



### 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.

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  $2.1\text{W/m}^2\text{K}$ , the improved value should be  $1.9\text{W/m}^2\text{K}$

The minimum EER of the HVAC equipments must be in accordance with the AL SA'FAT

AC Thermal Load	=	Total Area ( $\text{m}^2$ )	x	0.160
	=	<input type="text"/>	$\text{m}^2$ x	0.160
	=	<input type="text"/>	kW	

AC Electric Power Demand	=	Total Area ( $\text{m}^2$ )	x	0.077
	=	<input type="text"/>	$\text{m}^2$ x	0.077
	=	<input type="text"/>	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 AI SA'FAT

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 AI SA'FAT

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 AI SA'FAT

Mechanical ventilation, air quality and noise level must comply with AI SA'FAT

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.

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NO.	REVISION	DATE	APP.
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JOB NO.

JOB TITLE :

OWNER NAME :

DRG TITLE :

LOCATION

BLOCK NO :-

PLOT NO :-

DESIGNED BY:

SCALE:

DRAWN BY:

DATE:

CHECKED BY:

DRG NO.:

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

THERMAL INSULATION  
SYSTEM DETAILS