

Worksheet B: Heating and Cooling HTM & Load area for windows (flat, bay or garden) and glass doors (hinged, sliding or French)

HTD	CTD	T3 CTD	Form J1, item 6A	Northerly direction or obviously shaded by overhang						All other directions							
			Line ID (a, b, c...etc.)														
Round CTD value for Table 3 lookup; Use + 1 or -1; or + 2 or - 2; as required (16 = 15; 17 = 15; 18 = 20; 19 = 20)			Direction glass faces														
			Number of panes														
			Frame type (w, mm, mb, v)														
1) Table 2A construction number			To J1 →														
2) Table 2A U-value																	
3) Unadjusted heating HTM = U x HTD																	
4) Heating HTM adjustment (see Note 1)																	
5) Adjusted heating HTM (L3 x L4)			To J1 →														
6) Cooling HTM from Table 3A (default = blinds @ 45 deg)																	
7) Cooling HTM adjustment (see Note 2)																	
8) Adjusted C-HTM (L6 x L7)			N, NE, NW to J1 →														
9) Area of opening (SqFt) for one unit																	
10) Number of identical assemblies																	
11) Net area of identical assemblies (L9 x L10)			To J1 →														

If S is negative or zero, stop!
Then copy the line 8 HTM to line 26

If S > H, jump to line 19;
then copy the line 21 HTM to line 26

Internal shade same as used for line 6

Overhang (OH) adjustment

12) Opening height (H) in feet

13) Overhang length (X) in feet

14) SLM value for local altitude

15) Shade line to OH (Z) = L13 x L14

16) Distance below OH (Y)

17) Shaded height (S) = L15 – L16

18) Unshaded height (U) = L12 – L17

19) North HTM from Table 3A

20) HTM adjustment (copy line 7)

21) Adjusted North HTM (L19 x L20)

22) Shaded glass factor = L17 / L12

23) Unshaded glass factor = L18 / L12

24) Shaded HTM = L21 x L22

25) Unshaded HTM = L8 x L23

To J1 → 26) Effective HTM = L24 + L25

SLM values for North latitudes						
Latitude	25	30	35	40	45	50
E or W	0.83	0.83	0.82	0.81	0.80	0.79
SE or SW	1.89	1.63	1.41	1.25	1.13	1.10
South	10.10	5.40	3.53	2.60	2.05	1.70

Note 1: Default = 1.0; Bay window = 1.15; Garden window = 2.75; French door = 0.70

Note 2: Default = 1.0; Insect screen = 0.90; Bay window = 1.15; Garden window = 2.00; French door = 0.70