

Changes to outdoor design temperatures (ODT)

We are updating our default **outdoor design temperatures (ODT)** in Heatpunk and will now use the 99th percentile temperature for the relevant project location from [CIBSE guide A](#). This means the temperature will only fall below the ODT for 1% of the year. You may choose to use the 99.6th percentile in which case no additional uplift is needed for intermittent heating or exposed locations (see [MIS 3005-d](#) for details). Using the project's location, Heatpunk will also automatically remove **0.3°C** from the ODT for every **50 m** above sea level.

The ODT of any existing projects created prior to 17 March 2025 will be automatically changed to use the new ODTs.

Please refer to the table below to see the new values which will be used for each postcode region and how this compares with the temperature values Heatpunk previously used. You can also refer to the 'Temp difference' column to see how big the ODT change is between the old and new values for each postcode location.

This will have an impact on the heat loss calculations for all your projects. If you wish to return the project ODT to its original then this can be done by taking the relevant temp from the below table and [editing the project ODT within the heat pump task](#). An additional **0.3°C** will need to be removed for every **50 m** above sea level, with altitude given in the input section of the technical report & customer proposal.

Outdoor design temps comparison table:

Postcode	Heatpunk (pre-update)		CIBSE Guide A		Temp difference (°C) between Heatpunk and DB 99%
	Location	ODT (°C)	DB 99.6% (°C)	DB 99% (°C)	
AB	NE Scotland (Dyce)	-4.2	-5.4	-3.2	+1
AL	Thames Valley (Heathrow)	-2	-3	-1.7	+0.3
B	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
BA	Severn Valley (Filton)	-1.7	-4.6	-2.9	-1.2
BB	W Pennines (Ringway)	-2.2	-4.5	-2.7	-0.5

BD	E Pennines (Finningley)	-2.5	-3.3	-1.9	+0.6
BH	Southern (Hurn)	-1.5	-4.8	-3.4	-1.9
BL	W Pennines (Ringway)	-2.2	-4.5	-2.7	-0.5
BN	Southern (Hurn)	-2.1	-4.8	-3.4	-1.3
BR	South-eastern (Gatwick)	-3.2	-3	-1.7	+1.5
BS	Severn Valley (Filton)	-1.7	-3.1	-1.5	+0.2
BT	Northern Ireland (Belfast)	-1.2	-3.2	-1.5	-0.3
CA	North-western (Carlisle)	-3.7	-3.7	-2	+1.7
CB	Thames Valley (Heathrow)	-2.5	-3	-1.7	+0.8
CF	Severn Valley (Filton)	-1.6	-3.1	-1.5	+0.1
CH	W Pennines (Ringway)	-2.2	-4.5	-2.7	-0.5
CM	Thames Valley (Heathrow)	-2.3	-3	-1.7	+0.6
CO	E Anglia (Honington)	-2.3	-4.6	-3.1	-0.8
CR	Southern (Hurn)	-2	-3	-1.7	+0.3
CT	South-eastern (Gatwick)	-3.2	-3	-1.7	+1.5
CV	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
CW	W Pennines (Ringway)	-2.7	-4.5	-2.7	0
DA	South-eastern (Gatwick)	-3.2	-3	-1.7	+1.5
DD	E Scotland (Leuchars)	-3.8	-5.4	-3.2	+0.6
DE	W Pennines (Ringway)	-2.2	-3.9	-2.4	-0.2
DG	Borders (Boulmer)	-3.8	-5.6	-3.5	+0.3
DH	North-eastern (Leeming)	-3.7	-3.7	-2	+1.7

DL	North-western (Carlisle)	-3.7	-3.7	-2	+1.7
DN	E Pennines (Finningley)	-3.4	-3.3	-1.9	+1.5
DT	Southern (Hurn)	-1.7	-4.8	-3.4	-1.7
DY	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
E	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
EC	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
EH	E Scotland (Leuchars)	-3.4	-5.4	-3.2	+0.2
EN	South-eastern (Gatwick)	-2.1	-3	-1.7	+0.4
EX	South-western (Plymouth)	-1.5	-1.5	-0.2	+1.3
FK	E Scotland (Leuchars)	-3.7	-5.6	-3.5	+0.2
FY	North-western (Carlisle)	-2.2	-4.5	-2.7	-0.5
G	W Scotland (Abbotsinch)	-3.9	-5.6	-3.5	+0.4
GL	Midland (Elmdon)	-3.3	-4.6	-2.9	+0.4
GU	Thames Valley (Heathrow)	-2.2	-3	-1.7	+0.5
GY	South-eastern (Gatwick)	-1	-4.8	-3.4	-2.4
HA	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
HD	E Pennines (Finningley)	-3.5	-4.5	-2.7	+0.8
HG	E Pennines (Finningley)	-3.5	-3.3	-1.9	+1.6
HP	Thames Valley (Heathrow)	-2	-3	-1.7	+0.3
HR	Midland (Elmdon)	-2	-5.1	-3.2	-1.2
HS	NW Scotland (Stornoway)	-1	-5.6	-3.5	-2.5
HU	E Pennines (Finningley)	-3	-3.3	-1.9	+1.1

HX	W Pennines (Ringway)	-2.5	-4.5	-2.7	-0.2
IG	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
IM	W Pennines (Ringway)	-2.5	-4.5	-2.7	-0.2
IP	E Anglia (Honington)	-2.3	-4.6	-3.1	-0.8
IV	NE Scotland (Dyce)	-4	-5.6	-3.5	+0.5
JE	South-eastern (Gatwick)	-1	-4.8	-3.4	-2.4
KA	W Scotland (Abbotsinch)	-3.7	-5.6	-3.5	+0.2
KT	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
KW	NE Scotland (Dyce)	-4.2	-5.4	-3.2	+1
KY	E Scotland (Leuchars)	-3.4	-5.4	-3.2	+0.2
L	W Pennines (Ringway)	-2.4	-4.5	-2.7	-0.3
LA	North-western (Carlisle)	-2.2	-4.5	-2.7	-0.5
LD	Wales (Aberporth)	-2.9	-3.1	-1.5	+1.4
LE	Midland (Elmdon)	-3	-3.9	-2.4	+0.6
LL	W Pennines (Ringway)	-3	-4.5	-2.7	+0.3
LN	E Pennines (Finningley)	-3	-3.9	-2.4	+0.6
LS	E Pennines (Finningley)	-2.5	-3.3	-1.9	+0.6
LU	Thames Valley (Heathrow)	-2.4	-3	-1.7	+0.7
M	W Pennines (Ringway)	-2.2	-4.5	-2.7	-0.5
ME	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
MK	Midland (Elmdon)	-3.4	-4.6	-2.9	+0.5
ML	W Scotland (Abbotsinch)	-3.9	-5.4	-3.2	+0.7

N	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
NE	North-eastern (Leeming)	-3.4	-3.7	-2	+1.4
NG	E Anglia (Honington)	-3.2	-3.9	-2.4	+0.8
NN	Midland (Elmdon)	-3	-3.9	-2.4	+0.6
NP	Midland (Elmdon)	-1.6	-3.1	-1.5	+0.1
NR	E Anglia (Honington)	-2.4	-4.6	-3.1	-0.7
NW	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
OL	W Pennines (Ringway)	-3.2	-4.5	-2.7	+0.5
OX	Midland (Elmdon)	-2.4	-4.6	-2.9	-0.5
PA	W Scotland (Abbotsinch)	-4	-5.6	-3.5	+0.5
PE	E Anglia (Honington)	-3	-4.6	-3.1	-0.1
PH	NE Scotland (Dyce)	-3.8	-5.6	-3.5	+0.3
PL	South-western (Plymouth)	-0.2	-1.5	-0.2	0
PO	Southern (Hurn)	-1.8	-4.8	-3.4	-1.6
PR	North-western (Carlisle)	-3.2	-4.5	-2.7	+0.5
RG	Thames Valley (Heathrow)	-2.2	-4.6	-2.9	-0.7
RH	Thames Valley (Heathrow)	-1.9	-3	-1.7	+0.2
RM	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
S	W Pennines (Ringway)	-2.8	-3.3	-1.9	+0.9
SA	Wales (Aberporth)	-1.6	-3.1	-1.5	+0.1
SE	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
SG	Thames Valley (Heathrow)	-2	-3	-1.7	+0.3

SK	W Pennines (Ringway)	-2.9	-4.5	-2.7	+0.2
SL	Thames Valley (Heathrow)	-2	-3	-1.7	+0.3
SM	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
SN	Midland (Elmdon)	-2.2	-4.6	-2.9	-0.7
SO	Southern (Hurn)	-1.8	-4.8	-3.4	-1.6
SP	Southern (Hurn)	-1.8	-4.8	-3.4	-1.6
SR	North-eastern (Leeming)	-3.7	-3.7	-2	+1.7
SS	Thames Valley (Heathrow)	-2.3	-3	-1.7	+0.6
ST	W Pennines (Ringway)	-3	-5.1	-3.2	-0.2
SW	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
SY-	Wales (Aberporth)	-3.3	-5.1	-3.2	+0.1
TA	Severn Valley (Filton)	-2.1	-1.5	-0.2	+1.9
TD	Borders (Boulmer)	-3.8	-5.4	-3.2	+0.6
TF	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
TN	South-eastern (Gatwick)	-3.2	-3	-1.7	+1.5
TQ	South-western (Plymouth)	-1.3	-1.5	-0.2	+1.1
TR	South-western (Plymouth)	-1.4	-1.5	-0.2	+1.2
TS	North-eastern (Leeming)	-2.9	-3.7	-2	+0.9
TW	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
UB	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
W	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
WA	W Pennines (Ringway)	-2.1	-4.5	-2.7	-0.6

WC	Thames Valley (Heathrow)	-1.8	-3	-1.7	+0.1
WD	Thames Valley (Heathrow)	-2	-3	-1.7	+0.3
WF	E Pennines (Finningley)	-2.5	-3.3	-1.9	+0.6
WN	W Pennines (Ringway)	-2.1	-4.5	-2.7	-0.6
WR	Midland (Elmdon)	-3.3	-5.1	-3.2	+0.1
WS	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
WV	Midland (Elmdon)	-3.4	-5.1	-3.2	+0.2
YO	E Pennines (Finningley)	-3.7	-3.3	-1.9	+1.8
ZE	NE Scotland (Dyce)	-3	-5.4	-3.2	-0.2

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