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**KIN LONG** 



## **Hardware Configuration Solution** for Rail Transit











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TO IMPROVE THE HUMAN
BEING'S LIVING CONDITIONS AND
MAKE KINLONG THE SYNONYM
FOR HIGH-QUALITY.

More than **900,000** m² production area.

More than **60** subsidiaries.

More than 1000 sales offices both in domestic and overseas .

More than **16,000** employees.

# ESTABLISHING BENCHMARK AND PURSUING EXCELLENCE

Kinlong was established in 2003 and is a company engaged in design and research, manufacturing and sales of construction and building products. We are committed to provide high-quality products and services. After years of development, Kinlong has become a reputable brand in the construction industry.

Kinlong industrial park has an area of more than 900,000 square meters and has an employment of more than 16000 staff. Kinlong owns more than 60 subsidiaries, and with over 1000 sales branches in the domestic and overseas markets. The company has more than 20,000 categories of products, which has been sold to more than 100 countries and areas. Kinlong, with it's sophisticated production management, provides customers with integrated solutions for different functional buildings.

Focusing on providing integrated construction and building accessories and diversified products, Kinlong continues to meet customer needs and market changes with the sales model of "R&D + manufacturing + service", and sets up its own marketing networks to directly provide customers with products and technical services. With years of precipitation and accumulation, Kinlong is at the forefront of the industry.

Over the years, Kinlong has been embracing the philosophy of "Unique value is created by professionalism, but no future shall be created by speculation". This has made Kinlong standing on the leading position in construction hardware market. Kinlong has provided products and services for many famous buildings around the world, and the landmark buildings of countless cities have become the pride and glory of Kinlong people.

To every designer, engineer and company committed in construction industry, Kinlong is always the most trustworthy and reliable partner.

#### Social Responsibility



For more than ten years, Kinlong has not forgotten to give back to the society while developing itself. By the end of 2023, more than 90 kinlong social charity schools have been donated and built in remote and backward areas.





# INNOVATION AND ENTERPRISING INDUSTRY BENCHMARK

KINLONG KEEPS MAKING
PROGRESS BY INNOVATION, BY
WHICH WE HAVE OBTAINED
RECOGNITION AND HIGH PRAISE
FROM STATE
DEPARTMENTS, GOVERNMENT
UNITS AND ALL SECTORS IN THE
SOCIETY, AND WE HAVE GOT
MANY ACHIEVEMENTS.



Kinlong adheres to the philosophy that Unique value

can only be created by professionalism, speculation

has no future. Our enterprise core value is to respect

Respecting science; Striving for coexistence and all-

win; Promoting constant innovation; Pursuing sincerity

and trustworthiness. and we always insist making

innovation, breaking through and making progress,

increasing our capacity of research, by which we have

obtained recognition and praise from government

departments, units and all areas in the society and get

many achievements. We pay great attention to the

needs from our customers and the prospect of our

industry, consistently pursuing perfect, good quality,

excellent service and systematic solutions. Our quick

and accurate ability of handing over are always

Overseas and domestic authorized valid natents are 1000 items

In which, patents of invention are

We took part in the standards compiling

Kinlong has overseas and domestic

registered trade mark of 500 item

# ENTERPRISE REPRESENTATIVE HONOR Second Prize in National Science and Technology Progress Award

First Prize in Huaxia Construction Science and Technology Award

Second Prize in Huaxia Construction Science and Technology Award

Special Prize in China Steel Structure Association Science and Technology Award

First Prize in China Steel Structure Association Science and Technology Award

Innovation Award in China Steel Structure Association Science and Technology Award

The most influential brand of Jinxuan Award in the construction door, window and curtain wall industry for four consecutive sessions:

2021 TOP500 Preferred Supplier of Comprehensive Strength of Chinese Real Estate Development Enterprises-Smart Community Service Category

National High-Tech Enterprise

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#### REPRESENTATIVE R&D INNOVATION HONOR

National Intellectual Property Demonstration Enterprise

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Guangdong Provincial Enterprise Technology

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EXCELLENT SERVICE,
SYSTEMATIC SOLUTIONS AND
QUICK AND ACCURATE ABILITY
TO HAND OVER.

KINLONG IS LEADING THE



### To Form a Full-chain Comprehensive Advantage



### **Quality Comes from Profession**



The company has a sound management system ,passed ISO9001, ISO14001, ISO45001 systems of BSI and have a testing laboratory accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Till 31st October 2021, more than 90 products certifications have been obtained.

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Kinlong utilizes more than 600 sales-services throughout the country and abroad , sales team of more than 6,000 people, a nationwide installation and after-sales team, and more than 40 stock warehouses across the country to provide prompt response to our Clients . Local direct sales service, create the value to customers with sincerity and diligence.

### **Integrated service organization**



R & D patent

There are more than 800 patents at nome and abroad

R & D support

**R & D Integration** 



### **Product category**

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**Product support** 

### **Product integration**



# Organization and team

More than 4000 sales service teams from more than 500 sales service

**Service support** 

### **Service integration**



### **Integrated system**

Stock storage system Professional installation team Perfect logistics distribution system Warehousing, logistics, installation support,

Warehousing, logistics, installation integration

### **Certificate of authority**











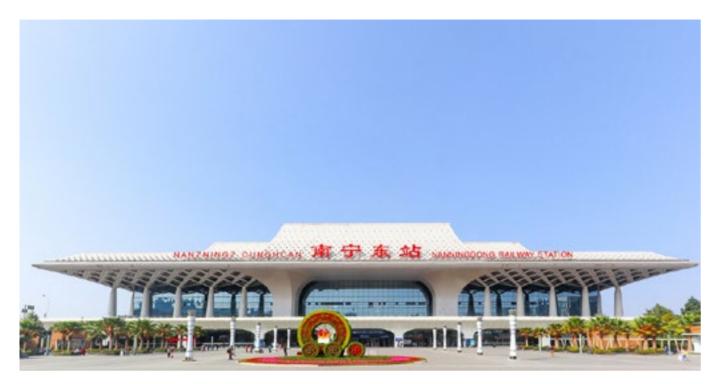




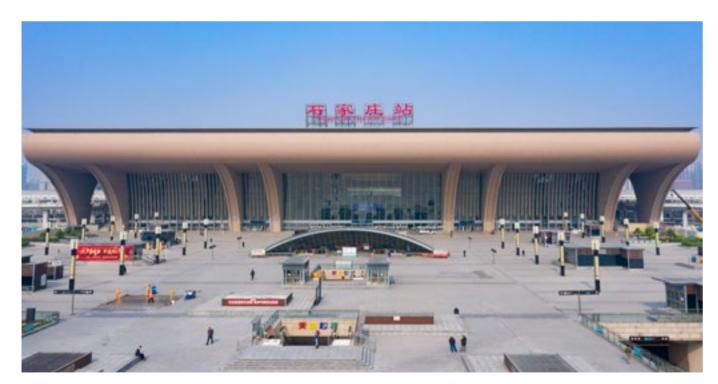








Nanning Metro



Shijiazhuang Metro



Beijing New Airport Terminal



Luoyang Rail Transit

### **Proposal Technical Requirements Template**

#### 1. Code and Standards

Product standards and code, engineering standards and code, acceptance standards and specifications include (but are not limited to):

GB12955-2015 《Fire resistant doorsets》

GB/T20909-2017 《Steel windows and doors》

GB17565-2007 《General specification burglary resistant safety door》

GB15763.1-2009 《Safety glazing materials in building - Part 1: Fire resistant glass》

GB16809-2008 《Fire resistant windows》

17J610-1 《Special doors and windows》

GB14102-2005 《Fire resistant shutter》

GB50877-2014 (2019 version) 《Code for installation and acceptance of fire resistant shutters, fire resistant doorsets and fire resistant windows》

GB/T7106-2019 《Graduations and test methods of air permeability, watertightness, wind load resistance performance for building external windows and doors》

04J631 《National Architectural Standard Design Institute for Hardware Accessories for Doors, Windows, Curtain Walls and Windows;》

GA93-2004 《Fire-proof door closer》

JG/T268-2019 《Door Closers for Construction》

QB/T 2474-2017 《Mortise locks》

GA/T73-2015 《Burglary-resistant mechanical locks》

GB16807-2009 《Fire intumescent seals》

GB50157-2013 《Code for design of metro》

DB11/995-2013 《Code for design of urban rail transit engineerin》

GB51298-2018 《Standard for fire protection design of metro》

GB50016-2014 (2018 Version) 《Code for fire protection design of buildings》

GB 50352-2019 《Uniform standard of civil buildings》

The product standards and code involved in the equipment; Engineering standards and code; The acceptance standards, specifications, etc. shall fully comply with all current regulations and specifications of the People's Republic of China, including but not limited to the above content. The above code and standards have the terms of this standard by quoted in this requirement. All code and standards default to the latest version of these files. For any discrepancies with the current version, the latest version shall prevail.

#### 2、Technical Requirements

#### 2.1. Requirements for American standard mortise locks

#### 2.1.1 General requirements

- 1) The performance meets the first level standard of ANSI/BHM A156.13, and a third-party certification report is required.
- 2) The service life is over 1 million times, a third-party certification report is required.
- 3) Precision cast stainless steel with a length of no less than 19mm, three section anti friction latch bolt, and all locking bolt should not contain any non-metallic materials such as plastic. Adopting precision cast stainless steel split solid handle, with a surface treatment of forged stainless steel color. Standard installation center distance 70mm,
- 4) The lock body material should be made of high-strength steel, which has undergone anti-corrosion treatment. The key moving parts of the door lock should be made of steel stamping, and the load-bearing parts should be precision cast stainless steel. Brass or other soft metals cannot be used. The lock body should be equipped with a stainless steel locking buckle plate that meets ANSI standards, with a guide bolt, and no distinction between left and right hands. The locking bolt can be reversed and adjusted on-site to adapt to the left and right hand door orientation.
- 5) The lock body should use high-strength springs to ensure the normal rebound of the handle and prevent the handle from sagging during use. The handle shaft should be made of corrosion-resistant reinforced steel with sufficient length to adapt to different thicknesses of the door leaf. The indoor and outdoor handles should be designed separately to ensure separate operation.
- 6) Doors with fire protection requirements and locks on the doors should pass the 1.5 hour fire protection type inspection required by the national standard GB12955-2008, and provide a third-party certification report.

### 2.1.2. American standard storage room lock (used for equipment room doors)

### **Functional requirements for use**

- 1) Inside the door: Pressing the handle inside the door at any time can simultaneously retract the inclined bolt and safety bolt, achieving a single action emergency escape function.
- 2) Outside the door: The outside handle is always fixed and cannot rotate. The door automatically locks when closed. After locking, use the key to open the door. When the door is closed, assist the safety bolt to lock the latch bolt. Equipped with a mechanical lock cylinder on the outside.

## 2.1.3. American standard classroom lock (used for cable rooms, air rooms, air ducts, etc.) Functional requirements for use:

- 1) Inside the door: Pressing the handle inside the door at any time can simultaneously retract the latch bolt and safety bolt, achieving a single action emergency escape function.
- 2) Outside the door: The door is locked with a key, but cannot be locked inside. After locking, use the key to unlock the door. When the door is closed, assist the safety bolt to lock the latch bolt. Equipped with a mechanical lock cylinder on the outside.

#### 2.1.4. American standard corridor lock (for corridor doors)

#### Functional requirements for use:

Press the handle inside and outside the door at any time to retract the latch bolt to unlock, without a lock cylinder.

### 2.1.5. American standard apartment lock (used for employee dormitories)

#### Functional requirements for use:

- 1) Inside the door: Pressing the handle inside the door at any time can simultaneously retract the latch bolt and safety, achieving a single action emergency escape function.
- 2) Lock the door with a key outside the door. After locking, unlock the door with the key. When the door is closed, assist the safety bolt to lock the latch bolt. Equipped with a mechanical lock cylinder on the outside.
- 3) Lock the door with a knob to active deadbolt.

### 2.1.6. American standard public restroom indicating lock

#### Functional requirements for use:

Inside the door: 1) Press the handle inside the door at any time to retract both the latch bolt and the safety bolt, achieving an emergency escape function in one action.

2) Use the knob to active the deadbolt lock it

Outside the door: 1) In any case, can use coins to retract deadbolt outside the door at anytime, and the device has a usage status indicator function

- 2) When locking with a knob indoors (with the bolt actived), the outer handle cannot be pressed down to unlock
- 3.) When the dead bolt retracts, the outer handle can be pressed down to unlock.

### 2.1.7. American standard dormitory locks

Inside the door: 1) Press the handle inside the door at any time to retract both the latch bolt and the safety bolt, achieving an emergency escape function in one action.

2) Use the knob to active deadbolt and lock the outer handle at the same time.

Outside the door: 1) The key can unlock under any circumstances.

- 2) When locking with a knob indoors (with the bolt actived), the outer handle cannot be pressed down to unlock.
- 3) When the dead bolt retracts, the outer handle can be pressed down to unlock.

#### 2.1.8. American standard office locks

Inside the door: 1) Press the handle inside the door at any time to retract both the latch bolt and the safety bolt, achieving an emergency escape function in one action.

2) Use the knob to lock or unlock the outer handle.

Outside the door: 1) The key can unlock under any circumstances.

- 2) Lock or unlock the external handle with the key.
- 3) When the outer handle is locked, the outer handle cannot be pressed down to unlock it.

#### 2.2. Requirements for anti-theft locks

Inside the door: 1) Press the handle inside the door at any time to retract both the latch bolt and the deadbolt, achieving an emergency escape function in one action.

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- 2) Use the knob to active or retract the safety bolt.
- 3) The inner handle can be lifted backwards to active the deadbolt.

Outside the door: 1) The key can open the fixed deadbolt and latch bolt, but cannot open the safety bolt.

- 2) The outer handle can be lifted backwards to active the deadbolt.
- 3) The outer handle cannot be pressed down and the latch bolt cannot be tilted.

The entire product meets the B-level requirements of the GA73-2015 "Burglary-resistant mechanical locks" standard, with the lock cylinder meeting the C-level requirements and a test report from the Testing Center of the Ministry of Public Security

#### 2.3 Requirements for European standard mortise locks

#### 2.3.1 General requirements

The lock body has passed EN12206 Level III testing and CE certification, with an opening life of over 200000 times.

Doors with fire protection requirements and locks on the doors should pass the 1.5 hour fire protection type inspection required by the national standard GB12955-2008, and provide a third-party latch bolt. The functions include corridor lock, bathroom lock, door lock, indicator bathroom lock, office lock, deadbolt lock, storage room lock, and classroom lock.

#### 2.4 Requirements for airtight locks

- 1) The product meets the requirements of GB/T7106-2019, and the wind resistant surface can withstand a pressure of 3000Pa. The door leaf bears an impact load of 294N and has a lifespan of 500000 times.
- 2) Handwheels are installed on both sides of the door, both inside and outside, and the door leaf can be opened through the handwheel
- 3) 3 point fastening (top, bottom, middle)

#### 2.5. American standard door closer

- 1) The door closer should comply with ANSI A156.4-200I A156.4-2000 Class I standard and be certified. It has been opened more than 2 million times and has passed the UL3-hour fire protection certification of the American Business Laboratory. It meets the relevant requirements of GB12955-2008 and has passed the fire protection type test of the China National Fixed Fire Extinguishing System and Refractory Component Quality Supervision and Inspection Center.
- 2) The door closer should be made of high-strength steel, with independent door opening buffer adjustment function, door closing speed and locking speed adjustment function. The door closer has adjustable force levels 1 to 6, suitable for a maximum door width of 1524mm, and comes with a protective cover.
- 3) The surface treatment of the door closer meets the corrosion resistance salt spray test standard for more than 100 hours, and the silver electrostatic spraying surface is applied.
- 4) The door closer should have no distinction between left and right door orientations, and should be equipped with a parallel arm mounting plate as standard. The outer door closer should be equipped with a high-strength parallel arm mounting plate with a door stop function.
- 5) The door closer should have no distinction between left and right door orientations, and should be equipped with a parallel arm mounting plate as standard. The outer door closer should be equipped with a high-strength parallel arm mounting plate with a door stop

#### 2.6. European standard door closer

- 1) The door closer should pass EN1154 testing and have CE certification, with a lifespan of over 500000 times, meet the relevant requirements of GB12955-2008, and pass the fire protection type test of the China National Fixed Fire Extinguishing System and Fireproof Component Quality Supervision and Inspection Center.
- 2) The door closer should be made of high-strength steel, with independent door opening buffer adjustment function, door closing speed and locking speed adjustment function.

#### 2.7. American standard hinge

- 1) Ordinary hinges should comply with the American standard ANSI/A156.1-2006 Class II standard, and can be opened more than 1.5 million times. A third-party certification report is required. The hinges used for fire doors must pass the 1.5 hour fire test required by the national standard GB12955-2008 and have a report
- 2) The ordinary door adopts a stainless steel hinge with 5 sections and 2 oil lubricated ball bearing structures, with a satin stainless steel finish. The access door or tube well door adopts a 3 section steel spring hinge,
- 3) The number of hinges is determined based on the height of the door. Generally, one hinge is used for every 762mm of the door height, specifically:

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Door height ≤ 1524mm: 2 pieces

1524mm < door height ≤ 2286mm: 3 pieces

2286mm < door height ≤ 3048mm: 4 pieces

- 4) Model and size: Ordinary hinge H1:114 imes 114 imes 3.4 mm
- Crossing hinge EH:  $114 \times 114 \times 3.4$  mm
- 5) The manufacturer's trademark should be etched on the front of each hinge to enable identification of the hinge manufacturer even after the door is installed.

#### 2.8, European standard hinge

- 1) Tested according to the European standard EN 1935:2002 and CE certified, with up to 200000 opening times;
- 2) Must pass the 90 minute fire test required by the national standard GB12955-2008 and provide a test report.

#### 2.9. Door pivot

- 1) To install steel or eccentric heaven and earth door shafts for closed doors or wind resistant doors, the door shaft must have a loadbearing capacity of over 275kg, a lifespan of over 500000 times, and can withstand positive and negative wind pressures of 6000 Pa. There is a third-party test report.
- 2) The shootbolt lock system can be provided in various specifications that are suitable for different door types. For doors with a height exceeding 2.0m, an intermediate shaft must be installed at the center line of the height.
- 3) Should pass the 1.5 hour fire test required by the national standard GB12955-2008 and have a report.

#### 2.10, American standard escape device

- 1) The tunnel passage door adopts a flat push escape device, which meets the first level standard of ANSI A156.3-2001 and has been certified. It has passed the UL3-hour fire protection certification of the American Underwriters' Laboratory, meets the relevant requirements of GB12955-2008, and has passed the fire protection type test conducted by the China National Fixed Fire Extinguishing System and Refractory Component Quality Supervision and Inspection Center for more than 1.5 hours.
- 2) The escape device push bar made of stainless steel material, and the fixing parts of the escape push bar should be designed reasonably to ensure that any screw, bolt, or other fixing part falling off or loosening will not cause the escape push bar lock bolt to fail to operate.
- 3) The exterior handle style and surface treatment of the device should match other locks, and its lock cylinder can be included in a unified master key management system with other locks.
- 4) The escape devices of the same series should have optional electronic control functions such as connecting with the access control, electronic control handles, electronic control locks, status monitoring, local or remote alarms, and electronic control delayed exit.

#### 2.11, European standard escape devices

- 1) Passed EN1125 testing and CE certification, with a lifespan of over 200000 cycles,
- 2) Must pass the 90 minute fire detection required by the national standard GB12955-2008 and provide a detection report

#### 2.12.Floor hinge

All floor hinges comply with EN 1154 standards, are suitable for doors weighing 300KG, have a 90 degree door stop function, have a lifespan of over 500000 times, are made of 304 stainless steel, and have a surface hairline treatment.

#### 2.13. Interval escape device (four lock point type)

- 1) Install interval emergency evacuation doors and escape doors at designated locations within the central area of the escape passage. The installation of heavy-duty flat push escape devices for all interval emergency evacuation doors and escape doors should meet the requirements of national standard commercial grade high-strength escape devices.
- 2) The fire door lock of the interval connecting passage must adopt an escape push bar device (upper, middle, and lower four point type), which includes push bar (or press bar), fixed seats, lock bolts, lock seats, and other components. When pushed horizontally or pressed down along the escape direction at any position of the effective length of the push bar on the inner side of the door, the lock bolt will retract to release the locking function, achieving an emergency escape function. The outer side is equipped with a handle and lock cylinder.
- 3) It must be a product that has passed the verification of the National Fixed Fire Extinguishing System and the Quality Supervision and Inspection Center for Refractory Components, and has a valid 90 minute fire protection type test report. It must have been tested more than 500000 times, and corresponding test certificates must be provided for the above standards;
- 4) The escape device must be equipped with a door lock cylinder and a fixed handle outside the door, which is made of stainless steel; The handle style and surface treatment should match other locks. The device should have the feature of quickly changing the door handle on site without distinguishing between left and right directions;
- 5) The section connecting passage fireproof door is required to be able to withstand wind pressure of 6000Pa.

#### 2.14. Door hardware accessories

The door hardware provided by the bidder must be provided by the same manufacturer, and all small hardware components, such as sequencers, door stoppers, bolts, dustproof boot, etc., must not be used interchangeably between two or more brands of small hardware in the same door.

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- 1) Concealed double door sequencer: used to control the closing sequence of two doors to ensure correct closing and prevent stacking a. Must pass the 90 minute fire test required by the national standard GB12955-2008 and provide a test report.
- b. Built in high-strength spring double bolt structure.
- c. All SUS304 stainless steel materials.
- d. The warranty period is 2 years and a quality guarantee certificate issued by the manufacturer is required.
- e. Location of use: All double leaf fire doors should be installed. If there is a conflict with the installation of the access lock or door closer, a surface mounted double door sequencer can be used; Surface mounted double door sequencer: used to control the closing sequence of two doors, it must pass the fire protection testing conducted by the national testing agency (in accordance with the fire protection requirements of GB12955-2015 appendix), and have a 90 minute fire protection type effective testing report
- 2) Manual concealed bolt for steel door
- a. Must pass the 90 minute fire proof type test certification required by GB12955-2015, and provide a copy of the certificate. Including access doors and normally open fire doors for use.
- b.Double door driven door leaf is used, and manual (automatic) latch should be provided with steel door according to the material of the door body.
- c.Double door height above 2300mm, with extended concealed latch (16 inches or longer) or automatic latch on the upper part. d.The installation of concealed bolt and door leaf must be equipped with a dustproof boot.
- 3) Push pull handle, skirting board and mop board, stainless steel pull plate, door stop:

The surface treatment is hairline stainless steel color. It must be fixed with threaded screws, and the surface treatment should be hairline stainless steel color.

The door stop should be installed on the wall or on the ground according to the actual situation, and should not obstruct the normal passage of people or affect the opening angle of the door leaf.

#### 3、Installation Technical Requirements

- 1) Except for special specifications or certain control requirements, as well as those determined by the design unit, the installation of hardware can be carried out in accordance with the specifications described in the National Building Standard Design Atlas 04J631 compiled by the China Building Standards Design and Research Institute;
- 2) Install each hardware according to the manufacturer's instructions and recommendations. Whether it is internal or surface mounted hardware, if it needs to be cut or matched, it must be painted or finished on the door surface, removed, stored, reinstalled, and subjected to surface protection treatment before proceeding. And only after the primer is completed can the hardware be installed:
- 3) Set horizontal or vertical lines to ensure the correct installation position. If necessary, adjust and reinforce the base plate for proper installation and operation.

#### 4. Information to Be Provided by The Bidder

- 1) Product information: According to the requirements, the bidder will submit the product technical information of each hardware manufacturer, including necessary documents to prove compliance with the design requirements, installation instructions, and maintenance instructions for operating components and finishes;
- 2) Hardware configuration table: The supplier shall prepare and submit the final hardware configuration table in the following form for confirmation by the design unit and the tenderer before manufacturing. The content includes information such as the size of the door, functional area, form of the door, opening direction, and hardware configuration of each door
- 3) The final hardware configuration table includes: based on the hardware summary table, the file configuration table is divided into "hardware groups" according to the listed hardware, indicating the various hardware required for each door. Including the following information:
- a. The model, style, functional description, quantity, and finish of the hardware;
- b. Hardware name and manufacturer;
- c. The corresponding positions of hardware on doors and frames;
- 4) Before submitting the hardware configuration table and placing an order, the bidder must submit a set of exposed hardware samples that meet the requirements listed in the hardware configuration table in this technical requirement, along with coordinated finishes, for confirmation by the design unit and the bidder's representative;
- 5) The bidder shall provide samples for all doors, door frames, and other product manufacturers that require factory prefabrication for the installation of hardware components.

### **5. Product Delivery**

- 1) Bidders should request hardware manufacturers to label and package each hardware item according to the hardware configuration table, and attach basic installation instructions.
- 2) The hardware manufacturer will work with the bidder's representative or installer to count the provided hardware until the quantity is correct and meets the contract requirements.
- 3) For the convenience of management, the tenderer proposes to use a master key system for the key of the station equipment management room area, which is set according to the three-level key system and special keys. The details are as follows:

The highest level key, the first level key, can open all doors of this station (except for special keys)

B. Secondary key

Professional key, secondary key can open all doors of a certain profession. Each profession can develop multiple secondary keys according to their usage needs, and develop their own range of rooms that can be opened by secondary keys.

C.Third level key

A room key, a third level key, can open all the doors of a room.

D.Special key

- a. The keys for opening the connecting passage doors and pump room doors of the entire line section are not included in the overall key system, but are independently configured;
- b. Special facilities such as other line rooms, police rooms, ticketing rooms, vending machine rooms, customer service centers, etc. in the station equipment management area

The keys of the rooms are individually configured and are not included in the overall key system.

- 4) Among them, the station equipment rooms involved in the secondary key master key system are divided into three categories, so the secondary keys are correspondingly divided into three categories. The classification requirements are as follows:
- A: The first category is ventilation and air conditioning rooms, including chiller rooms, ventilation and air conditioning rooms, air ducts, air chambers, etc;
- B: The second category of B is the dynamic lighting room, including the lighting distribution room, environmental control and electrical control room, etc;
- C: The third category is water supply and drainage rooms, including sewage pump rooms, wastewater pump rooms, fire pump rooms, etc. Note: The specific secondary key classification is subject to the final design liaison.
- 5) The bidder shall be responsible for keeping all hardware items that have been delivered to the site for use in the project but have not yet been installed.
- 6) Explanation::

a. The bidder is required to select the appropriate hardware group from the hardware configuration table for each door of each station within the scope of this bidding to configure door hardware. Doors that are not fully listed should be selected according to similar doors. b. The principles and methods for applying hardware groups can be found in the notes after the hardware configuration table c. In order to facilitate the management of lock cylinders and after-sales maintenance, all hardware products selected by the bidder (including escape door locks and core locks, hinges, door closers, etc.) must be produced by the same manufacturer, and all door hardware products should be supplied by the same supplier. The bidder is required to provide the bidder with product authorization documents from the hardware manufacturer.

d.The door hardware supplier selected by the bidder should have professional planning and graphic integration capabilities for door hardware to cope with potential hardware configuration changes caused by design changes.

#### **6.** Technical Documents And Materials

The bidder shall provide relevant technical data, including drawings, manuals, test reports, and other technical materials, in accordance with the requirements of the User Requirements Specification and in combination with the characteristics of the bidding product and the actual needs of this project.

Technical data should include but not be limited to the following:

- 1) List of product descriptions;
- 2) A detailed description of the main technical indicators and performance of the product;
- 3) Product related testing, inspection, and testing reports;
- 4) The main production process of the product;
- 5) The testing, inspection, and debugging methods of the supplied products;
- 6) Project implementation progress control plan;
- 7) Implementation plan for related services;
- 8) Analysis of product operation and maintenance costs;

### Hardware Configuration Table Template

Item	Door number	Door code	Room name	Outside area	<b>Door</b> leaf	Opening direction	Door material	Door width	Door height	Fireproof	Lock type	Hardware Group
1	N4-01	GFM	Station Control Room	Walkway	Double	Right, outside	Steel	1200	2300	First class	classroom lock	SHW-01
2	N4-02	GFM	Station master Room	Walkway	Single	Right, outside	Steel	900	2300	First class	classroom lock	SHW-02
3	N4-03	GHM	Meeting Room	Walkway	Double	Right, inside	Steel	1200	2300	no	classroom lock	SHW-03
4	N4-04	GFSM	Police Office	Public area	Single	Left, inside	Steel	1000	2300	First class	classroom lock	SHW-04
5	N4-05	GHM	Changing room	Walkway	Single	Right, inside	Steel	1000	2300	no	Bathroom lock	SHW-04
6	N4-06	GHM	Changing room	Walkway	Single	Right , inside	Steel	1000	2300	no	Bathroom lock	SHW-05
7	N4-07	GHM	Connected aisle	passage	Double	Double, swing	Steel	1500	2300	First class	Push bar lock against wind pressure	SHW-06
8	N4-08	GHM	Cleaning tool room	Walkway	Single	Right , inside	Steel	1000	2300	no	classroom lock	SHW-07
9	N4-09	GHM	washroom	Walkway	Single	Right, inside	Steel	1000	2300	no	Indicating bathroom lock	SHW-08
10	N4-10	GHM	washroom	Walkway	Single	Right , inside	Steel	1000	2300	no	Indicating bathroom lock	SHW-08
11	N4-11	GFDM	AFC Ticket Office	Walkway	Single	Left , inside	Steel	1200	2300	First class	Burglar-proof lock	SHW-09
12	N4-12	GFM	AFC Ticket Office	Walkway	Single	Left, outside	Steel	1000	2300	no	Storeroom lock	SHW-10
13	N4-13	GFM	AFC Maintenance work area	Walkway	Double	Right, outside	Steel	1500	2300	First class	Storeroom lock	SHW-11
14	N4-13	GFM	AFC Maintenance work area	Walkway	Double	Right, outside	Steel	1500	2300	First class	Storeroom lock	SHW-11
15	N4-14	GFM	Advertising spare parts warehouse	Walkway	Single	Left, inside	Steel	1000	2300	First class	Storeroom lock	SHW-10
16	N4-15	GFM	Driver's cage	Walkway	Single	Right, inside	Steel	1000	2300	First class	classroom lock	SHW-04
17	N4-16	GFM	Train inspection room	Walkway	Single	Right, inside	Steel	1000	2300	First class	Storeroom lock	SHW-10
18	N4-17	GHM	Vehicle repair tool room	Walkway	Single	Right, outside	Steel	1000	2300	First class	Storeroom lock	SHW-10
19	N4-18	GFM	Ventilation and air conditioning room	Walkway	Double	Left, outside	Steel	1500	2300	First class	Storeroom lock	SHW-12
20	N4-19	GFM	Thoroughfare	Walkway	Double	Right, outside	Steel	1200	2300	First class	Channel lock	SHW-13
21	N4-20	GFBM	Air duct	Air duct	Single	Left, outside	Steel	1000	2300	no	Air tight lock	SHW-14
22	N4-21	GFSM	Walkway	Common area	Double	Left, outside	Steel	1500	2300	First class	Push bar	SHW-15
23	N4-22	GFM	Anterior chamber		Double	Left, outside	Steel	1500	2300	First class	Push bar	SHW-15

### Hardware group template



Hardware group: SHW-01							
Product name	Quantity	Unit	Surface treatment	Brand	Model number	Function description	
European standard hinge	6	Pcs	Hairline	KIN LONG	SHY403030-2BB	4.0*4.0*3.0, 200,000 lifetimes, 304 stainless steel main material	
European standard classroom lock	1	Set	Hairline	KIN LONG	ST5572E5 SSN12730FE	European standard EN12209, CE certification, Passed 1.5 hours of fire resistance testing and 200000 life tests;	
Deputy lock	1	Set	Hairline	KIN LONG	SSN12730-False lock	Dummy handle	
European standard door closers	2	Pcs	silver	KIN LONG	BBM90105	European standard EN1154,500,000 lifetimes	
Overload the sequencer	1	Pcs	Hairline	KIN LONG	SSW12604	304 stainless steel, Passed 1.5 hours of fire resistance testing	
External single door magnetic lock	1	Pcs	silver	KIN LONG	KDS15010	When power off, the door will be open	
Steel door latch	2	Pcs	Hairline	KIN LONG	SCX12701	6 "steel door manual hidden latch	
Dust cans	1	Pcs	Hairline	KIN LONG	SFT12801	304 stainless steel main material, used with latch	
Half ball doorstop	2	Pcs	Hairline	KIN LONG	SMX12211	304 stainless steel material	

### **Key management system**

Key management systems are often used in apartments, office buildings, commercial spaces and other places. Various sizes, forms and specials are produced according to different needs.

Functional lock cylinder. With a set of Kinlong Master Key, you can open any door of your company or home as you like, which is safe and convenient.

The key management system is divided into two-level management lock cylinder, three-level management lock cylinder and four-level management lock cylinder. The master key of a certain level can open the specified range

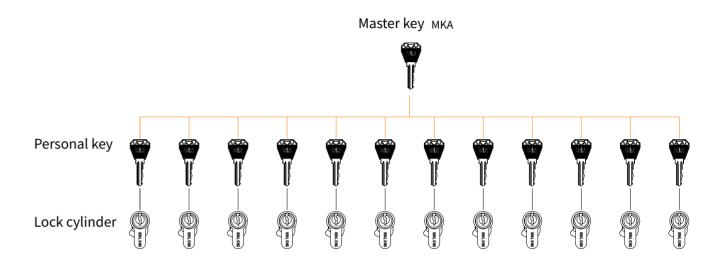
All door locks. For example, GMKA can open MKAA, MKAB, KAA1, KAA2, KAB1, KAB2, but cannot open the upper level GGMA And door locks within the scope of GMKB. The dedicated key of each lock is an independent key, and only the matching lock can be opened.



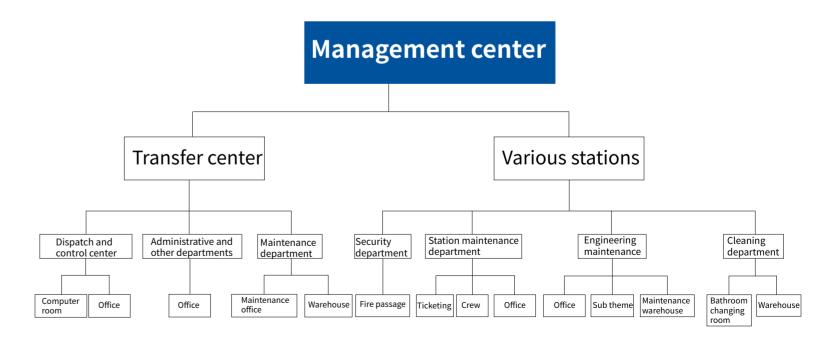
This system makes the corresponding key management system according to the architecture of each building

### Secondary management lock cylinder

The secondary management lock cylinder has a master key, which can open the lock cylinder of the entire system. The lower level of the master key is divided into multiple independent keys, and each key opens its own lock cylinder:



### Subway project master key architecture diagram



# KIN LONG provides a full range of hardware solutions for eight scenes



Rail transit hardware (this catalogue)

Hotel hardware

Shopping ma





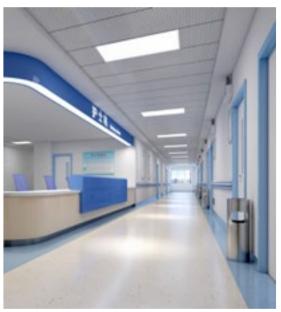
Office building hardware





▲ Airport hardware

Hospital hardware

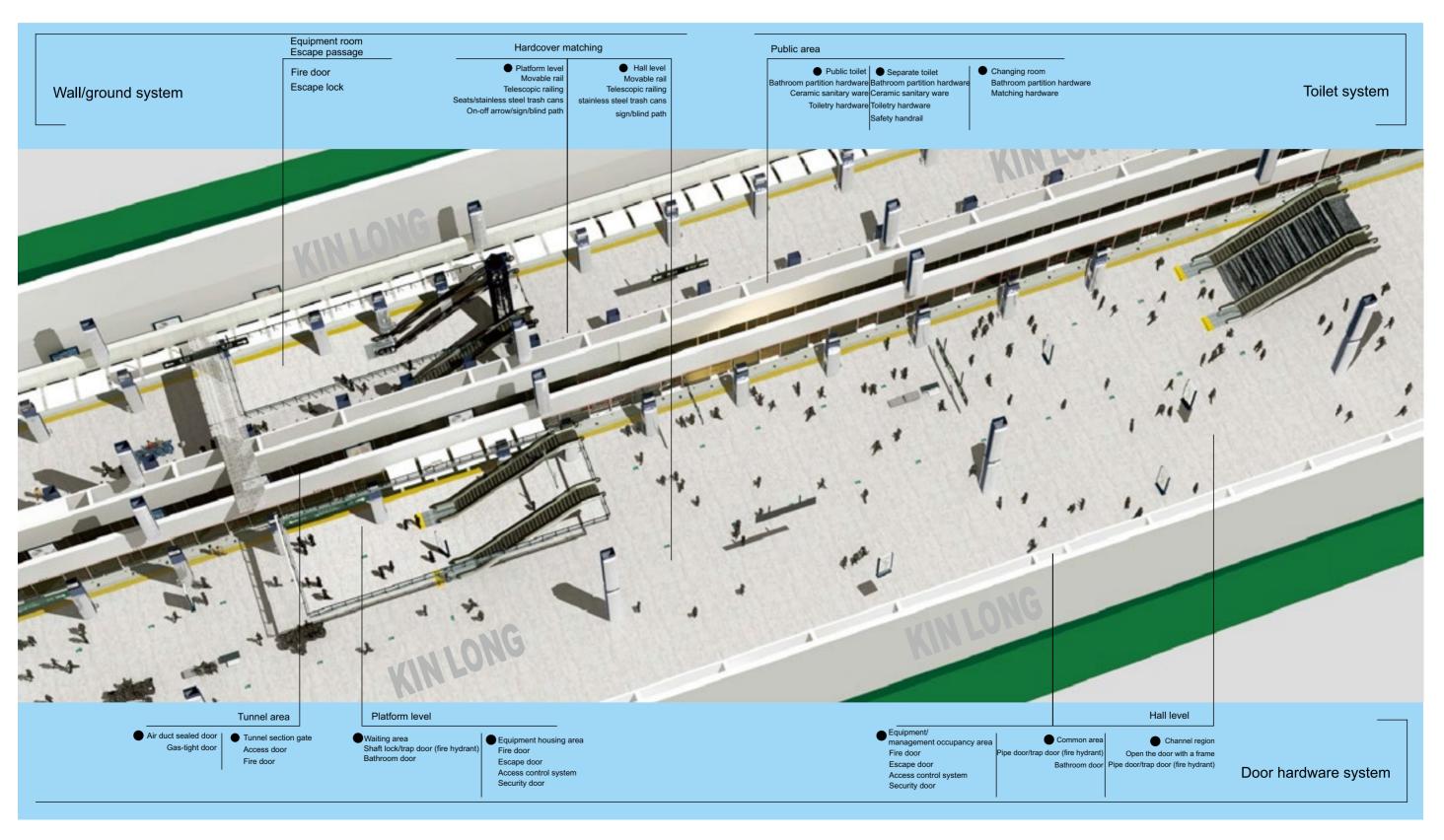






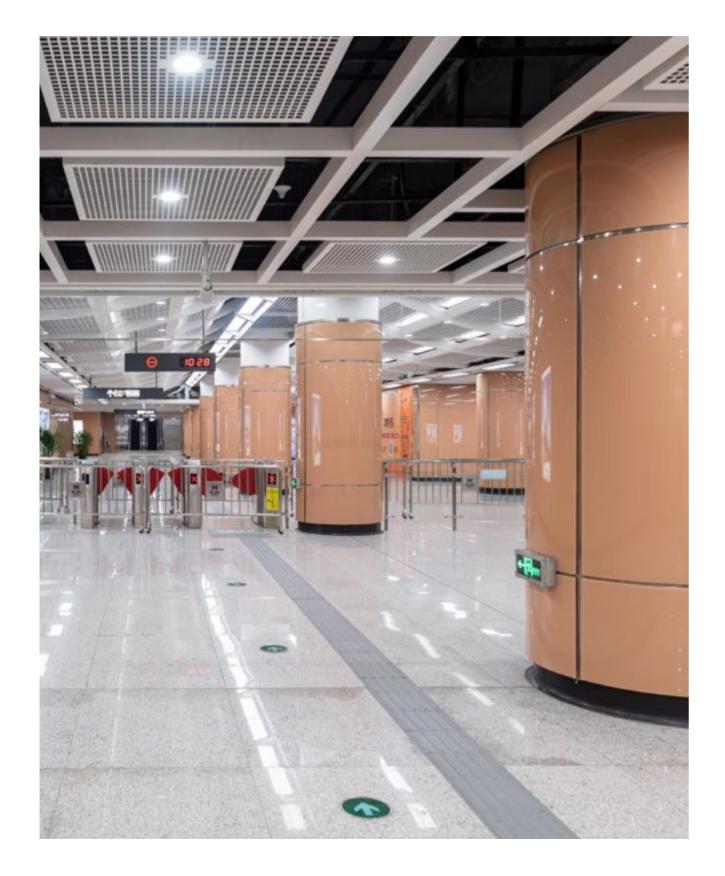
Hardbound room hardware





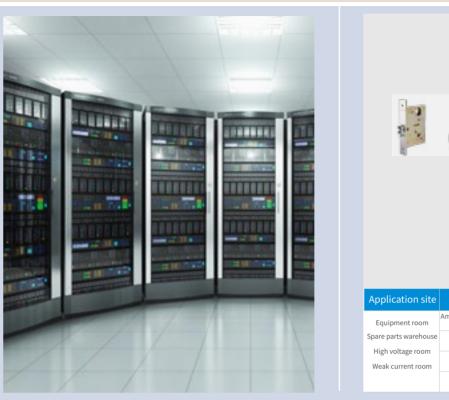
<sup>19</sup> <sub>19</sub>

# Hardware Configuration Solution for Rail Transit (American Standard Series)



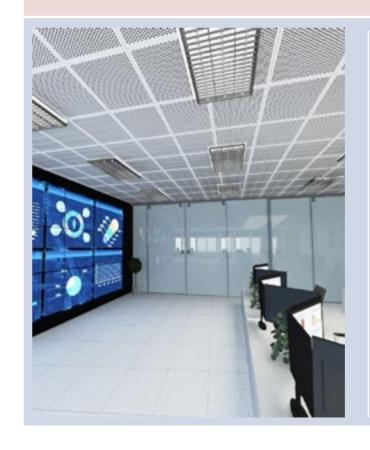
21

### Hardware configuration of spare parts warehouse locks





### Hardware configuration of station control room locks



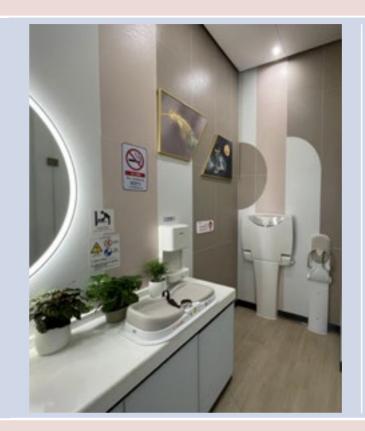


### Walkway lock hardware configuration

### Hardware configuration of mother and baby room lock





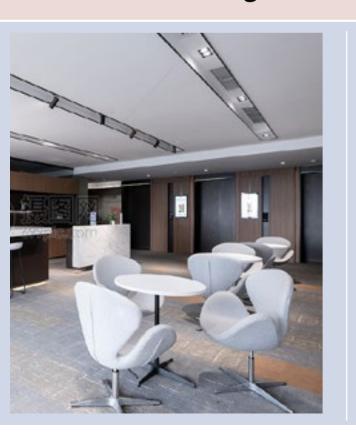


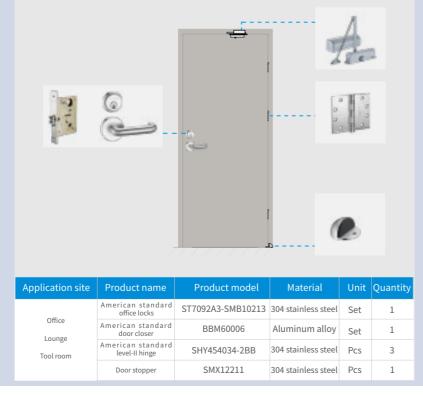


### Lounge lock hardware configuration

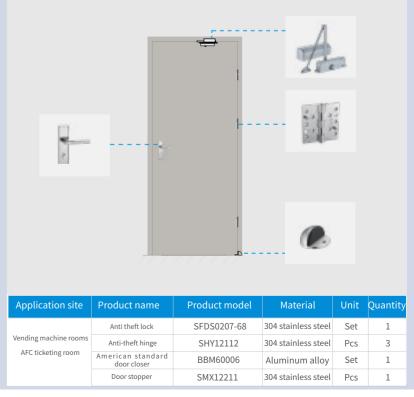
23

Hardware configuration of self-service ticket vending machine room locks









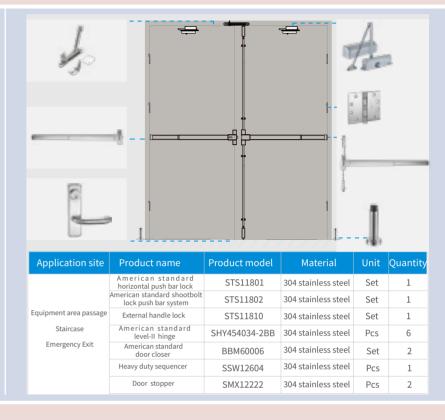
### Hardware configuration of tea room locks

### Hardware configuration of safety exit locks







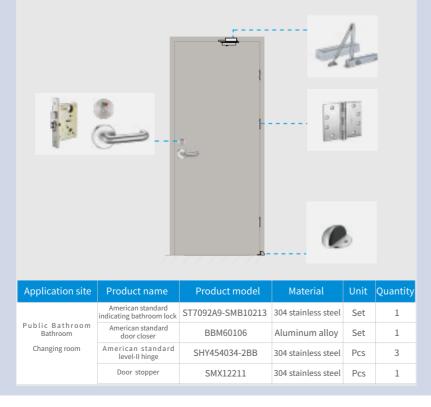


### Hardware configuration of locks in public restroom

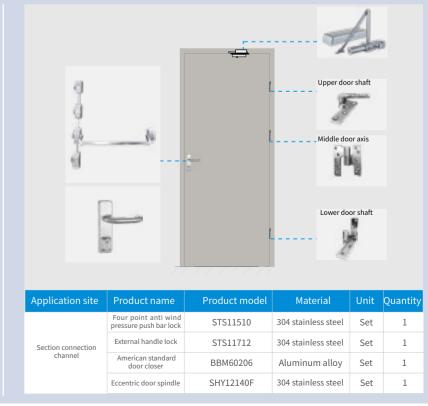
25

### Hardware configuration of locking devices for section communication channels









### New air duct door lock hardware configurati



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	+			ī	
Application site	Product name	Droduct model	Material	(iii)	Quanti
Application site	Product name	Product model	Material 304 stainless steel	Unit	Quanti
Application site	Product name  Airtight lock  American standard door closer	Product model SQM46032 BBM60006	Material 304 stainless steel Aluminum alloy	Unit Set Set	Quant 1
	Airtight lock  American standard	SQM46032	304 stainless steel	Set	1

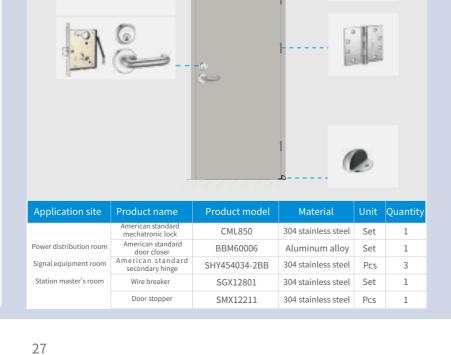
### Hardware Configuration of Public Bathroom Bathroom



Product name	Product model	Picture	Material
Induction faucet	WSZ45981	1	Brass/ chrome plated
Angle valve	WSZ7105B		304 stainless steel /Matte
Pop-up drain	WSZ96040	Ī	Brass/ chrome plated
Drain pipe	WSZ96220	U	Brass/ chrome plated
Toilet tissue box	WZH20080	3	304 stainless steel /Matte
Hand dryer	WDQ20030		ABS/white
Soap dispenser	WFJ41010	•	ABS/white
Floor drain	WDL3931C-75		Brass/ chrome plated
Tissue box	WZH10160		Stainless steel /hairline

### Hardware configuration of signal equipment room locks



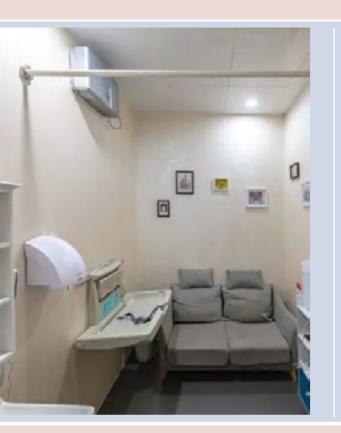


# Accessible bathroom bathroom hardware configuration



Product name	Product model	Picture	Material
Induction faucet	WSZ45981	1	Brass/ chrome plated
Angle valve	WSZ7105B		304 stainless steel /Matte
Pop-up drain	WSZ96040	Ī	Brass/ chrome plated
Toilet tissue box	WZH20080		304 stainless steel
Hand dryer	WDQ20030		ABS/white
Floor drain	WDL3931C-75		Brass/ chrome plated
Safety handrails	WFS42110		Nylon+ 304 stainless steel
Safety handrails	WFS41010	6	Nylon+ 304 stainless steel
Safety handrails	WFS42090		Nylon+ 304 stainless steel

### Hardware configuration of mother and baby room bathroom



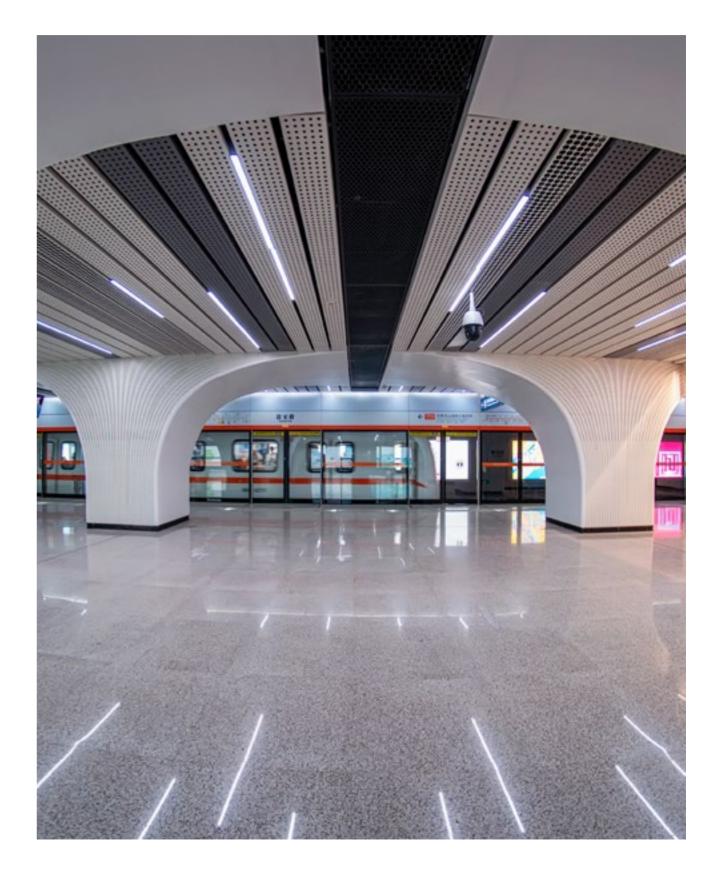
Product name	Product model	Picture	Material
Toilet tissue box	WSH2008A		304 tainless steel /Matte
Baby crib	WFG41020	N	HDPE/ grey
Induction faucet	WSZ45981	1	Brass/ chrome plated
Pop-up drain	WSZ96030	Ī	Brass/ chrome plated
Drain pipe	WSZ96220	U	Brass/Matte
Angle valve	WSZ71090	1	304 stainless steel

### Tea room bathroom hardware configuration



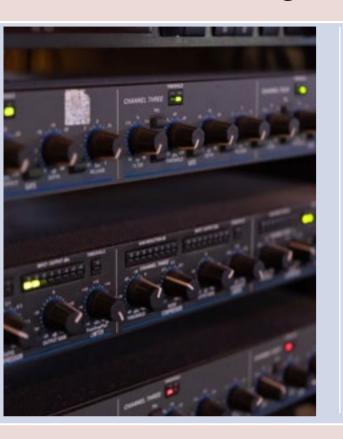
Product name	Product mode	Picture	Material
Vegetable basin faucet	WSZ44010		304 stainless steel
Sink	WCP12030	0	304 stainless steel
Angle valve	WSZ71090	*	304 stainless steel
Kitchen shelf	WYG11080		304 stainless steel

# Hardware Configuration Solution for Rail Transit (European Standard Series)

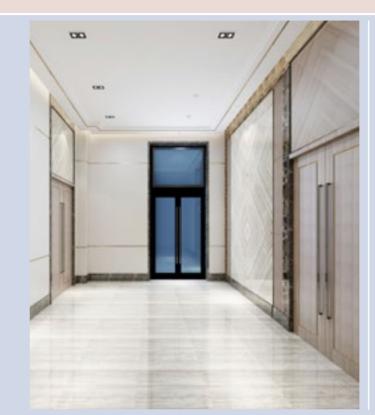


### Hardware configuration of weak current room locks

### Walkway lock hardware configuration









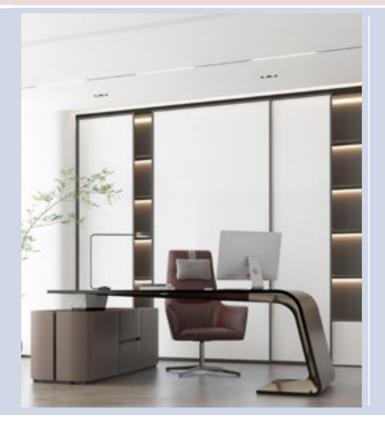
### Hardware configuration of locks in the environmental control electric control room

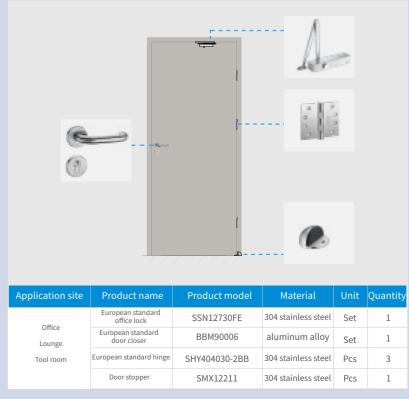
31

### Office lock hardware configuration



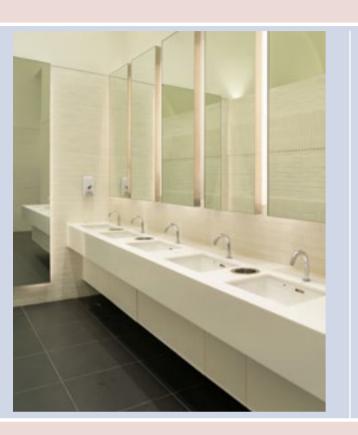


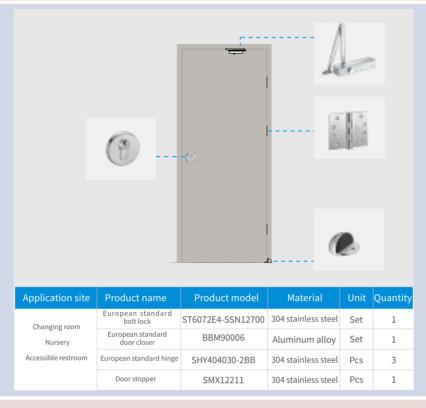




### Accessible bathroom lock hardware configuration

### Hardware configuration of office restroom locks







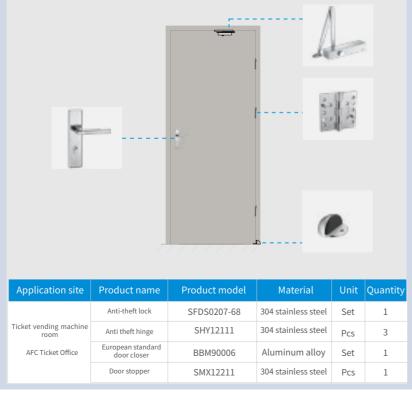


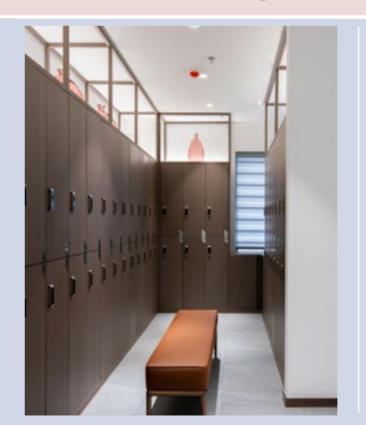
### AFC ticketing room lock hardware configuration

33

### Hardware configuration of lockers in the changing room



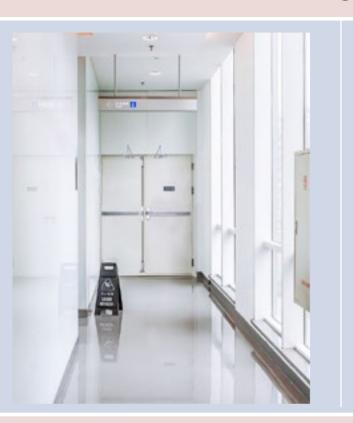


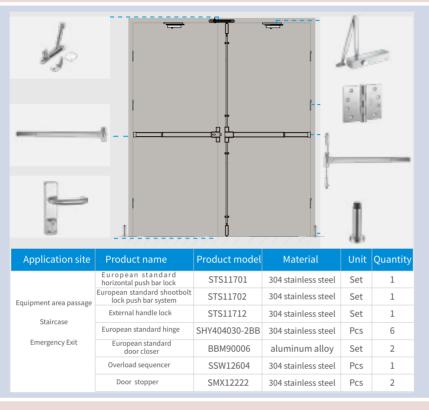




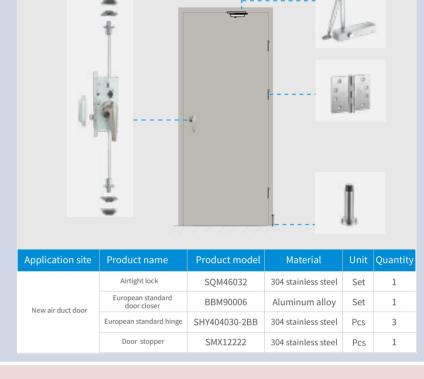
### Hardware configuration of staircase lock

### New air duct door lock hardware configurati



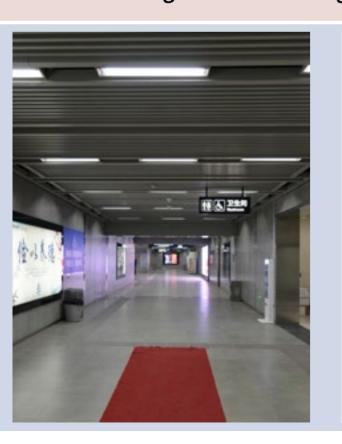






### Hardware configuration of locking devices for section communication channels

### Hardware configuration of locks in the station master's room





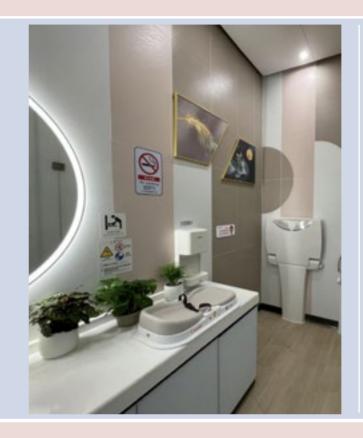




### **Hardware Configuration of Public Bathroom Bathroom**

Product name	Product model	Picture	Material
Induction faucet	WSZ45940	4	Brass/ chrome plated
Angle valve	WSZ7110H/C	B 3	304 tainless steel /Matte
Pop-up drain	WSZ96010	Ť	Brass/ chrome plated
Drain pipe	WSZ96210	u]	Brass/ chrome plated
Tissue box	WZH30060		ABS/white
Hand dryer	WDQ20010	0	ABS/white
Soap dispenser	WFJ10020	Tie.	ABS/transparent
Floor drain	WDL3012C		304 stainless steel/ chrome plated
Tissue box	WZH10160		Aluminum alloy

### Hardware configuration of mother and baby room bathroom



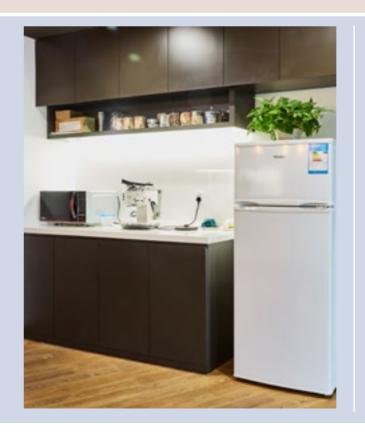
Product name	Product model	Picture	Material
Toilet paper box	WSH2008A		304 tainless steel /Matte
Baby crib	WFG41010		HDPE/grey
Induction faucet	WSZ45940	9	Brass/ chrome plated
Pop-up drain	WSZ96010	Ť	Brass/ chrome plated
Drain pipe	WSZ96210	V	Brass/Matte
Angle valve	WSZ71090	1	304 stainless steel

### Accessible bathroom bathroom hardware configuration

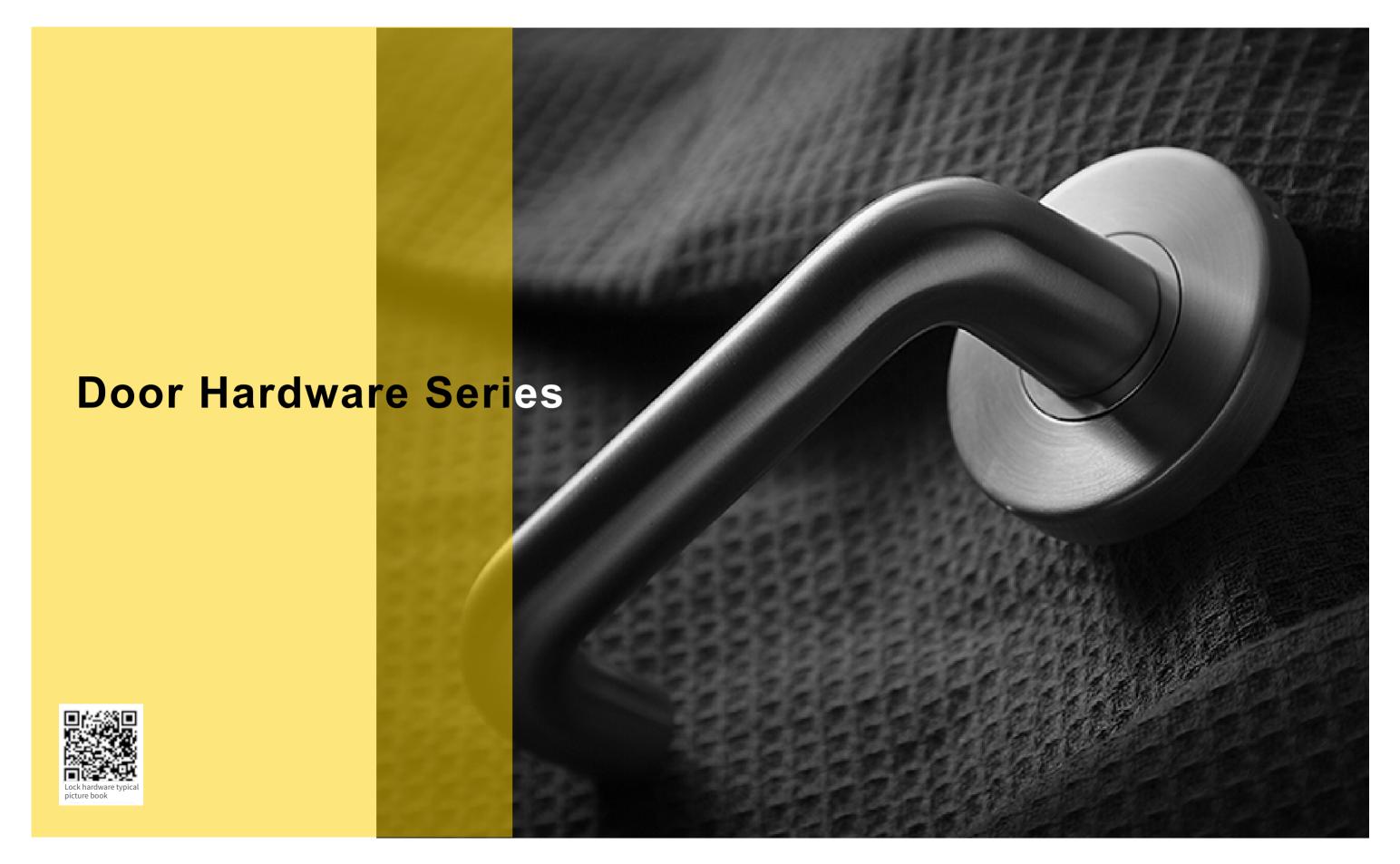


Product name	Product model	Picture	Material
Induction faucet	WSZ45940	9	Brass/ chrome plated
Angle valve	WSZ7110H/C	<b>1</b>	304 tainless steel /Matte
Pop-up drain	WSZ96040	Ī	Brass/ chrome plated
Drain pipe	WSZ96220	V	Brass/ chrome plated
Hand dryer	WDQ20010	20	ABS/white
Floor drain	WDL3931C-75		Brass/ chrome plated
Safety handrail	WFS42110		Nylon + 304 tainless steel
Safety handrail	WFS41010	6	Nylon + 304 tainless steel
Safety handrail	WFS42090		Nylon + 304 tainless steel

### Tea room bathroom hardware configuration



Product name	Product model	Picture	Material
Vegetable basin faucet	WSZ44010		304 stainless steel
Sink	WCP12030	6	304 stainless steel
Angle valve	WSZ71090	*	304 stainless steel
Kitchen shelf	WYG11080		304 stainless steel



American standard lock series

### American standard lock fireproof series

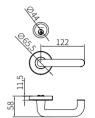
### ST7092A American standard lock body | American standard handle cover ring | SX-008 Cylinder







(centered installation)





Comply with American ANSI/BHMA A156.13 Grade 1 standard Passed ANSI certification, passed UL certification Suitable for steel or wooden entrance doors, villa doors, etc. 8 lock bodies with different functions to choose from, suitable for different places

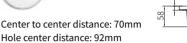
1 million times of opening life, sturdy and durable, the latch bolt is adjustable

The function switch button can easily switch the function of door lock and channel lock

The safety tongue can prevent the latch bolt from being

Equipped with s slot single row 6 ball marble lock cylinder





Applicable door thickness: above 45mm

Each model has a different maximum door thickness applies to. If it's beyond the max thickness, some fiitings need be customized

Cover plate: 304 Stainless steel Mounting screws: Stainless steel Surface treatment:Stainless steel hairline





### SMB10211 American standard fire lock







Function	Model
Channel lock	ST7092A1-SMB10211
Office lock	ST7092A3-SMB10211
Classroom lock	ST7092A5-SMB10211
Storage room lock	ST7092A6-SMB10211
Indicative public restroom lock	ST7092A9-SMB10211
Dormitory Lock	ST7092AB-SMB10211
Entry lock	ST7092AC-SMB10211
Apartment lock	ST7092AD-SMB10211







|--|

Function	Model
Channel lock	ST7092A1-SMB10213
Office lock	ST7092A3-SMB10213
Classroom lock	ST7092A5-SMB10213
Storage room lock	ST7092A6-SMB10213
Indicative public restroom lock	ST7092A9-SMB10213
Dormitory Lock	ST7092AB-SMB10213
Entry lock	ST7092AC-SMB10213
Apartment lock	ST7092AD-SMB10213

### **SMB10212 American standard fire lock**









#### Function Model ST7092A1-SMB10212 Channel lock Office lock ST7092A3-SMB10212 Classroom lock













Function	Model
hannel lock	ST7092A1-SMB10214
Office lock	ST7092A3-SMB10214
lassroom lock	ST7092A5-SMB10214
Storage room lock	ST7092A6-SMB10214
ndicative public estroom lock	ST7092A9-SMB10214
Dormitory Lock	ST7092AB-SMB10214
Entry lock	ST7092AC-SMB10214
Apartment lock	ST7092AD-SMB10214

#### SMB10213F American standard fire lock







Function	Model
American standard channel fire lock	ST7092A1-SMB10213F
American standard classroom fire lock	ST7092A5-SMB10213F
American standard storage room fire lock	ST7092A6-SMB10213F
American standard apartment fire lock	SMB10213F

Certified by ANSI and UL; Comply with GB12955-2008 fire test and pass fire protection certification;

### American standard lock function introduction

NO.	Function type	Model	Diagram	Function description
1	Passage door lock	ST7092A1		Outdoor: Under any circumstances, the outer handle can be pressed down to unlock Indoor: Under any circumstances, the inner handle can be pressed down to unlock
2	Office lock	ST7092A3		Outdoor: 1. The key can be unlocked at any time 2. The key locks or unlocks the outer handle 3. When the outer handle is locked, the outer handle cannot be pressed down to unlock Indoor: 1. The inner handle can be pressed down to unlock at any time 2. The knob can lock or unlock the outer handle
3	Storeroom lock	ST7092A6		Outdoor: 1. The key can be unlocked at any time 2. The outer handle is always fixed and cannot be pressed down to unlock Indoor: 1. The inner handle can be pressed down to unlock at any time
4	Classroom loc	<sup>K</sup> ST7092A5		Outdoor: 1. The key can be unlocked at any time 2. The key locks or unlocks the outer handle 3. When the outer handle is locked, the outer handle cannot be pressed down to unlock Indoor: 1. The inner handle can be pressed down to unlock at any time
5	Entrance door lock	ST7092AC		Outdoor: 1. The key can be used to unlock under any circumstances 2. When the room is locked with a key, the outer handle cannot be pressed down, only the key can be used to unlock Indoor: 1. The inner handle can be pressed down to unlock at any time 2. The key locks or unlocks the outer handle
6	Indicative public toilet lock	ST7092A9		Outdoor: 1. Coins can be used to retract the bolt outside under any circumstances, with indication function  2. When the indoor knob is locked (with the tongue bolt out), the outer handle cannot be pressed down to unlock  3. When the tongue is bolt, the outer handle can be pressed down to unlock Indoor: 1. Under any circumstance, you can open the door by pressing the handle outside  2. The inner handle has an escape function (retract the latch bolt and the dead bolt at the same time), and unlock the outer handle  3. The knob can stick out the bolt and lock the outer handle at the same time
7	Dormitory lock	ST7092AB		Outdoor: 1. The key can be used to unlock under any circumstances  2. When the indoor knob is locked (with the bolt sticking out), the outer handle cannot be pressed down to unlock  3. When the bolt is retracted, the outer handle can be pressed down to unlock, Indoor: 1. Under any circumstances, the inner handle can be pressed down to open the door  2. The inner handle has an escape function (retract the latch bolt and the dead bolt at the same time), and unlock the outer handle  3. The knob can stick out the bolt and lock the outer handle at the same time
8	Apartment lock	ST7092AD		Outdoor: 1. The key can be used to unlock under any circumstances  2. When the indoor knob is locked (with the bolt sticking out), the outer handle cannot be pressed down to unlock  3. When the bolt is retracted, turn the knob up 20° to unlock the outer handle. At this time, the outer handle can be down.  Press to unlock  Indoor: 1. The door can be opened by pressing the inner handle under any circumstances  2. The inner handle has an escape function (retract the latch bolt and the dead bolt at the same time)  3. The knob can stick out the bolt and lock the outer handle at the same time  4. When the bolt is retracted, turn the knob 20° to unlock the outer handle

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### American Standard Lock Certificate





CERTIFICATE OF COMPLIANCE | Certificate Number | 20190510-R39782 | Report Reference | R39782-20190111 | 2019-May-10 | GUANGDONG KIN LONG PRECISION PRODUCTS CO LTD NO.88 Guangfu Rd, Tongle Village, Dongsheng Town Zhongshan City, Guangdong 528414 CHINA This certificate confirms that SINGLE-POINT LOCKS AND LATCHES samples of See Addendum Page for Models/Product Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate. ard(s) for Safety: ANSI/UL 10C - Positive Pressure of Fire Tests of Door See the UL Online Certifications Directory at https://ig.ulprospector.com for additional information Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL Follow-Up Services. Look for the UL Certification Mark on the product.

American standard mortise lock ANSI certificate UL certificate for American standard mortise lock



American standard mortise lock fire certification certificate American standard mortise lock fire certification certificate

European standard lock series

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### European standard lock series



### SS12730 European standard lock





Function	Model
Passage lock	ST6072E1-SSN12730
Bathroom lock	ST6072E2-SSN12730
Door lock	ST6072E3-SSN12730
Unicom door lock	ST6072E7-SSN12730
Indicating bathroom lock	ST6078E9-SSN12730
Storeroom lock	ST6072E6-SSN12730
classroom lock	ST5572F5-SSN12730

#### Function Model Passage lock ST6072E1-SSN12729 Bathroom lock ST6072E2-SSN12729 Door lock ST6072E3-SSN12729 ST6072E7-SSN12729 Indicating bathroo ST6078E9-SSN12729 Storeroom lock ST6072E6-SSN12729 classroom lock ST5572E5-SSN12729

### SS12737 European standard lock





Function	Model	
Passage lock	ST6072E1-SSN12737	
Bathroom lock	ST6072E2-SSN12737	
Door lock	ST6072E3-SSN12737	
Jnicom door lock	ST6072E7-SSN12737	
ndicating bathroom ock	ST6078E9-SSN12737	
Storeroom lock	ST6072E6-SSN12737	
classroom lock	ST5572E5-SSN12737	



Function	Model
Passage lock	ST6072E1-SSN12738
Bathroom lock	ST6072E2-SSN12738
Door lock	ST6072E3-SSN12738
Unicom door lock	ST6072E7-SSN12738
Indicating bathroom lock	ST6078E9-SSN12738
Storeroom lock	ST6072E6-SSN12738
classroom lock	ST5572E5-SSN12738

### **European standard fire lock**

(A) (1.5a)



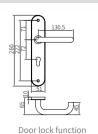


Function	Model	Remarks
European	SSN12730FE	Door lock
standard fire	ST6072E1-SSN12730FE	Passage lock
	ST6072E5-SSN12730FE	classroom lock
	ST6072E6-SSN12730FE	Storeroom lock

### SSN15930F European standard fire lock



SS12738 European standard lock



### European standard lock function

NO.	Function type	Model	Diagram	Function description
1	Passage door lock	ST6072E1		Single latch bolt, no square bolt Always open the latch bolt with handle inside and outside.  Can be used for access doors that do not need to be locked
2	Bathroom lock	ST6072E2		There are latch bolt and square bolt, with keyless bathroom lock. The inner and outer handles always open the latch bolt, the inner knob opens and closes the square bolt; in emergency, coins are used outdoors  Wait to insert the lock core slot to open the square bolt. It can be used in residential toilets or public restrooms.
3	Door Lock	ST6072E3		There are latch bolt and square bolt, with double lock head or outer lock head and inner knob. Open the latch bolt with your hands inside and outside,  The key opens and closes the square bolt and opens the latch bolt. It can be used for entrance doors or interior doors of houses, apartments, dormitories, office buildings, etc.
4	Unicom door lock	ST6072E7		There are latch bolt and square bolt, equipped with half lock internal knob. Only the outer handle opens the latch bolt, the key can open the latch bolt and square bolt.
5	Indicating bathroom lock	ST6078E9		There are latch bolt and square bolt, no lock, with people/no peop display. Open the latch bolt with handles inside and outside, the inner handle can open the latch bolt and the square bolt at the same time, and the inner button opens the square bolt; In an emergency, insert a coin into the indicator slot to open the square bolt outdoors. For public washroom.
6	Dead lock	ST6072E4	E(	Single square bolt, no handle cover plate, with double lock head or outer lock head and inner knob. Key opens and closes square bolt.  It can be used in storage rooms, tube wells, or industrial doors that are not often opened.
7	Storeroom lock	ST6072E6		Single latch bolt, with safety bolt, external handle fixed, outdoor with half lock. Inner handle and the external key opens the latch bolt. Used in storage rooms and other places.
8	Classroom lock	ST5572E5		Single latch bolt, with safety bolt, with half lock outdoors. Open the latch bolt with handle inside and outside, The key can lock the outer handle, then only exit allowed, can not enter. Used in classrooms and other places.

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### European standard lock certificate



European standard mortise lock CE certificate





European standard mortise lock fire certification certificate

European standard mortise lock fire certification certificate



Anti theft door lock series

### Burglar Lock series

- ♦ Passed the grade B test of GA / T73 2015 mechanical anti-theft lock.
- ◆ The cylinder passed the C-level test.
- ◆ Two sections of the lock bolt of the lock body extend out, and the latch bolt can be reversed.
- ♦ With safety bolt, indoor knob control.

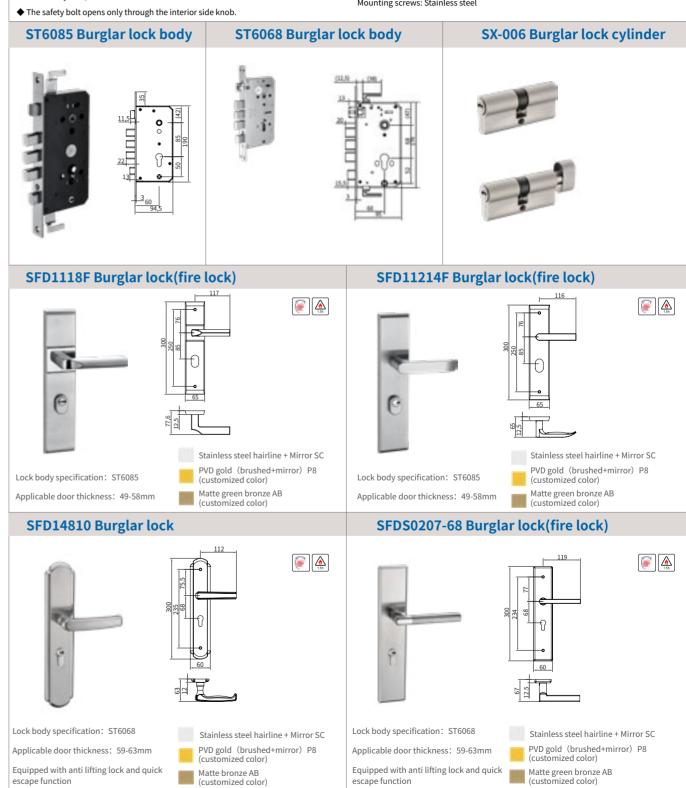
Standard with anti-theft cylinder, indoor and outdoor with the

key to open dead bolt and latch bolt.

Handle: 304 Stainless steel

Cover plate: 304 Stainless steel

Mounting screws: Stainless steel



### Anti-theft lock certificate



ST6068 Anti-theft lock Class B anti-theft test report



ST6068 Burglar lock fire certification certificate



Anti-theft lock core C level anti-theft test report



ST6085 Burglar lock fire certification certificate



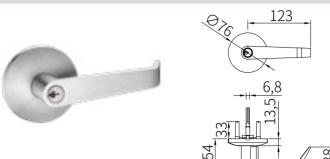
Escape push bar lock series

### European standard escape push bar lock series (Flat push type)

### European standard escape push bar lock (Flat push type) (E) (A) . Comply with European standard EN1125-2008, Passed CE certification Body length: 1040mm, Pusher length: 700mm . Durability test 200,000 times,90 minute fire detection. Applicable door width: Standard 1040mm,850-1040mm cut to shorter in site Applicable door height: 2135mm (STS11702) . The bolt and the lock cover are stainless steel 304 precision castings,. Beyond this range need to customize non-standard product . Single latch bolt structure, easy to use, no left or right. Main body: 304 stainless steel . Push way to open for easy escape STS11701 European standard escape push bar lock 850-1040 STS11702 European standard escape push bar lock American Standard escape push bar lock (Flat push type) . Meet the American standard ANSI/BHMA A156.3 grade1, UL10C. Body length: 1040mm, Pusher length: 500mm . Durability test 500,000 times,90 minute fire detection. Applicable door width: Standard 1040mm,650-1040mm cut to shorter in site . The bolt and the lock cover are stainless steel 304 precision castings. Applicable door height: 2135mm (STS11802) Beyond this range need to customize non-standard product . Single latch bolt structure, easy to use, no left or right. Main body: 304 stainless steel · Push way to open for easy escape STS11801 American Standard escape push bar lock STS11802 American Standard escape push bar lock 1040

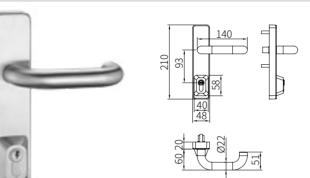
### Escape push bar lock series (External lock head)

### STS11711 External lock head (European standard)



- · Suitable for wooden doors and metal doors
- · Used with European standard escape push bar
- · Keep close or keep ope function can be set
- Optional products
- · With 3 keys
- · Suitable for STS11701、STS11702

### STS11712 External lock head (European standard)



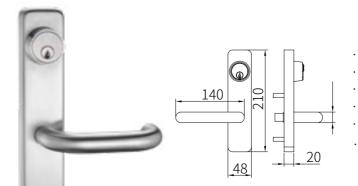
- · Suitable for wooden doors and metal doors
- · Used with European standard escape push bar
- · Keep close or keep ope function can be set
- · Handle function
- · With 3 keys
- · Suitable for STS11701、STS11702

#### STS21710 External lock head (European standard, American standard)



- 24,5 2,5 23 8î î E
- · Suitable for wooden doors and metal doors
- · Use with European and American standard escape bars
- · Keep close or keep ope function can be set
- · Handle function
- · With 3 keys
- Suitable for STS11701、STS11702、STS11801、STS11802

#### STS21810 External lock head (American standard)



- · Suitable for wooden doors and metal doors
- Used with American standard escape push bar
- · Keep close or keep ope function can be set
- Handle function
- · With 2 keys
- · Suitable for STS11801、STS11802

### American standard European standard push bar lock certificate



UL certificate for American standard push bar lock



American Standard Push Bar Lock Fire Inspection Report



European standard push bar lock CE certificate

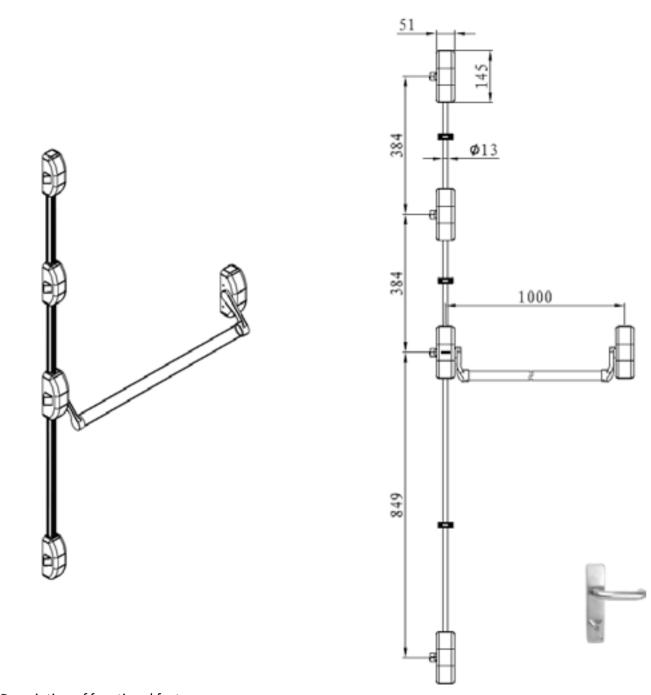


European Standard Push Bar Lock Fire Inspection Report



Hurricane-rated push bar

### STS11510 Hurricane-rated push bar



#### Description of functional features:

- 1. Compliance with standards: "GB30051-2013 General technical requirements for push-bar emergency exit locks, GB12955-2008 Fire resistant doorsets 1.5 hours and T/CAMET05001-2020 Wind Pressure Fireproof Doors for Urban Rail Transit Tunnels".
- 2.Material: Lock bolt, lock plate and lower press bar are made in S.S. 304, lock body stainless steel.;
- 3. Four point anti wind pressure push bar lock, resistant to wind pressure up to 6000Pa, with a lifespan of over 500000 times;
- 4. Suitable for regular door height  $\geqslant$  2100mm and width  $\geqslant$  1100mm, customized beyond the range;;
- 5. Cooperate with installation on wind pressure resistant and fireproof doors, optional with external handle lock (ensure that the center distance of the installation connection column is 90mm).

### Hurricane-rated push bar lock inspection report



Wind pressure test report



Fire test Report



Performance test report



Airtight lock





Gas lock inspection report

#### Description of functional features:

1.Compliance with standards:: GB/T7106-2019/Test Method for Air Tightness, Water Tightness, and Wind Pressure Resistance of Exterior Windows and Doors in Buildings,

GB/T31433-2015/ General Technical Conditions for Building Curtain Walls, Doors and Windows.

- 2.Material: Lock bolt, lock plate, lock cover plate stainless steel.
- 3. Side dead bolt, upper and lower bolt, resistant to wind pressure up to 3000pa; The lifespan exceeds 500000 times.
- 4.Door edge dimension: 70mm, opening angle: 70°
- 5.Suitable for door height ≤ 2400mm, door thickness 40-60mm, customized beyond the range;

6.To be installed in conjunction with the airtight door.



Fire lock series

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### Fire lock series

Passed national standard GB 21556- 2008. Passed GB12955-2008 fire test and obtained fire certification. Solid anti-saw lock bolt, latch bolt can be reversed. When closed, the outside key can open square bolt and latch bolt.

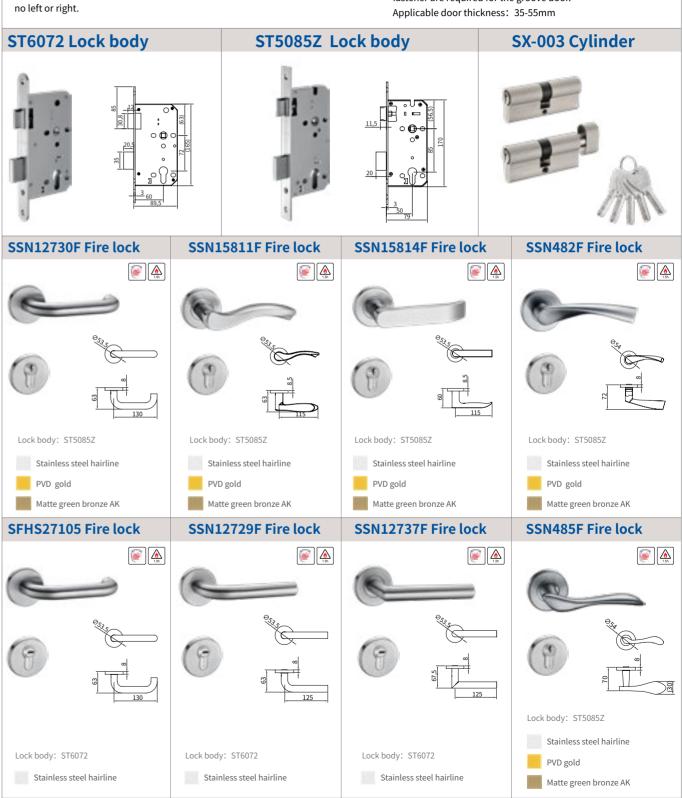
Equipped with S-slot single row 6-bead cylinder, With 3 keys.

Handle: 304 stainless steel Cover ring: 304 stainless steel

Exposed mounting screws: stainless steel Surface treatment: stainless steel hairline

Customized eccentric cylinder and customized non-standard lock

fastener are required for the groove door.





Pipe well lock series

### Tube well lock series

Passed the national standard GB 21556-2008 test Applicable door thickness: 35-60mm Standard all-pass unlocking cylinder, 1 key Main material: 304 stainless steel

Surface treatment: Stainless steel wire drawing Exposed mounting screws: stainless hairline

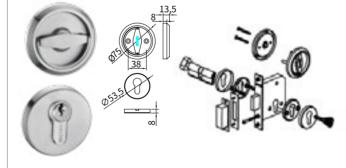
If you need not open the cylinder, then re-inquiry and order remark



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Lock body: 55D





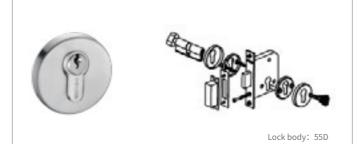




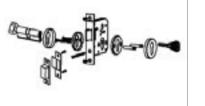
Lock body: 55D

### SGSS003 Pipe Well Lock (Fire lock)









Lock body: 55Z

### Fire Lock、Fire Certification Certificate for Pipe Well Lock



Fire Lock Fire Certification Certificate



Fire Certification Certificate for Pipe Well Lock



Fire Lock Fire Certification Certificate



Fire Certification Certificate for Pipe Well Lock



Electromechanical integrated lock series

### American standard electromechanical integrated lock series

### product descriptions

- 1. The lock body complies with the European standard EN12209:2003.
- 2. Provide various materials, surface treatment colors, and styles to meet architectural and design requirements.
- 3. Service life: 200000 lifetimes (lock), 200000 lifetimes (threaded cylinder), seven years of color and operation guarantee.
- 4、Power supply: Either 12VDC、12VAC、24VDC、24VACcan be used。
- 5. Working current: 250mA/24VDC、24VAC 300mA/12VDC、12VAC。
- 6、Installation center distance: 60mm, Pit-center distance: 72mm。
- 7. Working method: Power-on activation (customizable as needed).
- 8. This product is mainly suitable for indoor use, with a temperature of -25° C  $\sim$  50° C; Storage humidity:: 10%-95%, Working humidity:: 10%-90%.

### DST7092B-EL-ALM (latch bolt, keep open) DST7092B-EU-ALM (latch bolt, keep close)



Function description:

- 1、Control function: Used in conjunction with the access control system。
- 2. Outdoor: The external handle is normally fixed, and after successful verification of the access control system, the external handle can retract the latch bolt to achieve outdoor door opening. The emergency key can open the latch bolt.

Indoor: The interior handle can open the latch bolt to achieve quick indoor door opening. The latch bolt has an anti insertion function.

- 3、Signals can be customized as needed and output to the control center for monitoring purposes (default with safety bolt signal, i.e. door signal): Optional signal output: bi-directional door signal (with signals for inlet and outlet doors)
- 4. One of the following two functions can be debugged on-site

Keep open: When the power is cut off, the door lock will automatically open (the external handle can rotate to open the door)

Keep close: When the power is cut off, the door lock will automatically be in a locked state (the external handle is fixed and cannot rotate to open the door)

- 5. An additional mechanical key hierarchy management system can be equipped.
- 6. Suitable for various high security wired networking occasions with access control function.

### DST7092A-EL-ALM (latch bolt and dead bolt, keep open) DST7092A-EU-ALM (latch bolt and dead bolt, keep close)



Function description::

- 1、Control function: Used in conjunction with the access control system。
- 2. Outdoor: The external handle is normally fixed, and after successful verification of the access control system, the external handle can retract the latch bolt to achieve outdoor door opening. The emergency key can open both the latch bolt and the dead bolt.

Indoor: The internal handle can open the latch bolt and open the dead bolt at the same time to achieve fast indoor door opening. The internal twist separately controls the extension and retraction of the dead bolt. The latch bolt has the function of anti-inserting and shifting.

- 3、Signals can be customized as needed and output to the control center for monitoring purposes (default with safety bolt signal, i.e. door signal)) Optional signal output: bi-directional door signal (with signals for inlet and outlet doors)
- 4. One of the following two functions can be debugged on-site

Keep open: When the power is cut off, the door lock will automatically open (the external handle can rotate to open the door).

Keep close: When the power is cut off, the door lock will automatically be in a locked state (the external handle is fixed and cannot rotate to open the door).

- 5、An additional mechanical key hierarchy management system can be equipped.
- 6. Suitable for various high security wired networking occasions with access control function.

# European standard electromechanical integrated lock series

### product descriptions

- 1. The lock body complies with the European standard EN12209: 2003.
- 2 Provide various materials, surface treatment colors, and styles to meet architectural and design requirements.
- 3. Service life: 200000 (lock), solenoid (200000), seven years of color and operation guarantee.
- 4. Power supply: Either 12VDC、12VAC、24VDC、24VAC can be used.
- 5、Working current:: 250mA/24VDC、24VAC 300mA/12VDC、12VAC。
- 6、Installation center distance: 60mm, hole center distance: 72mm。
- 7. Working mode: Power on unlocking method (customizable as needed).
- 8. This product is mainly suitable for indoor use at temperatures; -25° C  $\sim$  50° C; Storage humidity: 10%-95% Working humidity: 10%-90%.

### DST6072EA-EL-ALM (latch bolt and dead bolt, keep open) DST6072EA-EU-ALM (latch bolt and dead bolt, keep close)



Function description::

- 1. Control function: Used in conjunction with the access control system.
- 2. The square rod insertion direction is determined inside and outside, and the external handle is normally idling. After the access control system is verified successfully, the external handle can withdraw the latch bolt and the dead bolt at the same time to achieve the outdoor door opening.

The interior handle can open the diagonal tongue to achieve quick indoor door opening.

Both inside and outside handle the reverse lift can quickly extend the dead bolt to achieve fast door locking. The emergency key can open the latch bolt and open the dead bolt at the same time, and the standard half cylinder is equipped.

The inclined tongue has the function of anti-inserting and shifting.

- 3. Signals can be customized as needed and output to the control center for monitoring purposes (**default** with safety bolt signal, i.e. door signal)
- 4. One of the following two functions can be debugged on-site

Keep open:When the power is cut off, the door lock will automatically open (the external handle can rotate to open the door)

Keep close: When the power is cut off, the door lock will automatically be in a locked state (the external handle is fixed and cannot rotate to open the door)

- 5、An additional mechanical key hierarchy management system can be equipped.
- 6. Suitable for various high security wired networking occasions with access control function.

### DST6072EB-EL-ALM (latch bolt, keep open) DST6072EB-EU-ALM (latch bolt, keep close)



Function description::

- 1、Control function: Used in conjunction with the access control system,latch bolt lock。
- 2. The square rod insertion direction is determined inside and outside, and the external handle is normally idling. After the access control system is verified successfully, the external handle can redraw the latch bolt to achieve the outdoor door opening.

The inner handle can open the latch bolt to achieve fast door opening.

Emergency key can be opened directly latch bolt, standard with half cylinder.

The latch bolt has the function of anti-inserting and shifting.

- 3. Signals can be customized as needed and output to the control center for monitoring purposes (**default with safety tongue signal, i.e. door signal**)
- 4. One of the following two functions can be debugged on-site

Keep open: When the power is cut off, the door lock will automatically open (the external handle can rotate to open the door)

Keep close: When the power is cut off, the door lock will automatically be in a locked state (the external handle is fixed and cannot rotate to open the door)

5. An additional mechanical key hierarchy management system can be equipped.

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 $6 \varsigma\,$  Suitable for various high security wired networking occasions with access control function.

# PUSH O

Hardware accessories

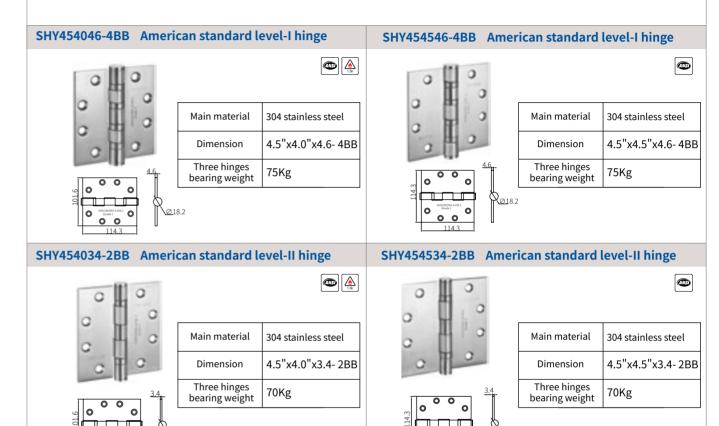
69

## American and European standard hinges

### American standard hinge

Tested and certified according to the American standard ANSI A156.1 Level 1, with a maximum of 2.5 million lifetimes. Tested and certified according to the American standard ANSI A156.1 Level 2, with a maximum of 1.5 million lifetimes. Passed GB12955-2008 Class A 1.5h fire detection.

Material: 304 stainless steel Surface treatment: brushed



### **European standard**

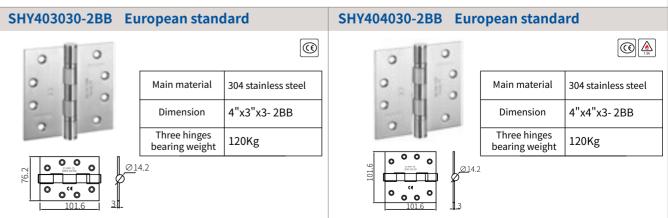
Tested and certified according to the European standard EN 1935:2002 Single axis hinges - Requirements and test methods.

Opened up to 200000 times.

Passed GB12955-2008 Class A 1.5h fire detection.

Material: 304 stainless steel

Surface treatment: brushed



# American standard European standard hinge certificate



American standard level-I hinge ANSI certification



Test Verification of Conformity

Verification Number: 190814117GZU-002 VOC

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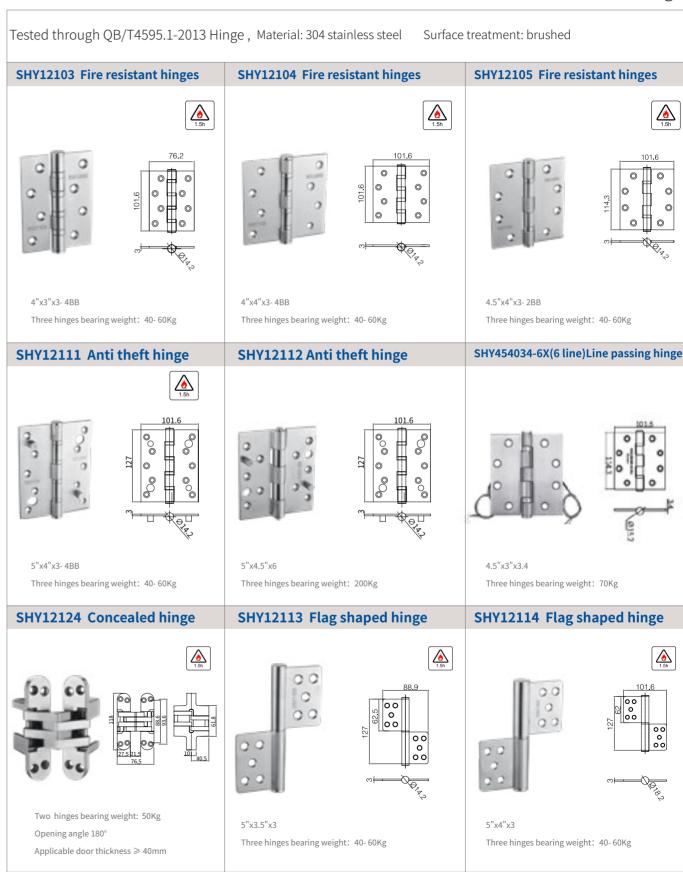
American standard level-II hinge ANSI certification



American standard hinge fire test report

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# National Standard Hinge



### Hardware accessories series - special hinges

# **SHY42135 Multifunctional hinge**

Product main material: aluminum allov

Surface treatment: silver, matte black

No left or right

Hinge composition:

Multifunctional hinge: SHY42135+Load bearing hinge: SHY42135A

Features: combining hinge, door closer, and door stopoer function in one;

Automatic door closing: It can automatically close the door at the angle of closing.

Automatic buffering: Before entering the lock, the door closing and closing speed can be adjusted to achieve buffering.

Stay at will: Prevent the door from automatically closing at any dwell angle.

According to the enterprise standard: Q/JL 04-2019 "Hydraulic hinges for building doors". with a lifespan exceeding 150000 times.

B	Door specifications	Door weight	Product configuration
Bearir	Door height ≤ 2000mm Door width ≤ 700mm	≤ 35Kg	1 multifunctional hinge (top) + 1 load-bearing hinge (bottom) or 2 multifunctional hinges
ng tal	Door height ≤ 2000mm Door width ≤ 900mm	≤ 60Kg	2 multifunctional hinges or 1 bearing hinge in the middle
table	Door height ≤ 2400mm Door width ≤ 1100mm	≤ 90Kg	3 multifunctional hinges

### **SHY12140F Eccentric door shaft**



Upper door shaft



middle door shaft



lower door shaft

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Functional characteristic description:

- 1、Compliance with standards: GB12955-2008 /Fire door, T/CAMET05001-2020 /Wind Pressure Fireproof Doors for Urban Rail Transit Tunnels.
- 2. Made of 304 stainless steel material with stainless steel wire drawing on the surface;
- 3. Distinguish between left and right directions;
- 4. Concealed installation, suitable for swing doors. When there is an error between the door leaf and the door frame, the gap can be directly adjusted without removing the door leaf;
  5. Using bearings with lubricating effect, without wear on the metal shaft, and with silent
- 6. Product neutral salt spray test for more than 72 hours;
- Passed 1.5 hours of fire resistance testing and 500000 life tests; 7. Maximum load-bearing capacity: 300kg; And there is a test report.

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Performance test report

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### Hardware Accessories Series - Auxiliary Hardware

### **Execution standards**

The door stopper passed the QB/T4596-2013 /Door Sucker and Door Buckle/ test, and the latch passed the QB/T 2032-2013 "Steel Latch" test.

The sealing strip complies with GB/T 24498-2009 "Sealant strips for building doors, windows, and curtain walls".



Main materials: 304 stainless steel

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Main materials: 304 stainless steel

Steel roller

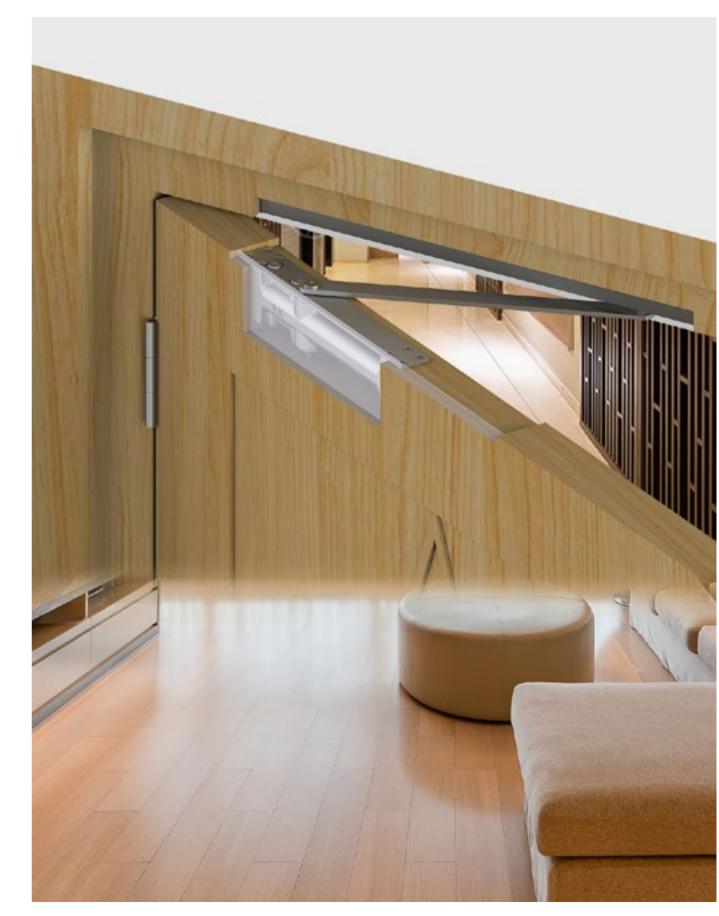
Main materials: 304 stainless steel





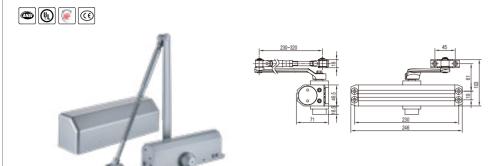
Door Control Hardware Sliding Door Product Catalog

Door control hardware series



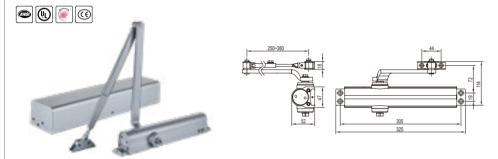
## Door closer series

### BBM60006 American standard door closers



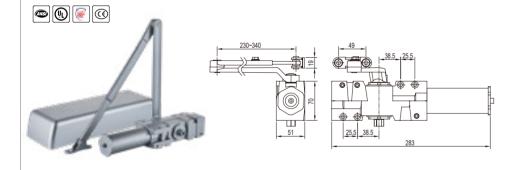
Positioning form	non-holding
Door width range	650~1500mm
Maximum bearing capacity	15~150kg
Service life	≥2 million times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray

### BBM60106 American standard door closers



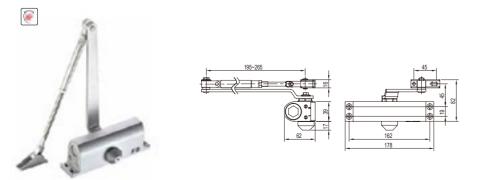
Positioning form	non-holding
Door width range	650~1500mm
Maximum bearing capacity	15~150kg
Service life	≥2 million times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray

### BBM60206 American standard door closers



Positioning form	non-holding
Door width range	650~1500mm
Maximum bearing capacity	15~150kg
Service life	≥2 million times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray

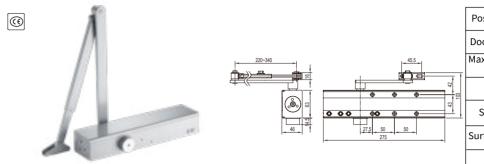
### GA93-4CI(B104) Fire door closer



Positioning form	non-holding
Door width range	1000~1250mm
Maximum bearing capacity	85kg
Service life	> 300,000 times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray (Non-standard colors can be customized)

## Door closer series

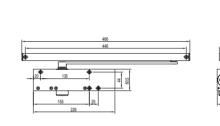
### BBM90006 European standard door closers



	Positioning form	non-holding
103	Door width range	850~1500mm
	Maximum bearing capacity	85~150kg
	Service life	> 500,000 times
	Speed control	Two-stage speed regulation
	Surface treatment	Silver gray (Non-standard colors can be customized)
	Applicable temperature	-20°C ~ 50°C

### BBM90115 European standard door closers

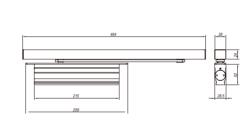




	Positioning form	Any position can be positioned, positioning can be revoked
Г	Door width range	650~1500mm
Ν	Maximum bearing capacity	25~85kg
	Service life	> 500,000 times
	Speed control	Two-stage speed regulation
5	Surface treatment	Silver gray (Non-standard colors can be customized
	Applicable temperature	-20°C ~ 50°C

### BBM30113 European standard hidden door closer





Positioning form	Any position can be positioned, positioning can be revoked
Door width range	850~1100mm
Maximum bearing capacity	65kg
Service life	> 500,000 times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray (Non-standard colors can be customized)
Applicable temperature	-20°C ~ 50°C
	Door width range  Maximum bearing capacity  Service life  Speed control  Surface treatment  Applicable

### BBM30115 Hidden door closer

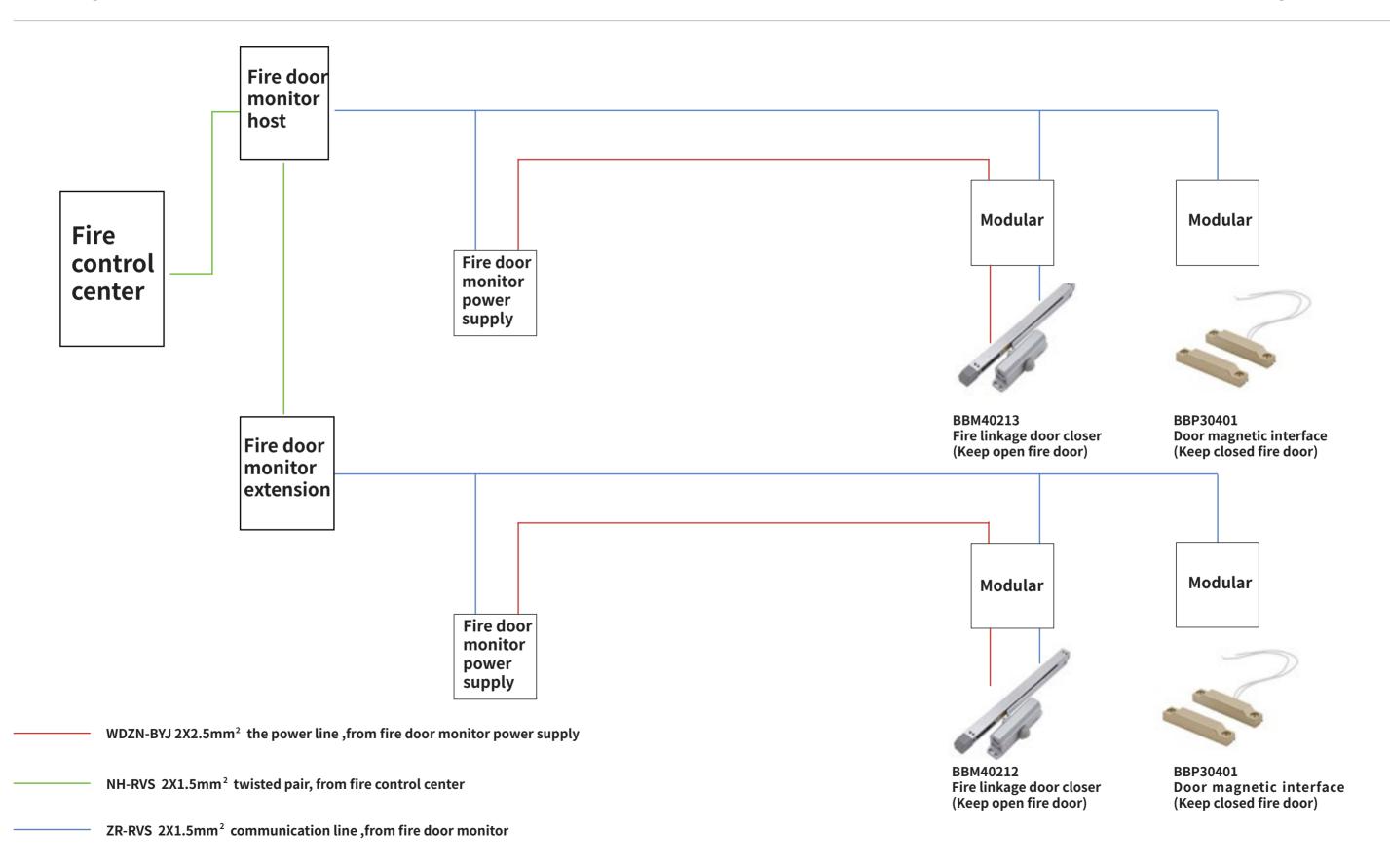


Positioning form	Any position can be positioned, positioning can be revoked
Door width range	1100~1300mm
Maximum bearing capacity	100kg
Service life	> 300,000 times
Speed control	Two-stage speed regulation
Surface treatment	Silver gray (Non-standard colors can be customized)
Applicable temperature	-20°C ~ 50°C

Fire linkage door closer series

Fire door monitoring system topology (five wire system non coding type)

Fire linkage door closer series



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brochure

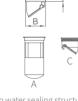
Bathroom hardware series

### Bathroom Hardware Series - Faucet



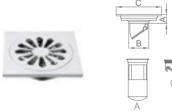
### Bathroom Hardware Series - Floor Drain WDL2011A/C Floor drain WDL2012A/C Floor drain WDL2011C-75 Floor drain (for big flow) Main material: 304 Main material: 304 Main material: 304 Wall thickness:2mm Wall thickness:2mm Wall thickness:2mm Surface treatment: Matte Surface treatment: Matte Surface treatment: Matte C:Plastic flip-up structure A:Stainless steel deep water sealing structure A:Stainless steel deep water sealing structure C:Plastic flip-up structure C:Plastic flip-up structure Model Pipe diameter A(mm) B(mm) C(mm) Model Pipe diameter A(mm) B(mm) C(mm) Pipe diameter A(mm) B(mm) C(mm) WDL2011A Ø50 25 Ø45 □100 WDL2012A Ø50 25 Ø45 □100 Ø75 24 Ø63 □100 WDL2011C Ø50 25 Ø45 □100 WDL2012C Ø50 25 Ø45 □100 WDL2017C Floor drain(ultrathin) WDL3012C Floor drain WDL2012C-75 Floor drain (High traffic) Main material: 304 Main material: 304 Main material: 304 Wall thickness:2mm Wall thickness:2mm Wall thickness:3mm Surface treatment: Matte Surface treatment: Chromium plating Surface treatment: Matte C:Plastic flip-up structure C:Plastic flip-up structure C:Plastic flip-up structure Model Pipe diameter A(mm) B(mm) C(mm) Pipe diameter A(mm) B(mm) C(mm) Pipe diameter A(mm) B(mm) C(mm) WDL2017C Ø40 19 Ø32 □100 Ø50 21 Ø45 □100 Ø75 24 Ø63 □100 WDL3931A/C Floor drain WDL3932A/C Floor drain WDL3931C-75 Floor drain Main material: copper Main material: copper Main material: copper Wall thickness: 3mm Wall thickness: 3mm Wall thickness: 3mm Surface treatment: Chromium plating Surface treatment: Chromium plating Surface treatment: Chromium plating





A:Stainless steel deep water sealing structure C:Plastic flip-up structure

WDL3931A Ø50 20 Ø44 □100 WDL3931C Ø50 20 Ø44 □100	Model	Pipe diameter	A(mm)	B(mm)	C(mm)
WDI 3931C Ø50 20 Ø44 □100	WDL3931A	Ø50	20	Ø44	□100
VIDE03010 200 20 244 2100	WDL3931C	Ø50	20	Ø44	□100



A:Stainless steel deep water sealing structure C:Plastic flip-up structure

Model	Pipe diameter	A(mm)	B(mm)	C(mm)
WDL3932A	Ø50	20	Ø44	□100
WDL3932C	Ø50	20	Ø44	□100

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C:Plastic flip-up structure

### Pipe diameter A(mm) B(mm) C(mm) Ø75 20 Ø63 □100



Kitchen hardware series

## Bathroom Hardware Series - Kitchen Hardware Series



Public accessories series

### Bathroom Hardware Series - Public Accessories Series



