## 1. Fireproof series

Fire Glass Model Fire standard		Ei60	Ei120
European Standa rd (Note 1)  En 357: 2004 Glass in the building. Including transparency or half Fire glass components of transparent glass products. Classification of fire resistance		EI60 60 minutes of insulation and fire prevention	EI120 120 minutes insulation and fire prevention

Note 1: There is no independent norm of fire -resistant glass in the European standard. Only the requirements for building components using fire -resistant glass and the following code classification

**R load** supports a 90-minute insulated wall or curtain wall such as REI 90

E Fire-resistant integrity Such as RE120 to reuse 120 minutes of non-insulated wall or curtain wall

**W** heat radiation such as EIW 60 non-reuse 60 minutes heat insulation and fire prevention, heat radiation not more than  $15 \text{kW} / \text{m}^2$  curtain wall or doors and Windows

I heat insulation such as EI 60 non-bearing 60 minutes fire insulation curtain wall

S smoke prevention Such as EIS 60 non-load-bearing 60 minutes heat insulation fire smoke prevention doors and Windows

C automatically close—such as EISC60 non-load-bearing 60 minutes heat insulation fire and smoke and can automatically close the doors and Windows

Fire door combination system Fire standard		Ei60-D1	Ei120-D1
European standard	EN 1634-1 And thunderbolt component and open home fire test examine	E60 For 60 minutes of heat insulation and fire prevention	E120 120 minutes of heat insulation and fire prevention
Singapore SS332 Standard Fire door aid conditions		For 60 minutes of heat insulation and fire prevention	120 minutes of heat insulation and fire prevention
Fire partition system fire-protection standard		Ei60-W1	Ei120−W1
European standard	EN1364-3-2014 Non-recorded wall fire test Part 1 The wall is complete Complete structure of the sister together)	E60 For 60 minutes of heat insulation and fire prevention	Ei120 120 minutes of heat insulation and fire prevention

1. Fire door system: Framework Fire Glass Door Framework Fire Glass Door  2. Fireproof partition wall system: Framework fireproof partition wall Framework fireproof partition wall		Referred 1 hour 2 hours insulation  Referred 1 hour 2 hours insulation	
	放测试图片1	放测试图片2	
	放测试图片3	放测试图片4	

公司地址等

#### Company Profile

#### 1 Overview

The security system is owned by KFORTS, a brand of Guangdong Hawell Security Technology Co., Ltd., which is divided into fire prevention series and anti -theft series.

- a. Fire prevention series developed and developed according to the EU Fire Standards (BS EN1634-1/BS EN1364-3) and Singapore Standard (SS332-2018), which meets the requirements and regulations stipulated in local building fire prevention standards. The fire door combination system and the fireproof partition wall system are suitable for fire prevention equation of extensive buildings.
- b. Anti -theft series is developed and developed according to the EU627/EN1628/EN1629/EN1630/EN356) standard, and passed the requirements and regulations stipulated in the standard.
- 2. Product scope
- I. Fire Fire Series
- a. Fire door combination system, fire prevention time is as long as 1 hour.
- b. Fire door combination system, the fire prevention time is up to 2 hours.
- c. Fire -resistant partition wall system, the fire prevention time is up to 1 hour.
- d. Fire -resistant partition wall system, fire prevention time is 2 hours.
- II anti -theft series
- a. Security window system
- b. Security Gate Combination System
- 3. Comply with laws and regulations
- a. Mechanical strength

FSB/PSB requires that glass can withstand the impact of 600N. I) BS6206 A-Class-Anti-impact.

Article 2208: Resistance crushing

b. Fire requirements

25mm/45mm fire -resistant glass has the insulation performance of stability, integrity and heat -resistant radiation.

It meets the EU fire prevention standards (BS EN1634-1/BS EN1364-3) and Singapore 332: 2018 fire door standard. c. Installation requirements

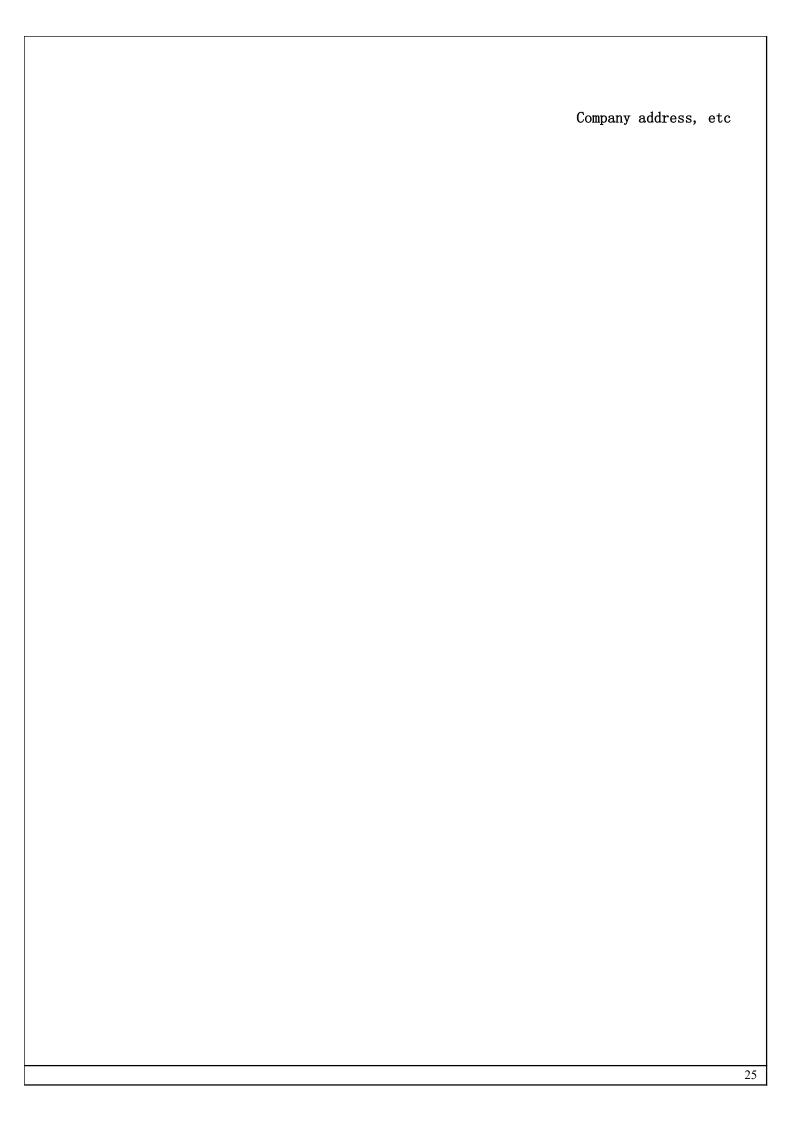
The "Fire Code" stipulates that the appropriateness and acceptability of the fire - resistant glass system should be evaluated on a case to clarify the use of use.

4. Consultant

The system is comprehensive in terms of design, manufacturing and application to meet the design and regulatory requirements.

The main categories of consultants include:

- a. Product approval
- b. Specific application for building composition approval
- c. Statistically qualified certificate
- d. Product technology consultation



product description

#### 1. Product specifications:

In order to ensure the quality and reliability of the product, it is specified by the brand of Guangdong Hwarrior Security Technology Co., Ltd. KFORTS. Existing fire door combination system, fire prevention partition wall system.

- 2. Introduction:
- a. Fire door combination system consists of a glass fire door and a glass fire partition wall system.
- b. Firewater wall system consists of fire -resistant glass partition wall

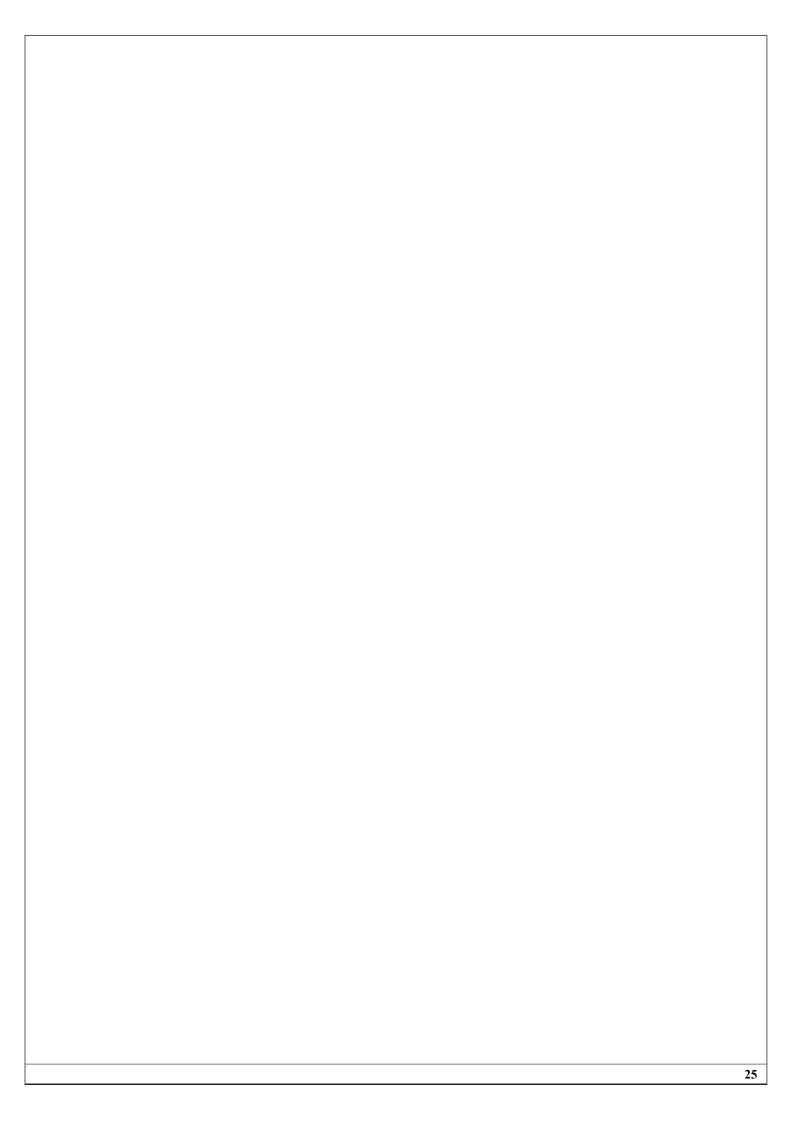
The above system meets the refractory requirements of BS476 PT 22-23 in terms of stability, integrity and insulation. From 1 hour to 2 hours. The system is combined with tempered safety glass+fire prevention materials, which aims to prevent cutting damage and forbidden to enter.

#### 3. Fire protection door combination system

grade system	grade system	grade		grade system	grade system	grade system
		system	system			
face- plate	face-plate	face- plate	face-plate	face-plate	face-plate	face- plate
System	System	System	System	System	System	System
size	size	size	size	size	size	size

#### 4. Fire protection partition wall system

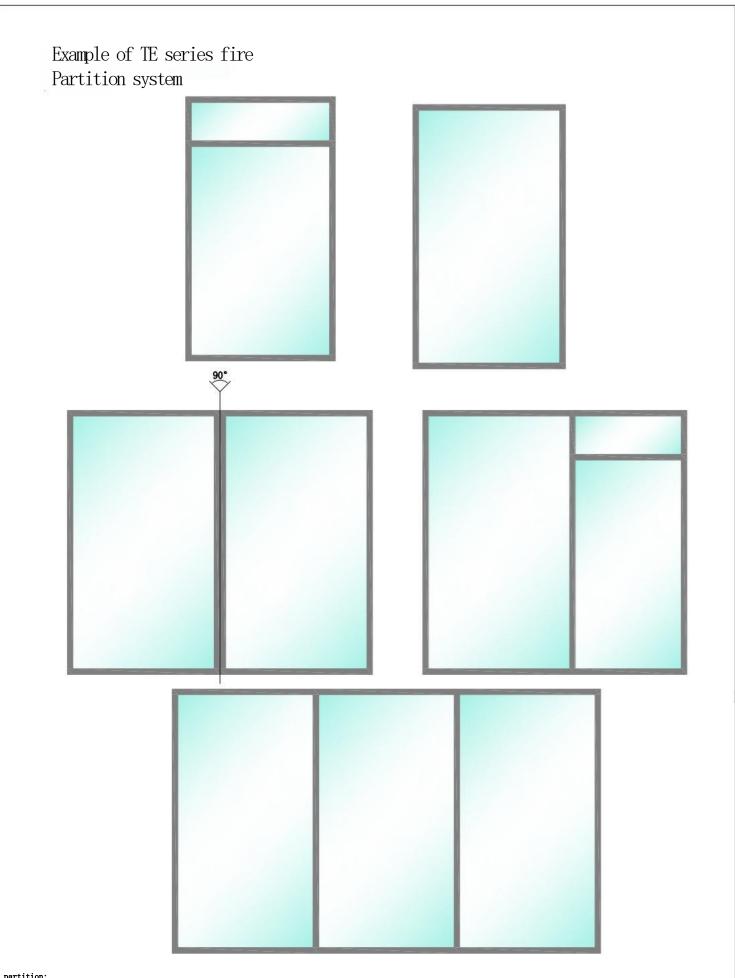
grade system	grade system	grade		grade system	grade system	grade system
		system	system			
face- plate	face-plate	face- plate	face-plate	face-plate	face-plate	face- plate
System	System	System	System	System	System	System



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5. Glass
a. Fire prevention series of tempered glass + fire prevention material bonding, with
fire prevention, high permeability, heat insulation, radiation prevention and other
characteristics, its optical clarity, transparency and float glass equivalent.
b. The glass has been tested by mechanical impact BS6206, AS2208, and BS5544. The test
proved that the glass did not penetrate and did not break. It belongs to a kind of
laminated glass in the safety glass, which will not be easily cut when broken.
The glass used can be processed on the color, texture, or sandblasting.
c. The glass passes the BS EN 12600:2002 impact test, which will ensure that the
multiple layers do not form bubbles when affected by solar radiation and severe
weather.
6. Framework
The frame used is a non-load-bearing steel and aluminum combined frame. It is composed of
steel core, fireproof material, aluminum alloy decorative surface package. All of the frame
Have all been tested: a. The fire door combination system has passed the eu BS EN1634
-1 and Singapore SS332 standards; b. The fire partition wall system has passed the EU
BS EN1364-3 standard.
7. Material
I, fire glass
II, frame
composition:
A, steel
Β,
insulation
material
aluminum
alloy
d, other
8. Laws
and
regulation
s I. Fire
safety
a. BS476 PT22-23 is used for stability, integrity and green greening
b.
Singapore
Standard
332:2018 fire doors.c.BS
EN 12600:2002 Impact test.d.
FSB / PSB certification and
listing.
II, mechanical test
a. BS6206600N mechanical impact resistance grade is A
b. AS 2208-Crurushing resistance.
C. BS5544:1978 Specification for anti-stick glass with boiling test.
III, hose flow test
The glass shall be able to withstand the heat shock through the hose flow test. Water
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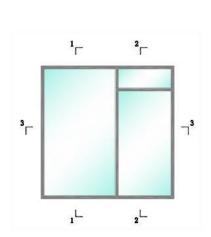
pressure of 45 lbs / q and speed of 1 square foot every 3 seconds. Do not break orpenetrate the

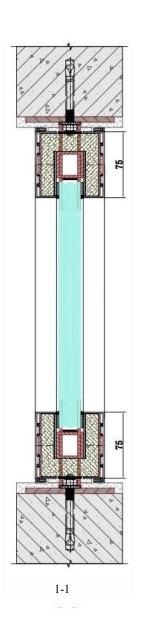
phenomenon.	
9. Consultants	
We will provide advice and certificates for:	
a.work certificate.	
b. Product fire prevention test report.	
c. Product label.	
d. The COC certification certificate.	
Company address, etc	
	25

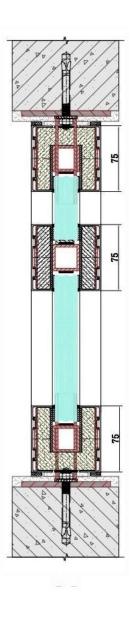


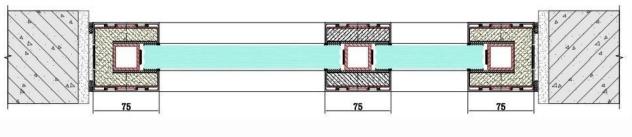
partition:
Minimum size: width =400mm, height =400mm Maximum size: width =1670mm, height =3000mm

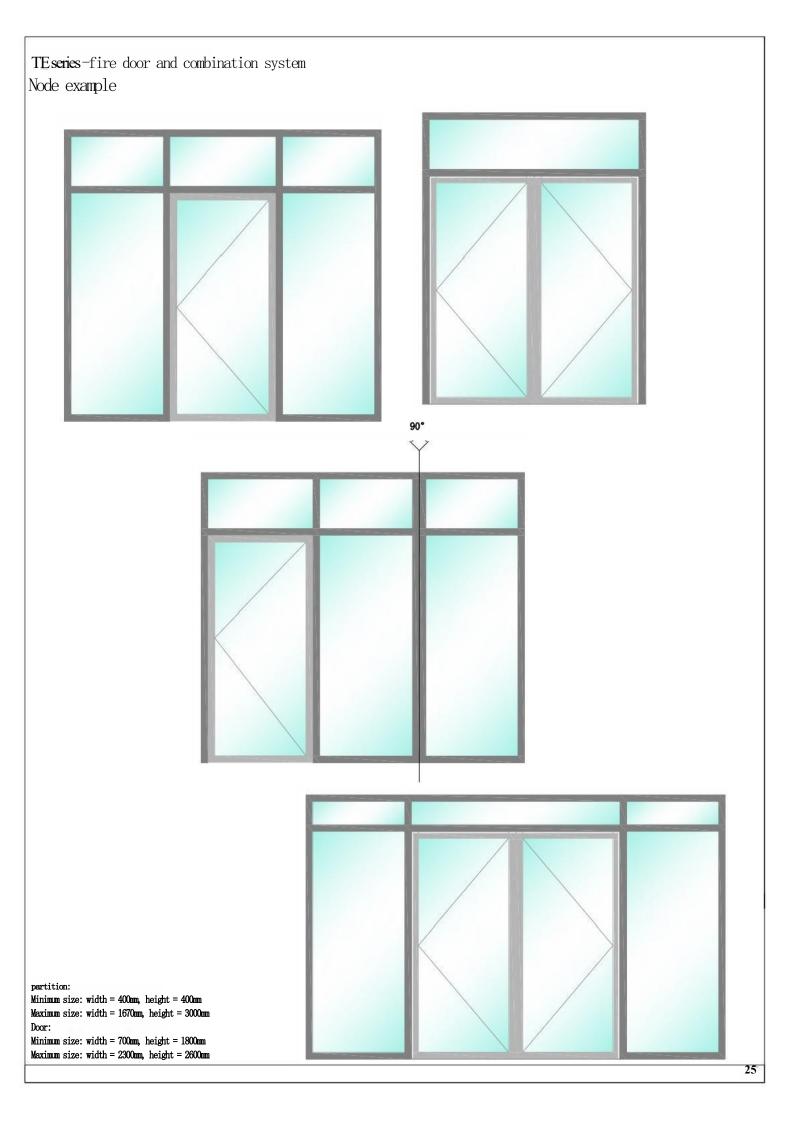
# TE series—Fireproof partition wall system Node example



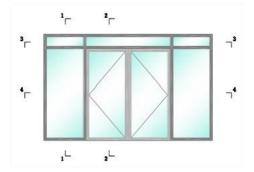


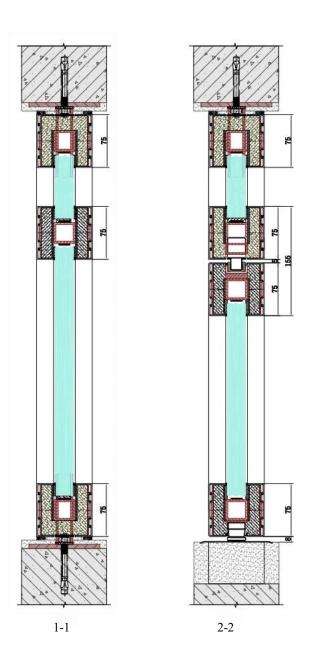


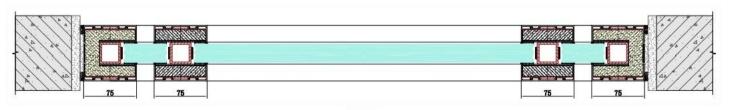




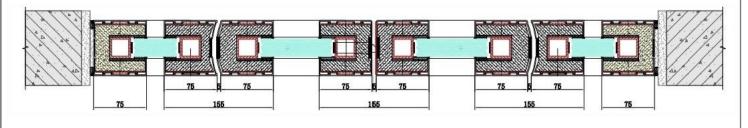
### TE series-Fireproof partition wall system Node example







3-3



4-4

# 二、防盗系列

系统防盗标准		TRI	TR2	TR3	备注	
	EN1627 门窗防盗性能要求与分类	RC3	RC4	RC6	注:TR安防系列包含:、窗、幕墙等系统: TR-X表示,最高在满足RC8防盗性舱情况下,还可以满足超过 TR3等级的防弹性能;也可以自由定制不同等级的防盗、防弹, 防爆组合	
	防盗测试时间	20min	30min	50min		
	防盗抵抗时间	5min	10min	20min		
欧洲标准	EN1628 门窗防盗性能-静力测试	6KN	10KN	15KN		
	EN1629 门窗防盗性能-动态力测试	50KG摆锤 以750mm高度撞击	不测试①	不测试①	①EN1629动态撞击测试的目的 是模拟不使用工具的人力攻击,如	
	EN1630 门窗防盗性能-抗手动破坏 测试	抵抗RC1-RC3工具 如700mm操棍,手摇钻等	抵抗RC1-RC4工具 如0.8KG斧头,电池钻等	抵抗RC1-RC6工具 如1.1KW马刀据 2.3KW角磨机等	肩撞或脚踢。当测试RC4及以上等级时,静态荷载已经远超过对态荷载已经远超过对态荷载是人力不能达到的,所以RC4以上等级产品不需要动态力学测试。	
	EN356 建筑用玻璃抗人工攻击	P5A 0100mm直径,4.11kg钢 球 9M高度撞击不同3点各3 次	P6B 2kg斧头砍击30-50次	P8B 2kg斧头砍击大于70次		

## TR系列一安防窗系统

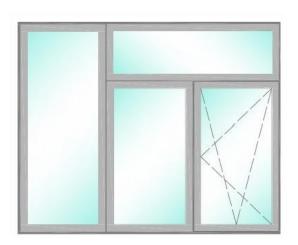
应用示例

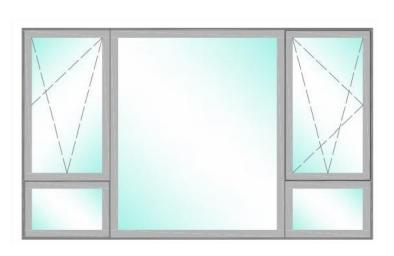










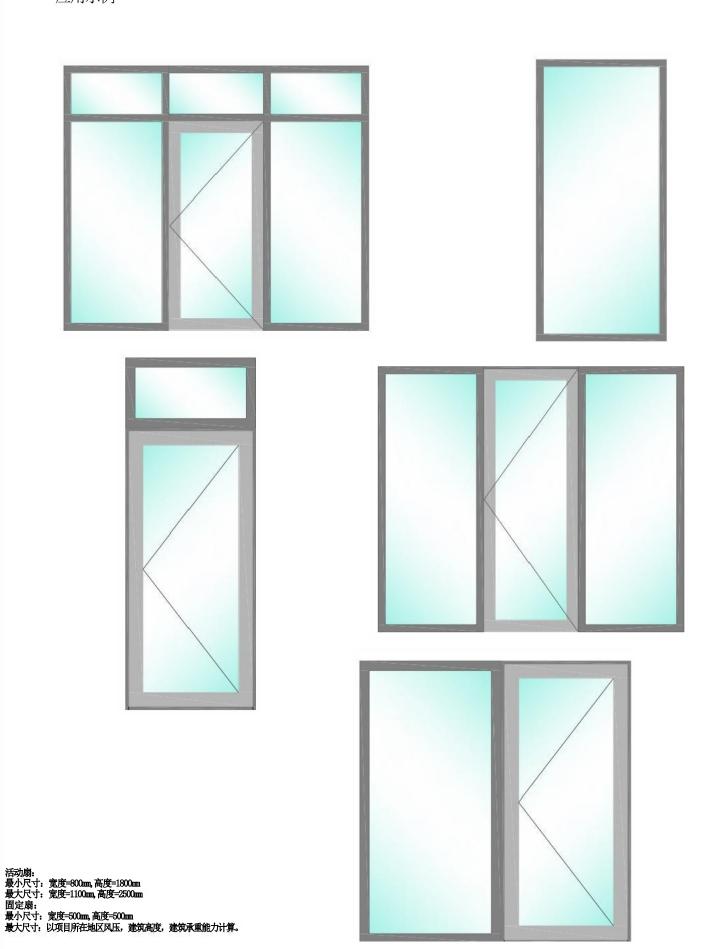


活动扇: 最小尺寸: 宽度=500m,高度=750mm 最大尺寸: 宽度=750mm,高度=1600mm 固定扇: 最小尺寸: 宽度=400mm,高度=400mm 最大尺寸: 以项目所在地区风压,建筑高度,建筑承重能力计算。

# TR系列-安防窗系统 节点示例 2<sup>L</sup> 1-1\_ 2-2\_ 3-3 4-4

#### TR系列-安防门组合系统

应用示例



25

# TR系列-安防门组合系统 节点示例 4 1-1 2-2 3-3 4-4