

Table 501.01 (9): DM U-value Calculator For Solid Block

Layer No.	Thickness mm	External Wall	Max.U = 0.57 W/m ² K	Density Kg/m ³	Resistance m ² K/W	Mass Kg/m ²
00.000.01	0.00	Inside Surface Film Resistance for Walls		0	0.120	0
00.000.30	15.00	Plaster (Cement / Sand)		1860	0.021	279
12.044.09	250.00	Masonry Solid Normal Weight		2167	0.152	5417
00.000.30	15.00	Plaster (Cement / Sand)		1860	0.021	279
00.000.02	0.00	Outside Surface Film Resistance for Walls		0	0.044	0
	280 mm	Thermal Transmittance U-value: 2.79 W/m ² K 0.49 Btu / °F ft ² h	Not as/DM Reg.		0.358 m ² K/W	

If the project team still would like to use solid block wall type, then additional insulation is required to improve the U-value to meet minimum DM requirements.

COMPLIANCE DOCUMENTATION

Table 501.01(10): Documents Required

Project Stages	Submittal Documents
Design Permit Application	<ol style="list-style-type: none"> 1. U-value calculation for wall, roof and floor in DM BLDG U-value calculator. 2. Glazing U-value, SC & LT in DM BLDG glazed schedule. 3. Section details highlighting proposed envelope details for wall, roof, floor and glazing. 4. Window to wall area calculation in DM BLDG glazed schedule.
Construction Completion Application	<ol style="list-style-type: none"> 1. DCL approval for insulation material and glazing highlighting U-value, SC & LT. 2. Building system approval certificate if applicable.
After Completion	Not applicable.

REFERENCES AND ADDITIONAL INFORMATION

Dubai Municipality. (2003). DM Administrative Resolution No. (66) of 2003 Approving Regulations the Technical Specifications for Thermal Insulation System.

Dubai Municipality. (n.d.) DM BLDG U-Value Calculation Sheet. Available at: <https://www.dm.gov.ae/en/pages/default.aspx>.

Dubai Municipality. (n.d.) DM BLDG Glazed Schedule Sheet. Available at: <https://www.dm.gov.ae/en/pages/default.aspx>.