

Lighting and Ventilation Calculations - rev. 23-Jan-05

	AREA (SQ. FT.)	DESC.	DERIVATION
Floor 1			
Living/Kitchen	700		
Bath	32		
TOTAL	732		
Ventilation	Factor	0.04	
	Required (sq. ft.)	29.28	
	Existing (sq. ft.)	14.71	previous architect (Barba) calcs
	South dbl hung	5.9	Existing measured lower sash opening
	East dbl hung	5.1	Existing measured lower sash opening
	East doors	39.1	Pella 7286 given by Pella
	North Awnings (x2)	8.2	Marvin WAWN2832 clear opening (6.2sf) x .66 = 4.1
	West door	22.4	Expanded opening dimensions of found door - 1" stop and threshold
	Proposed final (sq. ft.)	80.7	<i>(51.4 sq. ft. greater than required)</i>
Lighting	Factor	0.08	
	Required (sq. ft.)	58.56	
	Existing (sq. ft.)	45.77	previous architect (Barba) calcs
	South dbl hung	9	Existing measured visible glass
	South fixed horse window x2	3	Existing measured visible glass
	East dbl hung	8.4	Existing measured visible glass
	East doors	22.4	Pella 7286 given by Pella
	North Awnings (x3)	11.4	Marvin WAWN2832 Marvin Chart: w - 5.5" x h - 7.25" = 3.8sf
	North fixed door window	3.7	Existing measured visible glass
	North fixed horse window x 2	3	Existing measured visible glass
	West door	10	Expanded opening measured panel dimensions
	Proposed final (sq. ft.)	70.9	<i>(12.3 sq. ft. greater than required)</i>

Floor 2

Bdrm/Study	388
Bath	79
TOTAL	467

Ventilation	Factor	0.04		
	Required (sq. ft.)	18.68		
	Existing (sq. ft.)	33.1		previous architect (Barba) calcs
	Bath West hopper 1	2.3	Existing	measured opening
	Bath West Awning	3.4	Marvin AWN4824	clear opening (5.1sf) x .66 = 3.4
	West hopper 2	2.3	Existing	measured opening
	North Casement (x2)	16	Pella 3541	given by Pella
	East hopper (x2)	4.6	Existing	measured opening
	Proposed final (sq. ft.)	28.6		<i>(9.9 sq. ft. greater than required)</i>

Lighting	Factor	0.08		
	Required (sq. ft.)	37.36		
	Existing (sq. ft.)	48.51		previous architect (Barba) calcs
	Bath West hopper 1	2.3	Existing	measured visible glass
	Bath West awning	5.6	Marvin AWN4824	given by Marvin
	Bath ceiling	4	Roto S2V 1446	Given by Roto
	Hall Ceilling (x2)	8	Roto S2V 1446	Given by Roto
	West hopper 2	2.3	Existing	measured visible glass
	West palladian	12.4	Existing	measured visible glass
	North Casement (x2)	14.2	Pella 3541	given by Pella
	South palladian	2.9	Existing	measured visible glass
	East hopper (x2)	4.6	Existing	measured visible glass
	East palladian	12.4	Existing	measured visible glass
	Proposed final (sq. ft.)	68.7		<i>(23.6 sq. ft. greater than required)</i>

NOTE Floor area calculations do not include stairs, storage and closets