



The **ELECTRONIC BLUEPRINT** is the principal point of reference for Architects, Engineers and Builders and the only package that fully integrates regulatory and standards requirements with comprehensive, editable specifications, CAD details and approved industry training. Click here to view www.electronicblueprint.com.au

Unlisted Product Call

What are the products you use?

If they are not already specified for your use in the Electronic Blueprint editable documents, [Click here](#) to nominate the products you would like to see included.

August 2006 Bi-Monthly Electronic Update

Changes to the BCA and Australian Standards affect all aspects of the Building Industry.
[Click here](#) to obtain your complimentary Report and Distance Learning Package (CPD applicable)

Welcome to the August **ELECTRONIC BLUEPRINT** Bi-monthly Electronic Update.

- [Architect](#) - Centrally Sited Vacuum Systems
- [Engineers](#) - Optimisation of Steel Purlin and Girt Design
- [Builders](#) - Fire Resistance
- **Changes to Australian Standards**
New, superseded and amended standards for July & August.
[Changes to Australian Standards](#)
- **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 Attachments)**
In this issue: A complete and EDITABLE UPDATE of Electronic Blueprint **Section 7 – Structural Steelwork**, with all relevant modifications to specifications, supplied as a Microsoft Word document for direct addition to your existing specifications and files.
SEE ATTACHEMENTS to this email.
- [Industry Alert](#) – Stramit Condeck HP Slab Desgner Software available on CD-ROM.

Thank you for all the input and feedback received to date. Your questions, comments and requests help us to make the Electronic Blueprint a more thorough resource and specification tool for you. We welcome all emails and calls. Keep the comments coming!

Rod Johnston
Principal Author

Karen Bloomfield
Specification Manager

To cease receiving these newsletter please email us at info@electronicblueprint.com.au . Email addresses are never sold nor used for reasons other than **ELECTRONIC BLUEPRINT** notification and information.

ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW
49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au
Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 email: info@electronicblueprint.com.au

[Return to top](#)

Architects

Centrally Sited Vacuum Systems

Property owners are increasingly availing themselves of centrally sited vacuum systems, which enable convenient vacuum cleaning, without the problems associated with dragging a vacuum cleaner from room to room. Set out below is a suggested performance specification, suitable for simple residential construction. Designers should check the application, and, if necessary, amend the specified values.

Centrally sited vacuum systems shall comply with AS/NZS 60335.2.2 and the following performance requirements.

- Maximum noise output at 2 meters - 60db
- Self cleaning filter
- Bin not less than nominated in the schedule
- All components and installation shall provide air flow and bin size such that requires to be emptied not more than 4 times per year for the particular application, and have an air flow capable of providing adequate suction for the application as nominated in the schedule.
- Electrical installation shall comply with AS/NZS 3000.

Built-in vacuum system performance requirements				
Permissible total metres of pipe	Permissible minimum air watts	Max. db @ 2 metres distance	Minimum air flow(Ltrs/sec)	Minimum bin capacity* (ltrs)
0 - 70	500	58	45	20
40 - 100	550	58	45	30
90 - 120	650	58	50	30
110 - 170	750	58	50	30
160 – 200+	800	58	55	30

*If a disposable bin is used, the minimum bin size shall be nominated by the designer.
Inlets – As few as possible and as many as necessary.



Photos courtesy of CVC Centravac

For more technical and purchasing information, please click on:
<http://www.electronicblueprint.com.au/suppliers/BVCCentavac.html>

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

Engineers

Optimisation of Steel Purlin and Girt Design

Structural engineers involved in the design of large buildings such as, warehouses, factories, auditoriums, shopping centres and the like, will appreciate that purlins and girts (and their associated bridging) that is selected from load capacity tables often involve significant redundancies unnecessarily increasing in cost. Engineers are also often unsure of how to deal with purlins and girts that contribute to the transfer of racking loads from the ends of a building to the bracing system, and are thus in both bending and compression (or tension).

It is now possible, using modern computers and the design rules in AS/NZS 4600:1996, to optimize the design of purlins, girts and bridging for various non-standard configurations, laps and load combinations. The design utilizes bending capacities based on lateral buckling resistance of AS 4600 Clause 3.3.3.2.

The procedure may be summarized as follows.

1. Determine the appropriate permanent loads and wind loads, using AS/NZS 1170 Parts 0, 1 and 2.
2. Determine the initial bending moment and shear force diagrams for each run of purlins.
3. Break each span into segments between the initial positions of supports, points of contraflexure and bridging.
4. For each segment, consult moment capacity tables to determine the smallest appropriate purlin size. At laps, use the combined moment capacity of the lapped sections. If the purlins are subjected to combined bending and compression (or tension), determine the minimum possible purlin size for each segment, from interaction tables.
5. Because the bending moment distribution is dependent on the section properties of the chosen purlins in each segment, it is necessary to re-calculate the bending moment diagram based on the selected sections. Check that the chosen sections are adequate for the new bending moments.
6. Check the capacities of the bolted connections.
7. Check the adequacy of each section for combined bending and shear, paying particular attention to the ends of laps.
8. Check the maximum deflection of each purlin.
9. A limit of $\text{Span}/150$ is normally used.

Further details of this design methodology, and the Appropriate bending moment capacity tables for Stramit Exacta-Z purlins and girts, are available.



Click on www.electronicblueprint.com.au/suppliers/stramit.html

Photo courtesy of Stramit Building Products

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

ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW
49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au
Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 email: info@electronicblueprint.com.au

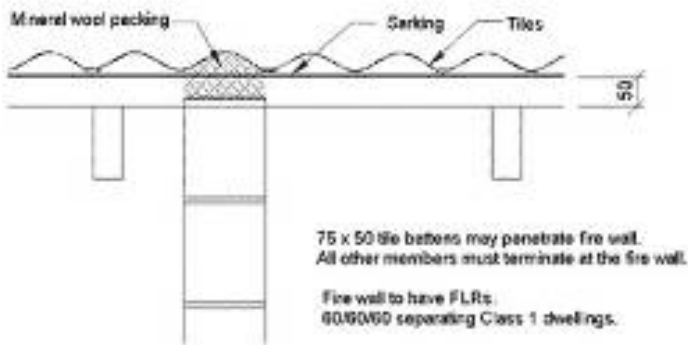
[Return to top](#)

Builders Fire Resistance

Builders are required to adhere to the fire performance requirements of the BCA (Building Code of Australia). This article highlights a few forms of construction that commonly present difficulties.

Ceiling Space

BCA 2006 Volume 2 Clause 3.7.1.8(A) requires that, if a building has a non-combustible roof covering, any fire wall must be continued to the underside of the roof. In such cases, it is a requirement that the space between the top of the fire wall and the underside of the roof be filled with “mineral fibre or other suitable fire resisting material”. However, it is permissible for roof battens to pass through this material at the top of the wall. BCA 2006 Volume 1 Clause C2.7(a) (iii) has similar requirements. Editable CAD details are available from www.electronicblueprint.com.au Section 10 Roof Cladding.



Fire Wall Perpendicular to Tile Battens & Parallel to Roof Framing

© 2000 Design Detail & Detail Plus Ltd

19_002a

Precast Concrete Panels

BCA 2006 Volume 1 Specification C1.11 has particular requirements for fixings of external tilt-up and precast concrete wall panels in Class 2 to 9 buildings not more than two storeys high, if they:

- Consist of single or multiple panels attached by steel connections to lateral supports
- Rely on those connection to resist outward movement, and
- Have height to thickness ratio not greater than 50. (i.e. they are not slender “sheets”)

This is to ensure that, under the action of fire, whole external wall panels do not collapse outwards onto attendant fire-fighters.



ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW
49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au
Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 email: info@electronicblueprint.com.au

[Return to top](#)

The requirements are spelt out in the BCA, and may be summarised as follows:

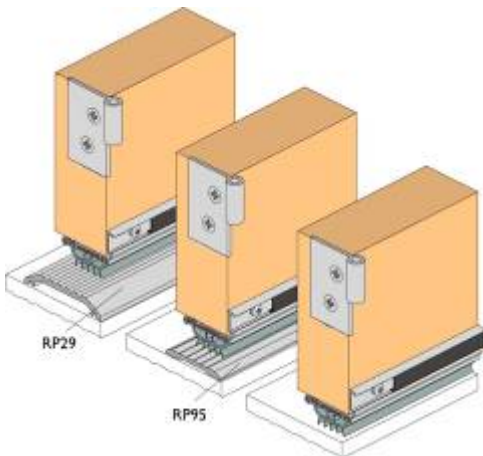
- a) Requirement that any cast-in inserts and fixings to be anchored into the panel with welded bars fixed to the panel reinforcement.
- b) Strength and moment requirements for cast-in top connections.
- c) Strength and moment requirements for drilled inserts and clips, acting as top connections.
- d) Requirements for lateral supports.
- e) Minimum numbers of top connections.
- f) Minimum numbers of side connections.

There are additional requirements to minimise the forces developed between vertically spanning external wall panels and any adjacent to columns.

Fire Doors and Shutters

BCA 2006 Volume 1 Clauses C3.6 and Spec 3.4 call up the revised standard AS 1905:2005 *Components for the protection of openings in fire-resistant walls*, Part 1 *Fire resistant door sets* and Part 2 *Fire resistant roller shutters*. In order to provide the requisite sealing of otherwise conforming fire doors and shutters, it is quite practical to retro-fit intumescent seals, provided they are tested to AS 1530.4. Such seals may expand up to 25 times when exposed to heat or flames, thus providing an effective seal against the ingress of smoke and flame.

Further details are available from www.electronicblueprint.com.au/suppliers/raven.html



Complying Door Seals



FireTest

Photos courtesy of Raven Seals

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
AS1680.2 – 2006 Particleboard flooring - Installation	
ATS 5200.482 – 2006 Technical specification for plumbing and drainage products – Soil waste dump fitting	
ATS 5200.000 – 2006 Technical Specification for plumbing and drainage products – Procedures for certification of plumbing and drainage products	ATS 5200.000 – 2005

Amended Standards
AS/NZS 3500.2:2003 Plumbing and Drainage – Sanitary plumbing and drainage
AS/NZS 3500.3:2003 Plumbing and Drainage – Stormwater drainage
AS/NZS 6400 :2005 Water efficient products – Rating and labelling

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

ELECTRONIC BLUEPRINT Section Up-date

This edition: **Section 7 – Structural Steelwork**

Attached as an EDITABLE Word file alongside this PDF.

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	\$150	\$200
4	\$150	\$200	\$300
6	\$200	\$300	\$400

CPD Points Gained – Based on Builders CPD

	B	D	E
2	5 points	6 points	8 points
4	9 points	12 points	16 points
6	14 points	19 points	24 points

ABOUT THE MODULES AND PACKAGES

Individual information about the modules may be obtained from the website at;

<http://www.electronicblueprint.com.au/distancelp.html>

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"

ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW

49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au

Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 email: info@electronicblueprint.com.au

[Return to top](#)

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 – August 2006

OFT Approval Code	Section	Type Code	Module Content
	0 – General Design Considerations	B2	Standard Specifications and Details
		D2	Quality Assurance for Local Government
		D4	Embodied Energy and Sustainability
		D4	Colour, Solar Absorptance & Reflectivity
Rpa5fl97		D4	Issues in Sustainability – Residential Construction
Rpa5zy99		E4	AS 1170.4 <i>Earthquake loadings</i>
	1 – Site Establishment	B2	Specifications, Detailing and Inspections of Site Establishment
	2 – Earthworks & Drainage	B2	Specifications, Detailing and Inspections of Earthworks & Drainage
	3 – Concrete	B2	Specifications, Detailing and Inspections of Concrete
		E2	Design & Specification of Slabs & Toppings
		E4	Concrete Advanced
Rpa5zy99	4 – Retaining Walls	D4	Specifications, Detailing and Inspections of Retaining Walls
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	Specifications, Detailing and Inspections of Drainage & Plumbing
	6 – Windows, Doors & Glazing	B2	Specifications, Detailing and Inspections of Windows, Doors & Glazing
	7 – Structural Steel Work	B2	Specifications, Detailing and Inspections of Structural Steel Work
	8 – Wall, Roof & Floor Framing	B2	Specifications, Detailing and Inspections of Wall, Roof & Floor Framing
	9 – Carpentry & Joinery	B2	Specifications, Detailing and Inspections of Carpentry, Joinery, Cladding & Flooring
	10 – Roof Cladding	B2	Specifications, Detailing and Inspections of Roof Cladding
	11 – Roof Plumbing	B2	Specifications, Detailing and Inspections of Roof Plumbing

ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW
 49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au
 Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 email: info@electronicblueprint.com.au

Rpa5zy99	12 - Masonry	B4	Anchorage
Rpa5zy99		B4	Occurrence of Efflorescence
Rpa5zy99		D2	Durability of Masonry Structures
Rpa5zy99		D4	Design Considerations
Rpa5zy99		D4	Acoustic Performance of Masonry
Rpa5zy99		D4	Residential Masonry Details
Rpa5zy99		D4	Salt Damp in Concrete & Masonry
Rpa5zy99		D4	Sustainability of Clay Brickwork
Rpa5zy99		D4	Thermal Performance of Masonry
Rpa5zy99		D4	Weep holes & Flashings
Rpa5zy99		E4	Repair of Cracked Buildings
Rpa5zy99		E4	Residential Masonry Control of Cracking
Rpa5zy99		E4	Masonry Design for AS 1170.4 <i>Earthquake Loadings</i>
Rpa5zy99		E4	Residential Masonry Specifications
Rpa5zy99		E4	Compressive Strength & Vertical Load
Rpa5zy99		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
Rpa5fl97	14 – Insulation	D4	Specifications for Insulated Roof, Wall & Floor Systems
Rpa5fl97		D4	Thermal Insulation of Buildings
	15 – Floor & Wall Tiling	D4	Specifications, Detailing and Inspections of Tiling
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	Specifications, Detailing and Inspections of Electrical Installation
	17 – Kitchen	B2	Specifications, Detailing and Inspections of Kitchen
	18 – Vehicular Doors	B2	Specifications, Detailing and Inspections of Vehicular Doors
	19 - Painting	B2	Specifications, Detailing and Inspections of Painting and Coatings
	20 – Resilient Floor Coverings	B2	Specifications, Detailing and Inspections of Resilient Floor Coverings
	21 – Carpets & Soft Furnishings	B2	Specifications, Detailing and Inspections of Carpets & Soft Furnishings
	22 – Windows & Door Shutters	B2	Windows & Door Shutters General
	23 – Mechanical Ventilation & Services	B2	Specifications, Detailing and Inspections of Mechanical Ventilation & Services
	24 – Cleaning	B2	Specifications, Detailing and Inspections of Cleaning
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	Specifications, Detailing and Inspections of Landscaping
	26 - Fencing	B2	Specifications, Detailing and Inspections of Fencing

	27 - Paving	B2	Specifications, Detailing and Inspections of Paving
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
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
Rpa5wh73			Maintaining Residential Pavements
Rpa5wh73			Compaction
	28 – Metalwork & Balustrades	B2	Specifications, Detailing and Inspections of Metalwork & Balustrades

[Return to top](#)

(Print PAGE 11 to access this order form)

OFT Approval Code (where appropriate)	Section	Type Code	Module Content	Cost
Total				

Please post my **ELECTRONIC BLUEPRINT** Distance Learning Package to:

Name:	Profession:
Company name:	Licence number:
Postal address:	
State:	Postcode:
Phone number:	Fax number:
Email	

- **My cheque/money order (made payable to Electronic Blueprint) for the amount of \$ (inc. GST) is enclosed**

Please allow 14 – 21 days delivery time for all packages

Contact us: web: www.electronicblueprint.com.au email: info@electronicblueprint.com.au

We supply Bi-monthly Electronic Updates of important changes relating to the industry. This is a free email service aimed at keeping industry professionals abreast of pertinent developments.

Please indicate if you do not wish to receive Electronic Blueprint Bi-Monthly Electronic Updates

The following people have also requested to receive Bi-Monthly Electronic Updates.

Email addresses:

.....

<p>Please post this form with payment to:</p> <p>ELECTRONIC BLUEPRINT Distance Learning Packages 49A Parklands Road, Mt Colah NSW 2079, Australia</p> <p>Phone: +61 2 4360 2255 Fax: +61 2 4360 2256 Email: info@electronicblueprint.com.au</p> <p>ACN 31 088 338532 Inc in NSW</p>

PRODUCT DIRECTORY

Enabling specifiers fast access a list of building products that comply with the specific requirements of the **ELECTRONIC BLUEPRINT**.

Supplier	Product Details	ELECTRONIC BLUEPRINT
Abey Australia Pty Ltd	Wall ties for all environments, including stainless steel cavity ties for use in Marine (R3) and Severe Marine (R4) environments	Section 12
Action Tanks (NSW)	Rotational moulded polyethylene rainwater tanks, polyethylene above ground and underground rainwater management systems; stormwater Detention-Retention	Section 5
Blockout Industries Pty Ltd	Roller shutters for thermal & sound insulation, and the protection of windows from bush fire.	Section 22
Breezeway Australia Pty Ltd	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	Sections 6, 9
Brunswick Sales	Vertical control joint ties to AS 2699 Part 1. Available fully galvanised or grade 316 stainless steel.	Section 12
Concrete Colour Systems	Pigments and systems for resurfacing, colouring and stencilling existing and new concrete surfaces	Section 3
Connolly Key Joint Pty Ltd	Preformed concrete control joints and ancillary products	Section 3
C&M Brick	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
CVC Centravac	Built –In Vacuum Systems	Section 23
Electronic Blueprint	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
Everbreeze Ventilation	Design, supply, installation and maintenance of quality ventilation systems complying with BCA and AS 1668.2	Sections 23, 6, 8
Fibercon	Steel fibre reinforcement used for enhancing toughness and impact resistance of concrete	Sections 3, 27
Helifix (Australia) Pty Ltd	Products to repair cracked or damaged brickwork	Section 12
Ensystem Australasia Pty Ltd	Non-toxic, in-ground or above-ground, termite colony elimination and protection system complying with AS3660.2	Sections 3, 7
Erosion Control Systems	Retaining wall systems up to and over 1500mm for both domestic and commercial applications in accordance with AS 4678 (Including Amendment 1)	Section 4
Hanson Building Products	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
Lafarge Plasterboard Pty Ltd	All boards produced by Lafarge Plasterboard are manufactured under a quality system certified as complying with ISO AS/NZS 9001:2000 by an accredited certification body.	Section 13
Master Builders Association	Construction area safety signage.	Section 1
Nofire Technologies Australia	A one part non-flammable water based intumescent coating similar in appearance to ordinary latex base paint which immediately foams and swells (intumesces) upon exposure to flame or heat, providing an effective insulation and heat shield to protect the subsurface.	Sections 7, 19
Nu-lok Roofing Systems	Interlocking Roofing systems	Section10
Ozaquasaver.com Pty Ltd	Water Saving Devices	Section 5
Raven Product Pty Ltd	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,	Sections 6, 18

ELECTRONIC BLUEPRINT ABN 31 088 338 532 Inc in NSW
 49A Parklands Road, Mt Colah NSW 2079, Australia www.electronicblueprint.com.au
 Phone: +61 2 4360 2255 Fax:+61 2 4360 2256 email: info@electronicblueprint.com.au

	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)..	
Robert Bosch (Australia) Pty. Ltd.	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
Specialised Saftey Solutions	Retractable door jamb system allowing conventional doors to be opened in opposite direction as a safety mechanism when the door is locked from the inside.	Section 6
Stramit Building Products	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
Sunplus CPC Solar	Commercial and domestic evacuated tube solar hot water system complying with AS 2712 Solar and heat pump water heaters – Design and construction.	Section 5
Tankmasta	Underground rainwater tanks and fittings for the purpose of domestic, commercial, or industrial rainwater harvesting	Section 5
Tripstop Pty Ltd	Concrete construction joints for misalignment and trip hazard control	Section 27

Industry Alert – Stramit Condeck HP Slab Designer Software Available.
[Click here](#) to view the full details.

SUPPLEMENT FOR STEEL FRAMED BUILDINGS

Introduction

This **Stramit Condeck HP®** composite decking supplement for steel framed buildings contains several product features as well as the latest data. Features include:-

- Data for steel framed construction.
- **Stramit Condeck HP Plus™** and span enhancement accessory for longer unpropped spans and greater design efficiency. This accessory can now be used to create partial continuity at internal supports where the decking ends.
- **Stramit Condeck Shades™** a non reflective coating that enables a more comfortable installation.
- Fire Design method that utilises the fully embedded portion of **Stramit Condeck HP®** decking ribs allowing a reduction in Fire Emergency Reinforcement.
- Shear stud placement rules that permit almost unlimited versatility in the number and position of shear studs.
- The use of Partial Shear Connection Theory in line with latest industry best-practice.
- Increased galvanised coating thickness for even greater durability.
- Supplemented by an easy-to-use software package **Stramit Condeck HP® Slab Designer™ 2.2**, that allows for variations in span lengths, live loadings, stacked material loadings and more.

Applications

Stramit Condeck HP® composite decking is ideal for floor slab construction in residential, commercial and many industrial applications. It is suitable for use in both steel frame and concrete frame construction, including band beam applications. In addition **Stramit Condeck HP®** composite decking has been successfully used in post-tensioned slabs. Whilst generally used in composite construction, **Stramit Condeck HP®** decking can be used as an effective lost formwork in conventional slab applications.

Stramit Condeck HP® composite decking is only intended for use in composite or non-composite suspended floor slab applications and strictly as shown in this and other current Stramit technical literature. Do not use for any other purpose.

Software

Stramit Building Products (Stramit) has software available for design of **Stramit Condeck HP®** composite slabs. **Stramit Condeck HP® Slab Designer™ 2.2** incorporates formwork, composite and fire design considerations, and allows for many more variables and permutations than can be shown in this manual.

Please contact your nearest Stramit office to obtain a copy of the software CD ROM or visit www.stramit.com.au to download the latest **Stramit Condeck HP®** technical manual.



Testing

Research and development activity has involved testing at the Centre for Advanced Structural Engineering at the University of Sydney, Centre for Construction Technology & Research at the University of Western Sydney and CSIRO. This has included tests related to fire design, composite action, shear studs, bare steel and deflection. This interaction ensures that Stramit is at the forefront of composite decking design.