



Therm Version 5.2 (5.2.14)
 Date: Thu Jun 29 12:08:42 2006

Created by:
 Created for:

Therm Filename: F:\Design\P5\THERMAL\AluCladExt_Sash_Insul.THM
 Cross Section Type: Sill
 Underlay Name:

U-factors

Name	Length mm	Basis	U-factor W/m2-K
Linear Transmittance	288.29	Projected Y	1.2273

Solid Materials

Name	Conductivity W/m-K	Emissivity
CEN Insulation Panel	0.04	0.90
CEN Foam Rubber	0.06	0.90
CEN Softwood	0.13	0.90
CEN EPDM	0.25	0.90
CEN Polyamide Nylon	0.25	0.90
CEN Mohair (Sweep)	0.14	0.90
CEN Aluminium	160.00	0.90

Cavities

Name: CEN Cavity
 Gas Fill: Air
 Convection Model: CEN
 Radiation Model: Standard

Poly ID	Heat Flow Dir	Side 1		Side 2		Dimension		Nu #	Keff W/m-K	Cavity Height mm
		Temp C	Emis	Temp C	Emis	Horz. mm	Vert. mm			
18	Horizontal	15.00	0.90	5.00	0.90	2.42	1.41	N/A	0.0319	N/A
31	Horizontal	15.00	0.90	5.00	0.90	2.74	5.57	N/A	0.0347	N/A
50	Horizontal	15.00	0.90	5.00	0.90	4.43	1.30	N/A	0.0366	N/A
51	Horizontal	15.00	0.90	5.00	0.90	0.47	1.25	N/A	0.0267	N/A
8	Horizontal	15.00	0.90	5.00	0.90	2.40	9.61	N/A	0.0342	N/A
9	Horizontal	15.00	0.90	5.00	0.90	5.61	2.24	N/A	0.0402	N/A
38	Horizontal	15.00	0.90	5.00	0.90	27.87	5.52	N/A	0.1140	N/A
71	Horizontal	15.00	0.90	5.00	0.90	2.93	2.94	N/A	0.0342	N/A
13	Horizontal	15.00	0.90	5.00	0.90	30.06	18.19	N/A	0.1339	N/A
34	Horizontal	15.00	0.90	5.00	0.90	0.79	0.19	N/A	0.0270	N/A
46	Horizontal	15.00	0.90	5.00	0.90	0.87	0.15	N/A	0.0272	N/A
47	Horizontal	15.00	0.90	5.00	0.90	0.61	0.10	N/A	0.0265	N/A
52	Horizontal	15.00	0.90	5.00	0.90	0.71	1.41	N/A	0.0275	N/A
17	Horizontal	15.00	0.90	5.00	0.90	0.94	0.62	N/A	0.0277	N/A
48	Horizontal	15.00	0.90	5.00	0.90	12.11	4.93	N/A	0.0579	N/A
53	Horizontal	15.00	0.90	5.00	0.90	16.03	5.33	N/A	0.0677	N/A
45	Horizontal	15.00	0.90	5.00	0.90	14.86	27.35	N/A	0.0768	N/A
59	Horizontal	7.00	0.90	-4.00	0.90	1.61	5.70	N/A	0.0306	N/A
10	Horizontal	15.00	0.90	5.00	0.90	0.59	2.20	N/A	0.0272	N/A
12	Horizontal	15.00	0.90	5.00	0.90	0.88	1.90	N/A	0.0281	N/A
24	Horizontal	15.00	0.90	5.00	0.90	0.95	1.27	N/A	0.0282	N/A
25	Horizontal	15.00	0.90	5.00	0.90	0.89	1.09	N/A	0.0279	N/A
26	Horizontal	15.00	0.90	5.00	0.90	1.31	6.25	N/A	0.0301	N/A
28	Horizontal	15.00	0.90	5.00	0.90	2.50	1.33	N/A	0.0321	N/A
30	Horizontal	15.00	0.90	5.00	0.90	4.15	0.84	N/A	0.0355	N/A
58	Horizontal	15.00	0.90	5.00	0.90	1.19	0.99	N/A	0.0286	N/A
33	Horizontal	15.00	0.90	5.00	0.90	0.68	0.95	N/A	0.0273	N/A
62	Horizontal	15.00	0.90	5.00	0.90	1.31	1.31	N/A	0.0291	N/A
73	Horizontal	15.00	0.90	5.00	0.90	2.03	1.07	N/A	0.0307	N/A
107	Horizontal	15.00	0.90	5.00	0.90	0.83	2.25	N/A	0.0281	N/A
108	Horizontal	15.00	0.90	5.00	0.90	0.78	1.01	N/A	0.0276	N/A

Name: CEN Cavity SV
 Gas Fill: Air
 Convection Model: CEN Ventilated
 Radiation Model: Standard

Poly ID	Heat Flow Dir	Side 1		Side 2		Dimension		Nu #	Keff W/m-K	Cavity Height mm
		Temp C	Emis	Temp C	Emis	Horz. mm	Vert. mm			
83	Horizontal	15.00	0.90	5.00	0.90	9.64	4.97	N/A	0.1042	N/A

Name: CEN Cavity Detailed
 Gas Fill: Air
 Convection Model: CEN
 Radiation Model: Advanced

Poly ID	Heat Flow Dir	Side 1		Side 2		Dimension		Nu #	Keff W/m-K	Cavity Height mm
		Temp C	Emis	Temp C	Emis	Horz. mm	Vert. mm			
35	Horizontal	15.00	0.90	5.00	0.90	30.89	36.94	N/A	0.0486	N/A

Glazing Systems

None

Standard Boundary Conditions

Name	Temperature C	Film Coefficient W/m ² -K
CEN Interior	20.00	7.691
CEN Reduced Radiation	20.00	5.000
CEN Exterior	0.00	25.000

Calculation Specifications

 Mesh Parameter : 6
 Estimated Error: 5.2%
 Calculations done in Version 5.2 (5.2.14)