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The [ELECTRONIC BLUEPRINT](#) is a series of building industry design and training publications, including an editable electronic manual for the design and specification of residential construction, provided free-of-charge to architects, consulting engineers and builders. They are encouraged to copy the drawings and specifications into their own contract documents, thus affording building product suppliers a unique opportunity to showcase their products. Click here to view www.electronicblueprint.com.au

October 2005 Bi-Monthly Electronic Update

Welcome to the October **ELECTRONIC BLUEPRINT** Bi-monthly Electronic Update, providing Architects, Engineers and Builders with up-to-date information about changes in the building industry.

- **Feature Articles**

- [Architects](#) - **What is happening to Product Certification?**
- [Engineers](#) - **What is happening to the Retaining Wall design standard?**
- [Builders](#) - **What is happening to Australian Standards for Residential Pavements?**

- **Changes to Australian Standards**

This is a list of current [Changes to Australian Standards](#) affecting building construction.

- **Forum**

The [Forum](#) provides an opportunity for Architects, Engineers and Builders to raise questions and voice comment on technical matters. **ELECTRONIC BLUEPRINT** will forward comments to the relevant Technical Committees of Standards Australia for consideration.

- **Distance Learning Packages**

The **ELECTRONIC BLUEPRINT** [Distance Learning Packages](#) provide Architects, Engineers and Builders with the opportunity to upgrade their Continuing Professional Development and obtain the required CPD points.

- **Product Directory**

The [Product Directory](#) enables specifiers and purchasers to quickly access a list of building products that comply with the specific requirements of the **ELECTRONIC BLUEPRINT**.

- **ELECTRONIC BLUEPRINT Section Update (See Attachements)**

In this issue:

A complete & EDITABLE **UPDATE** of **ELECTRONIC BLUEPRINT Section 4 - Retaining Walls**, with all relevant modifications to specifications, supplied as a Microsoft Word document for direct addition to your existing specifications and files. INCLUDED AS AN ATTACHEMENT.

We hope you find this to be a useful and informative service and welcome your feedback.

Rod Johnston
Principal Author

Karen Bloomfield
Specification Manager

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Architects - What is happening to Product Certification?

Complex changes to Building Regulations and Australian Standards have led to a situation where Architects, Inspectors, Local Authorities and Private Certifying Authorities can no longer be confident that particular building products are capable of achieving the performance specified in the BCA (Building Code of Australia).

One response has been the introduction of the CodeMark Scheme by the ABCB (Australian Building Codes Board). The scheme involves the accreditation of Third Party Certifiers to issue Certificates of Conformity for the suitability of building products in specified applications. The accreditation is the responsibility of JAS-ANZ (Joint Accreditation System of Australia and New Zealand).

CodeMark certification requires the holder to have “effective control” over the manufacture, testing, packaging, branding, delivery, installation and commissioning of the particular products. Whilst most of these may be achieved by well managed companies operating with effective quality assurance systems, the installation and commissioning aspects offer a particular challenge to manufacturers and suppliers.

ELECTRONIC BLUEPRINT works closely with CMS, Quasar Management Services, Mahaffey Associates and Global-Mark to provide a comprehensive service of product development, assessment, specification, testing and certification, aimed at ensuring that the most appropriate building products are correctly documented and available to the market.

Architects and designers should ensure that products are correctly specified and detailed to reflect the particular requirements. Guidance is available on the **ELECTRONIC BLUEPRINT** web site or the complimentary CD circulated regularly. These documents will reflect the CodeMark status where applicable.

Further details on the CodeMark system are available from the ABCB www.abcb.gov.au or from **ELECTRONIC BLUEPRINT**.

For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages (suitable for CPD points), please contact **ELECTRONIC BLUEPRINT** by email info@electronicblueprint.com.au.

Engineers - What is happening to the Retaining Wall design standard?

In 2002, Standards Australia published AS 4678 *Earth retaining structures*, to standardise the design and construction of various earth retaining structures, including cantilevered-stem gravity walls, reinforced soil structures, dry-stacked gravity walls, cantilevered post retaining walls, gabions, boulder walls and the like. The standard is relevant to retaining walls built of any of the common materials - concrete, masonry, steel or timber.

AS 4678 adopted limit state methods and partial factors on loads and materials for the design of retaining walls, thus providing a powerful tool that enables designers to consider the risks associated with each of the components and the level of control. As AS 4678 is used more widely, a few modifications are becoming necessary. These will be addressed in a revised version of AS 4678, expected during 2006.

- Experience indicates that the combination of AS4678 load factors and material factors, together with common analysis assumptions, leads to the “forward sliding” as the major design criterion, more often than “overturning”. This is a considerable shift in emphasis from previous design situations, and an issue that must be addressed.
- When first published, AS 4678 was aligned with load factors in the previous loading standards. With the publication of AS/NZS 1170 Parts 0 to 3, the load factors in AS 4678 should be reviewed and the standard calibrated to align with the new loading standards.
- The publication of AS 1170.4 *Earthquake actions in Australia* in 2006 will necessitate a review of AS 4678 Appendix I, and a change in the general approach of classifying retaining walls for earthquake risk. However, it is not anticipated that this will lead to major practical changes in design.

Various industry associations and suppliers have produced design manuals and computer software for the purposes of designing retaining walls to AS 4678. In particular, the Concrete Masonry Association of Australia has three design manuals MA51, MA52 and MA53, setting out an appropriate design methodology for reinforced masonry cantilever gravity walls, segmental concrete reinforced soil structures and segmental concrete gravity walls.

The **ELECTRONIC BLUEPRINT** provides a Distance Learning Package, explaining the use of AS 4678 and the various industry documents based on it. Over the next few months, additional training packages will be produced, dealing specifically with the issues highlighted in this Electronic Update.

For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages (suitable for CPD points), please contact **ELECTRONIC BLUEPRINT** by email info@electronicblueprint.com.au.

Builders - What is happening to Australian Standards for Residential Pavements?

AS 3727 *Residential pavements* is the relevant Australian Standard for the design and construction of concrete, asphalt, bituminous spray-seal and segmental pavements around houses, home units, apartments, cluster housing developments and the like.

The Standard sets out:

- The performance requirements of residential pavements, including
 - Cracking, Subsidence and Stepping
 - Chipping and Spalling
 - Slip Resistance
 - Ponding
- A means of classifying the site and determining the required depth of base and quality of surfacing.
- Construction requirements and details.

The site classification used for pavement design is the same as that used in AS 2870 *Residential slabs and footings*, and is based on the reactivity of the soil. AS 3727 provides simple standard designs for Class A, S, M and H sites, subject to “Light” and “Medium” traffic. This enables the rapid design of the base thickness from information commonly available on the structural engineer’s drawings. However, the approach should be treated with caution. If there has been soil fill placed on the site under the proposed pavement, then the classification should be treated as a “fill site” and the base thickness would need to be increased. The foundation should also be thoroughly compacted in this situation.

Currently AS 3727 is being reviewed and revised, and will be published as part of a suite of Standards covering all types of pavement, from residential pavement, through streets to commercial and industrial pavements.

For further information on this topic, or for relevant Continuing Professional Development Distance Learning Packages (suitable for CPD points), please contact **ELECTRONIC BLUEPRINT** by email info@electronicblueprint.com.au.

Changes to Australian Standards

New Standard	Superseded Standard
AS 1905.1 – 2005 Components for the protection of openings in fire resistant walls – Fire resistant doorsets	
AS 1905.2 – 2005 Components for the protection of openings in fire resistant walls – Fire resistant roller shutters	
AS 4072.1 – 2005 Components for the protection of openings in fire resistant separating elements – Service penetrations and control joints	
AS 1357.1 – 2004/Amdt 1 – 2005 Valves primarily for use in heated water systems – Protection valves	Draft Standard DR 04565
AS 1357.2 –2005 Valves primarily for use in heated water systems – Control valves	Draft Standard DR 05265 CP
ATS 5200.006 – 2005 Technical Specification for plumbing and drainage products – Reflux valves – Sewerage	ATS 5200.006 - 2004
ATS 5200.460 – 2005 Technical Specification for plumbing and drainage products – Grey water diversion device (GWDD)	ATS 5200.460 - 2004
AS 4786.2 – 2005 Timber flooring – Sanding and finishing	
ATS 5200.050 – 2005 Technical Specification for plumbing and drainage products – Prefabricated bathroom modules	
ATS 5200.051 – 2005 Technical Specification for plumbing and drainage products –Bidet douche seats	
ATS 5200.420 – 2005 Technical Specification for plumbing and drainage products – Tap-priming valves	

These changes are reflected in the next version of the **ELECTRONIC BLUEPRINT** , which will be distributed shortly. For more information on changes to Australian Standards, visit SAI Global at www.standards.com.au.

Forum

The Forum provides an opportunity for Architects, Engineers and Builders to raise questions and voice comment on technical matters. **ELECTRONIC BLUEPRINT** will circulate the comments electronically, and will, where appropriate, communicate them to the relevant Technical Committees of Standards Australia for consideration. Names will not be published unless requested by the writer. The comments and questions raised in this Forum are not necessarily those of the Electronic Blueprint or its staff. Where appropriate, Editor's comments have been added.

To add you comments and questions, [click here](#), and fill in the Contact Form. Space providing, your comments will be published in the next Bi-monthly Up-date.

What is the appropriate sealant for reinforced single leaf concrete blockwork houses?

Architect (Sydney)

Editor's Comment

Single leaf masonry must be correctly reinforced in accordance with AS 3700 Section 12, to avoid cracking and leakage. AS 3700-2001 Clause 12.7.2.1 states

- a) *Where a habitable room has an external wall of single-leaf masonry that is not sheltered from rain, the single-leaf masonry shall be protected on the outside face with a suitable weather-resistant coating in accordance with AS/NZS 2311....*

The following weather-resistant coating systems are deemed to be satisfactory:

- (a) *Three coats of 100% acrylic-based exterior quality paint. The first coat shall be worked thoroughly into the texture of the masonry by brush to ensure complete coverage of all voids and irregularities in accordance with AS/NZS 2311.*

A first coat of waterproof cement paint worked into the surface, over-coated with two coats of 100% acrylic based paint in accordance with AS/NZS 2311.

- (b) *If the masonry texture and jointing are to be obscured, the walls can be rendered with a proprietary cement-based high-build waterproof render, followed by an elastomeric acrylic polymer coating.*

Reliance on clear sealant to weather-proof single leaf masonry is not recommended. If a natural colour finish is required, the masonry should be protected by a verandah awning. Alternatively, it should be cavity or veneer construction, or should incorporate a waterproof membrane properly flashed to drain through weepholes.

Sealing and draining the fill behind retaining walls.

Geotechnical Engineer – Sydney

Comment (Paraphrased by Editor)

Engineering details for retaining walls, should incorporate the following:

- Details should show adequate thickness of a compacted clay layer, to provide surface sealing in accordance with AS 4678.
- There should be adequate surface drainage complying with AS 4678.
- Drainage pipes must be surrounded by adequate thickness of drainage gravel, suitably protected in a geosynthetic envelope. The use of a sock is often counterproductive.
- Engineer's drawings of the shape of the drainage fill to reflect practical limitations of how it is to be placed, e.g. reflect the angle of repose of the various layers.
- The correct terminology for the manufactured drainage medium is "geosynthetic", or more specifically, "geotextile".
- Geotextiles should not be hydrophobic, and must be capable of passing water freely.

Distance Learning Packages

The **ELECTRONIC BLUEPRINT** Distance Learning Packages provide Architects, Engineers and Builders with the opportunity to upgrade their Continuing Professional Development and obtain the required CPD points.

ELECTRONIC BLUEPRINT Distance Learning Courses are designed with currency as our main goal. What does this mean? It means that apart from ensuring our technical content is researched and written by leaders in the field, we aim to provide information that keeps you abreast of the industry changes as they are happening. This service is followed up with a Bi-monthly Electronic update and distribution of the **ELECTRONIC BLUEPRINT** CD.

The following pages outline the current list of Distance Learning Package Modules available through the **ELECTRONIC BLUEPRINT**.

Description of Type Codes

Module Type Codes are made up of Duration and Level of Complexity.

Modules are broken into three Levels of Complexity:

B signifies 'Building Modules' – Providing Details, Background, and Construction Inspections.

D signifies 'Design Modules' – These provide Specifications, Details and Concepts.

E signifies 'Engineering Modules' – These generally involve complex design calculations and engineering detailing.

Duration code is a ranking to account for the overall completion time including run time, research, assignment, tutor communication etc.

Use the following tables to work out individual module cost and CPD points gained, e.g. *Design & Construction of Earth Retaining Structures* with type code **D4** (Design / Duration Code 4) costs \$200 and gains 12 CPD points upon successful completion.

Module Costs

	B	D	E
2	\$100		
4		\$200	\$300
6		\$300	\$400

CPD Points Gained

	B	D	E
2	6 points		
4		12 points	16 points
6		18 points	24 points

ABOUT THE MODULES AND PACKAGES

Format

Each presentation is a Power Point presentation on CD, complete with audio facility.

Support facilities include the **ELECTRONIC BLUEPRINT** CD & web site, and email communication with your tutor.

CPD Point Accrual

These courses have been approved by the NSW Office of Fair Trading for the accrual of CPD points. CPD points have been based on the overall completion time for the module or package. In order to receive your Certificate of Completion and CPD points, you must complete and return the "Open Book" assignment, which is set at the end of the presentation and addresses key points of learning.

Points awarded for each unit have been based on 5 points per hour for Builders (NSW).

Architects and Engineers can work out their CPD Points accrued based on

- 2 points per hour for Architects, and
- 'hour-for-hour', for Engineers.

Please note that Building (B) Modules may only be purchased alongside an A or E module

An order form is located at the end of this document however for immediate help please email sales@electronicblueprint.com.au

Modules Available – October 2005

OFT Approval Code	Section	Type Code	Module Content
	0 – General Design Considerations	D4	Embodied Energy and Sustainability
		D4	Colour, Solar Absorptance & Reflectivity
Rpa5f197		D4	Issues in Sustainability – Residential Construction
Rpa5zy99		E4	AS 1170.4 <i>Earthquake loadings</i>
	1 – Site Establishment	B2	Inspections & Tests
		D4	Site Inspection General
	2 – Earthworks & Drainage	B2	Inspections & Tests
		D4	Earthworks & Drainage General
	3 – Concrete	B2	Inspections & Tests
		D4	Concrete General
		E4	Concrete Advanced
	4 – Retaining Walls	B2	Inspections & Tests
Rpa5zy99		D4	Design & Construction of Earth Retaining Structures
Rpa5zy99		E4	Background & use of AS4678 <i>Earth retaining structures</i>
Rpa5zy99		E4	Design of Segmental Concrete Gravity Retaining Walls
Rpa5zy99		E4	Design of Segmental Concrete Reinforced Soils Retaining Walls
Rpa5zy99		E4	Design of Reinforced Concrete Masonry Cantilever Retaining Walls
	5 – Drainage & Plumbing	B2	Inspections & Tests
		D4	Drainage & Plumbing General
	6 – Windows, Doors & Glazing	B2	Inspections & Tests
		D4	Windows, Doors & Glazing General
	7 – Structural Steel Work	B2	Inspections & Tests
		D4	Structural Steel Work General
	8 – Wall, Roof & Floor Framing	B2	Inspections & Tests
		D4	Wall, Roof & Floor Framing General
	9 – Carpentry & Joinery	B2	Inspections & Tests
		D4	Carpentry & Joinery General
	10 – Roof Cladding	B2	Inspections & Tests
		D4	Roof Cladding General
	11 – Roof Plumbing	B2	Inspections & Tests
		D4	Roof Plumbing General

	12 - Masonry	B2	Inspections & Tests
Rpa5zy99		D4	Design Considerations
Rpa5zy99		D4	Acoustic Performance of Masonry
Rpa5zy99		D4	Residential Masonry Details
		D4	Salt Damp in Concrete & Masonry
Rpa5zy99		D4	Sustainability of Clay Brickwork
Rpa5zy99		D4	Thermal Performance of Masonry
Rpa5zy99		E4	Residential Masonry Control of Cracking
Rpa5zy99		E4	Masonry Design for AS 1170.4 <i>Earthquake Loadings</i>
		E4	Compressive Strength & Vertical Load
		E4	Fire Performance of Masonry
Rpa5zy99		E4	House Design to AS 3700
Rpa5zy99		E4	Multi – Unit Design
Rpa5zy99		E4	Reinforced Concrete Masonry Houses
	13 – Ceiling & Wall Lining	B2	Inspections & Tests
		D4	Ceiling & Wall Lining General
	14 – Insulation	B2	Inspections & Tests
Rpa5fl97		D4	Specifications for Insulated Roof, Wall & Floor Systems
Rpa5fl97		D4	Thermal Insulation of Buildings
	15 – Floor & Wall Tiling	B2	Inspections & Tests
		D4	Tiling General
Rpa5wh73		D4	Issues in Measuring Slip Resistance
Rpa5wh73		D4	Measuring Slip Resistance of New Pedestrian Surfaces to AS/NZS 4586
Rpa5wh73		D4	Measuring Slip Resistance of Existing Pedestrian Surfaces to AS/NZS 4663
Rpa5wh73		D4	Slip Resistance Specifications
Rpa5wh73		D4	Maintaining Slip Resistance
	16 – Electrical Installation	B2	Inspections & Tests
		D4	Electrical Installation General
	17 – Kitchen	B2	Inspections & Tests
		D4	Kitchen General
	18 – Vehicular Doors	B2	Inspections & Tests
		D4	Vehicular Doors General
	19 - Painting	B2	Inspections & Tests
		D4	Painting General
	20 – Resilient Floor Coverings	B2	Inspections & Tests
		D4	Resilient Floor Coverings General
	21 – Carpets & Soft Furnishings	B2	Inspections & Tests
		D4	Carpets & Soft Furnishings General
	22 – Windows & Door Shutters	B2	Inspections & Tests
		D4	Windows & Door Shutters General
	23 – Mechanical Ventilation & Services	B2	Inspections & Tests
		D4	Mechanical Ventilation & Services General
	24 – Cleaning (Package)	B2	Inspections & Tests
Rpa5zy99	(Package)	D4	Occurrence of Efflorescence
Rpa5zy99			Prevention of Efflorescence

Rpa5zy99			Removing Efflorescence
Rpa5zy99			High Pressure Water Jet Cleaning
Rpa5zy99			Cleaning Pedestrian Surfaces
	25 - Landscaping	B2	Inspections & Tests
		D4	Landscaping General
	26 - Fencing	B2	Inspections & Tests
		D4	Fencing General
	27 - Paving	B2	Inspections & Tests
		D4	Paving General
		D4	Issues in Measuring Slip Resistance
Rpa5wh73		D4	Measuring Slip Resistance of New Pedestrian Surfaces to AS/NZS 4586
Rpa5wh73		D4	Measuring Slip Resistance of Existing Pedestrian Surfaces to AS/NZS 4663
Rpa5wh73		D4	Slip Resistance Specifications
Rpa5wh73		D4	Maintaining Slip Resistance
Rpa5wh73	(Package)	E6	Design of Residential Pavements using AS 3727
Rpa5wh73			Specification & Details for Concrete Residential Pavements
Rpa5wh73			Specification & Details for Asphalt Residential Pavements
Rpa5wh73			Specification & Details for Bitumen Spray Seal Residential Pavements
Rpa5wh73			Specification & Details for Segmental Residential Pavements
Rpa5wh73			Design & Specification of Permeable Pavements
	28 – Metalwork & Balustrades	B2	Inspections & Tests
		D4	Metalwork & Balustrades General

The **Product Directory** enables specifiers and purchasers to quickly access a list of building products that comply with the specific requirements of the **ELECTRONIC BLUEPRINT**.

Supplier	Product Details	ELECTRONIC BLUEPRINT
Helifix (Australia) Pty Ltd www.helifix.com.au	Products to repair cracked or damaged brickwork	Section 12
Abey Australia Pty Ltd www.abey.com.au	Wall ties for all environments, including stainless steel cavity ties for use in Marine (R3) and Severe Marine (R4) environments	Section 12
Stramit Building Products www.stramit.com.au	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	Sections 3, 7, 8, 10, 11
C&M Brick claudia.tapia@cmbrick.com.au	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	Sections 4, 12
Hanson Building Products www.hanson.biz	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	Sections 4, 12
Ancor Loc Earth Systems www.ancorloc.com.au	Ground anchor systems to comply with AS 4678 <i>Earth retaining structures</i>	Section 4
Edmonds www.edmonds.com.au	Adhesive mechanical fastening for ridgecaps for use in cyclonic areas and tested in accordance with AS 2050 Exhaust fans providing mechanical ventilation in accordance with AS 1668.2 Active sub-floor ventilation for areas of high humidity to aid in the reduction of termite activity and growth of mould and fungi	Sections 10, 23
Design, Detail, Deliver Pty Ltd sales@electronicblueprint.com.au	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	Sections 7, 12
VELUX Australia Pty Ltd www.VELUX.com.au	Integrated solar hot water design tested and approved in accordance to Australian Standard AS2712, Sun Tunnels, operable, curb mounted, and fixed skylights to AS4285, Venetian, pleated and Electric Blockout Blinds	Sections 5, 6, 21, 23
Action Tanks (NSW) www.actiontanks.com.au	Rotational moulded polyethylene rainwater tanks, polyethylene above ground and underground rainwater management systems; stormwater Detention-Retention	Sections 2, 5, 11
Air Cell www.aircell.com.au	Fibre-free, thermo-cellular reflective insulation blanket products, certified to AS/NZS 4859.1 and providing a protective vapour, insulation and radiant barrier	Section 14
Robert Bosch (Australia) Pty. Ltd. www.bosch.com.au	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.	Section 5
Cold Jet www.coldjet.com	Waterless, pressurized carbon dioxide dry ice blasting cleaning system. Non abrasive, environmentally friendly, fast, no secondary waste residue.	Section 24
Magnetite – NSW www.magnetite.com.au	Secondary glazing system. Magnetic seal and insulating acrylic panel capable of reducing heat gain or loss through windows by up to 80% and noise by up to 70%.	Section 6
Allvent Ventilation Products Phone: 02 4966 8499	Mechanical fans & ventilation products including axial fans (all size applications), centrifugal fans, roof-top units, ceiling header box fans, grills & components	Section 23
Erosion Control Systems www.erosioncontrol.com.au	Retaining wall systems up to and over 1500mm for both domestic and commercial applications in accordance with AS 4678 (Including Amendment 1)	Section 4
Concrete Colour Systems www.concretecoloursystems.com.au	Pigments and systems for resurfacing, colouring and stencilling existing and new concrete surfaces	Section 3
A.G.P Group www.agpgroup.com.au	Laminated, 'switchable' privacy glass to AS 1288; Operable frameless glass louvres to AS 1288 & AS 1170; Sliding, bi-fold or stackable Slimline Shutters & Operable metal louvres to AS 1664 & AS 1170; Range of custom build, automatic revolving doors to AS 4290; High security entry/exit systems.	Sections 6, 22
Raven Product Pty Ltd www.raven.com.au	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)..	Section 6

Section 4 – Retaining Walls

ELECTRONIC BLUEPRINT Specification Up-date

Attached as an EDITABLE Word file in the attachments section of this PDF.

(See tabs at lower left-hand side of PDF; click on ATTACHMENTS)