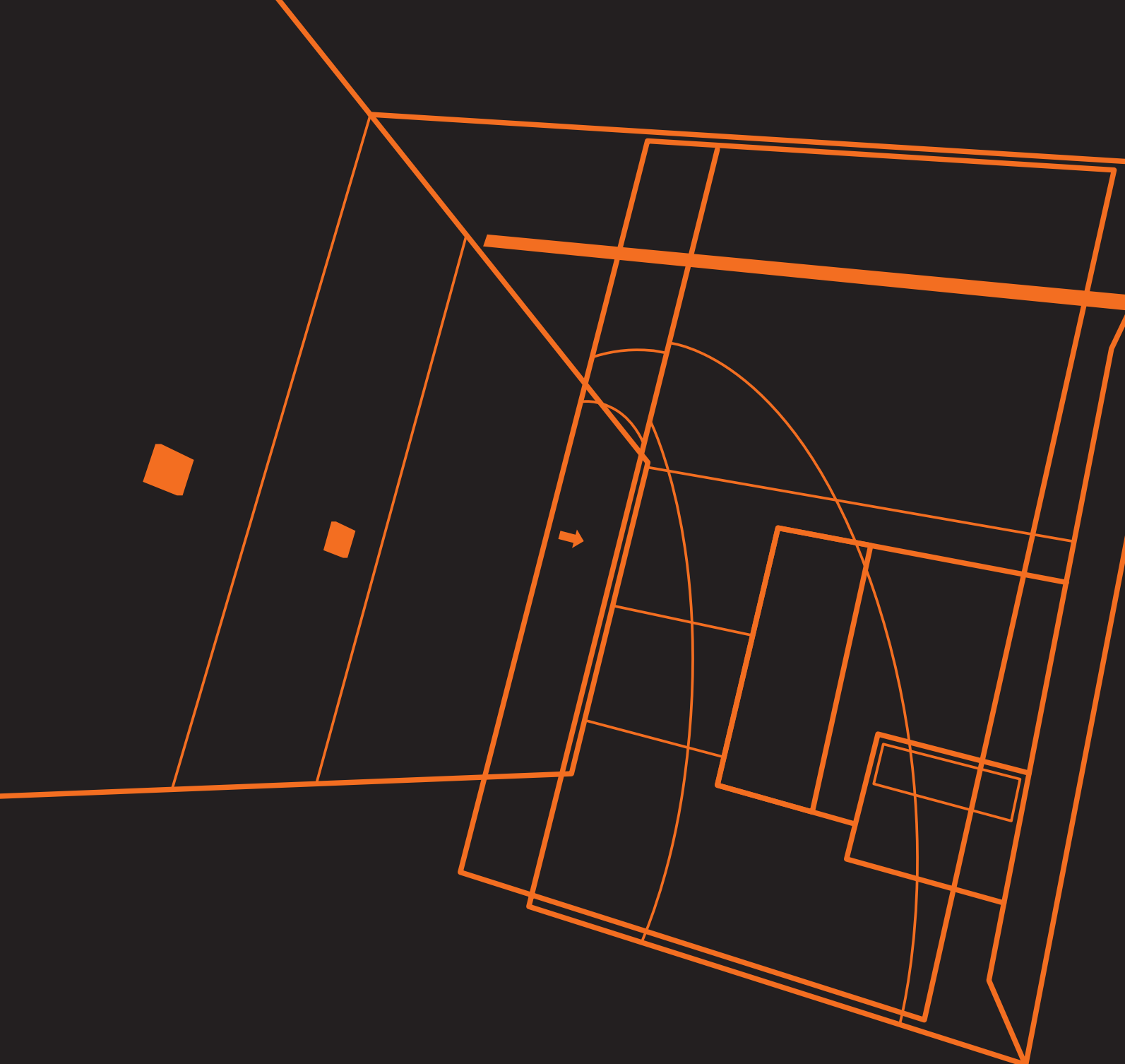




REFERENCE MANUAL

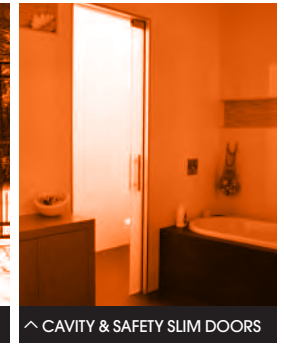
- > AUTOMATIC SLIDING DOORS
- > AUTOMATIC SWING DOORS
- > REVOLVING & CURVED DOORS
 - > GATE OPENERS
- > CAVITY & SAFETY SLIM DOORS

> MANUFACTURE

> DESIGN

> SALES

> SERVICE



The Automatic Door Operators referred to in this manual are manufactured from high quality materials and under strict supervision to comply with the current Australian Standards for Automatic Door Assemblies. Each unit is checked, tested and warranted to be free from defects in materials and workmanship.

The Logic Slide series of automatic door operators have been developed to suit all levels of duty from lightweight panels and medium traffic through to heavy duty panels and high density traffic requiring frequent and continuous use. The Auto Ingress operators are designed to suit just about any application.

Risk-Free Guarantee

Further from this, Auto Ingress also offers a "90 Day Replacement Guarantee" effective from the date of commissioning. Should the product fail to meet the performance specifications for the prescribed project, the said product will be replaced with an alternative product of the customer's choice equal to the performance specifications.

Leading Australian Owned Automatic Door Manufacturer

Auto Ingress Pty Ltd: A.C.N 083 047 241 / A.B.N 53 083 047 241

Member of: AADIF (Australian Automatic Door Industry Forum) & GAAQ (Glass and Aluminium Association of Queensland)

ASOFIA: Australian Shop & Office Fitting Industry Association

Compliance to: AS5007-2007 BCA EMC-C-Tick NZS 4239/1993 AS/NZ 4251.1:1999

Contact Details

Queensland – Head Office

Address 46 Rowland Street, Slacks Creek,
QLD 4127, Australia

Postal PO Box 825, Springwood, QLD 4127, Australia

Phone 61 7 3290 1500

Fax 61 7 3290 1567

National Toll Free 1300 138 750

Email contact@autoingress.com.au

Sales qldsales@autoingress.com.au

Victoria

Address Unit 37/189B South Centre Road,
Tullamarine, VIC 3043, Australia

Postal PO Box 300, Tullamarine
VIC 3043, Australia

Phone 61 3 9330 2220

Fax 61 3 9330 2228

Sales vic-sales@autoingress.com.au

Western Australia

Phone 1300 138 750

Fax 1300 138 756

Sales wasales@autoingress.com.au

New South Wales

Address 6/19-26 Durian Place, Wetherill Park,
NSW 2164, Australia

Postal PO Box 6199, Wetherill Park BC, NSW 2164, Australia

Phone 61 2 9756 6590

Fax 61 2 9756 5210

National Toll Free Service 1300 138 750

Sales ns-sales@autoingress.com.au

South Australia

Phone 1300 138 750

Fax 1300 138 756

Sales sa-sales@autoingress.com.au

Northern Territory

Phone 1300 138 750

Fax 1300 138 756

Sales nt-sales@autoingress.com.au

Tasmania

Phone 1300 138 750

Fax 1300 138 756

Sales tassales@autoingress.com.au

www.autoingress.com.au

TABLE OF CONTENTS

COMPANY PROFILE	6
IMAGE GALLERY	8
LOGIC SLIDE 300 SPECIFICATIONS	
> PRODUCT BROCHURE	10
> HEAVY DUTY SPECIFICATIONS	14
> LOW PROFILE SPECIFICATIONS	16
> TECHNICAL DRAWINGS	22
LOGIC SLIDE 220B SPECIFICATIONS	
> PRODUCT BROCHURE	41
> BRUSHLESS SPECIFICATIONS	
> LOW PROFILE SPECIFICATIONS	45
> TECHNICAL DRAWINGS	46
LOGICSWING SPECIFICATIONS	
> PRODUCT BROCHURE	58
> SPECIFICATIONS	62
> INSTALLATION DIAGRAMS	63
> CLOSURE ADJUSTMENT	
> TECHNICAL DRAWINGS	
REVOLVING & CURVED DOOR SPECIFICATIONS	
> KA023 3/4 WING REVOLVING DOOR PRODUCT BROCHURE	66
> KA022 2 WING REVOLVING DOOR PRODUCT BROCHURE	78
> KA023 3/4 WING REVOLVING DOOR PRODUCT BROCHURE	90
CAVITY & SAFETY SLIM DOOR SPECIFICATIONS	
> TECHNICAL DRAWINGS	111
GATE OPENERS SPECIFICATIONS	
WARRANTY	
INSTALLATION	
COMMISSIONING & MAINTENANCE	
OPERATIONAL FEATURES	
> DIGITAL DEVICE MANAGER	150
AUSTRALIAN STANDARDS	
> COMPLIANCE CERTIFICATES	152
> PRODUCT GUIDE - INTRODUCTION	156
> TABLE OF CONTENTS	157
> CHAPTER 1: PRODUCT QUALITY	158
> CHAPTER 2: STANDARDS	159
> CHAPTER 3: OPERATING INSTRUCTIONS	160
> CHAPTER 4: SERVICE GUIDE	163
> CHAPTER 5: WARRANTY DETAILS	166
DESIGN GUIDE	
> DRAW IN HAZARD	168
> FIRE ESCAPE REQUIREMENTS	169
> HEAD & BODY ENTRAPMENT HAZARD	170
> IMPACT HAZARD	171
> CRUSHING HAZARD	172
> SHEAR HAZARD	173
> SIGNAGE	174

Established in Queensland in 1996, Auto Ingress Pty Ltd being 100% Australian owned manufactures both chain and belt driven automatic door operators to suit extremely busy doorways such as; shopping centres, hospitals and universities just to name a few. With over 13,000 installations nationwide and export markets such as: Dubai, Vietnam, Fiji, Vanuatu, Greece and New Zealand Auto Ingress automatic doors are fast becoming the number one choice in the Australian market as well as being recognised as the preferred choice in various overseas markets.

Since its inception, Auto Ingress has strategically developed growth in the eastern states of Australia, establishing sales and service outlets in NSW and Victoria with a support infrastructure in both metropolitan and country/regional areas.

Acknowledging the importance of back up service, Auto Ingress together with their own network of technicians has secured long term relationships with many local and regional service contractors ensuring prompt reliable service to Australian metropolitan and isolated areas of the country 24 hours a day 7 days a week.

In 2006 Auto Ingress expanded their sales and service to Western Australia and are now in the embryonic stages with South Australia, Tasmania and Northern Territory. It is our immediate plan to become the number one supplier of automatic doors in the Australian market.

Auto Ingress Pty Ltd is resolute in gaining recognition and market share by providing a product that is extremely reliable, quality manufactured to the stringent ISO 9001-2000 conditions, low maintenance, economical to install, aesthetically pleasing, but more importantly is supported by market leading warranties.

Some of our national projects include: National Bank of Australia, Westpac, Mater Hospital, Bank West, Woolworths, Aldi Stores and Multi Unit projects including the Zone shopping Centres and various government projects such as court houses and police stations. We are proud members of the Australian Shop & Office Fitting Industry Association and the Australian Automatic Door Industry Forum. Our management team have over 30 years plus experience in the automatic door industry.

It is our policy to be consistent in all facets of our business, pricing, quality, service and delivery. Our belief is not only in our product; but in the way we do business. We will continue to develop this approach into the future.

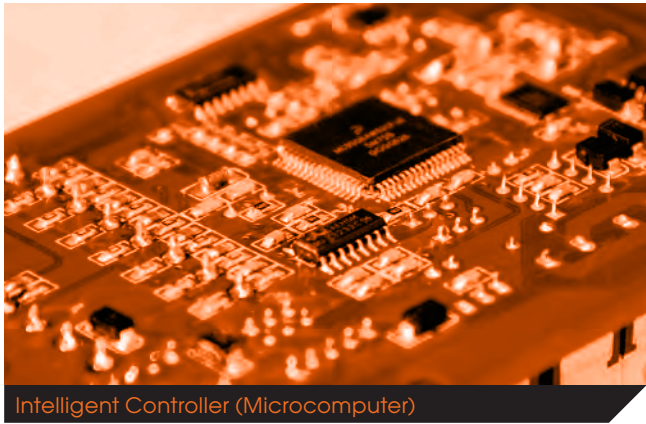
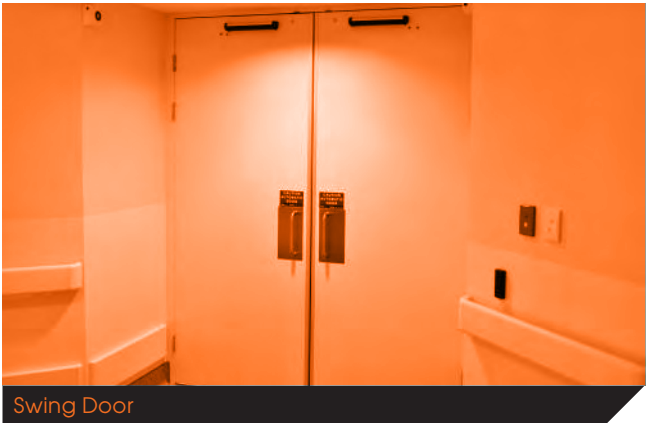
We invite you to explore our website for further comprehensive information on our company, products and contact details.

Mission

Auto Ingress aims to offer high quality, innovative effortless entry solutions, market leading warranties and technical support for the best possible value.

Vision

Our vision is to create a close family environment to achieve customer and employee satisfaction at the highest level as we strive to become a global leader in automatic door technologies.



PROUDLY AUSTRALIAN OWNED AND MANUFACTURED
AUTOMATIC ENTRY SOLUTIONS

MODEL LS300



AUTOINGRESS
AUTOMATIC DOORS

MANUFACTURE
DESIGN
SALES
SERVICE



< Motor & Gearbox

Arguably the highest torque automatic door motor in standard production. This heavy duty D.C. motor with direct gearbox can move door leaves of 380KG continuously 24hrs a day. Ideally suited for high density traffic areas such as Banks, Shopping Centres, Service stations, and Government buildings.

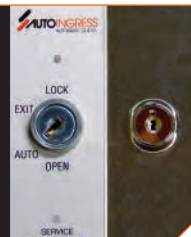


< Master Key Options

For maximum entry security

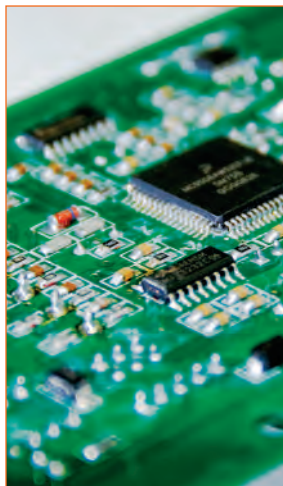


Standard Key Options >



< Intelligent Controller

Using the latest Microcomputer technology we provide safe and intelligent control of the doors at all times. The Microcomputer accurately monitors every movement of the door and can also provide automatic compensation based on climatic conditions such as wind loads and normal wear. The Microcomputer has an inbuilt, self monitored and recalibrating feature to always reprogram itself back to it's peak performance settings. The Auto Ingress door operators are manufactured utilising high quality componentry with a primary focus on providing cost effective, trouble free and ongoing door opening solutions.

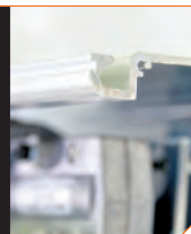


< Noise Suppressing

Auto Ingress have designed a noise suppressing end pulley that reduces chain noise by 30%.



Pelmet & Cowl Options >
A variety of profile sizes



< Pelmet Section

Aesthetically pleasing narrow pelmet sections coloured to suit your project.



< Track

All operators come standard with a Stainless steel track that is supported by a life time warranty. No pitting, corroding or rough operation of aluminium tracks anymore as this Stainless Steel track sets new standards in smoothness of door operation.



< Sensors

Are fully digital computerised infrared sensors with adjustable sensitivity, range and selectable zone detection pattern.



< Chain

This heavy duty drive chain is used for very heavy duty secure applications. It's 12.5mm pitched steel roller chain with a breaking strain of 1965 kg provides strength when needed most.



< Battery Back Up

Is supplied to maintain locking in the event of a power failure as well as to open the doors on an emergency signal when required.



Push Button Options >



< Electric Motor Lock

Considered the bench mark for high security applications. Electric Motor Locking provides instant peace of mind knowing that regardless of door alignment the doors will lock providing instant security.



< Device Manager

- > Access control pad option
- > Large display
- > Self Diagnostic
- > User friendly



Floor Guides >



< Motor Dampening

Vibration dampened by rubber mounts to ensure a quiet and smooth operation at all times.



Reset Switch >



Failsafe

On Power failure the doors will open or operate normally by using the built in UPS as per AS 5007-2007.

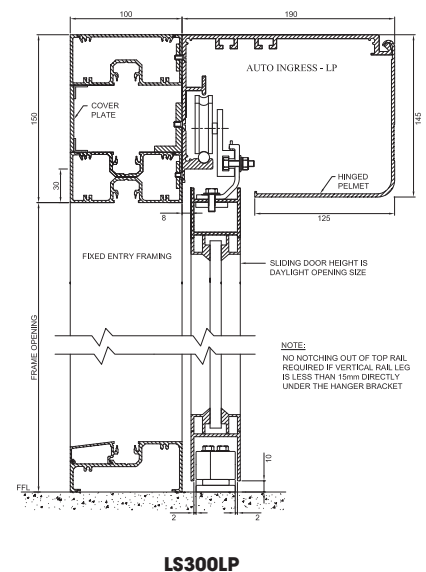
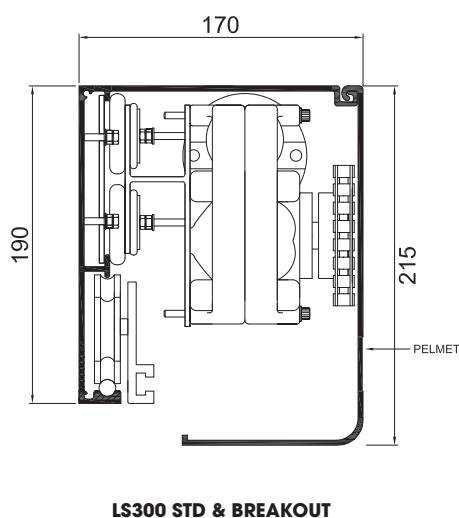
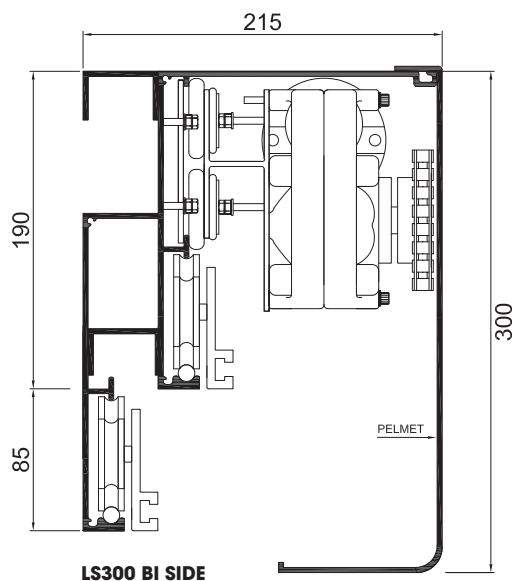
Warranties

- > 5 years motor and gearbox
- > 2 years parts
- > 12 months labour
- > Extended warranties on periodic maintenance

Specifications

MODEL	LS300	LS300 LP
Motor	300w	300w
Bi-Parting	Y	Y
Drive	Chain 1960kg	Steel Reinforced Belt
Single	Y	Y
BiSliding/Telescopic	Y	Y
Aluminium Doors	Y	Y
Panic Breakout	Y	N
Glass Doors 12, 15, 19mm	Y	Y
Timber Doors	Y	Y
Profile Height/Depth	215mmx170mm	145mmx190mm
Pelmet	Y	Y
Electric Motor Lock	opt	opt
Keypad Programmable Mode	Y	Y
Master Keyed Key Switching	opt	opt
Panic Lock	opt	opt
Total Door Weight	360	360
Weight per Leaf	185	185
Maximum Operator Width	8000	8000
Speed per Bi-Parting Doors	25-1300mm/sec	25-1300mm/sec
Door Open Dwell Time	0-60 sec	0-60 sec
Airlock Function	Y	Y
Climate Control (reduced opening)	Y	Y
Keypad Control	Y	Y
Keyed Mode Switch Control	Y	Y
Safety Stop	Y	Y
Safety Reverse	Y	Y
Fire Alarm Interface	Y	Y
Building Management Interface	Y	Y
Chime	opt	opt
Access Control Interface	Y	Y
Exit Only Function	Y	Y
Power Supply	240v/10amp	240v/10amp
Failsafe/Failsecure	Y	Y
Memory Retained Without Power	Y	Y
One million cycle tested to AS 5007-2007	Y	Y

* Based on door height of approx 2400mm. (Please confirm with your representative).



> Australian owned, designed & manufactured

> Proudly Australian Owned and locally Manufactured

> Service Support: 24 hours a day seven days a week

> Innovative seamless design integration

> Eye catching aesthetics

> Slimline profiles (145mm, 215mm)

> Engineered for performance in high density traffic flow environments

> To suit Timber, Aluminium Framed, Glass, Cavity Sliding and Servery window applications

> Custom made to suit your project needs

> A host of actuation options available

> Interface with all Access control options

> Device Manager Control Pad or key switching options

> Over engineered to move door weights of 360kg

> Extremely safe operation featuring automatic reversing. Installed in compliance to the safety elements of AS5007-2007

> Stainless Steel Track (Lifetime warranty)

> Built in UPS System (Uninterrupted power Supply)

> Hinged pelmet design

> High security locking module incorporated in the Motor

> Steel reinforced belt or chain

> Whisper quiet operation

> Climate control function available

> Tailored maintenance packages available

> Energy efficient

> Market leading Warranties

Manufactured and installed for compliance to the BCA & AS5007-2007.



Queensland – Head Office

Address 46 Rowland Street, Slacks Creek, QLD 4127, Australia

Postal PO Box 825, Springwood, QLD 4127, Australia

Phone 61 7 3290 1500

Fax 61 7 3290 1567

National Toll Free 1300 138 750

Email contact@autoingress.com.au

Sales qldsales@autoingress.com.au

Victoria

Address Unit 37/189B South Centre Road, Tullamarine, VIC 3043, Australia

Postal PO Box 300, Tullamarine, VIC 3043, Australia

Phone 61 3 9330 2220

Fax 61 3 9330 2228

Sales vic-sales@autoingress.com.au

Western Australia

Phone 1300 138 750

Fax 1300 138 756

Sales wasales@autoingress.com.au

New South Wales

Address 6/19-26 Durian Place, Wetherill Park, NSW 2164, Australia

Postal PO Box 6199, Wetherill Park BC, NSW 2164, Australia

Phone 61 2 9756 6590

Fax 61 2 9756 5210

National Toll Free 1300 138 750

Sales nswsales@autoingress.com.au

South Australia

Phone 1300 138 750

Fax 1300 138 756

Sales sasales@autoingress.com.au

Northern Territory

Phone 1300 138 750

Fax 1300 138 756

Sales ntsales@autoingress.com.au

Tasmania

Phone 1300 138 750

Fax 1300 138 756

Sales tassales@autoingress.com.au

LOGIC SLIDE 300 HEAVY DUTY PRODUCT SHEET

AUTOMATIC SLIDING DOOR ASSEMBLIES

General Applications: Aluminium Framed Doors & Frameless Doors (with or without electric lock)

Standard: To AS5007-2007 and NZS 4239/1993

Propriety Item: Logic Slide Heavy Duty automatic sliding door operator as manufactured by Auto Ingress Pty Ltd.

PERFORMANCE SPECIFICATION

The automatic (single slide/ bi-slide) Logic Slide 300 door operators are to be electrically approved 240v fully electric operators, fully housed in an extruded aluminium housing, height 215mm and width 170 mm. The said operators are to be manufactured in Australia to comply with the relevant Australian standards for sliding door assemblies (AS5007-2007) and B.C.A. requirements. The equipment shall incorporate the following:

1. Motor

Continuously rated D.C. motor with no overload protection to provide an operational rating of 60 minutes per hour 24 hours a day for door weights of up to 360kg. Motor to be directly coupled to gearbox without any intermediate coupling such as belts or pulleys. Minimum output torque of 100N. The motor is to incorporate an integral hall effect counter unaffected by dust and light for door position sensing, eliminating the need for mechanical limit switches. Infrared counters and plastic discs susceptible to misreading through dust and ambient light is not acceptable.

2. Gearbox

Maintenance-free, self-lubricating gears are to be supported at each end by fully sealed steel roller bearings. The gears are to be fully enclosed in a die cast aluminium housing to prevent exposure to dust and dirt and to prevent leakage or dissolution of lubricant.

3. Drive

Steel roller chain of 12.5 mm pitch directly connected to the hanger trolley assembly incorporating fibreglass reinforced nylon concave track wheels of 56mm diameter, fitted with permanently lubricated sealed roller bearings and running on a heavy duty self aligning and cleaning convex stainless steel track guaranteed for the lifetime of the operator.

4. The Digital Device Manager

(DDM/ Digital keypad) must have as a minimal requirement

The built in time clock with integral 10 year battery backup must provide time and day display and allow the user to change or set the day and time but be pass-code protected so unauthorised time change is not possible.

The time clock must allow every individual day to be separately programmable for automatic locking and unlocking of the building at differing times as determined by the user with the ability of the programmed time overrides for holidays plus user adjustable daylight saving times.

In built secure key pad for After Hours entry/exit with unlimited user determined and changeable pass-code. DDM secure keypad must utilize data transfer mode of operation – thereby making it vandal or intruder proof from the shorting of cables or damaging the device.

The DDM must provide nine modes of operation:

1. **Auto**
sensor operation on both sides of the door.
2. **Exit**
sensor operation on the inside of the door allowing exit only, door to lock when closed if fitted with an electric lock.
3. **Lock**
sensors are disabled and doors are securely locked when closed.
4. **Open**
doors are to remain in the open position.
5. **Manual**
doors are in manual mode allowing user to slide and leave at a position of their choice.

6. **Climate Auto**
reduced opening provided in auto mode.
7. **Climate Lock**
reduced opening in locked mode.
8. **Climate Open**
reduced hold open.
9. **Climate Exit**
reduced opening on exit mode.

Also the DDM must allow additional hard wired operational interface modes:

- **Panic Lock**
panic switch for fast closing and locking for personal protection.
- **Delivery Mode**
reduced opening for delivery drivers to pass parcels through.
- **Smoke Alarm**
to interface with Smoke alarm system to prevent the spread of smoke by closing the doors.
- **Fire Alarm**
to interface with the buildings Fire integration system to open doors on alarm, with or without mains power.
- **BMS**
must allow integration with existing building management systems for timed locking, secure after hours access plus both lock and door status outputs.

The DDM must cater for the following outputs as standard features:

- Built in Digital People Counter and Display with the pass-code protection for resetting.
- People Counter remote output for separate display in another location.
- Switchable entry chime.
- Door status - open or closed indication.
- Locked Status - locked or unlocked.
- Energy wise switch - when switched on the microcontroller to identify busy traffic flows and adjust the door opening width automatically.
- Ability for the user to change their own pass-code.
- Ability to reset the operator from the DDM.
- Ability to utilize managed lock mode - if there is a safety sensor failure late in the day this will enable the user to override the default setting and lock the door with unlimited operation in the lock mode only.
- Ability to use monitored and unmonitored safety sensors.
- Selectable electric/manual lock outputs.
- Selectable Push & go to open the doors or push close to boost electric locking.

As a standard feature the DDM must provide visual and audible alarms for:

- Battery Failure
- Built in factory registration
- Built in service reminders
- Mains power failure

The DDM must incorporate:

- Diagnostic messages display and event records via pass-code protection.
- Ability for pass-code protected user, service and factory setting changes so that accidental changes to modes or settings or functions are not possible.
- Non volatile ram for storage of the settings and pass-codes so these are not lost in power failure or battery failure or both.
- Separately programmable and uninterruptable (UPS) operational settings on power failure for both Lock and Auto modes.
- Selectable opening width on climate control.
- External computer operating properly (COP) watch dog timer so the microcontroller will reset to normal operation on power glitches etc.
- Adjustable preset power-boost for windy or for normal wear.
- Self diagnostic correction of door speeds and obstruction checking.
- Full timed operation on encoder failure and self restoration on correction.
- Self detection and correction of the locking position on power restoration in lock mode.
- Adjustable safety reversing torque in both directions.
- Adjustable brake timer and brake band width in both directions.

LOGIC SLIDE 300 HEAVY DUTY PRODUCT SHEET

5. Safety

Dual set of photoelectric cells to keep door open if threshold is obstructed as per the current Australian Standards.

6. Climate Control

Choice of manual fixed reduced opening or automatically adjustable energy wise function where the opening is automatically adjusted to suit increased traffic flow.

7. Security Interface

Ability to provide operational data to the building management computer and fully compatible with card reader, time clock control and key entry switch etc.

8. Door Control Switch

Digital Device Manager to provide the following functions:

AUTO EXIT HOLD OPEN LOCK MANUAL

9. Actuation Sensors

The operator is to actuate with fully digital computerised infrared sensors with adjustable sensitivity, range and selectable zone detection pattern. The sensors are to be capable of providing one metre sideways detection from the line of the installed unit. These detectors must provide selectable failsafe or failsecure operation.

10A. ☐ Locking - if Electrical Locking is required (please tick)

The doors are to lock via the operator. The operator is to be fitted with a fail safe motor lock device directly locking the rotor shaft thus preventing failures due to door misalignment. This device is to be fully battery backed in power failure. The controller is to provide logical control (ie unlock, open and close then relock with a valid request to exit such as card reader or after hours exit P.B switch) On power failure or emergency the door is to maintain security and be able to provide emergency egress and then be capable of being locked if mains power is not restored. The emergency exit switch fitted adjacent to the door must be accessible, illuminated, clearly engraved in red and must operate in both power failure and normal conditions.

10B. ☐ Locking - Manual Locking (Refer Lock Schedule) (please tick)

11. Battery Status Indicator and Charger

The operator is to continuously monitor the battery status and indicate failure through a visual and audible alarm. The controller shall provide a regulated and current limited self charging circuit to keep the battery at its optimum level of charge and to increase the useful life of the battery.

12. Self Diagnostic

The operator is to incorporate self diagnosing software to correct loads created by wind loading, gradual wear or misalignment of wheel track etc.

13. Self Intelligence

The micro controller is to be capable of self programming without the need for specialist programming equipment or service calls. On site adjustment for speed setting, safety reversing and dwell time has to be provided without the need for any additional programmers so that suitably trained trade personnel are not restricted from servicing the equipment.

14. Fire Alarm Interface

The operator is to be capable of full interface with the fire alarm system to provide both unlock and open facility or open only during normal operation (if not locked) on fire alarm.

15. Warranty

The automatic door operator is to be covered by a two year warranty from the date of commissioning. The motor and gearbox is to be covered by a five year warranty. An extended parts warranty of five years is to be provided with the acceptance of a service contract.

16. AS5007-2007, compliance date: 17.10.2010

LOGIC SLIDE 300LP LOW PROFILE PRODUCT SHEET

AUTOMATIC SLIDING DOOR ASSEMBLIES

General Applications: Aluminium Framed Doors
(with or without electric lock)

Standard: To AS5007-2007 and NZS 4239/1993

Propriety Item: Logic Slide Low Profile automatic sliding door operator as manufactured by Auto Ingress Pty Ltd.

PERFORMANCE SPECIFICATION

The automatic (single slide/ bi-slide) Logic Slide 300LP door operators are to be electrically approved 240v fully electric operators, fully housed in an extruded aluminium housing of height 145 mm and width 190 mm. The said operators are to be manufactured in Australia to comply with the current Australian Standards for sliding door assemblies and B.C.A. requirements. The equipment shall incorporate the following:

1. Motor

Continuously rated D.C. motor with no overload protection to provide an operational rating of 60 minutes per hour 24 hours a day for door weights of up to 360 kg. Motor to be directly coupled to gearbox without any intermediate coupling such as belts or pulleys. Minimum output torque of 100 kg/cm. The motor is to incorporate an integral hall effect counter unaffected by dust and light for door position sensing, eliminating the need for mechanical limit switches. Infrared counters and plastic discs susceptible to misreading through dust and ambient light is not acceptable.

2. Gearbox

Maintenance free self lubricating gears supported each end by fully sealed steel roller bearings. The gears are to be fully enclosed in a die cast aluminium housing to prevent exposure to dust and dirt and to prevent leakage or dissolution of lubricant.

3. Drive

Steel roller chain of 12.5 mm pitch directly connected to the hanger trolley assembly incorporating fibreglass reinforced nylon concave track wheels of 56mm diameter, fitted with permanently lubricated sealed roller bearings and running on a heavy duty self aligning and cleaning convex stainless steel track guaranteed for the lifetime of the operator.

4. The Digital Device Manager

(DDM/ Digital keypad) must have as a minimal requirement

The built in time clock with integral 10 year battery backup must provide time and day display and allow the user to change or set the day and time but be pass-code protected so unauthorised time change is not possible.

The time clock must allow every individual day to be separately programmable for automatic locking and unlocking of the building at differing times as determined by the user with the ability of the programmed time overrides for holidays plus user adjustable daylight saving times.

In built secure key pad for After Hours entry/exit with unlimited user determined and changeable pass-code. DDM secure keypad must utilize data transfer mode of operation – thereby making it vandal or intruder proof from the shorting of cables or damaging the device.

The DDM must provide nine modes of operation:

1. **Auto**
sensor operation on both sides of the door.
2. **Exit**
sensor operation on the inside of the door allowing exit only, door to lock when closed if fitted with an electric lock.
3. **Lock**
sensors are disabled and doors are securely locked when closed.
4. **Open**
doors are to remain in the open position.
5. **Manual**
doors are in manual mode allowing user to slide and leave at a position of their choice.

6. **Climate Auto**
reduced opening provided in auto mode.
7. **Climate Lock**
reduced opening in locked mode.
8. **Climate Open**
reduced hold open.
9. **Climate Exit**
reduced opening on exit mode.

Also the DDM must allow additional hard wired operational interface modes:

- **Panic Lock**
panic switch for fast closing and locking for personal protection.
- **Delivery Mode**
reduced opening for delivery drivers to pass parcels through.
- **Smoke Alarm**
to interface with Smoke alarm system to prevent the spread of smoke by closing the doors.
- **Fire Alarm**
to interface with the buildings Fire integration system to open doors on alarm, with or without mains power.
- **BMS**
must allow integration with existing building management systems for timed locking, secure after hours access plus both lock and door status outputs.

The DDM must cater for the following outputs as standard features:

- Built in Digital People Counter and Display with the pass-code protection for resetting.
- People Counter remote output for separate display in another location.
- Switchable entry chime.
- Door status - open or closed indication.
- Locked Status - locked or unlocked.
- Energy wise switch - when switched on the microcontroller to identify busy traffic flows and adjust the door opening width automatically.
- Ability for the user to change their own pass-code.
- Ability to reset the operator from the DDM.
- Ability to utilize managed lock mode - if there is a safety sensor failure late in the day this will enable the user to override the default setting and lock the door with unlimited operation in the lock mode only.
- Ability to use monitored and unmonitored safety sensors.
- Selectable electric / manual lock outputs.
- Selectable Push & go to open the doors or push close to boost electric locking.

As a standard feature the DDM must provide visual and audible alarms for:

- Battery Failure
- Built in factory registration
- Built in service reminders
- Mains power failure

The DDM must incorporate:

- Diagnostic messages display and event records via pass-code protection.
- Ability for pass-code protected user, service and factory setting changes so that accidental changes to modes or settings or functions are not possible.
- Non volatile ram for storage of the settings and pass-codes so these are not lost in power failure or battery failure or both.
- Separately programmable and uninterruptable (UPS) operational settings on power failure for both Lock and Auto modes.
- Selectable opening width on climate control.
- External computer operating properly (COP) watch dog timer so the microcontroller will reset to normal operation on power glitches etc.
- Adjustable preset power- boost for windy or for normal wear.
- Self diagnostic correction of door speeds and obstruction checking.
- Full timed operation on encoder failure and self restoration on correction.
- Self detection and correction of the locking position on power restoration in lock mode.
- Adjustable safety reversing torque in both directions.
- Adjustable brake timer and brake band width in both directions.

LOGIC SLIDE 300LP LOW PROFILE PRODUCT SHEET

5. Safety

Dual set of photoelectric cells to keep door open if threshold is obstructed as per the current Australian Standards.

6. Climate Control

Choice of manual fixed reduced opening or automatically adjustable energy wise function where the opening is automatically adjusted to suit increased traffic flow.

7. Security Interface

Ability to provide operational data to the building management computer and fully compatible with card reader, time clock control and key entry switch etc.

8. Door Control Switch

Digital Device Manager to provide the following functions:

AUTO EXIT HOLD OPEN LOCK MANUAL

9. Actuation Sensors

The operator is to actuate with fully digital computerised infrared sensors with adjustable sensitivity, range and selectable zone detection pattern. The sensors are to be capable of providing one metre sideways detection from the line of the installed unit. These detectors must provide selectable failsafe or failsecure operation.

10A. ☐ Locking - if Electrical Locking is required (please tick)

The doors are to lock via the operator. The operator is to be fitted with a fail safe motor lock device directly locking the rotor shaft thus preventing failures due to door misalignment. This device is to be fully battery backed in power failure. The controller is to provide logical control (ie unlock, open and close then relock with a valid request to exit such as card reader or after hours exit P.B switch) On power failure or emergency the door is to maintain security and be able to provide emergency egress and then be capable of being locked if mains power is not restored. The emergency exit switch fitted adjacent to the door must be accessible, illuminated, clearly engraved in red and must operate in both power failure and normal conditions.

10B. ☐ Locking - Manual Locking (Refer Lock Schedule) (please tick)

11. Battery Status Indicator and Charger

The operator is to continuously monitor the battery status and indicate failure through a visual and audible alarm. The controller shall provide a regulated and current limited self charging circuit to keep the battery at its optimum level of charge and to increase the useful life of the battery.

12. Self Diagnostic

The operator is to incorporate self diagnosing software to correct loads created by wind loading, gradual wear or misalignment of wheel track etc.

13. Self Intelligence

The micro controller is to be capable of self programming without the need for specialist programming equipment or service calls. On site adjustment for speed setting, safety reversing and dwell time has to be provided without the need for any additional programmers so that suitably trained trade personnel are not restricted from servicing the equipment.

14. Fire Alarm Interface

The operator is to be capable of full interface with the fire alarm system to provide both unlock and open facility or open only during normal operation (if not locked) on fire alarm.

15. Warranty

The automatic door operator is to be covered by a two year warranty from the date of commissioning. The motor and gearbox is to be covered by a five year warranty. An extended parts warranty of five years is to be provided with the acceptance of a service contract.

16. AS5007-2007, compliance date: 17.10.2010

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model **LS300 Bi Slide** door operators as manufactured by **Auto Ingress Pty Ltd** are to be electrically approved for 240v, fully housed in a specialised aluminium housing of height 300mm and width 215mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-4) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. **Primary Drive**
Steel roller Chain of 12.5 pitch with a tensile strength of no less than 1980 KG coupled to a noise suppressing end gear. And secondary drive to be H section notched steel reinforced belt design.
2. **Motor**
Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. **Door Weights**
Must be tested and certified to AS5007-2007 for 1 million cycles of combined door weights of up to 360kgs.
4. **Gear Box**
Self Lubricating fully sealed maintenance free gearbox.
5. **Track**
Stainless steel covered by a lifetime warranty.
6. **Actuation & Safety**
By either Eagle 6 Safe combination presence/micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. **Controller**
Solid state microprocessor controller with all-effect positional encoder.
8. **Reset feature**
Intelligent self diagnostic with calibrating software.
9. **Standard Interface ability**
Security, FIP, BMS.
10. **Monitored battery backed failsafe**
As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. **Door Type Options**
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-b001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-b002)

12. **Locking**
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)

13. **Special entry**
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).

14. **Control Functions** (please select)

- ☐ Standard-"Device Manager" fully programmable coded Mode Touch pad.
- ☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. **Warranties**
Auto Ingress LS300 Bi Slide Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.

16. **Warranty extention**
A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.

17. **Maintenance**
The operator is to be serviced and maintained in accordance with AS5007-2007

18. **AS5007-2007**, compliance date: 17.10.2010

Rev: 1-06-2011

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS300 door operators as manufactured by Auto Ingress Pty Ltd are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 215mm and width 170mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-4) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. **Drive**
Steel roller Chain of 12.5 mm pitch with a tensile strength of no less than 1950 KG coupled to a noise suppressing end gear.
2. **Motor**
Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. **Door Weights**
Must be tested and certified to AS5007-2007 for 1 million cycles of combined door weights of up to 360kgs.
4. **Gear Box**
Lifetime Self Lubricating fully sealed and maintenance free gearbox.
5. **Track**
Stainless steel covered by a lifetime warranty.
6. **Actuation & Safety**
To AS5007 by either combination presence safety/ micro wave sensors or dual sun resistant monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. **Controller**
Solid state microprocessor controller with hall-effect positional encoder.
8. **Reset feature**
Intelligent self diagnostic and calibrating software.
9. **Standard Interface ability**
Security, FIP, BMS.
10. **Monitored battery backed failsafe**
As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. **Door Type Options**
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-h001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-h006)

12. **Locking**
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)
13. **Special entry**
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).
14. **Control Functions** (please select)

☐ Standard- 'Device Manager' fully programmable coded Mode Touch pad (Refer DDM spec attached).

☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. **Warranties**
Auto Ingress LS300 Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon the date of Practical Completion.
16. **Warranty extention**
A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.
17. **Maintenance**
The operator is to be serviced and maintained in accordance with AS5007-2007
18. **AS5007-2007**, compliance date: 17.10.2010

Rev: 1-06-2011

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS300B door operators as manufactured by Auto Ingress Pty Ltd are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 215mm and width 170mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-4) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

- 1. Drive**
Heavy Duty Steel reinforced belt of 12.5 pitch.
- 2. Motor**
Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
- 3. Door Weights**
Must be tested and certified to AS5007-2007 for 1 million cycles of combined door weights of up to 360kgs.
- 4. Gear Box**
Self Lubricating fully sealed maintenance free gearbox.
- 5. Track**
Stainless steel covered by a lifetime warranty.
- 6. Actuation & Safety**
By either Eagle 6 Safe combination presence/ micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
- 7. Controller**
Solid state microprocessor controller with hall-effect positional encoder.
- 8. Reset feature**
Intelligent self diagnostic with calibrating software.
- 9. Standard Interface ability**
Security, FIP, BMS.
- 10. Monitored battery backed failsafe**
As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
- 11. Door Type Options**
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-h001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-h006)

- 12. Locking**
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)

- 13. Special entry**
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).

- 14. Control Functions (please select)**

☐ Standard-"Device Manager" fully programmable coded Mode Touch pad.

☐ Optional- MK4- four position security key switch (can be master keyed by client)

- 15. Warranties**
Auto Ingress LS300B Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.

- 16. Warranty extension**
A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.

- 17. Maintenance**
The operator is to be serviced and maintained in accordance with AS5007-2007

- 18. AS5007-2007, compliance date: 17.10.2010**

Rev: 1-06-2011

LOGIC SLIDE 300LP - LOW PROFILE BELT DRIVE

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS300LPB door operators as manufactured by Auto Ingress Pty Ltd are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 145mm and width 190mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-4) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. **Drive**
H section notched, steel reinforced belt of 12.5 pitch.
2. **Motor**
Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. **Door Weights**
Must be tested and certified to AS5007-2007 for 1 million cycles of combined door weights of up to 360kgs.
4. **Gear Box**
Self Lubricating fully sealed maintenance free gearbox.
5. **Track**
Stainless steel covered by a lifetime warranty.
6. **Actuation & Safety**
By either Eagle 6 Safe combination presence/ micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. **Controller**
Solid state microprocessor controller with hall-effect positional encoder.
8. **Reset feature**
Intelligent self diagnostic with calibrating software.
9. **Standard Interface ability**
Security, FIP, BMS.
10. **Monitored battery backed failsafe**
As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. **Door Type Options**
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-lp001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-lp002)

12. **Locking**
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)

13. **Special entry**
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).

14. Control Functions (please select)

☐ Standard-“Device Manager” fully programmable coded Mode Touch pad.

☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. **Warranties**
Auto Ingress LS300LPB Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.

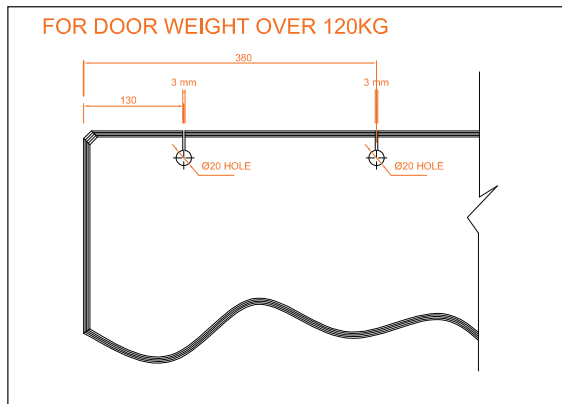
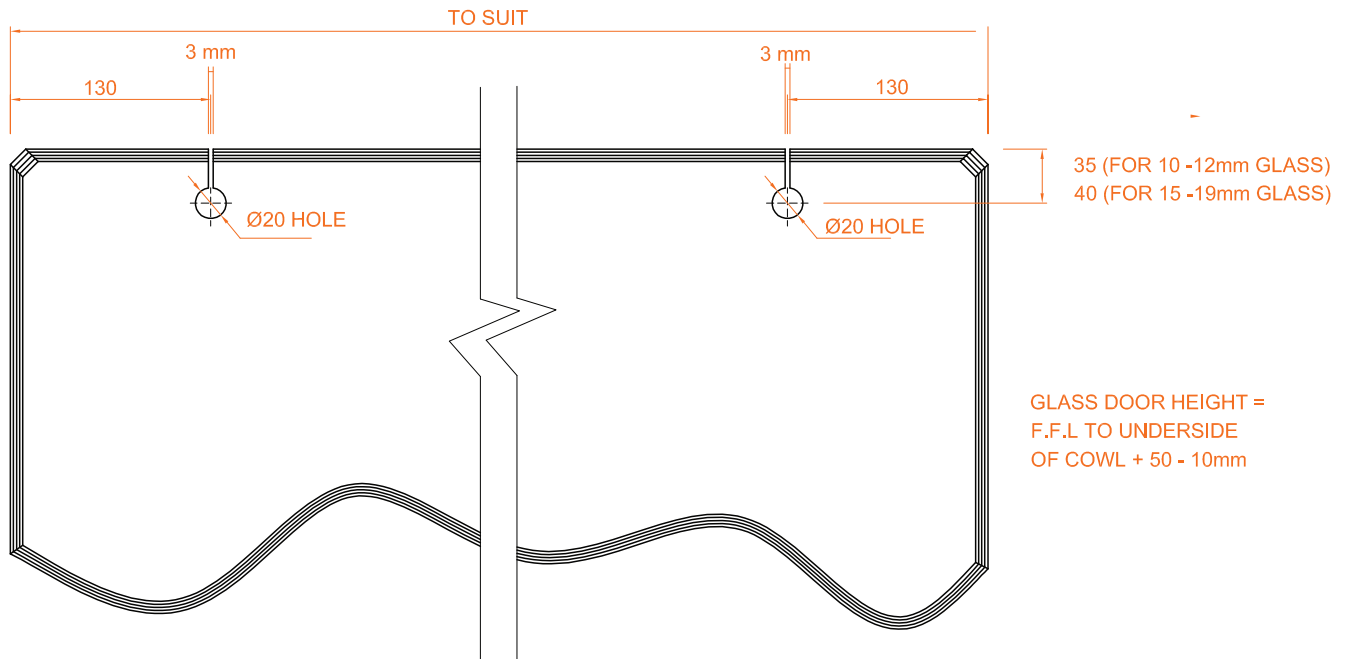
16. **Warranty extention**
A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.

17. **Maintenance**
The operator is to be serviced and maintained in accordance with AS5007-2007

18. **AS5007-2007**, compliance date: 17.10.2010

Rev: 1-06-2011

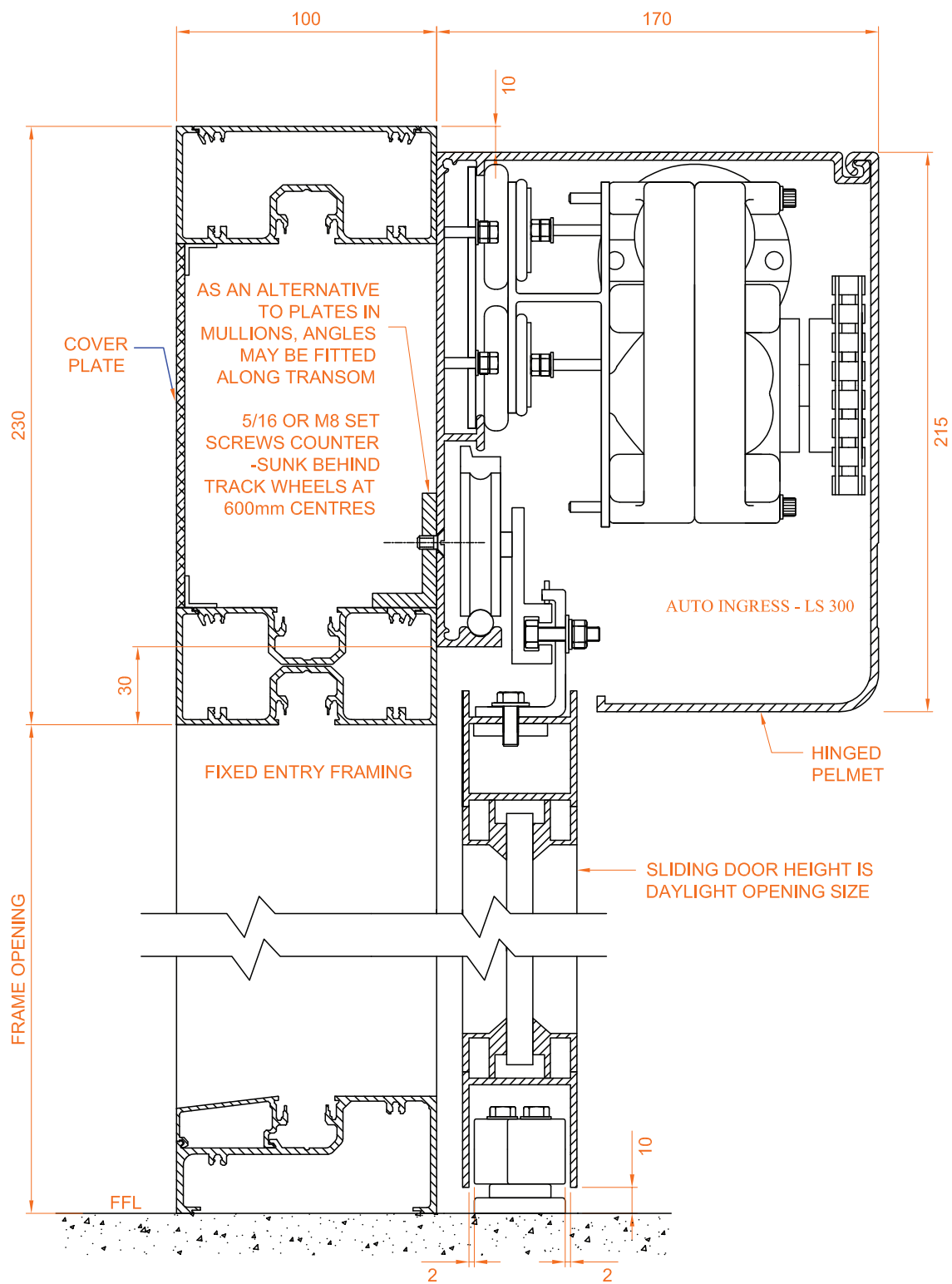
GLASS DOOR PREPARATION LS300/LS220B/FRAMELESS GLASS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	GLASS DOOR PREPARATION LS300/LS220B/ FRAMELESS GLASS
	DATE:	DRG. NO.
	02/02/12	Isl-g002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

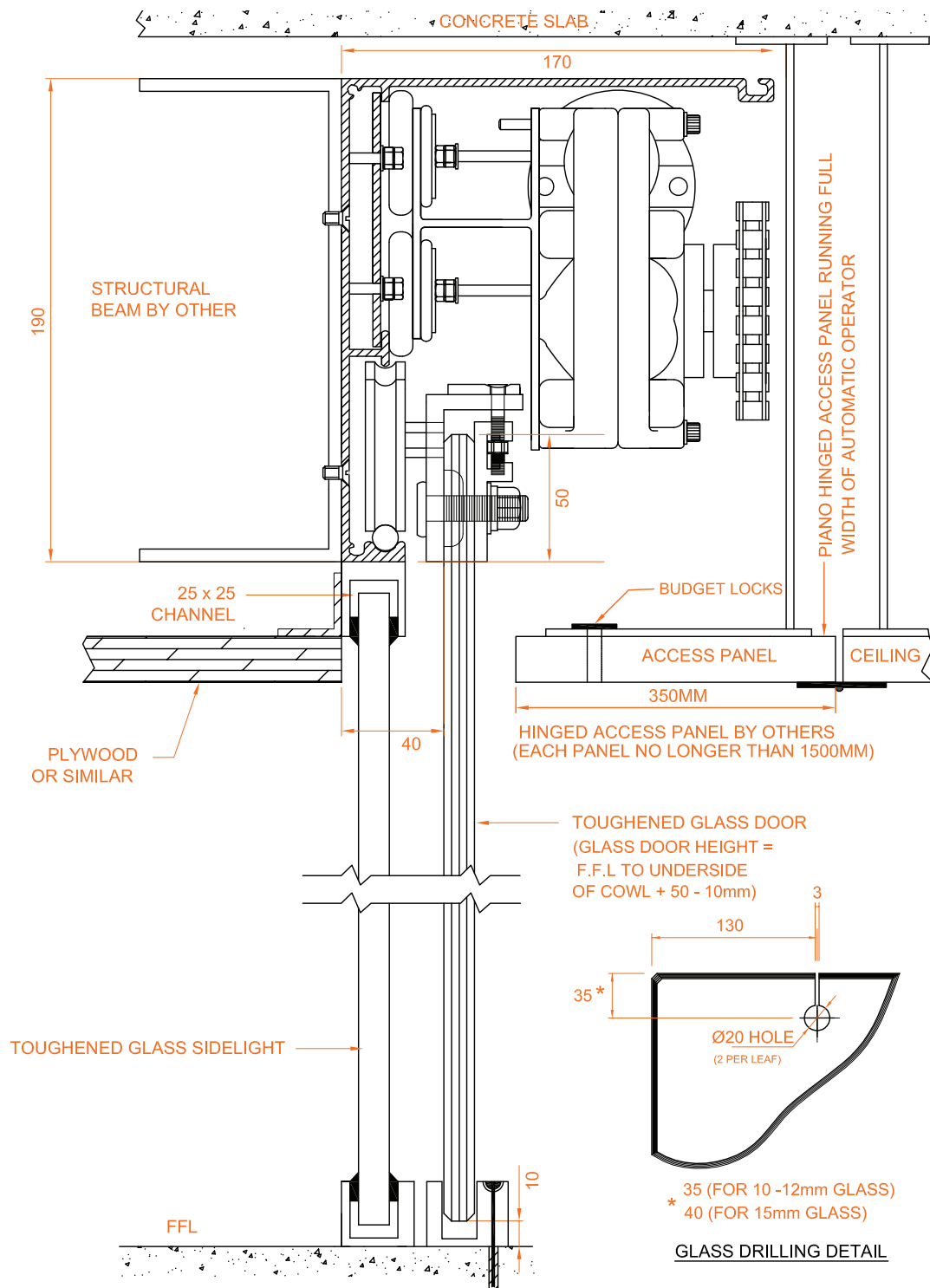
LS300 ALUMINIUM FRAMED DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > For operator mounting fit 260mm x 6mm thickness aluminium flat insert (width to suit space in mullions and jamb)	AUTO INGRESS	TITLE: LS300 Aluminium Framed Door Detail
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. ISI-h001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

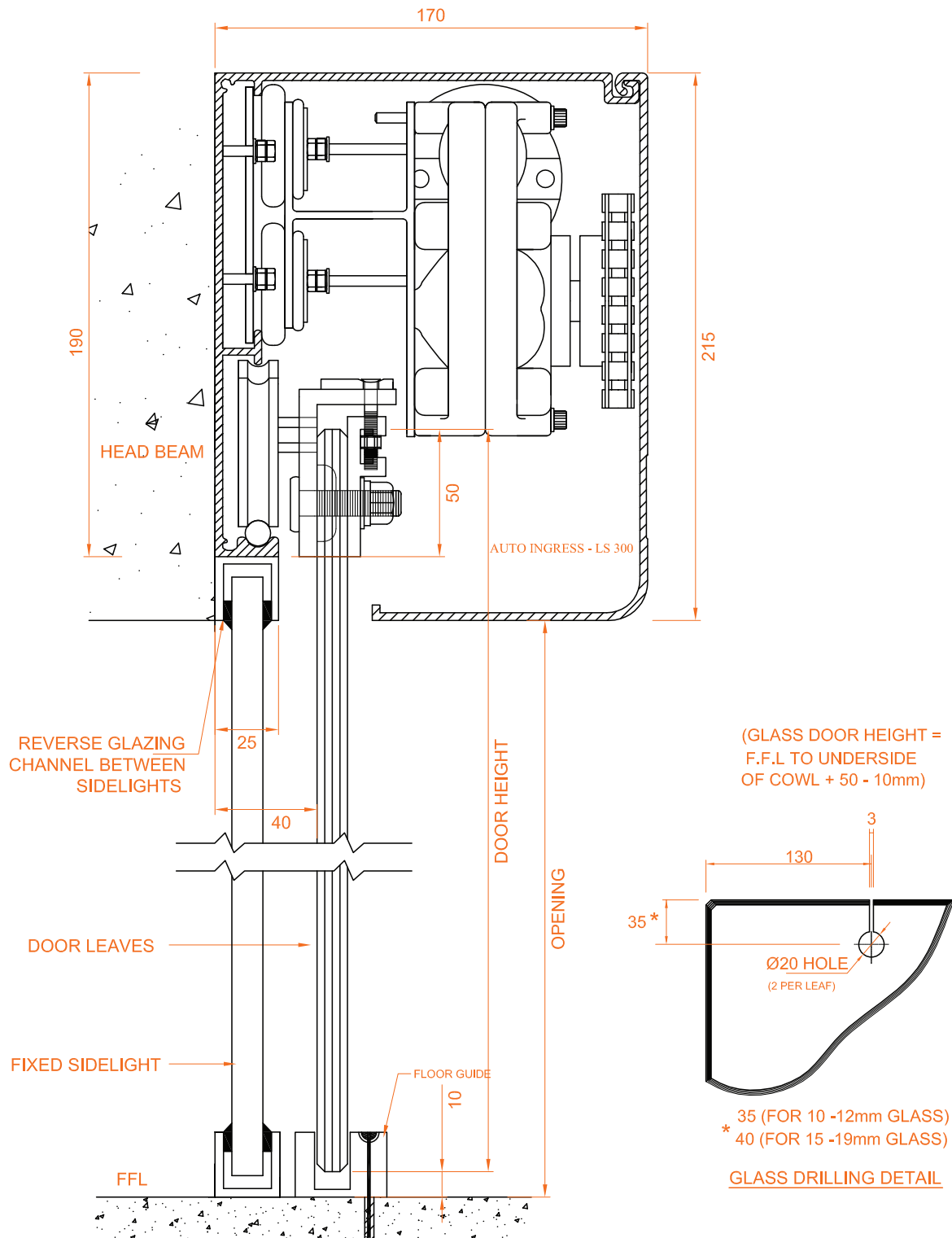
LS300 ABOVE CEILING FRAMELESS DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > Refer to Isl-g004 for glazing details	AUTO INGRESS	TITLE: LS300 Above Ceiling Frameless Door Detail
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. Isl-h002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

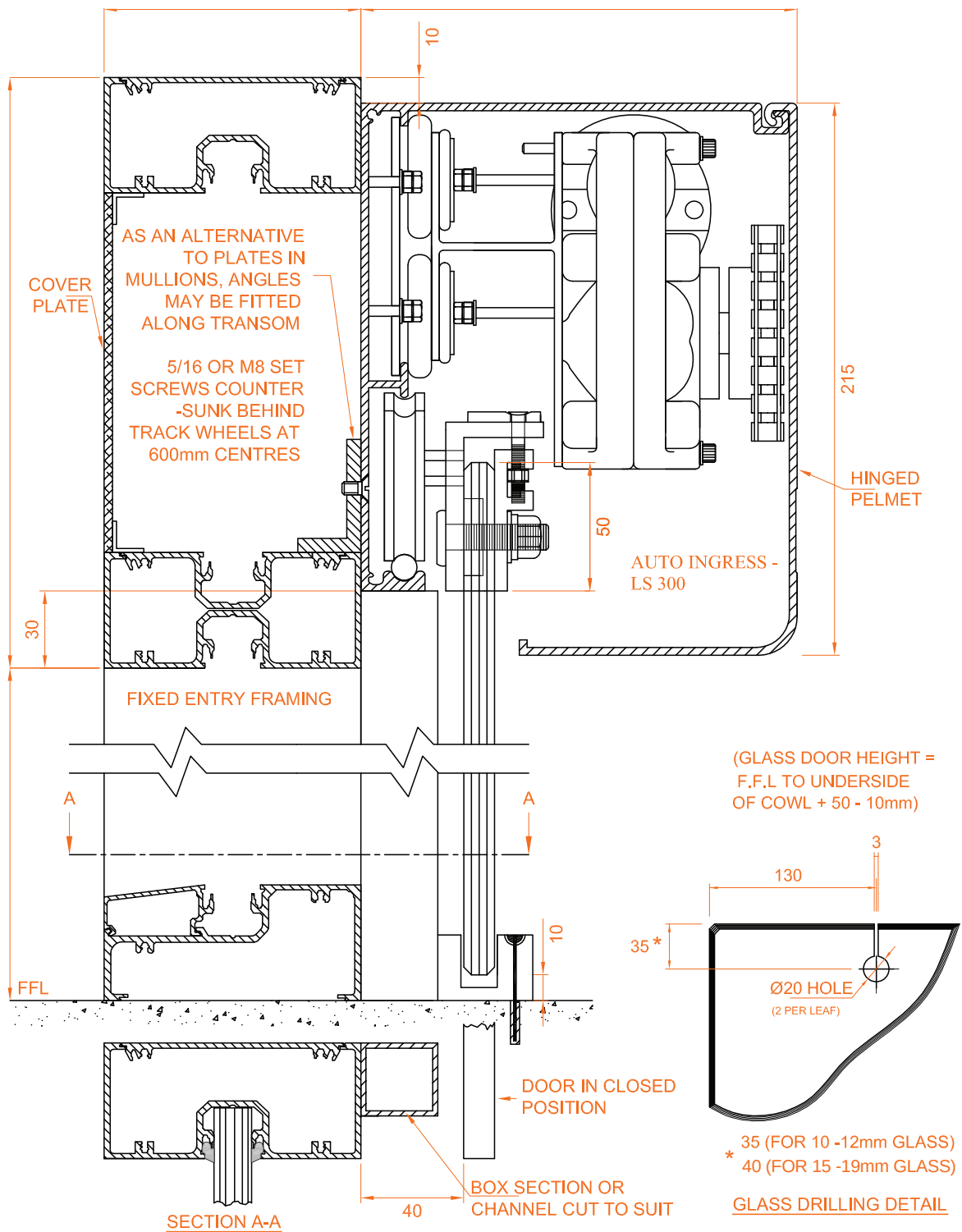
LS300 FRAMELESS GLASS DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > For operator mounting fit 260mm x 6mm thickness aluminium flat insert (width to suit space in mullions and jamb)	AUTO INGRESS	TITLE:
	SCALE:	LS300 Frameless Glass Door Detail
	DATE:	DRG. NO.
	02/02/12	Isl-h003

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all its contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

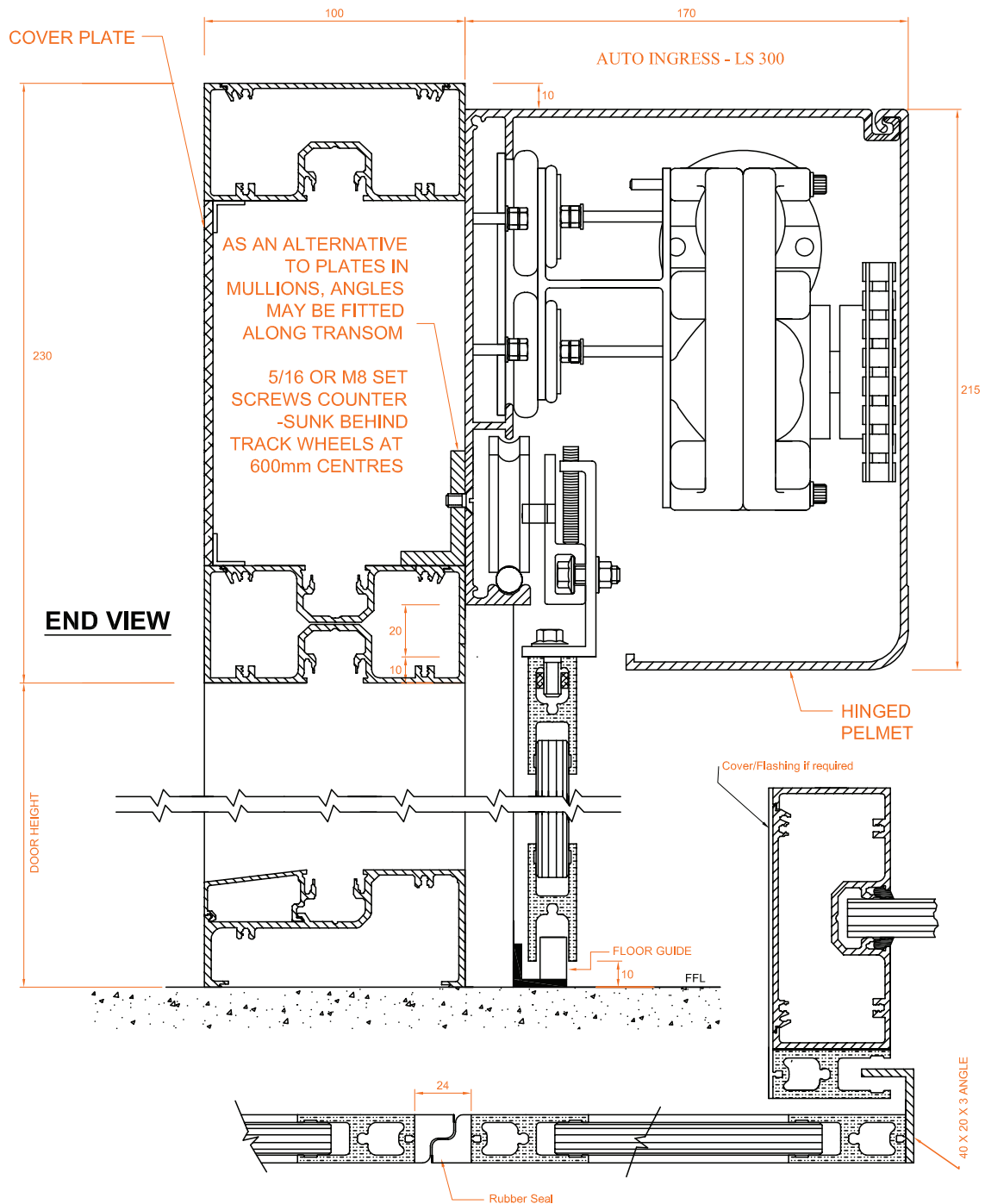
LS300 GLASS DOOR ONTO ALUMINIUM FRAME



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > To ensure track wheels are not obstructed - maximum length of fixing screw is 6mm	AUTO INGRESS	TITLE: LS300 Glass Door onto Aluminium Frame
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. IsI-h004

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

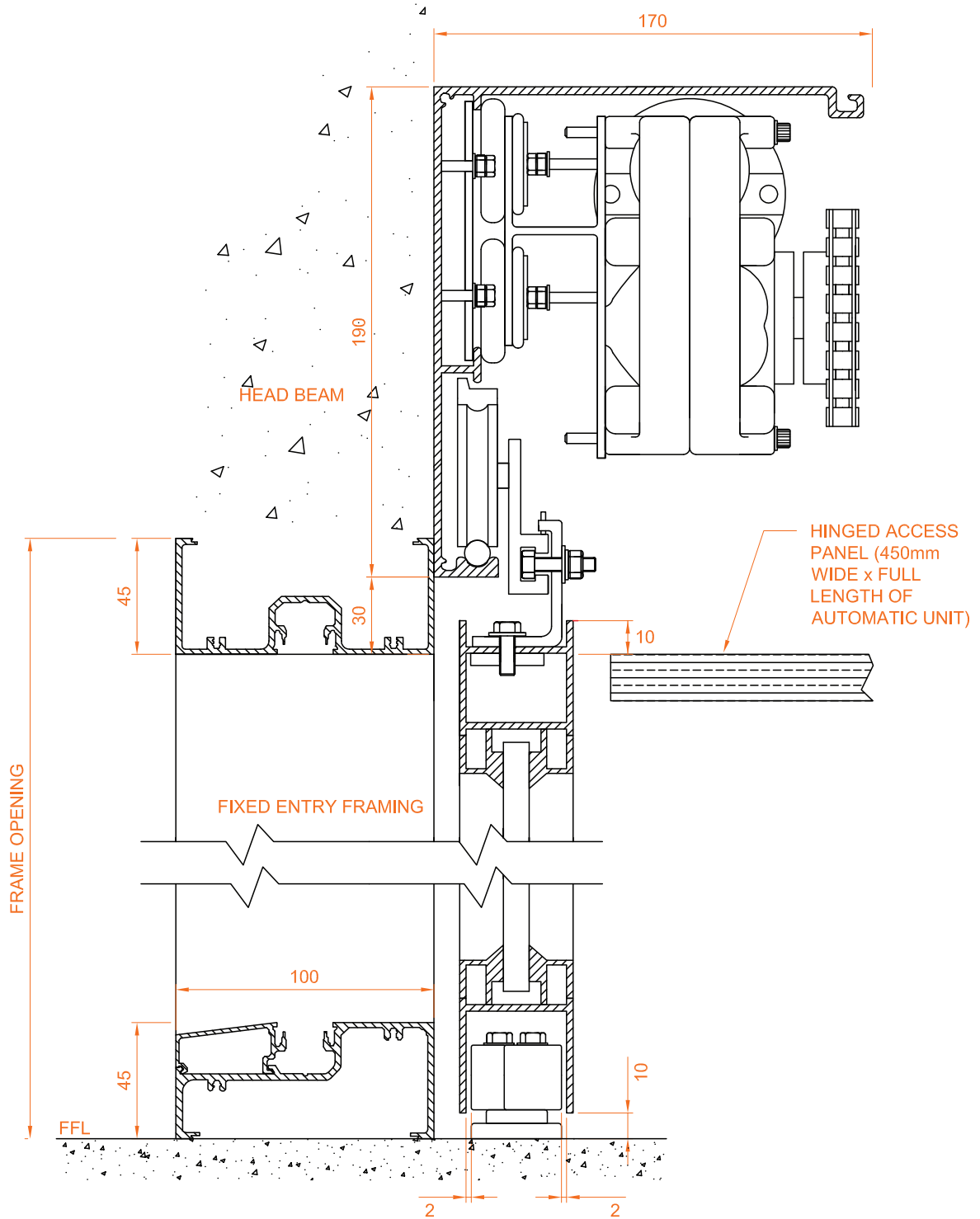
LS300 SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > To ensure track wheels are not obstructed - maximum length of fixing screw is 6mm	AUTO INGRESS	TITLE:
	SCALE:	LS300 Safety-Slim Framed Door Detail onto STD Aluminium Framed Shopfront with Interlock
	DATE:	DRG. NO.
	02/02/12	Isl-h005

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

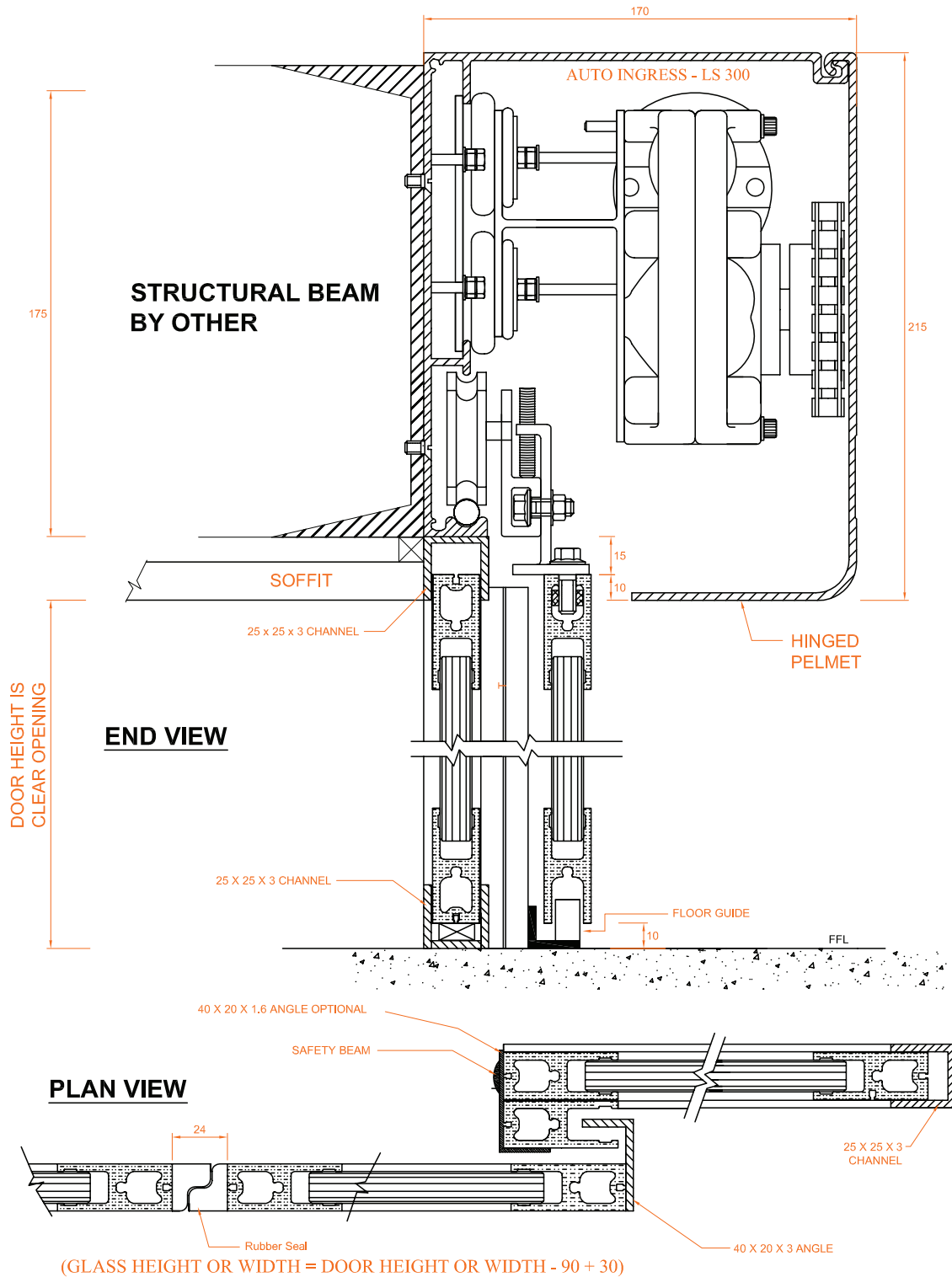
LS300 ALUMINIUM FRAMED DOORS ONTO A HEAD BEAM



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300 Aluminium Framed Doors onto a Head Beam
	DATE:	DRG. NO.
	02/02/12	Isl-h006

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all its contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

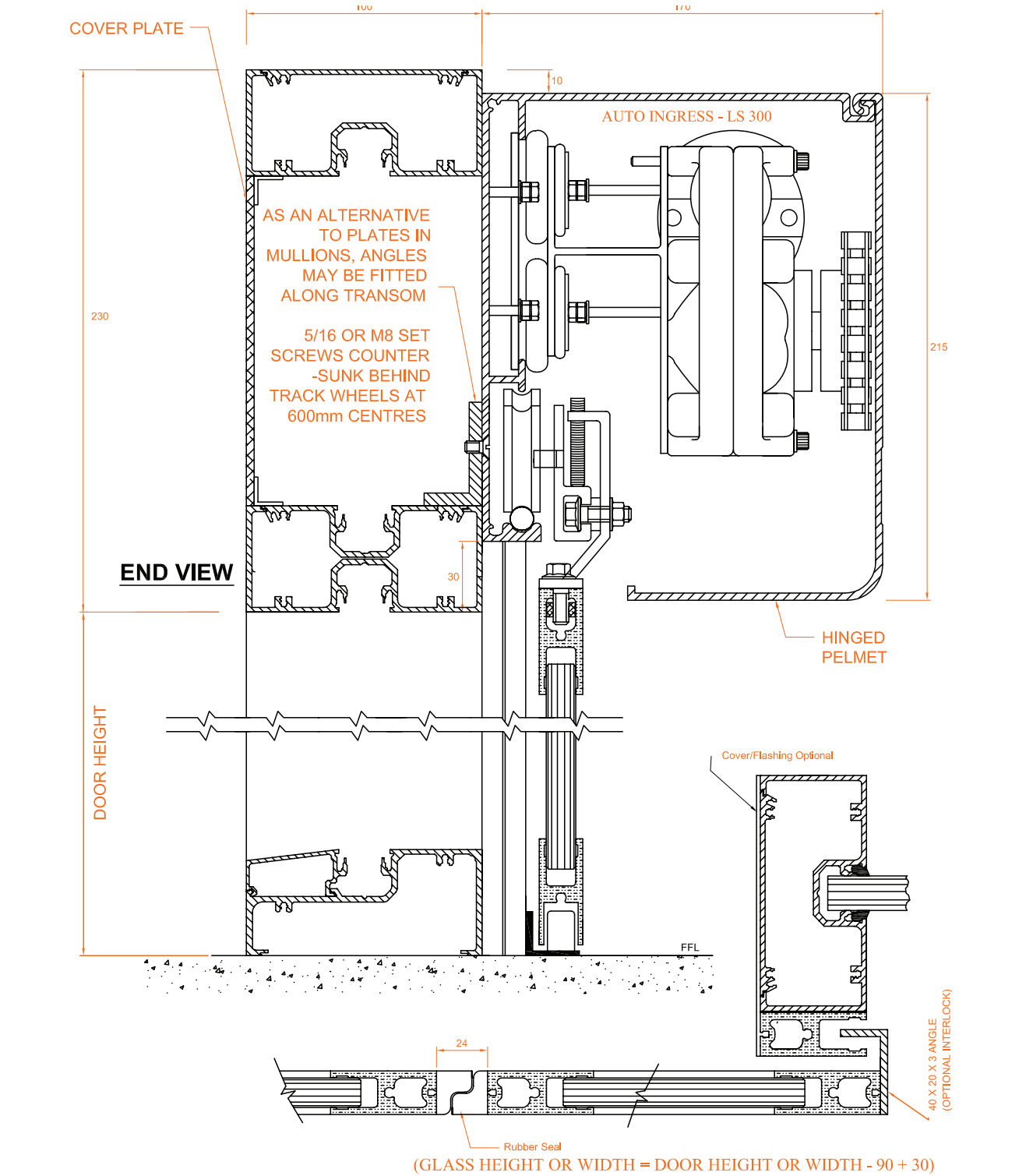
LS300 SAFETY-SLIM FRAMED DOOR DETAIL & SS SIDE LIGHT WITH INTERLOCK



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300 Safety-Slim Framed Door Detail & SS Side Light with Interlock
	DATE:	DRG. NO.
	02/02/12	Isl-h007

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

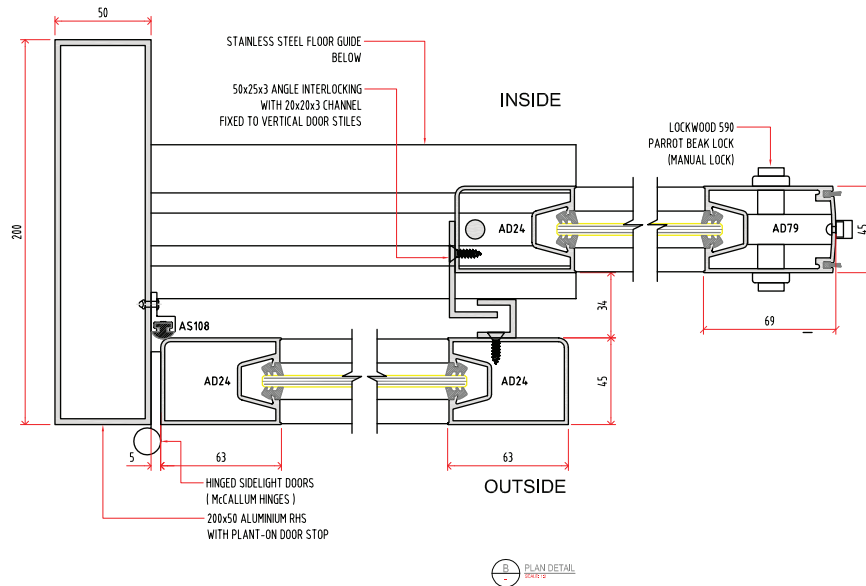
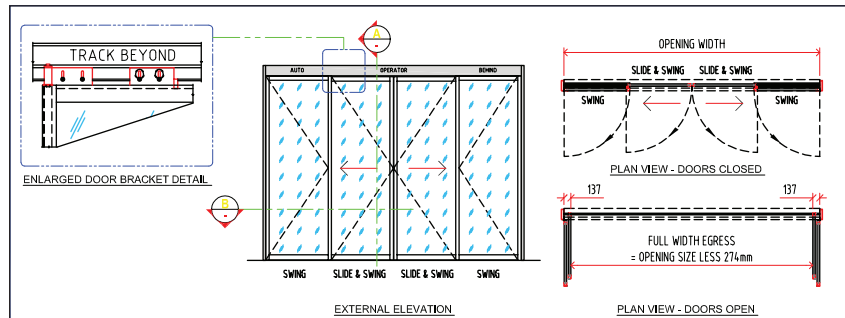
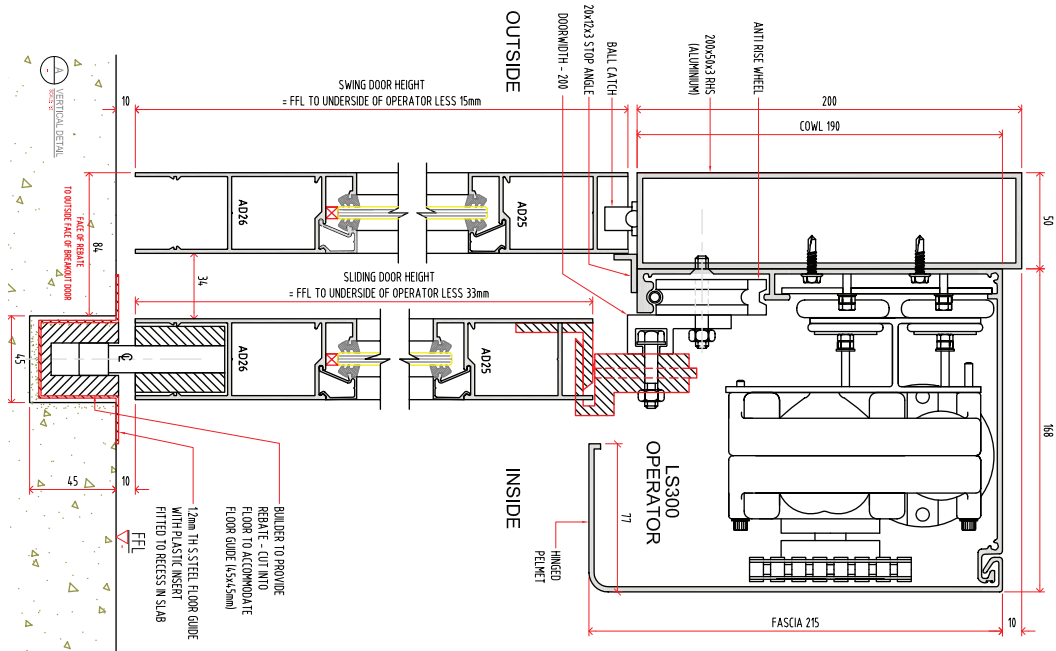
LS300 SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > To ensure track wheels are not obstructed - maximum length of fixing screw is 6mm	AUTO INGRESS	TITLE: LS300 Safety-Slim Framed Door Detail onto STD Aluminium Framed Shopfront with Interlock
	SCALE: NOT TO SCALE	DRG. NO. IsI-h008
	DATE: 02/02/12	

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

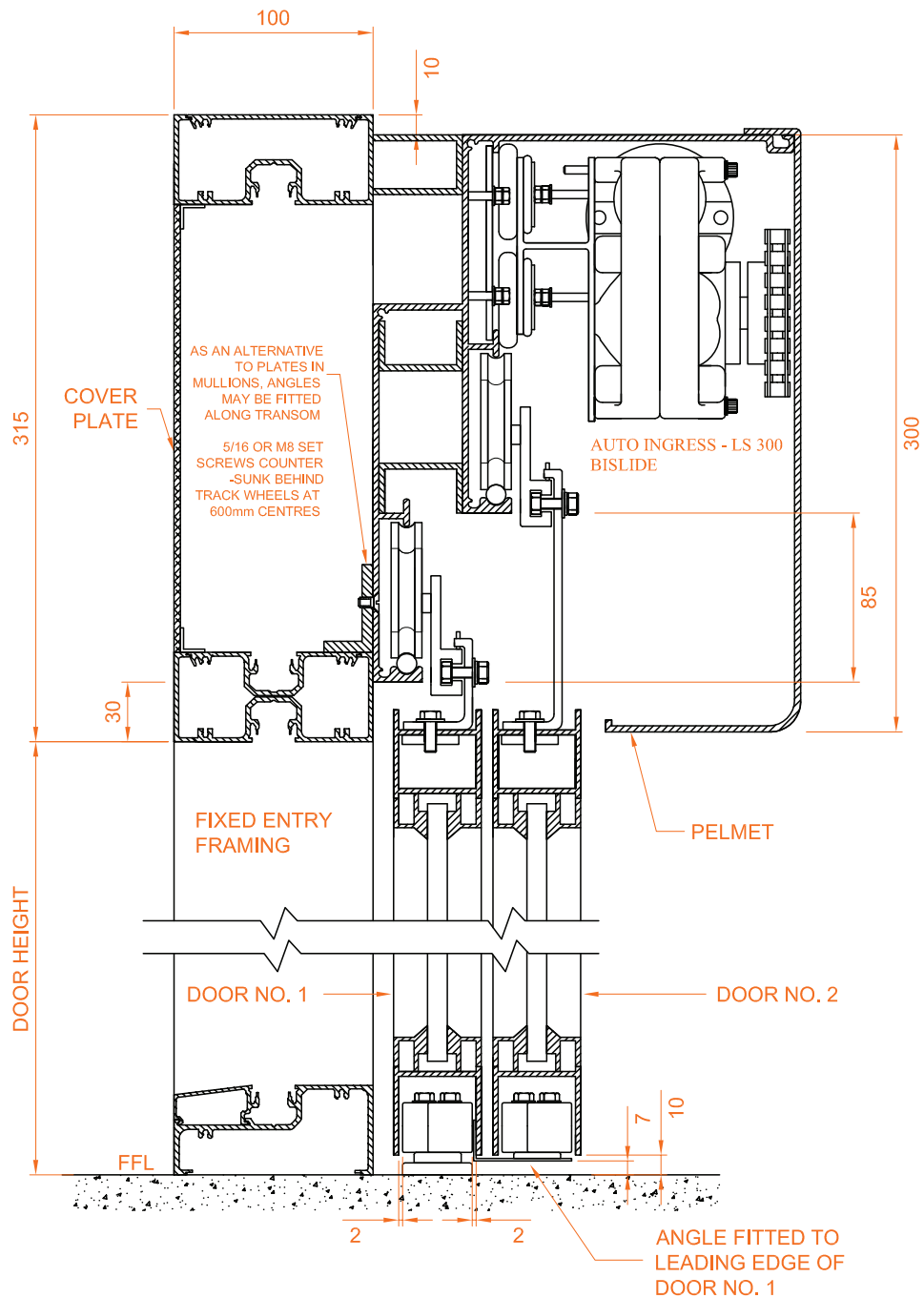
LS300 PANIC BREAK-OUT DOOR ASSEMBLY



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters	AUTO INGRESS	TITLE: LS300 PANIC BREAK-OUT DOOR ASSEMBLY
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. Isl-h009

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

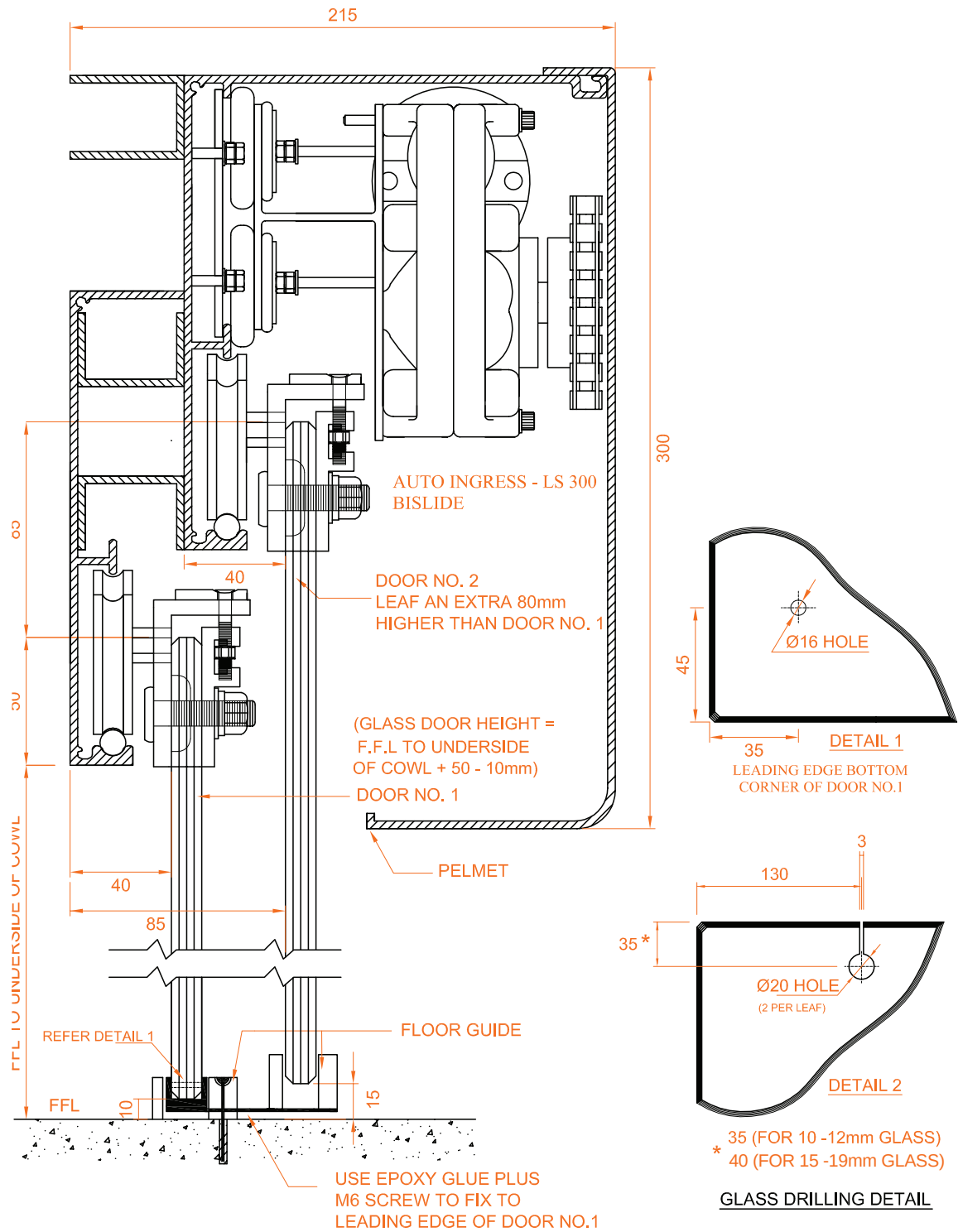
LS300 BI-SLIDE DETAIL ALUMINIUM FRAMED DOORS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS		TITLE: LS300 BI-SLIDE DETAIL ALUMINIUM FRAMED DOORS
	SCALE:	NOT TO SCALE	
	DATE:	02/02/12	DRG. NO. Isl-bs001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

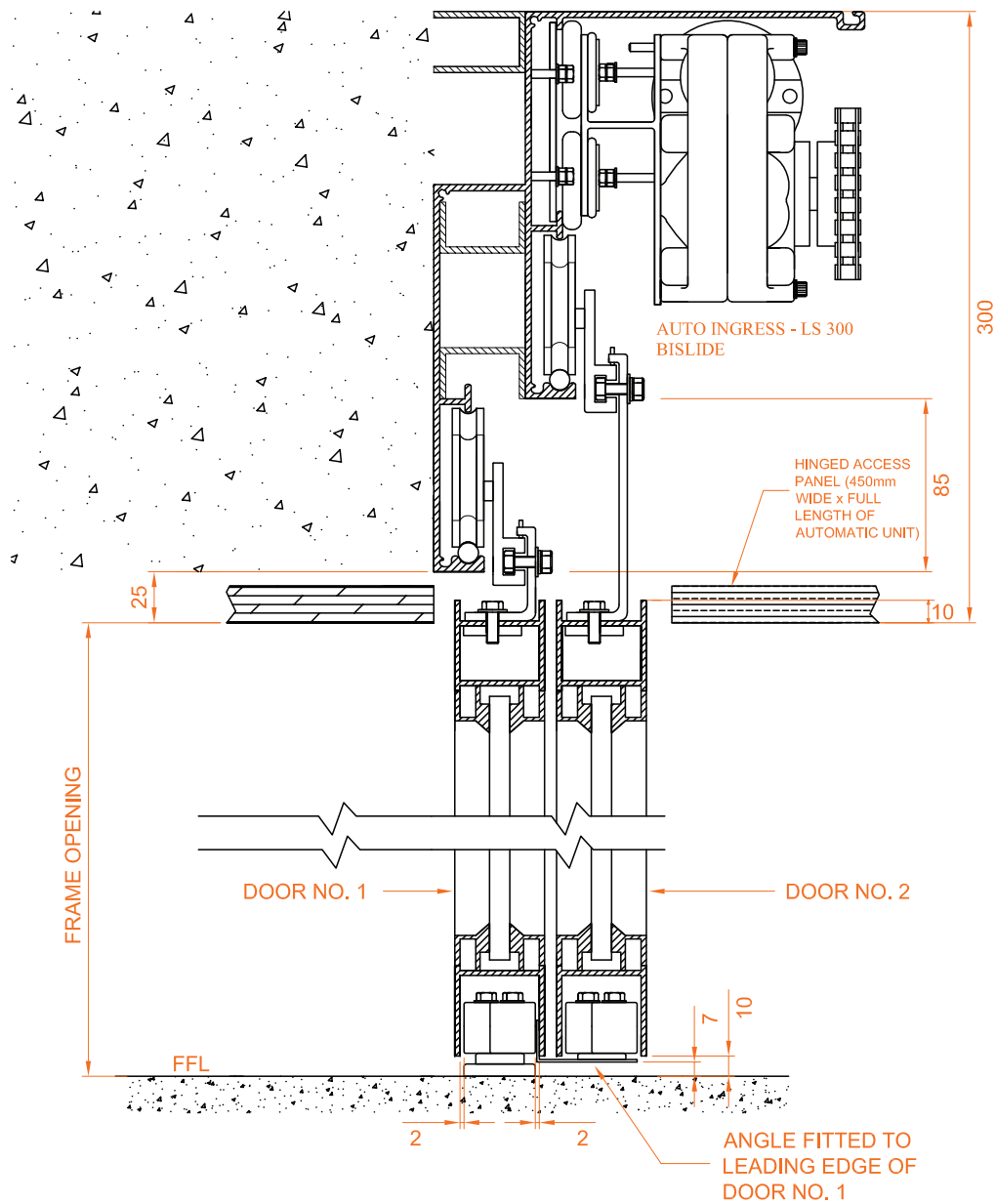
LS300 BI-SLIDE DETAIL FRAMELESS GLASS DOORS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LS300 BI-SLIDE DETAIL FRAMELESS GLASS DOORS
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. Isl-bs002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

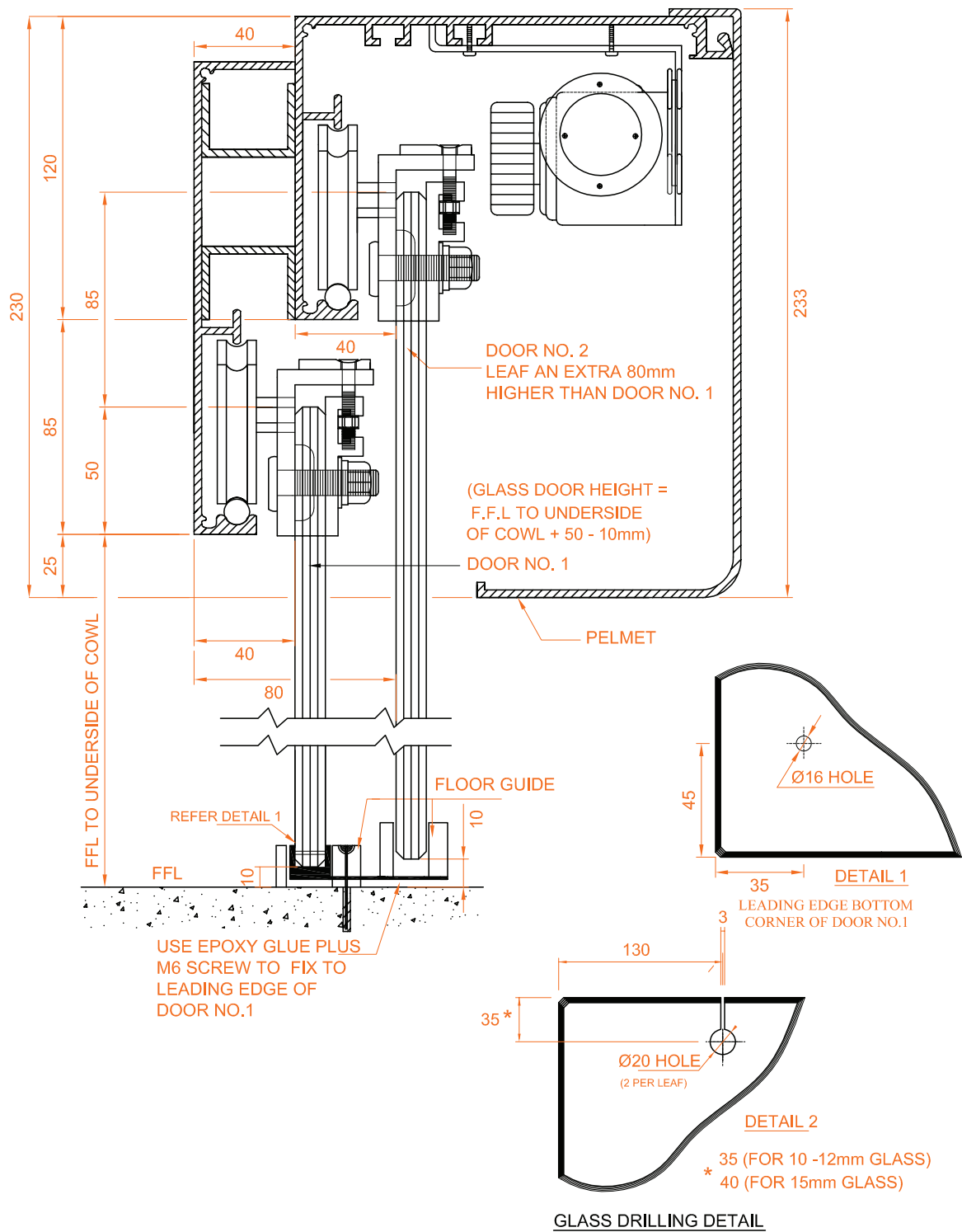
LS300 BI-SLIDE ABOVE CEILING ALUMINUM FRAMED DOORS DETAILS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300 BI-SLIDE ABOVE CEILING ALUMINIUM FRAMED DOORS DETAILS
	DATE:	DRG. NO.
	02/02/12	Isl-bs003

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

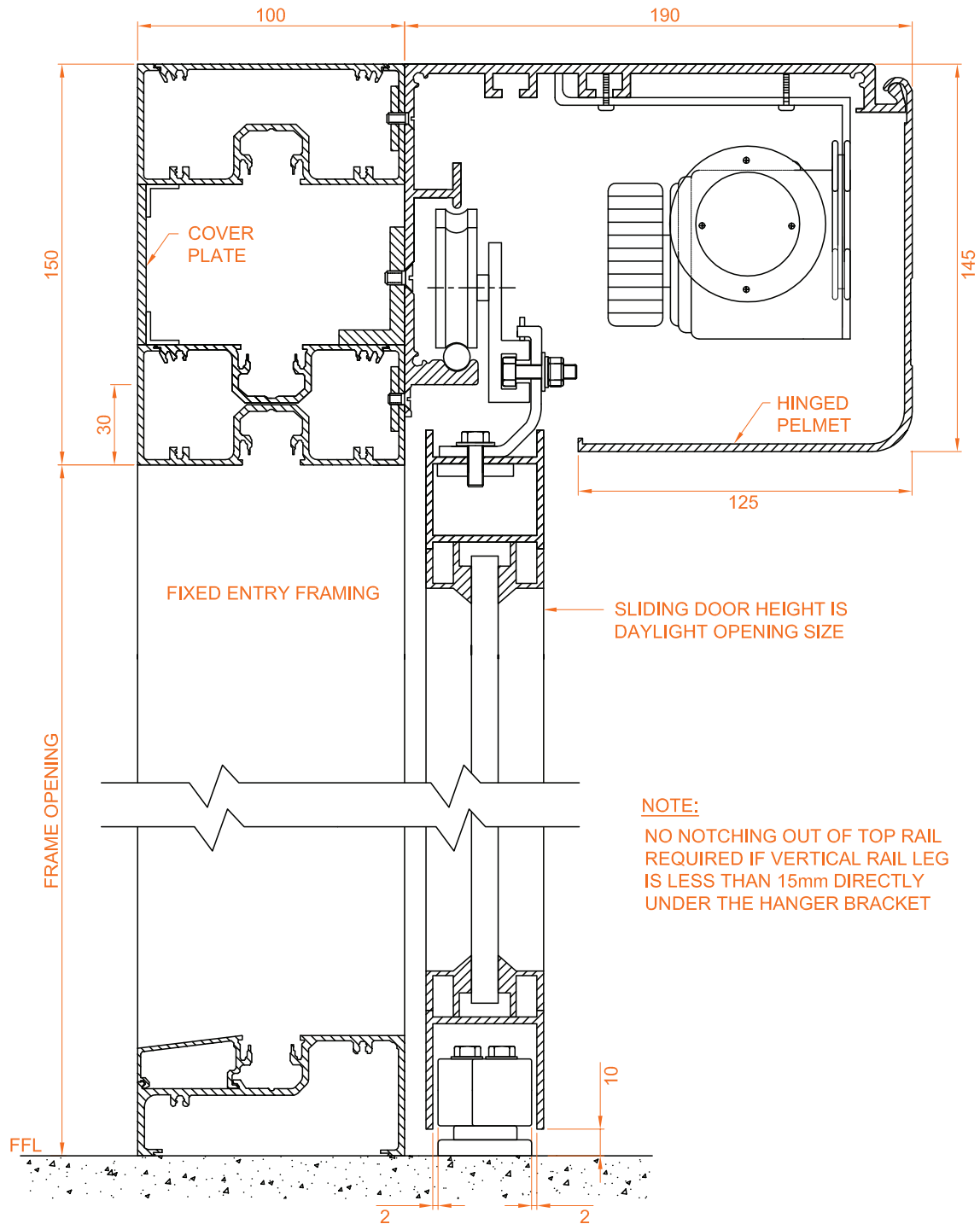
LP BI-SLIDE DETAIL FRAMELESS GLASS DOORS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LP BI-SLIDE DETAIL FRAMELESS GLASS DOORS
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. Isl-bs006

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

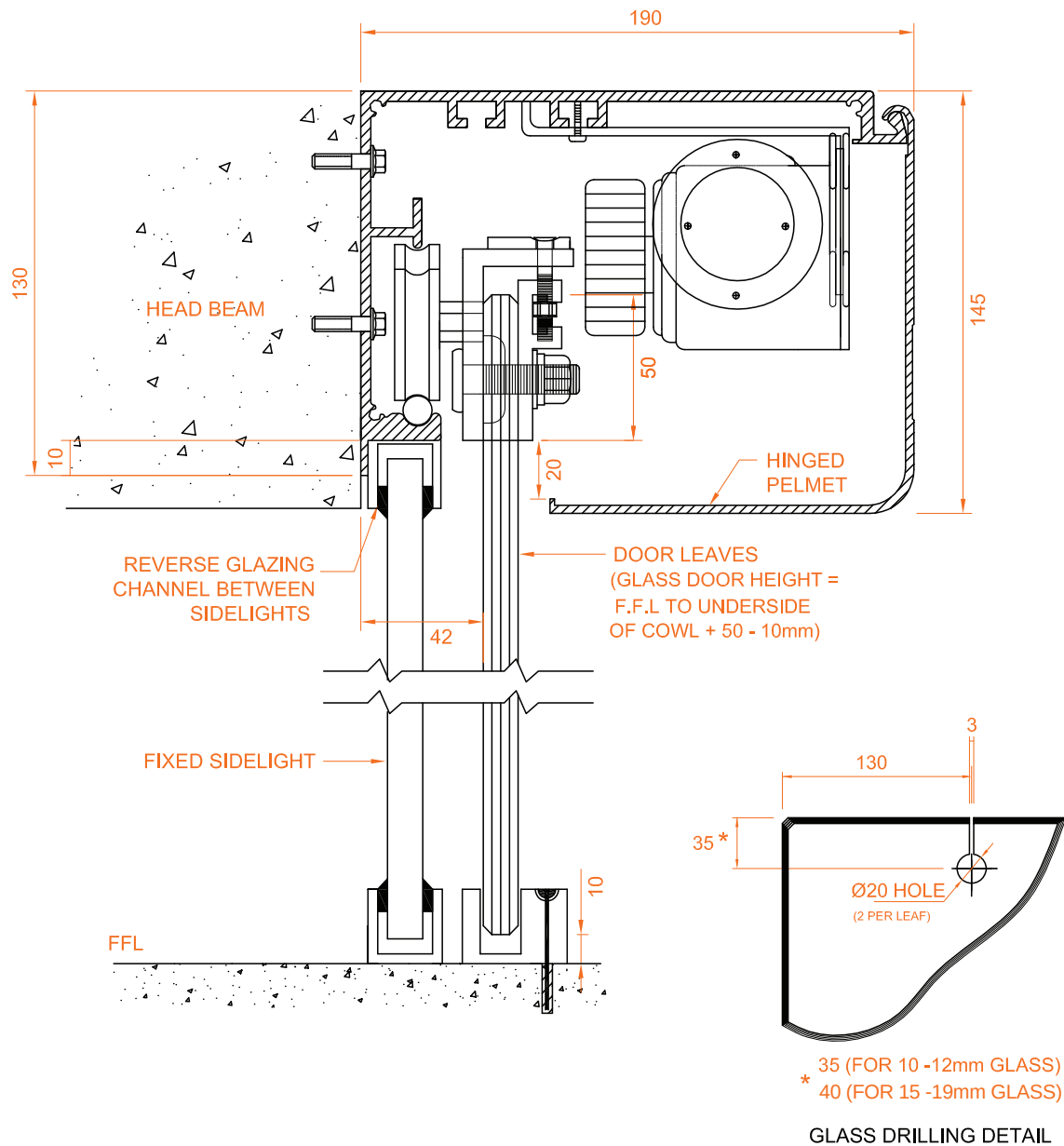
LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN ALUMINIUM FRAMED DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN ALUMINIUM FRAMED DOOR DETAIL
	DATE:	DRG. NO.
	02/02/12	IsI-lp001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

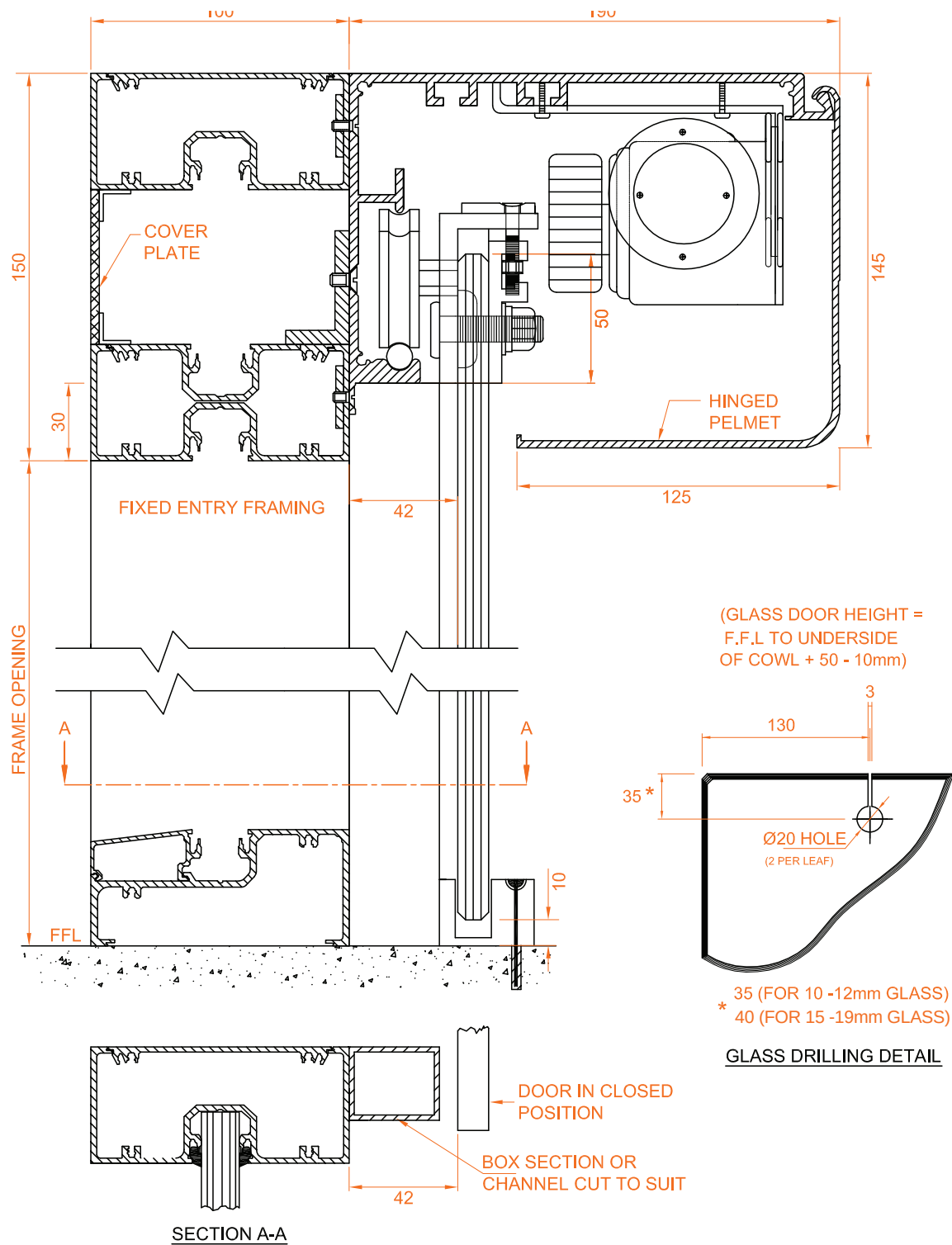
LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN FRAMELESS GLASS DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN FRAMELESS GLASS DOOR DETAIL
	DATE:	DRG. NO.
	02/02/12	IsI-lp002

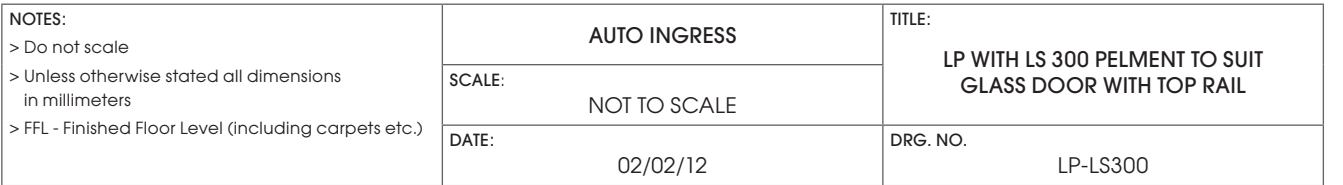
The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN GLASS DOOR ONTO ALUMINIUM FRAME



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS300LP & LS220LP LOW PROFILE, HEAVY DUTY BELT & CHAIN DRIVEN GLASS DOOR ONTO ALUMINIUM FRAME
	DATE:	DRG. NO.
	02/02/12	IsI-lp003

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.



These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.



PROUDLY AUSTRALIAN OWNED AND MANUFACTURED
AUTOMATIC ENTRY SOLUTIONS
MODEL LS220B

 **AUTOINGRESS**
AUTOMATIC DOORS

MANUFACTURE
DESIGN
SALES
SERVICE



< Motor & Gearbox

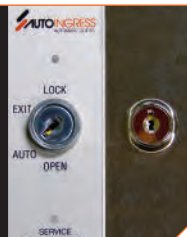
Designed to suit heavy duty applications, this model can operate up to 110kg per leaf in a wide range of applications. This unit is ideal for supermarkets, office buildings and retail shops. Incorporating an integral hall effect counter, this motor and gearbox provides perfect door positioning and whisper quiet operation.



< Master Key Options

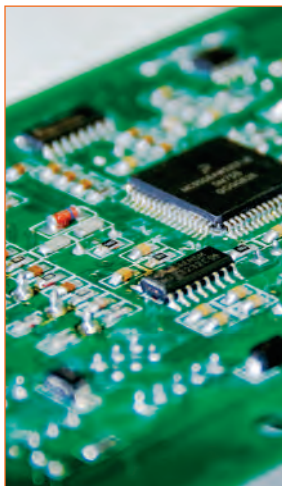
For maximum entry security

Standard Key Options >



< Intelligent Controller

Using the latest Microcomputer technology we provide safe and intelligent control of the doors at all times. The Microcomputer accurately monitors every movement of the door and can also provide automatic compensation based on climatic conditions such as wind loads and normal wear. The Microcomputer has an inbuilt, self monitored and recalibrating feature to always reprogram itself back to it's peak performance settings. The Auto Ingress door operators are manufactured utilising high quality componentry with a primary focus on providing cost effective, trouble free and ongoing door opening solutions.



< Tailored Opening Solutions

Tailored opening functions – Climate control / Courier mode reduced opening settings for better efficiency and security.



< Quiet & Smooth

Vibration dampened – ensuring a quiet and smooth operation at all times.

Reset Switch >



< Track

All operators come standard with a stainless steel track that is supported by a life time warranty. No pitting, corroding or rough operation of aluminium tracks anymore as this stainless steel track sets new standards in smoothness of door operation.



< Sensors

Are fully monitored computerized microwave and infrared sensors with adjustable sensitivity, range and selectable zone detection pattern.



< Belt

A "H" section steel reinforced belt provides both whisper quiet operation and maximum security when coupled with electric motor locking.



< Battery Back Up

Is supplied to maintain locking in the event of a power failure as well as to open the doors on an emergency signal when required.

Push Button Options >



< Electric Motor Lock

Considered the bench mark for high security applications. Electric Motor Locking provides instant peace of mind knowing that regardless of door alignment the doors will lock providing instant security.



< Device Manager

- > Access control pad option
- > Large display
- > Self Diagnostic
- > User friendly

Floor Guides >



< Pelmet Section

Aesthetically pleasing narrow pelmet sections coloured to suit your project.



Failsafe

On Power failure the doors will open or operate normally by using the built in UPS as per AS 5007-2007.

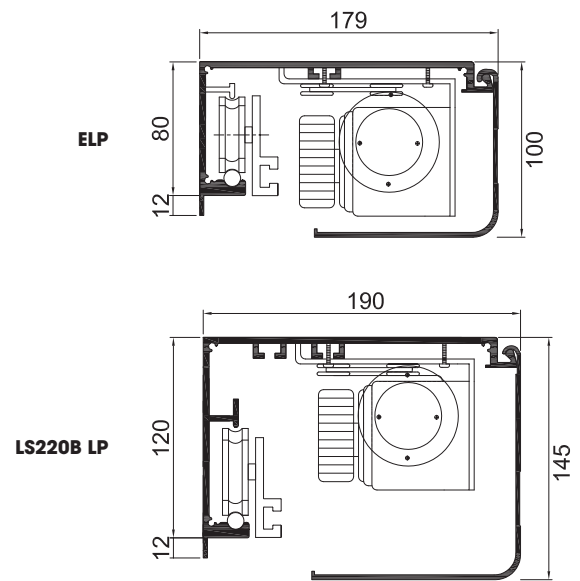
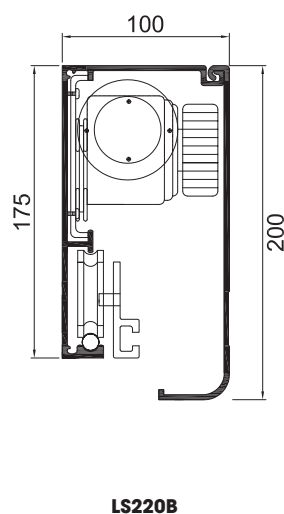
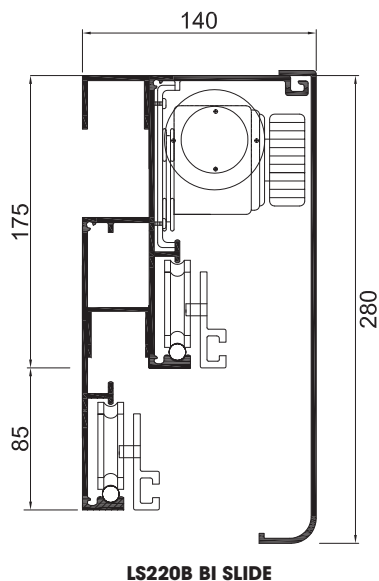
Warranties

- > 5 years motor and gearbox
- > 2 years parts
- > 12 months labour
- > Extended warranties on periodic maintenance

Specifications

MODEL	LS220B	LS220B LP	ELP
Motor	90w	90w	90w
Bi-Parting	Y	Y	Y
Drive	Steel Reinforced Belt	Steel Reinforced Belt	Steel Reinforced Belt
Single	Y	Y	Y
BiSliding/Telescopic	Y	Y	N
Aluminium Doors	Y	Y	Y
Panic Breakout	N	N	N
Glass Doors	Y	Y	Y
Timber Doors	Y	Y	Y
Profile Height/Depth	200mmx100mm	145mmx190mm	100mmx180mm
Pelmet	Y	Y	Y
Electric Motor Lock	opt	opt	opt
Keypad Programmable Mode	Y	Y	Y
Master Keyed Key Switching	opt	opt	opt
Panic Lock	opt	opt	opt
Total Door Weight	240kg	240kg	180kg
Weight per Leaf	120kg	120kg	90kg
Maximum Width	<1300mm*	<1300mm*	<1200mm*
Speed per Bi-Parting Doors	25-1300mm/sec	25-1300mm/sec	25-1300mm/sec
Door Open Dwell Time	0-60 sec	0-60 sec	0-60 sec
Airlock Function	Y	Y	Y
Climate Control (reduced opening)	Y	Y	Y
Keypad Control	Y	Y	Y
Keyed Mode Switch Control	opt	opt	opt
Sensors	Microwave	Microwave	Microwave
Safety Stop	Y	Y	Y
Safety Reverse	Y	Y	Y
Fire Alarm Interface	Y	Y	Y
Building Management Interface	Y	Y	Y
Chime	opt	opt	opt
Access Interface	Y	Y	Y
Exit Only Function	Y	Y	Y
Power Supply	240v/10amp	240v/10amp	240v/10amp
Failsafe/Failsecure	Y	Y	Y
One million cycle tested to AS 5007-2007	Y	Y	Y

* Based on door height of approx 2400mm. (Please confirm with your representative).



> Australian owned, designed & manufactured

- > Proudly Australian Owned and locally Manufactured
- > Service Support: 24 hours a day seven days a week
- > Innovative seamless design integration
- > Eye catching aesthetics
- > Slimline profiles (100mm, 145mm, 200mm)
- > Engineered for performance in high density traffic flow environments
- > To suit Timber, Aluminium Framed, Glass, Cavity Sliding and Servery window applications
- > Custom made to suit your project needs
- > A host of actuation options available
- > Interface with all Access control options
- > Device Manager Control Pad or kev switchina options
- > Over engineered to move door weights of 220kg
- > Extremely safe operation featuring automatic reversing. Installed in compliance to the safety elements of AS5007-2007
- > Stainless Steel Track (Lifetime warranty)
- > Built in UPS System (Uninterrupted power Supply)
- > Hinged pelmet design
- > High security locking module incorporated in the Motor
- > Steel reinforced belt
- > Whisper quiet operation
- > Climate control function available
- > Tailored maintenance packages available
- > Energy efficient
- > Market leading Warranties

Manufactured and installed for compliance to the BCA & AS5007-2007.



Queensland – Head Office

Address 46 Rowland Street, Slacks Creek, QLD 4127, Australia
 Postal PO Box 825, Springwood, QLD 4127, Australia
 Phone 61 7 3290 1500
 Fax 61 7 3290 1567
 National Toll Free 1300 138 750
 Email contact@autoingress.com.au
 Sales qldsales@autoingress.com.au

Victoria

Address Unit 37/189B South Centre Road, Tullamarine, VIC 3043, Australia
 Postal PO Box 300, Tullamarine, VIC 3043, Australia
 Phone 61 3 9330 2220
 Fax 61 3 9330 2228
 Sales vic-sales@autoingress.com.au

Western Australia

Phone 1300 138 750
 Fax 1300 138 756
 Sales wasales@autoingress.com.au

New South Wales

Address 6/19-26 Durian Place, Wetherill Park, NSW 2164, Australia
 Postal PO Box 6199, Wetherill Park BC, NSW 2164, Australia
 Phone 61 2 9756 6590
 Fax 61 2 9756 5210
 National Toll Free 1300 138 750
 Sales nswsales@autoingress.com.au

South Australia

Phone 1300 138 750
 Fax 1300 138 756
 Sales sasales@autoingress.com.au

Northern Territory

Phone 1300 138 750
 Fax 1300 138 756
 Sales ntsales@autoingress.com.au

Tasmania

Phone 1300 138 750
 Fax 1300 138 756
 Sales tassales@autoingress.com.au

LOGIC SLIDE 220LP LOW PROFILE SPECIFICATIONS

AUTOMATIC SLIDING DOOR ASSEMBLIES

General Applications: Aluminium Framed Doors
(with or without electric lock)

Standard: To AS5007-2007 and NZS 4239/1993

Propriety Item: Logic Slide Low Profile automatic sliding door operator as manufactured by Auto Ingress Pty Ltd.

PERFORMANCE SPECIFICATION

The automatic (single slide/ bi-slide) Logic Slide 220LP door operators are to be electrically approved 240v fully electric operators, fully housed in an extruded aluminium housing of height 145 mm and width 190 mm. The said operators are to be manufactured in Australia to comply with the current Australian Standards for sliding door assemblies and B.C.A. requirements. The equipment shall incorporate the following:

1. Motor

Continuously rated D.C. motor with no overload protection to provide an operational rating of 60 minutes per hour 24 hours a day for door weights of to 200 kg. Motor to be directly coupled to gearbox without any intermediate coupling such as belts or pulleys. Minimum output torque of 100 kg/cm. The motor is to incorporate an integral hall effect counter unaffected by dust and light for door position sensing, eliminating the need for mechanical limit switches. Infrared counters and plastic discs susceptible to misreading through dust and ambient light is not acceptable.

2. Gearbox

Maintenance free self lubricating gears supported each end by fully sealed steel roller bearings. The gears are to be fully enclosed in a die cast aluminium housing to prevent exposure to dust and dirt and to prevent leakage or dissolution of lubricant.

3. Drive

'H' section notched belt of 12.5 mm pitch directly connected to the hanger trolley assembly incorporating fibreglass reinforced nylon concave track wheels of 56 mm diameter, fitted with permanently lubricated sealed roller bearings and running on a heavy duty replaceable self aligning and cleaning convex stainless steel track guaranteed for the lifetime of the operator.

4. Control

Fully programmable microcomputer controller with non volatile ram and solid state commutation to provide:

- | | |
|---------------------------|---|
| A. Door Speed | Independently adjustable variable speed control for both open and close speeds as well as slow final speeds. Speed settings capable of being set to show compliance with the kinetic energy limitation as per the current Australian standards. |
| B. Stroke | Variable door travel on both normal or climate control facility. |
| C. Auto Reverse | To automatically reverse the door in both open and close cycles. Fully variable sensitivity. |
| D. Auto Stop | To automatically stop on opening and operate on reduced opening and slow speed until obstruction is cleared. |
| E. Auto Retry | To automatically retry at slow speed until obstruction is cleared and then revert to normal operation. Complete shut down requiring technical assistance to reset is not acceptable. |
| F. Maintain Closed | Continuous monitoring of doors in closed position to prevent opening by windloads by generation of back EMF. |
| G. Push 'n' Go | On automatic operation if doors are pushed apart by 75mm the microcomputer senses someone trying to get in and opens the door automatically. (Function disabled when locked via electric lock.) |

5. Safety

Dual set of photoelectric cells to keep door open if threshold is obstructed as per the current Australian Standards.

6. Climate Control

Choice of manual fixed reduced opening or automatically adjustable energy wise function where the opening is automatically adjusted to suit increased traffic flow.

7. Security Interface

Ability to provide operational data to the building management computer and fully compatible with card reader, time clock control and key entry switch etc.

8. Control Functions (please select)

☐ Standard- 'Device Manager' fully programmable coded Mode Touch pad (Refer DDM spec attached).

☐ Optional- MK4- four position security key switch (can be master keyed by client)

9. Actuation Sensors

The operator is to actuate with fully digital computerised infrared sensors with adjustable sensitivity, range and selectable zone detection pattern. The sensors are to be capable of providing one metre sideways detection from the line of the installed unit. These detectors must provide selectable failsafe or failsecure operation.

10A. ☐ Locking - If Electrical Locking is required (please tick)

The doors are to lock via the operator. The operator is to be fitted with a failsafe motor lock device directly locking the rotor shaft thus preventing failures due to door misalignment. This device is to be fully battery backed in power failure. The controller is to provide logical control (ie unlock, open and close then relock with a valid request to exits such as card reader or after hours exit P.B switch). On power failure or emergency the door is to maintain security and be able to provide emergency egress and then be capable of being locked if mains power is not restored. The emergency exit switch fitted adjacent to the door must be accessible, illuminated, clearly engraved in red and must operate in both power failure and normal conditions.

10B. ☐ Locking - Manual Locking (Refer Lock Schedule) (please tick)

11. Battery Status Indicator and Charger

The operator is to continuously monitor the battery status and indicate failure through an illuminated light emitting diode. The controller shall provide a regulated and current limited self charging circuit to keep the battery at its optimum level of charge and to increase the useful life of the battery.

12. Self Diagnostic

The operator is to incorporate self diagnosing software to correct loads created by wind loading, gradual wear or misalignment of wheel track etc.

13. Self Intelligence

The micro controller is to be capable of self programming without the need for specialist programming equipment or service calls. On site adjustment for speed setting, safety reversing and dwell time has to be provided without the need for any additional programmers so that suitably trained trade personnel are not restricted from servicing the equipment.

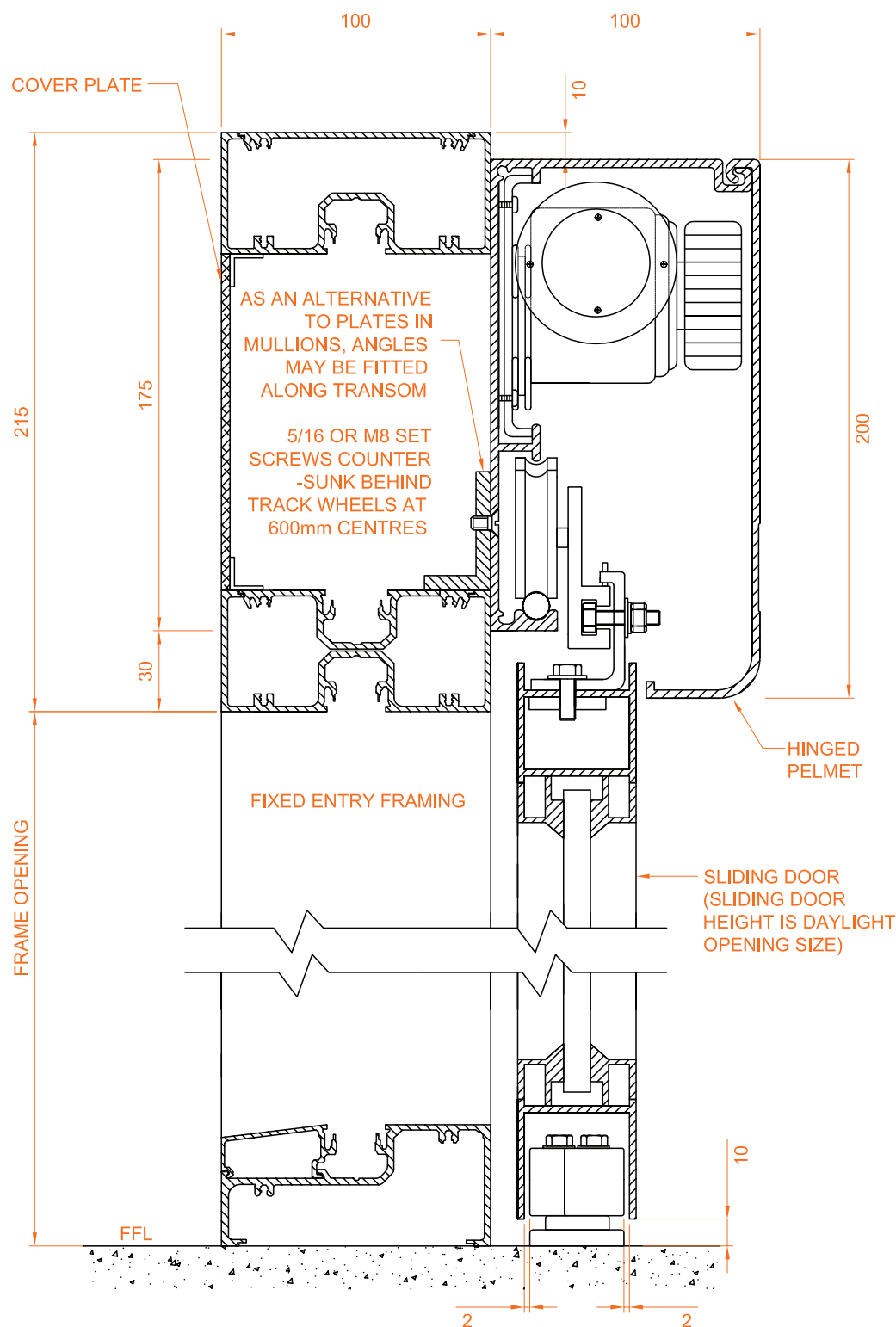
14. Fire Alarm Interface

The operator is to be capable of full interface with the fire alarm system to provide both unlock and open facility or open only during normal operation (if not locked) on fire alarm.

15. Warranty

The automatic door operator is to be covered by a two year warranty from the date of commissioning. The motor and gearbox is to be covered by a five year warranty. An extended parts warranty of five years is to be provided with the acceptance of a service contract.

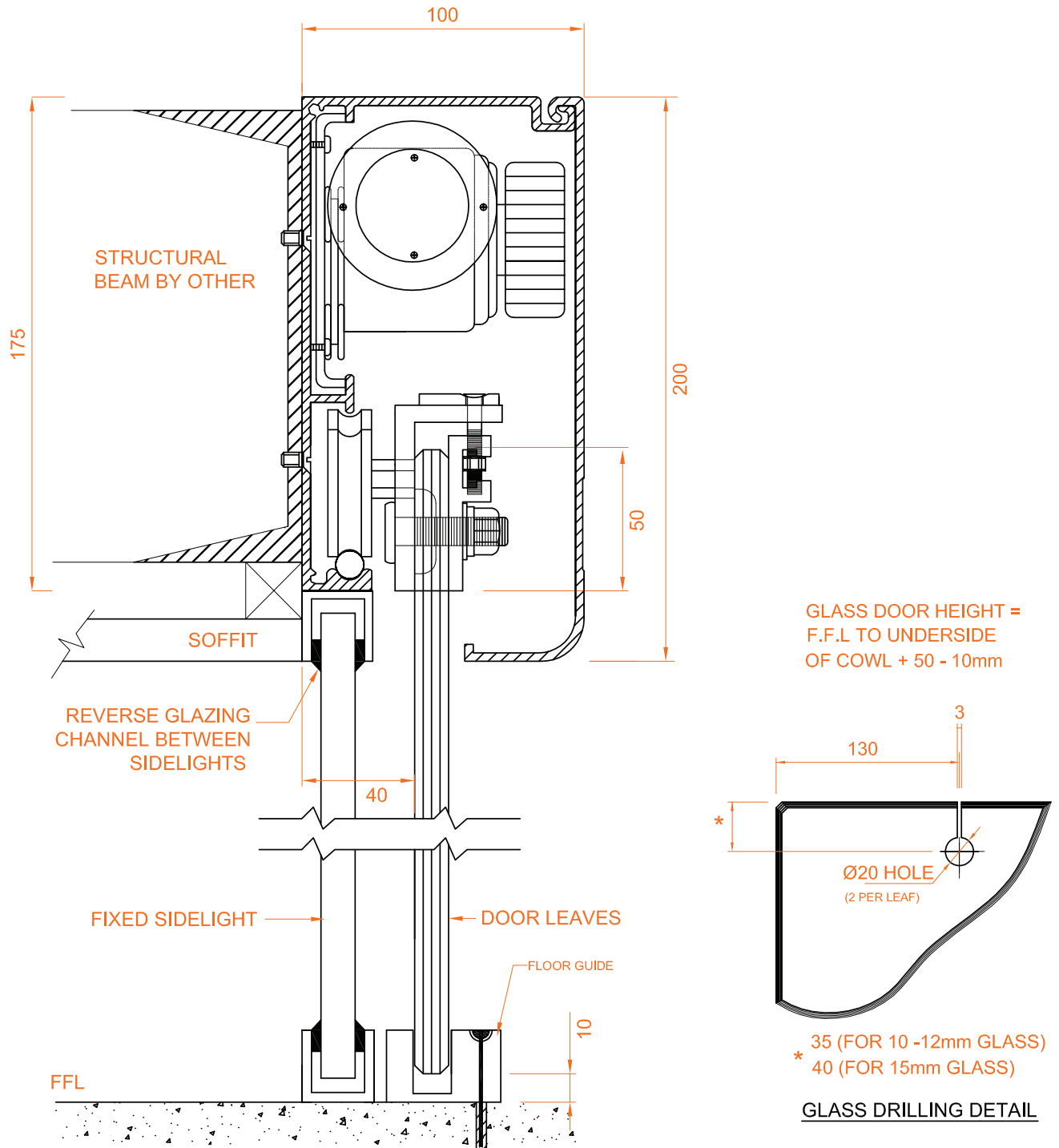
LS220B ALUMINIUM FRAMED DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LS220B ALUMINIUM FRAMED DOOR DETAIL
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. IsI-bl001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

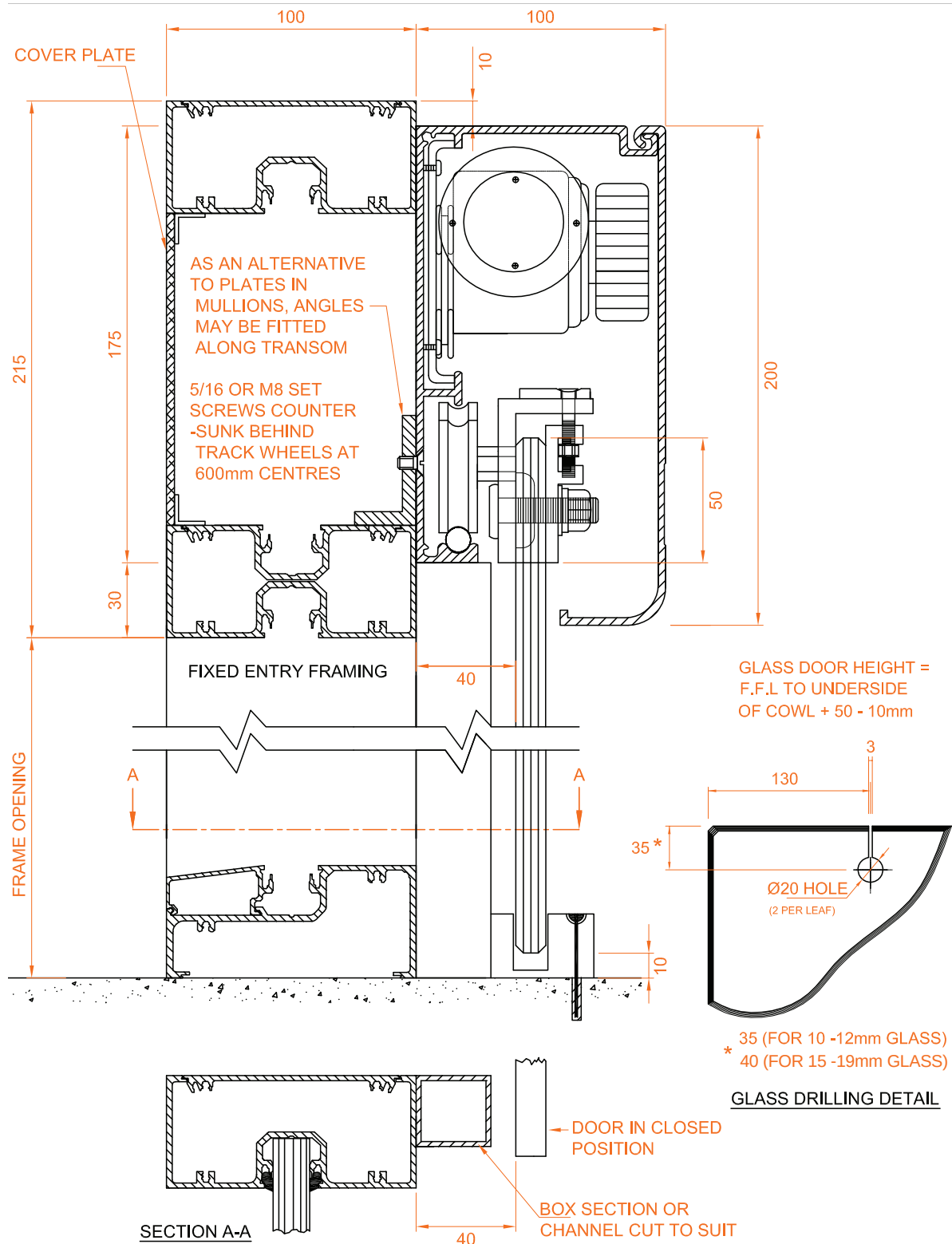
LS220B ALUMINIUM FRAMELESS DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220B ALUMINIUM FRAMELESS DOOR DETAIL
	DATE:	DRG. NO.
	02/02/12	IsI-bl002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220B GLASS DOOR ONTO ALUMINIUM FRAME



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LS220B GLASS DOOR ONTO ALUMINIUM FRAME
	SCALE: NOT TO SCALE	
	DATE: 02/02/12	DRG. NO. IsI-bl003

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

COVER PLATE

100

145

10

295

280

85

30

AS AN ALTERNATIVE TO PLATES IN MULLIONS, ANGLES MAY BE FITTED ALONG TRANSOM

5/16 OR M8 SET SCREWS COUNTER -SUNK BEHIND TRACK WHEELS AT 600mm CENTRES

FIXED ENTRY FRAMING

PELMET

DOOR NO. 1

DOOR NO. 2

FFL

2

2

7

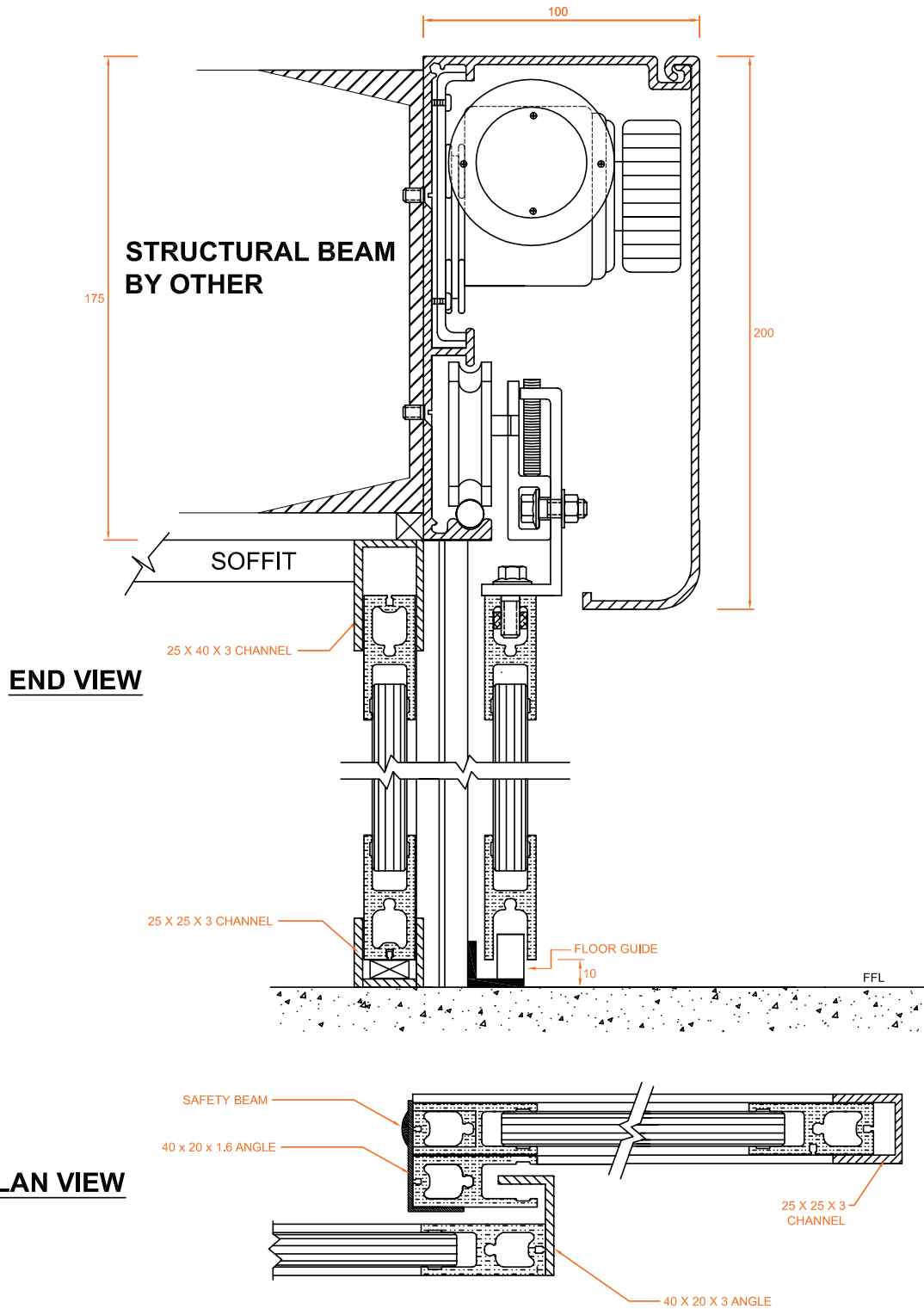
10

ANGLE FITTED TO LEADING EDGE OF DOOR NO. 1

FRAME OPENING

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220B SAFETY-SLIM FRAMED DOOR DETAIL & OFFSET SIDELIGHT DETAIL

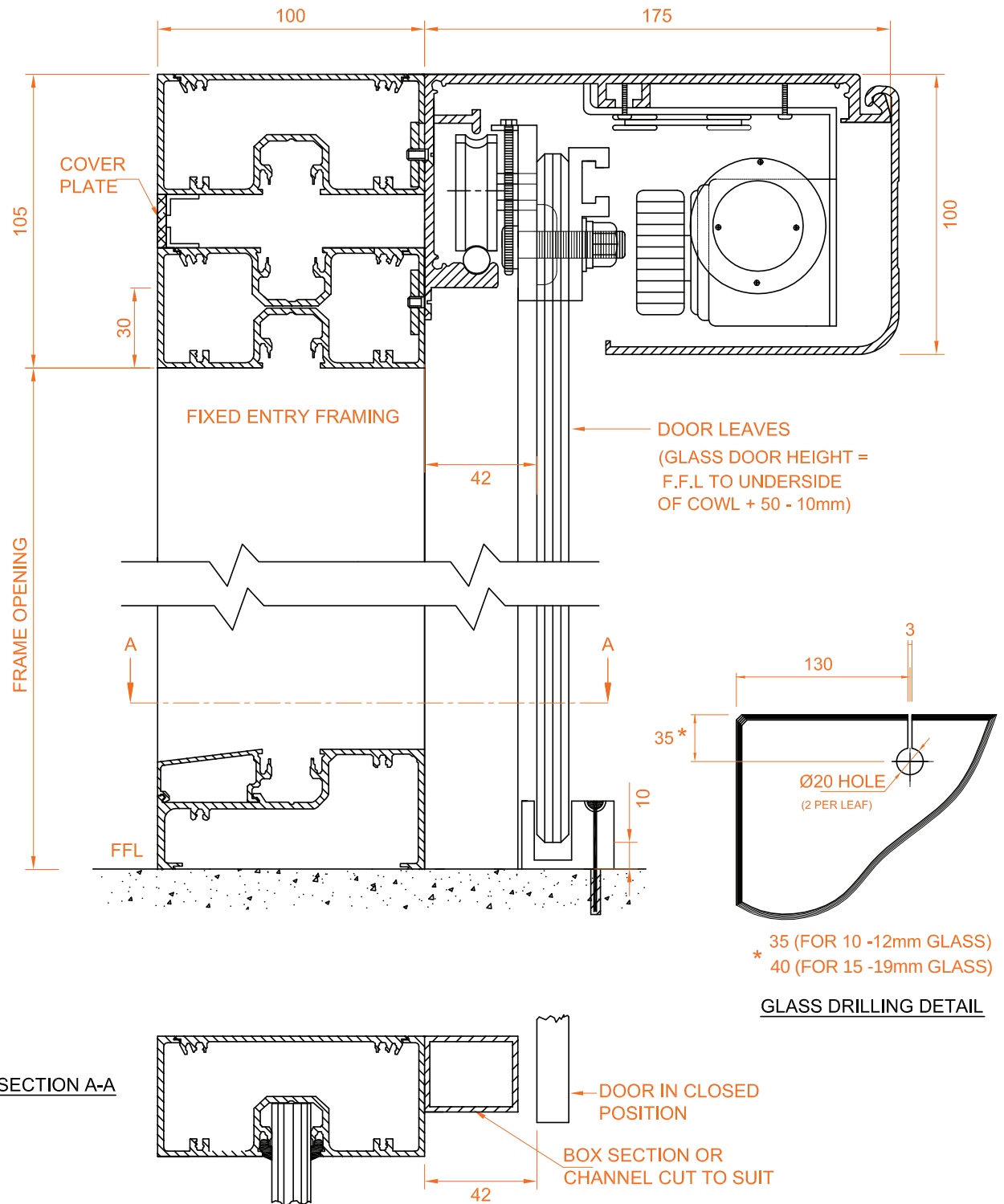


(GLASS HEIGHT OR WIDTH = DOOR HEIGHT OR WIDTH - 90 + 30)

NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220B SAFETY-SLIM FRAMED DOOR DETAIL & OFFSET SIDELIGHT DETAIL
	DATE:	DRG. NO.
	02/02/12	Isl-elp002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

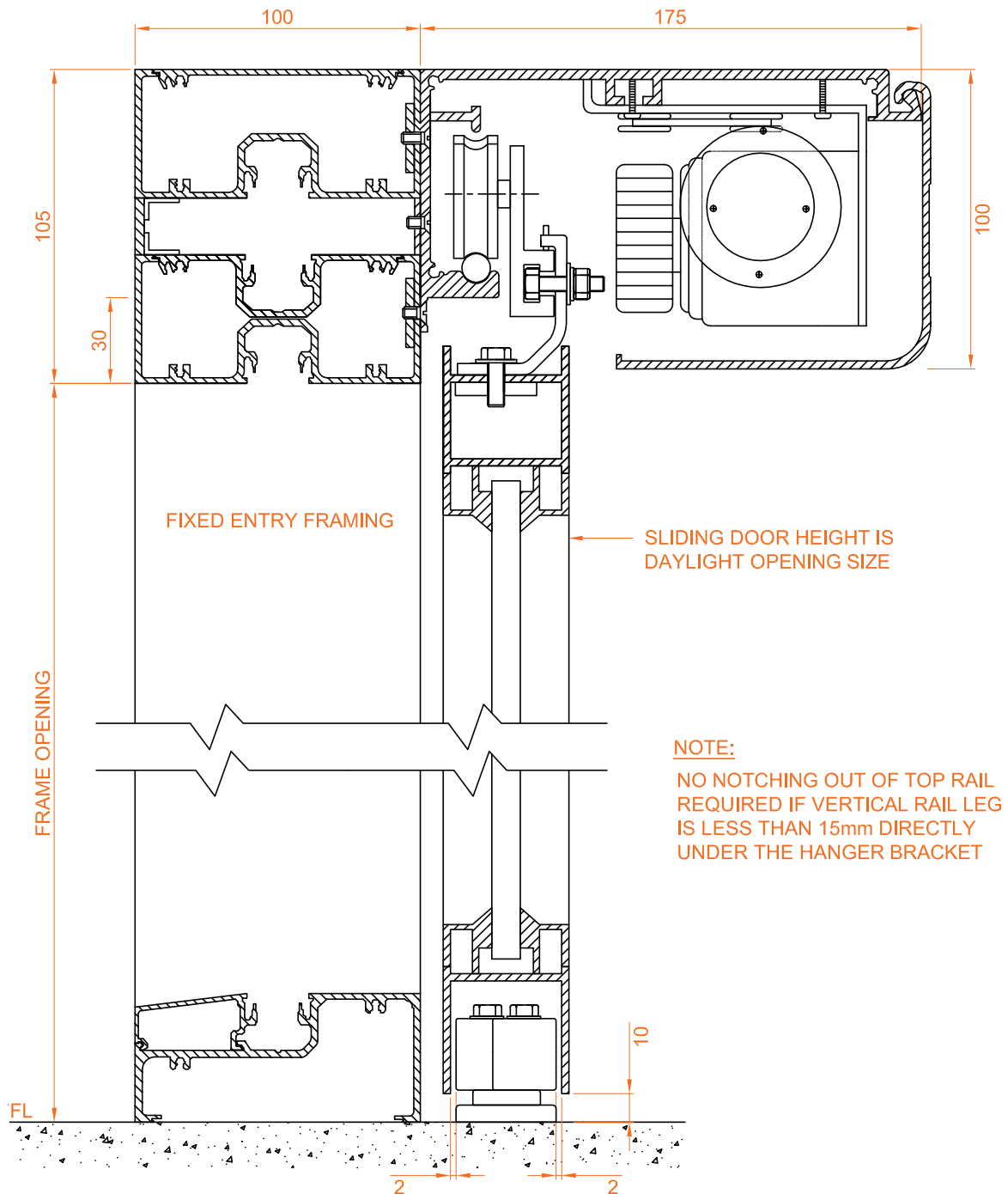
LS220 ELP 100MM LOW PROFILE BELT GLASS DOOR ONTO ALUMINIUM FRAME



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220 ELP 100mm LOW PROFILE BELT GLASS DOOR ONTO ALUMINIUM FRAME
	DATE:	DRG. NO.
	02/02/12	Isl-elp002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

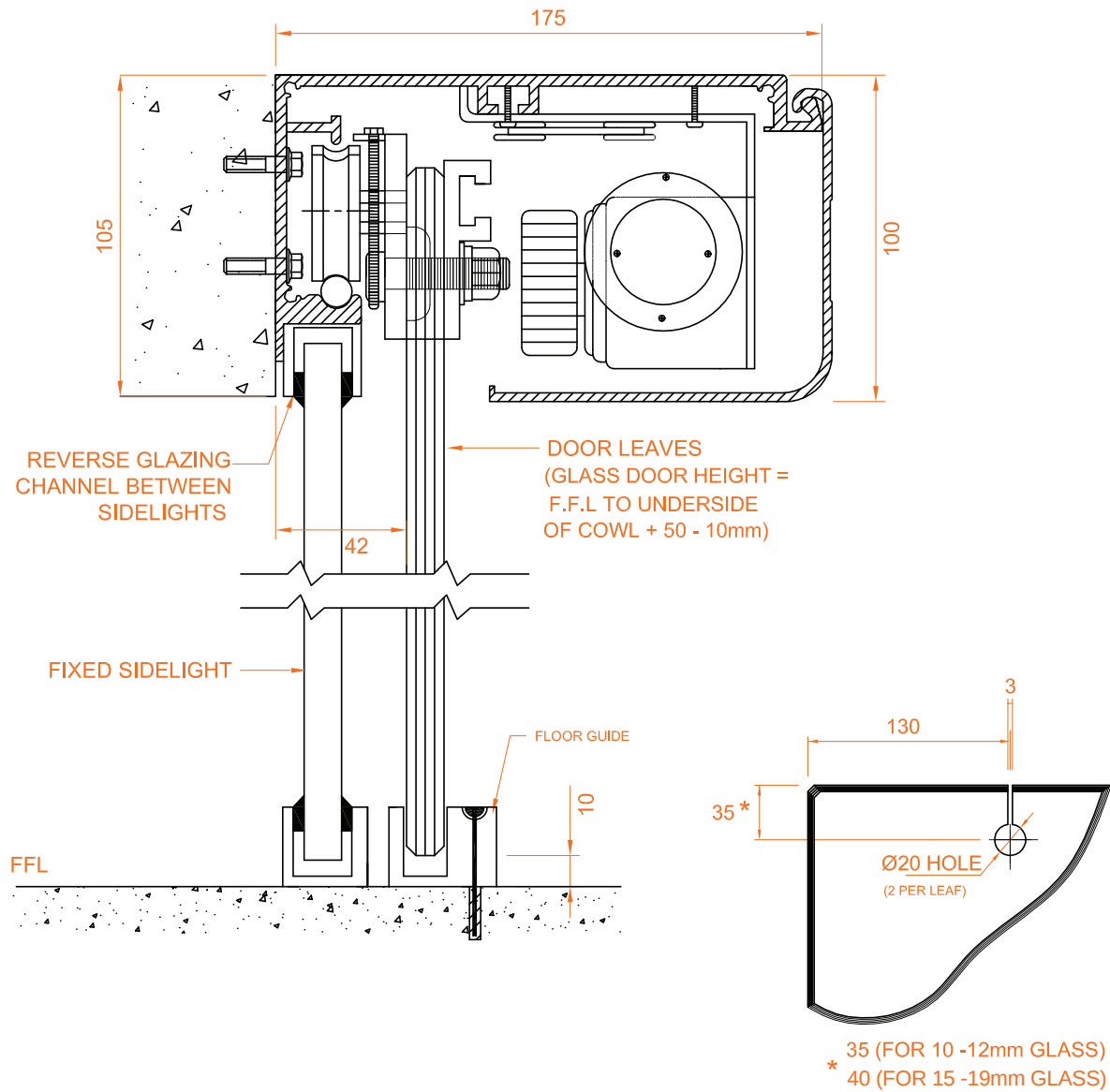
LS220 ELP 100MM LOW PROFILE BELT ALUMINIUM FRAMED DOOR DETAIL



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220 ELP 100mm LOW PROFILE BELT ALUMINIUM FRAMED DOOR DETAIL
	DATE:	DRG. NO.
	02/02/12	Isl-elp001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220 ELP 100MM LOW PROFILE BELT FRAMELESS GLASS DOOR DETAIL



GLASS DRILLING DETAIL

NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220 ELP 100mm LOW PROFILE BELT FRAMELESS GLASS DOOR DETAIL
	DATE:	DRG. NO.
	02/02/12	Isl-elp003

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS220 door operators as manufactured by Auto Ingress Pty Ltd are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 200mm and width 100mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-3) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. Drive – H section notched, steel reinforced belt design (12.5mm pitch).
2. Motor - Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. Door Weights – Must be tested and certified to AS5007:2007 for 1 million cycles of combined door weights of up to 200kgs
4. Gear Box - Self Lubricating fully sealed maintenance free gearbox.
5. Track - Stainless steel covered by a lifetime warranty.
6. Actuation & Safety- by either Eagle 6 Safe combination presence/ micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. Controller - Solid state microprocessor controller with hall-effect positional encoder.
8. Reset feature - Intelligent self diagnostic with calibrating software.
9. Standard Interface ability - Security, FIP, BMS.
10. Monitored battery backed failsafe. As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. Door Type Options
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-bl001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-bl002)
12. Locking
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)
13. Special entry
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).

14. Control Functions (please select)

- ☐ Standard-"Device Manager" fully programmable coded Mode Touch pad. (as per DDM spec attached)
- ☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. Warranties – Auto Ingress LS220 Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.
16. Warranty extension- A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.
17. Maintenance - The operator is to be serviced and maintained in accordance with AS5007-2007
18. **AS5007-2007**, compliance date: 17.10.2010

Rev: 1-06-2011

LOGIC SLIDE 220ELP-EXTRA LOW PROFILE BELT DRIVE

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS220ELP door operators as manufactured by Auto Ingress Pty Ltd are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 100mm and width 190mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-3) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. Drive – H section notched, steel reinforced belt design (12.5mm pitch).
2. Motor - Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. Door Weights – Must be tested and certified to AS5007:2007 for 1 million cycles of combined door weights of up to 200kgs
4. Gear Box - Self Lubricating fully sealed maintenance free gearbox.
5. Track - Stainless steel covered by a lifetime warranty.
6. Actuation & Safety- by either Eagle 6 Safe combination presence/ micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. Controller - Solid state microprocessor controller with hall-effect positional encoder.
8. Reset feature - Intelligent self diagnostic with calibrating software.
9. Standard Interface ability - Security, FIP, BMS.
10. Monitored battery backed failsafe. As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. Door Type Options
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-elp001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-elp002)
12. Locking
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA.
Manual locking (by others)
13. Special entry
Card reader (by security contractor)
MK2 entry security switch (can be master keyed by client).

14. Control Functions (please select)

☐ Standard-“Device Manager” fully programmable coded Mode Touch pad.

☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. Warranties – Auto Ingress LS220LP Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.
16. Warranty extension- A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.
17. Maintenance- The operator is to be serviced and maintained in accordance with AS5007-2007
18. AS5007-2007, compliance date: 17.10.2010

Rev: 1-06-2011

LOGIC SLIDE 220LP-LOW PROFILE BELT DRIVE

AUTOMATIC SLIDING DOOR ASSEMBLIES

PROPRIETY ITEM:

The automatic (bi-parting/single slide) model LS220LP door operators are manufactured by Auto Ingress Pty Ltd. are to be electrically approved for 240v, fully housed in an extruded aluminium housing of height 145mm and width 190mm.

The said operators are to be manufactured in Australia by an Australian Owned and Operated company with quality assurance to ISO 9001:2000 and full Compliance to AS5007-2007 as tested by a NATA accredited authority (certificate no 4209-1469-3) and BCA requirements for Automatic Door operators.

100%

AS5007-2007

The equipment shall incorporate the following features:

1. Drive – H section notched, steel reinforced belt design (12.5mm pitch).
2. Motor - Continuously rated heavy duty DC motor capable of 24 hour operation with no thermal shut down and carry a five year unconditional warranty.
3. Door Weights – Must be tested and certified to AS5007:2007 for 1 million cycles of combined door weights of up to 200kgs
4. Gear Box - Self Lubricating fully sealed maintenance free gearbox.
5. Track - Stainless steel covered by a lifetime warranty.
6. Actuation & Safety- by either Eagle 6 Safe combination presence/ micro wave sensors or dual sun resistant self monitored safety beams at heights of 150mm & 600mm above FFL combined with transom mounted microwave sensors. Automatic reversing if obstructed during closing sequence with fully adjustable sensitivity settings.
7. Controller - Solid state microprocessor controller with hall-effect positional encoder.
8. Reset feature - Intelligent self diagnostic with calibrating software.
9. Standard Interface ability - Security, FIP, BMS.
10. Monitored battery backed failsafe. As per BCA Regulations, doors drive fully open automatically on power failure/fire alarm (integration by others). Failsafe consists of 24v DC Battery & control board also incorporating battery alarm/monitor (as per AS5007-2007) to alert the user if power is low. Doors automatically return to original function mode when power resumes or fire signal is deactivated.
11. Door Type Options
Hanger Brackets to suit Aluminium framed doors (Dwg. No: Isl-lp001)
Hanger Brackets to suit frameless glass doors (Dwg. No: Isl-lp002)
12. Locking
Standard SK2 entry key switch & Emergency or after hours egress P2 push button
Electric locking – Failsafe, including battery back up and compliant with BCA. For door D.01
Manual locking (by others) for doors D.02 & D.03
13. Special entry
MK2 entry security switch (can be master keyed by client).

14. Control Functions (please select)

☐ Standard-“Device Manager” fully programmable coded Mode Touch pad.

☐ Optional- MK4- four position security key switch (can be master keyed by client)

15. Warranties – Auto Ingress LS220LP Door Operator is to be covered by a two (2) year parts and twelve (12) months labour warranty. The stainless steel track is to have a lifetime warranty. The motor and gear box to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.
16. Warranty extension- A 10 year warranty on the motor and gearbox is offered while covered by an Auto Ingress maintenance agreement from date of commissioning. For further information please contact Auto Ingress on 1300 138 750.
17. Maintenance- The operator is to be serviced and maintained in accordance with AS5007-2007
18. AS5007-2007, compliance date: 17.10.2010

Rev: 1-06-2011

PROUDLY AUSTRALIAN OWNED AND MANUFACTURED
AUTOMATIC ENTRY SOLUTIONS
MODEL LSWLP



AUTOINGRESS
AUTOMATIC DOORS

MANUFACTURE
DESIGN
SALES
SERVICE

LOGIC SWING - LP



< Motor & Gearbox

Designed to suit heavy duty applications, this model can operate up to 200kg per leaf in a wide range of applications. This unit is ideal for supermarkets, office buildings and retail shops. Incorporating an integral hall effect counter, this motor and gearbox provides perfect door positioning and whisper quiet operation.



< Master Key Options

For maximum entry security

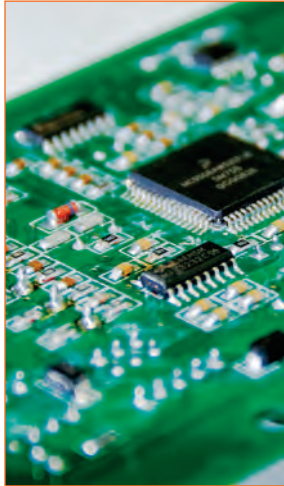


Standard Key Options >



< Intelligent Controller

Using the latest Microcomputer technology we provide safe and intelligent control of the doors at all times. The Microcomputer accurately monitors every movement of the door and can also provide automatic compensation based on climatic conditions such as wind loads and normal wear. The Microcomputer has an inbuilt, self monitored and recalibrating feature to always reprogram itself back to it's peak performance settings. The Auto Ingress door operators are manufactured utilising high quality componentry with a primary focus on providing cost effective, trouble free and ongoing door opening solutions.



< Tailored Opening Solutions

Tailored opening functions – Climate control / Courier mode reduced opening settings for better efficiency and security.



< Quiet & Smooth

Vibration dampened – ensuring a quiet and smooth operation at all times.



Reset Switch >



< Swing Arm

Which ever way your door swings there is an arm that suits your needs. You have the choice of either push (open out) or slide arm (open in).



< Sensors

Are fully monitored computerized microwave and infrared sensors with adjustable sensitivity, range and selectable zone detection pattern.



< Safety Sensor

In strict accordance to AS5007 a safety sensor can be fitted to the head of the door that detects pedestrians in the swing door path then stop the door.



< Battery Back Up

Is supplied to maintain locking in the event of a power failure as well as to open the doors on an emergency signal when required.



Push Button Options >



< Electronic Locking

Is required when coupled up to an access control system. Allows easy, fast and secure locking of doors locally or from a remote location.



< Device Manager

- > Large display
- > Self diagnostic
- > User friendly
- > 7 day time clock
- > People counter
- > Access control pad option
- > Control speed adjustments
- > Emergency notifications
- > Defined user codes



< Pelmet Section

Aesthetically pleasing narrow pelmet section.



Failsafe

On Power failure the doors will open or operate normally by using the built in optional UPS as per AS 5007-2007.

Warranties

> 5 years motor and gearbox > 2 years parts > 12 months labour

> Safety

> Compliance

> Interface ability

TECHNICAL SPECIFICATIONS

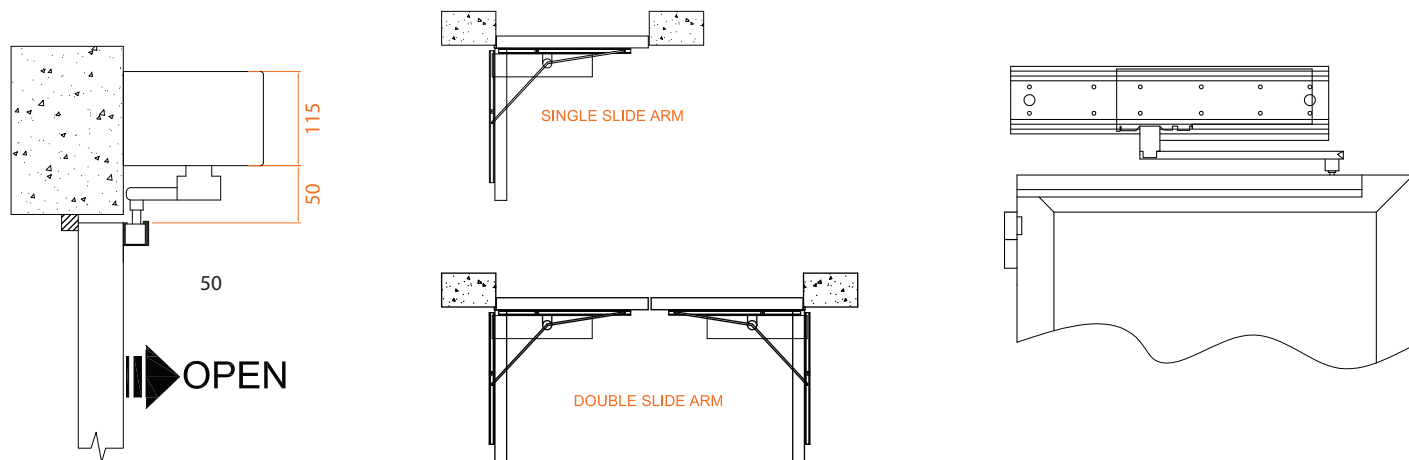
MODEL

LOGIC SWING-LP

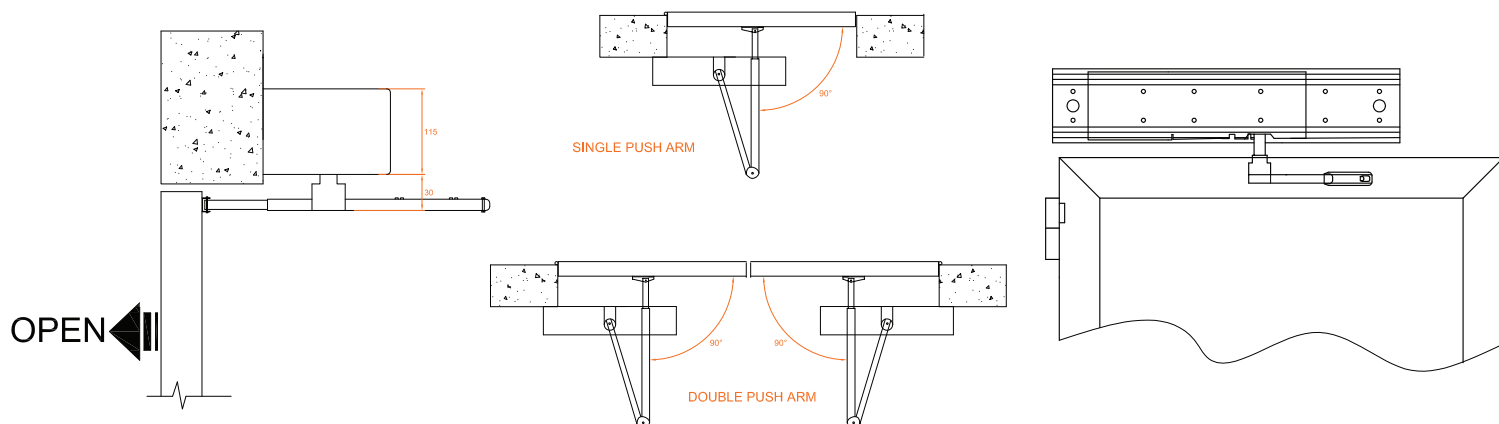
Motor	90w	Speed	25-1300mm/sec
Controller Drive	Microprocessor	Door Open Dwell Time	0-60 sec
Drive	Geared	Airlock Function	Y
Single	Y	Keypad Control	Y
Double	Y	Keyed Mode Switch Control	opt
Aluminium Doors	Y	Sensors	Microwave
Panic Breakout	Y	Safety Stop	Y
Glass Doors	Y	ITEC Safety Sensors	Y
Timber Doors	Y	Fire Alarm Interface	Y
Profile Height/Depth	115mm/180mm	Building Management Interface	Y
Pelmet	Y	Chime	Y
Electric Lock	Opt	Access Interface Control	Y
Keypad Programmable Mode	Y	Exit Only Function	Y
Master Keyed Key Switching	opt	Power Supply	240v/10amp
Panic Lock	opt	Failsafe/Failsecure	Y
Push arm/Slide arm	Y	One million cycle tested to AS 5007-2007	Y
Weight per Leaf	200kg		
Maximum Width	<1300mm*		

* Based on door height of approx 2400mm. (Please confirm with your representative).

LSW - LP SLIDE ARM



LSW - LP PUSH ARM



> Australian owned, designed & manufactured

> Proudly Australian Owned and locally Manufactured

> Service Support: 24 hours a day seven days a week

> Innovative seamless design integration

> Eye catching aesthetics

> Slimline profile

> Engineered for performance in high density traffic flow environments

> To suit Timber, Aluminium Framed, Glass, Doors

> Custom made to suit your project needs

> A host of actuation options available

> Interface with all Access control options

> Device Manager Control Pad or key switching options

> Over engineered to move door weights of 200kg

> Extremely safe operation featuring automatic stop. Installed in compliance to the safety elements of AS5007-2007

> UPS System (optional)
(Uninterrupted power Supply)

> Powdercoated pelmet design

> High security locking module (optional)

> Steel reinforced belt

> Whisper quiet operation

> Climate control function available

> Tailored maintenance packages available

> Energy efficient

> Market leading Warranties

Manufactured and installed for compliance to the BCA & AS5007-2007.



Queensland – Head Office

Address 46 Rowland Street, Slacks Creek, QLD 4127, Australia

Postal PO Box 825, Springwood, QLD 4127, Australia

Phone 61 7 3290 1500

Fax 61 7 3290 1567

National Toll Free 1300 138 750

Email contact@autoingress.com.au

Sales qldsales@autoingress.com.au

Victoria

Address Unit 37/189B South Centre Road, Tullamarine, VIC 3043, Australia

Postal PO Box 300, Tullamarine, VIC 3043, Australia

Phone 61 3 9330 2220

Fax 61 3 9330 2228

Sales vicsales@autoingress.com.au

Western Australia

Phone 1300 138 750

Fax 1300 138 756

Sales wasales@autoingress.com.au

New South Wales

Address 6/19-26 Durian Place, Wetherill Park, NSW 2164, Australia

Postal PO Box 6199, Wetherill Park BC, NSW 2164, Australia

Phone 61 2 9756 6590

Fax 61 2 9756 5210

National Toll Free 1300 138 750

Sales nswsales@autoingress.com.au

South Australia

Phone 1300 138 750

Fax 1300 138 756

Sales sasales@autoingress.com.au

Northern Territory

Phone 1300 138 750

Fax 1300 138 756

Sales ntsales@autoingress.com.au

Tasmania

Phone 1300 138 750

Fax 1300 138 756

Sales tassales@autoingress.com.au

LOGICSWING LSW - LP SPECIFICATIONS

PROPRIETY ITEM:

The automatic Logic Swing door operators as manufactured by Auto Ingress Pty Ltd (Toll Free Phone: 1300 138 750) are to be electrically approved 24v electric operators, the single/double Logic Swing housed in an aluminium housing of dimensions being H115 x W175 x L680. The said operators are to be manufactured with a minimum of 85% Australian content by a quality assured Australian owned company.

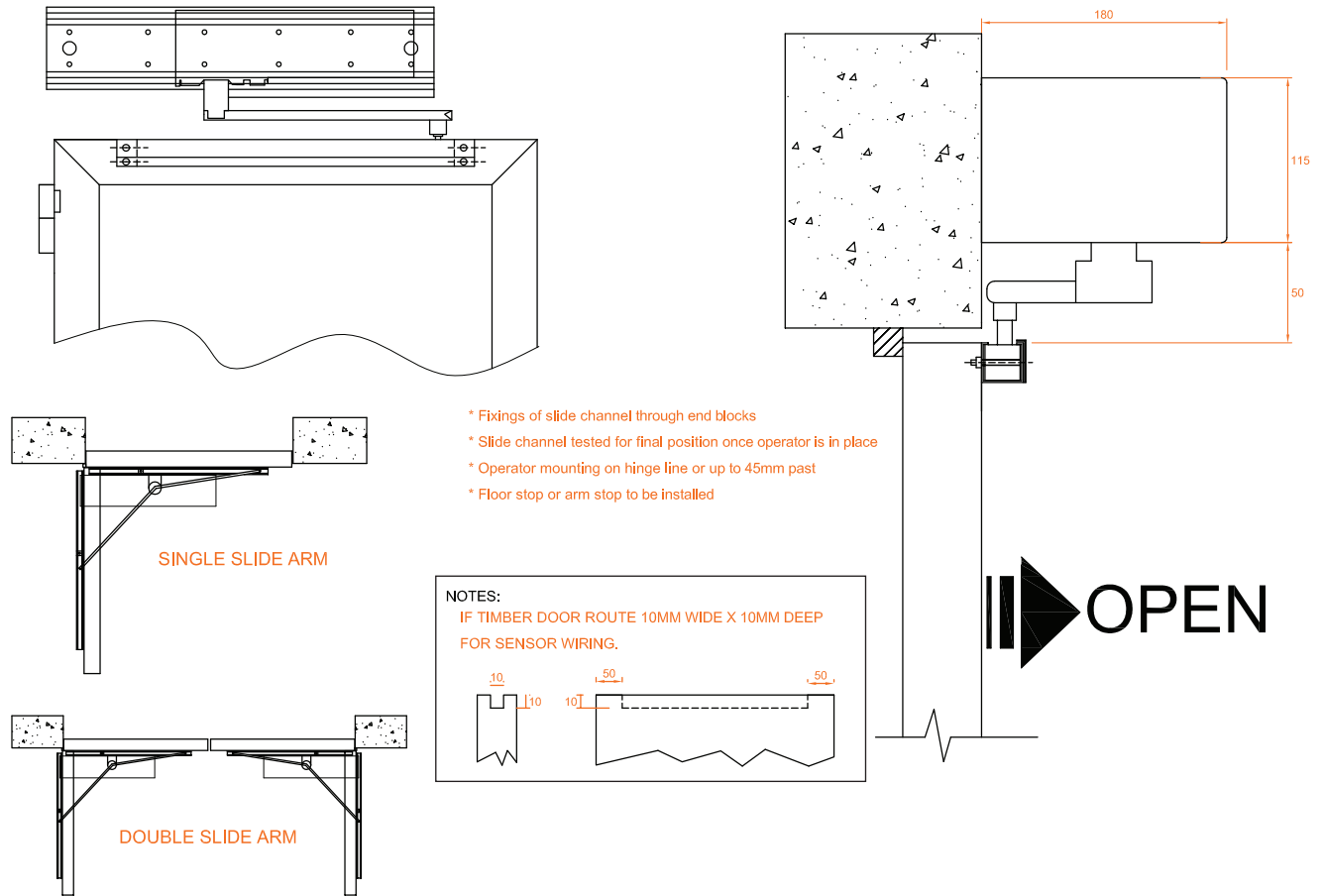
The equipment shall incorporate the following features:

1. **Operation**
Heavy Duty internal and external door operator continuous duty with manual operation with and without mains power. Suitable for both hinge and pivot type doors.
2. **Mounting**
Bulkhead/Transom/Structural plate for operator fixing (By Others)
3. **Arm configuration**
Regular Arm (push) , Slide Arm (pull)
4. **Opening function**
24V DC motor or manual override adjustable backcheck on both to eliminate mechanical door stops and prevent damage to hinges by wind loads.
5. **Closing function**
Adjustable closing torque, adjustable closing speed and latch speed to overcome door seal pressure, sticky lock etc.
6. **Push to open**
Manual override with auto close.
7. **Opening speed**
Adjustable 2-6 seconds.
8. **Closing speed**
Adjustable 2-10 seconds
9. **Hold open time**
Adjustable to 180 sec.
10. **Power source**
Solid230v AC (alternative power source available upon request).
11. **Control circuit**
Solid state intergrated circuit with electric lock output.
12. **Interface options**
Fire alarm, building management and security system interface.
13. **Battery backup**
Built in recharging circuit for 12v battery back up for electric lock and door operation.
14. **Control Functions (please select)**

☐ Standard-"Device Manager" fully programmable coded Mode Touch pad. (as per DDM spec attached)

☐ Optional- MK4- four position security key switch (can be master keyed by client)
15. **Actuation options**
Movement sensors, touch pads, card readers, push button switches etc.
16. **Safety**
Active infrared presence sensing system mounted on door leaf. Adjustable torque safety stops with auto close
17. **Locking**
Manual locking (by door manufacturer)
Electric Locking – Battery back up, Standard SK2 entry key switch & Emergency egress push button
18. **Special entry**
(only applicable with electric locking in lieu of SK2 entry switch)
 - Card reader (by security contractor)
 - Master keyed key MK2 switch for entry to match existing master keyed system.(barrel by locksmith
 - Auto Ingress Privacy Kit with LED status indicator.
19. **Fire alarm**
Cabling provided by fire contractor. (1 set of open contacts voltage free)
20. **Security & remote cabling**
Cabling by nominated security contractor. (0.2mm 8 core)
21. **Warranties**
The Automatic Door Operator is to be covered by a two (2) year parts guarantee and a twelve (12) months labour warranty. The motor and gearbox to have a 5 year unconditional warranty. All Warranties to take effect upon date of Practical Completion.
22. **Maintenance**
All automatic door operators should be serviced a minimum of three times per annum by qualified service technicians
23. **AS5007-2007, compliance date: 17.10.2010**

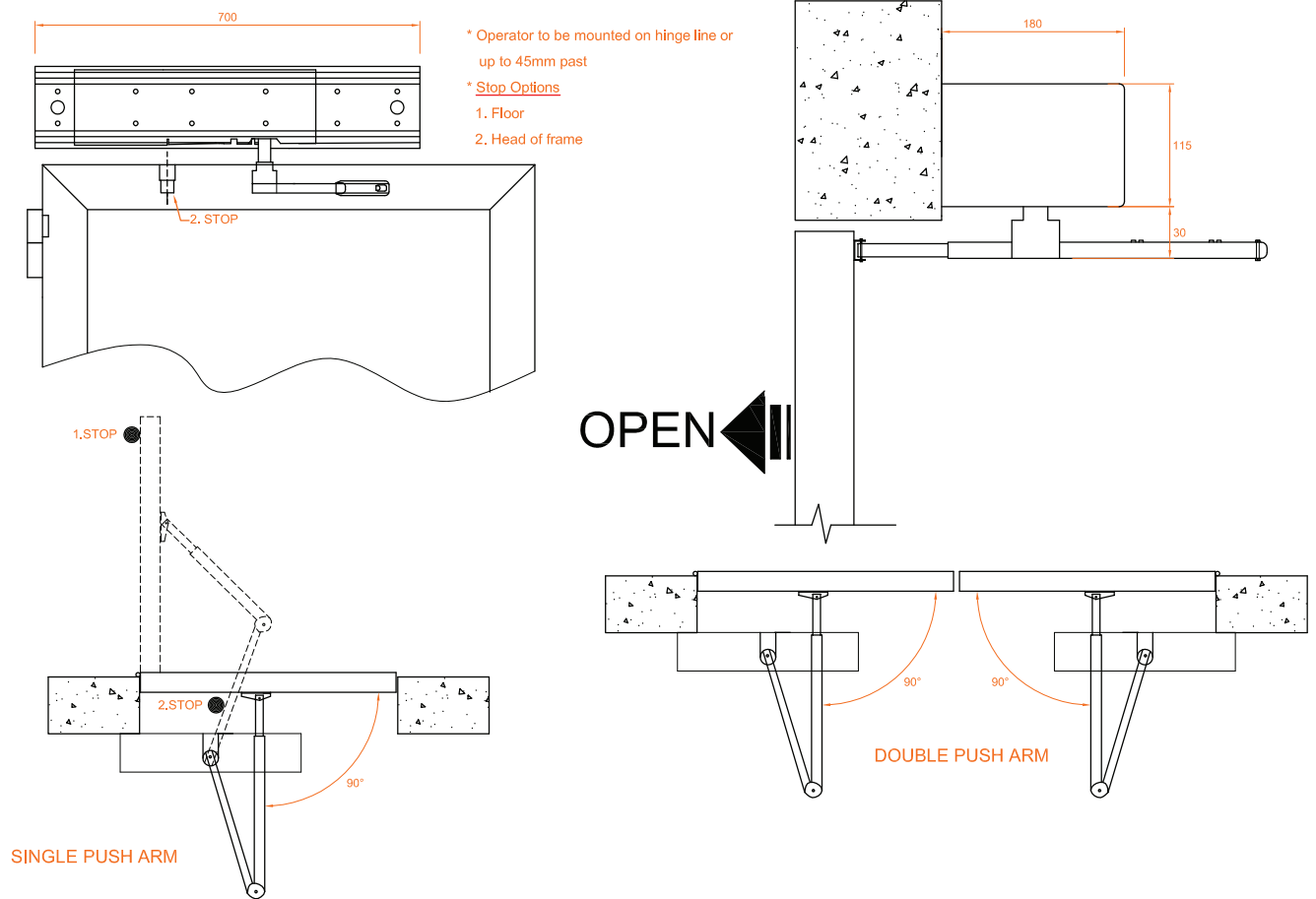
LOGICSWING INSTALLATION DIAGRAMS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters	AUTO INGRESS	TITLE:
	SCALE:	LSW - LP SERIES SWING SLIDE ARM
	DATE:	DRG. NO.
	02/02/12	lsw-sd001

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LOGICSWING INSTALLATION DIAGRAMS



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (Including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LSW - LP SERIES SWING PUSH ARM
	DATE:	DRG. NO.
	02/02/12	Isl-sd002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

3/4 WING REVOLVING DOOR
MODEL KA023

 **AUTOINGRESS**
AUTOMATIC DOORS

MANUFACTURE
DESIGN
SALES
SERVICE





KA023

Energy saving eco friendly

KA023 series products perfectly combine style, design and mechanics, with high technology, high performance and high precision design, feature quality work, heat preservation, windproof, dustproof, sound insulation, stable performance, all concise and practical.

The diversified surface treatment processes and colors can satisfy your personalized requirements.

KA023 3/4 wing revolving doors are suitable for the main entrance and exit in hotels, office buildings and commercial buildings.

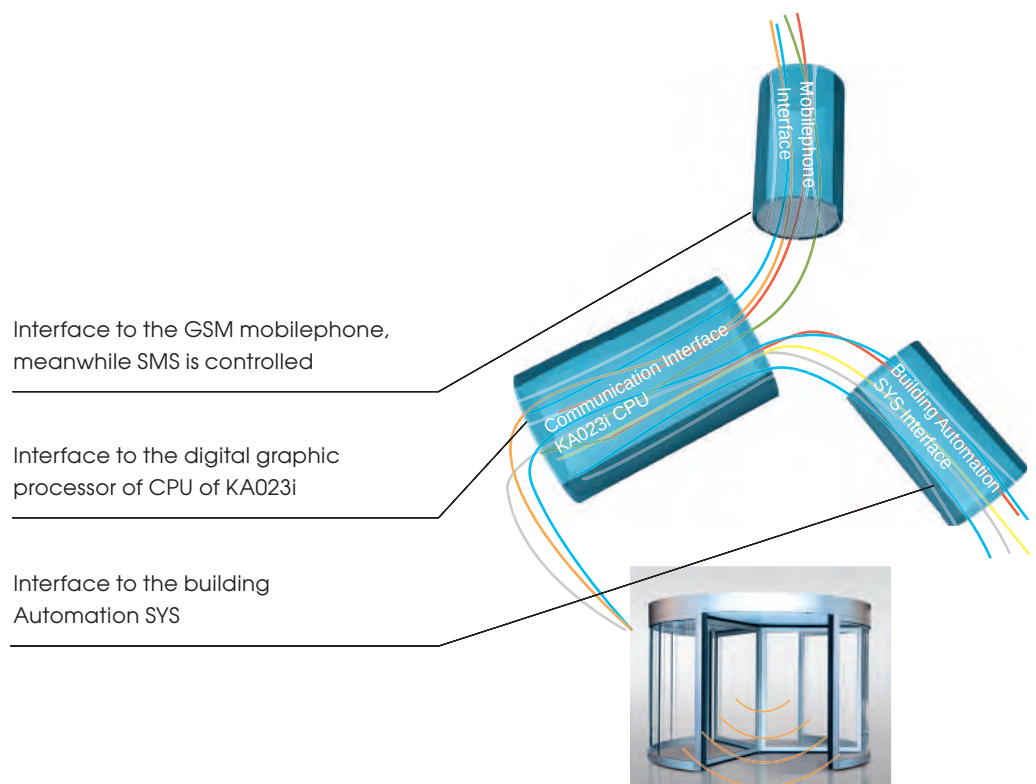


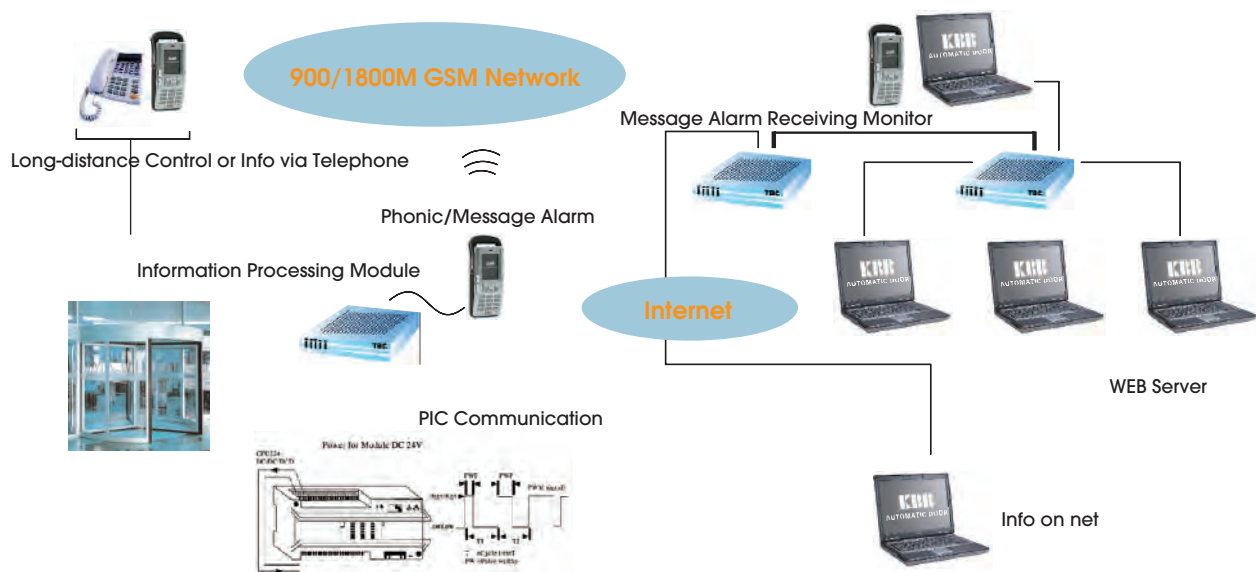
Design for

KA023 uses the running mode of revolving around the central axis, featuring high strength aluminum alloy frame assembly, removable structure, easy installation, convenient transportation, and convenient maintenance. The high quality bearing, multiple sealing and reasonable supporting structure can endure a harsh environment such as sand and dust.

According to the configuration the 3 wing and 4 wing revolving door can be manual or automatic. The manual KM023 is not equipped with an electric control or sensor. According to customers' requirements, the manual KM023 can be upgraded to a standard automatic door.

The new version KA023C, is the upgrade product from the KA023. It can be remote controlled by a typical wireless mobile phone, or via the internet to change functions, such as lock the door and trouble shooting.





Interface to the GSM mobilephone, meanwhile SMS is controlled Interface to the digital graphic processor of CPU of KA023i Interface to the building Automation SYS Communication Interface of KA023i CPU.



Safety

Pressure-sensitive function

If the resistance the revolving wing encounters exceeds a preset value (adjustable), the automatic door stops revolving.

Anti-squeeze sensor

The door stops immediately when the anti-squeeze sensor is triggered.

Fire alarm function

The preserved signal output can be connected to the fire system in the building. When the door receives a fire alarm signal, the revolving door switches to the emergency open mode automatically.

Wing sensor

Presence detection by the wing sensor starts braking immediately by the anti-collision sensor installed in the top of the revolving wing.

The 3/4 wings space design and controllable leaf rotation make the people flow in entrance/exit of buildings controllable, providing unique security advantages.

KA023 revolving door is equipped with a contact and noncontact safety sensor, installed with safety seals on an entrance column, and configured with torque control and anti-clamp function, ensuring the safety of the user.

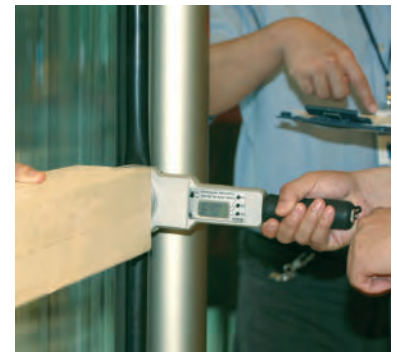
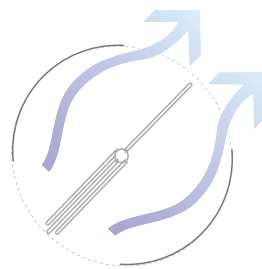
Function for the physical challenged

Press the green button before passing and the door revolves one circle in low speed, in order for allowing easy access for the physical challenged.

Emergency stop function

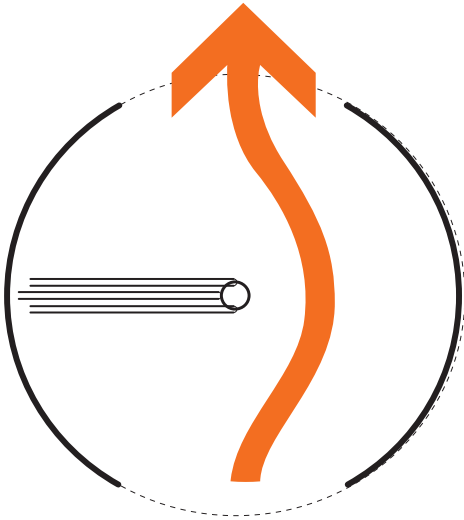
When an emergency occurs, the user can press the emergency stop button and the automatic revolving door will stop immediately.

The toughened, laminated glass satisfy the international standards. The door is clear, clean and elegant, featuring excellent sound insulation and heat preservation. The glass has excellent shock resistance, burglary proof, anti-explosion, bulletproof and high security, and won't be penetrated and the scraps won't disperse.



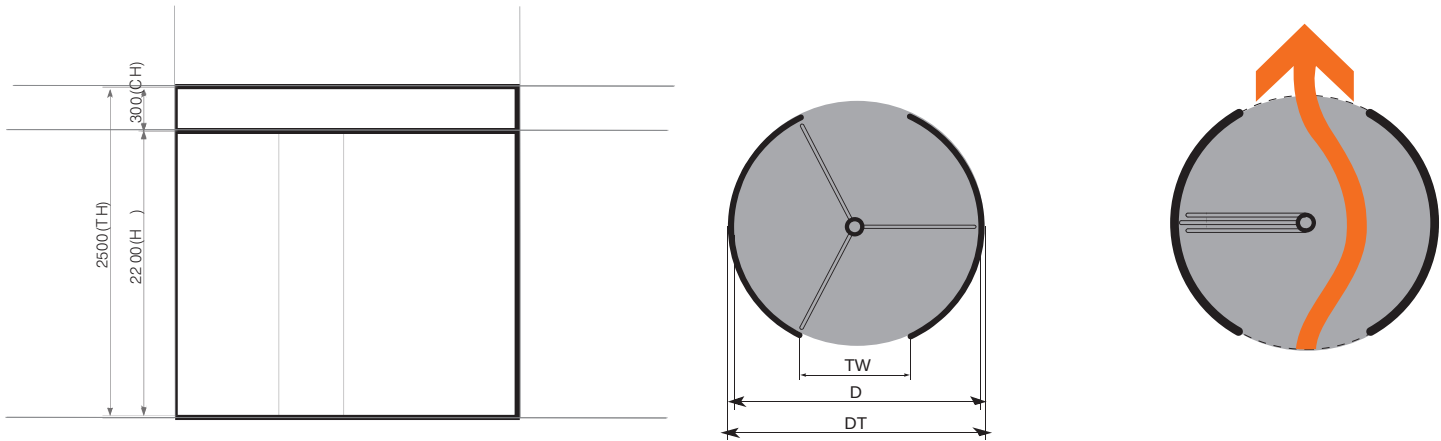
Standard	Optional
Alumimum alloy door leaf	Water proof cover
PLC control system	Fire alarm
Ceiling-Fire plate	Anti-collision
4+4mm laminated curved glass	Anti-squeeze
3+3mm laminated plane glass	Electro mechanical lock
Mechanical lock	Night security door
Ceiling spot Light: 12V	Remote control
Safety bumper	Internet monitoring system
Emergency stop	Manual/automatic mode conversion
Handicap button	

Specification	
Power supply	220V/AC ±10% 50HZ
Lighting	12V/AC 120W/240W
Rated power	600W
Lighting power	250W
Control system power	300W
Low speed adjustment range	50W
Emergency stop	0.5-2.5rpm
High speed adjustment rang	1-4rpm



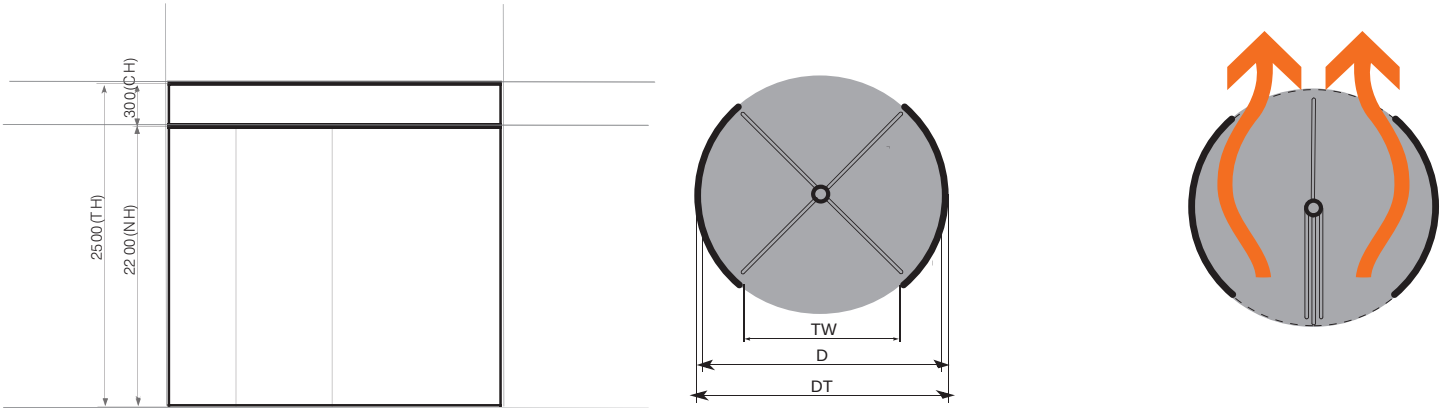
KA023 3 wings revolving door Dimension

Name	Diameter (D)	Outer diameter (DT)	Total height (TH)	Height (NH)	Opening Width (TW)	Persons/min
KA023-3-18	1800mm	1888mm	2500mm	2200mm	805mm	人 × 12
KA023-3-21	2100mm	2188mm	2500mm	2200mm	955mm	人 × 24
KA023-3-24	2400mm	2488mm	2500mm	2200mm	1105mm	人 × 24
KA023-3-27	2700mm	2788mm	2500mm	2200mm	1255mm	人 × 24
KA023-3-30	3000mm	3088mm	2500mm	2200mm	1405mm	人 × 30
KA023-3-32	3200mm	3288mm	2500mm	2200mm	1510mm	人 × 30
KA023-3-36	3600mm	3688mm	2500mm	2200mm	1705mm	人 × 36



KA023 4 wings revolving door Dimension

Name	Diameter (D)	Outer diameter (DT)	Total height (TH)	Height (NH)	Opening Width (TW)	Persons/min
KA023-4-18	1800mm	1888mm	2500mm	2200mm	1177mm	× 12
KA023-4-21	2100mm	2188mm	2500mm	2200mm	1390mm	× 24
KA023-4-24	2400mm	2488mm	2500mm	2200mm	1620mm	× 24
KA023-4-27	2700mm	2788mm	2500mm	2200mm	1824mm	× 24
KA023-4-30	3000mm	3088mm	2500mm	2200mm	2026mm	× 30
KA023-4-32	3200mm	3288mm	2500mm	2200mm	2172mm	× 30
KA023-4-36	3600mm	3688mm	2500mm	2200mm	2450mm	× 36





Maintenance

Auto Ingress is committed to providing ample and reliable accessories to the suppliers and distributors of its products. Auto Ingress provides prompt technical support in order to provide fast and effective after-sales service to customers all around the world.

Protestation

Automatic door and related products are part of professional automation products, and are likely to cause risk of harm, in case of installation, maintenance not conforming to the requirements of manufacturer, as well as relevant equipment function incurring disordered. For this reason, customers and distributors kindly notice:

1. Without permission you are not allowed to modify or change the product structure and foundation circuit.
2. Distributors and agents must hold a training certificate recognized and authorized by the manufacturer. The installation and maintenance should be performed by a qualified and authorized technician of the product.
3. Any use of components not made by the manufacturer, as well as damage caused by the failed installation and maintenance, is not the responsibility of the manufacturer.
4. Related content of this statement and product specification have the equal legitimacy and representation of to the manufacturer.



2-WING REVOLVING DOOR
MODEL KA022

 **AUTOINGRESS**
AUTOMATIC DOORS

MANUFACTURE
DESIGN
SALES
SERVICE





KA022

The Excellent Access

KA022 automatic revolving door is a unique revolving door concept with an unprecedented passage capacity. It provides a bi-directional, straight-line access and easily accommodates large objects such as shopping carts, luggage trolleys, stretchers and wheelchairs. Combining the highest possible capacity and ease of use with maximum flexibility, we offer a modular revolving door concept allowing us to design a high capacity entrance to meet your requirements.



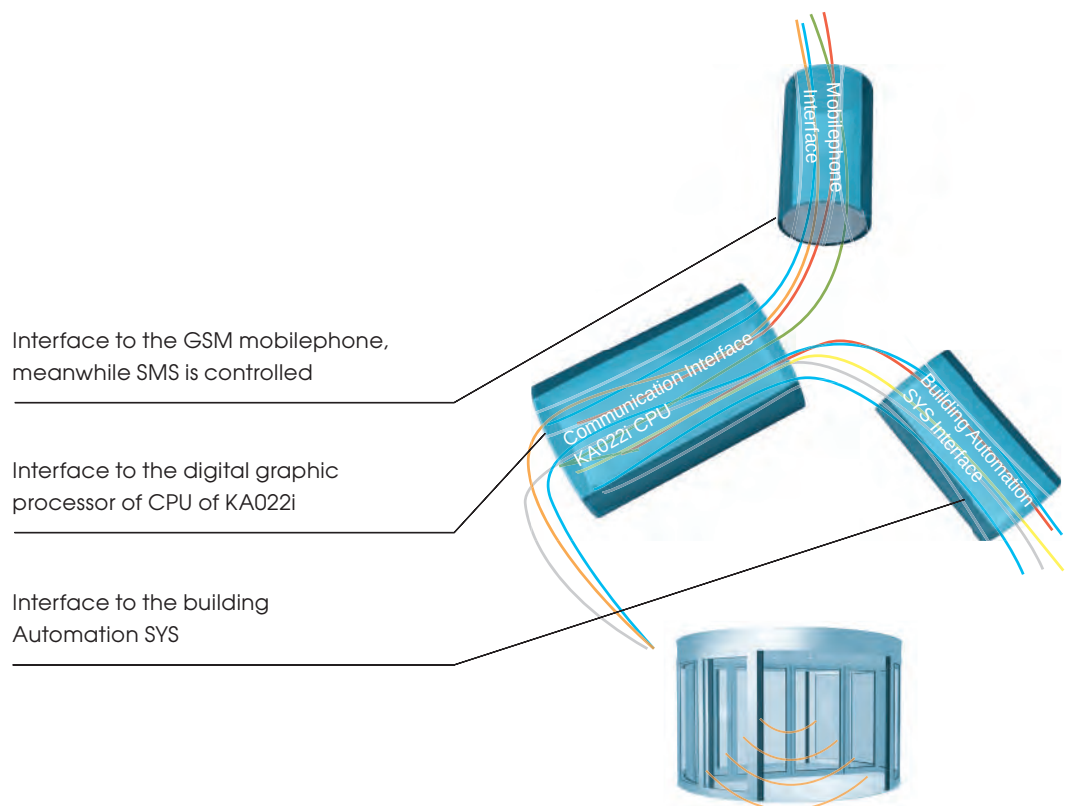
Internet accessibility

Functions:

Internet monitoring system

- Full time door monitoring for operation status updates.
- Instantaneous automatic alarm for malfunctions.
- Parameter adjustment upon client's request.

The system provides remote access for diagnosis as well as monitoring of the operational status for the KA022i. Adopting advanced radio digital communication technology and voice interactive technology to serve the following in the event of malfunction:



Electronical & mechanical features

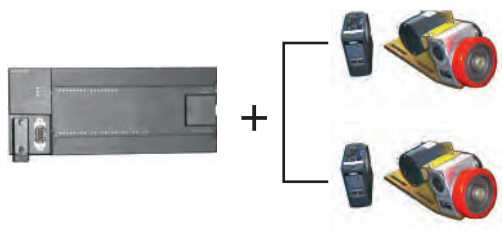


Intelligent control

PLC equipped for Chinese/English display of operation status.



Convenient preset of the door
Friendly display for users

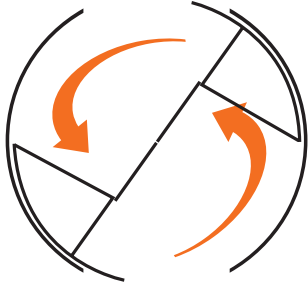


Advanced control system

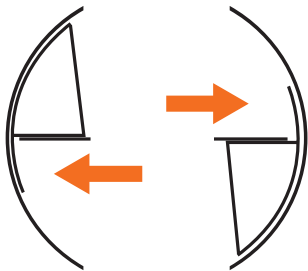
PLC+AC motor with inverter creates
quiet/steady operation and less maintenance



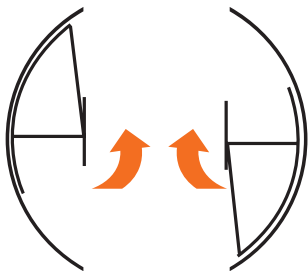
3 in 1



Revolving doors: The revolving door design completely eliminates exchange of indoor and outdoor air and greatly reduces excess heating costs. Under normal circumstances, an installed revolving door will essentially pay for itself within two years just through increased energy savings.



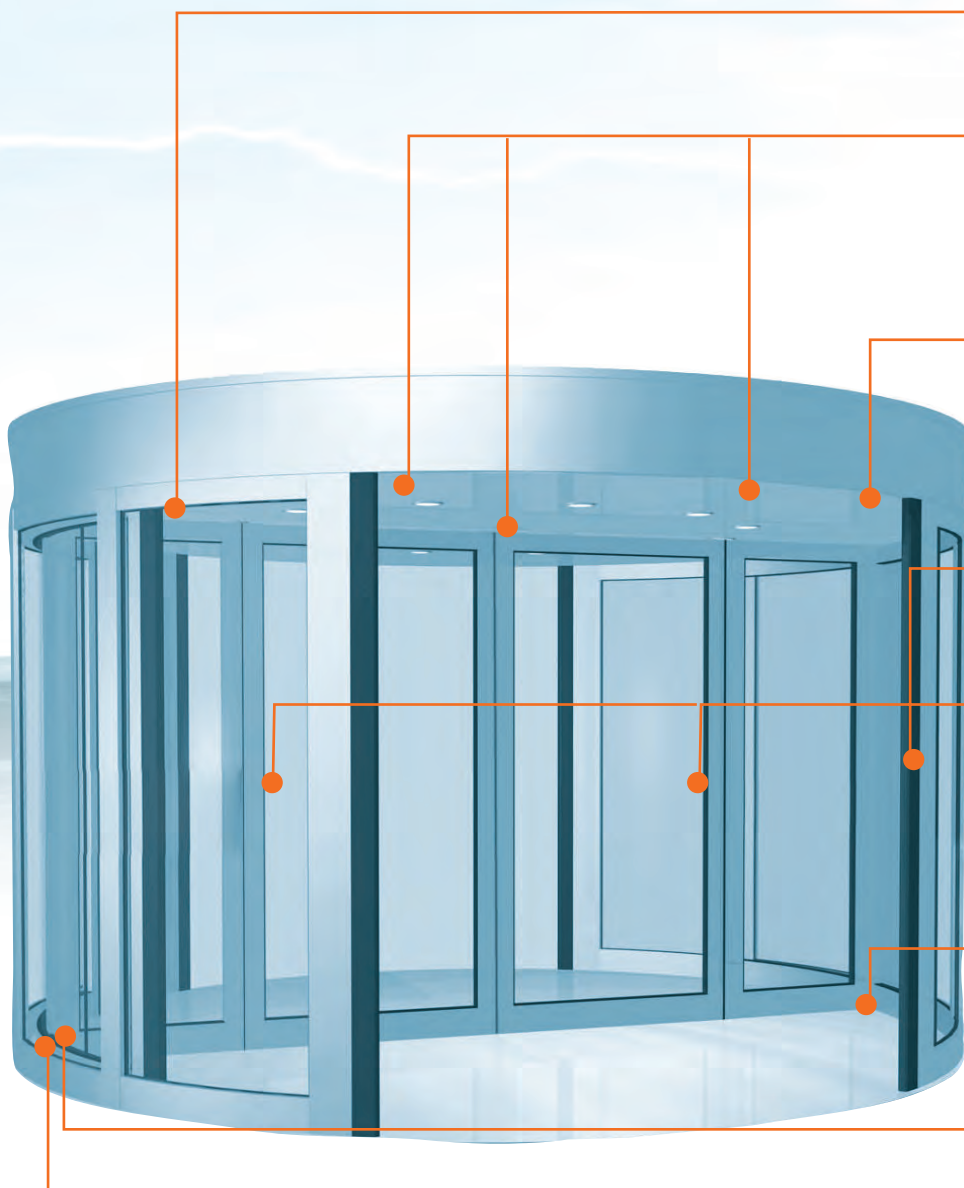
Sliding doors: During periods of pleasant weather, high foot traffic or large cargo deliveries, the sliding doors in between the wing doors can be opened, neatly solving all your logistical problems.



Balanced doors: The three-in-one performance capability of the wing doors is completed with the balanced doors. Combining the elegance and efficiency of the wing doors and the convenience of the sliding doors, the balanced doors can be used in case of emergencies by providing the fastest method of escape, ensuring the three-in-one double panel doors to be the safest.



Safety Design





Radar: When detecting moving objects, sensor will be activated and door starts to operate.



Anti-collision sensor: In case of a person or object obstruction, the system will stop and the doors will halt. This sensor is operational at all times.



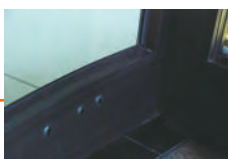
Anti-squeeze sensor: When the front safety switch on the door comes within 700mm of the outer safety rubber (distance can be adjusted), the sensor function becomes active. If there are any people or object obstructions within the limit range at this time, the system will stop and the doors will halt.

Vertical safety switch: In the event of an obstruction, the door will stop.

Sliding door anti-squeeze sensor (on models with sliding doors): When operating the sliding doors, if the sensor is activated, the sliding doors will automatically reverse direction, avoiding squeezing the pedestrian.

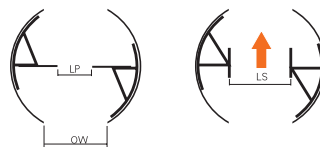
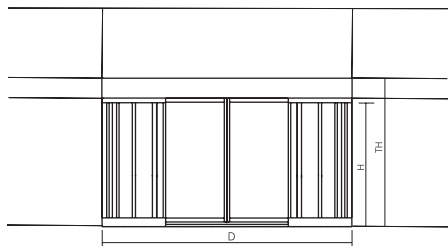


Photo cell: Six total, if a pedestrian is sensed, the doors will immediately reduce speed, brake and finally stop.



Foot sensor (optional): Installed near the floor on revolving doors, this sensor helps protect pedestrian feet.





Specifications

Names \ Models	KA022-2364	KA022-2424	KA022-2484
Diameter	3600mm	4200mm	4800mm
Outer Diameter (D)	3688mm	4288mm	4888mm
Total Height (TH)	2640mm	2640mm	2640mm
Height (H)	2300mm	2300mm	2300mm
Opening Width (DW)	1800mm	2100mm	2400mm
Sliding door opening width	1100mm	1400mm	1700mm
Max. opening width	1800mm	2100mm	2400mm
Canopy Height (CH)	340mm	340mm	340mm
Persons/min	48	64	80

Power supply	220V/AC ± 10% 50Hz	High speed adjustment range	1 ~ 4 r.p.m
Power consumption		Low speed adjustment range	0.5 ~ 2.5 r.p.m
Revolving door motor	250W/AC × 2=500W/AC	Ambient temperature range	- 15°C 50°C
Sliding door motor	100W × 2=200W		
Lighting	12V/AC 420W		
Lighting Power	12V/AC 600W		



Standard

Curved glass: 4+4mm laminated glass
Panic breakout glass: 3+3mm laminated glass
Aluminum alloy frame
Aluminum ceiling
Control unit
LED
Handicap button
Drive unit
Ceiling spot light: 12V/AC
UPS
Sliding door operator
Radar
Option
Surface treatment—anodized, cladding and RAL powder coating
Water proof or dust cover for canopy
Non—standard canopy height
Non—standard clear height
Internet monitoring system

Remarks: Design and specification are subject to change without notice. Products are tailored to meet your requirement.

Maintenance

Auto Ingress is committed to providing ample and reliable accessories to the suppliers and distributors of its products. Auto Ingress provides prompt technical support in order to provide fast and effective after-sales service to customers all around the world.

Protestation

Automatic door and related products are part of professional automation products, and are likely to cause risk of harm, in case of installation, maintenance not conforming to the requirements of manufacturer, as well as relevant equipment function incurring disordered. For this reason, customers and distributors kindly notice:

1. Without permission you are not allowed to modify or change the product structure and foundation circuit.
2. Distributors and agents must hold a training certificate recognized and authorized by the manufacturer. The installation and maintenance should be performed by a qualified and authorized technician of the product.
3. Any use of components not made by the manufacturer, as well as damage caused by the failed installation and maintenance, is not the responsibility of the manufacturer.
4. Related content of this statement and product specification have the equal legitimacy and representation of to the manufacturer.



3/4 WING REVOLVING DOORS



MANUFACTURE
DESIGN
SALES
SERVICE

About Revolving Doors

Revolving doors offer an impressive aesthetic appearance and effectively separate indoor and outdoor conditions. Auto Ingress's superior designs provide an imposing entrance to any building, while serving as an airlock as well, to minimize a building's heating and air conditioning losses, therefore maximizing energy savings. There are numerous variations and functions according to the needs passing.

Revolving doors are categorized in two different categories according to the way they revolve: two-wing doors and three/four-wing doors. Each door consists of a glass body with an aluminum frame. The operation of the doors can be manual or automatic.



Auto Ingress Three/Four-Wing Revolving Door – KA023

The KA023 are elegant and economical three/four-wing revolving doors. More than just granting the entry and exit of heavy passing traffic, the KA023 marks the highest standards in wind-proofing, dustproofing, warm-keeping and energy-saving . In summary, they can be regarded as the safest three/four-wing revolving doors in the world and an excellent choice by exceeding the expectations of customers and architects. KA023 comes in three operational modes: manual, automatic, and manual/automatic activation driving; and two driving models: top and underground driving.



KA023/KM023

Classic Door

KA061/KM061

Drum-Wall-Pillar Decorated Door



KA071/KM071

All-glass Door



KA061/KM061

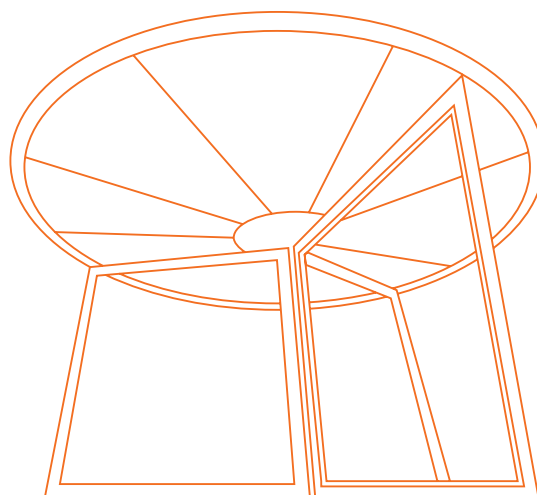
Drum-Wall-Pillar Decorated Door



Structure

Drum Wall Load-Bearing

One of the outstanding features in the KA023 doors is Auto Ingress's exclusive drum wall loadbearing structure. This component is essential to increase structural safety and overall quality, allowing for the door to have better stability, especially when comparing the doors with other two-wing pole bearing doors.



Auto Ingress
drum wall load-bearing



Other
pillar-bearing



Manual Revolving Door

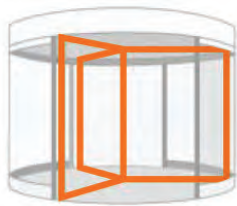
Manual revolving doors are separated into two categories: three-wing and four-wing doors, which do not require electric power and will never suffer from severe weather conditions. Auto Ingress's manual revolving doors are also equipped with an exclusive speed controlling device that allows the door to operate safely. Simultaneously, other standards such as energy-saving and dust proofing are maintained to the best level keeping the most competitive price.

The Speed Control Function

Auto Ingress's original speed limitation patent ensures safety as it prevents the doors from rotating too fast. This mechanical system is safer and more reliable compared to other electric operated devices.



Applied for:



KM023



KM071



KM061



Automatic Revolving Door

The difference between automatic and manual revolving doors is that the automatic doors are equipped with drive units and sensor systems, which make the door operate automatically. Three/four-wing doors are cost-efficient, and are commonly used in banks, shopping centers, hotels, office buildings, amongst others.



Anti-Squeeze Sensor:

The anti-squeeze sensor will stop the door immediately when activated.



Key Switch:

Automatic doors can be operated through three different functions: night lock, go-stop and continuous revolving.

(Note) The go-stop, the door will automatically revolve (through sensor activation) when the door is approached upon. This setting is ideal to reduce energy consumption.



Fire Alarm Function:

The pre-installed signal output also allows for the door to be connected to the fire system in the building. When the door receives a fire alarm signal, the revolving door will automatically switch to the emergency open mode.



Disabled Access Function:

The low-speed button is used to control the speed of the door and slow it down for the safety of younger, older and disabled passersby.



Emergency Stop Function:

The emergency stop button is able to stop movement of the automatic door under any circumstance, ensuring safety of the passersby in case of any emergency.



Mobile Phone / Internet Monitoring:

Auto Ingress's unique control software can be used to facilitate the management of the door through mobile phones or the internet. With this feature, the operator could monitor the operation status and alarms of the door.





Crystal Door

KA071 crystal door is made of a special safety glass, featuring a unique structure and an impeccable appearance. As the door is designed without a central column, clearer visibility allows it to become sparkling and more elegant. With Auto Ingress's unique music note style clamp, the KA071 door incorporates exceptional mechanics with aesthetics, increasing both safety and beauty.

Music Note Style Clamp

The music note style clamp is one of Auto Ingress's most distinguished patents.

Before the emergence of the music note style clamping system, most of the crystal doors use the conventional square clamping system. However, the traditional square clamp is unable to decentralize the pressure effectively, weakening the glass around the clamp, and therefore creating a safety hazard. The music note style clamp is named after its appearance, similar to one of the musical notes. The clamp's round shape makes the bearing points of the edge distribute pressure equally, keeping the door body steady and firm. This system has proven an impeccable safety record for Auto Ingress's crystal doors.



< Auto Ingress

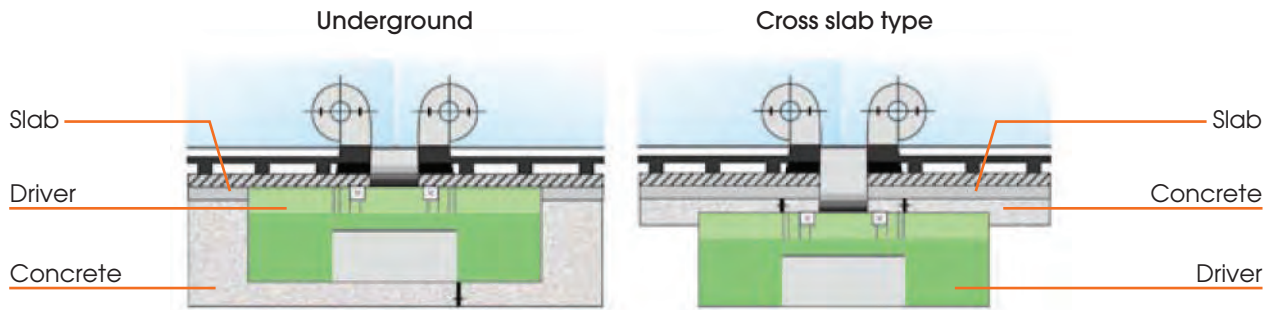


< Other



Installation

The KA071 door uses a unique bottom driving design. This allows the door body to be smooth and transparent, satisfying modern designers' preferences.



Specifications of Crystal Doors

Model	Diameter	Outer diameter	Total height	Height	Opening	Persons/min
KA071-3-18	1800mm	1852mm	2346mm	2300mm	849mm	x9
KA071-3-21	2100mm	2152mm	2346mm	2300mm	949mm	x9
KA071-3-24	2400mm	2452mm	2346mm	2300mm	1149mm	x12
KA071-3-27	2700mm	2752mm	2346mm	2300mm	1249mm	x18
KA071-3-30	3000mm	3052mm	2346mm	2300mm	1455mm	x18
KA071-3-32	3200mm	3252mm	2346mm	2300mm	1552mm	x24
KA071-4-18	1800mm	1852mm	2346mm	2300mm	1236mm	x9
KA071-4-21	2100mm	2152mm	2346mm	2300mm	1448mm	x9
KA071-4-24	2400mm	2452mm	2346mm	2300mm	1660mm	x12
KA071-4-27	2700mm	2752mm	2346mm	2300mm	1872mm	x18
KA071-4-30	3000mm	3052mm	2346mm	2300mm	2084mm	x24
KA071-4-32	3200mm	3252mm	2346mm	2300mm	2226mm	x24

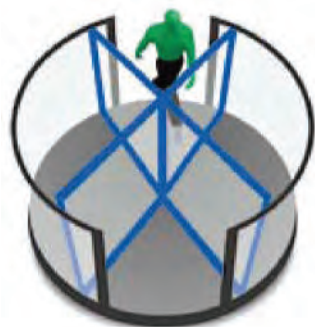
Specifications of Crystal Doors

Item Model	Materials	Central Axis	Emergence Breakout	Manual/ Automatic	Canopy Height	Diameter	Others
KA/KM071	Narrow frame: Width 30mm thickness 26mm	N/A	N/A	N/A	46mm	Standard inner diameter is less than 3 meters	KM071 with knob
KA/KM071A	Narrow frame: Width 80mm thickness 30mm	With axis and crossbeam	Optional	Optional	75mm	Standard inner diameter can be extended to 3.2 meters to 3.6 meters	KM071A with knob; Manual/ automatic KA071A with knob

Security Revolving Door

Following Prevention

In order to ensure that only the authorized person is granted access through the security door, the door rotation will only allow access to the individual with the access card. Any person attempting to follow the first user would be locked inside the door as the door will stop and sound a warning.



Authorized person enters



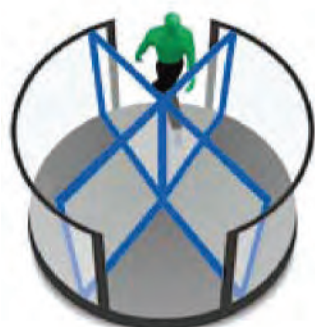
Unauthorized person follows to the next position



Door locks and then reverses to let unauthorized person go out

Video Analysis

Advanced video analysis software is used to ensure that only one person passes through each passage space. The alarm system of the security door would be triggered off in the case that two or more people breach access through the same passage space.



Authorized person enters



Unauthorized person follows to the position



Door stops; Alarm activated



Authorized person



Unauthorized person

Pass Indication

The passersby can be indicated whether they are authorized to pass by a set of LED lights mounted on the curved wall of the revolving door. When the green light shows, it means that the user is granted access whereas the red light denies it.



Pass Identification

Auto Ingress products provide various of identification systems, including card reader system, finger print reader system and so on, to ensure only identified people can get free access into the buildings. Meanwhile, the systems also help to track the record easily and accurately.

Auto Ingress mainly provides two kinds of swiping-card poles as below.



Applied for:



KM023



KM071



KM061



Advanced Safety Functions

Force-Sensitive Door Leaf

If the resistance that the revolving wings encounter exceeds a preset value (adjustable), the automatic door will stop revolving to ensure safety and to protect the door at the same time.

Torque Control Function

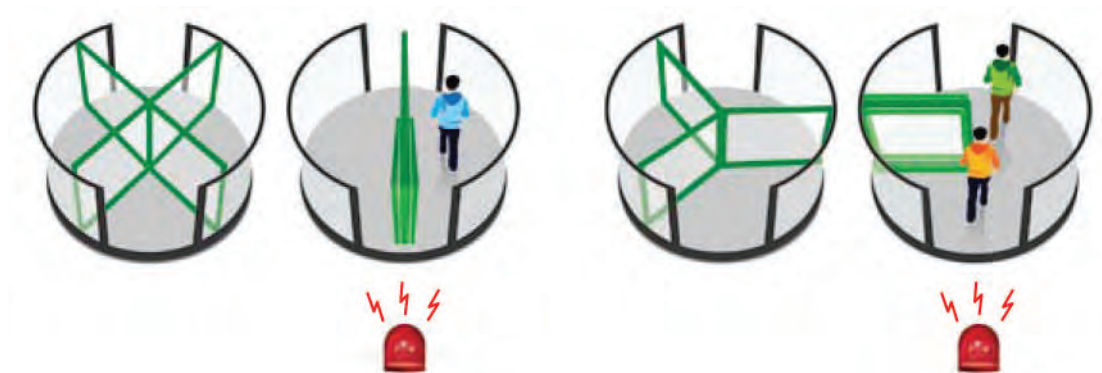
If the resistance that the revolving wings encounter exceeds a preset value (adjustable), the automatic door will stop revolving to ensure safety and to protect the door at the same time.

Horizontal Safety Light Barriers

The anti-collision light barriers installed on top of the revolving wings allow the doors to brake when any passersby or objects are detected within a defined scale.



Breakout Function



Night Security Door

Depending on customer preferences, two curved doors can be added outside the drum wall to close the whole revolving door system when needed. This option provides extra protection to the building and the door.



Large Diameter Three/Four-Wing Revolving Doors

KA052

Comparing with ordinary revolving doors, the KA052 series provides a wider passage, allowing easier and safer access to shopping carts in supermarkets and building material supply centers. In addition to providing an elegant entry, the KA052 is a great complement to a more delightful shopping environment. If the resistance that the revolving wings encounter exceeds a preset value (adjustable), the automatic door will stop revolving to ensure safety and to protect the door at the same time.



Square



Triangle

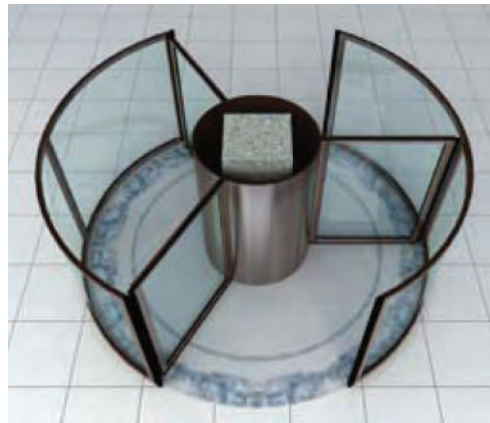


Without showcase



KA072

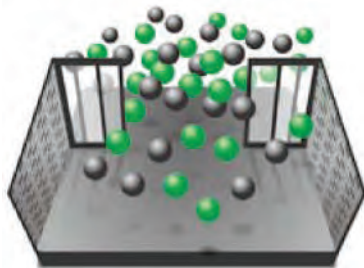
KA072 is the best solution for the buildings where there are columns in door areas. The ingenious design incorporates the columns inside the door frame, enhancing the overall appearance and practicality.



Energy-Saving and Environment-Friendly

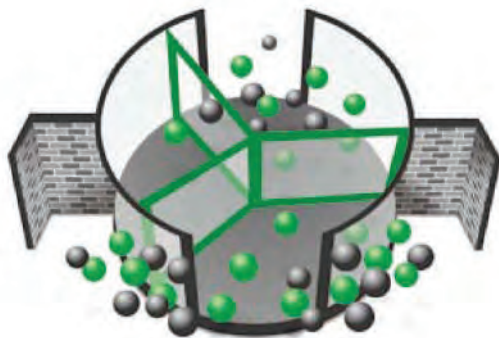
Auto Ingress's revolving doors use an unique design referred to as windmill revolving body. Its revolving direction is consistent with that of the wind. The design cuts of the exchange of indoor and outdoor air, allowing for cost and energy savings of 10% or more than other revolving doors. It is estimated that the cost of a Auto Ingress two-wing automatic revolving door is equivalent to the money it saves in three years.

The price difference of revolving doors and sliding doors are equal to the energy consumption cost of a 2-3 year timeframe.



sliding doors

< As for the sliding doors, the amount of air exchanged varies according to the size of the area, time of the opening of the door and the speed of airflow.



revolving doors

< The air exchange for revolving doors depend only on the inside air volume and the number of times the doors open.

● ● = Air

Environment Energy Consumption (EC) = Temperature
Difference Between Internal & External (TD) × Air
Exchange Volume(EV) × Specific Heat Capacity of Air (C)



Series of Three/Four-Wing Revolving Doors

	KA023	KM023	KA061	KM061	KA071	KM071	KA071A	KM071A
 Three-wing doors	✓	✓	✓	✓	✓	✓	✓	✓
 Four-wing doors	✓	✓	✓	✓	✓	✓	✓	✓
 Automatic	✓		✓		✓		✓	
 Manual		✓		✓		✓		✓
 With central axis	✓	✓	✓	✓			✓	✓
 With drum - wall - pillar			✓	✓				
 Top driving	✓	✓	✓	✓				
 Underground driving					✓	✓	✓	✓



Series of Three/Four-Wing Revolving Doors

Specifications

KA023 Three-wing Revolving Doors Dimension

Model	Diameter	Outer diameter	Total height	Clear Passage Height	Opening	Persons/min
KA023-3-18	1800mm	1888mm	2500mm	2200mm	805mm	12
KA023-3-21	2100mm	2188mm	2500mm	2200mm	955mm	24
KA023-3-24	2400mm	2488mm	2500mm	2200mm	1105mm	24
KA023-3-27	2700mm	2788mm	2500mm	2200mm	1255mm	24
KA023-3-30	3000mm	3088mm	2500mm	2200mm	1405mm	30
KA023-3-32	3200mm	3288mm	2500mm	2200mm	1510mm	30
KA023-3-36	3600mm	3688mm	2500mm	2200mm	1705mm	36

KA023 Four-wing Revolving Doors Dimension

Model	Diameter	Outer diameter	Total height	Clear Passage Height	Opening	Persons/min
KA023 -4 -18	1800mm	1888mm	2500mm	2200mm	1177mm	12
KA023 -4 -21	2100mm	2188mm	2500mm	2200mm	2390mm	24
KA023 -4 -24	2400mm	2488mm	2500mm	2200mm	1620mm	24
KA023 -4 -27	2700mm	2788mm	2500mm	2200mm	1824mm	24
KA023 -4 -30	3000mm	3088mm	2500mm	2200mm	2026mm	30
KA023 -4 -32	3200mm	3288mm	2500mm	2200mm	2172mm	30
KA023 -4 -36	3600mm	3688mm	2500mm	2200mm	2450mm	36

Technical Parameters

Power supply	220 V/AC $\pm$ 10% 50Hz
Lighting	12V/AC 120W/240W
Rated power	600W
Motor power	250W
Lighting power	300W
Control system power	50W
Low speed adjustment range	0.5 ~2.5rpm
High speed adjustment range	1~4rpm

Configuration

Standard	Optional
Aluminum alloy door leaf	Waterproof cover
PLC control system	Fire alarm
Ceiling --- Fire plate	Anti-collision
4+4mm laminated curved glass	Anti-squeeze
3+3mm laminated plane glass	Night security door
Mechanical lock	Remote control
Ceiling spot light: 12V/AC	Internet monitoring system
Safety bumper	Manual / Automatic activation device
Emergency stop button	
Handicap button	

Note: Design and specifications are subject to change without notice, as they are based on product development.

Surface Treatment

Anodizing

Auto Ingress keeps the strictest and highest standards in its process. The finish of the anodized aluminum is no exception, offering more than twenty different choices of color and surface texture finishing. Other standards of this stainless material include its wear-resistance, corrosion resistance, electrostatic prevention, amongst other features to meet different architectural styles and demands.



Stainless Steel Cladding

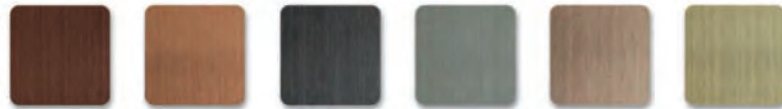
Mirror surface



Satin pattern



Hair pattern



Carving pattern



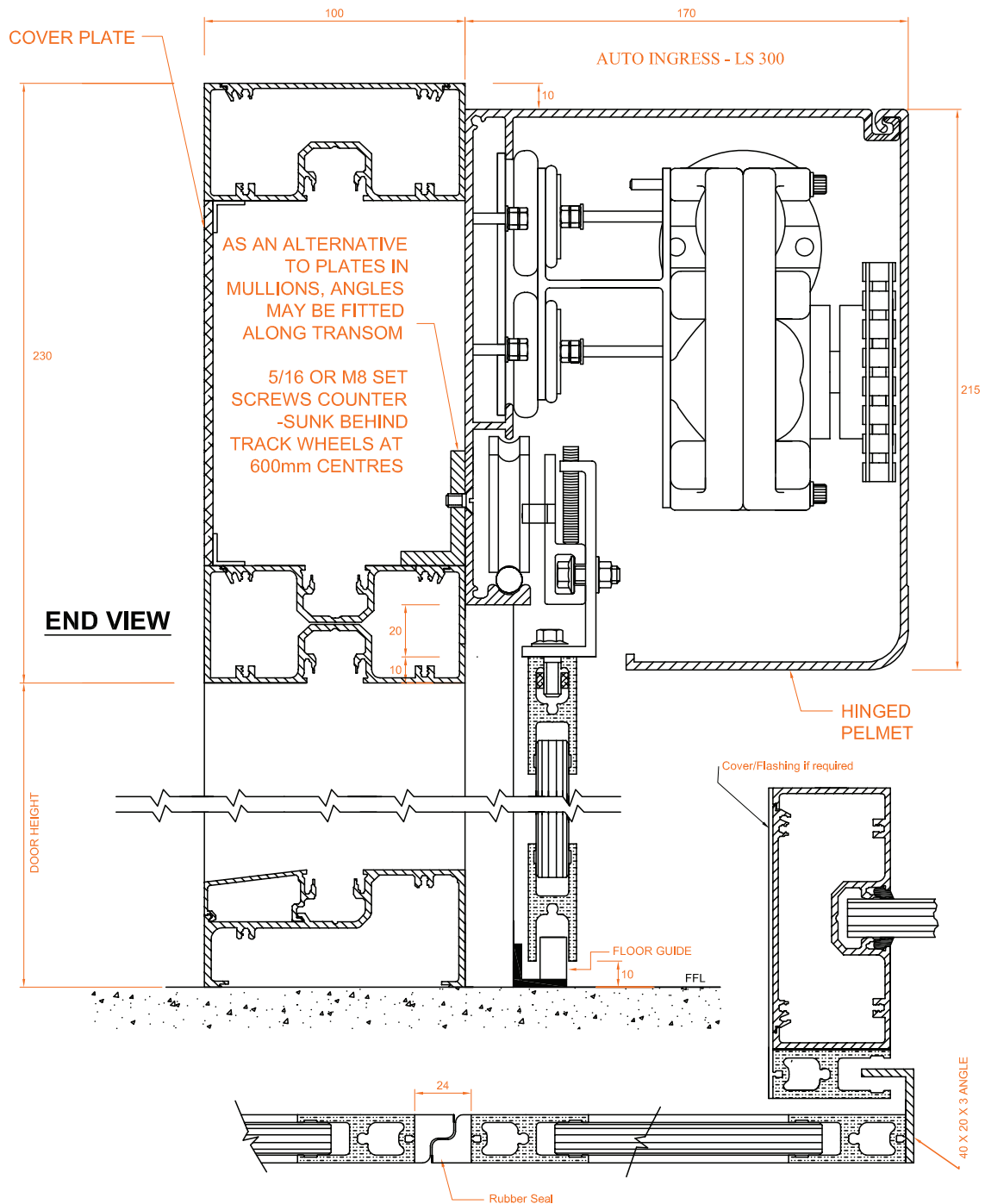
Arenaceous pattern



Coating

Auto Ingress provides two kinds of coating: powder coating and PVDF coating.

LS220B SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK

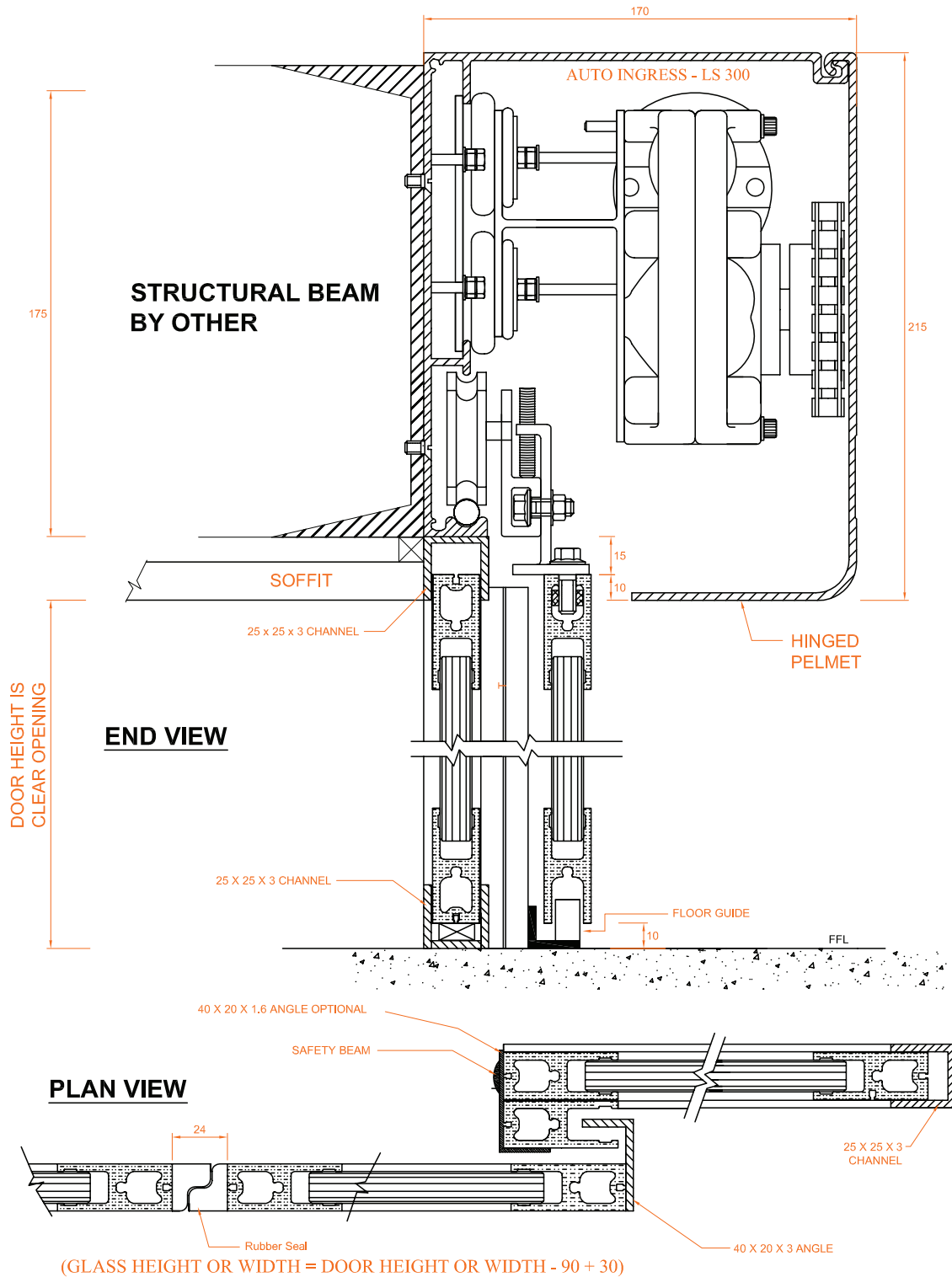


(GLASS HEIGHT OR WIDTH = DOOR HEIGHT OR WIDTH - 90 + 30)

NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > To ensure track wheels are not obstructed - maximum length of fixing screw is 6mm	AUTO INGRESS	TITLE:
	SCALE:	LS220B Safety-Slim Framed Door Detail onto STD Aluminium Framed Shopfront with Interlock
	DATE:	DRG. NO.
	02/02/12	Isl-h005

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all its contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

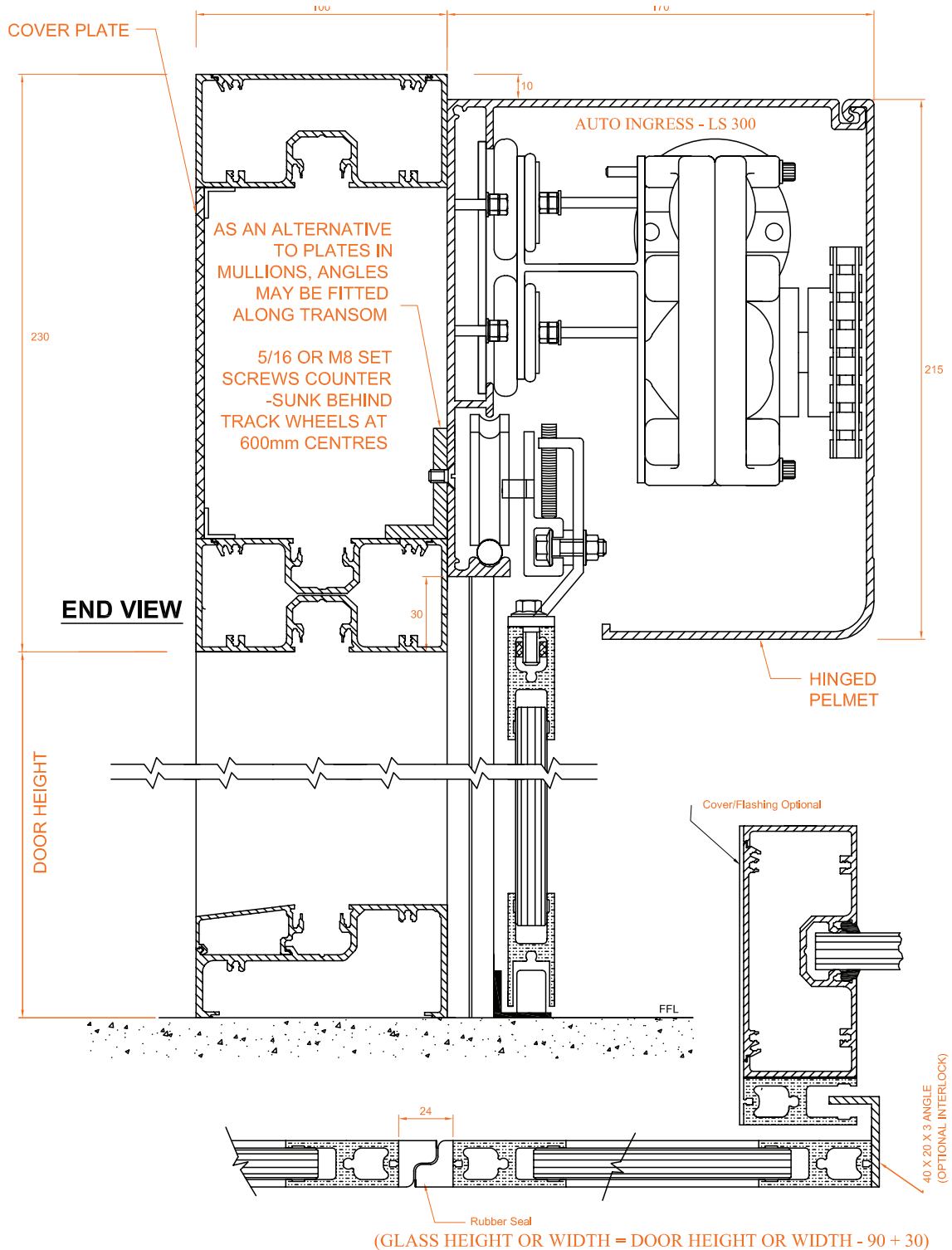
LS220B SAFETY-SLIM FRAMED DOOR DETAIL & SS SIDE LIGHT WITH INTERLOCK



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220B Safety-Slim Framed Door Detail & SS Side Light with Interlock
	DATE:	DRG. NO.
	02/02/12	Isl-h007

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220B SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK



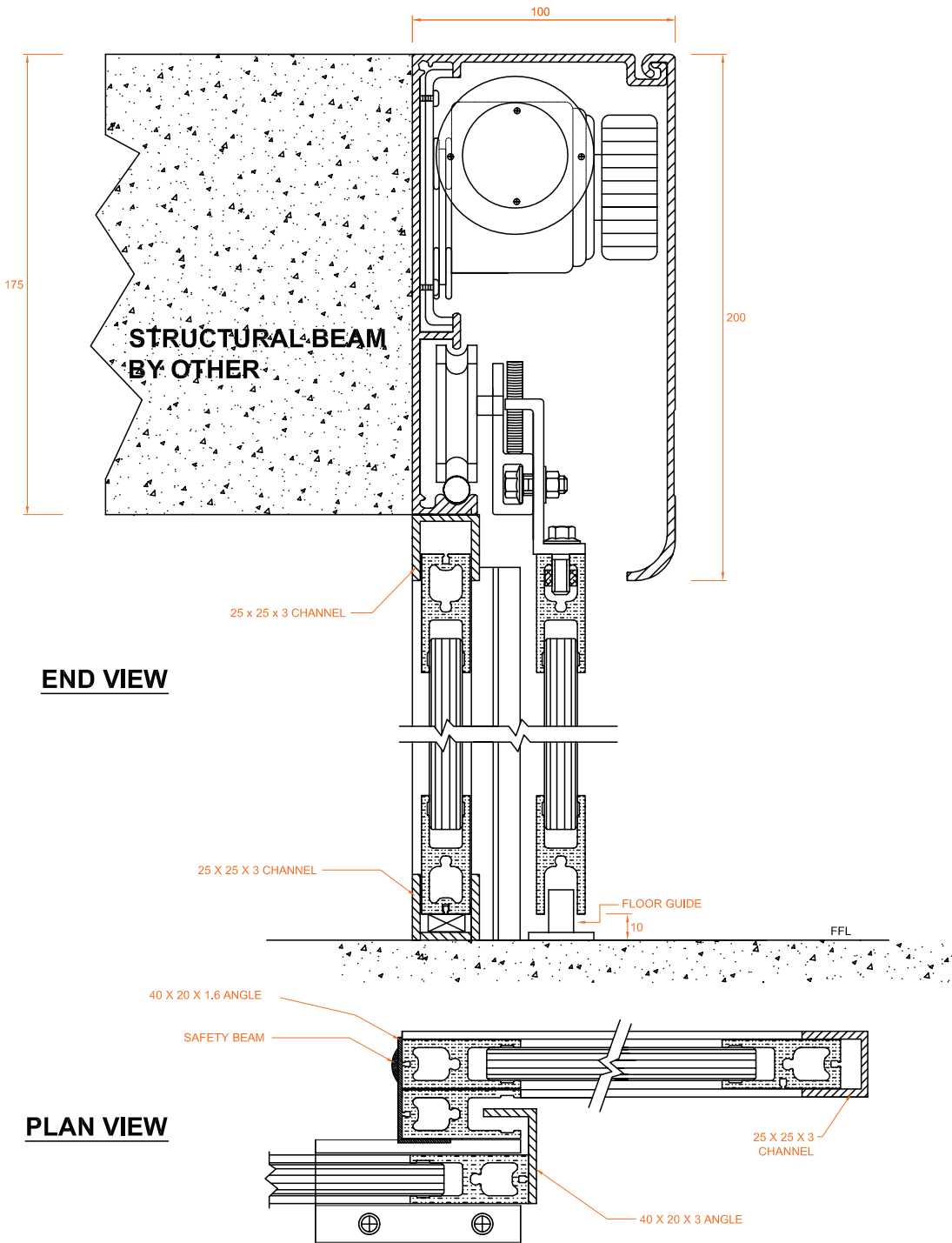
NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.) > To ensure track wheels are not obstructed - maximum length of fixing screw is 6mm	AUTO INGRESS		TITLE: LS220B Safety-Slim Framed Door Detail onto STD Aluminium Framed Shopfront with Interlock
	SCALE:	NOT TO SCALE	
	DATE:	02/02/12	DRG. NO. Isl-h008

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.



The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220B SAFETY-SLIM FRAMED DOOR DETAILED ON STD ALUMINIUM FRAMED SHOPFRONT

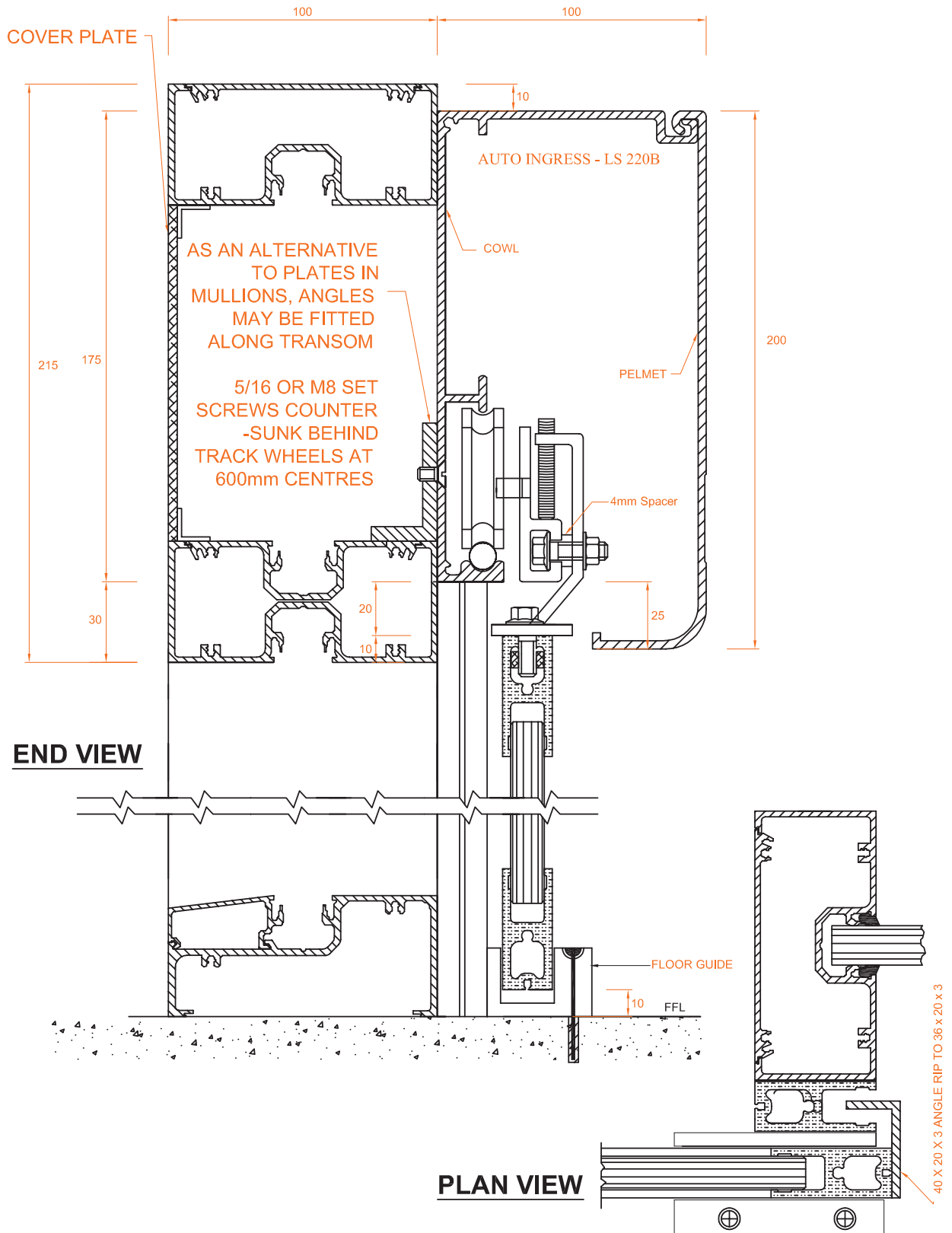


(GLASS HEIGHT OR WIDTH = DOOR HEIGHT OR WIDTH - 90 + 30)

NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LS220B SAFETY-SLIM FRAMED DOOR DETAILED ON STD ALUMINIUM FRAMED SHOPFRONT
	SCALE:	
	DATE:	DRG. NO.
	02/02/12	IsI-bl007

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

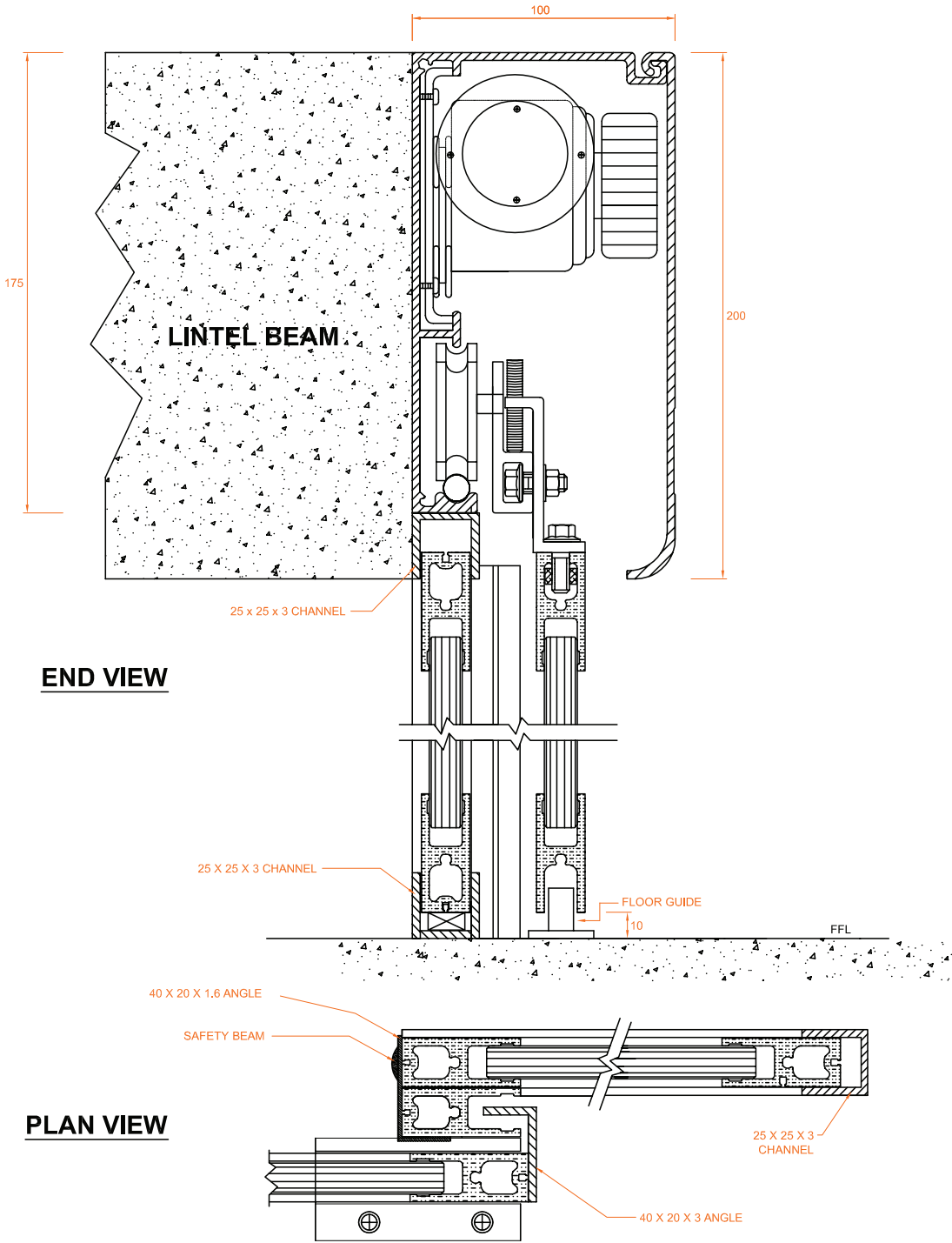
LS220B SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE: LS220B SAFETY-SLIM FRAMED DOOR DETAIL ONTO STD ALUMINIUM FRAMED SHOPFRONT WITH INTERLOCK
	SCALE: NOT TO SCALE	DRG. NO. IsI-bl006
	DATE: 02/02/12	

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

LS220B SAFETY-SLIM FRAMED DOOR DETAIL & SS SIDE LIGHT WITH INTERLOCK

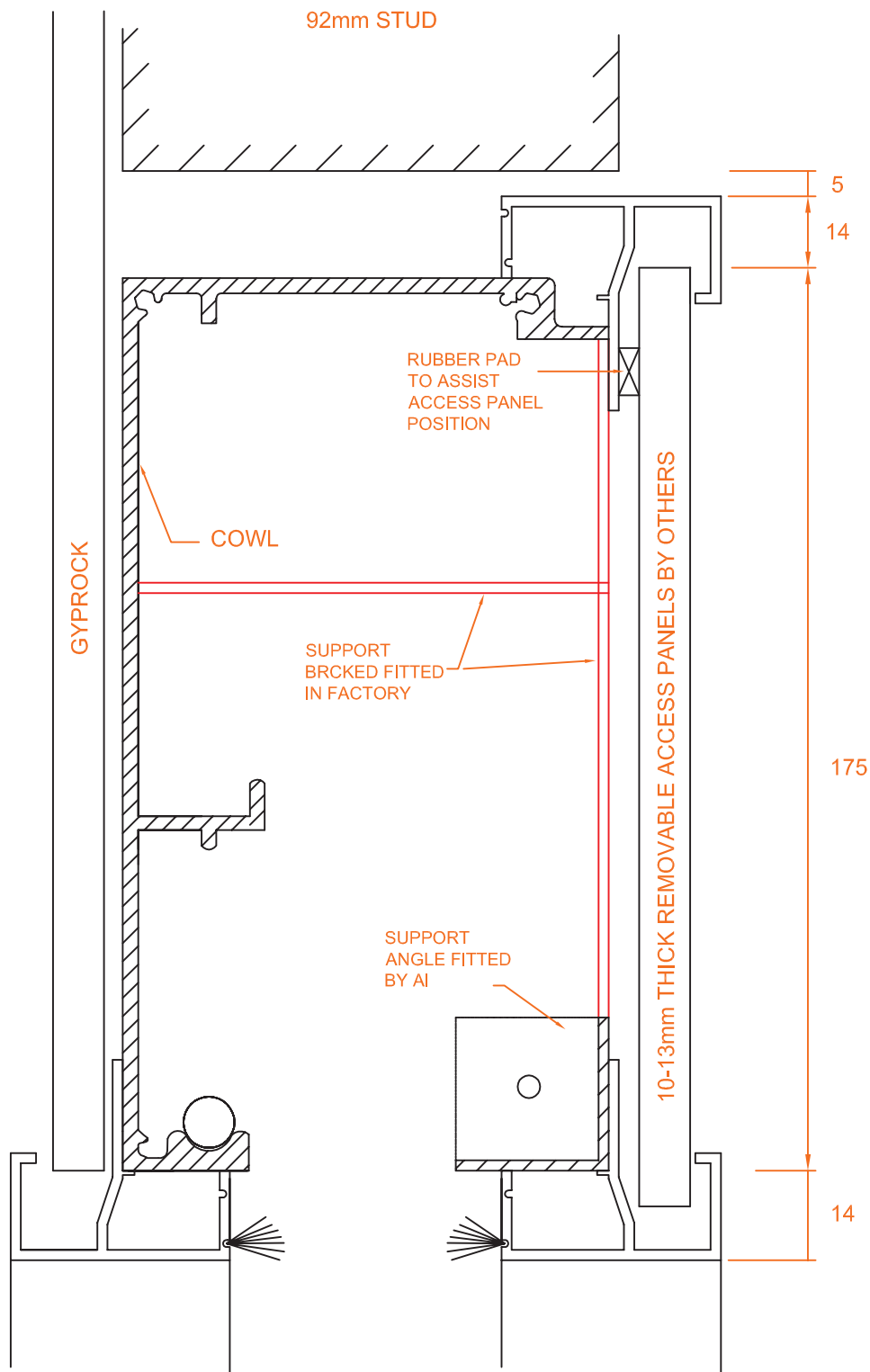


(GLASS HEIGHT OR WIDTH = DOOR HEIGHT OR WIDTH - 90 + 30)

NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE:	LS220B SAFETY-SLIM FRAMED DOOR DETAIL & SS SIDE LIGHT WITH INTERLOCK
	DATE:	DRG. NO.
	02/02/12	IsI-bl009

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

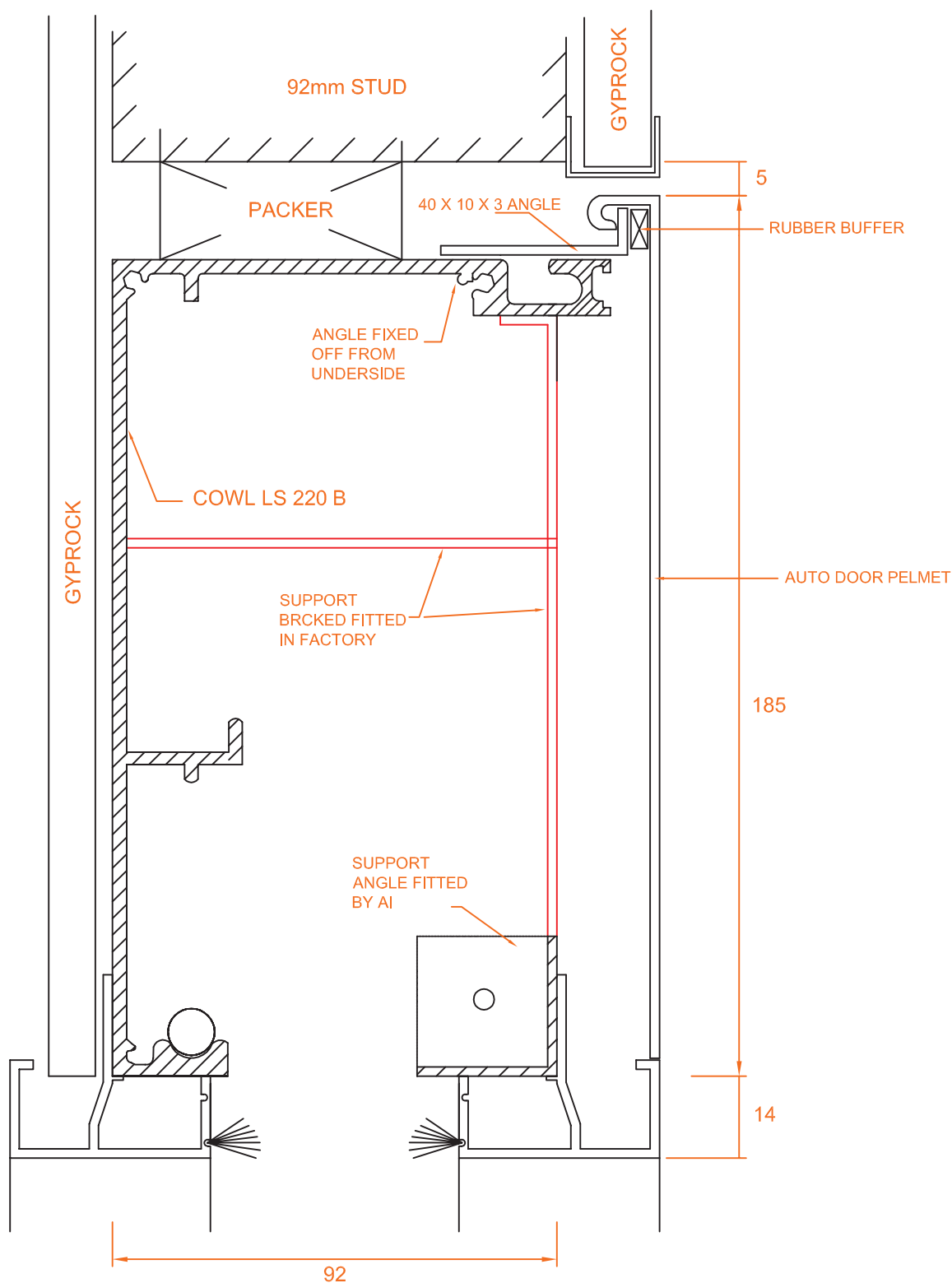
CAVITY HEAD DETAILS (ACCESS PANEL)



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE: NOT TO SCALE	CAVITY HEAD DETAILS (ACCESS PANEL)
	DATE: 02/02/12	DRG. NO. CAVITY 01

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

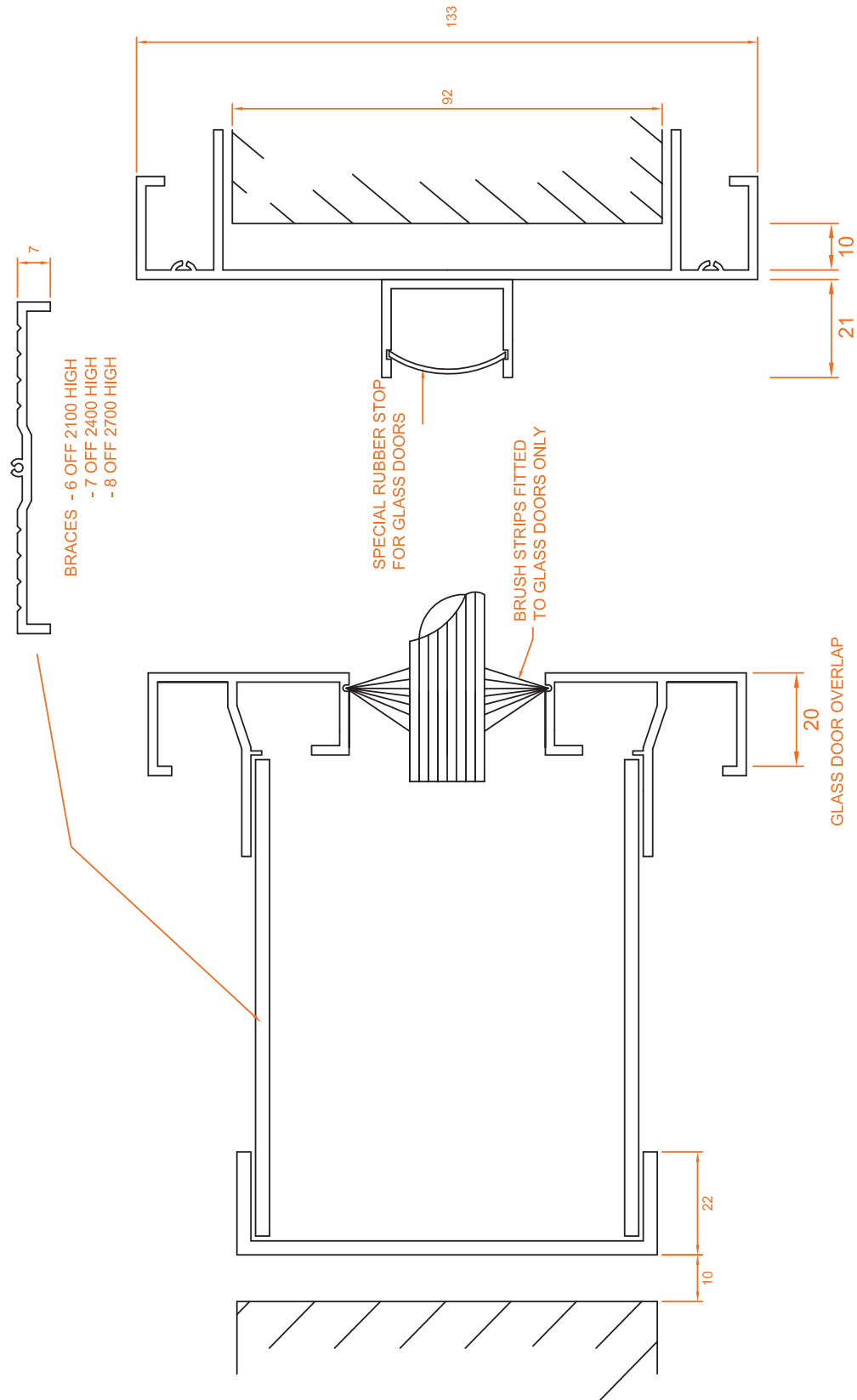
CAVITY HEAD DETAILS (STD PELMET)



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE: NOT TO SCALE	CAVITY HEAD DETAILS (STD PELMET)
	DATE: 02/02/12	DRG. NO. CAVITY 02

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

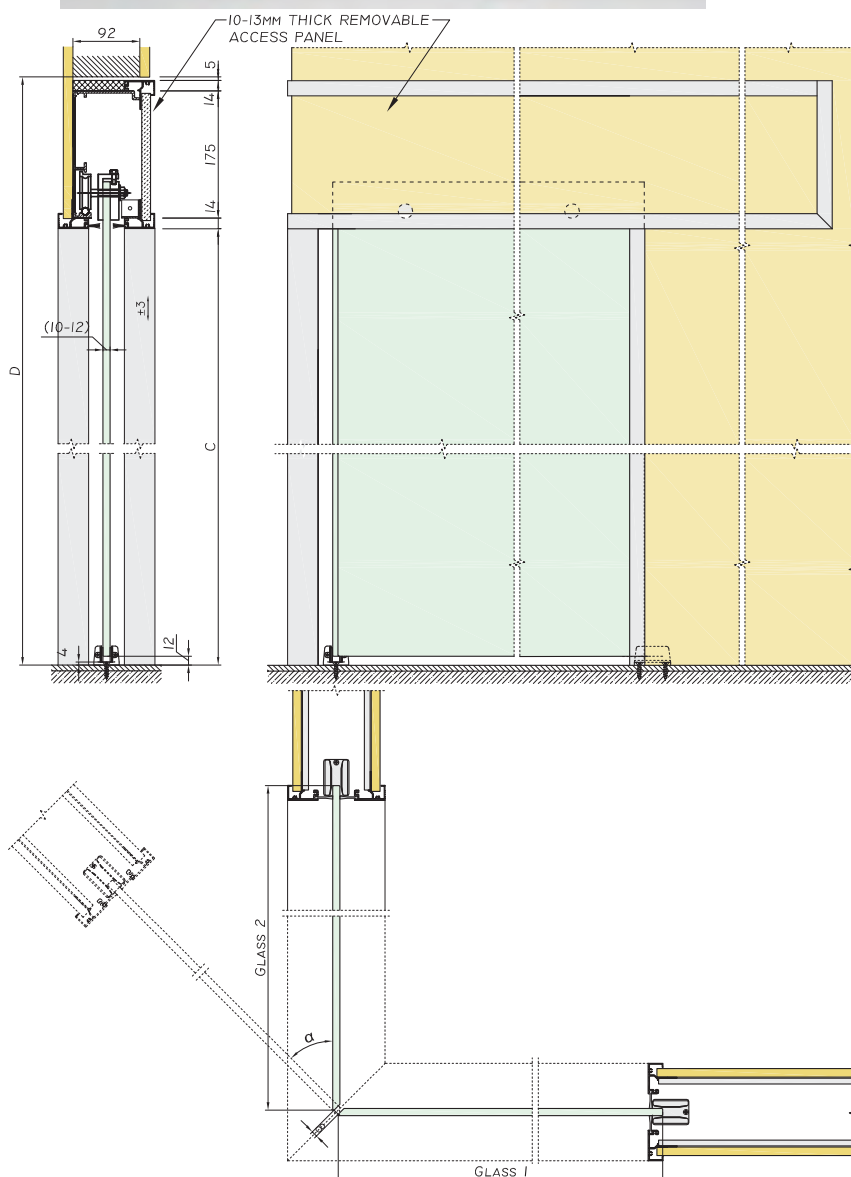
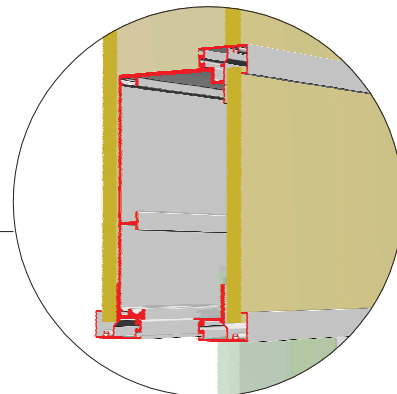
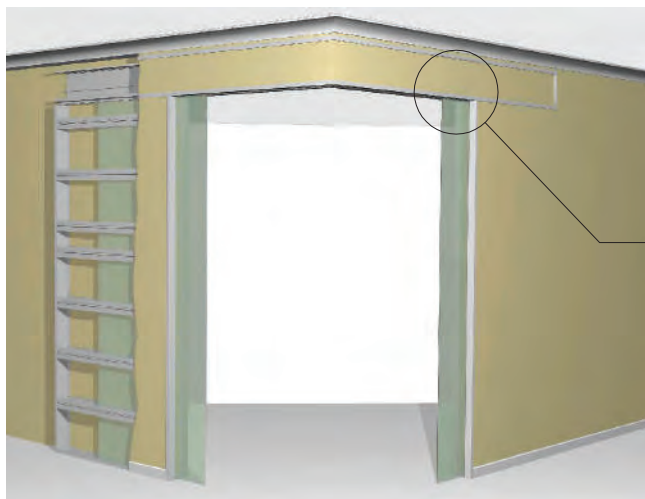
CAVITY HEAD DETAILS (PLAN VIEW)



NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE: NOT TO SCALE	CAVITY HEAD DETAILS (PLAN VIEW)
	DATE: 02/02/12	DRG. NO. CAVITY 03

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

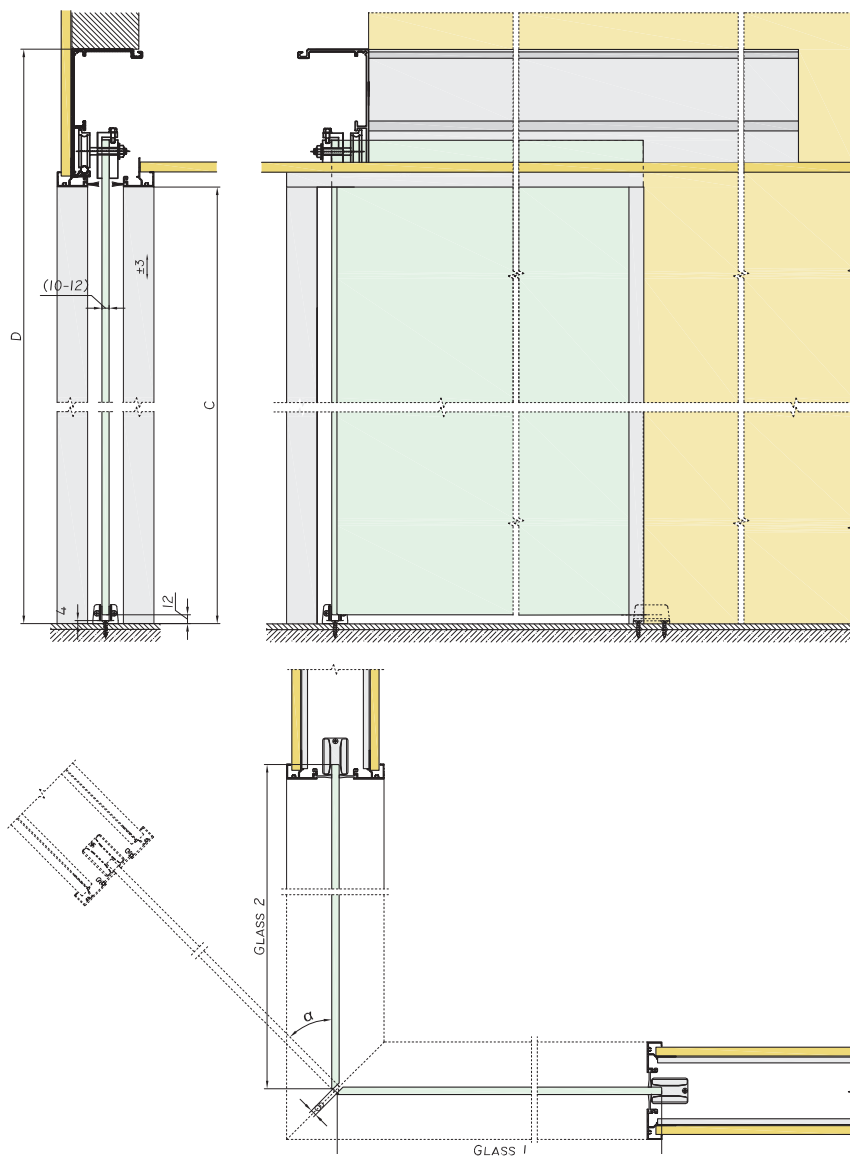
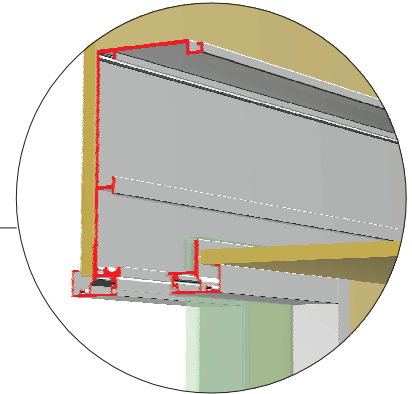
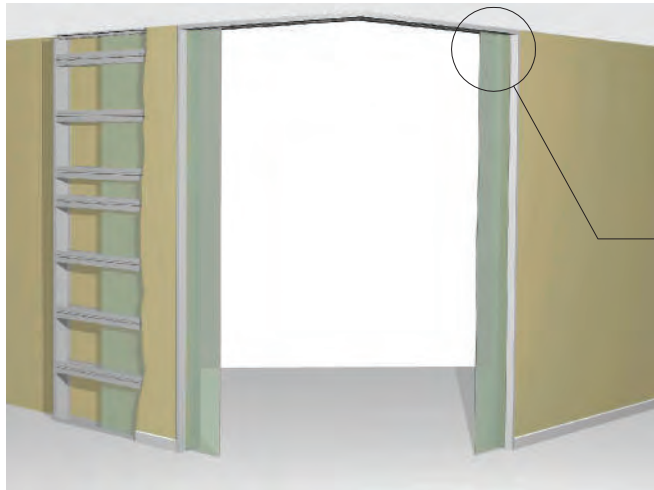
AUTOMATIC CAVITY SLIDER - STD HEAD SECTION



C - Distance from finished floor to underside of track.

D - Distance from finished floor to underside of support beam.

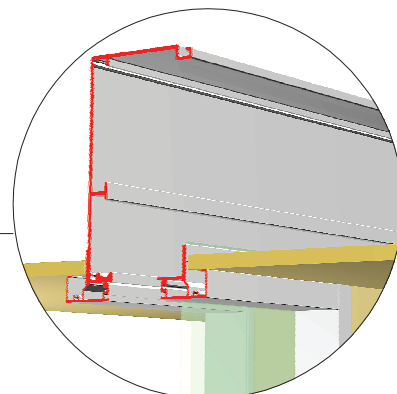
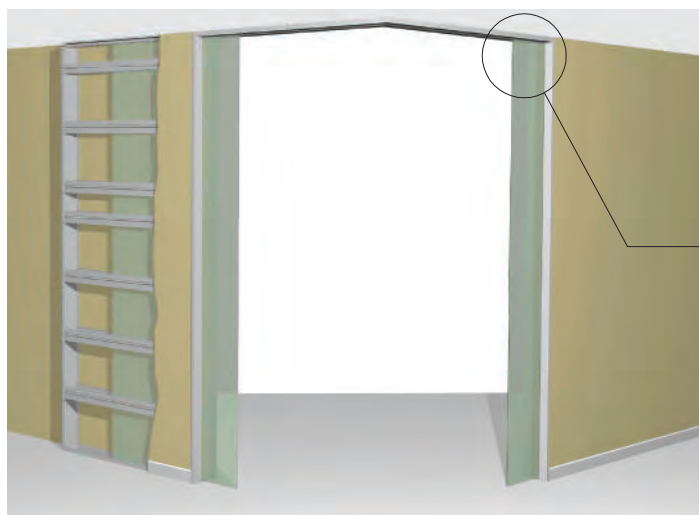
AUTOMATIC CAVITY SLIDER - STD BULKHEAD SECTION



C - Distance from finished floor to underside of track.

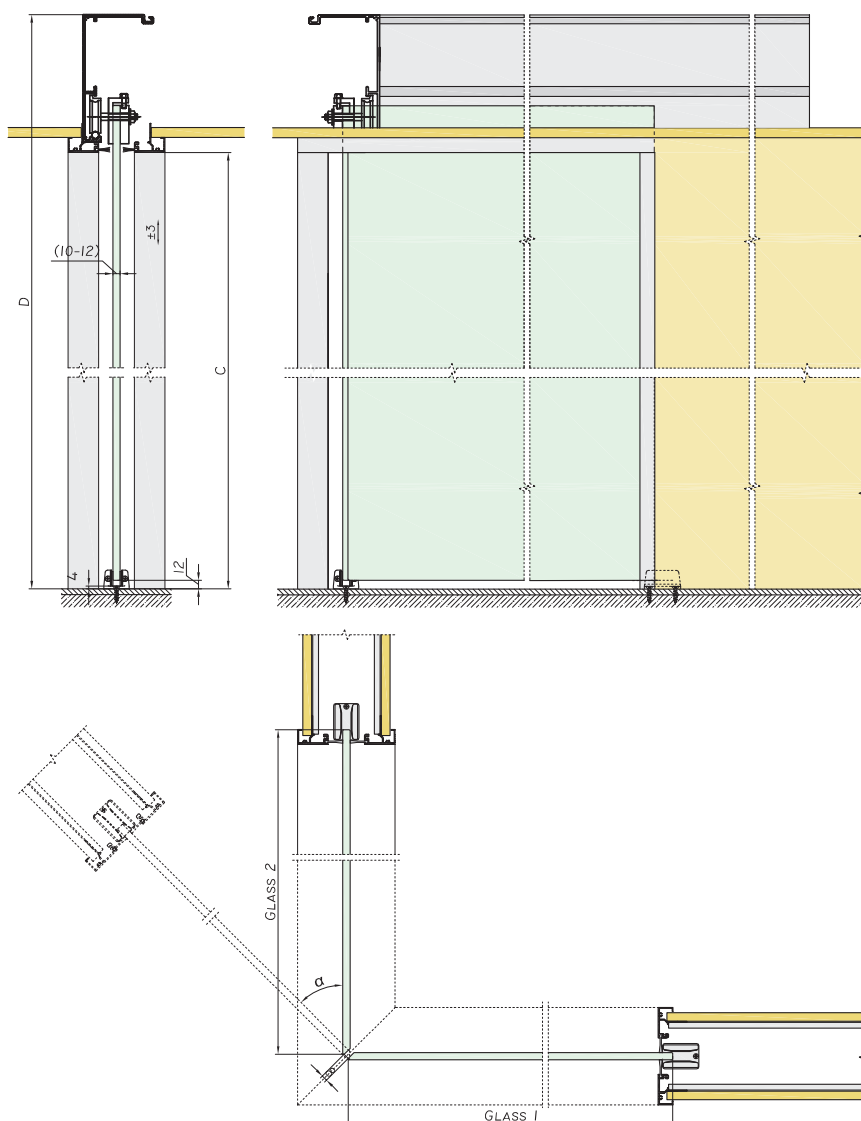
D - Distance from finished floor to underside of support beam.

AUTOMATIC CAVITY SLIDER - STD FLUSH SETTING SECTION

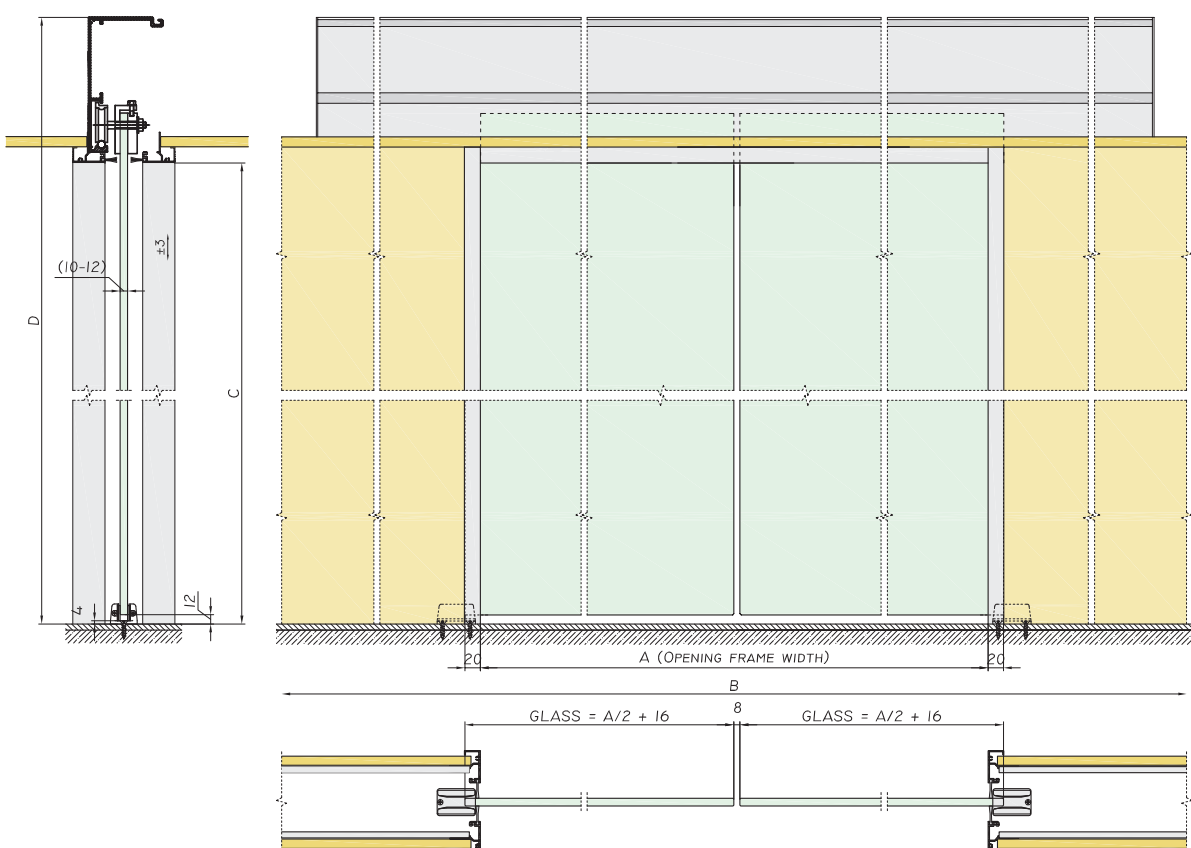
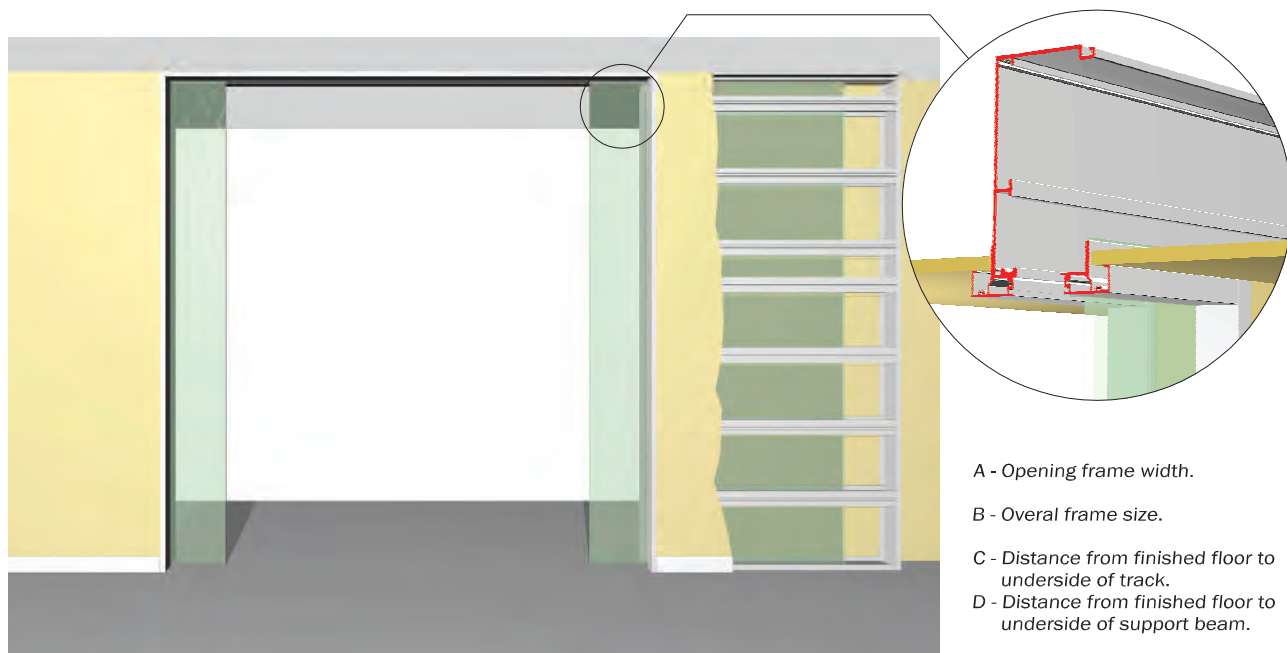


C - Distance from finished floor to underside of track.

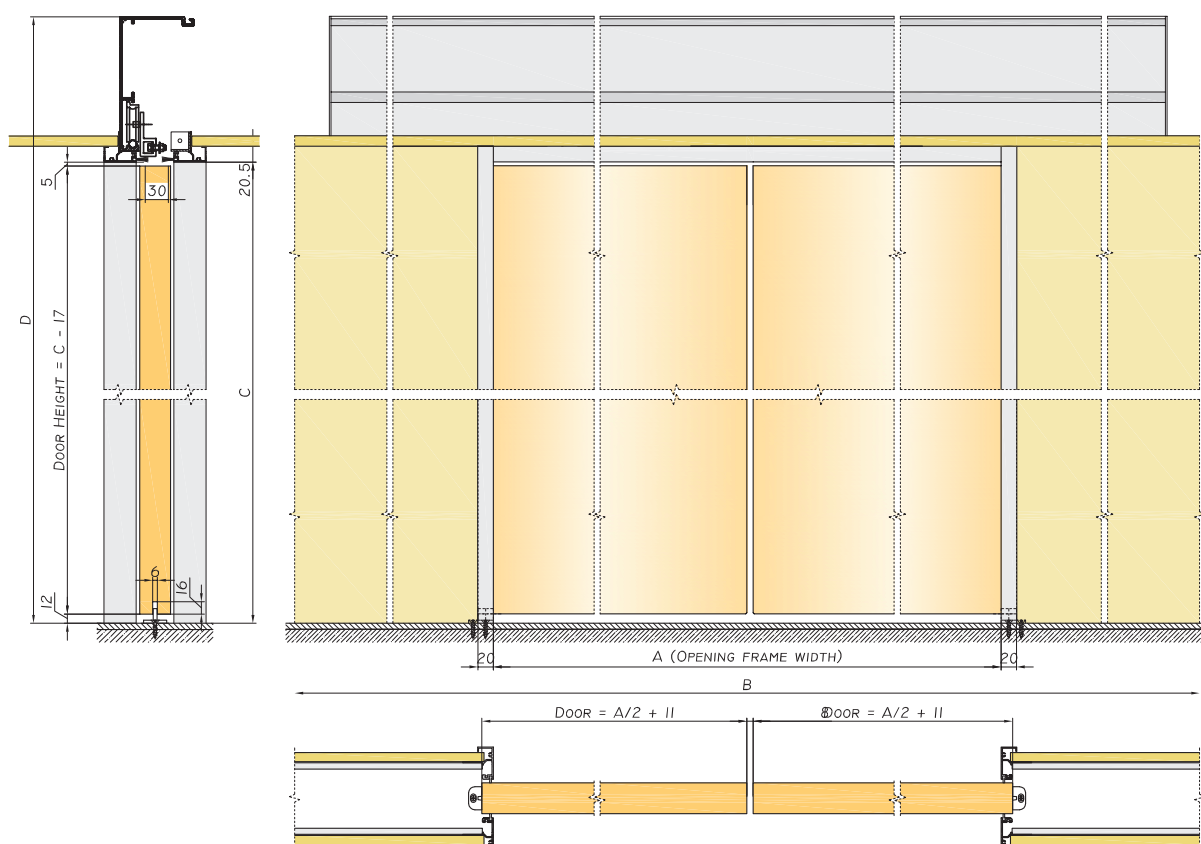
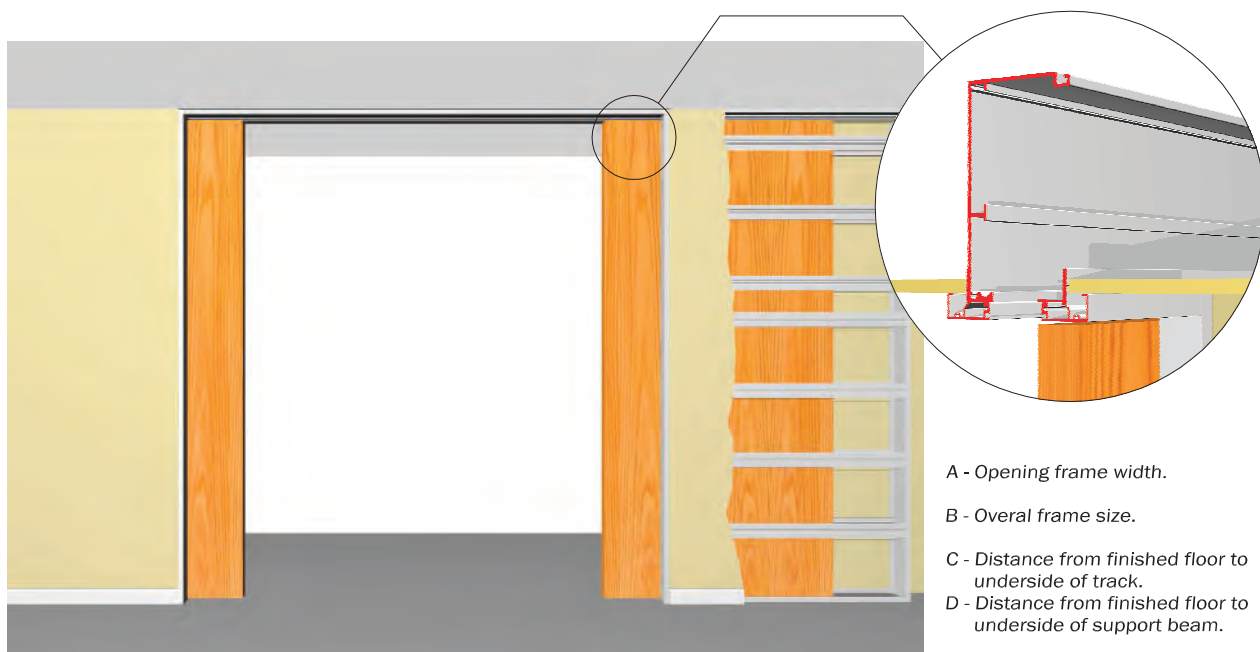
D - Distance from finished floor to underside of support beam.



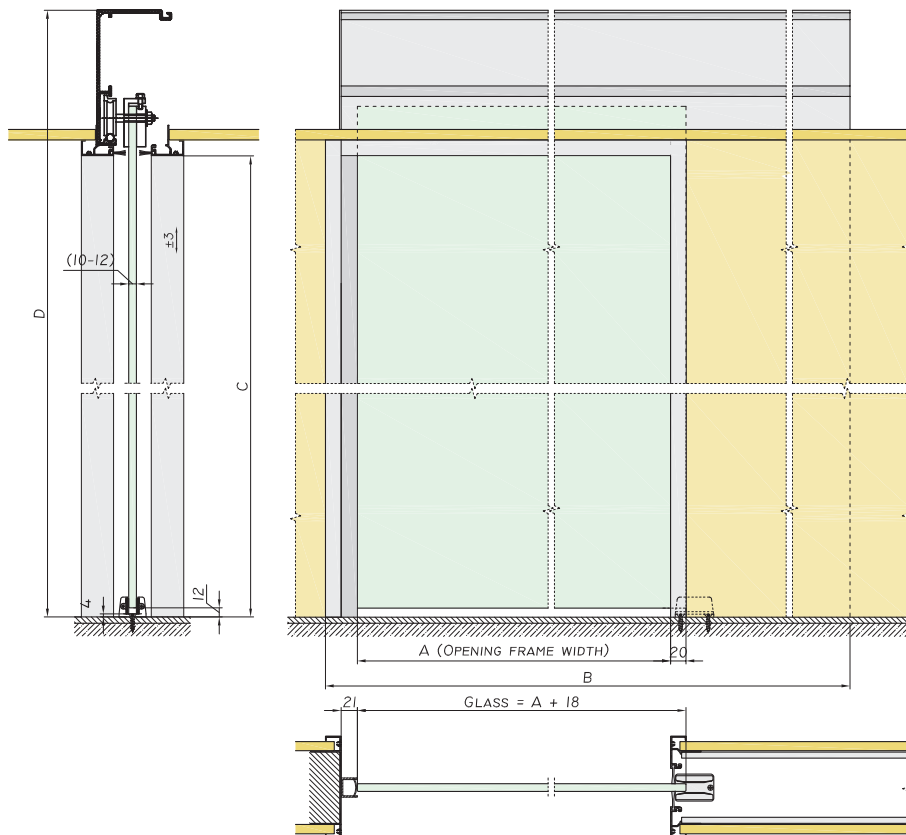
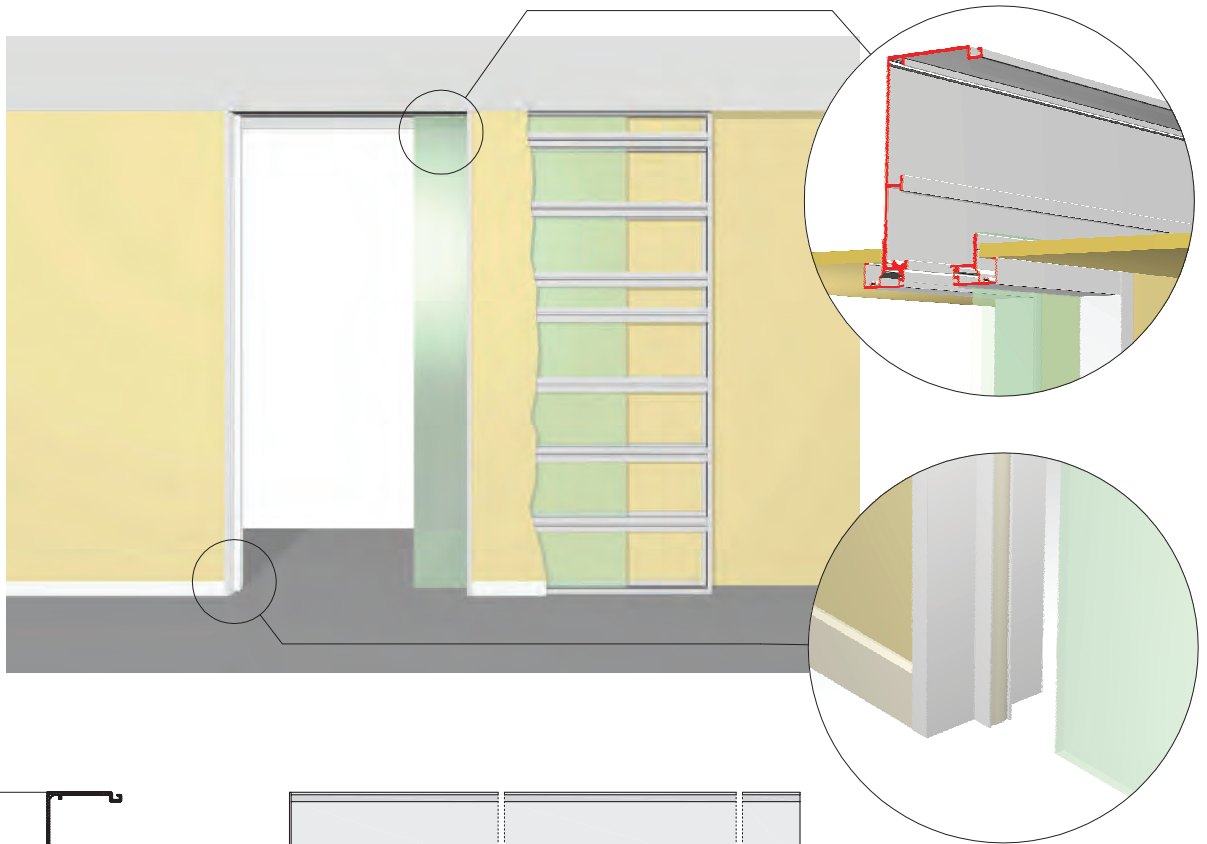
AUTOMATIC CAVITY SLIDER - STD FLUSH SETTING SECTION



AUTOMATIC CAVITY SLIDER - STD FLUSH SETTING SECTION

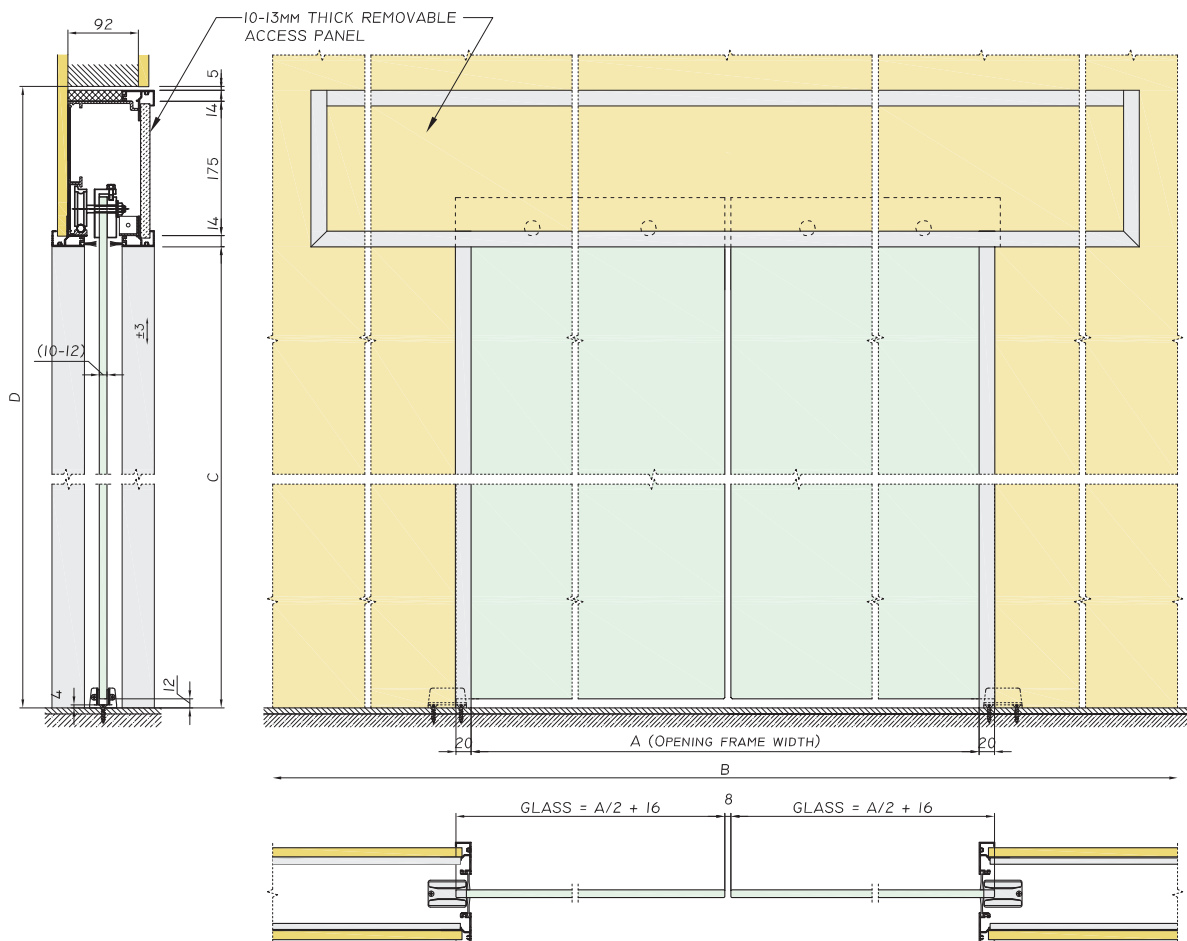


AUTOMATIC CAVITY SLIDER - STD HEAD SECTION

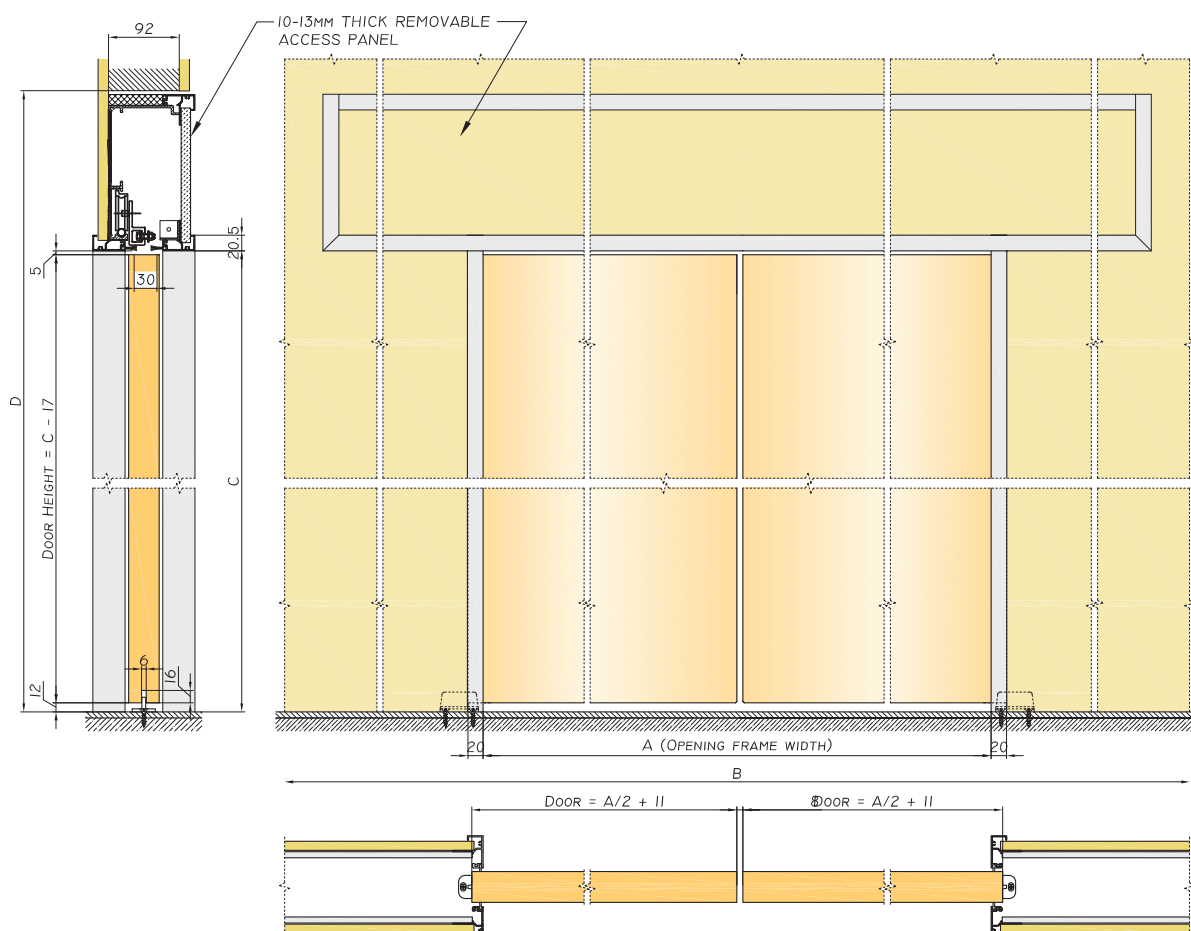
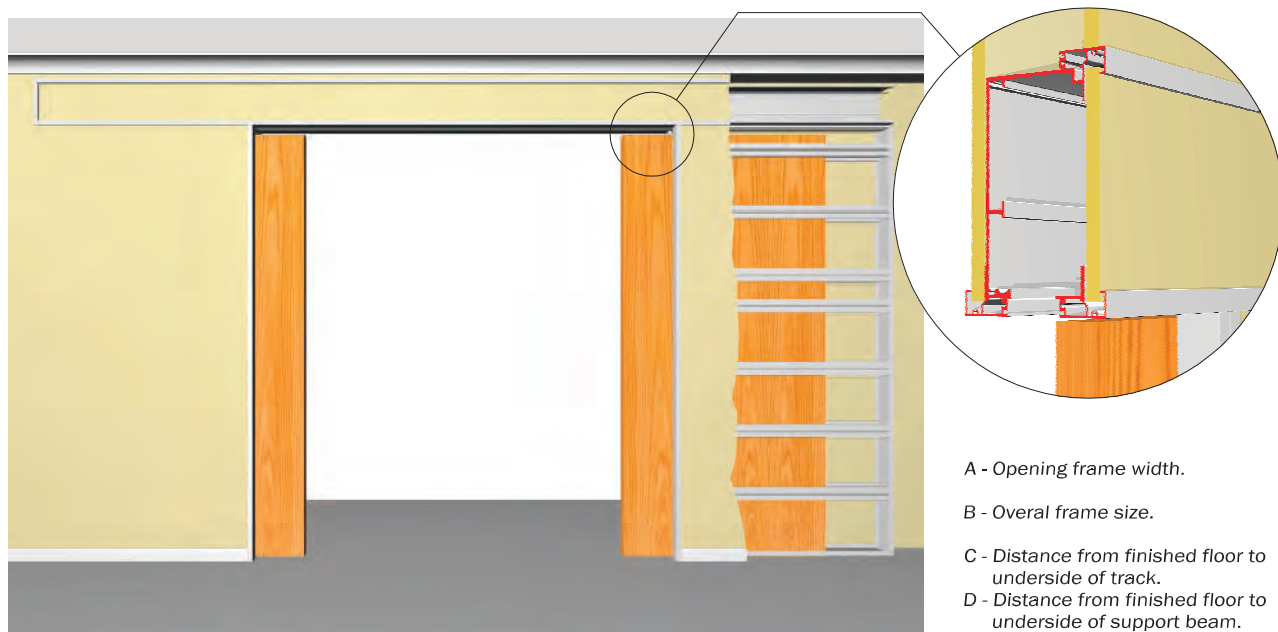


- A - Opening frame width.
- B - Overall frame size.
- C - Distance from finished floor to underside of track.
- D - Distance from finished floor to underside of support beam.

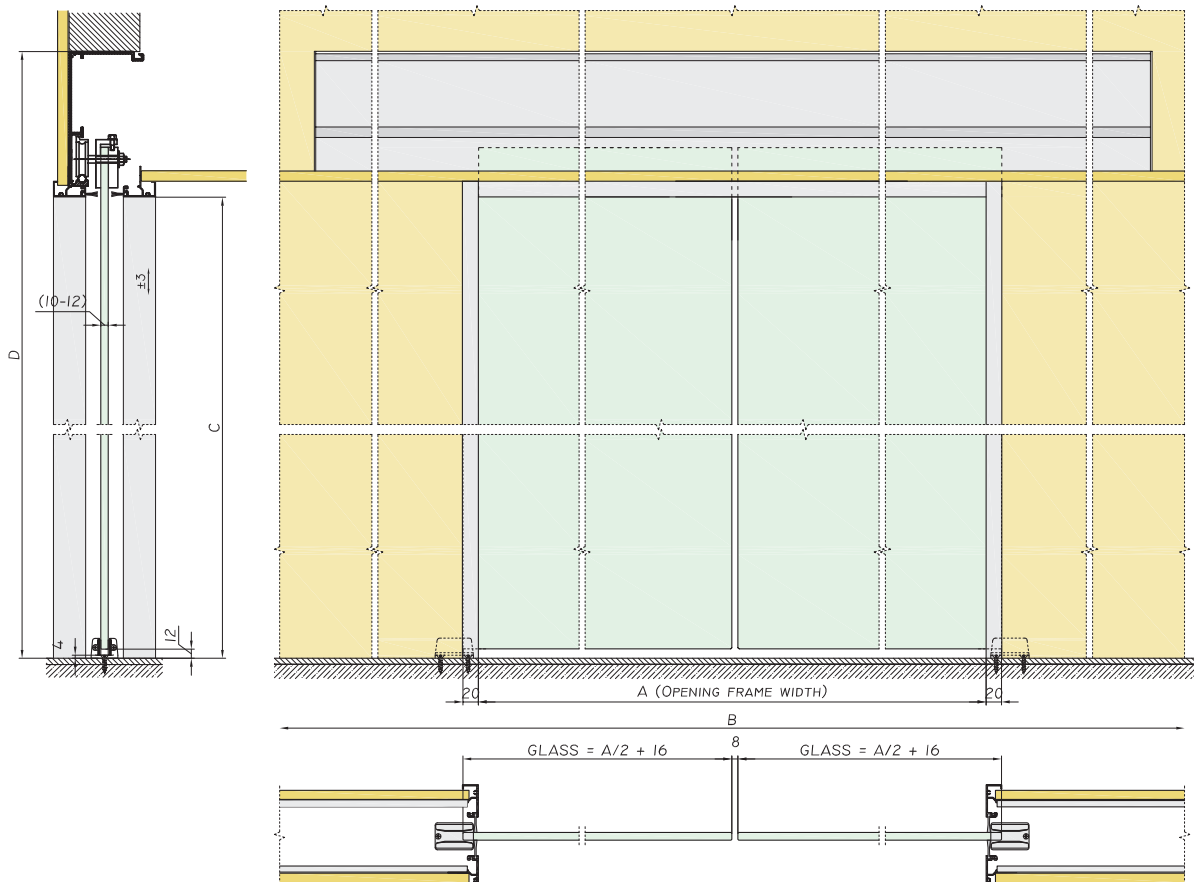
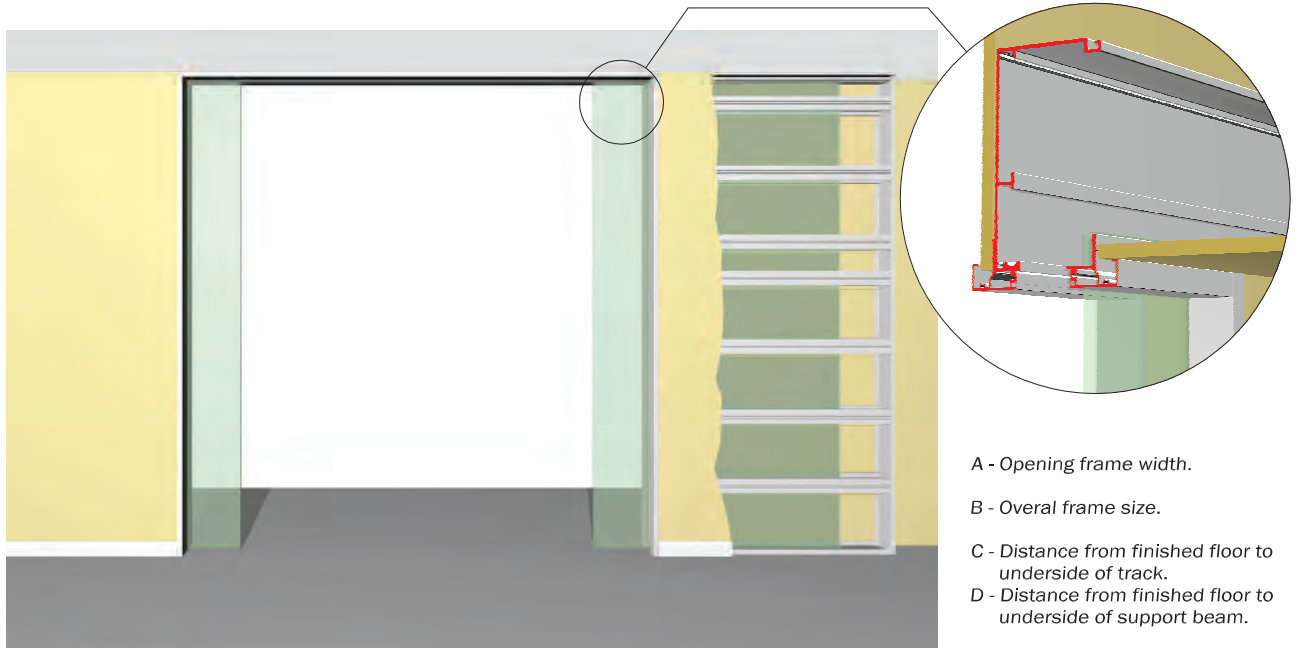
AUTOMATIC CAVITY SLIDER - STD HEAD SECTION



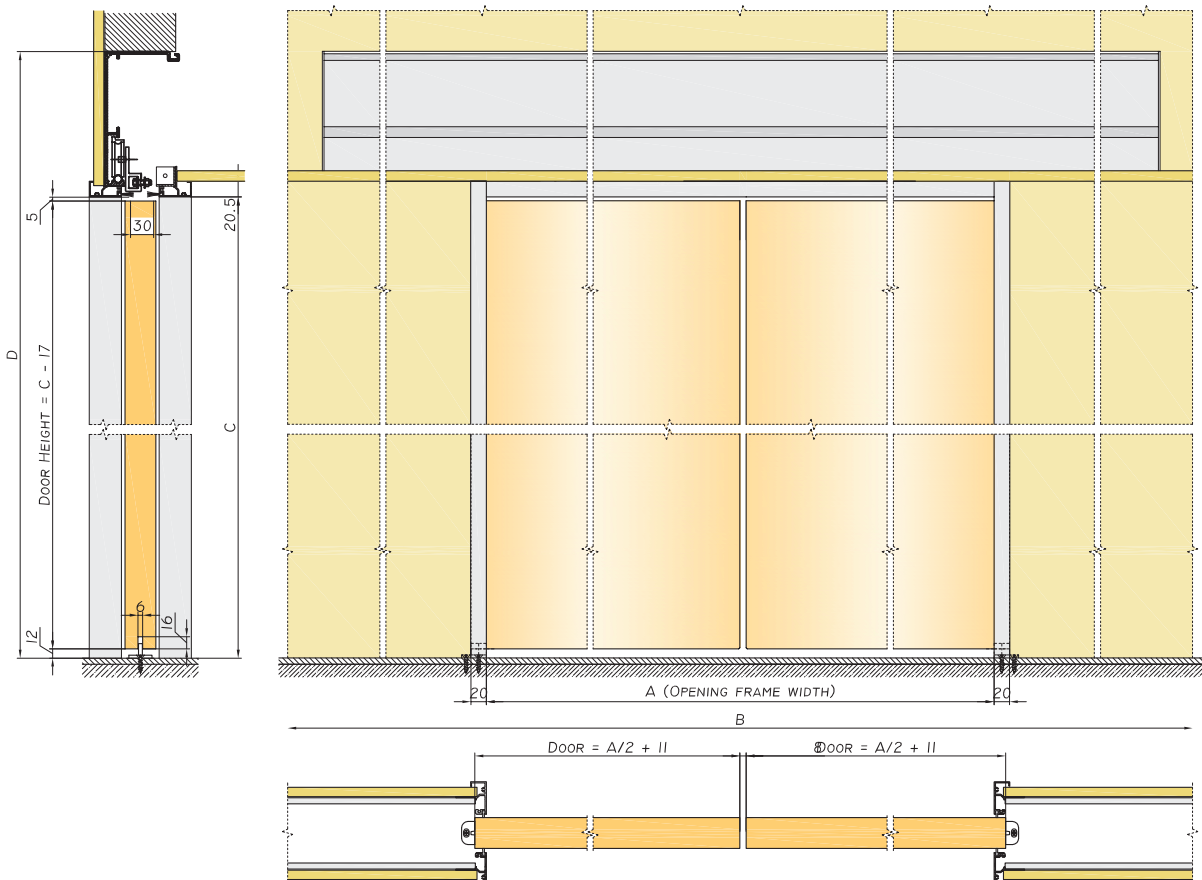
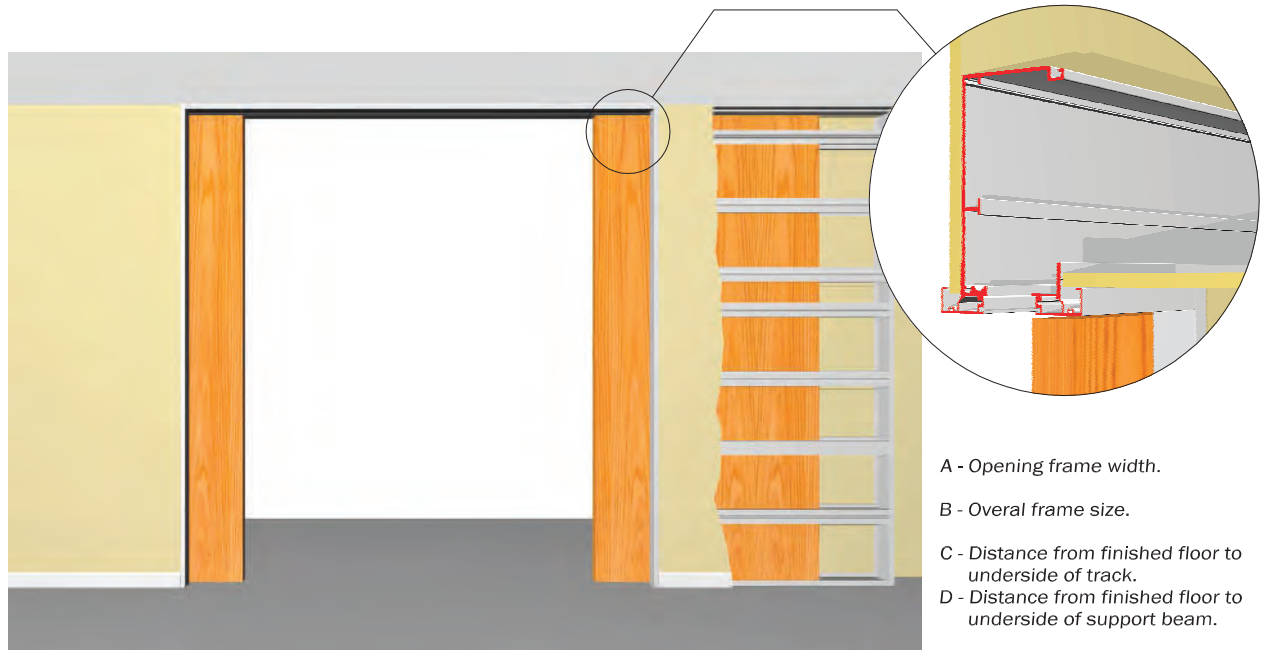
AUTOMATIC CAVITY SLIDER - STD HEAD SECTION



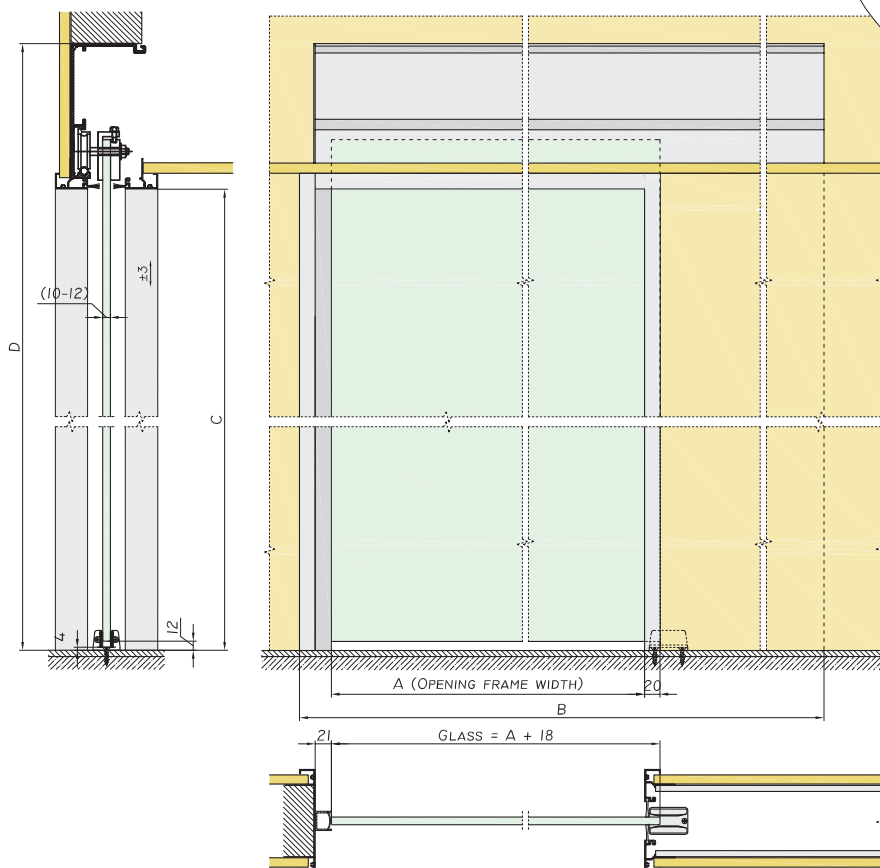
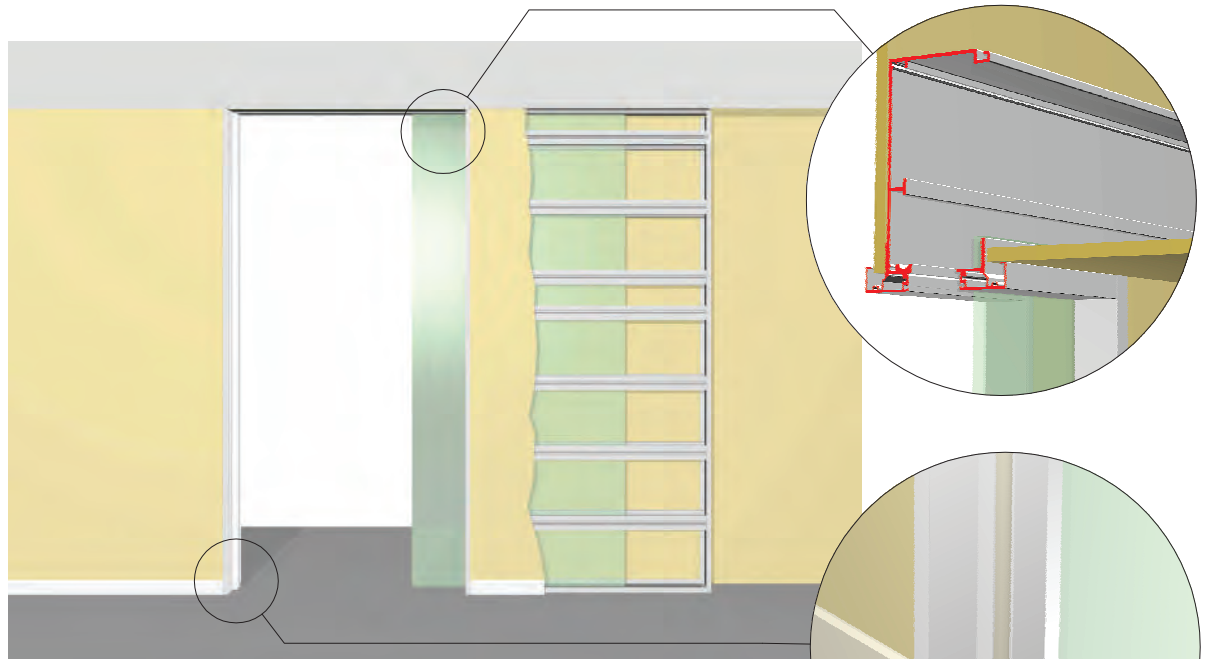
AUTOMATIC CAVITY SLIDER - STD BULKHEAD SECTION



AUTOMATIC CAVITY SLIDER - STD BULKHEAD SECTION



AUTOMATIC CAVITY SLIDER - STD BULKHEAD SECTION



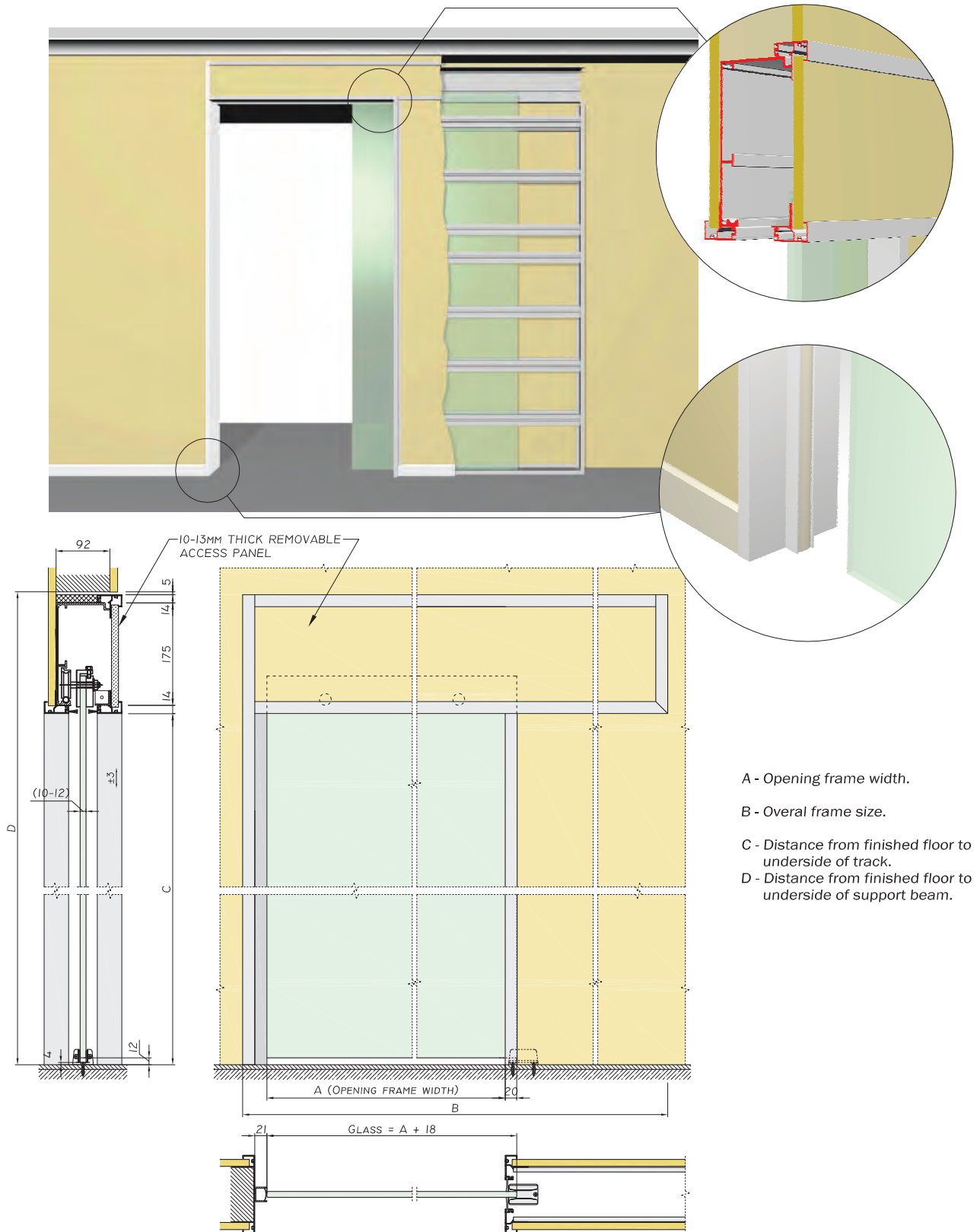
A - Opening frame width.

B - Overall frame size.

C - Distance from finished floor to underside of track.

D - Distance from finished floor to underside of support beam.

AUTOMATIC CAVITY SLIDER - STD HEAD SECTION



DOOR WIDTH CALCULATION

DoorWidth Calculation - Double Slider

> Sidelights = $0.25 (\text{opening width}) + 15$

> Door Width = $0.25 (\text{opening width}) + 30$

> Effective Opening = $0.5 (\text{opening width}) - 120$



DoorWidth Calculation - Single Slider

> Sidelights = $0.5 (\text{opening width}) + 15$

> Door Width = $0.5 (\text{opening width}) + 30$

> Effective Opening = $0.5 (\text{opening width}) - 60$

Door Height Calculation (Aluminium framed only)

> Door height = Daylight Door Opening - finished floor level to underside of transom.

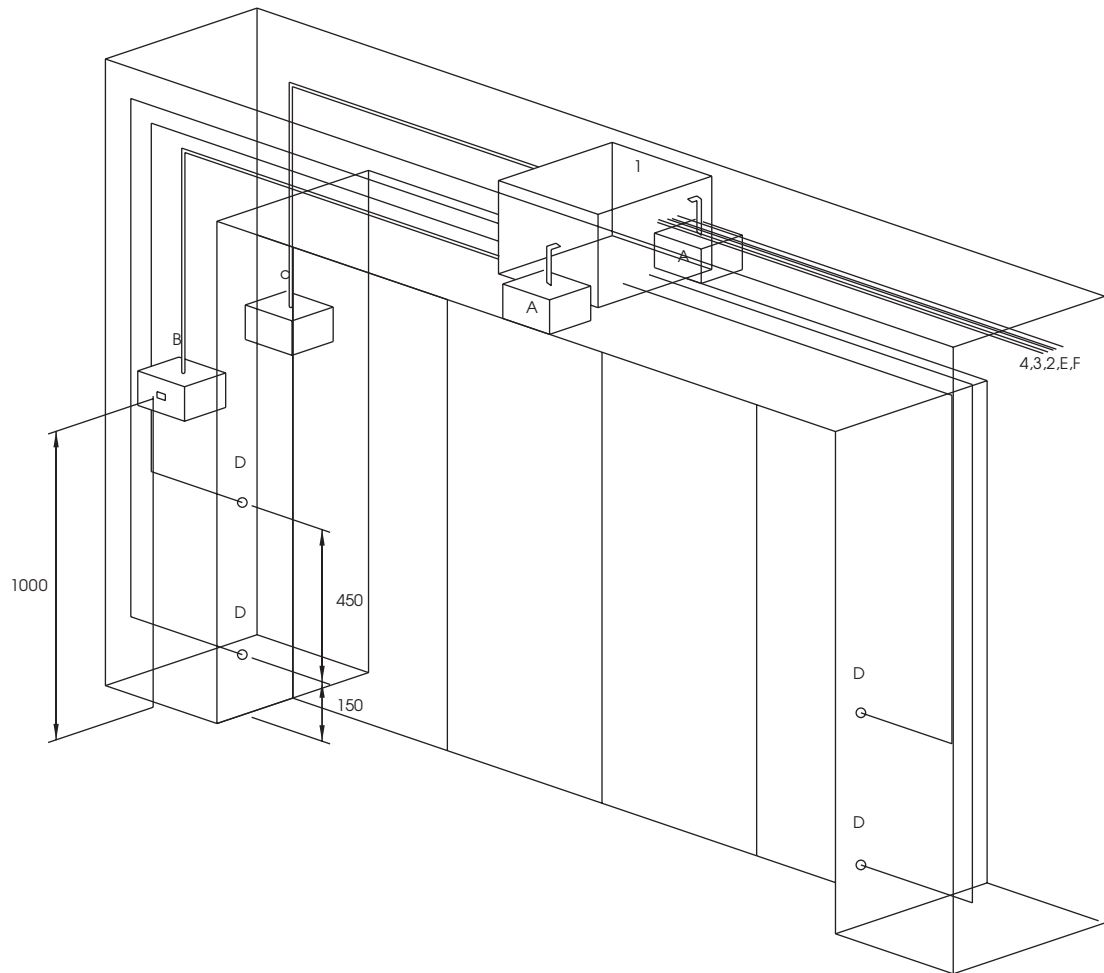
NOTE: The above door width calculations allow 45mm overlap in both open and close positions.

Where it may be difficult to run cable at installation or commissioning it is necessary to run the appropriate power and control cables prior to the walls and ceiling being lined. On receipt of order it is important to determine the cabling routes so that the appropriate personnel can be notified of this requisite and that this work be coordinated.

CABLING REQUIREMENTS

1. **Photocell:** (Safety Beam) 0.2mm single core screened cable. Usually 2 sets of safety beam is necessary. Each pair is mounted across the doorway so that a straight line is formed between the transmitter and the receiver. The first pair is mounted at 150mm from the finished floor level and the second pair at around 600mm. It is necessary therefore to run cable to each side of the doorway and to ensure that these holes are correctly aligned.
2. **Mode Switch:** 0.2mm / 8 core E.L.V
3. **Emergency Exit Switch:** 0.2mm / 4 core E.L.V
4. **After Hours Entry Switch:** 0.2mm / 4 core E.L.V
5. **Entry/Exit Detector:** 0.2mm / 4 core E.L.V
6. **Security Controller:** 0.2mm / 8 core E.L.V
7. **Fire Alarm Controller:** 0.2mm / 4 core E.L.V

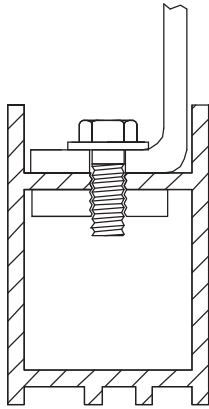
PREWIRING DIAGRAM (DRAWING NO. LSL-G001)



1. **Door Gear Controller:** Integral with full width Auto door gear track.
2. **To power Supply:** 10A-240V-AC Switched Socket Isolator must be accessible.
3. **To Security Controller:** (8 Core ELV 0.2)
4. **To DDM at tellers:** 8 Core 0.2 ELV Cable.
- A. **Door Sensor:** (4 Core 0.2 ELV)
- B. **Emergency Exit Switch:** (4 Core 0.2 ELV). Mounted at 1200 AFFL and ensure switch tamper-proof from out side.
- C. **Key Entry Switch/Card Reader etc.:** (4 Core 0.2 ELV). Mount at 1200 AFFL.
- D. **Safety Beams:** (1 Core 0.5 Screened) Mount at 150mm and 600mm AFFL and within 10mm horizontally of face of glass doors or on Aluminium Frame.
- E. **Fire Alarm Controller:** 4 Core 0.2 ELV
- F. **People Counter:** 4 Core 0.2 ELV

NOTE: This drawing is a schematic diagram only. Size and location of components may vary. This drawing makes no allowance for wiring to door counters, or other components not associated with the Auto-door operation.

ALUMINIUM FRAMED DOOR PREPARATION

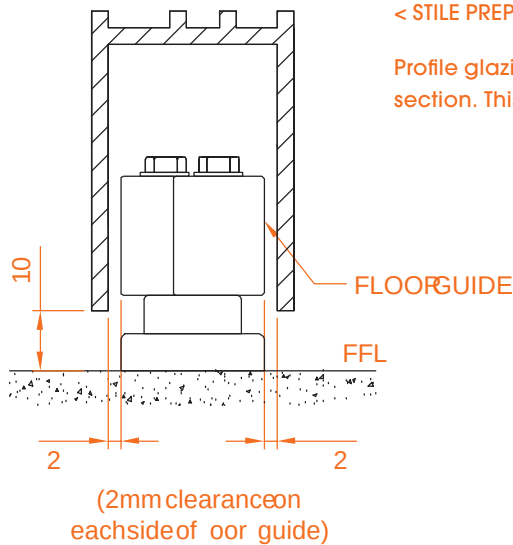


SECTION A-A

< TOP RAIL PREPARATION

Door Manufacturer to include hanger mounting blocks 250mm long at each end (ie. 5mm thick section firmly fixed to the rail) to provide mounting for two hanger brackets which project from the underside of the operator. Mark off hole centres from hanger brackets to mounting blocks, drill and tap for 8mm diameter bolts for aluminium or use tek screws for timber. Bolts to remain just below the top of the door.

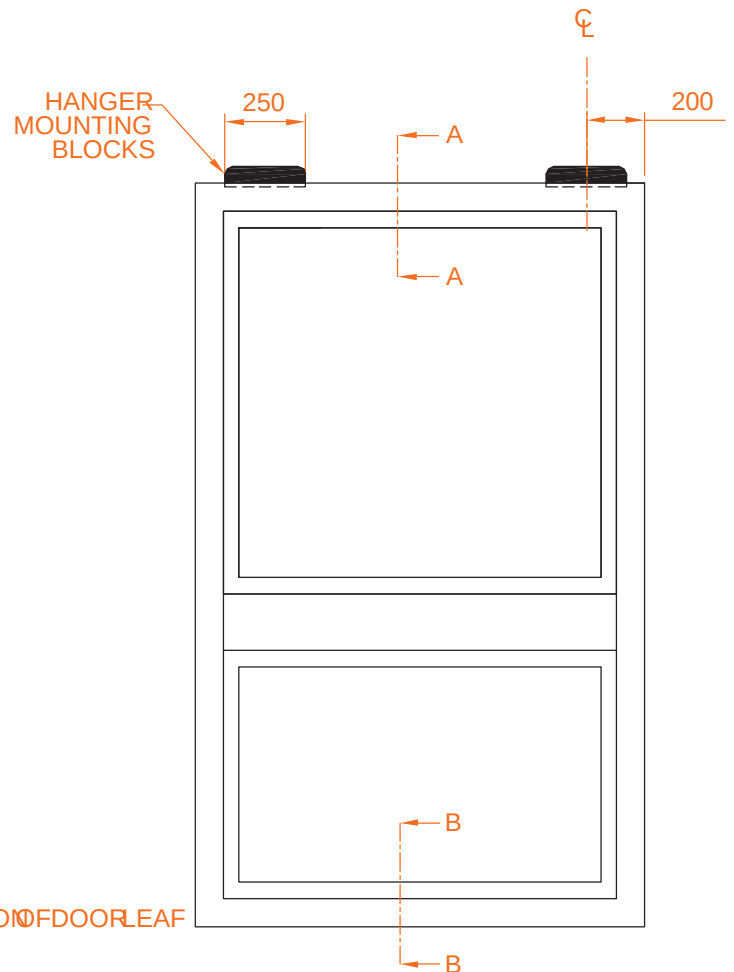
For timber doors - H. Brackets sit on top Door height for timber doors = Daylight opening less 10 mm



SECTION B-B

< STILE PREPARATION

Profile glazing platform of stiles, to outline of bottom rail channel section. This allows full width door to travel over floor guide.

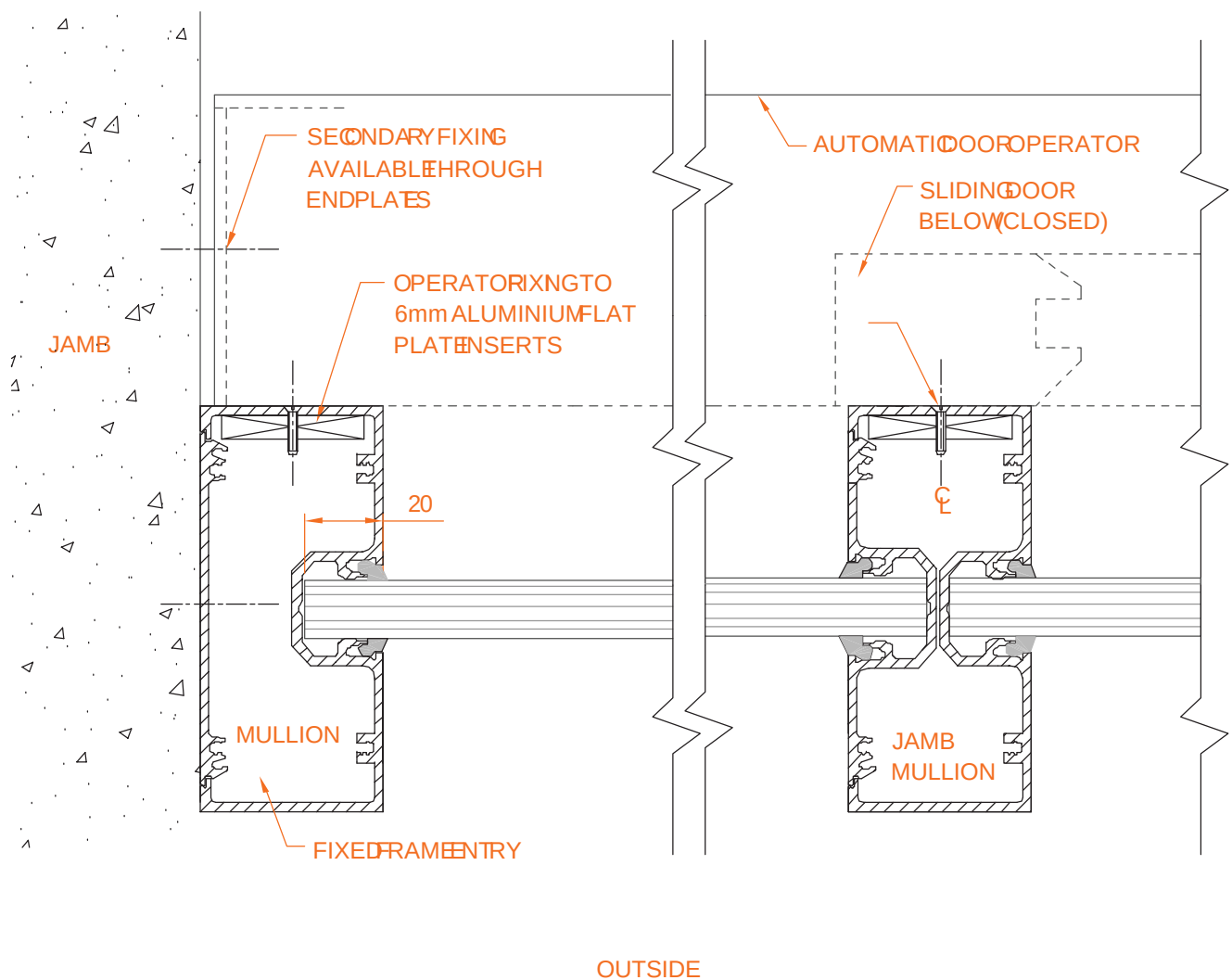


TYPICAL ELEVATION OF DOOR LEAF

NOTES: > Do not scale > All dimensions in millimeters > Drawing not to scale - schematic diagram only > FFL - Finished Floor Level (including carpets etc.) www.autoingress.com.au	AUTO INGRESS		TITLE: ALUMINIUM FRAMED DOOR PREPARATION
	SCALE: NOT TO SCALE		
	DATE: 02/02/12		DRG. NO. Isl-g002

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all it's contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

OPERATOR FIXING DETAIL



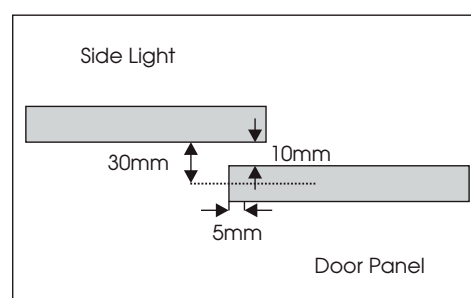
NOTES: > Do not scale > Unless otherwise stated all dimensions in millimeters > FFL - Finished Floor Level (including carpets etc.)	AUTO INGRESS	TITLE:
	SCALE: NOT TO SCALE	OPERATOR FIXING DETAIL
	DATE: 02/02/12	DRG. NO. Isl-h005

The information & drawings in this manual have been prepared & checked by our Technical Staff & consultants, & every effort has been made to ensure accuracy. As Auto Ingress does not accept responsibility for any inaccuracies that may exist, please contact us if there are any details that you should need further clarification on. Auto Ingress also reserves the right to change any specifications/drawings without notice. Every effort will be made to update this manual in the event that specifications are changed however Auto Ingress accepts no responsibility in the event that these changes are not advised, or detailed in this manual. Please note that in accepting this manual it is a condition of acceptance that all its contents are confidential & are protected by Auto Ingress's copyright & without limiting the scope of the rights conferred on the Company it is a condition of acceptance that the information contained herein will not be used in whole or in part to the detriment of Auto Ingress that no information or drawings will be reproduced, copied, published or distributed without the prior written consent of Auto Ingress. These operators have been tested by our Consultants to show compliance with BCA, AS5007/2007 & NZS4239/1993 & EMC compliance AS/NZS 4251.1/1999.

INSTALLATION FLOOR GUIDES



1. Close door fully and mark a position 5mm from the trailing edge of the door.
2. Mark a line 30mm from the sidelight.
3. Locate the floor guide so that the back edge of the back roller is on the 5mm line and the centre line of the floor guide is on the 30mm line.
4. Adjust the guide to allow at least 1mm clearance between the inside face of the door style and each side of the roller. Ensure that the floor guide is not tight along the full door travel.



5. Fix the guide securely using the fixings provided.
6. Ensure that the guide is not too tight or binding along the full door travel.

> It may be necessary in certain cases to pack the floor guide up so that the floor guide mounting plates sit on the same level as the finished floor.

TYPE AS5 V7 – 3.8: COMMISSIONING INSTRUCTION: MODELS LS300 + LP & LS220B + LP + ELP + LSW – LP

1. Ensure the automatic door operator is fixed securely, the doors are hung plumb and slide freely to full open and close positions
2. Check the floor guide and anti-rise wheels are not too tight and allows enough travel. Adjust the height if needed to provide adequate floor clearance (approx 10mm). Set the mechanical stops securely. If fitted check the manual lock engages correctly.
3. Wire up all switches and sensors as per the diagram below. Set the mode to auto and turn the mains power on.
4. The door should slowly open first. If it closes instead then switch the power off swap the motor direction by swapping the supply wire to the motor Turn the power back on to reprogram then operate the doors several times and plug in the batteries.
5. If the settings need changing, press the setup key on the node pad and key in the 4 digit master code, then press the enter key.
6. Using the up or down arrow keys choose the setup parameter or setup function by pressing the enter key. Press the arrow keys up or down for the sub parameter or the function required. Press enter to select or exit to escape. Once selected change if required using the up or down arrow keys. Press enter to retain the change or exit to discard. Press the up or down arrow key to select the next function or parameter to change. Press enter to select or keep pressing the exit key to return to previous menus and/or to return from the programming screen to the normal rolling display.
7. To change the operational mode press the mode key and key in the user code followed by the enter key. Press mode key to change from the current mode to the desired new mode.
8. Pressing the setup key and using the user code will allow the alarm reset for 72 hours, user code change and managed lock. In lock mode only, managed lock enables locking of the doors by overriding the safety sensors until the next mode change.
9. The master code is used for permanent alarm reset, parameter and function changes, new user code change and time clock settings.
10. Pressing the exit key and confirming by the enter key will open the door in all modes for ingress except when disabled; then pressing the enter key followed by the user code will open the door in all modes.

Please note that all parameter and functional changes should only be carried out by competent personal to avoid injuries or accidents. The commissioning is to be carried out to AS5007 and BCA requirements with particular notice for the safety and egress requirements.

The following items are available on the mode pad:

Modes: Open, Auto, Exit, Lock and Manual, Plus additional Climate Open, Climate Auto, Climate Exit, Climate Lock and Safe Mode.

User setup: 48 hour reset, user pass-code change, Managed lock, Time and Day setup, People Counter, Register door, View settings and Diagnose faults.

Setup Parameters: Open, Close, Slow open and slow close speeds, Open and Close current limit, Dwell Time Auto, Dwell Time Lock Open and close Trim, Slow Boost, Climate, Open Brake Time, Close brake time, Reverse delay, Soft Start trim, Open Safe trim, Close Safe Trim.

Setup functions:

Battery, failsafe, Service, Push & Go, Open/Close Safety Sensor Relay o/p, Open/Close Safety Sensor Monitor, Buzzer Enable/Disable, Key pad entry enable/disable, Climate options, Lock type, Back check and Latch resistance, Keypad Mode Code disable, Hold Open.

Setup Time Clock: Enable time clock & Programme lock/Unlock Times.

Factory Setup: Master-code Change, Factory registration settings, Service phone, Door type, Default settings, Select Battery, Select key pad, Reset Service Timer, Buzzer Setup, Enter serial number.

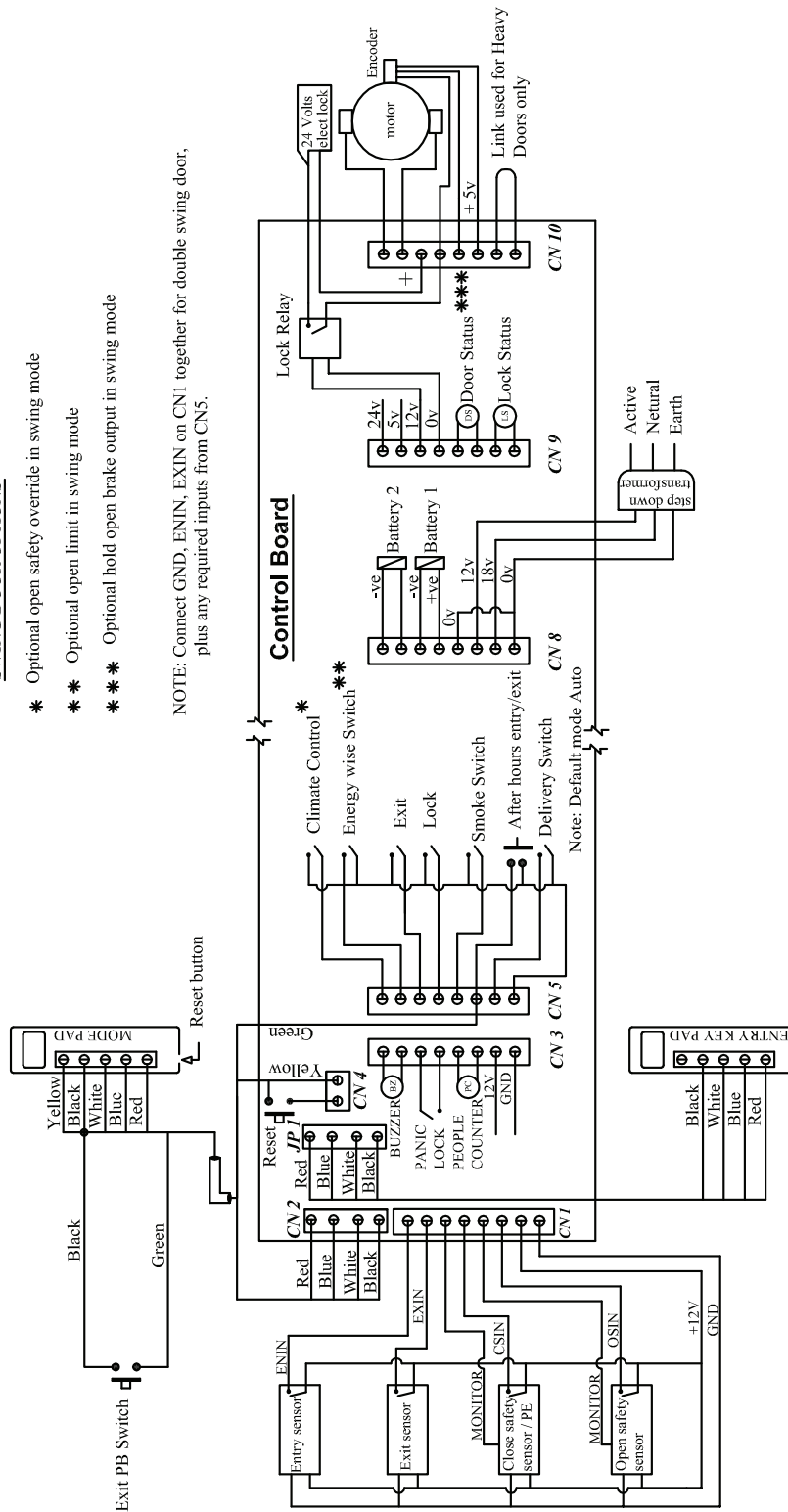
Reset:

- 1) Press up arrow for 20 sec.
- 2) Press reset button on underside of key pad.
- 3) Mains Power OFF (30 sec) then ON, Press exit Push Button if in lock mode.

SWING DOOR OPTIONS

- * Optional open safety override in swing mode
- ** Optional open limit in swing mode
- *** Optional hold open brake output in swing mode

NOTE: Connect GND, ENIN, EXIN on CN1 together for double swing door, plus any required inputs from CN5.



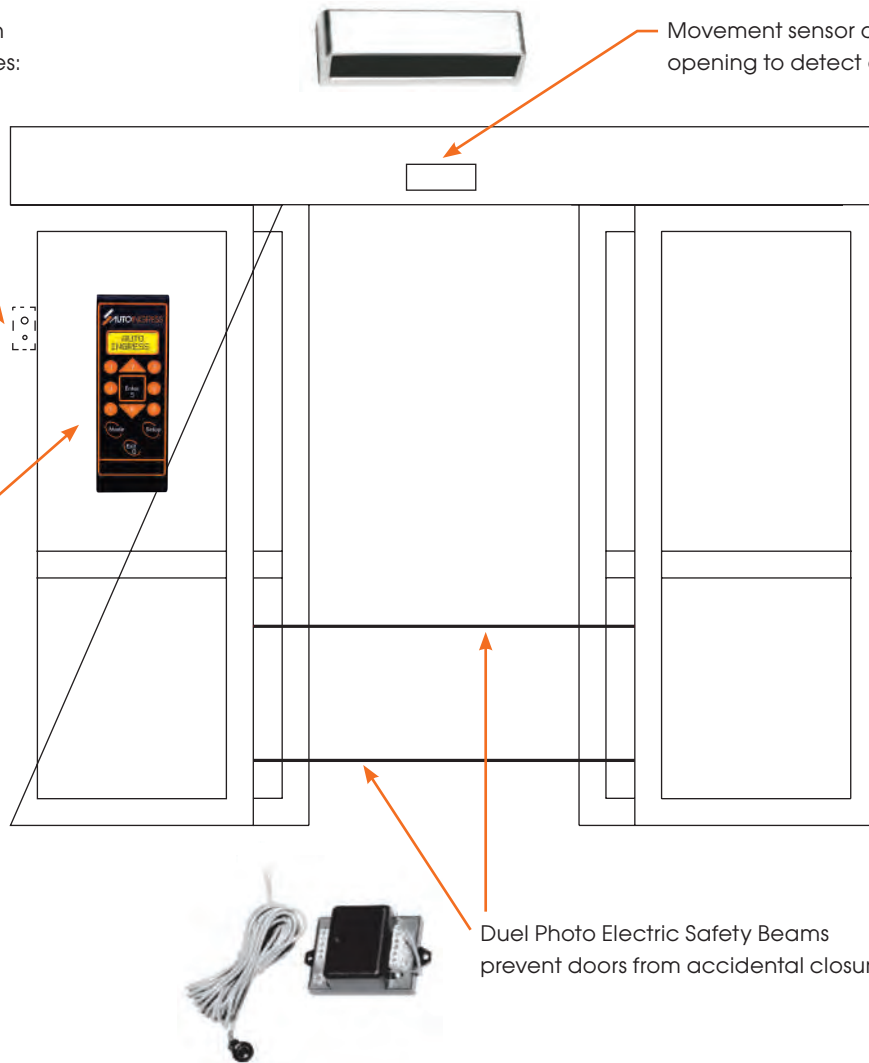
NOTE

- 1) All control inputs to CN5 from fire alarm or security system etc, MUST BE VOLTAGE FREE
- 2) Door will stay open if keypad is not connected; controller will malfunction if incompatible keypad is used.

Internal user function
Mode Switch provides:

1. Automatic
2. Lock
3. Exit Only
4. Hold Open
5. Manual

Battery Level
Indicator for
emergency
failsafe device



Movement sensor on each side of door
opening to detect approaching traffic

Dual Photo Electric Safety Beams
prevent doors from accidental closure

Optional Eagle B Safe combination safety sensor and movement activation

The electric lock consists of an electromagnetic clutch, fitted on the rotor of the motor requiring power to lock. As such, it is free of the misalignment and disengagement problems associated with solenoid type or magnetic clamp type locks. This lock is not affected by the door position or pressure applied to the doors. Holding force of up to 1950 KG can be obtained subject to Glass & Aluminium strength.

The operator is normally fitted with a four position rotary switch which can provide the following features:

OPEN	Door opens and remains open.
AUTO	Normal operation activated from each side by motion sensors.
EXIT	External motion sensor is disabled allowing exit only.
LOCK	Both internal and external motion sensors are disabled. Door closes and locks preventing entry or exit.
MANUAL	Enables you to manually move the doors to any position



DDM

SECURITY DURING POWER FAILURE

A battery reserve and built-in charger is provided for security up to 8 hours. Optional 50 hour battery reserves are also available. A battery level and charger monitor is also built in which will provide an LED indication if the battery is not charged.

EGRESS AND ACCESS

An illuminated emergency exit push button switch is provided (mandatory for building egress codes). On pressing this switch the doors will open and close for one cycle under normal power. Entry into the building can be achieved by a key switch or card reader etc.

FAILSAFE OPERATION

During normal automatic operation of the door on power failure the doors would open on battery reserve. When the doors are locked they would remain locked. Exit from the building is achieved by pressing the emergency exit push button switch. To re-lock under power failure push door closed - auto close options are also available.

FIRE ALARM INTERFACE

The doors can be interfaced with the fire alarm system to either open and hold open under alarm conditions while in automatic mode only, or both in automatic mode and lock modes.

SECURITY INTERFACE

An inbuilt 'security interface' is provided for easy connection for security companies.

NOTE: For connection diagrams and technical information on all of these features please consult your Representative for details.



Motor and Gearbox standard with five (5) year warranty

TROUBLE SHOOTING GUIDE

Fault	Probable Cause/Remedy
Door will not calibrate or is dead	> no mains power > battery not plugged in > mode switch not set on lock > slow speed set too low for the door weight > door is jammed or binding > anti - rise wheels too tight > floor guide too tight > chain or belt too tight
Door will not open on actuation	> mode switch not set in correct position > actuation device incorrectly wired or faulty > door jammed or manually locked
Door will not close	> actuation devices faulty or active > door jammed or obstructed > photocell incorrectly wired or faulty or beam broken
Door operates very slowly	> door was obstructed from opening or closing fully and requires one complete open and close cycle to reset > door was not calibrated after power failure possibly the mode switch was on lock or exit; turn mode switch on auto then switch mains power off and then on again > slow speed set too low for full open/close > door was not calibrated properly on powerup > door is jamming or binding on floorguide or mat, etc.
Slams open or shut	> slow speed set too high > open and or close speed set too high
Electric lock will not engage	> mode switch incorrectly set > lock not aligned correctly > lock faulty > battery not connected or flat
Will not failsafe open	> mode switch incorrectly set > battery not connected or flat

Auto Ingress Door Operators have been designed using the latest computer technologies. The heavy duty model LS300 & LS300LP is suitable for operating door leaf weights up to a maximum of 180kg per leaf, whilst the LS220B will operate door leaf weights up to a maximum of 100kg per leaf for continuous operation where 100% duty cycle is required.

Comprehensive testing has been done to ensure compliance with AS5007-2007, NZS4239 (1993), and EMC to AS/NZS4251.1/1999.

The system is designed to operate on 230V 50-60 Hz + 15% (refer to factory for other options).

The Control Box offers the following features:

- > Auto calibration of open, close, and braking distances, relative to door width on power-up.
- > Inhibition of this calibration process if the doors are locked. Automatic re-calibration on receipt of a valid open signal after unlocking of the doors.
- > Inbuilt failsafe to open doors when power has failed. This is inhibited if doors are locked electrically or mechanically. If electrically locked, the doors can be unlocked and opened from an appropriate activation device such as an emergency exit push button switch.
- > The microprocessor is kept powered through a battery on mains power so logical control of the electric lock is possible even when the power has failed.
- > Low battery level indication.
- > Safety beams are operational only when the doors open and switch off when the doors are fully closed. This enables the installation of these beams on either inside or on the outside of the door line.
- > EASY MORNING ENTRY AND NIGHT EXIT (Push to Open). If the doors are used for morning entry and night exit they can be turned off with the mode switch. When moved ajar they will re-open automatically to enable easy entry/exit. This feature is for doors with manual locks.
- > In-built motor lock with full failsafe operation for maximum security and trouble free operation, coupled with complete safety in an emergency.
- > Safety sensing if the doors are blocked or locked during opening.
- > Adjustable safety reversing on hitting an obstruction on closing. Note: The closing force of the doors should be adjusted so as not to exceed 110N to comply with current safety codes.
- > Climate control - the doors can be opened to half the normal opening width to save on air conditioning costs. An alternative selection can be made to select the energy wise feature. In this case the doors automatically determine whether a full opening or half opening is required based on the traffic flow through the doors.
- > Selectable opening, closing and brake speeds are provided. Note: For compliance with existing safety codes the kinetic energy on closing should not exceed 27 Joules.
- > Status output to show valid lock condition.
- > Adjustable 'dwell time' from 1-20 seconds.
- > Panic Lock - when electric locks are used, security can be maintained in emergency situations with a flick of a switch.
- > Manual Slide - in Lock/Off positions, the door can be manually operated and left in any position to enable after hours access or to obtain a partial opening.
- > People Counter - can help with counting customer traffic when you run promotions.



PROUDLY AUSTRALIAN OWNED AND MANUFACTURED

D.D.M – DIGITAL DEVICE MANAGER

SETTING NEW STANDARDS IN INTELLIGENT CONTROL

Using your automatic door has never been easier and secure. The Auto Ingress device manager with its intelligent control helps you manage your automatic entry so that it performs at its peak giving you ultimate control.

STANDARD INBUILT FEATURES

- > **7 day time clock** – program lock and unlock times and never again worry about forgetting to lock up. Scheduled lock times can easily be overridden when required.
- > **Climate control** – tired of exorbitant air conditioning costs or want restricted access width after hours, use Auto Ingress climate control settings.
- > **Selectable chime function** – when doors are locked and you are out back if someone enters the external sensor field a chime will sound. Additional chimes can be fitted if required.
- > **People counter** – know how many people enter your building. Measure your marketing campaigns with ease. Audible Chime Alarm on low battery as per AS5007-2007.
- > **Security interface** – door open, locked signals provided as well as easy interface to BMS systems and fire systems.
- > **Programmable user codes** – ability to increase security levels by altering and changing codes to suit your needs.
- > **Speed adjustments** – complete programming of all speed settings achieved.
- > **Lock Override** – the ability to override a sensor fault to gain lock mode late in the day. Reduces afterhours calls.
- > **Entry keypad** – extremely secure when used as an entry keypad. Used with secure data transfer (cable cannot be shorted to open doors).
- > **10 built in mode settings** – Auto, Open, Lock, Manual, Exit, Safe, Climate (Auto, Exit, Open).

> COMPLIANCE TO AS5007-2007 AND THE MILLION CYCLE TEST

> **Phone** 1300 138 750 > **Sales** sales@autoingress.com.au > autoingress.com.au





Date of Issue: 04 February 2010
Report No: 4209-1469-1
Client: Auto Ingress
Attention: Raj Krishna
Address: PO Box 825,
 Springwood, Qld, 4127
Order No. 11838
Job Description: The Mechanical Testing of Automatic Door
Identification: Model LS220B
Test Specification(s) AS 5007 - 2007 Powered doors for pedestrian access and egress
Test Location 46 Rowland St, Slacks Creek, QLD
Identification Model LS220B

The door operator assembly mounted on a steel support frame operated as a Bi parting door system with a total combined door mass of 200 kg.

Results

Clause	Title	Test Date	Results
2.2.2	Devices for stopping the leaf movement	21/12/2009	Pass
2.3.2	Limitation of leaf forces	21/12/2009	Pass
2.4	Manual Operation	21/12/2009	Pass
4.4.1.1 (b)	Testing - Endurance Tests (1,000 cycles at -15°C ± 3°C with sample prepared by 12 hour cooling)	28/01/2010	Pass
4.4.1.1 (c)	Testing - Endurance Tests (1,000 cycles at 50°C)	1/02/2010	Pass

Lester Solley
Consultant Mechanical Engineering

Corporate Signatory

Supervising Consultant: Paul Tutin
 Principal Consultant Mechanical Engineering

PearlStreet ETRS Pty Ltd
 ABN 21 006 353 046

TEL +61 (0)7 3718 0300 FAX +61 (0)7 3718 0399
 OFFICE ADDRESS - 2 Ron Boyle Crescent, Carole Park
 PO Box 303, Carole Park
 Queensland 4300
www.pearlstreet.com.au



Date of Issue: 05 February 2010
Report No: 4209-1469-2
Client: Auto Ingress
Attention: Raj Krishna
Address: PO Box 825,
Springwood, Qld, 4127
Order No. 11838
Job Description: The Mechanical Testing of Automatic Door
Test Specification(s) AS 5007 - 2007 Powered doors for pedestrian access and egress
Test Location 46 Rowland St, Slacks Creek, QLD
Identification Model LS300
 The door operator assembly mounted on a steel support frame operated as a Bi parting door system with a total combined door mass of 360 kg.

Results

Clause	Title	Test Date	Results
2.2.2	Devices for stopping the leaf movement	21/12/2009	Pass
2.3.2	Limitation of leaf forces	21/12/2009	Pass
2.4	Manual Operation	21/12/2009	Pass
4.4.1.1 (b)	Testing - Endurance Tests (1,000 cycles at -15°C ± 3°C with sample prepared by 12 hour cooling)	28/01/2010	Pass
4.4.1.1 (c)	Testing - Endurance Tests (1,000 cycles at 50°C)	1/02/2010	Pass

Lester Solley
Consultant Mechanical Engineering

Corporate Signatory

Supervising Consultant: Pat Cusack
Principal Consultant Mechanical Engineering

PearlStreet ETRS Pty Ltd
 ABN 21 006 353 046

TEL +61 (0)7 3718 0300 FAX +61 (0)7 3718 0399
 OFFICE ADDRESS - 2 Ron Boyle Crescent, Carole Park
 PO Box 303, Carole Park
 Queensland 4300
www.pearlstreet.com.au



Date of Issue: 17 September 2010
Report No: 4209-1469-3
Client: Auto Ingress
Attention: Raj Krishna
Address PO Box 825,
 Springwood, Qld, 4127
Order No. 11838
Job Description: The Mechanical Testing of Automatic Door
Test Specification(s) AS 5007 - 2007 Powered doors for pedestrian access and egress
Test Location 46 Rowland St, Slacks Creek, QLD
Identification Model LS220B (Auto Ingress DWG No. Isl-bl001 Dated 15/12/2009)

The door operator assembly mounted on a steel support frame operated as a bi-parting door system with a total combined door mass of 200 kg.

Results

Clause	Title	Test Date	Results
2.2.2	Devices for stopping the leaf movement	21/12/2009	Pass
2.3.2	Limitation of leaf forces	21/12/2009	Pass
2.4	Manual Operation	21/12/2009	Pass
4.4.1.1 (a)	Testing - Endurance Tests (1 000 000 cycles under ambient conditions)	10/09/2010	Pass
4.4.1.1 (b)	Testing - Endurance Tests (1,000 cycles at -15°C ± 3°C with sample prepared by 12 hour cooling)	28/01/2010	Pass
4.4.1.1 (c)	Testing - Endurance Tests (1,000 cycles at 50°C)	1/02/2010	Pass
4.4.2 (a)	Mains power failure test	10/09/2010	Pass

Lester Solley
Consultant Mechanical Engineering

Corporate Signatory

ADDRESS :2 Ron Boyle Crescent, (PO Box 303), Carole Park QLD 4300 Australia | PHONE +61 7 3718 0300 | FAX +61 7 3718 0399
 PEARLSTREET ETRS PTY LTD ABN 21 006 353 046 Part of the ALS Laboratory Group A Campbell Brothers Limited Company





Date of Issue: 17 September 2010
Report No: 4209-1469-4
Client: Auto Ingress
Attention: Raj Krishna
Address PO Box 825,
 Springwood, Qld, 4127
Order No. 11838
Job Description: The Mechanical Testing of Automatic Door
Test Specification(s) AS 5007 - 2007 Powered doors for pedestrian access and egress
Test Location 46 Rowland St, Slacks Creek, QLD
Identification Model LS300 (Auto Ingress DWG No. Isl-h1001 Dated 15/12/2009)
 The door operator assembly mounted on a steel support frame operated as a bi-parting door system with a total combined door mass of 360 kg.

Results

Clause	Title	Test Date	Results
2.2.2	Devices for stopping the leaf movement	21/12/2009	Pass
2.3.2	Limitation of leaf forces	21/12/2009	Pass
2.4	Manual Operation	21/12/2009	Pass
4.4.1.1 (a)	Testing - Endurance Tests (1 000 000 cycles under ambient conditions)	10/09/2010	Pass
4.4.1.1 (b)	Testing - Endurance Tests (1,000 cycles at -15°C ± 3°C with sample prepared by 12 hour cooling)	28/01/2010	Pass
4.4.1.1 (c)	Testing - Endurance Tests (1,000 cycles at 50°C)	1/02/2010	Pass
4.4.2 (a)	Mains power failure test	10/09/2010	Pass

Lester Solley
 Consultant Mechanical Engineering

Corporate Signatory

ADDRESS :2 Ron Boyle Crescent, (PO Box 303), Carole Park QLD 4300 Australia | PHONE +61 7 3718 0300 | FAX +61 7 3718 0399
 PEARLSTREET ETRS PTY LTD ABN 21 006 353 046 Part of the ALS Laboratory Group A Campbell Brothers Limited Company



www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

PRODUCT GUIDE - INTRODUCTION

Intelligent operation, flexibility in design and guaranteed performance are but a few reasons why the Auto Ingress door operators are recognised as one of the market leaders in 'Door opening Solutions' today.

This Manual contains information on the following Auto Ingress Automatic Door Equipment:

- LS220B/LS220BLP
- LS300/LS300LP

The Auto Ingress Automatic door operator is manufactured at our Brisbane factory which allows us to offer comprehensive back-up and support service on all our operators as our products are backed by an extensive network of specialist agents across Australia and selected export markets. Auto Ingress agents have been exclusively trained on all systems and provide 24hr 7day service Australia wide;

Phone: 1300 138 750

Our quality control system and after sales service together with our continuous improvement policies has resulted in thousands of successful installations in some very stringent locations.

Auto Ingress Automatic Doors are **fully Australian owned, designed and manufactured.**

Auto Ingress Pty Ltd
P.O. Box 825, Springwood QLD 4127
Phone (07) 3290 1500 • Fax (07) 3290 1567

Member-Australian Automatic Door Industry Forum & Australian Shop and Office Fitting Industry Association

TABLE OF CONTENTS

COMPLIANCE CERTIFICATES

PRODUCT GUIDE - INTRODUCTION

COVER PAGE

TABLE OF CONTENTS

CHAPTER 1 - PRODUCT QUALITY

> QUALITY STATEMENT

CHAPTER 2 - STANDARDS

> B.C.A. & STANDARDS CERTIFICATION

> SPECIFICATION STANDARD

CHAPTER 3 - OPERATING INSTRUCTIONS

> 4 POSITION DOOR CONTROL SWITCH

> POWER FAILURE & FAILSAFE OPERATION

> BATTERY LEVEL INDICATOR

> IMPORTANT NOTE:

> DIGITAL MODE PAD

CHAPTER 4 - SERVICE GUIDE

> IMPORTANT SAFETY MESSAGE

> SERVICE GUIDE / HELPFUL HINTS

> RESET PROCEDURE

> SERVICE ASSISTANCE

> MAINTENANCE PROGRAM

CHAPTER 5 - WARRANTY

> AUTOMATIC DOOR WARRANTY



CHAPTER 1

Quality Statement

The Auto Ingress Door Operators are manufactured under stringent quality assurance conditions using high quality components with a primary focus on providing a cost effective, reliable product.

**TO PROVIDE AN AUTOMATIC DOOR
OF THE BEST QUALITY & RELIABILITY WITH
THE BEST AFTER SALES SERVICE.**

The elegance of architecture is equally matched by the quality and reliability of the Auto Ingress automatic door operating equipment.

PRODUCT

Innovative Technology | 24 Hr Service
Interface Ability | Australian Owned



CHAPTER 2

Standards

B.C.A. & Standards Certification

All sliding door operators have been independently tested by UNIQUEST a University of Queensland accredited body, and fully comply with the current building egress codes.

BCA

Building Code of Australia

AS5007-2007 / NZS 4239/1993 safety requirements

Australian & New Zealand Standards for Automatic Door Assemblies

AS/NZS 4251.1/1999

EMC Compliance – Electro Magnetic Emissions Standard

EMC Compliance

Electro Magnetic Emissions Standard

Specification Standard

The Logic Slide Automatic Door as manufactured by Auto Ingress an Australian owned Company please phone: 1300 138 750.

The Auto Ingress Logic Slide operator is to incorporate the following as a minimum requirement and is to take precedence over those unable to meet the minimum requirements. The operator shall provide all of the following features.

- Computer micro-chip control
- Heavy-duty chain drive or H-section notched belt on LS220B.
- Actuation sensors to be active infra-red / microwave.
- Failsafe Operation – Doors to open fully under power-fail conditions via monitored battery failsafe.
- Dual Sets (2) of a photo-electric (PE) safety cells or presence sensors for additional safety to prevent door(s) from closing if threshold area is obstructed.
- Automatic safety reversing – if obstructed during closing sequence with adjustable sensitivity setting.
- The motor is to be fully electric continuously rated with no thermal overload and sealed maintenance free gearbox.
- Mode Switch to control Day/Night operational modes
- Climate Control facility to provide dual openings
- Selectable Fire Alarm/Security Status Terminals provided.
- Twelve (12) months labour warranty and two (2) years parts warranty as per our warranty form.

CHAPTER 3

4-Position Mode

Control Switch | Device Manager

These models are equipped with a microcomputer that automatically sets the open and close position of the doors 'go slow modes'. If you find your door going slow, please let it performs one complete cycle without interference. This enables the microcomputer to reset. Your automatic door will do this 'go slow cycle' every time there is a mains power failure. If after one cycle your door does not reset, please see the service – helpful hints guide in chapter 4 of this manual. As with all computers, this unit requires a dedicated power supply.

Your door is equipped with a four –position mode/control switch or digital mode pad/ device manager (may not be fitted if the door is controlled by the security system or time clock etc) to achieve the following functions:

1. **AUTO**
Daily (two way traffic) Automatic use – doors will operate via sensors
2. **OPEN**
Doors will stay open
3. **EXIT**
Exit only – the external sensor is deactivated and door will only open by activation from the inside sensor
4. **LOCK**
Door will lock if fitted with electric lock; if no electric lock is fitted the door will close allowing manual locking. If a manual lock option is used the door will automatically open for entry and exit when slid apart approximately 50mm. If electric lock is fitted an exit or entry switch must be used.
5. **MANUAL**
The doors can be moved to a desired location and left in that position.

Power Failure & Failsafe Operation

1. Auto or Exit modes the door will open on power failure (Failsafe) and will reset to resume normal operation when power is restored. The failsafe device should be tested periodically by switching the mains power off. The door should open fully with battery power.
2. Lock or after hours mode the door will wait for a valid open signal and will reset to normal operation.

CHAPTER 3

Battery Level Indicator

Red light OFF (Key/Mode switch models)
Battery is charged.

Red light ON (Key/Mode switch models)
Battery is flat and may require service. Call for service if not charged within 24 Hrs.

When this function is enabled the door will stay open on Battery Failure in Auto and Exit Modes. Battery Failure is ignored on Lock or Secure Mode to maintain security.

On Digital Mode Pad, the screen will display battery failure to indicate a problem.

Please call 1300 138 750.

NOTE

To enable us to provide efficient service for your Automatic Door operator it is important to refer to the Chapter 4 Service Guide in this manual should you experience a fault or erratic operation of your door.

Please ensure that 240volt mains power is switched on and that the power lead is correctly installed into the power point.

Auto Ingress Device Manager

Setup Local menus:

1. **48 Hr Alarm Reset** – This mode allows you to reset the door for another 48 hours when the alarm is sounding. Normally this will be battery failure alarm. This reset can be used 3 times before the door will stay locked open. You must call 1300 138750 for immediate service
2. **Change User Pass code** – This simply allows you to change the user pass code.
3. **Manage Lock** - In some circumstances you may have a faulty safety beam that will hold the door open so you can't get the doors closed and locked. In this mode you can over ride the hold open signal and close and lock the doors.
Please call 1300 138750 for immediate service.

CHAPTER 3

Selecting Door Mode

1. Press Mode button
 2. Enter 4 digit User Code
 3. Press Mode button and keep pressing until desired door mode appears
 4. Press Enter
 5. Done
- Default User Code: 1234

48 Hour Alarm Reset

1. Press Set up Button
2. User Code
3. Press Enter
4. Display local setup
5. Enter
6. Use arrow key (first menu item):
48 hour reset Err. Alarm
7. Press Enter
8. Confirm 48 Hour Reset
9. Press Enter
10. Exit
11. Call 1300 138 750

Change User Code

1. Press Set up key
2. User Code
3. Press Enter
4. Set up local
5. Enter
6. Arrow key down to: User Code
7. Enter
8. Enter new 4 digit user code
9. Enter
10. Press Exit

Managed Lock

(In case of Emergency Only)

1. Press Set up key
2. User Code
3. Enter
4. Set up local
5. Enter
6. Arrow key down to: Manage Lock
7. Enter
8. Confirm Managed Lock
9. Enter
10. Managed Lock Okay
11. Exit
12. Call 1300 138 750

CHAPTER 4

IMPORTANT SAFETY MESSAGE

Thank you for your purchase of our automatic door equipment.

The Australian Standard AS5007-2007 has a mandatory requirement for periodic log book service by suitably qualified personnel.

Your automatic door operator may be required to meet the requirements of the Building Code of Australia and allow safe egress at all times including power failures and emergencies. Some automatic door operators could be part of the required exits and may be deemed to be part of the essential services.

There may be a legal obligation to ensure that your door operator performs to the requirements of the building code and also provides optimum safety for all users. Please contact your regional authority or AUTO INGRESS PTY LTD should you require any further information on this vital safety requirement.

We as manufacturers of this equipment have identified and adopted some very stringent maintenance guidelines. The service procedures we undertake not only ensure that your door operator will perform to the requirements of the BCA. It also ensures that the safety and security of the users is optimised on normal operation.

AUTO INGRESS PTY LTD strongly believes in the merits of this service and recommends four services per year to meet the requirements of the standard.

Please review the service offer provided in the Maintenance Program outlined in this chapter of the manual.

Service Guide / Helpful Hints

Doors Staying Open:

1. Check mode switch is not on open.
2. Check safety beam across the doorway is not obstructed (eyes in doorjamb).
3. Check nothing is activating the sensors i.e. No moving signs, pot plants etc.
4. Is mains power on?
5. Are the doors jammed physically such as on the carpet or stone etc?
6. Is Battery Fail light on?
Wait for battery to recharge?

Doors will not Open:

1. Check that the doors are not manually locked or jammed.
2. Is the mains power on?
3. Is the mode switch on auto?
4. Is the panic switch on?
5. Is the lock switch on?
6. Is the exit switch on?
7. Is the door jammed physically?
8. Is the door mechanically locked?

Reset Procedure

Your Automatic door operator is controlled by a micro-computer and may require resetting due to power surges.

Action:

1. Turn mode switch to auto.
2. Turn mains power off.
3. Wait 20 seconds.
4. Turn power back on (The door will do one slow open-close cycle, and then resume normal operation).

CHAPTER 4

Service Assistance

Auto Ingress recognises that Service is an integral component to providing the peace of mind necessary for our customers to enjoy their new automatic door systems.

Your new Auto Ingress Automatic door operator comes with a full 12 months warranty on labour and 2 years warranty on parts as set out in Chapter 5 Automatic Door Warranty (Terms & Conditions apply).

Service Help Desk

If you experience a service problem or breakdown call us at (07) 3290 1500 or

Toll Free in Australia on: 1300 138 750

AUTO INGRESS PTY LTD (head office)
46 Rowland Street, Slacks Creek QLD 4127
P.O. Box 825, Springwood QLD 4127
Australia

Phone: (07) 3290 1500

Fax: (07) 3290 1567

E-mail: contact@autoingress.com.au

Web: www.autoingress.com.au

CHAPTER 4

MAINTENANCE PROGRAM

The Australian Standards AS5007-2007 has a mandatory requirement for periodic log book service by suitably qualified personnel.

We as the manufacturer of this equipment recommend quarterly or four periodic services per year for most applications. For extremely busy or heavy applications or in harsh environmental situations more regular service is recommended.

The maintenance procedures we have adopted ensure that every door operator provides hassle free performance, increased long-term reliability and optimum safety at all times.

AUTO INGRESS PTY LTD SERVICE OFFER AND TERMS

Quarterly Service Agreement

- Service to be carried out every quarter (4 maintenance calls per year)
- Complete functional testing and full routine maintenance.
- Labour to be on 12 months warranty subject to our standard warranty terms.
- Parts to be on 24 months warranty subject to our standard warranty terms.
- All service work warranted for 90 days subject to our standard warranty terms.
- All work carried out to comply with AS5007/2007 and BCA requirements.
- All work to be carried out by AUTO INGRESS or its accredited agents.
- Cost per service per operator .. +GST.

The above service agreement is for a period of 12 months from the date of acceptance and is terminable thereafter by three months written notice.

AGREEMENT

The above service offer is hereby accepted

Sign Here

Date of acceptance

Name of Person Authorised To Sign

Site/Company Name

Site Address

Invoice To

Postal Address

AUTO INGRESS WARRANTY TERMS & CONDITIONS

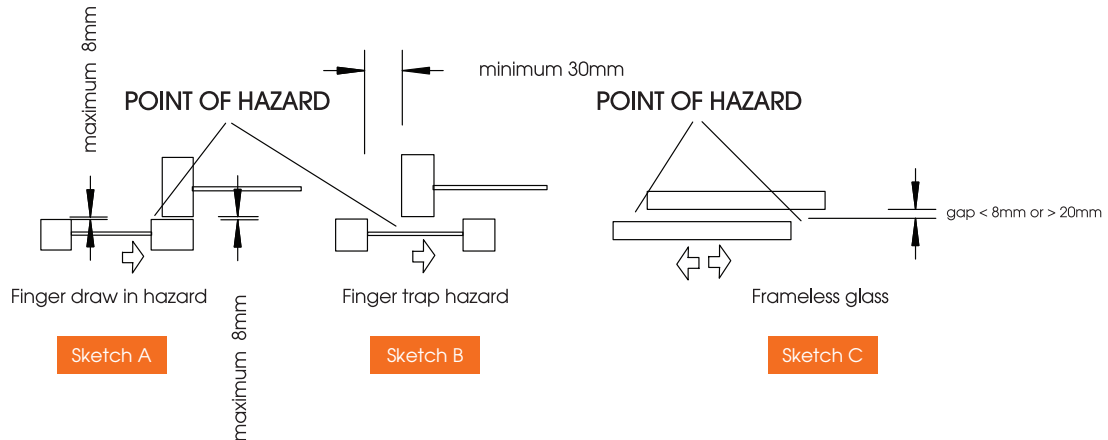
CHAPTER 5

The Automatic Door Equipment as per the unit serial number is manufactured from good quality material and under careful supervision. The unit before installation was checked and tested and is warranted to be free from defects in materials and workmanship from the date of commissioning on the following basis:

1. Auto Ingress or their authorised distributor, will undertake to replace or repair at their discretion parts that prove to be defective due to faulty manufacture for a period of two years from the date of commissioning. Except for the first twelve months of this warranty period, labour charges would be made at prevailing charge out rates. The motor and gearbox is warranted for a further three year period (total five years). The stainless track is warranted for the lifetime of the automatic door operator. The decision as to whether defects should be repaired or replaced will be solely that of Auto Ingress or its distributor.
2. The warranty is in lieu of any other warranty expressed or implied by agreement or law, and is automatically invalidated in the event of any person other than a recognised Auto Ingress distributor servicing the equipment without prior written consent of Auto Ingress.
3. This warranty is automatically invalidated if the manufacturers specifications or the recommended installation, commissioning, service and maintenance procedures are not followed as required by AS5007-2007.
4. To be valid the warranty included in the factory registration form must be registered with Auto Ingress Pty Ltd at PO Box 825, Springwood QLD 4127 by completing the factory registration enclosed with the equipment within fourteen days of commissioning of the equipment. No claims will be recognised against equipment that is not covered by a registration form held by the factory and dated no later than fourteen days from the date of commissioning.
5. Auto Ingress or their distributor; do not accept any liability for consequential loss, damage or injury resulting from defective workmanship or material.
6. The warranty is invalidated in the event of any misuse or abuse of the equipment and does not cover defects due to or occasioned by War, Fire, Flood, Earthquake, Act of God, Acts of Third Parties, subsidence or faults in the structure of the building in which it is installed.

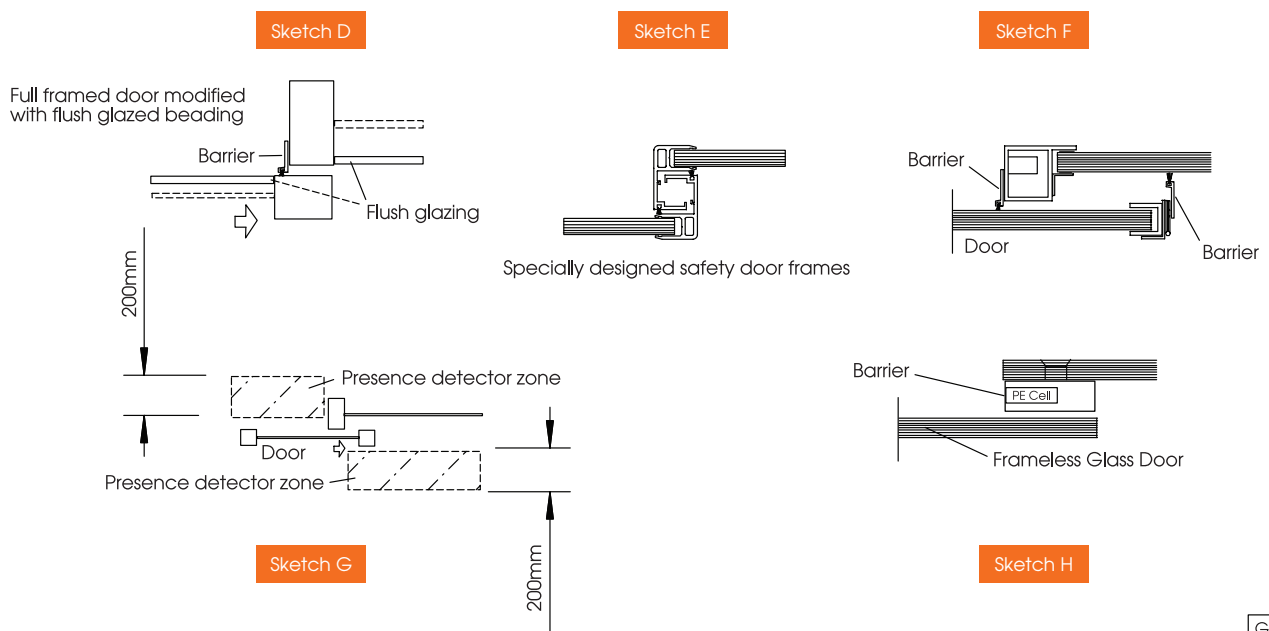
A draw in or finger trap hazard exists under the following conditions:

1. A gap of greater than 8mm between two sliding surfaces is considered likely to allow fingers to be drawn in.
2. Hands are considered safe guarded where the gap between the two sliding surfaces are greater than 20mm.
3. Where attachments are fitted to the door or sidelight such as letter boxes, letter flaps, handles grilles or other surface mounted hardware.
4. A gap of less than 30mm between the fixed door jamb and the leading stile glazed rebate.



Methods to safe guard and minimise draw in and finger entrapment hazard.

1. Adjust the framing to eliminate the hazard e.g. add flush glazing; realign door, move and reset the fully open door stop to ensure that the 30mm gap is maintained & or
2. A barrier profile hard enough to resist the penetration of fingers & or
3. Replace the framing system with a flush glazed slimline safety framing or
4. The fitting of a additional presence sensor that shall detect 200mm ahead of the hazard point, this sensor is to be capable of detecting a stationary person for a minimum of 60 seconds.
5. Attachments are required to be removed.



GW 0707

FIRE ESCAPE REQUIREMENTS

The Building Code of Australia section D2 Construction of exits requires Automatic sliding doorways serving as or part of a required exit to include the following performance features:

- 19b(iv) A It must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and
- 19(iv) B If it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm any where in the fire compartment served by the door.
- 21 The door in a required exit or forming part of or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by a single hand downward action or pushing action on a single device which is located between 900mm and 1.2m from the floor, except if it-
- 21c(i) Serves an occupancy where special arrangements for security are necessary and it can be immediately unlocked by operating a fail-safe control switch, not contained within a protective enclosure. AS5007 (3.3.2 Manual activation) and AS 1428.1-2001 (11.2.2) recommended in addition that the switch shall be mounted in a position where the user has an unimpeded view of the door, within a area that a person walking at normal pace has enough time to egress the doorway before it closes and is mounted between 900mm and 1100mm from the finished floor. The button shall not be fitted to a position where the user will not be struck by the door during its opening cycle. The design of the button shall satisfy the needs of the user and the requirements for person with disability to have a switch width of a recommended 35mm. The button shall be suitably labeled by a sign –or
- 21d Is fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler/ smoke/heat detector system installed throughout the building;

Note! Special requirements apply to places of public entertainment in NSW.

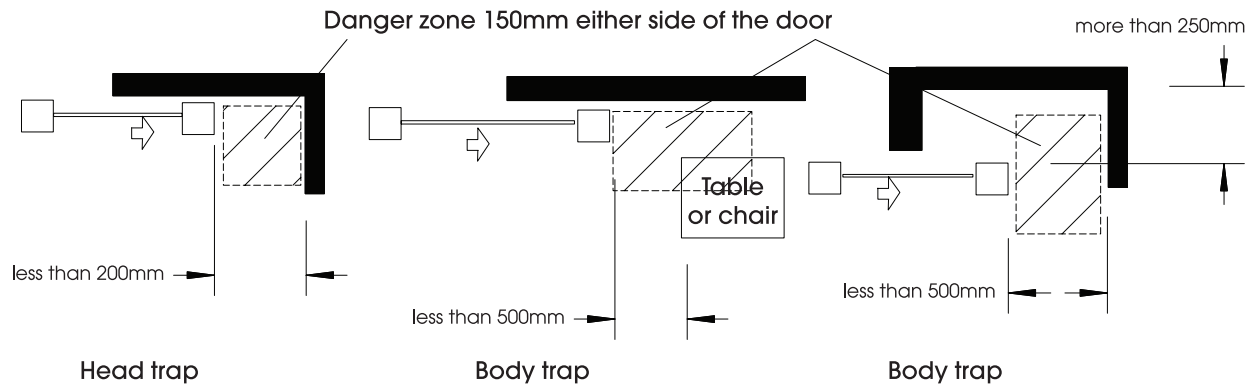
The NSW environmental Planning and Assessment Regulations 2000 part 9 nominates Automatic fail-safe devices to be a statutory fire safety measures are as follows:

- A. Before a building under construction can be occupied the owner of the building has to provide the local Council and Fire Commissioner a final fire certificate stating that all the fire safety measures in the building have been carried out a final fire safety assessment. (item 169)
- B. The final fire safety statement must be carried out by a properly qualified person within 3 months of the date of the final fire certificate. The person who carries out the assessment must inspect, test and verify the performance of the fire safety measure. (item 171)
- C. The annual fire safety statement must be carried out by a properly qualified person within 3 months prior to the anniversary date of the issue of the fire certificate. The person who carries out the test must inspect, test and verify the performance of the fire safety measure. (item 176)
- D. Fire Safety Maintenance The owner of the building must not fail to maintain the essential fire safety measure to a standard no less than that the specified in the buildings schedule or to the standard of design that was originally implemented; (item182) AS5007 and the manufacture ADIS Automatic Doors recommends that inspections and verification tests be made on a triennial basis (3 times a year)

HEAD & BODY ENTRAPMENT HAZARD

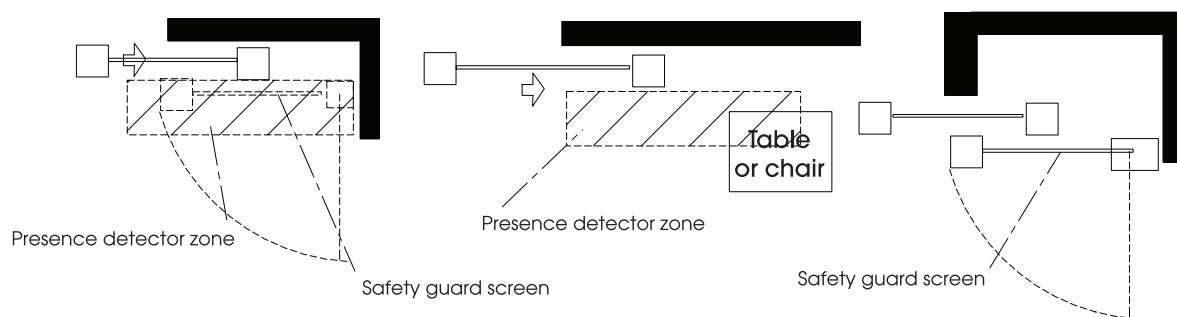
A head or body entrapment hazard exists under the following conditions:

1. The distance between the rear of the sliding door and adjacent parts surrounding is less than 200mm is considered a head trap.
2. The distance between the rear of the sliding door and adjacent parts surrounding is less than 500mm is considered a body trap.
3. The distance between the door and the sidelight or wall that it opens over is greater than 250mm is considered a body trap



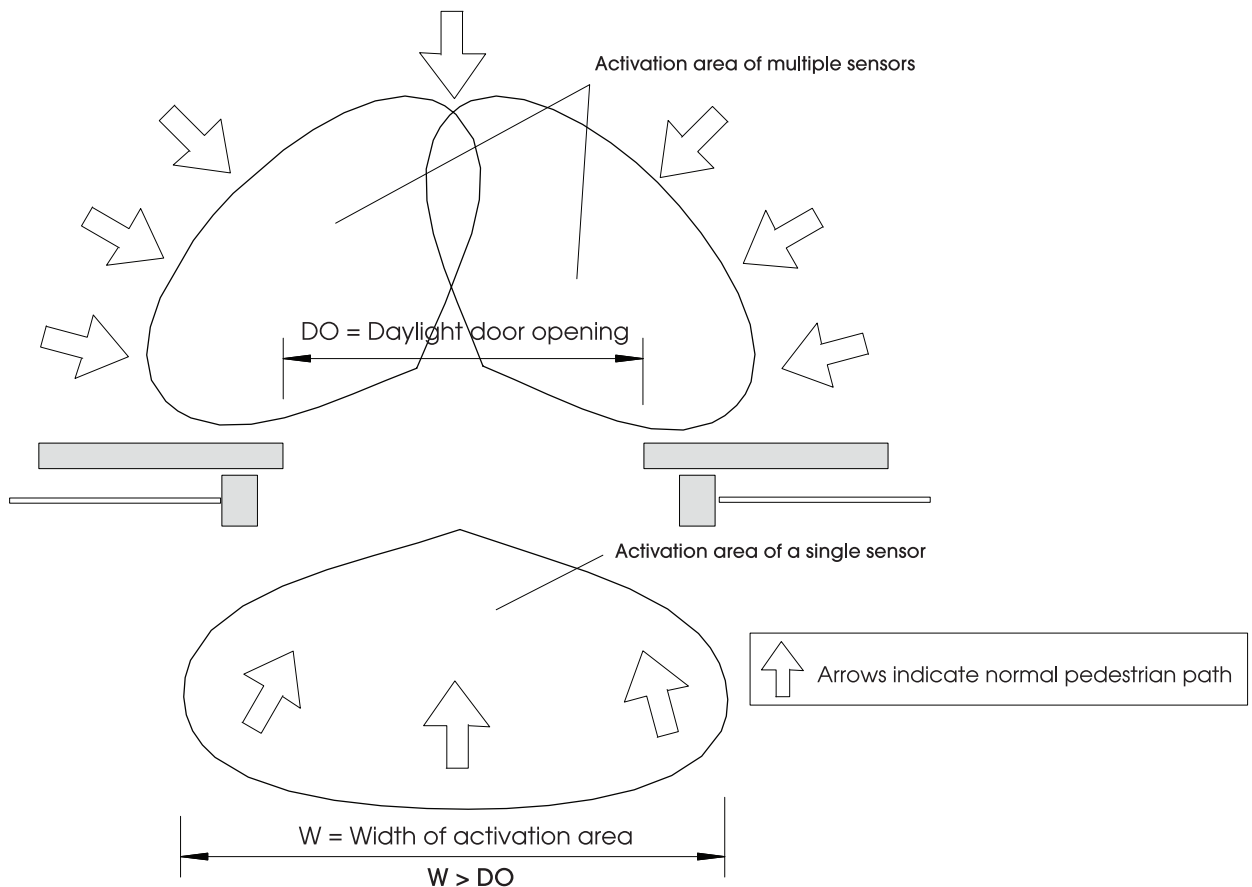
Methods to safe guard and minimise head and body hazard:

1. Add presence sensors to cover the full length of the doors opening stroke plus the width of the danger zone combined with a safety hazard warning sign & or
2. Add safety guard screens, screens must cover the length of the stroke of the door, be a minimum of 2m high, be pivotable to allow cleaning, shall be secured by tool or equal protection so that children shall not readily be able to open them, climb up them or get under them.



A impact hazard may exist under the following conditions:

1. Where the activation system does not open the door/s sufficiently to allow a person walking at normal pace or
2. Where the activation system does not have a field wide enough to detect a person using the doorway when fully opened or
3. Where all lines of approach of traffic are not capable of item 1 or
4. The type and quantity of sensor is incorrect for the profile characteristics of the users of the doorway; e.g. elderly, infirm, disability and young children.

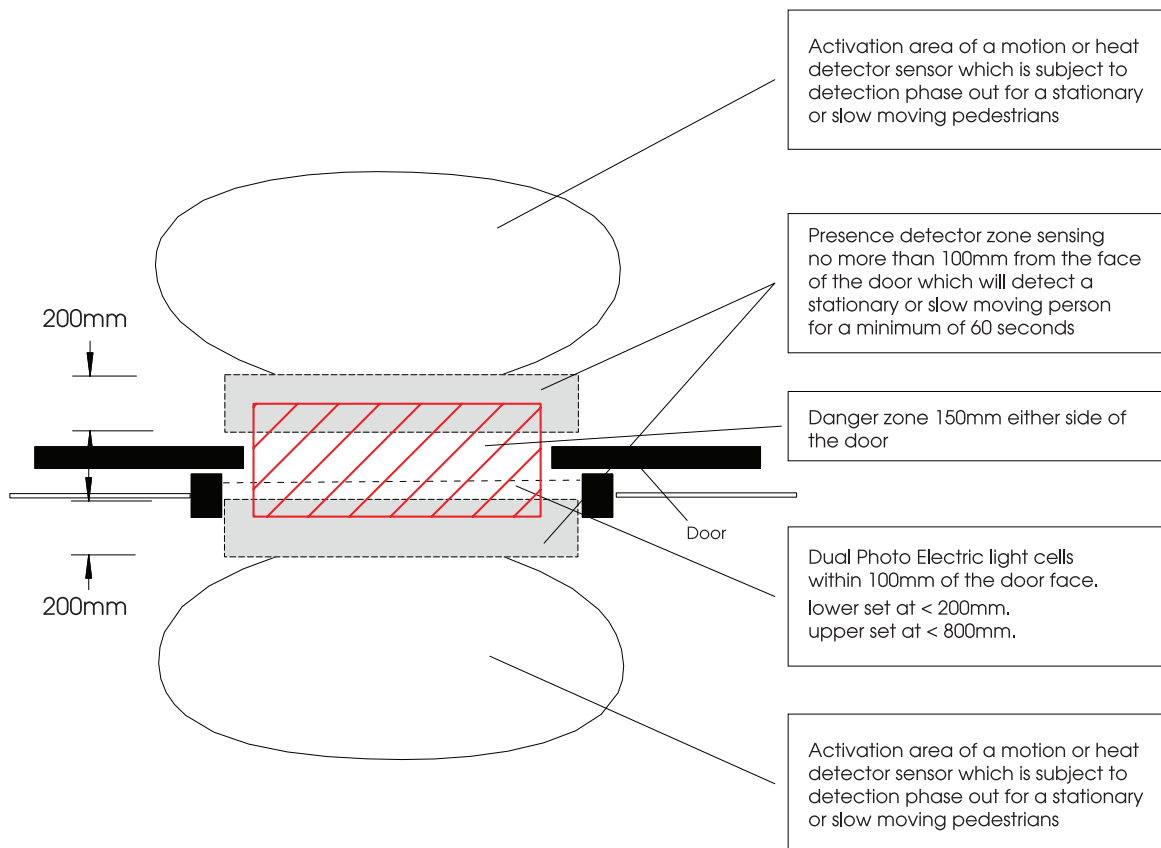


Methods to safe guard and minimise impact hazard:

1. Adjust or replace the sensor so as to allow the door to open for a person walking at normal pace.
2. Adjust or replace the sensor to allow the sensor to have a field wide enough to cover the full width of the daylight door opening.
3. Add additional sensors or replace the existing sensor to ensure that all approach paths/all potential users are capable of opening the doors at normal pace.

A crushing hazard during the closing cycle may exist under the following conditions:

1. Where a single protective safety device is not fitted, i.e, PE cells, presence sensors or mats.
2. Where the absence or restriction of activation sensors creates a large danger zone that is not protected by presence sensors or mats.
3. Where the entrance way is used regularly by elderly, infirmed, disabled persons and young children where the danger zone is not protected by presence sensors or mats.
4. Where the doors closing speed exceeds the safe speed parameters (see AS5007 for chart)

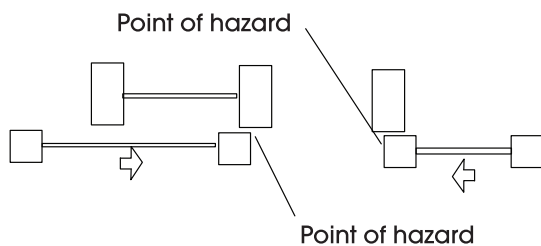


Methods to safe guard and minimise crushing hazard:

1. The fitting of a protective safety device e.g. PE cells, presence sensors or mats
2. Add presence sensors or mats to applications that have large danger zones or are used by the list of slow moving pedestrians as described in item 3 above.
3. Adjust the closing speed to slow the doors down below the 27J kinetic energy level.

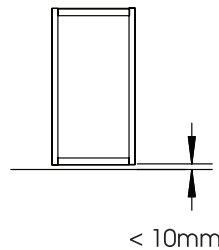
A shear hazard exists under the following condition:

1. Where the sliding door when opening or closing passes a fixed object that could cause damage to fingers, hands or a body.
2. Where the gap between the bottom of the door and the finish floor is greater than 10 mm or is uneven during the doors full stroke cycle

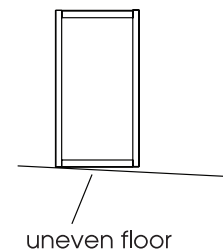


Sketch A

Sketch B



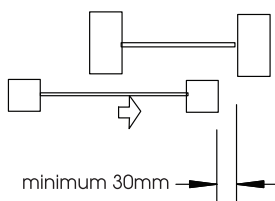
Sketch C



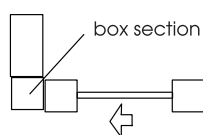
Sketch D

Methods to safe guard and minimise shear hazard:

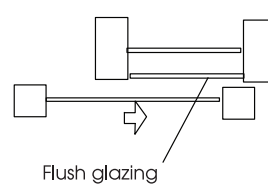
1. Adjust the doors fully open door stop to ensure that the 30mm gap is maintained or
2. Fit an additional box section to the door jamb so that the door butts to the jamb instead of overlapping and or
3. Add flush glazing to intersecting mullions and or
4. Adjust the door hanger bracket system to lower the door to below a 10mm floor finish gap and or
5. Fit guards to the bottom of the door to minimise the gap to below 10mm or to level the gap on uneven floors.



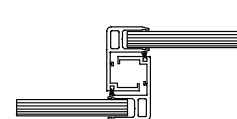
Sketch E



Sketch F



Sketch G



Sketch H

An automatic door is required to be safe guarded by the following signage:

1. An indicator sign in the form of an arrow of minimal size of 100 mm long by 40 mm high visible from both sides of the door leaf between 1.2 m and 1.5 m above the floor level as close as practical to the leading edge, with the head of the arrow pointing in the direction of the door leaf travel when opening. Colour of the arrow shall be "off white". This directional arrow as nominated in AS5007 is the responsibility of the auto door supplier.
2. The design for access and mobility under the Disability Discrimination Act (DDA), The building codes of Australia and the Australian standard for Glass in Buildings AS 1288 requires frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening where there is no chair rail, handrail or transom, should be clearly marked for the full width with a contrasting line not than 75 mm wide at a height between 900 mm and 1000 mm above the floor. The contrasting line should have a minimum luminance contrast with the back ground when viewed from either side, the fitting of the vision strip is the responsibility of the contractor providing the glazing.

