WORKSHEET A: INDOOR & OUTDOOR DESIGN CONDITIONS

Project:		City, State:				Table 1A Latitude >	
Indoor Design Conditions	Heating Drybulb>		Winter Humidification		Cooling Drybulb>	Cooling RH%>	
Outdoor Design Conditions	99% Drybulb>		1% Drybulb>		Grains Difference>	Daily Range>	
Heating Temperature Difference (HTD) = Indoor Heating Drybulb - Outdoor 99% Drybulb>				Table 1A Elevation>		**Refer to Table 1A and see Sections 3-6 and 3-7**	
Cooling Temperature Difference (CTD) = Outdoor 1% Drybulb - Indoor Cooling Drybulb>				Table 10A ACF>			

WORKSHEET C: SKYLIGHTS

Reference Temperatures	HTD	CTD	T3 CTD	Line # for J1AE, Item 6B	a	b	c	d
		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>				
				Glass tilt angle (degrees)>				
				Frame type (w, m, mb, v)>				
				Curb height (Inches)>				
1	Area of roof opening (curb length x curb width) for one skylight (SqFt)							
2	Curb size (See Table 2B-4)							
3	Number of identical skylight assemblies							
4	Net area (SqFt) of identical skylight assemblies (L1 x L3)			**To J1AE-->**				
5	Table 2A construction number			**To J1AE-->**				
6	Table 2A Ueff-value							
7	Heating HTM = Ueff x HTD			**To J1AE-->**				
8	Cooling HTM from Table 3C			**To J1AE-->**				

WORKSHEET E: INFILTRATION

Input Data	Heating	Cooling	Number Bedrooms	Occupants (#BR + 1)	Number Fireplaces	Burner Btuh	HTD	CTD	T1 Grains	T10 ACF
Floor area (SqFt)>										
Conditioned above grade volume (CuFt)>						Note: Burner Btuh = 0 for direct-vent appliance				

Table 8 Outdoor Air Requirement

			Heating	Cooling
1	Outdoor air Cfm for 0.35 ACH requirement	0.35 x above grade volume / 60 =		
2	Outdoor air Cfm for occupants	20 x number of occupants =		
3	Outdoor air for burners that take combustion air from conditioned space	0.50 x input capacity (Btuh) / 1000 =		■
4	Suggest value for fresh air Cfm	Maximum value from lines 1, 2 or 3 =		

Envelope Infiltration Rate

5	Tightness of construction (see table 5A)	Envelope =	Fireplace =	
6	Table 5A ACH for heating	Envelope ACH (heating) =	Cfm for one fireplace =	
7	Table 5A ACH for cooling	Envelope ACH (cooling) =		Heating / Cooling
8	Infiltration Cfm for heating	Line 6 ACH x above grade volume for heating / 60 + Line 6 fireplace Cfm x number of fireplaces =		■
9	Infiltration Cfm for cooling	Line 7 ACH x above grade volume for cooling / 60 =	■	

Infiltration loads

10	Infiltration load for heating (Btuh)	**To J1AE >**	< 1.1 x ACF x Line 8 Cfm x HTD
11	Sensible infiltration load for cooling (Btuh)	**To J1AE >**	< 1.1 x ACF x Line 9 Cfm x CTD
12	Latent infiltration load for cooling (Btuh)	**To J1AE >**	< 0.68 x ACF x Line 9 Cfm x Grains

Suggested Value for Engineered Ventilation Cfm

13	Compare infiltration rate with suggested fresh air rate	Line 4 Cfm - line 8 Cfm for heating =	Line 4 Cfm - line 9 Cfm for cooling =
14	Suggest value for engineered ventilation Cfm -->	<--Largest positive value from line 13 (see line 11, worksheet H)	