



E20-II Block Load

What is Block Load?

Carrier's Block Load program is a powerful, fully featured HVAC load estimating program suitable for commercial buildings of any size.

Who Can Benefit From Block Load?

Block Load is a tool for consulting engineers, design/build contractors, HVAC contractors, facility engineers and other professionals involved in the design, analysis or installation of commercial building HVAC systems.

How Does It Work?

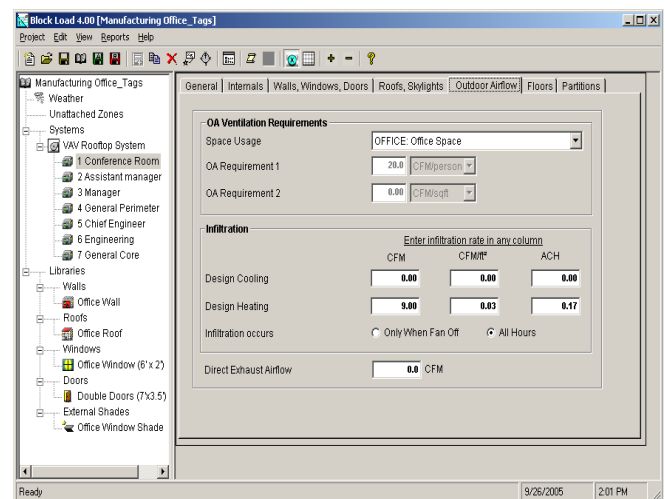
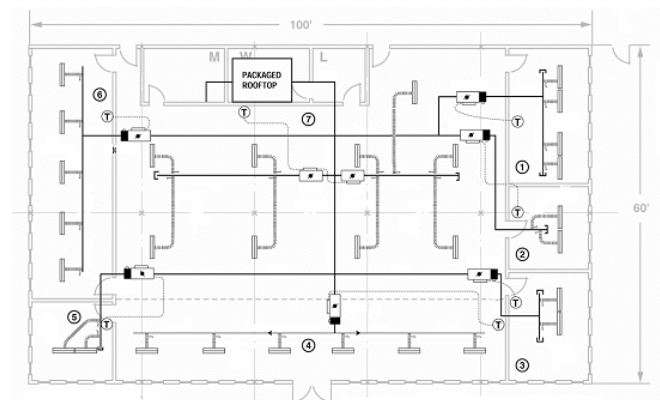
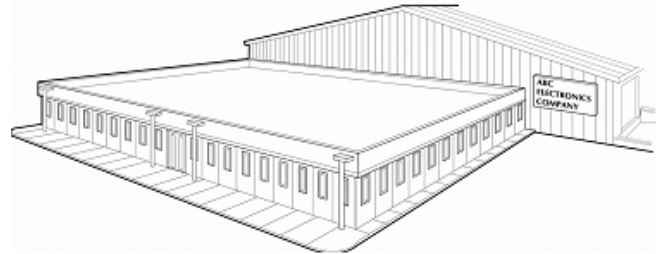
Block Load asks you to supply basic information about your building, and then provides you with all the sizing and load information you need to analyze and design the HVAC system and select all of the air conditioning equipment.

Load Calculation Features

- Uses ASHRAE procedures for Transfer Function cooling load calculations, design heating load calculations, solar radiation calculations.
- Calculates room and zone loads 24 hours a day for design days in all 12 months.
- Identifies peak room, zone, and coil loads.
- Suitable for sizing systems involving central station air handlers, packaged rooftop units, self-contained units, split systems, DX fan coils, hydronic fan coils and water source heat pumps.
- Sizing data is provided for central cooling and heating coils, preheat coils, fans, terminal reheat coils, CAV and VAV air terminals, fan coils and terminal heat pumps.
- Analysis of ventilation requirements using procedure described in ASHRAE Standard 62-2001.
- Provides a database of design weather data for over 700 cities worldwide.

Report Features

- Provides many well-formatted reports listing calculation results as well as input data
- Key system sizing report summarizes data needed for equipment selection on 1-2 pages
- Key ventilation report summarizes requirements for each zone in the system
- Additional reports provide zone and system component loads, hourly zone and system load profiles, detailed hourly psychrometric data and a graph of the psychrometric process
- Provides features for copy-and-paste from displayed reports into other documents.
- Provides features for saving reports as files in RTF-, PDF- or HTML- format documents.
- Advanced output reports available to help in the diagnosis of load results and system behavior.



- Tree view in main window allows for easier program navigation and data viewing
- Choice of conventional input format or spreadsheet style input for building data
- Runs in English and SI Metric units
- Suitable for new construction and retrofit applications.
- Provides a database of design weather data for over 700 cities worldwide.
- Provides feature for archiving and retrieving project data
- Provides feature for converting Block Load v3.0 data into Block Load v4 data
- Provides a global search and replace feature for all building data
- Provides a feature to automatically change the orientation of the entire building
- Program is network compatible

Block Load is available on a license basis. The first year and all subsequent annual license fees entitles the licensee to regular program updates and technical support from our HVAC Systems Engineers.

To license Block Load, please contact your local Carrier sales office, or, in the US and Canada, contact Carrier at:

Fax: 1-315-432-6844

email: software.systems@carrier.utc.com
Web: www.commercial.carrier.com

Hourly Air System Design Day Loads for VAV Rooftop System

DESIGN MONTH: JUL								
Hour	OA TEMP °F	SUPPLY AIR/FY OUT CM	CENTRAL COOLING SENSIBLE MBH	CENTRAL COOLING TOTAL MBH	CENTRAL HEATING COOL MBH	PREHEAT COOL MBH	TERMINAL COOLING COLLS MBH	TERMINAL HEATING COLLS MBH
0000	80.0	0	0.0	0.0	3.3	0.0	0.0	0.0
0100	79.1	0	0.0	0.0	3.3	0.0	0.0	0.0
0200	78.2	0	0.0	0.0	3.3	0.0	0.0	0.0
0300	77.4	0	0.0	0.0	3.3	0.0	0.0	0.0
0400	76.9	0	0.0	0.0	3.3	0.0	0.0	0.0
0500	76.7	0	0.0	0.0	3.3	0.0	0.0	0.0
0600	77.1	1.82	0.0	0.0	3.3	0.0	0.0	0.0
0700	79.0	36.86	9.9	14.7	0.0	0.0	0.0	0.0

Project Name: Manufacturing Office_Tags 00052005
Prepared by: Carter Software Systems 03/28/2005

Number of Zones: _____
Floor Area: _____ sqft
Location: St. Louis (MO) Missouri

Project Name: Manufacturing Office_Taps
Prepared by: Camille Salinas-Solomon

Load condition	1. Outdoor air	2. Mixed air
Enter DB (°F)		

	A. Shipping Plan Doubt
	B. Road Aid
Fairly safe
Fairly safe
Fairly safe
Fairly safe

Air Source	No	Yes	Don't know
Air Source	10	80	10
Air Source	10	80	10
Air Source	10	80	10

Zone Name	Maximum Cooling Sensible MBH	Design Airflow CFM	Minimum Air Flow CFM	Tin
1 Conference Room	7.3	340	240	
2 Assistant manager	3.3	157	40	
3 Manager	5.3	251	40	
4 General Perimeter	17.8	847	250	

Project Name: Manufacturing Office_Flags
Prepared by: Carter Software Systems
08/06/2006
10:43AM

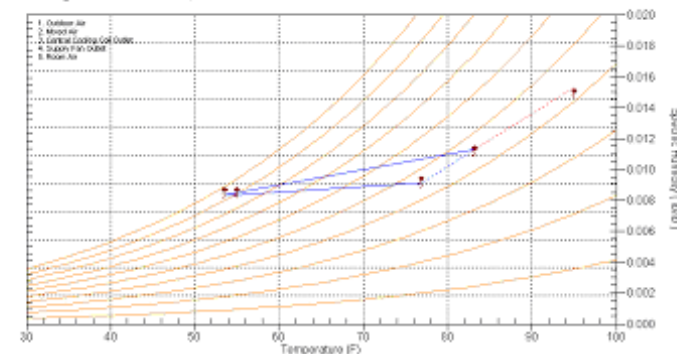
ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT 75/65/55			HEATING DATA AT 65/55/45		
	COOLING DATA DB 75/65/55			HEATING DATA WB 75/65/55		
	Details	Sensible BTU/hr	Latent BTU/hr	Details	Sensible BTU/hr	Latent BTU/hr
Minimum and Skyglint Solar Loads	304 sqft	157,064	-	304 sqft	-	-
Local Transmission	2892 sqft	33,116	-	2892 sqft	90,936	-
Local Infiltration	1146 sqft	11,460	-	1146 sqft	22,920	-
Minimum Ventilation	304 sqft	30,422	-	304 sqft	2,525	2,525

Project Name: Manufacturing Office_Tags 09/24/2019
Prepared by: Carter Collins/Solomon 02:48PM

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Lerning: St. Louis IAP, Missouri
 3186666-833

Data for: Avg DESIGN COOLING DAY, 1500



THOMAS & LOUGHEE 2005

Page 104