

In accordance with ACCA Manual J
Properly Sized - Professionally Installed

Report Prepared By:**Comfort-Calc**

██████████ 508 Brighton Place
 ██████████ ██████████ Mechanicsburg, PA. 17055
 Phone: 717-877-9738

For:

██████████
 ██████████
 Ledyard, CT 06339

Design Conditions: Ledyard

Indoor:

Summer temperature: 72
 Winter temperature: 72
 Relative humidity: 50

Outdoor:

Summer temperature: 86
 Winter temperature: 5
 Summer grains of moisture: 102
 Daily temperature range: Medium

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
Whole House	2,385.6 sq.ft.	18,438	6,721	25,159 (2 tons)	49,660
Basement		5,745	2,177	7,922	16,274
Storage	190 sq.ft.	24	0	24	1,978
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	190 sq.ft.	0	0	0	306
- Basement floor, 2' or more below grade; Concrete; Not applicable					
NE Partition	23 sq.ft.	24	0	24	89
- Partition, masonry; R-113 1/2 in.; 8 or 12 in. Block					
NE Wall BelowGr	74 sq.ft.	0	0	0	620
- Block or brick, extends to 5' below grade; None; 8 or 12 in. Block					
SE Wall BelowGr	115 sq.ft.	0	0	0	963
- Block or brick, extends to 5' below grade; None; 8 or 12 in. Block					
Mechanical Room	96 sq.ft.	0	0	0	1,155
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	96 sq.ft.	0	0	0	154
- Basement floor, 2' or more below grade; Concrete; Not applicable					
SE Wall BelowGr	119.5 sq.ft.	0	0	0	1,001
- Block or brick, extends to 5' below grade; None; 8 or 12 in. Block					
Hall	77 sq.ft.	0	0	0	124
Infiltration		0	0	0	0

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	77 sq.ft.	0	0	0	124
- Basement floor, 2' or more below grade; Concrete; Not applicable					
Laundry	51 sq.ft.	0	0	0	455
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	50.6 sq.ft.	0	0	0	81
- Basement floor, 2' or more below grade; Concrete; Not applicable					
SE Wall BelowGr	44.7 sq.ft.	0	0	0	374
- Block or brick, extends to 5' below grade; None; 8 or 12 in. Block					
Stairs	19 sq.ft.	0	0	0	339
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	19.4 sq.ft.	0	0	0	31
- Basement floor, 2' or more below grade; Concrete; Not applicable					
NW Wall BelowGr	36.8 sq.ft.	0	0	0	308
- Block or brick, extends to 5' below grade; None; 8 or 12 in. Block					
Craft Room	155 sq.ft.	940	385	1,325	2,395
Infiltration		80	155	235	857
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	1	300	230	530	0
Floor	155.2 sq.ft.	0	0	0	250
- Basement floor, 2' or more below grade; Concrete; Not applicable					
SW Wall	84.4 sq.ft.	67	0	67	435
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
Window	10.8 sq.ft.	417	0	417	359
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
SE Wall	95.8 sq.ft.	76	0	76	494
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
Family Room	250 sq.ft.	3,850	1,623	5,473	6,281
Infiltration		362	703	1,065	3,896
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	4	1,200	920	2,120	0
Floor	250 sq.ft.	0	0	0	0
- Over conditioned space					
NW Wall	121 sq.ft.	96	0	96	625
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
Glassdoor	39 sq.ft.	1,704	0	1,704	941
- Sliding glass door; Double pane; Wood or vinyl frame; Low emittance					
- No inside shading; Coating: None (clear glass); No outside shading.					
SW Wall	89.2 sq.ft.	71	0	71	460

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
Window	10.8 sq.ft.	417	0	417	359
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Bathroom	39 sq.ft.	24	0	24	89
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	39 sq.ft.	0	0	0	0
- Over conditioned space					
SE Partition	23 sq.ft.	24	0	24	89
- Partition, masonry; R-113 1/2 in.; 8 or 12 in. Block					
workshop	245 sq.ft.	907	169	1,076	3,458
Infiltration		87	169	256	935
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	244.8 sq.ft.	0	0	0	394
- Basement floor, 2' or more below grade; Concrete; Not applicable					
NW Wall	138.1 sq.ft.	110	0	110	712
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
Window	12 sq.ft.	367	0	367	399
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
NE Wall	49.8 sq.ft.	39	0	39	257
- Masonry, above grade; R-113 1/2 in.; 8 or 12 in. Block					
NE Partition	46 sq.ft.	249	0	249	623
- Partition, frame; None; none					
NW Partition	30.7 sq.ft.	55	0	55	138
- Partition, frame; R-113 1/2 in.; none					
First Floor		12,693	4,543	17,236	33,386
Living Room	260 sq.ft.	1,930	323	2,253	9,086
Infiltration		166	323	489	1,792
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Fireplace		0	0	0	4,311
- Average - glass doors, damper					
Floor	259.5 sq.ft.	0	0	0	0
- Over conditioned space					
SW Wall	106 sq.ft.	149	0	149	568
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
SE Wall	133.3 sq.ft.	188	0	188	714
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
Window	23.4 sq.ft.	903	0	903	778
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
Ceiling	260 sq.ft.	524	0	524	923
- Under ventilated attic; R-19 (4 - 6.5 inch); Dark					
Entry Foyer	51 sq.ft.	821	408	1,229	3,290
Infiltration		210	408	618	2,260
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	51.2 sq.ft.	0	0	0	0
- Over conditioned space					
SE Wall	12.6 sq.ft.	18	0	18	68
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
Window	9.4 sq.ft.	363	0	363	299
- Single pane & storm; Wood frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Door	20 sq.ft.	127	0	127	482
- Wood; Panel; Wood storm					
Ceiling	51 sq.ft.	103	0	103	181
- Under ventilated attic; R-19 (4 - 6.5 inch); Dark					
Hall	71 sq.ft.	143	0	143	252
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	71 sq.ft.	0	0	0	0
- Over conditioned space					
Ceiling	71 sq.ft.	143	0	143	252
- Under ventilated attic; R-19 (4 - 6.5 inch); Dark					
Bedroom Rhett	115 sq.ft.	1,193	399	1,592	2,197
Infiltration		87	169	256	935
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	1	300	230	530	0
Floor	115.4 sq.ft.	0	0	0	0
- Over conditioned space					
SE Wall	86.3 sq.ft.	122	0	122	463
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
Window	11.7 sq.ft.	452	0	452	389
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Ceiling	115.4 sq.ft.	232	0	232	410
- Under ventilated attic; R-19 (4 - 6.5 inch); Dark					
Bedroom Brynn	142 sq.ft.	1,515	455	1,970	3,141
Infiltration		116	225	341	1,247
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	1	300	230	530	0
Floor	142.4 sq.ft.	0	0	0	0
- Over conditioned space					

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
SE Wall	74.3 sq.ft.	105	0	105	398
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
Window	11.7 sq.ft.	452	0	452	389
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
NE Wall	43.6 sq.ft.	61	0	61	234
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; R-1.31/2 in. Asphalt board					
Window	4.4 sq.ft.	135	0	135	146
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
NE Partition	58 sq.ft.	60	0	60	223
- Partition, masonry; R-113 1/2 in.; 8 or 12 in. Block					
Ceiling	142 sq.ft.	286	0	286	504
- Under ventilated attic; R-19 (4 - 6.5 inch); Dark					
Stairway	44 sq.ft.	203	42	245	576
Infiltration		22	42	64	234
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	43.8 sq.ft.	0	0	0	0
- Over conditioned space					
NW Wall	25.2 sq.ft.	40	0	40	152
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Window	2.8 sq.ft.	86	0	86	93
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Ceiling	44 sq.ft.	55	0	55	97
- Under ventilated attic; R-30 (8 - 9 inch); Dark					
Kitchen	162 sq.ft.	1,477	548	2,025	5,148
Infiltration		282	548	830	3,039
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	162.5 sq.ft.	0	0	0	0
- Over conditioned space					
NW Wall	72.3 sq.ft.	115	0	115	436
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Window	23.4 sq.ft.	716	0	716	778
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Door	16.3 sq.ft.	103	0	103	393
- Wood; Panel; Wood storm					
NE Partition	32 sq.ft.	58	0	58	144
- Partition, frame; R-113 1/2 in.; none					
Ceiling	162 sq.ft.	203	0	203	358
- Under ventilated attic; R-30 (8 - 9 inch); Dark					
Master Bedroom	179 sq.ft.	2,009	783	2,792	4,120

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
Infiltration		166	323	489	1,792
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	2	600	460	1,060	0
Floor	179.2 sq.ft.	0	0	0	0
- Over conditioned space					
NE Wall	100 sq.ft.	158	0	158	603
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
NW Wall	91.3 sq.ft.	145	0	145	551
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Window	23.4 sq.ft.	716	0	716	778
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
Ceiling	179 sq.ft.	224	0	224	396
- Under ventilated attic; R-30 (8 - 9 inch); Dark					
Bathroom	96 sq.ft.	558	112	670	1,615
Infiltration		58	112	170	623
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	95.8 sq.ft.	0	0	0	0
- Over conditioned space					
NW Wall	53.3 sq.ft.	84	0	84	321
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Window	8 sq.ft.	245	0	245	266
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
SW Wall	32 sq.ft.	51	0	51	193
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Ceiling	96 sq.ft.	120	0	120	212
- Under ventilated attic; R-30 (8 - 9 inch); Dark					
Dining Room	138 sq.ft.	2,815	1,473	4,288	3,868
Infiltration		166	323	489	1,792
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
People	5	1,500	1,150	2,650	0
Floor	137.5 sq.ft.	0	0	0	0
- Over conditioned space					
NW Wall	64.6 sq.ft.	102	0	102	390
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Window	23.4 sq.ft.	716	0	716	778
- Double pane; Vinyl frame; Clear glass					
- Draperies or blinds; Coating: None (clear glass); No outside shading.					
SW Wall	100 sq.ft.	158	0	158	603
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Ceiling	138 sq.ft.	173	0	173	305
- Under ventilated attic; R-30 (8 - 9 inch); Dark					

Building Component		Sensible Gain (BTUH)	Latent Gain (BTUH)	Total Heat Gain (BTUH)	Total Heat Loss (BTUH)
Entry	6 sq.ft.	29	0	29	93
Infiltration		0	0	0	0
- Tightness: Avg.; Winter ACH: .9 ; Summer ACH: .4					
Floor	5.6 sq.ft.	0	0	0	0
- Over conditioned space					
SE Wall	13.3 sq.ft.	21	0	21	80
- Wood frame, with sheathing, siding or brick; R-113 1/2 in.; none					
Ceiling	6 sq.ft.	8	0	8	13
- Under ventilated attic; R-30 (8 - 9 inch); Dark					
Whole House	2,385.6 sq.ft.	18,438	6,721	25,159 (2 tons)	49,660