In accordance with ACCA Manual J

Registered For:

The Adam French Residence

For: Adam French

122 Anderson

Sandborn, IN 47578

Design Conditions: Vincennes

Indoor: Outdoor:

Summer temperature: 75
Winter temperature: 69
Winter temperature: 6
Relative humidity: 50
Summer grains of moisture: 99
Daily temperature range: Medium

Sensible Total **Building Component** Total Latent **Heat Gain Heat Loss** Gain Gain (BTUH) (BTUH) (BTUH) (BTUH) Whole House 3,244.2 sq.ft. 43,830 6,644 50,474 165,585 (4 tons) First Floor 19,134 3,639 22,773 97,825 Front Parlor 278 sq.ft. 4,744 587 5,331 22,189 461 587 1.048 Infiltration 3.419 - Tightness: Poor; Winter ACH: 1; Summer ACH: .5 0 0 0 **Fireplace** 7,738 - Average - glass doors, damper 0 0 0 Floor 277.5 sa.ft. 1,906 - Over enclosed crawl space; Carpeted; No insulation 129.2 sa.ft. 0 721 2,206 - Wood frame, with sheathing, siding or brick; None; none Window 39.6 sq.ft. 0 2.123 2,470 2,123 - Single pane; Wood frame; Clear glass - Draperies or blinds; Coating: None (clear glass); No outside shading. 188.3 sq.ft. 1.051 1,051 3,215 N Wall 0 - Wood frame, with sheathing, siding or brick; None; none Window 19.8 sq.ft. 388 0 388 1,235 - Single pane; Wood frame; Clear glass - Draperies or blinds; Coating: None (clear glass); No outside shading. **Entry Way** 190 sq.ft. 1,149 587 1,736 6,829 Infiltration 461 587 1,048 3,419 - Tightness: Poor; Winter ACH: 1; Summer ACH: .5 0 0 Floor 190 sa.ft. 1,305 - Over enclosed crawl space; Carpeted; No insulation W Wall 53 sq.ft. 0 296 905 - Wood frame, with sheathing, siding or brick; None; none

| uilding Component | | Sensible Gain (BTUH) | Latent Gain (BTUH) | Total Heat Gain (BTUH) | Total Heat Loss (BTUH) |
|-------------------------------|---|---|--------------------------|------------------------------|------------------------------|
| Door - Wood; Soli | 59.5 sq.ft. d; Metal storm | 392 | 0 | 392 | 1,200 |
| Bath | 36 sq.ft. | 754 | 0 | 754 | 2,551 |
| Infiltration - Tightness: Po | or; Winter ACH: 1 ; Sum | 0 nmer ACH: .5 | 0 | 0 | 0 |
| Floor | 36 sq.ft. d crawl space; Carpeted | 0 | 0 | 0 | 247 |
| W Wall | 67.5 sq.ft. with sheathing, siding or | 377 | 0 | 377 | 1,152 |
| S Wall | 67.5 sq.ft. with sheathing, siding or | 377 | 0 | 377 | 1,152 |
| Music Room | 303 sq.ft. | 3,254 | 587 | 3,841 | 19,868 |
| Infiltration - Tightness: Po | or; Winter ACH: 1 ; Sum | 461 nmer ACH: .5 | 587 | 1,048 | 3,419 |
| Fireplace - Average - glas | ss doors, damper | 0 | 0 | 0 | 7,738 |
| Floor - Over enclosed | 303.3 sq.ft. d crawl space; Carpeted | 0 ; No insulation | 0 | 0 | 2,083 |
| W Wall - Wood frame, v | 17.7 sq.ft. with sheathing, siding or | 99 brick; None; none | 0 | 99 | 302 |
| | 19.8 sq.ft. e; Wood frame; Clear gla or blinds; Coating: None | | 0 | 1,061 | 1,235 |
| N Wall | 153.5 sq.ft. with sheathing, siding or | 857 | 0 | 857 | 2,621 |
| Window - Single pane | 39.6 sq.ft. e; Wood frame; Clear gla or blinds; Coating: None | 776 ass | 0 | 776 | 2,470 |
| Back Parlor | | · • · · · · · · · · · · · · · · · · · · | 616 | 3,435 | 19,498 |
| Infiltration | or; Winter ACH: 1 ; Sum | 484 | 616 | 1,100 | 3,590 |
| Fireplace | ss doors, damper | 0 | 0 | 0 | 7,738 |
| Floor | 312.1 sq.ft. d crawl space; Carpeted | 0 ; No insulation | 0 | 0 | 2,143 |
| S Wall | 159.2 sq.ft. with sheathing, siding or | 889 | 0 | 889 | 2,718 |
| Window - Single pane | 39.6 sq.ft. e; Wood frame; Clear gla or blinds; Coating: None | 1,172 ass | 0 | 1,172 | 2,470 |
| E Wall | 22.1 sq.ft. with sheathing, siding or | 123 | 0 | 123 | 377 |
| Door | 22.9 sq.ft. | 151 | 0 | 151 | 462 |

| Building Component | | Sensible Gain (BTUH) | Latent Gain (BTUH) | Total Heat Gain (BTUH) | Total Heat Loss (BTUH) |
|---|-------------------------------------|---|--------------------------|------------------------------|------------------------------|
| - Wood; Solid; Met | al storm | | | | |
| Kitchen | 294 sq.ft. | 3,656 | 616 | 4,272 | 14,197 |
| Infiltration - Tightness: Poor; Wi | nter ACH: 1 ; Sum | 484 mer ACH: .5 | 616 | 1,100 | 3,590 |
| Floor - Over enclosed craw | 294 sq.ft. I space; Carpeted; | 0 No insulation | 0 | 0 | 2,019 |
| S Wall - Wood frame, with sl | 196.7 sq.ft. neathing, siding or | 1,098 brick; None; none | 0 | 1,098 | 3,358 |
| Window - Single pane; Woo | | 1,172 iss (clear glass); No outsi | 0 de shading | 1,172 | 2,470 |
| E Wall | 134.6 sq.ft. | 751 | 0 | 751 | 2,298 |
| - Wood frame, with st | • | | U | 751 | 2,290 |
| Door - Wood; Solid; Met | 22.9 sq.ft. | 151 | 0 | 151 | 462 |
| Back Entry | 103 sq.ft. | 640 | 225 | 865 | 3,432 |
| Infiltration - Tightness: Poor; Wi | nter ACH: 1 ; Sum | 177 mer ACH: .5 | 225 | 402 | 1,311 |
| Floor - Over enclosed craw | 102.7 sq.ft. I space; Carpeted; | 0 No insulation | 0 | 0 | 705 |
| N Wall - Wood frame, with sl | 56 sq.ft. neathing, siding or | 312 brick; None; none | 0 | 312 | 954 |
| Door - Wood; Solid; Met | 22.9 sq.ft. al storm | 151 | 0 | 151 | 462 |
| Carol Room | 132 sq.ft. | 2,118 | 421 | 2,539 | 9,261 |
| Infiltration - Tightness: Poor; Wi | nter ACH: 1 ; Sum | 331 mer ACH: .5 | 421 | 752 | 2,450 |
| Floor - Over enclosed craw | 132 sq.ft. I space; Hardwood | 0 I or tile; No insulation | 0 | 0 | 1,297 |
| E Wall - Wood frame, with sl | 142.1 sq.ft. neathing, siding or | 793 brick; None; none | 0 | 793 | 2,426 |
| Door - Wood; Solid; Met | 22.9 sq.ft. al storm | 151 | 0 | 151 | 462 |
| N Wall - Wood frame, with sl | 81.5 sq.ft. neathing, siding or | 455 brick; None; none | 0 | 455 | 1,391 |
| Window - Single pane; Woo | | | 0 | 388 | 1,235 |
| · | ds; Coating: None | (clear glass); No outsi | | 07.000 | |
| econd Floor | 004 " | 24,694 | 3,005 | 27,699 | 67,763 |
| Front Room Infiltration - Tightness: Poor; Wi | 281 sq.ft. nter ACH: 1 ; Sum | 5,060 438 mer ACH: .5 | 558 558 | 5,618 996 | 12,796 3,248 |

| lding Component | | Sensible Gain (BTUH) | Latent Gain (BTUH) | Total Heat Gain (BTUH) | Total Heat Loss (BTUH) |
|-----------------------------------|---|--|--------------------------|------------------------------|------------------------------|
| Floor - Over conditioned s | 281.1 sq.ft. pace | 0 | 0 | 0 | 0 |
| W Wall - Wood frame, with s | 106.6 sq.ft. sheathing, siding or | 595 brick; None; none | 0 | 595 | 1,820 |
| • • | 37.8 sq.ft. ood frame; Clear glands: Coating: None | 2,026 ass (clear glass); No out | 0 side shading | 2,026 | 2,358 |
| N Wall - Wood frame, with s | 153.5 sq.ft. | 857 | 0 | 857 | 2,621 |
| Window - Single pane; Wo | 19.1 sq.ft. ood frame; Clear gla | 374 ass | 0 | 374 | 1,191 |
| Ceiling - Under ventilated at | 281 sq.ft. | (clear glass); No out 770 ch); Light | o 0 | 770 | 1,558 |
| Front Bath | 40 sq.ft. | 1,899 | 186 | 2,085 | 4,414 |
| Infiltration - Tightness: Poor; W | /inter ACH: 1 ; Sum | 146 nmer ACH: .5 | 186 | 332 | 1,083 |
| Floor - Over conditioned s | 40 sq.ft. | 0 | 0 | 0 | 0 |
| W Wall - Wood frame, with s | 75.3 sq.ft. sheathing, siding or | 420 brick; None; none | 0 | 420 | 1,286 |
| | 18.9 sq.ft. pod frame; Clear glands: Coating: None | 1,013 ass (clear glass); No out | 0 side shading | 1,013 | 1,179 |
| S Wall | 37.7 sq.ft. | 210 | 0 | 210 | 644 |
| - Wood frame, with | • | | ŭ | 210 | 011 |
| Ceiling - Under ventilated at | 40 sq.ft. ttic; R-11 (3 - 3.5 in | 110 ch); Light | 0 | 110 | 222 |
| Ravenna Room | 204 sq.ft. | 4,126 | 558 | 4,684 | 10,967 |
| Infiltration - Tightness: Poor; W | /inter ACH: 1 ; Sum | 438 nmer ACH: .5 | 558 | 996 | 3,248 |
| Floor - Over conditioned s | 204 sq.ft. | 0 | 0 | 0 | 0 |
| S Wall - Wood frame, with s | 122.2 sq.ft. sheathing, siding or | 682 brick; None; none | 0 | 682 | 2,086 |
| Window - Single pane; Wo | 37.8 sq.ft. ood frame; Clear gla | 1,119 | 0 side shading. | 1,119 | 2,358 |
| W Wall - Wood frame, with s | 18.8 sq.ft. | 105 | 0 | 105 | 321 |
| Window - Single pane; Wo | 18.9 sq.ft. ood frame; Clear gla | 1,013 | 0 side shading | 1,013 | 1,179 |

| Building Component | | Sensible Gain (BTUH) | Latent Gain (BTUH) | Total Heat Gain (BTUH) | Total Heat Loss (BTUH) |
|--|---|--|--------------------------|------------------------------|------------------------------|
| E Wall | 37.7 sq.ft. | 210 | 0 | 210 | 644 |
| Wood frame, with s Ceiling Under ventilated at | 204 sq.ft. | 559 | 0 | 559 | 1,131 |
| Master Bedroom | 314 sq.ft. | 3,839 | 558 | 4,397 | 10,933 |
| Infiltration - Tightness: Poor; W | /inter ACH: 1 ; Sum | 438 mer ACH: .5 | 558 | 996 | 3,248 |
| Floor - Over conditioned s | 314.5 sq.ft. pace | 0 | 0 | 0 | 0 |
| N Wall - Wood frame, with s | 122.2 sq.ft. sheathing, siding or | 682 brick; None; none | 0 | 682 | 2,086 |
| | 37.8 sq.ft. ood frame; Clear glands; Coating: None | 741 ass (clear glass); No outs | 0 side shading. | 741 | 2,358 |
| W Wall - Wood frame, with s | 18.8 sq.ft. | 105 | 0 | 105 | 321 |
| | 18.9 sq.ft. bod frame; Clear glands: Coating: None | 1,013 ass (clear glass); No outs | 0 | 1,013 | 1,179 |
| Ceiling - Under ventilated at | 314 sq.ft. | 860 | 0 | 860 | 1,741 |
| 3rd Bath | 48 sq.ft. | 1,151 | 186 | 1,337 | 3,491 |
| Infiltration - Tightness: Poor; W | /inter ACH: 1 ; Sum | 146 mer ACH: .5 | 186 | 332 | 1,083 |
| Floor - Over conditioned s | 48 sq.ft. pace | 0 | 0 | 0 | 0 |
| S Wall - Wood frame, with s | 56.4 sq.ft. sheathing, siding or | 315 brick; None; none | 0 | 315 | 963 |
| | ood frame; Clear gla | 559 ass (clear glass); No outs | 0 side shading. | 559 | 1,179 |
| Ceiling - Under ventilated at | 48 sq.ft. | 131 | 0 | 131 | 266 |
| Venna Room | 168 sq.ft. | 3,479 | 372 | 3,851 | 8,989 |
| Infiltration - Tightness: Poor; W | /inter ACH: 1 ; Sum | 292 mer ACH: .5 | 372 | 664 | 2,165 |
| Floor - Over conditioned s | 168 sq.ft. pace | 0 | 0 | 0 | 0 |
| S Wall - Wood frame, with s | 94 sq.ft. sheathing, siding or | 525 brick; None; none | 0 | 525 | 1,607 |
| | 18.9 sq.ft. ood frame; Clear gla nds; Coating: None | 559 ass (clear glass); No outs | 0 side shading. | 559 | 1,179 |

| Building Component | Sensible Gain | Latent Gain | Total Heat Gain | Total Heat Loss |
|---|------------------------------|----------------------|--------------------|--------------------|
| | (BTUH) | (BTUH) | (BTUH) | (BTUH) |
| E Wall 113 s - Wood frame, with sheathing | • | 0 ne | 630 | 1,928 |
| Window 18.9 s - Single pane; Wood frame | q.ft. 1,013 ; Clear glass | 0 | 1,013 | 1,179 |
| - Draperies or blinds; Coati Ceiling 168 s - Under ventilated attic; R-11 | q.ft. 460 | 0 Outside shading | 460 | 931 |
| Elevator Room 132 s | , , | 362 | 2,552 | 7,609 |
| Infiltration - Tightness: Poor; Winter ACH | 284 H: 1 ; Summer ACH: .5 | 362 | 646 | 2,108 |
| Floor 132 seconditioned space | q.ft. 0 | 0 | 0 | 0 |
| E Wall 85.6 s - Wood frame, with sheathing | • | 0 ne | 478 | 1,461 |
| Door 18 s - Wood; Solid; No storm | q.ft. 171 | 0 | 171 | 522 |
| N Wall 94 s - Wood frame, with sheathing | • | 0 ne | 525 | 1,607 |
| Window 18.9 s - Single pane; Wood frame - Draperies or blinds; Coati | ; Clear glass | 0 outside shading | 370 | 1,179 |
| Ceiling 132 s - Under ventilated attic; R-11 | q.ft. 362 | 0 | 362 | 732 |
| Back Hall 136 s | q.ft. 1,204 | 186 | 1,390 | 3,979 |
| Infiltration - Tightness: Poor; Winter ACH | 146 H: 1 ; Summer ACH: .5 | 186 | 332 | 1,083 |
| Floor 136 s - Over conditioned space | q.ft. 0 | 0 | 0 | 0 |
| N Wall 56.4 s - Wood frame, with sheathing | • | ne 0 | 315 | 963 |
| Window 18.9 s - Single pane; Wood frame - Draperies or blinds; Coati | ; Clear glass | 0 outside shading | 370 | 1,179 |
| Ceiling 136 service - Under ventilated attic; R-11 | q.ft. 373 | 0 | 373 | 754 |
| Main Hall 195 s | q.ft. 534 | 0 | 534 | 1,081 |
| Infiltration - Tightness: Poor; Winter ACH | 0 H: 1 ; Summer ACH: .5 | 0 | 0 | 0 |
| Floor 195 s - Over conditioned space | q.ft. 0 | 0 | 0 | 0 |
| Ceiling 195 s - Under ventilated attic; R-11 | • | 0 | 534 | 1,081 |
| Stairwell 78 s | q.ft. 1,212 | 39 | 1,251 | 3,504 |

| Building Componer | nt | Sensible Gain (BTUH) | Latent Gain (BTUH) | Total Heat Gain (BTUH) | Total Heat Loss (BTUH) |
|---------------------------|---|----------------------------|--------------------------|------------------------------|------------------------------|
| Infiltration | oor; Winter ACH: 1 ; Sumi | 31 | 39 | 70 | 228 |
| Floor - Over condition | 78 sq.ft. | 0 | 0 | 0 | 0 |
| S Wall - Wood frame | 152 sq.ft. , with sheathing, siding or | 849 brick; None; none | 0 | 849 | 2,595 |
| • . | 4 sq.ft. ne; Wood frame; Clear gla or blinds; Coating: None (| | 0 side shading. | 118 | 249 |
| Ceiling | 78 sq.ft. ated attic; R-11 (3 - 3.5 inc | 214 | 0 | 214 | 432 |
| Whole House | 3,244.2 sq.ft. | 43,830 | 6,644 | 50,474 (4 tons) | 165,585 |