

Since columns and beams within the building envelope are not insulated, the glazing U-value requirement shall be improved by 10%.
As an example, if max. glazing U-value is 2.1W/m² K, the improved value should be 1.9W/m² K

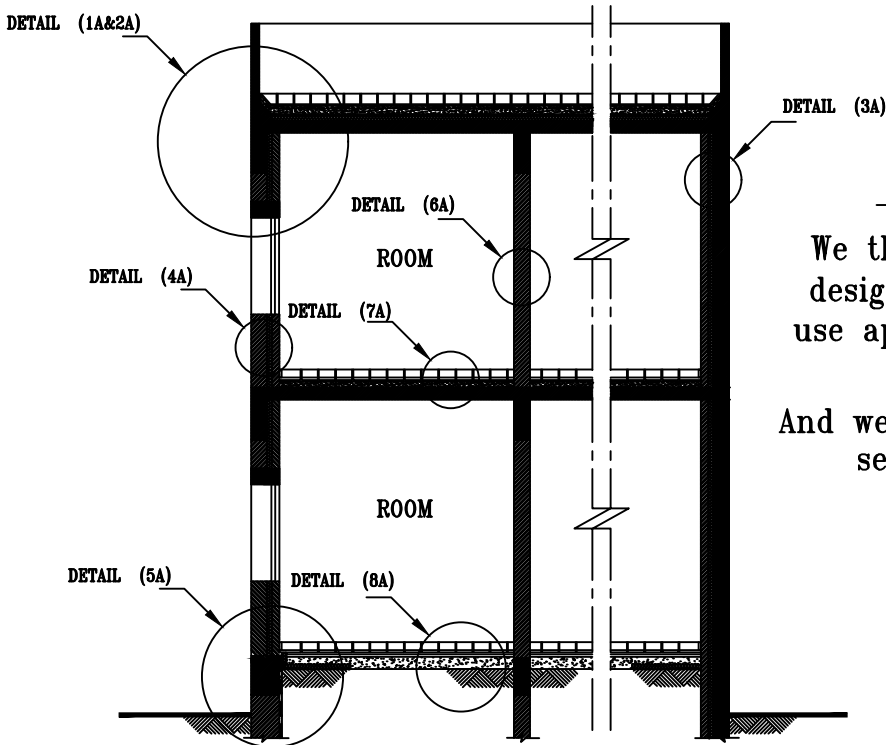


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Undertaking Letter for
Insulation and Glass Specifications

We the (consultant/contractor) responsible for the design and supervision of the project undertake to use approved thermal insulation materials, systems and installation methods.

And we commit that the attached thermal insulation sections are matching the architectural and structural details.



SECTION

The minimum EER of the HVAC equipments must be in accordance with Dubai Building Code

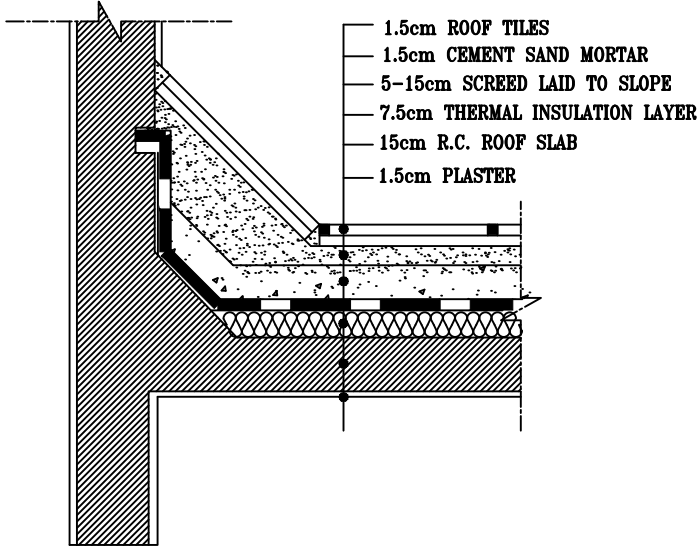
AC Thermal Load	=	Total Area (m²) x 0.160
	=	m² x 0.160
	=	kW

AC Electric Power Demand	=	Total Area (m²) x 0.077
	=	m² x 0.077
	=	kW

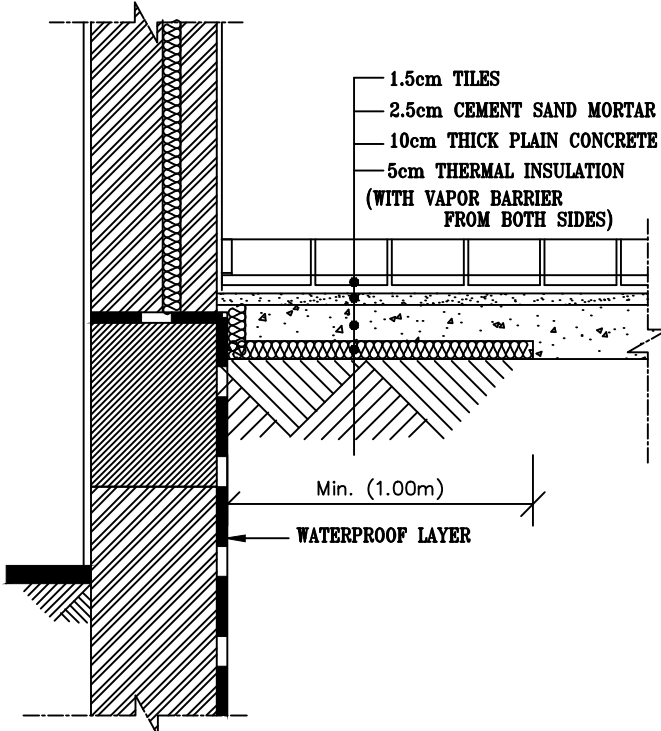
Where the total area is the total built up area excluding non AC car park or external swimming pool

Notes and Conditions:

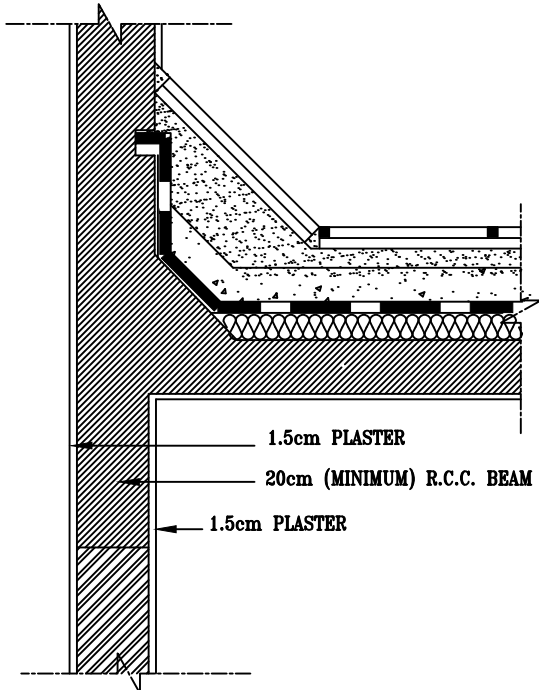
- The above two equations are applicable for DX air conditioning system only. If another system is being used (like chilled water, or variable refrigerant flow VRF), then all VAC drawings, glazing element schedule, AC load schedule, AC load calculation program should be attached as per DBC.
- Consultant must confirm prior to approving or installing AC units in the site that the electric demand load for AC units doesn't exceed the allowed and approved load. If extra load is required, then all VAC drawings, glazing element schedule, AC load schedule, AC load calculation program should be attached as per DBC.
- An approved insulated aluminium sandwich panel (applied for roof) is used and illustrated on the architectural sections and details (if being used).
- The U-value, SC, and LT must comply with DBC.
- Mechanical ventilation, air quality and noise level must comply with DBC.
- All indoor AC units to be located in wet areas to ease the maintenance and avoid damages due to AC drain leakage otherwise client written approval is required.



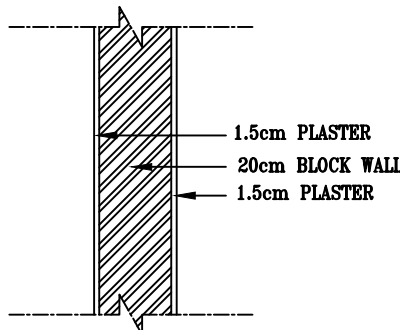
DETAIL (1A) OF ROOF



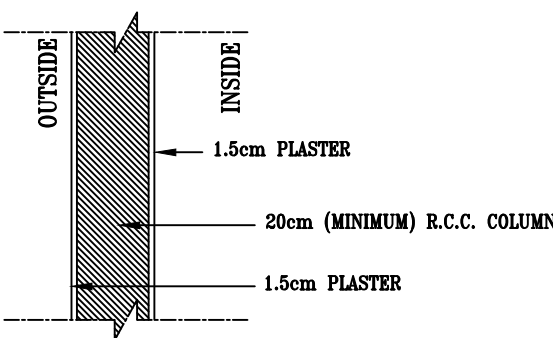
DETAIL (5A) OF GROUND FLOOR



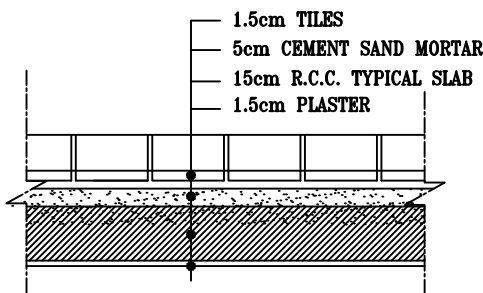
DETAIL (2A) OF DROP BEAMS



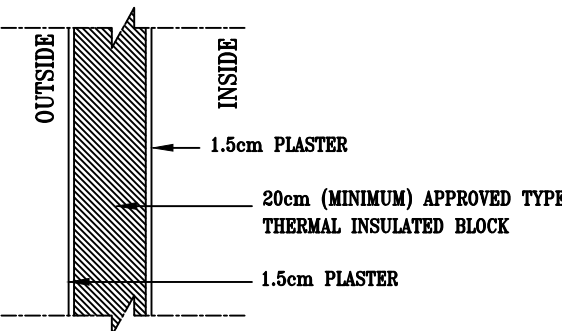
DETAIL (6A) OF PARTITION



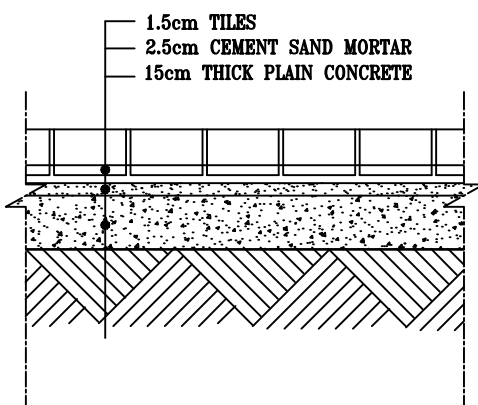
DETAIL (3A) OF EXTERNAL COLUMN



DETAIL (7A) OF TYPICAL FLOOR



DETAIL (4A) OF EXTERNAL WALL



DETAIL (8A) OF NON INSULATED GROUND FLOOR

No.	Date:	Name:
6	13/10/2020	NON INSULATED BEAM / COLUMN WITH APPROVED THERMAL BLOCK

THERMAL INSULATION
SYSTEM DETAILS