

BCA 2006 ENERGY EFFICIENCY CONFORMANCE SHEET PART 3.12

Residential (Class 1) and attached garages (Class 10A) in **Climate Zone 5**

Lot No
House No
Street Name
Suburb

					Application	Details of compliance
Part 3.12.1.2 ROOF INSULATION (total required = R3.2)						
Flat ceilings with pitched roofs			Reflective insulation + R2.5 or add total of R3.0		<input type="checkbox"/>	
Flat, skillion, cathedral roofs			Reflective Insulation + R2.5 or add total of R3.0		<input type="checkbox"/>	
Part 3.12.1.3 ROOF LIGHTS (Less than 10% of the floor area of room)						
<ul style="list-style-type: none"> Aggregate area of roof lights for a building must not exceed 3% of the total floor area of the storey served. 					<input type="checkbox"/>	
<ul style="list-style-type: none"> Roof lights exceeding 10% 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) – in this instance further details to be attached. 					<input type="checkbox"/>	
Roof light shaft index (m)	Area of Roof Lights to Room / Floor Area of Room (%) – Specify values in spaces provided.					Specify location of roof lights.
	≤ 1.5%	> 1.5% ≤ 3%	> 3% ≤ 5%	>5% ≤10%		
Less than 0.5	N/A	SHGC (.....) ≤ 0.75 U-Value(.....) ≤ 5.0	SHGC (.....) ≤ 0.50 U-Value(.....) ≤ 5.0	SHGC (.....) ≤ 0.25 U-Value(.....) ≤ 5.0		
0.5 to less than 1.0	N/A	U-Value(.....) ≤ 5.0	SHGC (.....) ≤ 0.70 U-Value(.....) ≤ 5.0	SHGC (.....) ≤ 0.35 U-Value(.....) ≤ 2.5		
1.0 to less than 2.5	N/A	U-Value(.....) ≤ 5.0	U-Value(.....) ≤ 5.0	SHGC (.....) ≤ 0.45 U-Value(.....) ≤ 2.5		
2.5 and above	N/A	U-Value(.....) ≤ 5.0	U-Value(.....) ≤ 5.0	U-Value(.....) ≤ 2.5		
Part 3.12.1.4 WALL INSULATION (total required = R1.9)						
Double Brick >220kg/m ²			Nil requirements		<input type="checkbox"/>	
Brick veneer (110mm bricks min)			Reflective insulation + R1.0 or add total of R1.5		<input type="checkbox"/>	
All other walls (as specified in BCA Figure 3.12.1.3)			Reflective insulation + R1.5 or add total of R1.5		<input type="checkbox"/>	
Part 3.12.1.5 FLOOR INSULATION (N/A)						
Suspended timber & concrete			Nil requirements		<input checked="" type="checkbox"/>	
Part 3.12.1.6 CLASS 10A ATTACHMENTS (garages/ storerooms)						
The external fabric of the Class 10a achieves the required R-Value of the Class 1 building.					<input type="checkbox"/>	
The Class 10a is separated from the Class 1 by walls/ ceiling of the required R-value					<input type="checkbox"/>	
Forms part of the external fabric that achieves the required R-value					<input type="checkbox"/>	
NB - Insulation must be installed in accordance with the Manufacturer's Specifications, in order to ensure that the correct R-value is achieved.						
Part 3.12.2 EXTERNAL GLAZING						
Copy of the completed Glazing Calculator spreadsheet (available on www.abcb.gov.au) attached, or					<input type="checkbox"/>	
Schedule of calculations demonstrating the aggregate calculated Conductance (U) & Solar Heat Gain (SHGC) limits; and the actual Conductance (U) & Solar Heat Gain (SHGC) of the design attached.					<input type="checkbox"/>	

		Application	Details of compliance
Part 3.12.3 BUILDING SEALING - This does not apply where only an evaporative-cooler is used or for gas vents.			
For all chimneys and flues of open solid fuel burning appliances, and	Provide a damper or flap that can be closed to seal the chimney or flue (Refer 3.12.3.1).	<input type="checkbox"/>	
When forming part of the fabric bounding a conditioned space:	Seal roof lights as specified by 3.12.3.2,	<input type="checkbox"/>	
	Seal external windows and doors where required by 3.12.3.3.	<input type="checkbox"/>	
	Seal exhaust fans with a sealing device such as a self-closing damper, filter or the like. (3.12.3.4).	<input type="checkbox"/>	
	Roofs, external walls, external floors and any opening to be constructed to minimise air leakage in accordance with 3.12.3.5.	<input type="checkbox"/>	
Part 3.12.4 AIR MOVEMENT REQUIREMENTS TO HABITABLE ROOMS			
Minimum total ventilation opening area (% of room area)	Without ceiling fan	7.5%	<input type="checkbox"/>
	With ceiling fan	5%	<input type="checkbox"/>
Total Ventilation Openings	Must be connected to a vent. opening in another room via a breeze path; or		<input type="checkbox"/>
	Be provided by 2 vent openings in the same room with each openings' area not less than 25% of area required above.		<input type="checkbox"/>
Breeze Path Provisions	Must pass through no more than 2 ventilation openings in internal walls. Opening area must 1.5m ² minimum, and		<input type="checkbox"/>
	Not more than 20m between ventilation openings.		<input type="checkbox"/>
Part 3.12.5 SERVICES			
Evaporative Cooling Ductwork	Minimum R0.6		<input type="checkbox"/>
Refrigerated cooling or Heating Ductwork	Located externally or in roof space - min R1.0		<input type="checkbox"/>
Central Heating Water piping	Internally – R0.2 Externally – R0.3		<input type="checkbox"/>
Hot water supply system	To be designed and installed in accordance with Section 8 of AS/NZS 3500.4 or clause 3.38 of AS/NZS 3500.5		<input type="checkbox"/>

INTERPRETATION:	
Reflective insulation	A building membrane with a reflective surface such as reflective foil laminate, reflective barrier, foil batt or the like capable of reducing radiant heat flow. The surface of reflective insulation may be described in terms of its infra-red emittance or in terms of its solar reflectance. Generally, for the surface of a particular reflective insulation : emittance + reflectance = 1.
Solid Fuel Burning Device	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	A space within a building that is heated or cooled by the buildings <i>domestic services</i> which includes, heating, air-conditioning, mechanical ventilation and hot water devices but excludes cooking facilities, portable appliances and heaters that have a capacity of not more than 1.2kW installed in a non habitable room. (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 the <i>external wall</i> , 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, a door or other device which can be held open

NOTE: This Conformance sheet may not be applicable for all proposals. Where alternative means of meeting the Performance Requirements are proposed, include the Verification Method details with the Application, in accordance with Part 2.6 of the Building Code of Australia.

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	