上布置了一定数量的回弹测区。砂浆强度推定值见表 9。结果表明：被抽测部位砂浆强度推定值在 6.3~6.9MPa 之间，满足原设计砂浆强度等级 M5.0 的要求。

表 9　砂浆回弹法检测结果

构件名称	碳化深度（mm）	平均回弹值	强度推定值（MPa）
32 层墙(1/29)-30/(1/E)	2.0	23.1	6.8
32 层墙 26-29/C	2.0	22.7	6.5
32 层墙 26/B-(1/B)	2.0	23.2	6.8
22 层墙 14/K-M	2.0	22.7	6.4
22 层墙 12-13/K	2.0	23.2	6.8
22 层墙 15-17/(1/F)	2.0	23.2	6.9
22 层墙 15-16/M	2.0	22.7	6.4
22 层墙(1/15)/(1/F)-J	2.0	22.8	6.5
16 层墙 22-23/K	2.0	22.6	6.3
16 层墙 18-20/(1/F)	2.0	22.8	6.5

16 层墙 1-2/D	2.0	22.5	6.3
16 层墙 1-2/L	2.0	22.8	6.5
12 层墙 4-6/K	2.0	22.6	6.4
10 层墙 13/B-D	2.0	23.3	6.9
6 层墙 4-6/K	2.0	22.9	6.6
4 层墙 22/(1/B)-D	2.0	22.6	6.4

7、粉刷层厚度检测

采用游标卡尺对嘉宇西苑 3#栋住宅楼墙体粉刷层厚度进行检测。结果见表 10。结果表明，粉刷层平均厚度在 14.5mm~27.1mm 之间。

表 10　粉刷层厚度检测结果

构件名称	实测厚度（mm）			平均厚度（mm）
32 层墙(1/29)-30/(1/E)	14.4	14.0	15	14.5
32 层墙 26-29/C	17.2	15.8	20	17.7
32 层墙 26/B-(1/B)	17.6	17.6	18	17.7
22 层墙 14/K-M	18.6	22.8	20.2	20.5
22 层墙 12-13/K	25.2	21.2	21	22.5
22 层墙 15-16/J	18.0	17.5	16	17.2
22 层墙 15-17/(1/F)	22.0	18.0	27	22.3
22 层墙 15-16/M	26.8	24.6	19	23.5
22 层墙 15-17/D	24.0	18.8	20.2	21
22 层墙(1/15)/(1/F)-J	22.2	19.8	20	20.7
16 层墙 22-23/K	21.2	14	17	17.4
16 层墙 18-20/(1/F)	25.6	20.2	23.4	23.1
16 层墙 1-2/D	21	18.8	23.8	21.2
16 层墙 1-2/L	17.5	20.5	21.5	19.8
12 层墙 4-6/K	19.8	11.0	19.5	16.8
10 层墙 13/B-D	23.0	22.0	28.4	24.5
6 层墙 4-6/K	30	26	25.2	27.1

4 层墙 22/(1/B)-D	15	20	16	17

8、砂浆灰缝厚度检测

采用游标卡尺对嘉宇西苑 3#栋住宅楼填充墙砂浆灰缝厚度进行检测。结果见表 11。结果表明，水平灰缝厚度在 13.1mm~24.9mm 之间，竖向灰缝厚度在 13.3mm~34.4mm 之间，依据《砌体结构工程施工质量验收规范》GB50203-2011 规定：砌体的水平灰缝厚度和竖向灰缝厚度宜为 10mm，但不应小于 8mm，也不应大于 12mm。故抽测部位填充墙灰缝厚度部分偏厚。

表 11　灰缝厚度检测结果

构件名称	实测厚度（mm）				平均厚度（mm）
32 层墙(1/29)-30/(1/E)	水平灰缝	21.0	23.0	21.0	21.7
	竖向灰缝	/	/	/	/
32 层墙 26-29/C	水平灰缝	15.0	15.2	16.0	15.4
	竖向灰缝	33.0	37.0	33.2	34.4
32 层墙 26/B-(1/B)	水平灰缝	14.0	13.0	16.0	14.3
	竖向灰缝	14.2	13.2	12.4	13.3
22 层墙 14/K-M	水平灰缝	16.2	17.0	18.0	17.1
	竖向灰缝	10.5	12.0	10.2	10.9
22 层墙 12-13/K	水平灰缝	14.2	14.6	15.0	14.6
	竖向灰缝	20.0	21.0	21.0	20.7
22 层墙 15-17/(1/F)	水平灰缝	26.0	29.6	19.0	24.9
	竖向灰缝	/	/	/	/
22 层墙 15-16/M	水平灰缝	17.2	15.0	16.0	16.1
	竖向灰缝	12.6	20.6	19.8	17.7
22 层墙 15-17/D	水平灰缝	/	/	/	/
	竖向灰缝	24.0	25.0	23.8	24.3
22 层墙(1/15)/(1/F)-J	水平灰缝	11.0	14.4	14.0	13.1
	竖向灰缝	/	/	/	/
16 层墙 22-23/K	水平灰缝	16.0	16.2	18.0	16.7
	竖向灰缝	25.8	20.2	20.2	22.1
16 层墙 18-20/(1/F)	水平灰缝	18.4	20.0	18.5	19.0
	竖向灰缝	/	/	/	/

16 层墙 1-2/D	水平灰缝	10.4	11.0	10.0	14.5
	竖向灰缝	20.0	21.0	19.8	20.3
16 层墙 1-2/L	水平灰缝	17.2	20.4	28.2	21.9
	竖向灰缝	19.0	18.5	20.2	19.2
12 层墙 4-6/K	水平灰缝	16.5	16.0	17.2	16.6
	竖向灰缝	16.3	12.5	13.8	14.2
10 层墙 13/B-D	水平灰缝	14.0	14.0	14.2	14.1
	竖向灰缝	16.0	16.4	18.0	16.8

9、主楼主体沉降观测结果

根据委托方提供的由湖南中科工程检测有限公司出具的《嘉宇西苑 3#栋主体沉降观测报告》(报告编号 15C-180010、15C-180026、15C-190005)可知：至 2019 年 7 月 28 日止，嘉宇西苑 3#栋各监测点累计沉降量在均在允许值范围内，总体来讲，嘉宇西苑 3#栋的沉降量满足设计及规范要求。依据《建筑变形测量规范》（JGJ8-2016）5.5.5.4 条分析，嘉宇西苑 3#栋在现有荷载条件下主体沉降趋于稳定，不影响结构的安全使用。

10、桩基础检测结果

根据委托单位提供的由湖南省宏尚检测技术股份有限公司出具的《嘉宇西苑一期 3#栋单桩竖向抗压静载试验报告》(报告编号 HNHS-ZJJZ 20160050)可知：所测试桩极限承载力为 5000kN，单桩竖向抗压承载力特征值满足 2500kN 的设计要求；

根据委托单位提供的由湖南省宏尚检测技术股份有限公司出具的《嘉宇西苑一期 3#栋基桩低应变检测报告》(报告编号 HNHS-DYB20160126)可知：所检测 65 根桩中评定为 I 类桩共 65 根，占总桩数的 100.0%。

11、裂缝原因分析

根据现场检测结果、裂缝分布特征等情况，墙体、楼板裂缝原因分析如下：

（1）墙体水平及竖向裂缝

由于填充墙砌块、墙面抹灰砂浆、混凝土的线胀系数相差大，当环境温度发生变化时，三者的变形不一致，彼此间相互约束而产生约束应力，当抹灰砂浆产

生的约束应力超过其抗拉强度时，在混凝土梁、剪力墙与填充墙界面产生温度收缩或胀缩水平裂缝，这是水平及竖向裂缝产生的主要原因；其次也与墙体粉刷层和砂浆灰缝偏厚易开裂有关；

（2）填充墙斜向裂缝

由于温度升高时，混凝土楼（屋）面板出现热胀变形，对下部填充墙产生水平推力，当推力超过砌体砂浆强度时，即出现裂缝；

（3）其它墙体裂缝

门窗洞口转角是应力集中的部位，当温度变化时，引起材料的冷缩，在洞口阴角处产生较大的应力集中而使墙体在该处出现裂缝；

总之，嘉宇西苑 3#栋住宅楼墙体裂缝主要是因为温差应力、材料收缩变形引起在薄弱部位（混凝土剪力墙与填充墙交界面、混凝土梁与填充墙交界面、门窗洞口转角等部位）开裂。上述裂缝表现为建筑工程的质量通病，这种变形裂缝的特点是，裂缝一旦出现，其变形引起的约束应力部分随之消失。由于房屋结构为现浇钢筋混凝土剪力墙结构，填充墙只起围护和分隔作用，故填充墙体裂缝不会危及主体结构安全，但影响美观，应对其进行处理。

（4）楼板切角裂缝

主要原因是现浇板在温度收缩变形作用下，钢筋混凝土楼面其中心部位为不动点，如楼板受到约束力，该处的法向拉应力最大。楼面板四周受砖墙和梁的双向体系约束，则该出变形最大，由双向最大约束剪应力形成与梁边缘约 45° 的约束主拉应力，当该主拉应力（即温度应力）大于混凝土实际抗拉强度时，即出现切角裂缝；

（5）楼板跨中裂缝

混凝土具有热胀冷缩的性质，当外部环境或结构内部温度发生变化时，混凝土将发生变形，本工程楼面板变形收到周边梁、墙约束，在结构内将产生应力，当应力超过混凝土抗拉强度时即产生温度裂缝。该房屋板面配筋为分离式配筋，板面负筋未贯通，配筋率小的跨中部位为薄弱部位，易产生裂缝，该裂缝属于温差应力、材料收缩引起的变形裂缝；

总之，楼板切角及跨中裂缝属材料收缩和温差应力所致的变形裂缝，裂缝影响了楼板的耐久性，应对其进行加固处理。

四、结论及建议

（一）结论

根据现场抽检结果、委托方提供资料，可得出如下结论：

1、长沙市望城区嘉宇西苑 3#栋住宅楼抽检部位剪力墙、梁构件混凝土强度均满足原设计强度等级要求；

2、长沙市望城区嘉宇西苑 3#栋住宅楼混凝土构件抽测部位钢筋根数满足施工质量验收规范要求，钢筋间距存在排布不均现象，但其最大偏差小于《混凝土结构现场检测技术标准》GB/T50784-2013 中 9.2.8 条第 3 条的 1.5 倍设计值的规定；部分剪力墙测区保护层厚度偏厚；

3、长沙市望城区嘉宇西苑 3#栋住宅楼主体结构倾斜测量值未超过《建筑地基基础设计规范》GB 50007-2011 允许值要求[0.0025Hg]，房屋四周地面也未发现有沉降裂缝等异常情况；

4、长沙市望城区嘉宇西苑 3#栋住宅楼抽检部位填充墙砂浆强度推定值均满足原设计强度等级要求；

5、长沙市望城区嘉宇西苑 3#栋住宅楼抽测部位板构件尺寸均满足施工质量验收规范要求；

6、长沙市望城区嘉宇西苑 3#栋住宅楼墙体裂缝主要是因为温差应力、材料收缩变形引起在薄弱部位（混凝土剪力墙与填充墙界面、混凝土梁与填充墙界面、门窗洞口转角等部位）开裂，填充墙只起围护和分隔作用，故填充墙体裂缝不会危及主体结构安全；楼板切角及跨中裂缝属材料收缩和温差应力所致的变形裂缝；

7、长沙市望城区嘉宇西苑 3#栋住宅楼现有墙体、楼板裂缝不会降低房屋原有的结构安全等级，但影响美观、耐久性，应进行处理。

（二）建议

根据上述检测结论，结合现场实际情况，依据国家、行业相关规范、规程，特提出如下建议处理方案：

1、填充墙与混凝土梁、墙交接处裂缝；填充墙墙体中间裂缝：

将墙体裂缝两侧各不少于 150mm 粉刷层凿除至砌体基层面，用抗裂砂浆将凿出砌体粗糙面打底填充压实，沿裂缝长度方向满布Φ0.8 钢丝网（网眼尺寸不大于 10×10），然后粉同原粉刷层厚抗裂（膨胀）砂浆进行处理，再用弹性腻子罩面满挂网格布两边搭到腻子层 5cm，最后两遍内墙腻子打磨上漆。对于梁底与填充墙不密实处，应先灌实。

2、楼板裂缝：

楼板裂缝采用专用结构灌注胶和封闭胶按照《混凝土结构加固设计规范》GB 50367-2013 要求进行灌注和封闭进行补强处理。

湖南湖大土木建筑工程检测有限公司

2019 年 8 月 5 日