APPLICATION NO.

Kingdom of Bahrain		مملكة البحرين
Electricity & Water Authority		هيئة الكهرباء والماء
Electricity & Water Conservation Directorate		إدارة ترشيد الكهرباء والماء

THERMAL INSULATION IMPLEMENTATION FORM

Client Name: **Phone No.:** **e-mail:**

Bldg. No. **Road No.** **Block No.** **Area:**

Engineering Office Name: **Phone No.:** **e-mail:**

Building Type: **No. of floors:**

- ***Thermal Transmittance (U-Value) for Roofs***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
	Total thermal resistances for materials used in Roof (R_T):					

U-Value = **$W/m.^2$ °C**

Client's Name & Signature **In Charge Engineer Name & Signature** **Engineering Office Stamp & Signature**

Electricity & Water Authority Approval **Date of Approval**

Kingdom of Bahrain		مملكة البحرين
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- ***Thermal Transmittance (U-Value) for Air-conditioned floors/ceilings exposed to non air-conditioned spaces***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature | **In Charge Engineer Name & Signature** | **Engineering Office Stamp & Signature**

Electricity & Water Authority Approval | **Date of Approval**

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-
- ***Thermal Transmittance (U-Value) for external Walls with Blocks***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/$m.^2$ °C

Client's Name & Signature

In Charge Engineer Name & Signature

Engineering Office Stamp & Signature

Electricity & Water Authority Approval

Date of Approval

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- ***Thermal Transmittance (U-Value) for Concrete/ Shear Walls***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature | **In Charge Engineer Name & Signature** | **Engineering Office Stamp & Signature**

Electricity & Water Authority Approval | **Date of Approval**

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- ***Thermal Transmittance (U-Value) for External Columns***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature | **In Charge Engineer Name & Signature** | **Engineering Office Stamp & Signature**

Electricity & Water Authority Approval | **Date of Approval**

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- ***Thermal Transmittance (U-Value) for External Beams***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature	In Charge Engineer Name & Signature	Engineering Office Stamp & Signature

Electricity & Water Authority Approval **Date of Approval**

Kingdom of Bahrain		مملكة البحرين
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- ***Thermal Transmittance (U-Value) for Spandrel Area of Curtain Wall***

Sr. No.	Description of materials used	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature	In Charge Engineer Name & Signature	Engineering Office Stamp & Signature

Electricity & Water Authority Approval **Date of Approval**

Kingdom of Bahrain		مملكة البحرين
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- ***Thermal Transmittance (U-Value) for walls of light wells/shafts/voids***

Sr. No.	Description of materials used in Walls	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature _____

In Charge Engineer Name & Signature _____

Engineering Office Stamp & Signature _____

Electricity & Water Authority Approval _____

Date of Approval _____

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- ***Thermal Transmittance (U-Value) for*** ***(specify the type of wall)***

Sr. No.	Description of materials used in Exterior Walls	Density kg/m^3	Thickness (I) m	r $\frac{m.k}{w}$	R $\frac{m^2.k}{w}$	Notes
1-						
2-						
3-						
4-						
5-						
6-						
7-						
8-						
9-						
10-						
11-						
12-						
13-						
	Total thermal resistance for materials used in Wall (R_T):					

U-Value = W/m.^{2} °C

Client's Name & Signature | **In charge Engineer Name & Signature** | **Engineering Office Stamp & Signature**

Electricity & Water Authority Approval | **Date of Approval**

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Glass Selection Details

Location	Windows & Doors	Curtain Wall	Sky Light	Total Glass Area (M^2)	Total Surface Area (M^2)	Glass %
Glass Area (M^2)						

LOCATION	GLASS MAKE/DESCRIPTION/COATING SURFCE #		THICKNESS (mm)			SUMMER U-VALUE ($W/M^2\,^oC$)	SHADING COEFFICIENT (SC)	LIGHT TR %
	OUTER GLASS	INNER GLASS	OUTER GLASS	AIR SPACE	INNER GLASS			
WINDOWS & DOORS								
CURTAIN WALLS								
SKY LIGHT								

I hereby state that all information in the attached tables and documents is correct and I confirm that I will comply with Thermal Insulation Order no. (8 /99) for the construction of this building.

Client's Name & Signature _____

In Charge Engineer Name & Signature _____

Engineering Office Stamp & Signature _____

Electricity & Water Authority Approval _____

Date of Approval _____