

# PALMER'S TECHNICAL POINTERS

New this edition is a column from the busy desk of MPGD technical manager Eric Palmer. This will pick up on coming issues, Standards and regulations affecting the industry.

Roofers need to be aware of two new Codes of Practice, gasfitters about two new Standards and for plumbers there's news about three Standards.

- **New code of practice for torch-on membranes** – Torch-on membranes, an alternative solution to the Department of Building and Housing's weathertightness Acceptable Solution E2/AS1, have a new generic code of practice (COP). The 'Code of Practice for Torch-on Membrane Systems for Roofs and Decks' has been developed by a group of supply and installation companies, which have worked together since 1994 to draft a generic code focusing on double-layered or multiple-layered torch-on membrane systems for New Zealand conditions. DBH's newsletter *Codewords* says it 'provides valuable guidance to the construction industry on the group's recommended best practice for the selection and weathertight detailing of torch-on cladding to roofs, decks and gutters'. See article on page 18. The full COP can be downloaded at [www.membrane.org.nz](http://www.membrane.org.nz).
- **New code of practice for metal roofing** – Version 2 of the COP for NZ metal roof and wall cladding design and installation is currently before the DBH for possible classification as a Guidance Document for the NZ Building Code. This is a review by the NZ Metal Roofing Manufacturers Inc (NZMRM) of its previous design and installation handbook. Version 2, also known as V2, better explains some areas, amendments have been made in light of changes to Standards and other legislation, it clarifies the roofing industry's position in relation to E2/AS1 (which is only one non-mandatory means of compliance with the Building Code) and also learns from the past, listens to the present and looks to the future, the NZMRM says. V2 can be downloaded at [www.metalroofing.org.nz](http://www.metalroofing.org.nz), where you can also register to be notified of updates.

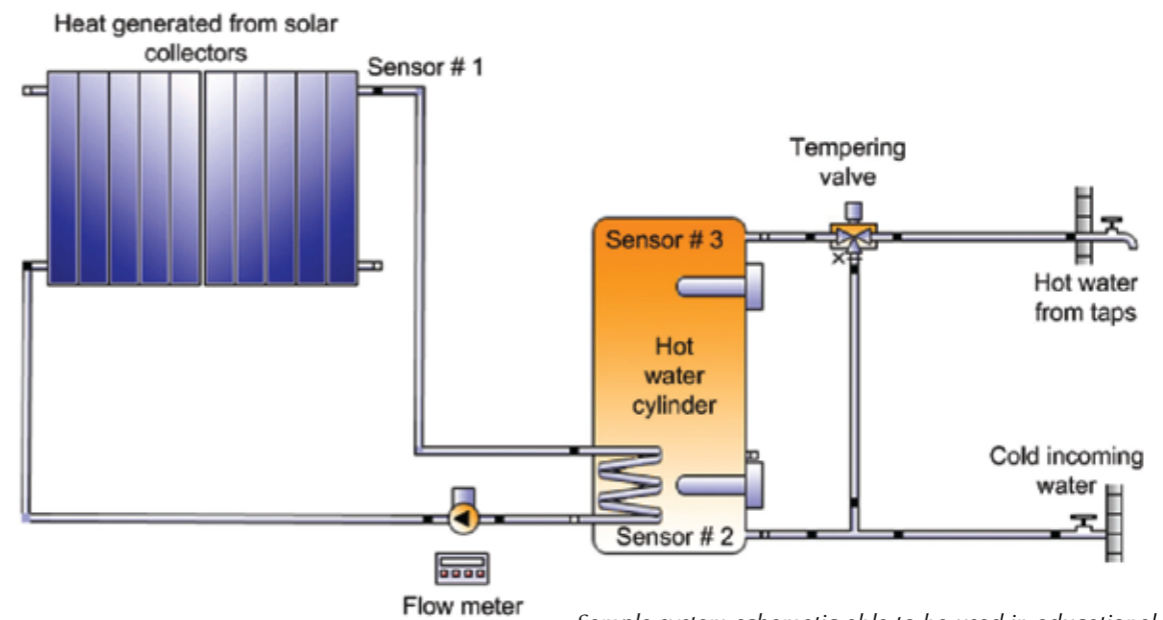


- **New LPG handling standard** – Standards NZ has published a revised Standard for the handling of liquid petroleum gas. *The storage and handling of LP Gas, AS/NZS 1596:2008* updates and replaces the 2002 version. This Standard has been significantly revised to address new technologies, storage methods, and the management of emergencies. It includes updated procedures to reflect industry best practice. Major changes have been made to the section covering storage and usage, to make the quantities more realistic and address concerns from regulatory authorities and fire services. All general requirements, such as the use of firewalls and vapour barriers to achieve separation distances, have been consolidated in a new section. The updated Standard provides those involved with storing and handling LPG with the relevant, user-friendly information they need to apply safe handling practices at all times.
- **NZS 5262 Gas Appliance Safety Standard to be updated** – as it needs to be amended to fit into the proposed new legislation. A scoping meeting was held recently and we'll keep you up-to-date on progress.
- **New standard for polyethylene (PE) pipe fittings (AS/NZS 4129:2008 Fittings for PE Pipes for Pressure Applications)** – specifies requirements for fittings to be used with PE pipe manufactured in accordance with AS/NZS 4130 or AS 2698.2 or POP-009. This Standard is applicable to fittings manufactured for the conveyance of water, fuel gas, and other fluids including compressed air and supersedes AS/NZS 4129:2000.
- **New Standard for fire hydrant systems** – NZS 4510:2008 supersedes NZS 4510:1998 and sets out the minimum technical and performance requirements for fire hydrant systems installed in buildings.
- **New National Environmental Standard for On-site Wastewater Systems** – is still in the consultation process. ■

## SOLAR UPSKILL #15

### DATA LOGGING PERFORMANCE OF THE SYSTEM

Recording information for financial, sustainable practice or for simple fault diagnosis are some of the handy reasons for installing a data logger on to a solar water heating system, says our solar expert Ian Sumner, technical director of Energy Conscious Design Ltd and EcoSolar.



Sample system schematic able to be used in educational displays.

The main three reasons for installing data logging on to a solar water heating system are:

1. To support a financial decision to install a system, recording energy savings and energy usage.
2. Education – for instance a school may want to provide education on sustainable practices, displaying to pupils the systems installed, why they were installed and how they operate and save energy.
3. Fault diagnosis – as more and more systems are installed, especially as they become more and more costly and complex, it is important that fault diagnosis and remote interrogation are installed as good practice.

Several levels of data logging are available ranging from simplistic solutions to comprehensive and experimental data logging: a solar controller with integral data logging facility; a solar controller with integral data logging facility connected to a computer; or logging on to a local area network (LAN). Ian explores the installation issues associated with these in the full article that is available on the Master Plumbers website within the Energy Efficiency Interest Group.

Ian's latest Solar Upskill follows his look at hydraulic design issues for SWH systems (#14), published in the last *Plumbers' Journal*.

For more detailed information, please request a free copy of the latest *EcoSolar Solar Hot Water Installation Guide* or send any questions or requests for topics to be covered to Ian Sumner. Email [ian@ecosolar.co.nz](mailto:ian@ecosolar.co.nz). Phone 0800 ECOSOLAR (0800 326 76527). ■



Part 15 of Ian Sumner's Solar Upskill series is available for download in full from the Energy Efficiency Interest Group at [www.masterplumbers.org.nz](http://www.masterplumbers.org.nz).

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