

Special Purpose Doors System Guide



SPECIAL PURPOSE DOORS SYSTEM GUIDE

Issue: 15-11-2011

What are Special Purpose Doors?

Many doors are required to provide a specific performance level, or a combination of performance levels. In some cases these fall in to distinct categories, such as fire resistant or acoustic, whilst in others the measure may be more obscure, such as ballistic or radiation resistance. Typically a "Special Purpose" door is one which has been designed, tested and constructed to suit a nominated performance level. In most cases either an Australian or International Standard will be used to nominate the test method, however many doors are constructed to meet specific individual designs.

In addition to the range of pre-designed special purpose doors specified in this manual, Pyropanel has a research and development division that specializes in developing custom designed doors to meet the particular performance characteristics that may be required in various applications. If you do not find a product that meets your specific requirements, please phone Pyropanel Developments directly and ask to speak to a technical consultant in the Research and Development division who will be more than happy to determine how best we can meet your needs.

Pyropanel also manufacture a huge range of certified fire doors, smoke doors, life safety doors, acoustic doors, fire rated Glazing and other passive fire protection products, that are generally located in other sections of this technical manual - Please refer to the Pyropanel website or the Introduction section in the full manual if you can not find a product for your particular requirement in this section.

Advantages and Features

- Custom design to suit almost any requirement
- Certified products
- Large range
- Personalised service
- Readily available technical information
- Available through a network of licensed manufacturers and distributors Australia wide, and throughout many other countries

Custom Designed Special Purpose Doors

When contacting Pyropanel regarding any type of custom designed special purpose door, the following questions are an example of the typical information that may be required:

1. What are the specific performance measures that the door will be required to meet?
2. To what standard, if any, will the door be required to meet?
3. What size will the door be?
4. Does it require special hinging or operating systems?
5. Are there any nominated surface finish requirements?
6. Will the door be exposed to weather?
7. Is the door in a high traffic area?
8. Are site conditions important?
9. Will access for installation be a consideration in the door design (eg, doors in tunnels)?

Model	Features	Tech Sheet
Special Purpose Doors - Pre Designed Solutions		
Bullet resistance doors	A variety of bullet resistant doors to meet the various classifications of AS2343, from Class GO (9mm handgun) through to the AK-47 assault rifle.	SP-BR01
RF doors	Fully lined doors that are designed prevent the passage of RF radiation, especially for rooms where MRI equipment is used.	SP-RF01
Substation doors	Manufactured to the specification and details required by the State Electricity Commission of Victoria, these doors are available in 3 'off the shelf' sizes, or as custom configurations.	SP-SUB

- Please refer to the Tech Sheet indicated for details on the particular door model required
- Please refer to the Pyropanel Website for the latest Technical information
- If you do not find a product to suit your requirements, please contact Pyropanel Developments for the latest information on our comprehensive range of Passive Fire Protection and Special Purpose Products



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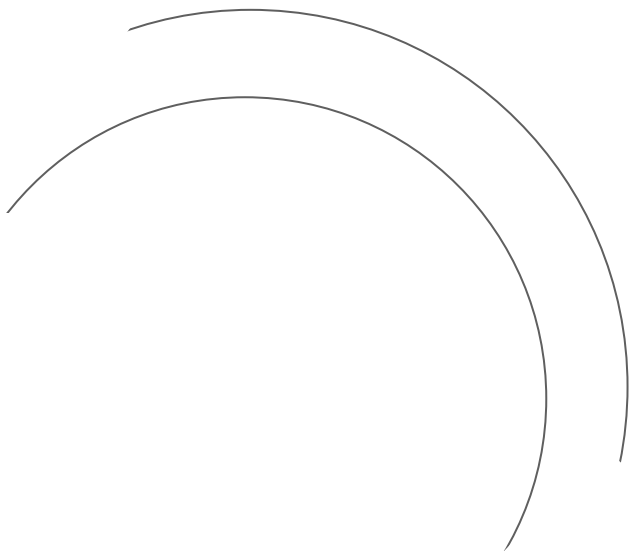
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Availability

All Pyropanel products are available throughout Australia and various other countries through a network of licensed manufacturers and distributors. For a current contact list, please contact Pyropanel Developments or visit our website at www.pyropanel.com.au.

[Pyropanel > Fire Doors > Smoke Doors > Life Safety Doors > Fire Rated Glazing > Passive Products > Special Purpose Doors](#)



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PYROPANEL®

BULLET RESISTANT DOORS

Special Purpose Bullet Resistant Doorsets

TECH SHEET: SP-BR01

Issue: 01-11-05

Range of bullet resistant doorsets that have been tested to Australian Standards for a variety of resistance classifications

DESCRIPTION

Pyropanel Bullet Resistant doorsets are tested to Australian Standards, and are available in a range of models to suite all applications. They have a nominal thickness of 50-55mm, and are supplied with 2mm metal door frames, factory fitted ball bearing 100mm x 100mm butt hinges (4qty), or continuous piano hinges. All locksets and door hardware are required to be factory fitted to ensure no loss of integrity.

APPLICATIONS

Pyropanel Bullet Resistant doorsets are suitable for a wide range of applications such as banks, embassies, prisons, cash rooms, apartment entry doors, etc.

FEATURES

- Wide range of models covering AS classifications of G0, G1, G2, R1, R2, S0, and S1, as well as the AK47 urban assault rifle.
- Fire Resistant construction available up to -/120/30.
- Smoke and sound resistant (with seals).
- Bullet resistant vision panels utilising LEXGUARD laminate glass.
- Finishes include Zinc, Galvanised, Stainless Steel, Laminate, Ply or MDF.

CLASSIFICATION TABLE

(AS/NZS 2343:1997)

Class	Weapon Type	Calibre	Ammunition	Range
G0	Hand Gun	9mm	7.4g standard bullet	3m +/- 10mm
G1	Hand Gun	.357 Magnum	10.2g flat nose bullet	3m +/- 10mm
G2	Hand Gun	.44 Magnum	15.6g flat nose bullet	3m +/- 10mm
R1	Rifle	5.56mm	3.6g bullet	10m +/- 20mm
R2	Rifle	7.62mm	9.3g bullet	10m +/- 20mm
S0	Shotgun	12 gauge full choke	32g 70mm no.6 SG shot	3m +/- 10mm
S1	Shotgun	12 gauge full choke	24.8g 70mm single slug	3m +/- 10mm
AK-47	Urban Assault rifle	7.62mm	8.3g jacketed bullet	10m +/- 20mm

MODELS AVAILABLE

Model	Bullet Resistance	Fire resistance (fire rated construction)
BR-A	G0, G1, G2, S0, S1	Up to -/120/30
BR-B	R1, G0, G1, G2, S0, S1	Up to -/120/30
BR-C	R2, G0, G1, G2, S0, S1, AK-47	Up to -/120/30

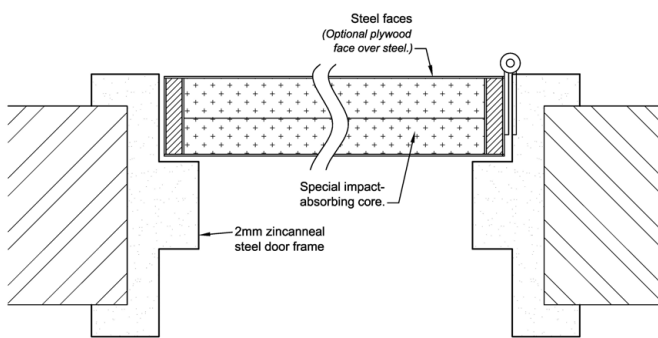


Illustration of typical doorset with frame solidly grouted into masonry wall. Special bullet resistant frames can be designed for stud wall applications

HOW TO SPECIFY

"Door to be a Pyropanel Bullet resistant doorset, 50-55mm mm thick, -/120/30 Fire rated construction, with steel / ply / mdf* facings installed in a Pyropanel pressed metal door frame solidly packed with concrete"*

* denotes example—delete or change or specify as required



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RF DOOR

Special Purpose RF Door

TECH SHEET: SP-RF01

Issue: 01-11-05

Fully lined doors designed to passage of electromagnetic radiation and RF radiation into & out of specially rooms

DESCRIPTION

Fully lined door designed to prevent the passage of electromagnetic radiation and RF radiation into and out of rooms.

APPLICATIONS

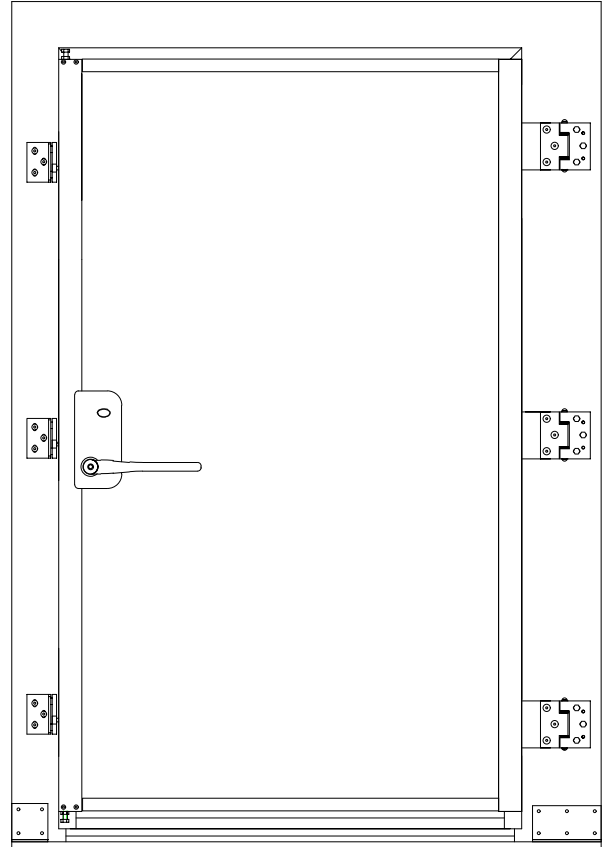
RF Doors are designed specifically for MRI (Magnetic Resonance Imaging) rooms in hospitals. They prevent electromagnetic (EM) and RF radiation from exiting the room, but more importantly prevent EM and RF radiation from entering the room and interfering with the imaging equipment. Designed especially for use with MRI and other RF equipment rooms in hospitals, laboratories, universities, etc.

FEATURES

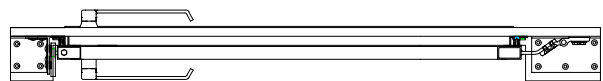
- The door is also designed to achieve a high acoustic attenuation due to the high sound pressure levels developed by modern RF equipment.
- The edges of the door are sealed with special seals which block EM and electrically link the door to the specially designed room, which is grounded.
- Doors are available in RHH (right hand hinged) or LHH (left hand hinged), and open inwards, or open outwards.
- The standard model has been designed to resist a particular range of electromagnetic radiation, and is not suitable for all applications - custom designs for other applications are available - please contact Pyropanel for more information.

HARDWARE

- Custom designed Stainless Steel lever action handles supplied to both faces.
- Heavy Duty adjustable hinges.
- 3 point cam-action latching mechanism.
- Ply or Stainless steel on outside face.
- Incorporates electromagnetic resistant seals to all 4 edges.



Elevation of typical RF door assembly



Plan view of typical RF door assembly

HOW TO SPECIFY

"Door to be a Pyropanel RF Door, installed as part of a custom designed RF room".



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SUB-STATION DOORS

Special Purpose Sub-Station Doorsets

TECH SHEET: SP-SUB

Issue: 22-11-11

Metal Clad Doorset especially approved for use in Substations

DESCRIPTION

Manufactured to the specification of the Electricity Supply Authorities, these doorsets can be made for individual project requirements, and are available as single or double leaf as well as cubicle sets, all complete with frames and hardware.

APPLICATIONS

Ideal for substations in hospitals, schools, public buildings etc., or anywhere that requires a metal door with excellent ventilation.

FEATURES

- Fully weather and vermin proof, fixed louver aluminium ventilations sealed to door with waterproof compound
- Ventilators constructed from AS1866-1976 aluminium
- Door faces constructed from 1.6mm flat galvanised sheeting, fastened with pop sealed rivets at 150mm spacings.
- Welded construction leaf frame, as per AS1554, Pt1 1974
- Vents 0.015mm clear anodised finish
- Door frames constructed from 40 x 40 x 5mm mild steel angle, welded, ground flush, and prime painted
- Door leaves hung on 3 No. 100mm plated steel hinges, factory fitted to frames.
- Center door can be removed on DSUB3 to provide just under 3600 clear opening
- Outer doors open 180°
- Special sizes are available for all models
- Active leaf on DSUB2 or DSUB3 to be specified on plans
- DSUB3 supplied Pre-Hung in modular form for ease of transport and handling - easily assembled on site

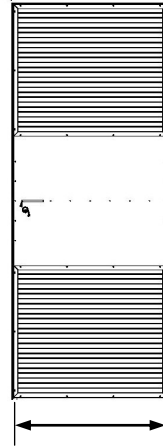
HARDWARE

- Lockwood 211 Stream Latch
- 'D' pull handle
- Tower Bolts (DSUB2 and DSUB3)
- Lockwood 9000 series Panic Bar (DSUB3 only)
- Panic Bolt (DSUB3 only)

OPTIONAL EXTRAS

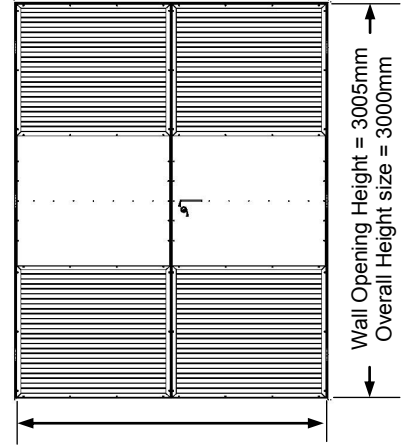
- Single Panic Bar (DSUB1 and 2)
- Lockwood 3572 Mortise Lock (DSUB1, 2 and 3)
- Pressed metal door frame (DSUB1, 2 and 3)
- Can be upgraded to Blast Resistance (on assessment)

DSUB1



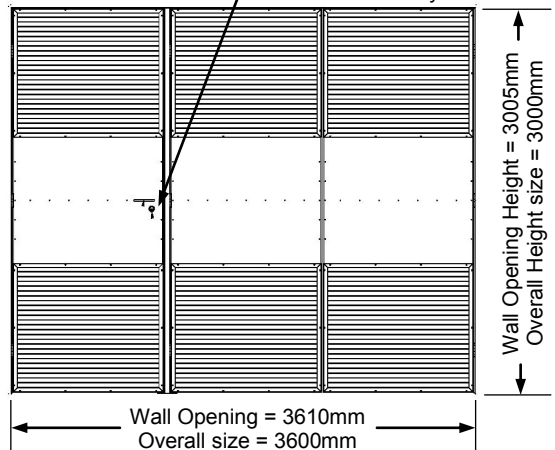
Wall Opening = 1202mm
Overall size = 1192mm

DSUB2



Wall Opening = 2380mm
Overall size = 2370mm

DSUB3



Wall Opening = 3610mm
Overall size = 3600mm

MODELS

Model	Leaf	Wall Opening	Overall Size
DSUB1	Single	3005 x 1192	3000 x 1192
DSUB2	Pair	3005 x 2380	3000 x 2370
DSUB3	Triple	3005 x 3610	3000 x 3600

HOW TO SPECIFY

"Door to be a Pyropanel Substation door Model DSUB3 with the following options: (eg, Mortise lock, pressed metal door frames, etc).*

* denotes example—delete or change or specify as required



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