

PERTRONIC INDUSTRIES LTD

FIREBITS

FPA Conference Edition - October 2004

Welcome to this FPA Conference edition of Firebits! Pertronic Industries is proud to be a regular supporter of the FPA Conferences and the associated FIREXPO - important annual events for our industry.

2004 is also a memorable year for our company. We have just completed a move into newer and larger premises in Lower Hutt (more on pages three and four), and earlier in the year we opened a sales office and warehouse in Brisbane to complement our facilities in Sydney and Melbourne.



The Grand Chateau at Mt. Ruapehu is a familiar site to many tourists and skiers, both locally and overseas. The complex has recently undergone a major upgrade of all fire protection systems, including the installation of a Pertronic F120 analogue addressable control panel. Smoke detectors with sounder bases were fitted into all bedrooms to provide a local alarm, with the sounder bases also used for the hotel's staged evacuation system. The F120 panel's intelligence is used to supervise the staged evacuation, rather than a separate EWIS panel. A modem is also fitted into the F120 panel, giving the servicing company remote access to the system (via proprietary Pertronic software) for routine isolations, resets, detector status and event history reports - saving their client the cost of a five hour round trip.



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NZS4512:2003 - More Questions Answered

Q. *Is there any change in the interface to fire alarm panels from sprinkler systems?*

A. Yes there is. Under the previous Standard, the interface from the sprinkler SGD/DBA to the fire alarm panel was a simple contact. In the new Standard, a short circuit or open circuit cannot generate an alarm call. An interface is now required from the SGD/DBA to the fire alarm panel (as with indicating call points or heat detectors), and we have developed a new interface card to achieve this. If a fire alarm panel built to the new Standard is being installed as a retrofit to an existing system, this interface card (product code SGDBAIF) will need to be added into the existing SGD/DBA by the contractor. When contractors now order new SGD/DBA's from us, the order will need to clarify if the unit is being installed in a system complying to the new or old Standard, so we know whether or not to fit the interface card.

Q. *What about flow switch interfaces?*

A. This is much the same situation as with sprinkler interfaces. The standard practice is for flow switches to be normally open, closing on operation. In this case, in addition to the 10k end-of-line resistor (for monitoring purposes) an additional 10k resistor is required in series with the flow switch, to decrease resistance on the circuit (but not give a short circuit) when the flow switch closes.

Q. *Under the new Standard, concealed detectors that form part of a zone with other (visible) detectors need to have a remote indication [clause 405.4]. How do we achieve this?*

A. For concealed heat detection, the Pertronic indicating heat detector does not at present have remote indication capability. In these applications it is necessary to use System Sensor heat detectors with a remote LED Annunciator (product code RA400Z) per detector to meet the requirement of the Standard (this same remote LED Annunciator is used with concealed smoke detectors). Alternately, treat the concealed detector/s as a separate zone.

Q. *What cable do you recommend for the 100 volt speaker circuits?*

A. In addition to recommending twisted pair cable for our data loops, we also recommend twisted pair cable for speaker circuits as this will minimise data loop noise pickup by the speakers. We now stock 1.25mm² twisted pair cable in a grey sheath (product code EVACCBL), to differentiate the speaker circuit from the red sheathed data loop, and to help prevent 24V smoke detectors being accidentally connected to 100V circuits.

Q. *What amplifiers do you have available for use with 100 volt speaker circuits ?*

A. We have developed three amplifiers to date -

- a 12 volt 20 watt amplifier which produces the AS2220 evac tone with speech

- a 24 volt 20 watt amplifier which produces the AS2220 evac tone with speech

- a 24 volt 50 watt amplifier which produces the AS2220 evac tone with speech, plus the alert tone with speech, and one of four customised tones can also be selected (eg for a different local alarm tone in a Type 5 installation). Any of these tones can be substituted with a client-specific tone for a particular application, subject to space/file size on the sound chip.

Bugs And Fire Alarm Panels

We often comment on the problems bugs create with detectors, but there is also a problem with bugs and fire alarm panels. A large number of fire alarm panels are mounted directly in the front windows of buildings, so that the mimic is facing outwards, as required under the Standard. More often than not, the panel is positioned so that the mimic is hard up against the window, but this doesn't stop bugs (moths, beetles, flies, wasps, etc) getting trapped between the mimic and the glass. Apart from looking extremely unsightly, the buildup of dead bugs - in some cases - obscures parts of the mimic itself.

A suggestion is, whenever possible, to mount the panel so that the front of the mimic is around 10mm clear of the window and bugs will no longer get trapped between the two surfaces.

New Pertronic Lower Hutt Facility Officially Opened



Clockwise from top left - Lower Hutt Mayor John Terris welcoming guests to the official opening; Minister of Labour and Associate Minister of Economic Development Paul Swain with David Percy in the production area; a fire alarm panel under development for the China market; Minister Swain formally opening the building; a section of the printed circuit board (pcb) production area; guests at the opening.



Twenty two years old and still growing

The move to our new premises marks a milestone in our journey and company growth, with the new facility having approximately 50% more space than our older premises.

Our decision to make the investment is based on our commitment to give the best possible service to the New Zealand Fire Protection Industry and on our confidence in the future and viability of New Zealand electronics manufacturing.

The company began as a one person start-up 22 years ago and now employs 35 people in New Zealand plus 10 people in Australia, with offices / warehouses in Brisbane, Sydney and Melbourne.

None of this would have been possible without the commitment and support of many people, and I am very appreciative and grateful for the efforts made by those people over the years.

I am particularly grateful for the support and encouragement that we have received from all our customers throughout the company's history. Without customers there would be no business. I thank you all.

Innovation, quality and service are not destinations, they are always part of a journey. We cannot claim perfection, but we are committed to getting things right, and to being the best in the industry. I look forward to our ongoing partnership.

*David Percy
Managing Director*

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A Company On The Move!

Pertronic Industries moved in mid-August to newer and larger premises in Lower Hutt. But we didn't move too far - just across the road, in fact, from number 20 to number 17 Eastern Hutt Rd (all our other contact details remain the same).

The company purchased the building last year and it has since undergone a major refurbishment throughout, with an extension added to the ground level to provide a spacious, custom-built manufacturing area. Although the Building Code only required a Type 2 fire alarm system for the building, we naturally couldn't settle for that! A sprinkler system has been installed, in addition to a full analogue addressable smoke detection system, supported by a Pertronic F100A analogue addressable fire alarm control panel (what else?).

The fire alarm system is also interfaced to the security system. In the mornings, when the security system is switched off, this action also isolates all smoke detectors in the building, to prevent nuisance alarms while manufacturing processes are operating. In the evenings, when the security system is activated, this in turn restores the smoke detectors to normal, providing full detection coverage when the building is unoccupied (this arrangement is allowable as the smoke detection system is an enhancement beyond the base requirement of a Type 2 fire alarm system).

The new facility was officially opened on 29th September by the Minister of Labour and Associate Minister of Economic Development, Mr. Paul Swain (who is also the MP for the area) and by the Mayor of Lower Hutt, Mr. John Terris. Over 150 invited guests also attended the opening.

Mr. Terris welcomed the rejuvenation of a large commercial property and commented on the economic growth Pertronic Industries was contributing towards in the Hutt area. Mr. Swain emphasised that an important part of the country's future was in this type of specialised electronics development and manufacture, and warmly congratulated the company on its growth and achievements to date.



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