



# INSTRUCTIONS FOR ENTERING EQUIVALENT INPUT DATA INTO BE18

## CALCULATION TOOL EQUIVALENT VALUES FOR ENTRY INTO BE18

Project-specific values that must be entered into the energy framework calculation are stated in the offer and order confirmation material for LivingBetter ventilation windows and IKM A/S heat pumps.

These instructions show where to enter the data and ensure that the building's energy framework is calculated correctly. Naturally, the data varies from that entered in connection with standard products and solutions, as these do not have the same impact on energy consumption and the indoor climate.



# ENERGY VALUES FOR THE VENTILATION WINDOW

LivingBetter receives scale drawings (floor plans and façades) from the customer. Based on the drawings, we draw up proposals to indicate the volume of supply air that is required to meet BR18 requirements.

This figure is then used to calculate more precise equivalent U-values that can be entered in the BE18 program. The equivalent U- and g-values are stated in a table at the back of LivingBetter's offer.

This calculation method has been devised in cooperation with Aalborg University (AAU) in compliance with the Danish Building Research Institute's instructions 213 Energy demand in buildings.



#### THE VENTILATION WINDOW

The ventilation window is defined as a double window structure with a double-glazed unit on the inside and a single-glazed unit on the outside (the opposite is also possible) fitted in conjunction with LivingBetter's patented thermostatic valve system and with air channels, made to Living-Better's specifications and fully tested by an independent research institute.

The window's function presupposes that there is negative pressure in the building, achieved either by natural or mechanical air extraction. For the ventilation window to contribute to the energy framework calculation, a mechanical means of extraction (e.g. an exhaust air heat pump) is required that recovers energy from the exhaust air.

Fraunhofer Gesellschaft (research institute) and Aalborg University (AAU) have conducted exhaustive tests on ventilation windows fitted with the LivingBetter thermostatic valve system. The test results make it possible to calculate and substantiate air volume and energy recovery so that the solution meets energy labelling requirements.

# THE EXTRACT AIR HEAT PUMP



When installed in combination with ventilation windows, IKM's extract air heat pump operates constantly and maintains negative pressure in the building at all times. The heat pump recovers energy from exhaust air. This energy is used to produce domestic hot water and central heating.

IKM A/S exhaust air heat pumps are approved in accordance with EN14825. The BE data is stated in accordance with EN14511 Air condition systems, table 9, exhaust air. Domestic hot water meets the requirements of EN16147 profile (L).

Please note: An extract air heat pump is not listed on the so-called positive list. The only heat pumps on this list are heat pumps that have an outdoor unit. Even so, IKM extract air heat pumps are approved for use in new residential units.



### TOOL FOR CALCULATING EQUIVALENT VALUES FOR ENTRY INTO BE18

#### **U-value** equivalent

Enter U-value in the "Data/Statisk værdi" (Data/static value) folder. The program calculates a U-value equivalent for the ventilation window's reduced ventilation heat loss.

Calculating the equivaler (Input data from LivingBet					οιο	gy				Output data (e	nter in Er	nergy calo	:ulation)
The residential unit 155 m <sup>2</sup> Mandatory basic air exchan			Differential pressure in the building (Pa) 13.7	The ventilation window's % share of total element width		stati enter figu With no through	ation window's c values res from offer) air circulation the window		equiva for mecha supply air	lation window's alent values nical ventilation volume per vent) 3.9 l/s	wind glazing (f,	ntilation low's g factor ) +	Screening factor Enter shading coef- ficient as screening
for ventilation (0.3 l/s/m²) 1. 46.5 l/s/m2	08 m³/t/m²		Recommended 12 - 16 Pa	window's % share of total element width			0.0 l/s) 0 m³/t)		1.	4.0 m³/t		lent E <sub>w</sub> - ues	factor
Offer/order position ID	Dime	ensions	No. of CWT vents in the window element		U, [V	"∙value V/k.m²]	g <sub>g</sub> -value		wvalue [W//k m²]	g <sub>g</sub> -value	f,	E,	NB: Set X in "Kun sommer"
	Width	Height											(summer only)
West – bedroom	70	127	2	100	Γ	0.85	0.63	Τ	0.37	0.69	0.78	71.6	0.92
West – living room	150	212	2	(%) Line vertilation of total element width		0.80	0.63		0.53	0.66	0.89	66.1	0.96
East – living room	90	212	2			0.81	0.63		0.41	0.67	0.84	74.3	0.94
East – room	107	127	2	100		0.85	0.63		0.37	0.69	0.69	58.5	0.92
East – room	107	127	2	total element width (%) 100 50 75		0.85	0.63		0.37	0.69	0.69	58.5	0.92
East – office	107	127	2			0.85	0.63		0.37	0.69	0.69	58.5	0.92

#### g-value equivalent

Enter g-value in the "Data/Statisk værdi" (Data/static value) folder. The program calculates a g-value equivalent for the ventilation window's reduced ventilation heat loss.

					1							
Calculating the equivaler					uogy			Output data (	enter in E	nergy calo	culation)	
	•	ea	Differential pressure in the building (Pa) 13.7	a) The ventilation window's % share of total demost with that ught he window % % share of that upmost with window % % share of that upmost with window % share of that upmost window % share of that upmost with window % share of that upmost with window % share of that upmost window % share of that upmost with upmost with window % share of that upmost window % share of that upmost with upmost wit							Screening factor Enter shading coe	
Mandatory basic air exchan or ventilation (0.3 l/s/m²) 1. 46.5 l/s/m2	asic air exchange rate (cf. BR18) n (0.3 l/s/m <sup>2</sup> ) 1.08 m <sup>3</sup> /t/m <sup>2</sup> : 16.5 l/s/m2 / 167.4 m <sup>3</sup> /t Dimensions No. of CWT	Recommended 12 - 16 Pa	total element width	(0.0	l/s)			equiva	lent E <sub>w</sub> -	ficient as screening factor		
Offer/order position ID	Dime	nsions	No. of CWT vents in	(%)	U value [W/k m²]	g <sub>g</sub> -value	U <sub>w</sub> -value [W/k m²]	g <sub>g</sub> -value	f,	E	NB: Set X in "Kun sommer"	
	Dimensions     Dimensions     No. of CWT vents in the window element     Total       udotom     70     127     2     2       ug room     100     122     2     2       uo     100     127     2     2								(summer only)			
West – bedroom		100	0.85	0.63	0.37	0.69	0.78	71.6	0.92			
West – living room		2	50	0.80	0.63	0.53	0.66	0.89	66.1	0.96		
East – living room	90	212	pressure in the building (Pa) 13.7 Recommended 12 - 16 Pa No. of CWT vents in the window element t 2 2 2 2 2	75	0.81	0.63	0.41	0.67	0.84	74.3	0.94	
East - room	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5	0.92	
East - room	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5	0.92	
East – office	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5	0.92	

#### Screening factor

Enter shading coefficient as screening factor in "Skygger" (Shade), table 1. NB: Set X or ÷ before the figures entered under "Kun sommer" (summer only).

Calculating the equivaler Input data from LivingBet					ology			Output data (e	enter in Er	nergy calo	ulatior	1)
155 m²	Dimensions     Dimensions     No. of CWT vei the window ele       100     70     127     2       100     70     127     2       100     100     127     2	Differential pressure in the building (Pa) 13.7 Recommended 12 - 16 Pa	The ventilation window's % share of total element width	static (enter figure with no ai through a (0.1	tion window's values es from offer) ir circulation he window 0 l/s) 1 m <sup>3</sup> /t)	equivale for mechanic (supply air vo 3.9	ion window's nt values cal ventilation lume per vent) l //s l m³/t	wind glazing (f, equiva	ntilation low's g factor ) + lent E <sub>w</sub> - ues	Ente	reening factor r shading coe nt as screenir factor	
Offer/order position ID	Dime	ensions	No. of CWT vents in the window element	(%)	U <sub>w</sub> -value [W/k m²]	g <sub>g</sub> -value	U <sub>w</sub> -value [W/k m²]	g <sub>g</sub> -value	1 <sub>f</sub>	E,,	"k	IB: Set X in iun sommer"
	Width	Height									(summer on	
West – bedroom	70	127	2	100	0.85	0.63	0.37	0.69	0.78	71.6		0.92
West – living room	150	212	2	50	0.80	0.63	0.53	0.66	0.89	66.1		0.96
East – living room	90	212	2	75	0.81	0.63	0.41	0.67	0.84	74.3		0.94
East – room	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5		0.92
East - room	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5		0.92
East – office	107	127	2	100	0.85	0.63	0.37	0.69	0.69	58.5		0.92

#### Dynamic U-values\_width-corrected:

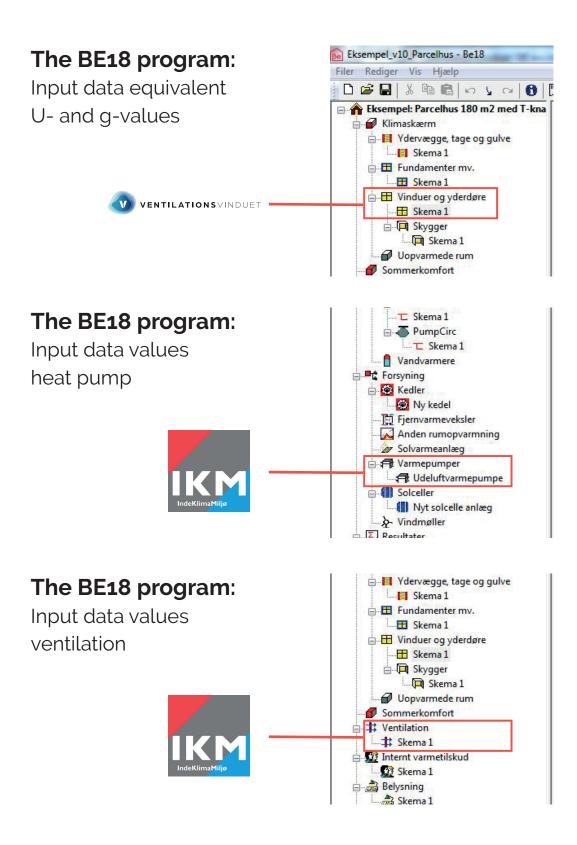
If the area of the ventilation window is less than 100%, enter the static U- and g-values for that part of the window that is a standard element. These values are stated in LivingBetter's quote/order confirmation.

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Calculating the equivalen (Input data from LivingBet					WT valve tech-n	ology			Output data (e	enter in Er	nergy calo	:ulation)
The residential unit' 155 m <sup>2</sup>	0	ea	Differential pressure in the building (Ha) 13.7		he ventilation low's % share of	static (enter figur With no a	tion window's values es from offer) r circulation	equivale for mechanie	ion window's ent values cal ventilation lume per vent)	wind glazing	ntilation low's g factor	Screening factor Enter shading coef-
Mandatory basic air exchan for ventilation (0.3 l/s/m²) 1.0 46.5 l/s/m2	08 m³/t/m²		Recommended 12 - 16 Pa	tota	window's % share of total element width (%) (%) (%) (V (V) (V) (V) (V) (V) (V) (V) (V) (V)	(0.	he window 0 l/s) 1 m³/t)		9 l/s ) m³/t	equiva	) + lent E <sub>w</sub> - ues	ficient as screening factor
Offer/order position ID	Dime	ensions	No. of CWT vents in the window element	$\mathbf{\Lambda}$		U -value [Ŵ/k m²]	g <sub>g</sub> -value	U -value [W/k m²]	g <sub>g</sub> -value	f,	E	NB: Set X in "Kun sommer"
	Width	Height										(summer only)
West – bedroom	70	127	2			0.85	0.63	0.37	0.69	0.78	71.6	0.92
West – living room	150	212	2	LΓ		0.80	0.63	0.53	0.66	0.89	66.1	0.96
East – living room	90	212	2			0.81	0.63	0.41	0.67	0.84	74.3	0.94
East – room	107	127	2		100	0.85	0.63	0.37	0.69	0.69	58.5	0.92
East – room	107	127	2		100	0.85	0.63	0.37	0.69	0.69	58.5	0.92
East – office	107	127	2		100	0.85	0.63	0.37	0.69	0.69	58.5	0.92
Total no. of CWT vents			12									

The static values for windows and doors **without** ventilation are stated in LivingBetter's offer/order confirmation (see individual positions).

# ENTER EQUIVALENT INPUT DATA



### THE BE18 PROGRAM:

Enter the windows' energy parameters in the "Vinduer og yderdøre" (Windows and outside doors) folder.

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	and the second sec			_				_	_			-			
	- SB anvisning 213: Bygningers energibehov,	Re18													
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	Vinduer og vderdøre	Antal	Orien	Hældn,	Areal (m²)	U (Wim <sup>2</sup> K)	b	HI (WK)	Ff(-)	g (-)	Skygger	Fc (-) Dim.Ind	e (C) Dim.Ude (C	Teb 010	c
Ydervægge, tage og gulve	Those of yoeroere	18	Crient	1 Idenuiti	55.8	O (Minity)	CtrlClick	55.837	11(5)	9(9	CtriClick	Dilline	e (c) Diff.oue (c	1786.78	-
	Vindue, ille had, bxb:0.60x0.60m	1	×	80	0.4	129	1.00	0.516	0.42	0.4	1. Udhæng	1		16.512	0
Fundamenter mv.	Vindue, vaer. N. 150x140m	1		00	2.1	1.04	1.00	2.184	0.73	0.62	1. Udhæng			69.888	0
AND SKIPHULL	Vindue kakken 330x140m	1		<b>X</b>	4.6	1.03	1.00	4,738	0.76	0.62	1. Udhæng	1		151.616	0
	Bryggersdør, 1,00x2,10m	1		90	2.1	1,12	1,00	2 352	0.66	0.62	1. Udhæng	1		75 264	0
	Hoveddar, 1.60x2.10m	1		90	3.4	1.15	1.00	3.91	0.66	0.62	1. Udhaeng	1		125.12	0
Skema 1	Vindue, arb.vær., 1,50x1,40m	1		90	21	1.04	1.00	2 184	0.73	0.62	1. Udhæng	1		69.888	-
Uopvarmede rum	Vindue, at bad, 1.50x1.40m	1		90	21	1.04	1.00	2.184	0.73	0.4	1. Udhæng	1		69.888	0
merkomfort	Vinduer, sovevær., 0.60x1.40m	2		90		1.2	1.00	1.92	0.55	0.62	1. Udhæng			61.44	0
	Glasparti, sovevær., 1,80x2,10m	1		90	3.0	1.04	1.00	3.952	0.77	0.62	3. Højreskygr			126.464	-
	Glasparti stue, 1.80x2.10m	1	0	90	3.8	0.94	1.00	3.572	0.87	0.62	4. Venstresky			114.304	1
Skema 1	Glasparti, stue, 3.60x2,10m	1	50	90	7.6	0.99	1.00	7.524	0.82	0.62	2. Terrasse			240,768	1
ning 1	Glasparti atue. 3.60x2.10m	1	81	90	7.6	0.99	1.00	7.524	0.82	0.62	2. Terrasse			240.768	1
	Glasparti, stue, 1.80x2.10m	1	v	90	3.8	0.94	1.00	3.572	0.87	0.62	3. Højreskvar	-0.2		114,304	1
	Glasparti, spisestue, 2,80x2,10m	1	8	90	5.9	0.99	1.00	5.841	0.82	0.62	4. Venstresky	-0.45		186,912	0
	Vindua umo C 1 60v1 40m	1	9	90	2.1	104	1.00	2.184	0.73	0.62	5. Venstresky	-0.2		69.888	0
nefordelingsanlæg	Ventilationsvindue fix profil 1.20x1.20m	1	5	90	1.4	0,57	1.00	0.798	0.86	0.55	1. Udhæng	1		25.536	0
	Ventilationsvindue åben profil 1,20x1,20m	1	8	90	1,4	0,63	1,00	0,882	0,71	0.55	1. Udhaeng	1		28.224	0
							-								

#### Calculate **U-value** equivalent as instructed in SBI 213 and enter in column U (W/m2-K)

#### Calculate g-value equivalent as instructed in SBI 213 and enter in column g

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Vis Hjælp																
1 B B 0 1 0 0 D	📆 🤜 🖇 SB anvisning 213: Bygningers energibehov	Be18														
el: Parcelhus 180 m2 med T-kna																
askærm	Vinduer og yderdøre	Antal	Orient	Hældn.	Areal (m <sup>2</sup> )	U (Wim <sup>a</sup> K)	ь	Ht (WIK)	Ff (-)	g (-)	Skygger	Fc (-)	Dim.Inde (C)	Dim.Ude (C)	Tab (W)	
/dervægge, tage og gulve Skema 1		18			55,8		Click	55,837			CtrlClick				1786,78	
undamenter mv.	1 Vindue, ille bad, bxh:0,60x0,60m	1	v	90	0,4	1,29	1.0	0,516	0,42	0,4	1. Udhæng	1			16,512	
Skema 1	2 Vindue, vær. N. 1.50x1.40m	1	v.	90	2.1	1.04	1.00	2.184	0.73	0.62	1. Udhæng	-0.2			69.888	
finduer og yderdøre	3 Vindue, køkken, 3,30x1,40m	1	n	90	4,6	1,03	1,00	4,738	0,76	0,62	1. Udhaeng	1			151,616	
Skema 1	4 Bryggersdør, 1.00x2.10m	1	n	90	2,1	1,12	1,00	2.352	0,66	0.62	1. Udhæng	1			75,264	
н жуудаг	5 Hovedder, 1,60x2,10m	1	n	90	3.4	1,15	1.00	3.1	0.66	0.62	1. Udhæng	1			125,12	
Skema 1	6 Vindue, arb.vær., 1,50x1,40m	1	n	90	2,1	1,04	1,00	2,18	0,73	0,62	1. Udhaeng	1			69,888	
Jopvarmede rum	7 Vindue, st. bad., 1.50x1.40m	1	ø	90	21	1.04	1.00	2.184	0.73	0.4	1. Udhæng	1			69.888	
imerkomfort tilation	8 Vinduer, sovewaer, 0.60x1.40m	2	0	90	0.8	1.2	1,00	1.92	0.55	0.62	1. Udhaeng	-0.2			61.44	
Skema 1	9 Glasparti sovevær, 1.80x2.10m	1	9	90	3.8	1.04	1.00	3.952	0.77	0.62	3. Højreskvor	-0.5			126.464	
mt varmetilskud	10 Glasparti, stue, 1,80x2,10m	1		90	3.8	0.94	1.00	3.572	0.87	0.62	4. Venstreska	-0.2			114 304	
Skema 1	11 Glasparti atue, 3.60x2.10m	1	50	90	7.6	0.99	1.00	7.524	0.82	0.62	2. Terrasse				240.768	
sning	12 Glasparti stue, 3.60x2.10m	1	54	90	7.6	0.99	1.00	7.524	1.2	0.62	2. Terrasse	-0.4			240.768	
5kema 1	13 Glasparti, stue, 1,80x2,10m	1	v	90	3.8	0.94	1.00	3.572	0.87	0.62	3. Højreskvar				114,304	
et elforbrug Parkeringskældre mv.	14 Glasparti apisestue 2.80x2.10m	1		90	5.9	0.99	1.00	5.841	0.82	0.62	4. Venstresky				186.912	
ranisk keling	15 Windus user S 1 50x1 40m	1		90	2.1	1.04	1.00	2.184	0.73	0.62	5. Venstresky				69.888	
nefordelingsanlæg	+16 Ventilationsvindue fix profil 1,20x1,20m	1		90	1.4	0,57	1.00	0.798	0.86	0.55	1. Udhæng				25.536	
Skema 1	17 Ventilationsvindue åben profil 1.20x1.20m	1		90	1.4	0.63	1.00	0.882	0.71	0,55	1. Udhæng				28.224	
Pumper	17 ventrasonsvindoe aben proti 1,2001,20m		-			0,00	1,00	0,002	3,71	0,00	1. Oundering					
Pumpe-skema 1	19															

#### Area (m2) is the gross window area (stated in the offer)

#### Stated in the table at the back of the LivingBetter's offer/order confirmation

empel_v10_Parcelhus - Be18 Rediger Vis Hjælp																
■   8 % %   0 \ 0   0	📅 📆 🤜 🦹 SBi anvisning 213: Bygningers energibeh	ov. Be18														
Eksempel: Parcelhus 180 m2 med T-kna																
Klimaskærm	Vinduer og yderdøre	Antal	Orient	Hældn.	Areal (m²)	U (Wim <sup>a</sup> K)	ь	Ht (WIK)	Ff(-)	g(-)	Skygger	Fc (-)	Dim.Inde (C)	Dim.Ude (C)	Tab (W)	Ot
- H Ydervægge, tage og gulve		18			55,8		CtriClick	55,837			CtrlClick				1786,78	0/1
Skema 1	1 Vindue, lille bad, bxh:0.60x0.60m	1		90	0.4	1.29	1.00	0.516	0.42	0.4	1. Udhæng	1	-		16.512	0
E Fundamenter mv.	2 Vindue, vær. N. 1.50x1.40m	1		90	2.1	1.04	1.00	2,184	0.73	0.62	1. Udhæng	-0.2			69.888	0
- III Vinduer og vderdøre	3 Vindue, kekken, 3.30x1.40m	1	0	90	4.6	1.03	1.00	4.738	0.76	0.62	1. Udhaeng	1			151.616	0
Skema 1	4 Bryggersdør, 1.00x2.10m	1		90	2.1	1.12	1.00	2.352	0.66	0.62	1. Udhæng	1			75.264	0
E det skygger	5 Hoveddør, 1,60x2,10m	1		90	3.4	1,15	1.00	3.91	0.66	0.62	1, Udhæng	1			125,12	0
Skema 1	6 Vindue, arb.veer., 1.50x1.40m	1	0	90	2.1	1.04	1.00	2.184	0.73	0.62	1. Udhaeng	1			69.888	0
🚽 Uopvarmede rum	7 Vindue, st. bad., 1,50x1,40m	1		90	2.1	1.04	1.00	2.184	0.73	0.4	1. Udhæng	1			69.888	0
Sommerkomfort	8 Vinduer, soveyeer, 0.60x1.40m	2		00	0.8	1.2	1.00	1.92	0.55	0.62	1. Udhæng	.0.2			61.44	-
t Skema 1	9 Glasparti, sovevær, 1.80x2.10m	1		×.	3.8	1.04	1.00	3.952	0.77	0.62	3. Høireskvor	-0.5			126,464	0
3 Internt varmetilskud	10 Glasparti, stue, 1.80x2.10m	1		90	3.8	0.94	1.00	3.572	0.87	0.62	4. Venstresky				114.304	1
Skema 1	11 Glasparti stue, 3,60x2,10m	1	50	90	7.6	0.99	1.00	7.524	0.82	0.62	2. Terrasae				240.768	1
Belysning	12 Glasparti, stue, 3,60x2,10m	1	97	90	76	0.99	1.00	7.524	0.82	0.62	2. Terrasse				240.768	1
Skema 1	13 Glasparti stue, 1.80x2.10m	1		90	38	0.94	1.00	3.572	0.87	0.62	3. Højreskygs				114 304	1
Andet elforbrug	14 Glasparti spisestue, 2,80x2,10m	1		90	5.9	0.99	1.00	5.841	0.82	0.62	4. Venstresky				186.912	0
Mekanisk køling	15 Vindua umr S 150v140m	1		90	21	1.04	1.00	2.184	0.73	0.62	5. Venstresky				69.888	0
Varmefordelingsanlæg	+16 Ventilationsvindue fix profil 1,20x1,20m			90	14	0,57	1.00	0.798	0,85	0.55	1. Udhæng	1			25.536	0
T Skema 1	17 Ventilationsvindue äben profil 1,20x1,20m	1	•	90	1.4	0.63	1.00	0.882	0.00	0.55	1. Udhæng	1			28.224	0
Pumper		-	-		1.00	0,05		0,004	3,71	0,35	r. odnasng					0
Ta Pumpe-skema 1	18															
Varmt brugsvand	20															
- VBV Beholder	20															

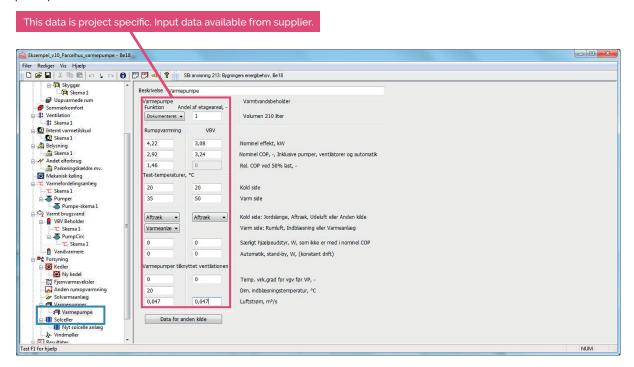
#### Ff (-) is the window's glazing factor (%). Calculated as area of glass/gross area

v10_Parcelhus - Be18	-	of these based based on the local	1.00		-				-	- CO.							
er Vis Hjælp   &Rat®al ⊧o y, ox [6][5	n m	SB anvisning 213. Bygningers energibehov	Be18														
mpel: Parcelhus 180 m2 med T-kna	<i></i>						<u> </u>										
limaskærm		Vinduer og yderdøre	Antal	Orient	Hældn.	Areal (m²)	U (Wim <sup>2</sup> K)	b	Ht (WIK)	Ff (-)	g (-)	Skygger	Fc (-)	Dim.Inde (C)	Dim.Ude (C)	Tab (W)	C
Ydervægge, tage og gulve			18			55,8		CtrlClick	55,837			CtrlClick				1786,78	0
E Skema 1 Fundamenter my.	1	Vindue, lille bad, bxh:0.60x0.60m	1	v	90	0.4	1.29	1.00	0.516	0.42	0.4	1. Udhæng	1	-		16.512	0
Fundamenter mv.	2	Vindue, vær: N, 1,50x1,40m	1	v	90	2,1	1,04	10	2,184	0,73	0,62	1. Udhaeng	-0,2			69,888	0
Vinduer og vderdøre	3	Vindue, køkken, 3.30x1.40m	1	n	90	4.6	1.03	1.0	4,738	0.76	0.62	1. Udhæng	1			151.616	0
E Skema 1	4	Bryggersdør, 1.00x2.10m	1	n	90	2.1	1,12	1.00	2.352	0,66	0.62	1. Udhæng	1			75,264	0
un skygger	5	Hoveddar, 1.60x2.10m	1	0	90	3.4	1.15	1.00	3.91	0.66	0.62	1. Udhaeng	1			125.12	0
- 🖾 Skema 1	6	Vindue, arb.vær., 1.50x1.40m	1		90	21	1.04	1.00	2 184	0.73	0.62	1. Udhæng	1			69 888	0
Uopvarmede rum		Vindue, st. bad., 1.50x1.40m	1	ø	90	2.1	1.04	1.00	2 184	0.73	0.4	1. Udhaeng	1			69.888	0
nmerkomfort	0	Vinduer, sovevær., 0.60x1.40m	2	a	90	0.8	1.2	1.00	12	0.55	0.62	1. Udhæng	-0.2			61.44	0
Skema 1		Glasparti sovever, 1.80x2.10m	1		90	38	1.04	1.00	3.95	0.77	0.62	3. Højreskygs				126.464	0
nt varmetilskud	10	Glasparti, stue, 1.80x2.10m	1		90	3.8	0.94	1.00	3,572	0.87	0.62	4. Venstresky				114.304	1
Skema 1		Glasparti sture 3.60x2.10m	1	50	90	7.6	0.99	1.00	7.524	0.82	0.62	2. Terrasse				240,768	
sning	12	Glasparti, stue, 3,60x2,10m	1	eu	90	7.6	0.99	1,00	7.524	0.82	0.62	2. Terrasse				240.768	1
Skema 1		Glasparti, stue, 1.80x2.10m	1	v	90	38	0.94	1.00	3.572	0.87	0.62	3. Højreskvar				114 304	
et elforbrug Parkeringskældre mv.		Glasparti, spisestue, 2,80x2,10m	1		90	5.9	0.99	1,00	5.841	0.82	0.62	4. Venstresky				185,912	0
Parkenngskældre mv. kanisk køling		Vindue user 9 150x140m	1		90	2.1	1.04	1.00	2.184	0.72	0.62	5. Venstresky				69.888	0
mefordelingsanlæg	10	Ventilationsvindue fix profil 1,20x1,20m	1		90	14	0,57	1.00	0.798	0.86	0.55	1. Udhæng	1			25.536	0
Skema 1		Ventilationsvindue åben profil 1,20x1,20m	1		90	1.4	0.63	1.00	0.882	0.71	0.55	1. Udhæng	1			28,224	0
Pumper	18 19 20			-			0,00	1.00	0,000	1000						ences :	-

## THE BE18 PROGRAM:

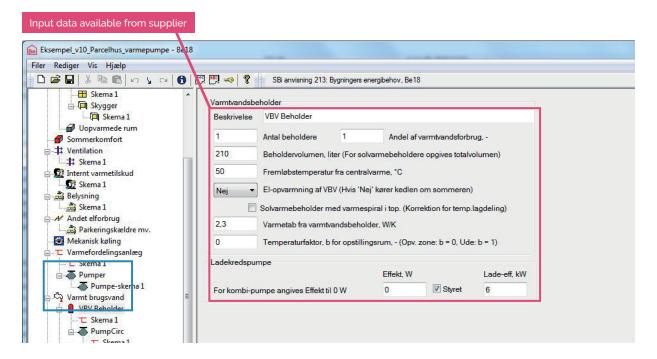
#### Heat pumps:

Enter the heat pump's energy parameters in the table in the "Varmepumper" (Heat pumps) folder.



#### Domestic hot water:

Enter the heat pump's hot water tank data and (if relevant) circulation pumps and distribution data in the VBV Beholder (Domestic hot water tank) and PumpCirc tables respectively, in the "Varmt brugsvand" (Domestic hot water) folder.



## THE BE18 PROGRAM:

#### Ventilation:

Enter project-specific calculated values in the table in the "Ventilation" folder.

Be18							-									5
Filer Rediger Vis Hjælp								-								
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Eksempel: Parcelhus 155 m2	_															
🖻 💣 Klimaskærm		Ventilation	Areal (m <sup>2</sup> )	Fo, -	qm (l/s m²)	n vgv (-)	ti (°C)	EI-VF	qn (l/s m²)	in (l/s m²)	SEL (kJ/mª)	qm,s (l/s m²)	qn,s (l/s m²)	qm,n (l/s m²	qn.n (l/s m²	•
Vdervægge, tage og gulve Skema 1		Zone	94,8	1	Vinter			0/1	Vinter	Vinter		Sommer	Sommer	Nat	Nat	
E Skema I	+	1 Hele boligen ved aftræk gennem v	94,8	1	0,3	0	0	0	0	0	0.0	0.3	0.9	0	0	
Bill Pundamenter niv.		2												1		
Tinduer og yderdøre		3														
Skema 1		4														
E- 🗖 Skygger		5														
🔲 🗐 Skema 1				-				-								
Uopvarmede rum		7	-				-	-								
Sommerkomfort		2					-									
· Ventilation			-	-		-	-									
Skema 1	4				-			-								
The second secon	1			-											-	-

