# HEAT LOAD ENGINEERING QUESTIONNAIRE ON STANDARD HEAT LOAD CALCULATION TO DIN EN 12831



Please complete the following fields fully on your PC. Print out and **sign** the questionnaire, then send it to your sales centre. The email address and fax number can be found on the last page of this questionnaire.

### 1. Project data

	Sender
Sales centre	
Customer no./ completed by	
Company	
Contact	
Telephone/mobile	
Fax/email	
Street, no.	
Postcode, town	
Country	

	Building project
Building owner/ project	
Contact	
Telephone/mobile	
Fax/email	
Street, no. (place of construction) Postcode (place of construction)	
Country	
Notes on building project	

### 1.1 Heating and ventilation system

The calculation to DIN EN 12831 differentiates between the systems listed below. Consequently, the results of this calculation cannot be used, or can only be used to a limited extent, for other heating or ventilation systems.

System		Туре
	Central ventilation/heating systems, extract air	
	Central ventilation/heating systems, extract and ventilation air	
	Central heating system	
	Decentralised heating/storage heaters	

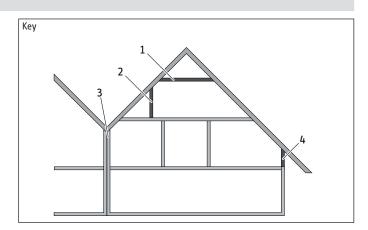
Charger model for storage heaters and electric central heating systems $\boldsymbol{\!\!\!\!\!\!^*}$	
	Enable time $t_{_{\rm F}}$ (in hours)
	Additional enable time t <sub>zF</sub> (in hours)
	Energy factor f <sub>c</sub> (details from power supply utility)

\* These details can be obtained directly from the power supply utility responsible for the system.

### 1.2 Components

Type of	windows
	Window frames made of wood or plastic
	Window frames made of metal
	Single glazing
	Double glazing
	Double window (Double window with 20-100 mm clearance between the two window panes. The frame elements are not joined together.)
	Composite windows (The structure is similar to a double window, but the frame elements are joined together.)
	Triple glazing
	Thermal glazing
	Ug value W (m² * K) *

<sup>\*</sup> This information is essential for thermal and triple glazing. The information is only available from the window manufacturer. Due to the wide variety of brands, an estimate is not possible here.



- 1 Collar beam ceiling ceiling separating topmost living space and attic.
- 2 Long pane side or walled-off attic vertical wall in the attic between roof slope and floor. The long pane side is not an outside wall; the room beyond is not lived in or heated.
- 3 Wall separating houses (fire wall).
- 4 Jamb wall vertical wall in the attic between roof slope and floor. The jamb wall is always an outside wall.

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Components	Structure of materials $ \label{eq:leading_problem}                                    $	Material thickness in cm	Coeff. of thermal conduct. in W/ (m*K)	U value in W/(m <sup>2</sup> *K)
Outside wall		•!!!		, 10
Cellar/basement				
Thermal insulation of cellar/basement				
Ground floor				
Thermal insulation of ground floor				
Upper floor(s)				
Thermal insulation of upper floor				
Internal wall				
Cellar/basement				
Ground floor(s)/upper floor(s)				
Wall separating houses				
Cellar/basement				
Ground floor(s)/upper floor(s)				
Floor				
Unfinished floor in cellar/basement				
Thermal insulation of unfinished floor in basement				
Unfinished floor on ground floor				
Thermal insulation of unfinished floor on ground floor				
Separating ceiling				
Unfinished ceiling, separating ceilings Thermal insulation of				
unfinished ceiling Ceiling to non-converted attic o	r ridge area (collar heam ceiling)			
Ceiling structure	Trase area (condit beam centing)			
Thermal insulation of ceilings				
Roof slope				
Roof construction				
Thermal insulation of roof				
Long pane side/walled-off attic				
Long pane side/walled-off attic				
Thermal insulation of long pane side				
Flat roof				
Roof construction				
Thermal insulation of roof				
Notes				

## HEAT LOAD ENGINEERING QUESTIONNAIRE ON STANDARD HEAT LOAD CALCULATION TO DIN EN 12831



### 1.3 Printing and sending the engineering questionnaire

Printing the engineering questionnaire

Print

Print out and sign your engineering questionnaire, then fax it to the fax number below.

Faxing the engineering questionnaire\*

Email the engineering questionnaire to your sales centre.

Send

Stiebel Eltron Info Centre

#### Other construction documents

The more detailed and accurate the description of your system or building, the more precisely we can plan your project. If you have any further technical drawings, photographs or specifications for the building, please send us full copies of all of these documents.

### **Legal note**

You confirm that the details are complete and correct. We use them as a basis for the engineering and calculation of your system. We accept no liability for calculations or engineering designs based on incorrect, inaccurate or incomplete details. We accept no liability nor offer any warranty if our engineering design is used for the creation of a system using third party components.

Date	Signature

<sup>\*)</sup> Landline prices of the relevant provider apply.