



# ELECTRONIC BLUEPRINT UPDATE

## CPD for Architects, Engineers & Builders

### Dear Building Professional

Thank you for receiving the ELECTRONIC BLUEPRINT Update.

Bi-monthly issues are emailed (six per year) to keep architects, engineers and builders informed of:

- Changes to the Building Code of Australia and relevant Australian Standards
- Commentary on the changes and other important design considerations
- Appropriate **specifications and drawing details** to comply with those standards
- A range of building products that meet the particular requirements.

Should you require more information of any of the matters raised herein, please refer to our website [www.electronicblueprint.com.au](http://www.electronicblueprint.com.au) or contact us by email [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au) .

Rod Johnston – Principal Author

Karen Bloomfield – Chief Executive Officer

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  - Resilient Floor Coverings
  - Carpets & Soft Furnishings

#### Individual Sustainability Distance Learning Modules for CPD point accrual

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- Air Quality & Toxicity

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Product Directory enables specifiers and purchasers to quickly access building products complying with the specification requirements.

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New, Superseded and amended Australian Standards.

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Sustainable Slip Resistance - Global Safe Technologies (Australia) Pty Ltd

We are conscious that professionals receive large quantities of technical information.

To cease receiving these newsletters (six per year) please email us at [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au) .

Email addresses are never sold nor used for reasons other than **ELECTRONIC BLUEPRINT** notification and information.

# Architects – Making Homes Safer for the Elderly

## Background

The general improvements in health and treatment of disease enable us to live longer in our own homes. However, these homes still present considerable risk of injury to the frail and elderly. The Victorian Government, Royal Australian Institute of Architects and Archicentre provide a guide, "A housing profile of Victoria's older population", which surveys these risks and provides useful design information on minimizing them.

## Summary of the Faults

The guide provides a survey of faults detected (as a percentage of the houses inspected) by local government area, and the Victoria-wide results are tabulated below. It can be seen that the most common faults relate to trip and fall hazards, and the guide provides practical solutions for minimizing these hazards. The guide states, "Serious consideration should be given to the development of a standard and associated regulation to ensure that only slip-resistant baths and shower bases are installed in Victorian homes".



Nature of Fault	Percentage of inspected houses with the fault
Trip and fall	22 %
Electrical	18 %
Cracking	13 %
Roofs	11 %
Timber rot	10 %
Stumps	9 %
Mould	8 %
Drains	6 %
Health hazard	4 %
Security	3 %
Fire hazard	2 %
Illegal building	2 %

## Slip resistance of tiles, pavers, flags, stone, concrete, timber, vinyl etc.

There are many design applications where Architects must give close consideration to the possibility of slips and falls occurring. The Building Code of Australia (BCA) does not give guidance, although the following standards are useful.

- AS/NZS 4586:2004 *Slip resistance classification of new pedestrian surface materials* permits the classification of new pedestrian surfaces according to frictional characteristics by a number of alternative methods.
- AS/NZS 4663:2004 *Slip resistance measurement of existing pedestrian surfaces* permits the determination of frictional characteristics, using the Wet Pendulum test method or the Dry Floor Friction test method, of existing pedestrian surfaces that may be subject to wear, contamination, damage, poor construction or other environmental effects peculiar to the application.
- HB 197:1999 *An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials* provides guidance on the background to the standards and on the selection of appropriate slip resistance for various applications.

Each document applies to a variety of pedestrian surfaces, such as tiles, pavers, flags, stone, concrete, timber, vinyl and cork. The standards do not apply to carpet or some highly profiled surfaces.

There are a number of significant issues, which affect the use and application of these standards.

- Number of test methods

The Standards provide details of the four test methods that are in common use, viz.

Wet Pendulum	Most common – wet applications
Dry Floor Friction Tester	Dry applications only
Wet Barefoot Ramp	Common for imported tiles in wet applications
Oil-wet Ramp	Common for many imported tiles

- **Classifications**  
AS/NZS 4586 provides a means of classifying the slip resistance of new surface materials (before wear and contamination) to permit logical specification by designers.
- **Slider Material**  
There are two rubber materials in common use. AS/NZS 4586 and AS/NZS 4663 specify under which circumstances each can be used. The Electronic Blueprint gives guidance on the effects of each slider material on the measured slip resistance.
- **Slider Preparation**  
The preparation of rubber sliders affects the test results. Alternative preparations are under consideration for incorporation into AS/NZS 4586 and AS/NZS 4663.
- **Corrections**  
The Electronic Blueprint gives guidance on the effects of lubrication (by water or other lubricant), temperature and slope of the surface.

For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages, please contact **ELECTRONIC BLUEPRINT** at [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au)

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## Engineers – Concrete slabs to accommodate masonry walls and tiled floors

Structural Engineers are required to design and specify suspended concrete slabs and concrete slab-on-ground construction that is both structurally adequate and serviceable, including:

- Limiting deflections so supported walls (particularly masonry) are not subject to cracking;
- Limiting cracks that disrupt floor coverings such as tiles.

### Insulation of tiled patio slabs functioning as a roof to rooms underneath



Construction of this type is covered by AS 3958.1 "Guide to the installation of ceramic tiles" Clause 3.3.2.1 for "Exterior floors, decks and roofs". This specifies ceramic tiles, cement-based adhesive, waterproof membrane and concrete (with a statement that "Slab should be sloped for complete drainage). The clause covers two cases. One is without a membrane, but with positive drainage below the slab. The other is for a suspended slab with a maximum deflection of 1 in 360 [and with a membrane]. However, there appears to be a problem with this specification - In most cases, the top surface of most suspended slabs will be constructed level, and the falls will be taken up in a screed immediately under the tiles. If the membrane is above the screed it will drain, but if it is below the screed (on the level slab) it will not drain. This may not be a problem, provided large quantities of moisture are not being accumulated. The fact that the standard does not address this question gives cause for concern.

AS 3958.1 Clause 3.3.2.1 does not address the inclusion of insulation within the surface to control the heat flow to and from a room below. Nor do any of the other diagrams (including Figure 1.1) address the question of insulation. In contrast, Figure 1.1 of AS 3958.2 "Guide to the selection of a ceramic tiling system" does address this question, showing an insulation layer sandwiched between two impermeable layers. Clause 5.6.2 provides some limited specification. When an insulation layer is incorporated within a tiled floor system, it must have sufficient compressive strength and rigidity to prevent movement and subsequent cracking of the tiles or grout. The properties of extruded polystyrene board (xps) are shown in AS 1366.4. As a starting point, it is suggested that the highest strength extruded polystyrene board (Class IV) be specified (240 kPa at 10% compressive strain). A normal uniform floor load of 2.4 kPa would lead to 0.1% strain, which represents 0.1 mm of movement in 100 mm thickness of board. Such a small movement is unlikely to cause cracking. Manufacturers' recommendations must be sought.

When an insulation layer is incorporated within a tiled floor system, it must have sufficient compressive strength and rigidity to prevent movement and subsequent cracking of the tiles or grout. The properties of extruded polystyrene board are shown in AS 1366.3. As a starting point, it is suggested that one of the higher strength boards e.g. Class VH or H be specified (165 kPa or 135 kPa at 10% compressive strain). Although these strengths are very high compared to the actual load likely to be applied, so is the 10% strain. 0.5% strain in 100 mm of board represents 0.5 mm of movement (still enough to cause a crack) and would be caused by 8.2 or 6.7 kPa respectively. It is strongly recommended that the manufacturer's recommendations be sought.

## Suspended Slab Deflection

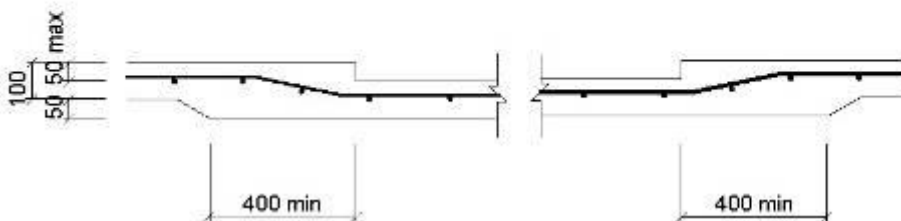
- If masonry walls are to be constructed over suspended concrete slabs, the deflection is limited by AS 3600 Table 2.4.2 to span/800 for spans and cantilever length/400.
- If tiles are fixed to floors or walls that are particularly flexible, they will become loose and drummy. Ensure that all substrates (e.g. concrete slabs, timber joists, flooring, studs and wall cladding) have sufficient stiffness to avoid excessive deflection. In the absence of manufactures' recommendations to the contrary, the same criteria as recommended in AS 3600 Table 2.4.2 for masonry walls would be reasonable. [Return to top](#)

## Substrate Curing

- AS 2870 Clause 5.3.7 has provisions for the detailing of slabs to minimise shrinkage in tiled areas. Tiles should not be fixed to concrete slabs until the concrete has cured for at least 6 weeks. If the slab does not include additional reinforcement to inhibit shrinkage, the tiling should be delayed at least 12 weeks.
- Tiles should not be fixed to concrete masonry until it has cured for at least 28 days.
- For clay masonry substrates, a sand-cement render coat should be applied and allowed to cure for at least seven days before tiles are applied.

## Recesses in Concrete Slabs

In order to achieve falls in tiled floors and to reduce the step between tiled and untiled rooms, it is preferable to recess the concrete slabs. Particular attention is required to ensure that the correct cover to steel reinforcement is achieved. The effect of reduced structural slab thickness, to account for the recess, should also be considered when assessing the slabs for both strength and deflection.



Shallow Recesses in Slabs

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For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages, please contact **ELECTRONIC BLUEPRINT** at [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au)

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## Builders – Tiling Details

The following Australian Standards are relevant to the design and construction of floor and wall tiling.

AS 3958.1 Ceramic tiles - Guide to the installation of ceramic tiles

AS 3958.2 Ceramic tiles - Guide to the selection of a ceramic tiling system

AS/NZS 4586 Slip resistance classification of new pedestrian surface materials

AS/NZS 4663 Slip resistance measurement of existing pedestrian surfaces

AS 3740 Waterproofing of wet areas within residential buildings

AS 2870 Residential Slab and footings - Construction

AS 4992.1 Ceramic Tiles: Grouts and adhesives – Terms, definitions and specifications for adhesives

AS 4992.2 Ceramic Tiles: Grouts and adhesives – Test methods for adhesives (ISO 13007-2:2005, MOD)

AS 4992.3 Ceramic Tiles: Products for installation – Grouts: Definitions and specifications

AS 4992.4 Ceramic Tiles: Products for installation – Grouts: Test methods

AS 2358 Adhesives - For fixing ceramic tiles

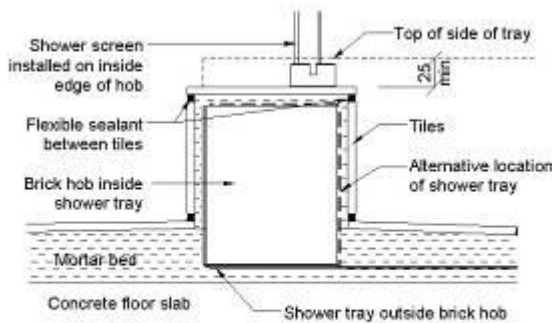
AS 3972 Portland and blended cements

AS 1672.1 Limes and Limestone - Limes for building

AS 2758.1 Aggregates and rock for engineering purposes - Concrete aggregates

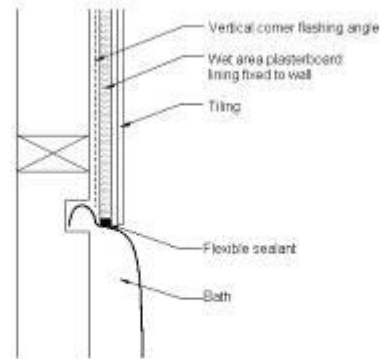
### Details

Builders are required to ensure that they meet the requirements of AS 3740 *Waterproofing of wet areas within residential buildings*. The following details are available from the Electronic Blueprint Website, and are available as “jpg” files or as editable “dxf” CAD files. Refer also to other sections of the Electronic Blueprint to details on other forms of construction.



Shower Hob Tiling Detail

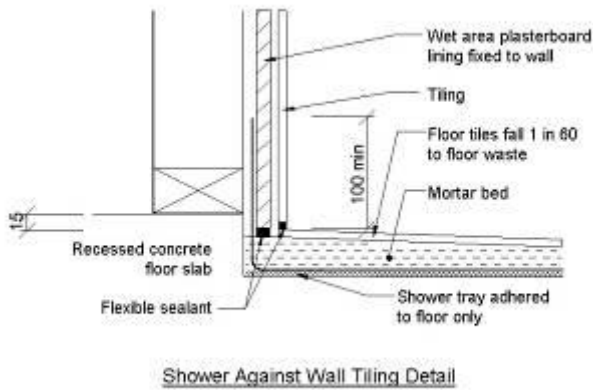
(c) 2008 Design Detail & Deliver Pty Ltd  
15\_003



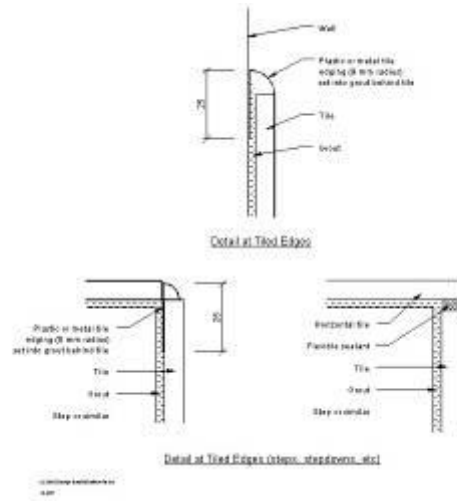
Bath Against Wall Tiling Detail

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### Recesses in Concrete Slabs

When recessing concrete floors to achieve falls in tiles and to reduce the step between tiled and untiled rooms, pay particular attention to achieving the required correct cover to steel reinforcement and to locating the recess accurately.

### Drumminess

If tiles are not fixed correctly, they may become “drummy” and eventually lift off. Before hand-over, each tile should be lightly tapped. Any change of resonance may indicate drumminess. Rolling a marble across the floor and observing the sound will rapidly check large areas of floor tiles.

For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages, please contact **ELECTRONIC BLUEPRINT** at [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au)

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## Product Directory - Supplier Table

Key:	
Supplier name	Hyperlink to Product Page for particular Supplier
EB Sections	Electronic Blueprint sections that Supplier products feature in
Spec Type:	<span style="background-color: #0000FF; color: white;"> </span> Electronic Blueprint Specification
	<span style="background-color: #008000; color: white;"> </span> Electronic Blueprint Sustainability Specification

Supplier	Product Details	EB SECTION(S)	SPEC TYPE
<a href="#">Abey Australia Pty Ltd</a>	Wall ties for all environments, including stainless steel cavity ties for use in Marine (R3) and Severe Marine (R4) environments	12	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Armacell Australia Pty Ltd</a>	Engineered foam for thermal and acoustic insulation solutions.	5,23	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Ausdrain</a>	Drainage cells for horizontal and vertical applications ; Geotextiles; Protection Boards; Underground rainwater storage & re-use; Stormwater infiltration & filtration; Retention tanks; Septic leach drainage.	2,4,5	<span style="background-color: #008000; color: white;"> </span>
<a href="#">Biolytix</a>	Wastewater Treatment Solutions	5	<span style="background-color: #008000; color: white;"> </span>
<a href="#">Breezeway Australia Pty Ltd</a>	Energy and cyclone rated louvre windows made from non-corrosive materials complying with AS 2047; Skylights manufactured in accordance with AS2485 and AS1288 and energy rated according to WERS Scheme; Solid timber loft ladders with a high load capacity of 160kg; insulated and dust retardant trap doors	6, 9	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Brunswick Sales</a>	Vertical control joint ties to AS 2699 Part 1. Available fully galvanised or grade 316 stainless steel.	12	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">C&amp;M Brick</a>	Retaining wall systems to meet the requirements of AS 4678; Water-repellent masonry blocks	4, 12, 27	<span style="background-color: #008000; color: white;"> </span>
<a href="#">Concrete Colour Systems</a>	Pigments and systems for resurfacing, colouring and stencilling existing and new concrete surfaces	3	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Connolly Key Joint Pty Ltd</a>	Preformed concrete control joints and ancillary products	3	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Cultured Stone</a>	Manufactured Stone Veneer Cladding	9	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">CVC Centravac</a>	Built -In Vacuum Systems	23	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Devi Heating Systems</a>	Underfloor and ceiling heating systems.	16	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Easy Living Home Elevators</a>	Home & commercial elevators, dumbwaiters and limited mobility lifts to AS 1735	23	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Electronic Blueprint</a>	Steel mullions for brickwork and blockwork to provide wind and earthquake resistance to the new AS/NZS 1170.2 and AS 1170.4. Resilient ties to comply with BCA Vol 1&2 for the separation of leaves of cavity walls to eliminate the transmission of impact sound	7, 12	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Edwards Solar Hot Water</a>	Solar Hot Water Systems	5	<span style="background-color: #008000; color: white;"> </span>
<a href="#">Endless Solar Corporation</a>	Solar Hot Water Systems	5	<span style="background-color: #008000; color: white;"> </span>
<a href="#">Elmich Australia</a>	Landscape Engineering Solutions	2,5,25,27	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Ensystex Australasia</a>	Termite barriers complying with the requirements of AS 3660.1 Non-toxic, in-ground or above-ground, termite colony elimination and protection system complying with AS3660.2.	3,8,12	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Erosion Control Systems</a>	Retaining wall systems up to and over 1500mm for both domestic and commercial applications in accordance with AS 4678 (Including Amendment 1)	4	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Exfoliators</a>	Premium Perlite, Premium Vermiculite and Passive Fire Protection products.	19	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Expella Pty Ltd</a>	Ventilation solutions	23	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Fibercon</a>	Steel fibre reinforcement used for enhancing toughness and impact resistance of concrete	3, 27	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Foamular Insulation</a>	Extruded Polystyrene Insulation	14	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Ford Timbers Pty Ltd</a>	Hardwoods with enhanced performance.	8,9,10,26,28	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Galvanisers Association</a>	GAA is an industry Association established in 1963 to represent galvanizing companies and to provide technical consulting services on a not for profit basis.	7	<span style="background-color: #0000FF; color: white;"> </span>
<a href="#">Global Safe Technologies</a>	Anti Slip and Non Slip Floor Surface Safety Solutions Provider	15,19, 20,29	<span style="background-color: #0000FF; color: white;"> </span>

<a href="#">Golden Cypress Timber Sales</a>	Golden Cypress timber, sustainably grown in Victoria	9	
<a href="#">Hanson Building Products</a>	Retaining wall systems to meet the requirements of AS 4678; Water-repellent masonry blocks; Concrete block systems, including insulated blocks and acoustic block systems, to meet the BCA requirements; Segmental pavers for roadways, driveways, gardens and pool surrounds to meet AS 3727 Residential pavements Energy Efficient Masonry Housing Systems	4,12	
<a href="#">Helifix (Australia) Pty Ltd</a>	Products to repair cracked or damaged brickwork	12	
<a href="#">Higgins Insulation</a>	Higgins Insulation manufacture high quality, high performance, safe, natural, environmentally friendly insulation products	14	
<a href="#">Joistrip</a>	Extruded Rubber Flashings	8	
<a href="#">Make It Mudbricks</a>	Traditional puddle mixed mud bricks suitable for use in load bearing or post and beam style homes.	12	
<a href="#">Master Builders Association</a>	Construction area safety signage.	1	
<a href="#">Nanovations</a>	Specialty Paints	19	
<a href="#">New Water</a>	Complete Underhouse Rainwater Storage System	5	
<a href="#">Nuplex Constructions</a>	Nuplex Construction Products manufacture and market floor coatings and sealers complying with AS/NZS 2310, AS/NZS 2311 & AS/NZS 2312.	19	
<a href="#">Nylex Water Solutions</a>	Rainwater Tanks	5	
<a href="#">Origen Australia</a>	EnduroShield™ is a revolutionary permanent non-stick, invisible coating for glass, ceramic and tile surfaces.	19	
<a href="#">Pointsbuild</a>	Basic legal and financial training for CPD points	0	
<a href="#">Polyslab</a>	Permanent bases and Safe trays for Hot Water Systems, Plant & Machinery	5,23	
<a href="#">Protect-A-Window Australia</a>	Protective window, tile and tub coatings	0,19	
<a href="#">Raven Product Pty Ltd</a>	Sealing Systems, for doors and windows, which are frequently multi-purpose, sealing against a combination of intrusions and leakages including sound (AS 1191), fire (intumescent) & smoke (to AS 1530.4 & AS/NZS 1905.1), rain, draughts, dust, embers, light insects, vermin, and energy inc. heating & air conditioning (to AS 4420.4, AS 4420.5, AS 2047, AS 1939, AS 1530.7)..	6, 18	
<a href="#">Resene Paints (Aust) Ltd</a>	Environmentally friendly (low VOC) paints complying to APAS requirements and Electronic Blueprint Sustainability Specification.	19	
<a href="#">Robert Bosch (Australia) Pty. Ltd.</a>	Commercial and domestic continuous flow gas hot water systems- Hydropower, Pilot & Electronic ignition, available in natural gas & LPG. All gas hot water systems compliant with AS 4552.	5	
<a href="#">RootBarrier</a>	Moisture and tree root shields	3	
<a href="#">Silvan Australia Pty Ltd</a>	Innovative rainwater utilisation systems	5	
<a href="#">Skydome Skylight Systems</a>	Tubular skylights, roof windows, domed skylights, overhead glazing, mechanical roof ventilation	6, 23	
<a href="#">SmartFlo Gutters</a>	Enclosed self-shedding gutter systems.	11	
<a href="#">Stramit Building Products</a>	Cold-rolled galvanised steel products complying with AS 4600 Permanent formwork of cold-rolled steel complying with AS 1538 and AS 1397 Sheet steel metal roof and wall cladding complying with AS 1397 Metal rainwater goods complying with AS 2179.1	3, 7, 8, 10, 11	
<a href="#">Sunplus CPC Solar</a>	Commercial and domestic evacuated tube solar hot water system complying with AS 2712 Solar and heat pump water heaters – Design and construction.	5	
<a href="#">Timbercrete</a>	Unique Brick Suppliers	4	

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## Changes to Australian Standards

New Standard	Superseded Standard
AS 7240.11-2008 Fire detection and alarm systems - Manual call points (ISO 7240-11:2005, MOD)	
AS/NZS 61534.1:2008 Powertrack systems - General requirements (IEC 61534-1, Ed. 1 (2003) MOD)	
<b>Amended Standards</b>	
AS 1288-2006 Glass in buildings - Selection and installation	
AS 1604.1-2005 Specification for preservative treatment - Sawn and round timber	
AS/NZS 1604.2:2004 Specification for preservative treatment - Reconstituted wood-based products	
AS/NZS 1604.3:2004 Specification for preservative treatment - Plywood	
AS/NZS 1604.4:2004 Specification for preservative treatment - Laminated veneer lumber (LVL)	
AS/NZS 1604.5:2005 Specification for preservative treatment - Glued laminated timber products	
AS 5605-2007 Guide to the safe use of preservative-treated timber	

These changes are reflected in the updated version of the **ELECTRONIC BLUEPRINT**, which will be available at [www.electronicblueprint.com.au](http://www.electronicblueprint.com.au). For more information on changes to Australian Standards, visit SAI Global at [www.standards.com.au](http://www.standards.com.au)

## Distance Learning Training Program

The **ELECTRONIC BLUEPRINT** Distance Learning Packages allow Architects, Engineers and Builders to upgrade their Continuing Professional Development and obtain the required CPD points without having to attend formal lectures.

Each presentation is a Breeze style presentation on CD, complete with full text, audio voice-over and tutoring opportunity.

More information including registration forms and further course information may be obtained from the website at; <http://www.electronicblueprint.com.au/training.html>

### Non-structured Distance Learning

Architects, Engineers and Builders may select Distance Learning Packages from a comprehensive list to suit their particular needs. The training is carried out at the convenience of the participant, an assignment is submitted and assessed, the Certificate of Completion is issued and CPD points assigned. [More...](#)

### Structured Distance Learning Program

Every two months, a coordinated Distance Learning Package consisting of several related topics will be offered. Each package will include an Electronic Update, which summarises the content, and several voiced-over presentations

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<b>Summary of Structured Distance Learning Program</b>	
Module 1	Site establishment & preliminaries
Module 2	Masonry
Module 3	Sustainability (Energy Efficiency) Windows, doors & glazing Insulation
Module 4	Earthworks & site drainage
Module 5	Retaining walls Fencing Landscaping
Module 6	Slip Resistance Floor & wall tiling Resilient floor coverings Carpets & soft furnishings
Module 7	Sustainability (Water Conservation) Drainage & plumbing Roof cladding Roof plumbing
Module 8	Paving Public kerbs, gutters, footpaths etc
Module 9	Sustainability (Air quality & toxicity) Painting & coatings Cleaning
Module 10	Concrete
Module 11	Loading Standards Structural steelwork Wall, roof & floor framing Carpentry, Joinery, Cladding & Floor Ceiling & wall lining
Module 12	Electrical installation Mechanical ventilation & services Kitchen Vehicular doors Window & door shutters Metalwork & balustrades
<p><b>Complimentary Packages</b></p> <p>Site establishment &amp; preliminaries - This demonstration module will be made available free-of-charge to Architects, Engineers or Builders interested in participating in the program.</p> <p>BCA – A module on the amendments to the BCA Volumes 1 &amp; 2 which are published 1<sup>st</sup> May each year will be made available free-of-charge with the May module of each year</p>	

#### Further Assistance

For more help on any subject, participants may contact the tutor by email. The tutor will respond within 48 hours. On completion of the presentation, participants may complete a short assignment and email it to the tutor. The purpose of the assignment is to provide focus for the presentation, and to enable participants to apply the information to practical situations. The tutor will assess it, provide comments and forward a certificate by return email.

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# Sustainability Distance Learning for Continued Professional Development

Due to demand, we are extending our offer. For \$175 + GST (each), each presentation is a Breeze style presentation on CD, complete with full text, audio voice-over and tutoring opportunity.

**Energy Efficiency** – dealing with issues related to the conservation of energy and reduction in greenhouse gas emissions

**Water Conservation** – dealing with issues of capturing rainwater and conserving water use, together with maintaining water quality

**Air Quality** – dealing with minimizing the release of volatile organic compounds from building products, to maintain a satisfactory air quality and avoid “sick building syndrome”

[Place order](#)

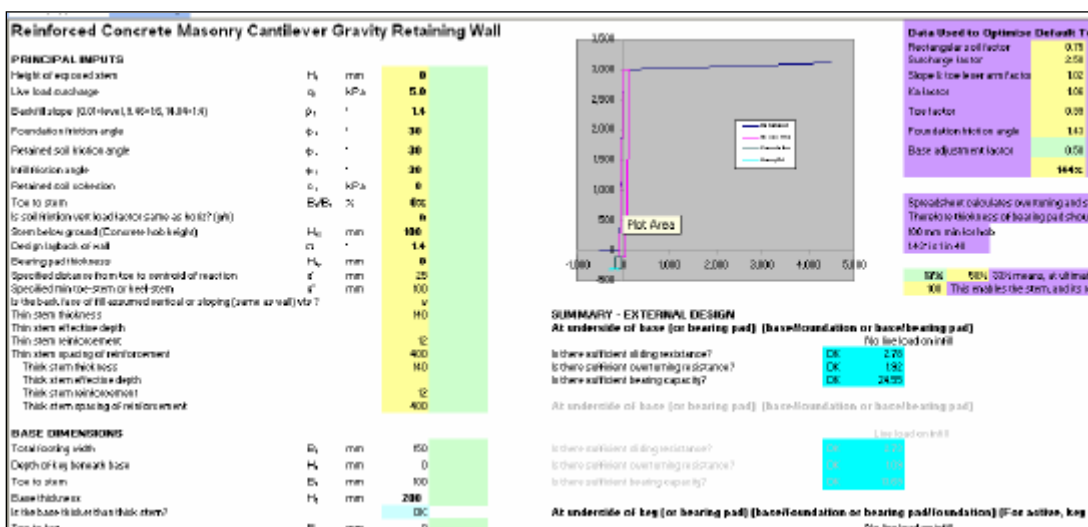


## Design Software Package

### Design of Retaining Walls to AS 4678 Details - Design Software Package

AS 4678 introduced into Australia the limit state design methodology for earth retaining structures, thus enabling safe and economic designs that takes full account of variations in loads, soil properties and materials properties. This Microsoft Excel spreadsheet enables civil and structural engineers to design a range of cantilever retaining walls, segmental reinforced soils systems and segmental gravity retaining walls to AS 4678 Earth retaining structures.

**Cost:** \$790 + GST    **Format:** Excel    [Place order](#)



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## Global Safe Technologies (Australia) Pty Ltd

*Tailored Floor Safety Risk Management, not just Non Slip Floors!*

*Home Safe, Work Safe, GLOBAL SAFE©*

### Sustainable Slip Resistance

Why sustainable floor safety is so important for buildings? Architects, specifiers and builders of every building project come across this issue. Relevant slip resistance standards give good guide for the specification of surfaces, but it is also important to ensure that the specified surface will remain slip resistant for an acceptable period of time, not just immediately after the project completion.

While the surface at its original condition passes the relevant standard requirements it can wear off very quickly due to heavy traffic, regular harsh mechanical cleaning or become ineffective due to lack of proper cleaning.

So, what can an architect or specifier of a surface can do to ensure that the specified surface slip resistive quality will last? While the answer is not simple, there is help available. Specify materials and surfaces which have undergone accelerated wear test, This test is more and more often asked for and the result can assist to provide a reasonable guide how long the surface is expected to last.

While there are a couple of companies who provide this test, Carl Strautins from Slip Check Pty Ltd is one of the pioneer of this testing and has presented several papers on scientific conferences and often asked by manufacturers and suppliers for accelerated wear test of their product. One of his papers, **Sustainable Slip Resistance: An Opportunity for Innovation** is available on in the Articles section of our website

[http://www.globalsafe.com.au/slip\\_fall\\_prevention\\_australia.php](http://www.globalsafe.com.au/slip_fall_prevention_australia.php)

This article is an absolute must for architects, designers and product specifiers and highly recommended to anyone who has an interest in sustainability of pedestrian surfaces, including cleaning companies. It goes into more details and explains the history, the various test methods employed and results obtained. It also mentions view of various international codes and standards and explains the "Plan-Do-Check-Act" methodology implemented in Quality Management Systems. This test is proposed to be included in the new upcoming Australian and New Zealand Slip Resistance standards.

For further information about accelerated wear testing please contact Carl Strautins from Slip Check Pty Ltd on +61 (0)416 224 460 or via email [carl.strautins@gmail.com](mailto:carl.strautins@gmail.com)

For further information on the Global Safe Technologies Australia's sustainable non slip solutions range of products call us on 1300 668 620 or visit our website [www.globalsafe.com.au/index.php#solution](http://www.globalsafe.com.au/index.php#solution)

If you have any specific concern about your floor surface and would like to contact an Authorised Dealer in your area visit <http://www.globalsafe.com.au/contactus.php>.

An Authorised Dealer will contact and arrange an appointment with you will visit your site to assess the floor safety risk of your specific situation and will provide you with a complimentary FREE Floor Safety Inspection Report.

## ENVIROSPEC News



**ENVIROSPEC**  
THE ENVIRONMENTAL DIVISION OF ELECTRONIC BLUEPRINT

[ENVIROSPEC](#) is committed to sustainable building construction and operation. We provide assessments and specifications for sustainable building products, determined in the context of the Building Regulations and the Protocol: Sustainability Specifications, Criteria and Compliance for Australian Building Products ([Download Protocol](#)).

ENVIROSPEC and CMS are proud to present the 2008 ESSENTIAL **FREE** SEMINAR SERIES:

### MARKETING IN THE GREEN DECADE

- Sustainability
- CodeMark
- Electronic Specifications

Who: Senior Marketing Managers

What: Building Products

Why: In the green decade our building practices will change dramatically and be dictated by:

- More regulation
- Tighter sustainability stringency
- Demand for fast access to accurate technically sound product information.

This workshop brings two of the leading building industry professionals together. Rod Johnston, (Chairman of the Electronic Blueprint and engineering representative on the ABCB Building Codes Committee), will identify sustainability features of many building products and how to exploit this through CodeMark and electronic specifications.

Herve Michoux (Managing Director, Global-Mark) will address how smart product suppliers are taking up the Australian Building Codes Board CodeMark scheme to ensure that their products are specified as complying with the Building Code of Australia.

Current and proposed changes to the Building Code of Australia, a global move towards sustainability and the advent of internet based product specifications have converged to offer exciting marketing techniques for the modern marketing manager.

This year we will bring the seminar to Sydney, Brisbane and, for the first time, Melbourne. Dates will be advertised on the website shortly, however, receive your personal invitation by registering your interest (name & state) at [info@electronicblueprint.com.au](mailto:info@electronicblueprint.com.au). Number of attendees is limited by venue size.

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