

## Fire Steel Doors

3 Hr Fire Rating  
ANSI/UL 10C & CAN/ULC-S104



Model : FRD  
Door Leaf : 45 mm.thk.  
Insulation : Rockwool



Model : FRX  
Door Leaf : 50 mm.thk.  
Insulation : Ceramic Fiber



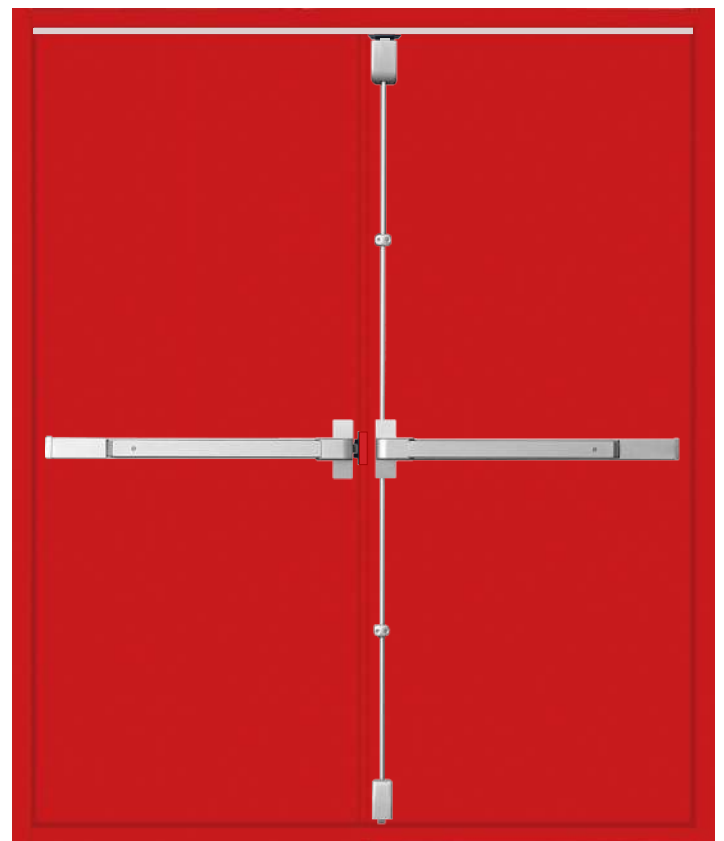
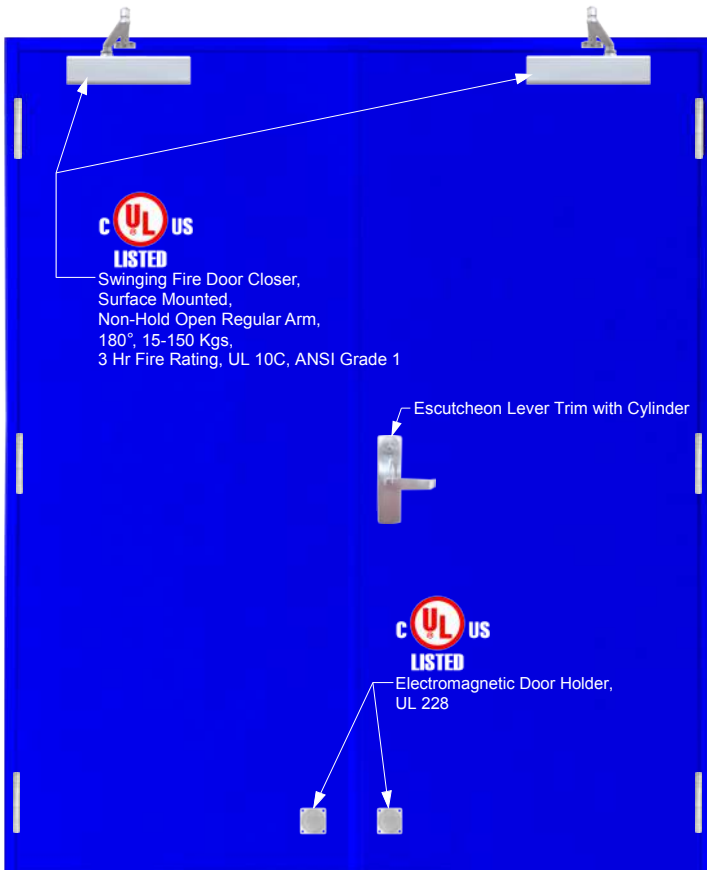
**Rockwool**  
40 mm.thk.

**Ceramic Fiber**  
50 mm.thk.  
Better thermal  
insulation and  
soundproof  
than  
Rockwool



ISO 9001:2008 Certified  
Certificate No. FM 509124

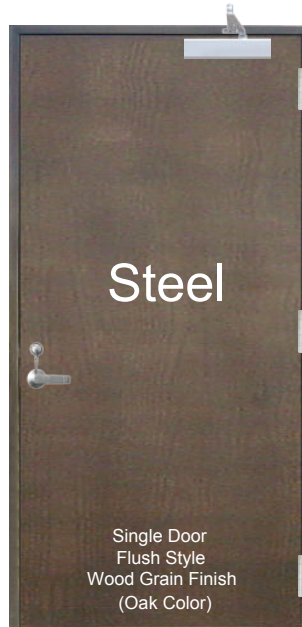
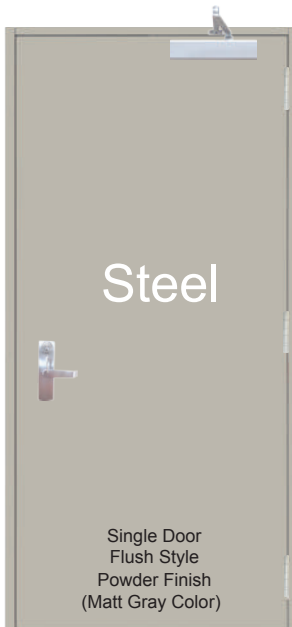
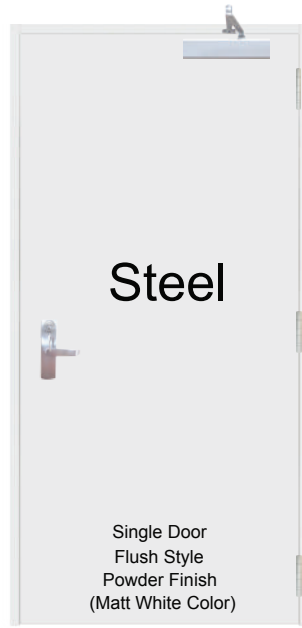
# Door Components (FRD & FRX)



Automatic Door Bottom Seal, 3 Hr Fire Rating, UL 10C (Without Threshold / Bottom Frame)

With Threshold / Bottom Frame (Without Automatic Door Bottom Seal)

## Styles and Colors (FRD & FRX)



# Door Hardware (for FRD & FRX)



Fire Exit Device, Rim Type, 3 Hr Fire Rating, UL 10C



Fire Rated Mortise Exit Device, 3Hr Fire Rating, UL 10C

Concealed Vertical Rod

Vertical Rod



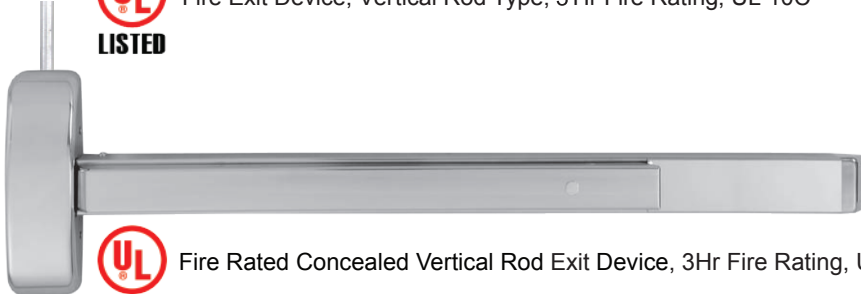
Escutcheon Lever Trim with Cylinder



BB Hinge, SS304  
3 Hr Fire Rating, UL 10C



Fire Exit Device, Vertical Rod Type, 3 Hr Fire Rating, UL 10C



Fire Rated Concealed Vertical Rod Exit Device, 3Hr Fire Rating, UL 10C

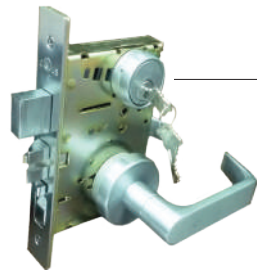
Vertical Rod

Concealed Vertical Rod

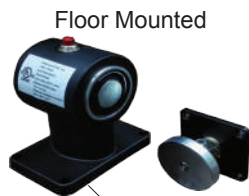


Swinging Fire Door Close  
Surface Mounted,  
Non-Hold Open Regular  
180°, 15-150 Kgs,  
3 Hr Fire Rating, UL 10C, ANSI Grade 1

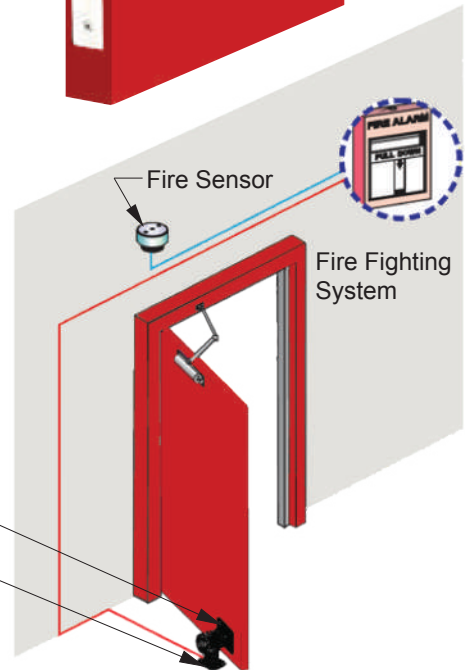
# Door Hardware (for FRD & FRX)



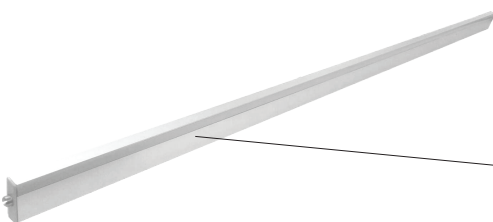
**c UL US LISTED** Fire Mortise Lock, Stainless Steel, Cylinder with Thumbturn  
3 Hr Fire Rating, UL 10C



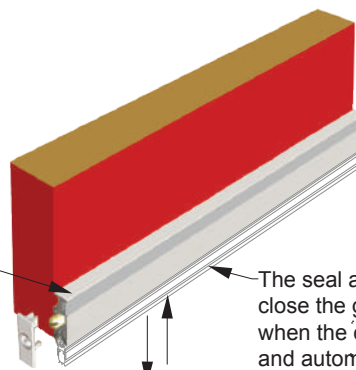
**c UL US LISTED** Electromagnetic Door Holder, UL 228



**CLASSIFIED c UL US** Smoke Seal, 3 Hr Fire Rating, UL 10C



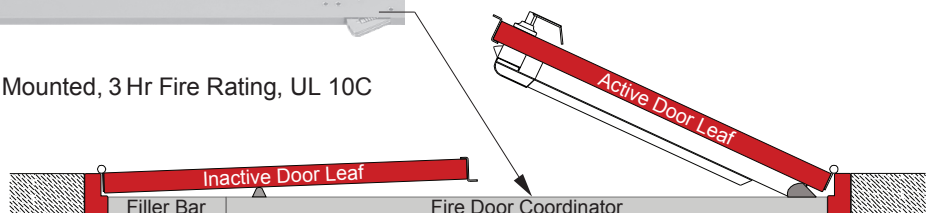
**CLASSIFIED c UL US** Automatic Door Bottom Seal, 3 Hr Fire Rating, UL 10C



The seal automatically comes out to close the gap beneath the door leaf when the door leaf is completely closed, and automatically retract when the door leaf starts to be opened.

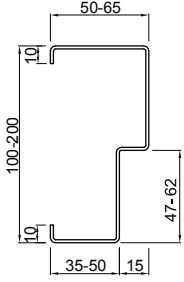
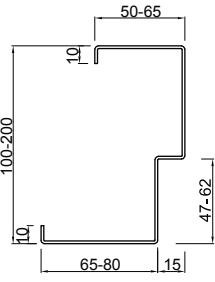
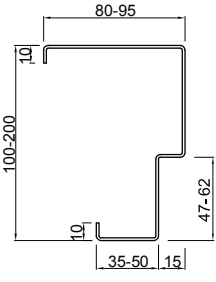
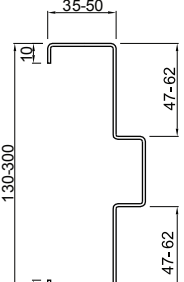
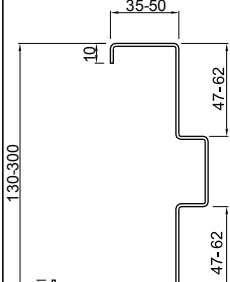
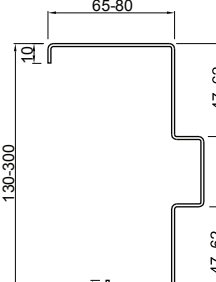


**c UL US LISTED** Fire Door Coordinator, Surface Mounted, 3 Hr Fire Rating, UL 10C

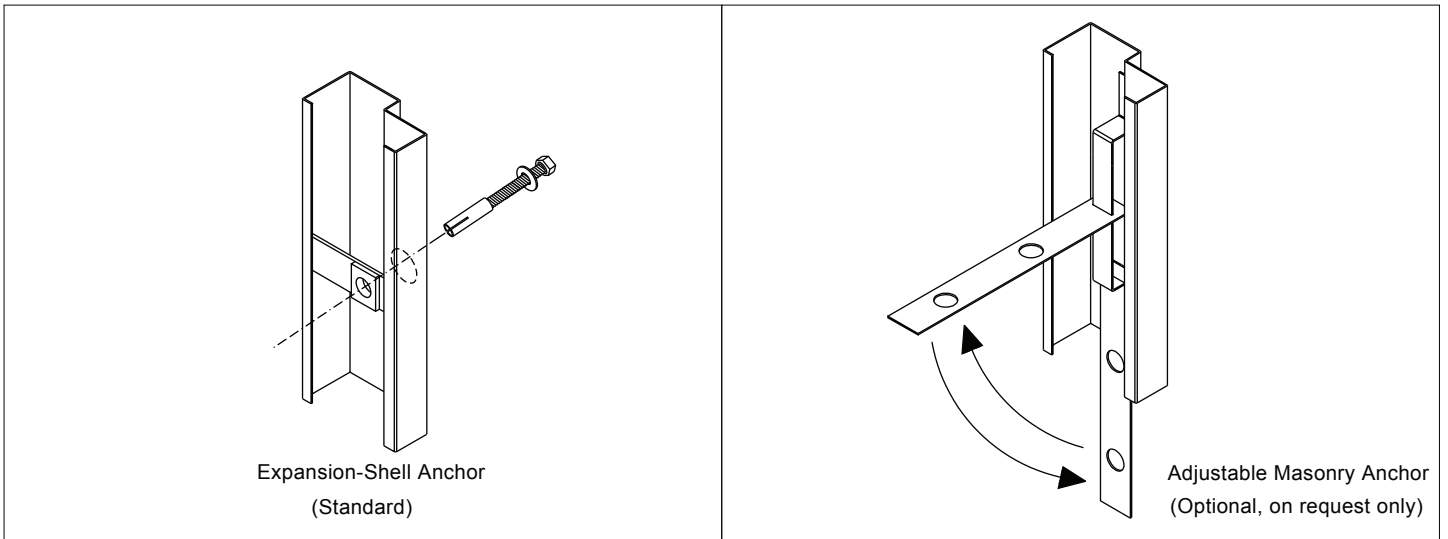




## Door Frame Profiles (for FRD & FRX)

 <p>Single Rabbet, without Architrave</p>	 <p>Single Rabbet, with Architrave at Pull Side</p>	 <p>Single Rabbet, with Architrave at Push Side</p>	 <p>Double Rabbet, without Architrave</p>	 <p>Double Rabbet, with Architrave at Pull Side</p>	 <p>Double Rabbet, with Architrave at Push Side</p>
--	--	--	---	--	--

## Anchor Types



## How to Order XXX-X XX X-XX-XX

### Door Model :-

**FRD** = Fire Steel Door, 3 Hr Fire Rating, ANSI/UL 10C & CAN ULC-S104

**FRX** = Fire Steel Door (Extra type), 3 Hr Fire Rating, ANSI/UL 10C & CAN ULC-S104

### Door Type :-

**S** = Single Door

**D** = Double Door

### Door Style :-

**00** = Flush

**FG** = Flush with Fire Rated Glass & Frames, 3 Hr Fire Rating, UL 10C

**EB** = Embossed

### Finish :-

**P** = Powder

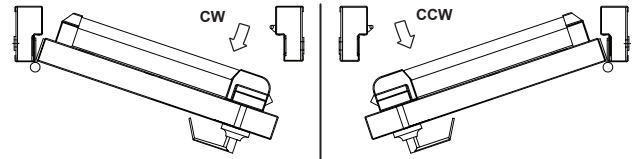
**W** = Wood Grain

### Size :-

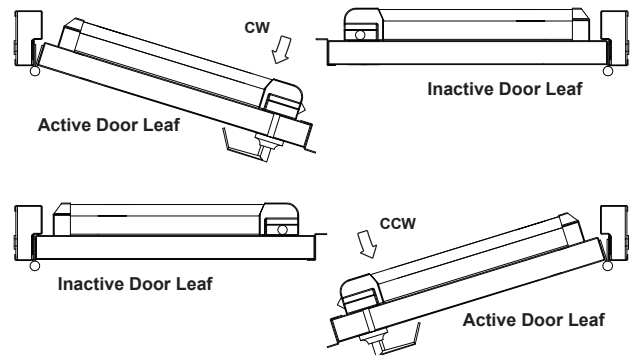
**Width x Height** = Outer Width of door frame x Outer Height of door frame  
(Height from finished floor level to top of the door frame)

### Opening Direction (Top View) :-

#### Single Door



#### Double Door



**CW** = Door Leaf (Active Door Leaf in case of Double Door) is opened to ClockWise direction

**CCW** = Door Leaf (Active Door Leaf in case of Double Door) is opened to CounterClockWise direction

**Example : FRD-DFGP-1500x2100-CCW** = Fire Steel Door, 3 Hr Fire Rating, ANSI/UL 10C & CAN ULC-S104, Double Door, Flush Style with Fire Rated Glass & Frames, 3 Hr Fire Rating, UL 10C, Powder Finish, Outer Width 1500 mm x Outer Height 2100 mm, Active Door Leaf is opened to CounterClockWise direction.

# Certificates Model : FRD

## CERTIFICATE OF COMPLIANCE

Certificate Number 20150210-R25577  
Report Reference R25577-20150129  
Issue Date 2015-FEBRUARY-10

Issued to: PCJ INDUSTRIES CO LTD  
199/24-25 VIBHADEERANGSIT RD  
SAMSENNAI  
PAYATHAI 10400 THAILAND

This is to certify that representative samples of SWINGING TYPE FIRE DOORS, POSITIVE PRESSURE TESTED ; SWINGING TYPE FIRE DOORS  
Model FRD, swinging-type fire door assembly of the hollow metal type with Max 100 sq in. glazing material, 3 Hr rating.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 10B - Fire Tests of Door Assemblies  
ANSI/UL 10C - Positive Pressure Fire Tests Of Door Assemblies  
CAN/ULC-S104 - Standard Method for Fire Tests of Door Assemblies

Additional Information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

*B. Mahesh*  
Bruce Mahesh, Assistant Chief Engineer, Global Inspection and Field Services  
UL LLC  
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [www.ul.com/contact](http://www.ul.com/contact)



# Certificates Model : FRX

## CERTIFICATE OF COMPLIANCE

Certificate Number 20190418-R25577  
Report Reference R25577-20190412  
Issue Date 2019-April-18

Issued to: PCJ INDUSTRIES CO LTD  
199/24-25 VIBHADEERANGSIT RD  
SAMSENNAI PAYATHAI 10400 THAILAND

This certificate confirms that representative samples of SWINGING TYPE FIRE DOORS, POSITIVE PRESSURE TESTED  
FRX, swinging-type fire door assembly of the hollow metal typewith Max. 100 sq in. glazing material, intended to provide protection for openings in Max. 3 hour locations.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 10C, Positive Pressure Fire Tests of Door Assemblies  
ANSI/UL 10B, Fire Tests of Door Assemblies  
CAN/ULC-S104, Standard Method for Fire Tests of Door Assemblies

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

*B. Mahesh*  
Bruce Mahesh, Director North American Certification Program  
UL LLC  
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [www.ul.com/contact](http://www.ul.com/contact)



## CERTIFICATE OF COMPLIANCE

Certificate Number 20150129-R25758  
Report Reference R25758-20150129  
Issue Date 2015-JANUARY-29

Issued to: PCJ INDUSTRIES CO LTD  
199/24-25 VIBHADEERANGSIT RD  
SAMSENNAI  
PAYATHAI 10400 THAILAND

This is to certify that representative samples of FIRE DOOR AND WINDOW FRAMES  
The single-unit type, pressed-steel frames for masonry walls at least 2 inches (50.8 mm) thickness.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 10B - Fire Tests of Door Assemblies  
ANSI/UL10C - Positive Pressure Fire Tests Of Door Assemblies  
CAN/ULC-S104 - Standard Method for Fire Tests of Door Assemblies

Additional Information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

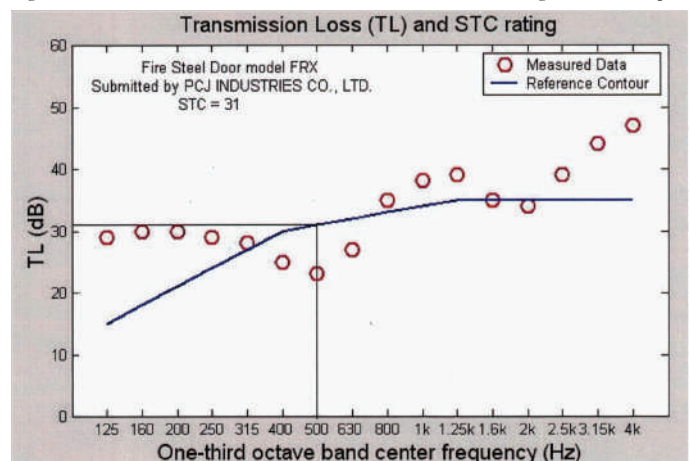
Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

*B. Mahesh*  
Bruce Mahesh, Assistant Chief Engineer, Global Inspection and Field Services  
UL LLC  
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [www.ul.com/contact](http://www.ul.com/contact)



Figure 1. The airborne sound transmission-loss (TL) and the STC rating of the test sample.







We, **PCJ INDUSTRIES CO.,LTD.**, was established in 1998, specialize in production of Fire Steel Doors, Combination Fire and Smoke Dampers, Fire Damper, Non-Fire Dampers, Duct Silencers, Acoustic Louvers, and Air Outlets.

Most of our products have been certified by several organizations for standardization, i.e. : Underwriters Laboratories, British Standards Institution, Standards Australia, Air Diffusion Council, Thai Industrial Standards Institute. Moreover, our company has been certified by International Organization for Standardization, ISO 9001 : 2008 as well.



We have our own factory established on our own land, area 40,000 sq.m.(approx.), in Kaengkhroi, Saraburi, Thailand.

Our Policy has always been, and will continue to be, the production and On Time-Every Time Schedule Delivery of Quality, Reliability and Competitively Priced Products. We have invested in instruments, machines, and we have experienced engineer teams take full time to research and develop our product lines continuously, including new product designs to meet worldwide market demands.

Our products have been distributed to many countries worldwide :-



and will be distributed to a lot more countries in the future.



**พีซีเจ อุตสาหกรรม จำกัด.**  
**PCJ INDUSTRIES CO.,LTD.**

199/24-25 Vibhavadeerangsit Road, Samsennai, Payathai, Bangkok 10400, Thailand

Tel : +66 2 2701938, +66 2 2781604, +66 2 2790859, +66 2 2794166, +66 2 6160184, +66 2 6160185

Fax : +66 2 2780451, +66 2 6160071 Email : sales@pcjindustries.co.th Website : www.pcjindustries.co.th



ISO 9001 : 2008 Certified  
Certificate No. FM 509124

0 1 0 8 1 9