

**GSAS Minimum Requirements for IJARAH PLOTS at Lusail (GSAS compliance Checklist)**

Sl. No.	Requirements		Inspection	
			Visual	Documentation
<b>A</b>	<b>Energy</b>			
1	Roof U-value	$\leq 0.25$ [W/(m <sup>2</sup> K)]	-	1. The final cross-sectional drawing of the roof along with the U-value calculation. 2. Approved Material Submittals for all the materials used in the Roof construction.
2	Wall U-value	$\leq 0.3$ [W/(m <sup>2</sup> K)]	The overall width of the external wall shall match the approved documents	1. The final cross-sectional drawing of the external wall along with the U-value calculation. 2. Approved Material Submittals for all the materials used in the Wall construction.
3	Glazing to Opaque Wall Ratio	$\leq 0.35\%$	-	1. Approved Elevation drawings indicating the glazing to opaque ratio
4	Glazing	$\leq 2.1$ [W/(m <sup>2</sup> K)] - Double Glazing-Hinged Type	The windows shall be double hinged type and double glazed.	1. The approved material submittals for the Glazing highlighting the U-value and the Shading Coefficient.
5	Shading Coefficient	$\leq 0.35$	-	
6	HVAC system	<ul style="list-style-type: none"> <li>▪ VRF Systems</li> </ul>	1. The energy consumption for the VRF, DX Package ACs from the nameplate of the units. 2. The star rating of the Hi-Wall Split ACs shall be minimum 5-Star. This can be checked by the Star rating label on the unit itself.	1. Approved material submittals for the HVAC Units.
		<ul style="list-style-type: none"> <li>▪ DX roof top package air conditioners</li> </ul>		
		<ul style="list-style-type: none"> <li>▪ Hi-wall mounted Split units with Minimum 5 Star Energy label or above</li> </ul>		
		<ul style="list-style-type: none"> <li>▪ Window-type air conditioning units are not accepted</li> </ul>		
7	Lighting	<ul style="list-style-type: none"> <li>▪ Use of LED, CFL, T5 lightings or other equivalent efficient fixtures</li> </ul>	The installation of light fixtures.	1. Approved material submittals for the Lighting fixtures.
8	Domestic Hot Water	Electric Wall mounted with minimum efficiency of 90%	-	1. Approved material submittals for the Heater system.

<b>B</b>		<b>Water</b>		
1	Dual Flush Toilet	≤ 4.5 L/flush for full flush and 3 L/flush for reduced flush	Check that the WC are dual flush	Approved material submittal for the Toilet.
2	Lavatory Faucet	≤ 4.7 L/min at an operating pressure of 3 bar	-	Approved material submittal for the Faucet.
3	Kitchen Sink	≤ 5.0 L/min at an operating pressure of 3 bar	-	Approved material submittal for the Kitchen Sink faucet.
4	Shower Head	≤ 8.0 L/min	-	Approved material submittal for the Showerhead.
5	Softscape Area	≤ 20% of plot area	Actual softscape area	Approved Landscape layout drawing indicating the total softscape area.
6	Plant Species	More than 30 % are native or adaptive	-	Approved datasheet for the Plant Species.
7	Irrigation	Use of automatic & drip irrigation system	Installation of Drip Irrigation System.	Approved Irrigation layout drawings.

Remark: This checklist to be signed and stamped by the Consultant supervisor