

	<b>SERVICE PENETRATION SYSTEM CERTIFICATE NO.</b>	<b>FG1 Version 3.0</b>
	<b>WARNING: This certificate may only be reproduced in full</b>	
	<b>SYSTEM NAME: PROMASEAL FIRE PILLOWS</b>	<b>DATE ISSUED: June 1996</b>  <b>EXPIRY DATE: 30 June 2008</b>
PO Box 6825 St Kilda Road Central VIC 8008 Tel: +61 3 9865 8644 Fax: +61 3 9865 8615 www.certifire.com.au info@certifire.com.au	<b>SUPPLIER: PROMAT AUSTRALIA PTY LTD</b> 1 Scotland Road, Mile End, SA 5031 Tel: +61 8 8352 6759 Fax: +61 8 8352 1014	

## 1. SCOPE

The service penetration fire protection system described below has been appraised against Certifire schedules [CA001](#), [CA002](#), and [CA021](#).

These schedules require that the FRLs of the system have been established in accordance with the BCA provisions and that the products are manufactured/supplied under an independently audited quality management system.

## 2. FIELD OF APPLICATION

This certificate relates to the use of Promaseal Fire Pillows in conjunction with Promaseal Acrylic Sealant and Fyre-guards to protect openings in walls and floors which may be penetrated by metal pipes and cables.

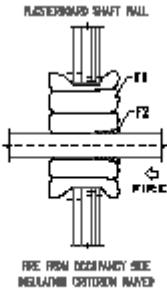
The system may be used to protect openings with or without service penetrations of maximum size 0.31m<sup>2</sup> in plasterboard partitions,

Promatect partitions and masonry/concrete walls, and openings of maximum size 0.25m<sup>2</sup> in concrete floor slabs. See Table 3 for details of compatible separating elements in which the performance of the system has been appraised.

The Fire Resistance Levels (FRLs) of Promaseal Fire Pillow systems established in accordance with the BCA provisions and relevant Certifire schedules are given in Table 1.

**Table 1: Performance of Promaseal Fire Pillow systems with Fyre-guards around services**

The Fire Resistance Levels (FRLs) represent (Structural adequacy / Integrity / Insulation) in minutes.

Description of penetrations/separating element	FRL
Promatect H laminated partitions 50mm thick with local thickening, or Boral/CSR plasterboard shaft wall with minimum thickness of 96 mm, and maximum opening size of 0.31 m <sup>2</sup>	
• Un-penetrated	-/120/120
• Ferrous metal and copper pipes to 150 mm maximum diameter	-/120/-
• Brass pipes to 100 mm maximum diameter	-/120/-
• Telecommunications and power cables with or without cable trays	-/120/-
<b>Installation details</b>	
	

### 3. DESCRIPTION OF COMPONENTS

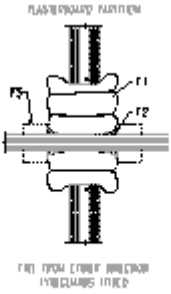
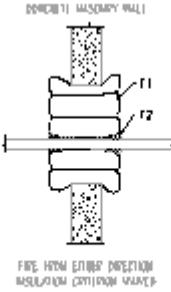
**F1 Promaseal Fire Pillows** comprise green cloth envelopes enclosing a high temperature fire resistant granulated material. They are supplied in 3 sizes, nominally 300 x 250mm x 40mm (large); 200 x 250 x 40mm (medium) and 100 x 250 x 30mm (small).

**F2 Promaseal Acrylic Sealant** is flexible water based gunable sealant and is supplied in 300ml cartridges, 600ml sausages and 10 litre pails.

**F3 Fyre-guards** are formed from steel stud mesh having 0.75mm diameter wires at 12mm centers and have a diameter 100mm greater than the service they enclose.

**Table 1: Performance of Promaseal Fire Pillow systems with Fyre-guards around services**

The Fire Resistance Levels (FRLs) represent (Structural adequacy / Integrity / Insulation) in minutes.

Description of penetrations/separating element	FRL
Boral / CSR plasterboard steel stud partitions with minimum thickness of 114 mm (2 layers of 16 mm plasterboard on each face, or 2 x 13 mm layers with local thickening - see 4 below) and a maximum opening size of 0.31 m <sup>2</sup>	
<ul style="list-style-type: none"> <li>Un-penetrated</li> </ul>	-/120/120
<ul style="list-style-type: none"> <li>Ferrous metal and copper pipes to 150 mm maximum diameter</li> </ul>	-/120/120
<ul style="list-style-type: none"> <li>Brass pipes to 100 mm maximum dia.</li> </ul>	-/120/120
<ul style="list-style-type: none"> <li>Telecommunications and power cables with or without cable trays</li> </ul>	-/120/120
<p><b>Installation details</b></p> 	
Masonry walls with a minimum thickness of 90mm (and with local thickening to walls less than 96mm - see 4 below) or concrete walls minimum wall thickness of 120 mm, and with a maximum opening size of 0.31 m <sup>2</sup> :	
<ul style="list-style-type: none"> <li>Un-penetrated</li> </ul>	-/120/120
<ul style="list-style-type: none"> <li>Ferrous metal and copper pipes to 150 mm maximum diameter</li> </ul>	-/120/-
<ul style="list-style-type: none"> <li>Brass pipes to 100 mm maximum dia.</li> </ul>	-/120/-
<ul style="list-style-type: none"> <li>Telecommunications and power cables with or without cable trays</li> </ul>	-/120/-
<p><b>Installation details</b></p> 	

<b>Concrete slabs having a maximum opening size of 0.25m<sup>2</sup> and: having a minimum thickness of 120 mm</b>	
• Un-penetrated	-/120/120
• Ferrous metal and copper pipes to 150 mm maximum diameter.	-/120/120
• Brass pipes to 100 mm maximum dia.	-/120/120
• Telecommunications and power cables with or without cable trays.	-/120/120
<b>having a minimum thickness of 150 mm</b>	
• Un-penetrated	-/180/180
• Ferrous metal and copper pipes to 150 mm maximum diameter.	-/180/120
• Brass pipes to 100 mm maximum dia.	-/108/120
• Telecommunications and power cables with or without cable trays.	-/180/180
<b>Installation details</b>	
<p style="text-align: center;">SYSTEM FG1/4</p>	

**COMPONENTS:**

**F1 Promaseal Fire Pillows**

**F2 Promaseal Acrylic Sealant**

**F3 Fyre-guards**

**Notes:**

1. The Promaseal Fire Pillow system may be used in separating elements having FRLs less than those listed above. The performance of the penetration system should then be taken as the lesser FRLs of the separating element and the penetration system. Plasterboard facings should be locally thickened in accordance with the installation summary.
2. The lengths of Fyre-guards required to be fitted to the non-fire exposed face of a penetration system which is required to satisfy the criterion of insulation is given in Table 2 where a system may be exposed to fire conditions from either face the Fyre-guards shall be fitted on both sides of the separating element.
3. Fyre-guards may be omitted for applications where the criterion of insulation is waived.

**Table 2: Fyre-guards around services - Lengths required if used**

<b>Insulation Ratings (minutes)</b>	<b>Cables and Cable Trays</b>	<b>Brass/Steel/Cast Iron Pipes up to 100mm diameter.</b>	<b>Copper, Steel and Cast Iron pipes up to 150mm diameter.</b>
60 mins	100 mm	100 mm	400 mm
90 mins	100 mm	100 mm	500mm
120 mins	100mm	100 mm	500mm
180 mins	400 mm	400 mm <sup>1</sup>	-

Notes: <sup>1</sup> Cast iron pipes and steel pipes only.

#### **4. INSTALLATION SUMMARY**

- Openings in plasterboard partitions shall be framed with light gauge steel channels.
- Where the thickness of a wall or partition is less than 96mm and/or plasterboard facings are less than a total thickness of 32mm on the fire exposed face (including walls with FRLs less than 120/120/120), the wall thickness shall be increased locally around the openings by screw-fixing Firestop or Fyrechek plasterboard or Promatect cover strips of minimum width 100mm at 200mm maximum centers.
- Promaseal Fire Pillows shall be packed firmly into the opening around any services staggering joints between the layers of pillows and Promaseal Acrylic Sealant applied around the service penetrations and any gaps not filled with pillows.
- Where the insulation criterion is not waived, fit Fyre-guards to both faces of the penetration or to the non-fire exposed face where the side of fire exposure can be defined. Refer to Table 1.

**See manufacturer's installation instructions for further details. Reference FFP-1-2-91.**

It is recommended that the systems described in this certificate are installed by a Certifire listed Fire Protection Contractor certified in the appropriate category and that the installation be required to be labelled with a Certifire Label.

#### **5. SERVICEABILITY DATA**

**Resistance to water** - No data presented.

**Flexibility** - No data presented.

#### **6. HEALTH AND SAFETY**

Health and Safety data sheet ref. 110324 can be obtained from the supplier.

#### **7. SUPPORTING DATA**

<b>Test report no.</b>	NI3790	<b>Test date:</b>	30 October 1990
	NI4390		22 November 1990
<b>Letter of opinion</b>	124	<b>Date:</b>	8 January 1991

**8. CONTACT DETAILS:**

Promat Australia Pty Ltd, 1 Scotland Road, Mile End, SA 5031.  
Tel (08) 8352 6759 Fax (08) 8352 1014

Promat Australia Pty Ltd, Unit 9, 175 Briens Rd., Northmead NSW 2152.  
Tel (02) 9630 4922 Fax (02) 9630 0258

Promat Australia Pty Ltd, 3/273 Williamstown Rd, Port Melbourne, Vic 3207.  
Tel (03) 9645 3866 Fax (03) 9645 3844

Fyreguard QLD, 2/8 Hampton Ct., Burleigh Junction Qld 4220.  
Tel (07) 5593 4955 Fax (07) 5593 4349

Promat Australia Pty Ltd, Locked Bag 8, Subiaco WA 6094  
Tel 1800 302 020

**Qld Distributor**

Nofire Australia, 2/8 Hampton Ct., Burleigh Junction Qld 4220  
Tel (07) 5593 5955 Fax: (07) 5993 4349

Nofire Australia, 417 Newman Rd, Geebung Qld 4034  
Tel (07) 3865 4422 Fax (07) 2865 4632

**9. INFORMATION ON CERTIFIRE**

Certifire Australia is an independent, authoritative body providing a certification scheme for passive fire protection systems, suppliers and contractors.

For further information contact Certifire Australia.

Certifire Australia takes direction from the Certifire Advisory Panel which has been constituted with balanced representation from all sectors of the industry.

**NOTE:** This system certificate should be read in conjunction with Certifire schedules **CA001**, **CA002** and **CA021**. The BCA requires that FRL's are based on tests performed in accordance with AS1530.4-1990 or a similar/more severe test. It should be recognised that a single test method will not provide a full assessment of the performance of a system or fire hazard under all fire conditions

Reviewed by	Approved by
<b>Rick Fox</b> <b>National Technical Manager</b> <b>PROMAT AUSTRALIA PTY LTD</b>	<b>G J Evans</b> <b>Chief Executive Officer</b> <b>CERTIFIRE PTY LTD</b>