



Department of Housing and Works  
Government of Western Australia

## BCA PART J5

## DTS ENERGY EFFICIENCY DECLARATION

Class 2 – 9 buildings

Climate Zone: \_\_\_\_\_

Class of building: \_\_\_\_\_

### Building Details

Lot No: \_\_\_\_\_ Street No: \_\_\_\_\_ Street: \_\_\_\_\_

Suburb: \_\_\_\_\_ Post Code: \_\_\_\_\_

Owner: \_\_\_\_\_ Address: \_\_\_\_\_

Builder: \_\_\_\_\_ Address: \_\_\_\_\_

Part J5.2 AIR-CONDITIONING AND VENTILATION SYSTEMS	N/A	Yes
J5.2(a)(i) The air-conditioning system will be capable of being inactivated when the building is not occupied, and The system has motorised outside air and return dampers and those dampers close when inactivated.	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(ii) Supply and return ducts will be insulated in accordance with <b>Specification J5.2</b>	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(iii) The air-conditioning system has multiple zones and will be thermostatically controlled and will not mix heated and cooled air and will limit the re-heating to not more than 7.5K at the supply air rate.	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(iv) The building is located in climate zone 3 and the system has an air-conditioning unit capacity over 65kW <sub>r</sub> and has an outdoor air economy cycle. <i>Note: Not applicable to restaurants, café and bars or Class 9b buildings.</i>	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(iv) The building is located in climate zone 4, 5 or 6 and the system has an air-conditioning unit capacity over 50kW <sub>r</sub> and has an outdoor air economy cycle. <i>Note: Not applicable to restaurants, café and bars or Class 9b buildings.</i>	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(v) This building is a <b>Class 3</b> and the system will be capable of controlling the temperature of sole-occupancy units at different temperatures during sleeping periods.	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(a)(vi) The air flow rate of the system is greater than 1000 L/s and will be designed so that the motor shaft power does not exceed the requirements of <b>(A)</b> or <b>(B)</b> <b>Attached are calculations verifying compliance.</b>	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(b)(i) The mechanical ventilation system will be capable of being inactivated when the building is not being occupied.	<input type="checkbox"/>	<input type="checkbox"/>
J5.2(b)(ii) The mechanical ventilation system will not exceed the minimum quantity required by Part F4 by more than 50% other than allowances in <b>(A)</b> <b>(B)</b> or <b>(C)</b> .	<input type="checkbox"/>	<input type="checkbox"/>

	N/A	Yes
<b>J5.2(b)(iii)</b> The mechanical ventilation systems air flow rate is more than 1000 L/s and will be designed in accordance with <b>Table J5.2</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.2 (b)(iv)</b> The building has a carpark with over 40 vehicles and the mechanical ventilation system will be designed in accordance with <b>AS 1668.2</b> and will maintain an average minimum air-change rate of 0.5 per hour when the carpark is not occupied for more than 2 hours.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Part J5.3 TIME SWITCH</b>		
The air-conditioning system exceeds 10 kW <sub>r</sub> and a time switch will be installed in accordance with <b>Specification J6</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>Note: Does not apply where the system is made up of individual units &lt;10kW<sub>r</sub>.</b>		
The ventilation system has an air flow rate of more than 1000 L/s and a time switch will be installed in accordance with <b>Specification J6</b> .	<input type="checkbox"/>	<input type="checkbox"/>
The building has a heating system that exceeds 10 kW and a time switch will be installed in accordance with <b>Specification J6</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>Part J5.4 HEATING AND CHILLING SYSTEMS</b>		
<b>J5.4(a)(i)</b> The system provides heating or chilling for air-conditioning and all piping, vessels, heat exchanges or tanks that contain heated or chilled fluid will be insulated in accordance with <b>Specification J5.4</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(a)(ii)</b> Water is pumped through the system at greater than 2 L/s and the pump is designed in accordance with the requirements of <b>(A)</b> and <b>(B)</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(a)(iii)</b> The system contains more than one water heater used for heating a building, chiller or coil and is capable of stopping the flow of water to those not operating.	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(b)</b> The system has a boiler that achieves the thermal efficiency complying with <b>Table 5.4a</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(c)</b> This building will have package air-conditioning split units and/or heat pumps that are greater than 65 kW <sub>r</sub> capacity and will comply with the energy efficiency ratio of <b>Table J5.4b</b> and have been tested in accordance with <b>AS/NZS 3823.1.2</b> test condition T1.	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(d)</b> The system has a refrigerant chiller over 125 kW <sub>r</sub> capacity and has an energy efficiency ratio determined in accordance with <b>ARI 550/590</b> and complies with <b>Table J5.4c</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(e)</b> The system has an air cooled condenser fan motor that is not part of any package equipment and does not use more than 15 W of motor shaft power for each kW of heat rejected from the refrigerant in accordance with <b>ARI 460</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(f)</b> The system has cooling towers and the fan does not use more than the allowed motor shaft power of either <b>(i)</b> or <b>(ii)</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(g)</b> The system has a closed circuit cooler and the fan will not use more than the allowed motor shaft power of either <b>(i)</b> or <b>(ii)</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(h)</b> The system has a evaporative condenser and the fan will not use more than the allowed motor shaft power of either <b>(i)</b> or <b>(ii)</b> .	<input type="checkbox"/>	<input type="checkbox"/>
<b>J5.4(i)</b> The system has a closed circuit cooler or an evaporative condenser and will not use more than 150 W of pumped motor shaft power for each L/s of spray water circulated.	<input type="checkbox"/>	<input type="checkbox"/>



Part J5.5 MISCELLANEOUS EXHAUST SYSTEMS	N/A	Yes
<b>J5.5(a)</b> All miscellaneous exhaust fans in kitchens and laundries etc, that have an air flow rate of more than 1000L/s, have been designed to minimise the exhausting of conditioned air and will be fitted with a local control for reducing capacity (eg. Variable speed) and a shut off device.	<input type="checkbox"/>	<input type="checkbox"/>

I declare that I am an appropriately qualified person and the information of the Air-conditioning and Ventilation system for the proposed building that is attached to and provided on this Declaration Sheet complies with the Deemed-to-Satisfy provisions of the BCA.

Name of person: \_\_\_\_\_ Qualification: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone No: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

I declare that the Air-conditioning and Ventilation system for the proposed building will be installed in accordance with the information attached to and provided on this Declaration Sheet:

Name of Builder or representative: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone No: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**NOTE:** This Declaration sheet is the copyright of the Western Australian Government and no part may be reproduced without prior permission.

This Declaration sheet is designed to be used in conjunction with the deemed to satisfy (DTS) provisions of the BCA and should not replace the BCA.

Where a proposal is unable to comply with the DTS provisions, an applicant may seek to comply with the performance requirements by the submission of an assessment using the verification methods stated in the BCA. Where this is proposed, a report from an appropriately qualified person is to be submitted for the consideration of the Building Surveyor.