



SHIRE OF DERBY/WEST KIMBERLEY

BUILDING INFORMATION SHEET

BCA ENERGY EFFICIENCY PROVISIONS

Effective 1st July 2003

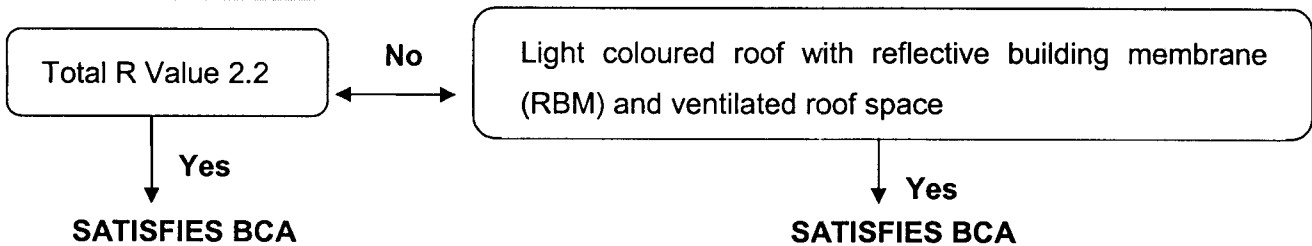
CLIMATE ZONE 1 – DERBY

Notes :

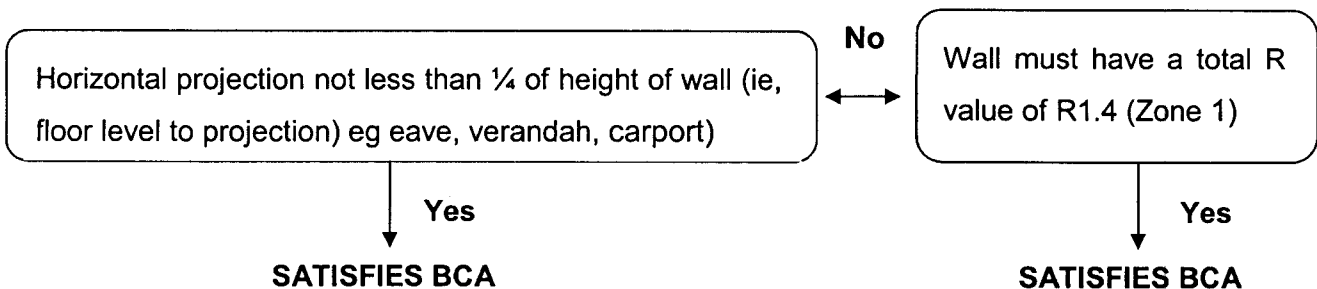
- ◆ Plans submitted for a building licence must contain the following information :
 - Section 1:50 showing any insulation and the R Value.
 - Colour of roof.
 - Window schedule showing types of windows plus total glazed area m² as a percentage (%) of floor area of habitable rooms being serviced by the window(s).
 - Ceiling fans (on electrical plan).
- ◆ Ducted air-conditioning must be insulated to comply with the BCA 3.12.5.
- ◆ 'Conditioned space' means a space that is heated or cooled by the buildings domestic services.

BUILDING FABRIC (3.12.1)

ROOFING (3.12.1.2)



EXTERNAL WALLS (3.12.1.4)



EFFECTIVE GLAZING AREA (3.12.2)

The following table details the allowable % of total glazing area to total floor area.
(Note : Only count 50% of north glazing)

- ◆ Shading must be provided to all sides of the building for tropical locations (north of latitude 20 degrees south).
- ◆ A shade projection must be a permanent feature.

	SHADE	MAX %	ACTUAL
Aluminium window Single clear glass (includes louvres)	No shade	18%	
	450mm	22%	
	600mm	24%	
	750mm	25%	
	900mm	27%	

BCA ENERGY EFFICIENCY CHECK SHEET PART 3.12

Residential (Class 1) and attached Class 10A (garages) in Climate Zone 1

PROPERTY THIS APPLICATION RELATES TO			
Lot No.	House No.	Street Name	Suburb

	Application	Details of compliance	
ROOF INSULATION (total required = R2.2)			
Either - for flat ceiling with pitched roofs. Light coloured roof; with RBM under roof cover and ventilate roof space evenly with vents of a area greater than 1% of ceiling area or 2 x 300mm whirley birds with roof vents = to or > that 2% of ceiling area OR insulate as below			
Flat ceilings with pitched roofs	RBM + R1.0 or total of R1.5 tiles only		
Flat, skillion, cathedral roofs	RBM + R1.0 or add total of R2.0		
WALL INSULATION (total required = R1.4)			
Either - Shading to project horizontally at least one quarter of internal floor to eave height; e.g. 2700mm wall, 675mm projection. The shading option does not apply to south walls south of 20oS latitude OR insulate as below.			
Double Brick >220kg/m ²	RBM + R1.0 or add total R1.0		
Brick veneer	RBM only or add total of R1.0		
All other walls (specified in BCA Figure 3.12.1.5)	RBM + R1.0 or add total of R1.0		
FLOOR INSULATION (N/A)			
AIR MOVEMENT REQUIREMENTS TO HABITABLE ROOMS			
Minimum total ventilation opening area (% of room area)	Without fan	15%	
	With fan	12.5%	
Breeze Path Provisions	1. Must pass through no more than 2 ventilation openings in internal walls. Opening area of not less than 1.5m ² . 2. Not more than 20m between ventilation openings.		
Total Vent Openings	Connecting breeze path to ventilation opening in another room, or 2 vent openings min. in 1 room with openings' area not less than 25% of area required above.		
EFFECTIVE GLAZING AREA (% of total glazing area to total floor area of the storey)			
NB: Only 50% of north glazing needs to be used in effective glazing calculations.			
Glazing type	Shade	Max %	Actual
Single clear glass Aluminium Standard frame	No shade	18	
	450mm	22	
	900mm	27	
Toned glass (min. 5mm thick) Aluminium Standard frame	No shade	23	
	450mm	29	
	900mm	36	
Single solare control, pyrolytic low e glass Aluminium Standard frame	No shade	33	
	450mm	33	
	900mm	33	

		Application	Details of compliance
ROOF LIGHTS (Less than 5% of the floor area of room)			
Shaft Length			
Over 1.5m	Nil requirement		
0.6m to 1.5m	Controlled glazing to roof light if total area of roof light is 3% to 5% of the room area.		
Less than 0.6m	Controlled glazing to roof light if total area of roof light is 1.5% to 3% of the room area.		
<p>?? Aggregate area of roof lights for a building must not exceed 3% of the total floor area of the house.</p> <p>?? Roof lights exceeding 5% of the floor area of a room may only be used if other openings are not available to provide adequate light (refer BCA Clause 3.12.1.3 for further detail)</p> <p>?? Roof lights under main roof – not alfresco areas</p>			
BUILDING SEALING			
Evaporative air conditioning will be installed.	Nil requirement		
Conditioned Space	Seal chimneys and flues of solid fuel burning device with damper or flaps. Roof lights External doors and windows Exhaust fans Construction of roof walls & floors		
CLASS 10A ATTACHMENTS			
The attached Class 10a must achieve the required R-Value of the Class 1 building.			
SERVICES			
Evaporative Cooling Ductwork	Located externally or in roof space - min R0.6		
Refrigerated cooling or Heating ductwork	External to the building - min R1.5 Roof spaces - min R1.0		
Hot water supply system	To be designed and installed in accordance with Section 6A of AS/NZS 3500.4.2 or clause 3.38 of AS/NZS 3500.5		

INTERPRETATION	
RBM	means a reflective building membrane with a reflective surface such as reflective foil laminate or foil batt capable of reducing radiant heat flow (a) With a reflectance of at least 0.95 and; (b) with an emittance of not more than 0.0.5.
Solid Fuel Burning Device	is a heater that burns material such as timber coal and the like – it does not refer to gas or liquid fuel burning devices
Conditioned Space	means a space within a building that is heated or cooled by a domestic services which includes, gas heating & air-conditioning (Refer BCA for further detail)
Controlled Glazing	Glazing to a roof light that achieves a Solar Heat Gain Co-efficient of not more than 0.75 and a Total U-Value of not more than 5.0
Ventilation Opening	means an opening in an external wall, floor or roof of a building designed to allow air movement into or out of a building by natural means, including a permanent opening, an openable part of a window, or door or other device which can be held open

The details provided on this Conformance Sheet are true and correctly reflect the plans and specifications submitted for a building licence:

Signature

Builder or representative

Contact

Date

Position