



## INSPECTION REPORT

The undersigned BV surveyors, Jiening Wang acting within the scope of Bureau Veritas General Conditions of Service, were requested by Shanghai Star House Co., Ltd. to witness the test carried out in the manufacturer located in Nanhui, Shanghai, China. Reported the result as follows:

### DESCRIPTION:

Model of house container: SH101

Component of test: Single frame structure of end wall (please refer attached drawing)

### INSPECTION PERSONNEL:

The test witnessed by Jiening Wang from Bureau Veritas & Mr. Parkman Pan from the manufacturer on Apr 8, 2010.

### TEST METHODS:

1. One single end wall frame will be placed on 4 level pads on each corner.
2. A load of 280 Kg was evenly distributed in 1,000 MM x 1,000 MM in the center of the frame structure. Measure the deformation after 5 minutes of loading and recording.
3. Increased the load to 420 Kg even distributed. Measure the deformation after 5 minutes of loading and recording.
4. Remove the load. Measured the deformation & recording.
5. A load of 572 Kg was evenly distributed in 1,000 MM x 1,000 MM in the center of the frame structure, check the condition after 5 minutes of loading,

### DEFORMATION BEFORE, DURING & AFTER TEST

Check points	1	2	3	4	5
Before test	0	0	0	0	0
280 Kg	0	0	3	0	24
420 Kg	1	1	4	2	37
Permanent set after test	1	0	2	0	4

After removal of load 420 Kg, checked the structure, no obvious damages was noted. The end wall was repeated test with a load of 572 Kg & during 5 minutes, then removed load, no obvious damages was found.

### PHOTOS:



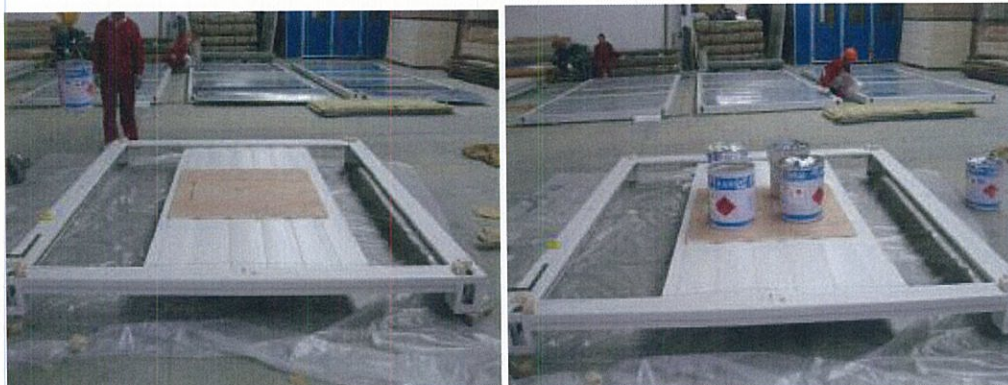
**BUREAU  
VERITAS**



Weight checking (partial photos)



Weight checking (partial photos)



End wall before testing & check points

Testing during load of 280 Kg





**BUREAU  
VERITAS**



Testing during load of 420 Kg.



Testing during load of 572 Kg



End wall after testing

#### ATTACHMENT

1. Check points of end wall  
End wall tested: Points 1- 5
2. Drawings of components.  
SH101-5400000  
SH101-0400000  
SH101-0300020  
SH101-0200009
3. Calculation of equivalent wind speed supplied by manufacturer.



Attending Surveyor,  
Wang Jining

## Calculation of equivalent wind speed

The wind pressure can be approximated by:

$$\text{Pressure} = 1/2 \times (\text{density of air}) \times (\text{wind speed})^2 \times (\text{shape factor})$$

$$\text{Wind speed} = \sqrt{2 \times (\text{pressure}) / (\text{density of air}) \times (\text{shape factor})}$$

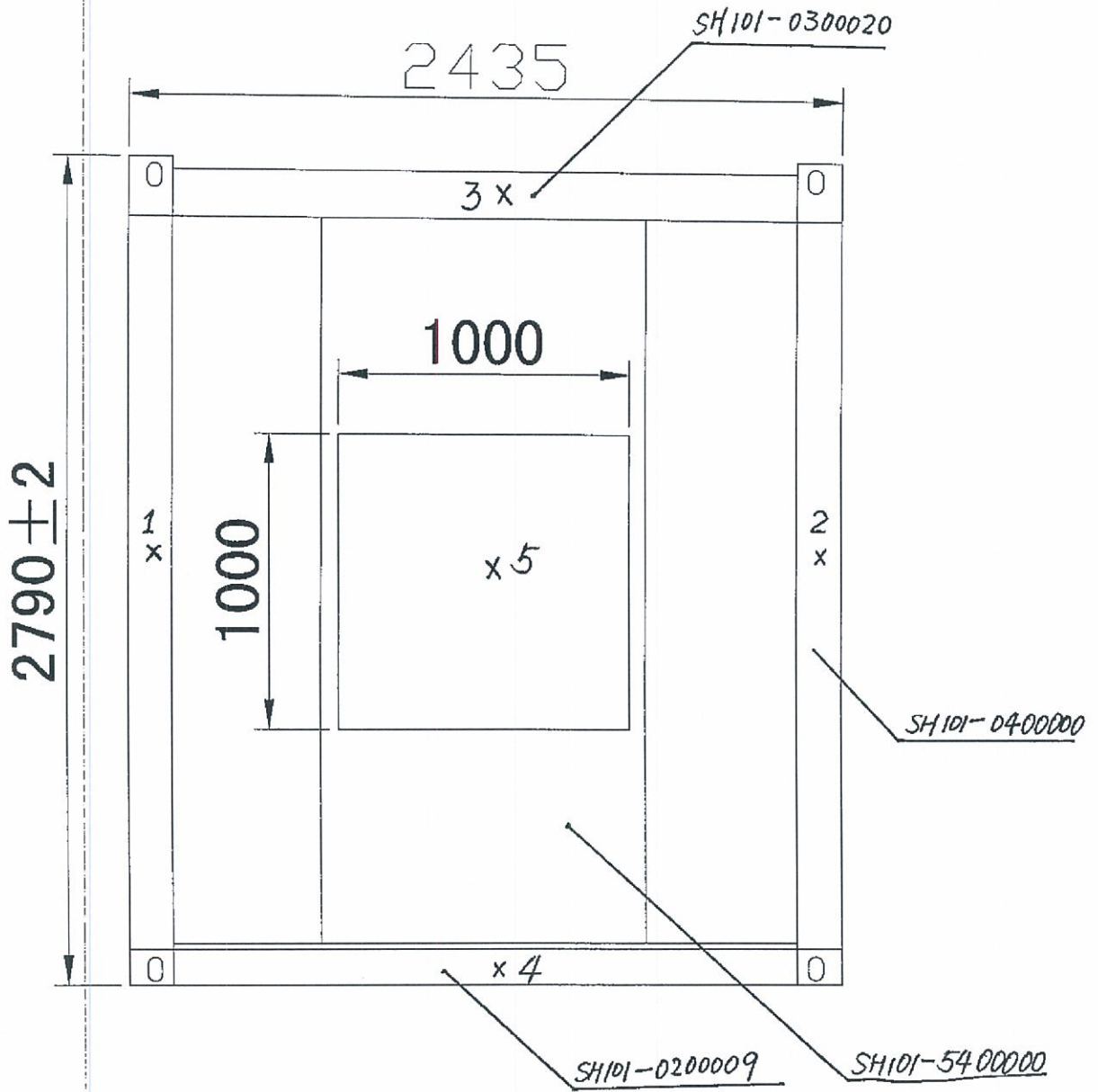
- The density of air is about 1.25 Kg/m<sup>3</sup>
- The shape factor  $\mu_z$  (drag coefficient) depends on the shape of the body. It has order of magnitude 1 & is dimensionless, a standard value is  $\mu_z = 1.17$
- The wind speed must be expressed in m/s. In that case, the pressure has units Kg/m/s<sup>2</sup>, i.e. N/m<sup>2</sup>

So for 280 Kg/m<sup>2</sup> (2746.8 N/m<sup>2</sup>) we have:

$$\text{Wind speed} = \sqrt{2 \times 2746.8 / (1.25 \times 1.17)} = 61 \text{ m/s} = 220 \text{ Km/h}$$

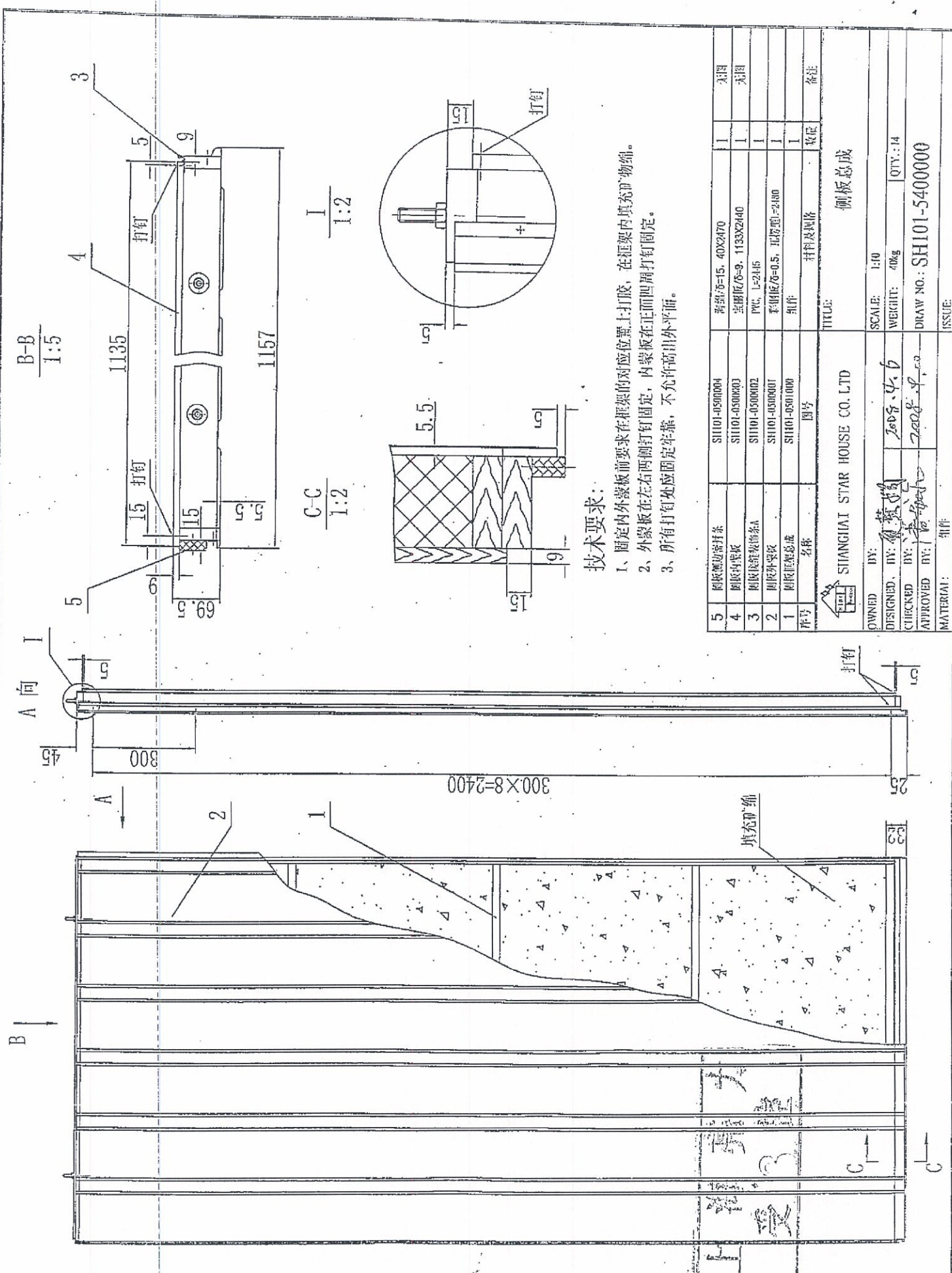
So for 420 Kg/m<sup>2</sup> (4120.2 N/m<sup>2</sup>) we have:

$$\text{Wind speed} = \sqrt{2 \times 4120.2 / (1.25 \times 1.17)} = 75 \text{ m/s} = 270 \text{ Km/h}$$



END WALL TESTED





**技术要求:**

- 1、固定内外蒙板前要求在框架的对应位置上打胶，在框架内填充海绵。
- 2、外蒙板在左右两侧打钉固定，内蒙板在正反面四周打钉固定。
- 3、所有打钉处应固定牢靠，不允许高出外平面。

5	网板边密封条	SH101-0500004	规格: 5=15, 40X2470	1	米图
4	网板内衬板	SH101-0500003	规格: 5=9, 1133X2440	1	米图
3	网板内衬物条	SH101-0500002	规格: L=2445	1	
2	网板外衬板	SH101-0500001	规格: 5=0.5, 比厚: 2440	1	
1	网板总成	SH101-0501000	组作	1	

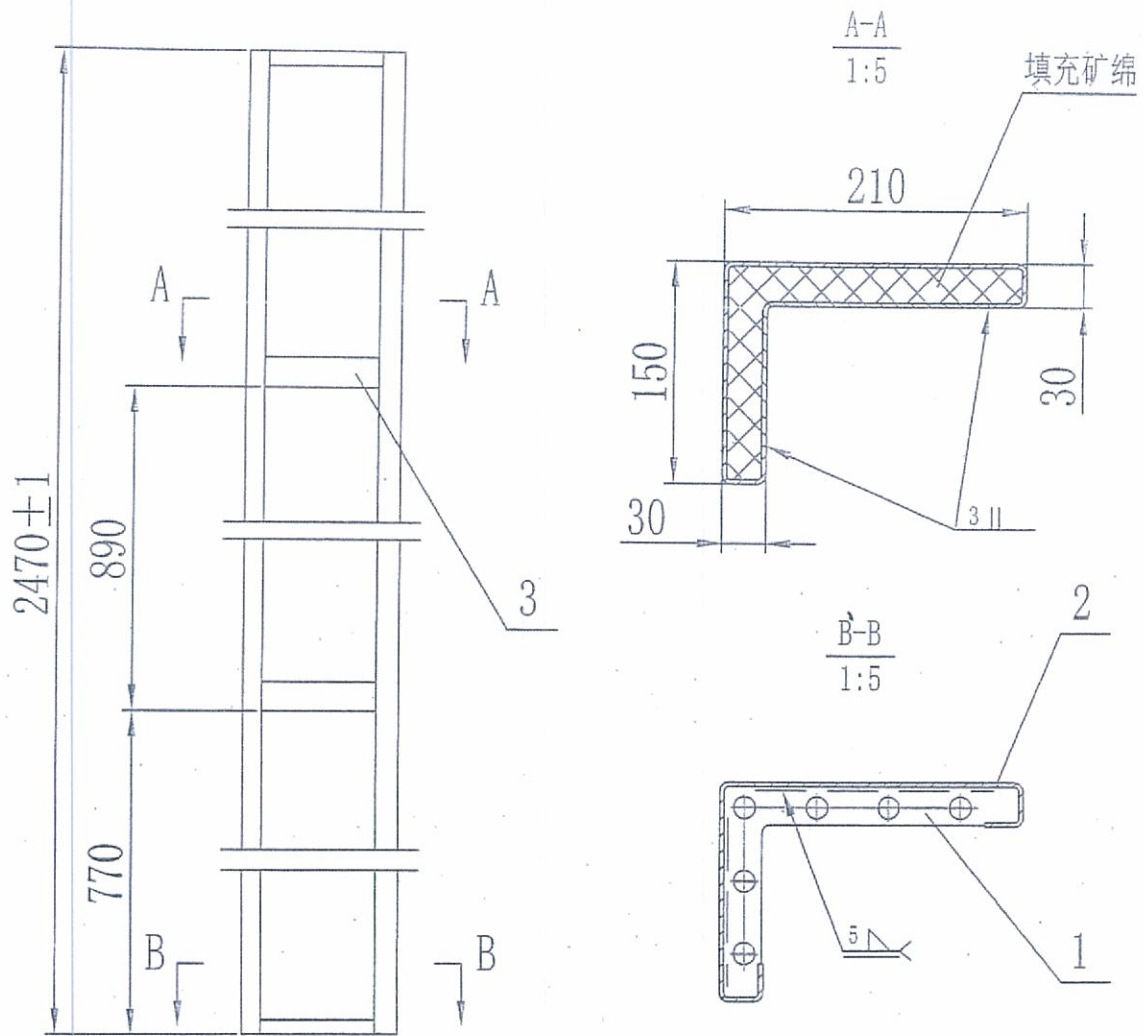
材料规格 数量 备注

OWNED BY: SHANGHAI STAR HOUSE CO. LTD  
 DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]  
 MATERIAL: 组作

SCALE: 1:10  
 WEIGHT: 40kg  
 QTY: 14  
 DRAW NO.: SH101-5400000  
 ISSUE:

TITLE: 侧板总成


SH101-0400000



上海亮力  
受 3 控

技术要求:

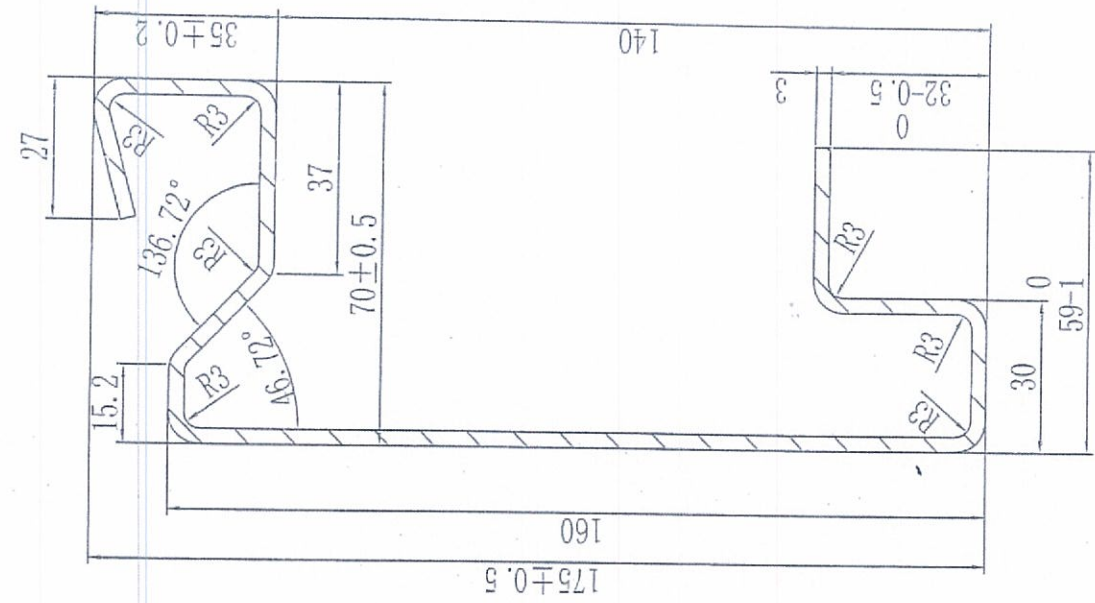
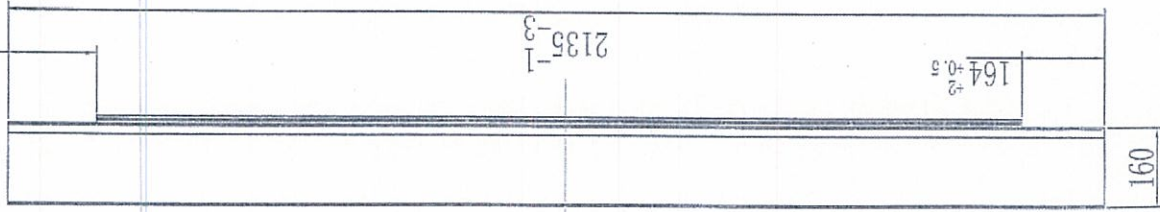
- 1、所有焊缝采用CO2气体保护焊焊接。
- 2、所有焊缝不得有虚焊、漏焊、咬边等缺陷。
- 3、焊后去毛刺，外表面焊缝磨平。
- 4、喷涂：a镀锌10μm，b环氧底漆25μm，c外表面面漆75μm，d内面漆35μm。

3	角柱内衬	SH101-0400003	Q235A/δ=3, 板弯件	2	
2	角柱	SH101-0400002	Q235A/δ=3, 板弯件	1	
1	角柱连接件	SH101-0400001	ZG35	2	
序号	名称	图号	材料及规格	数量	备注
 SHANGHAI STAR HOUSE CO. LTD			TITLE: 角柱总成		
OWNED BY:			SCALE: 1:10		
DESIGNED BY: 黄慧娟		2008.4.6	WEIGHT: 30kg	QTY.: 4	



向

B-B旋转  
1:1



A

B  
↑

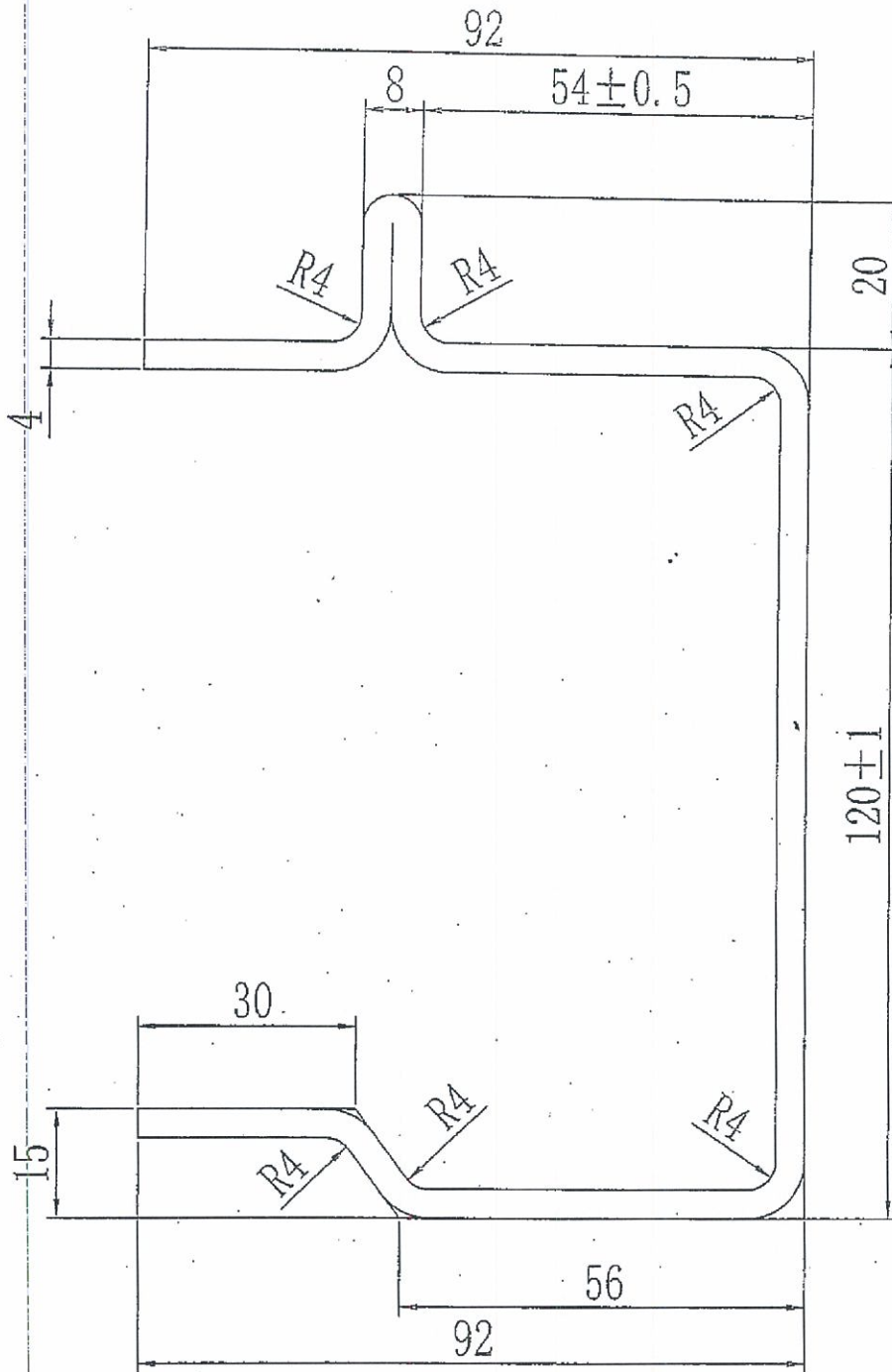
70

上海亮力  
受了控

技术要求:  
1、直角允许误差 $\pm 0.5\text{mm}$ 。  
2、无毛刺。任意1000mm范围内,直线度 $\pm 1\text{mm}$ 。

SHANGHAI STAR HOUSE CO. LTD		TITLE: 顶框短边梁(二)	
OWNED BY:	SCALE: 1:10	DESIGNED BY: 何慧娟	WEIGHT: 17.3kg
DESIGNED BY: 何慧娟	2008.4.6	CHECKED BY: 潘柳林	QTY.: 1
CHECKED BY: 潘柳林	2008.4.6	APPROVED BY:	DRAW NO.: SH101-0300020
MATERIAL: HIKO25A/F1.0			ISSUE:





技术要求:

- 1、直角允许误差 ± 0.5mm。
- 2、无毛刺，任意1000mm范围内，直线度 ± 1mm。

上海亮力  
受 3 控

L=2135<sup>±1</sup>



SHANGHAI STAR HOUSE CO. LTD

TITLE:

底框短边梁

OWNED BY:

SCALE: 1:1

DESIGNED BY:

顾慧娟

2008.4.6

WEIGHT: 22kg

QTY.: 2

CHECKED BY:

李永华

2008.4.10

01101 0000000