TOWN OF TRUMBULL  
CONNECTICUT  

Trumbull Community Center Study and Building Committee  
Thursday, September 28, 2017  
7:00 PM  
Long Hill Conference Room, Trumbull Town Hall

Present: Co-Chairmen Joseph Pifko and Daniel Marconi, Lori Hayes-O’Brien, Jeannine Stauder and Joseph Costa

Also Present: Lynn Arnow, Chief of Staff; Thomas Arcari from Quissenberry Arcari, Jesse Voss and Graham Curtis from DTC; Greg Raucci and Darin Antolini from Bismark; Marie Allen, Director of the Southwestern CT Commission on Aging; Michele Jakab, Director of the Trumbull Senior Center; Michael Moccia, Acting Director and Dan Gagne, Program Coordinator for the Trumbull Parks & Recreation

Absent: Commissioners Richard Seaman, David Preusch and Dawn Cantafio

The meeting was called to order by Mr. Marconi at 7:05 pm followed by the Pledge of Allegiance. Mr. Pifko requested a moment of silence for Rachel Yahwak, a past member of the Committee, who passed away earlier in the month.

Past Minutes
Motion was made by Mr. Marconi to approve the minutes of July 27, 2017 as written. Seconded by Mrs. Stauder and approved with one abstention by Mrs. Hayes-O’Brien. Motion was made by Mr. Marconi to approve the minutes of August 24, 2017 as written. Seconded by Mrs. Stauder and approved with one abstention by Mr. Costa.

Public Comment
No public comment.

Motion was made by Mrs. Hayes-O’Brien to move the New Business portion of the agenda before Old Business to accommodate the guest speakers. Seconded by Mr. Marconi and approved.
Marie Allen, Director of the Southwestern CT Commission on Aging, presented a program on senior centers in the southwest region of CT. The power point is posted on the Committee’s website. Mrs. Allen noted that a senior center is a reflection of the community and it elevates and enhances the entire town. It is considered a designated community focal point for State and federal programs within the community. Some highlights covered included:

2. Trumbull’s population – noted that 70% of women live alone and are an average of 75 years old.
3. Role of the senior center – reduces isolation; healthy aging, health promotion and disease prevention; connection to community services and financial assistance.
4. Enhanced role – lifetime learning; volunteer opportunities; gateway to care

Seniors want to be a part of the community but need programs that fit their needs. Many do not want to go to another community. They also want to connect in a meaningful way.

Mrs. Allen discussed the values of mixed use centers which usually have activities for seniors during the day and extend hours into the evening for other activities for the community. Location is also important especially with regard to bus lines.

Mrs. Hayes-O’Brien questioned the impact on the EMS system. Mrs. Jakab noted she has been working with EMS Chief Laucella on fall prevention programs and is making more family connections in certain circumstances. She noted that many residents are aging in place which increases the EMS responses.

Mrs. Allen left the meeting at 7:37 pm.

Mrs. Jakab and Mr. Gagne spoke on the programming possibilities of a new community center/senior center. A proposed schedule was presented noting all the expected activities fit into the schedule including some new programs from the Recreation Department. Mrs. Hayes-O’Brien asked if they had spoken with individuals at Trumbull High School regarding programs to consider moving some of them to the center. Mr. Gagne noted little discussion has been held but reiterated that not all programs would fit into the new facility.

Mr. Mocciae felt that the facility would be a great senior center but a better community center as a multi-use facility is the way to proceed. Quality of programing is enhanced tremendously if you own your own building.

Discussion was held regarding the pool component. Mr. Mocciae felt the competition teams should remain at Hillcrest as the pool being looked at for the center is better suited for recreational programming. Mr. Arcari agreed that the programming possibilities are limitless in this situation.

The staffing component was discussed. Mrs. Arnow noted discussions have been held regarding staffing. Potential staffing might include a clerk at the primary desk, administration for the recreation programs, possible park ranger for the trailhead, senior center staff would be on the upper level for the senior programming, administrative staff after the senior center staff leave for the day. These are suggestions but there is not a firm
staffing model at this time. It is actively being discussed. Mr. Pifko asked Mrs. Jakab to come back to the Committee with a more realistic staffing model that reflects the needs of the center.

Mr. Gagne discussed the possible increase in teen programs and how having space at the new center would be beneficial for socialization of the high school students and increase the potential for the youth programs in town.

Mr. Pifko presented to the Committee a portion of a Comprehensive Performance Review of the current Senior Center. He read the following pertinent finding with regard to the current structure:

“Finding #8: Due to age and original intended use of the structure, the facility is not conductive to its current purpose.

- There is no dedicated area for comfortable congregation. This area would allow for sharing and socialization. Many rooms are small, and lack flexibility for use. Seniors may have difficulty finding those with whom they wish to spend time. The staff has limited lines of visibility, which poses safety concerns, a priority to Senior Center management.
- Larger parties, classes or events must occur singly to accommodate attendees.
- Office workers are required to share space and telephones.
- There is no security system and there are no cameras.
- The building is often difficult or expensive to refurbish or maintain:
  - The floors have asbestos
  - There is no loading dock for deliveries
  - Light fixtures are difficult to replace
- Parking space cannot be expanded.

Recommendation: The Town is currently considering building a community center which would include space for Senior Center and Social Service personnel and activities.

Management Response:
For best Senior Center Practice and Social Work Practice the current facility is not conducive to helping the Senior Center or Social Services meet their goals in serving the community. The layout of the building does not allow for congregation and socialization. Members are tucked away in classrooms where engagement with staff, volunteers, and other members does not occur. Rooms do not serve as multipurpose rooms, therefore limiting significant use of the building. Our Social Service department is in a shared office space where the client right to privacy and anonymity is unprotected.”

Mrs. Jakab, Mr. Mocciae and Mr. Gagne left the meeting at 8:08 pm.

DTC Engineering presented their Energy Summary Model comparing the proposed new community center and existing facilities (copy posted on Committee’s website). Proposed energy usage for the new center is approximately $75,507. Energy cost for the existing pool facilities at Hillcrest is $60-000 - $70,000) and the Senior Center is $21,772. It was noted that high efficiency equipment and significant high energy code
requirements means more HVAC for less dollars. The new center would be a healthier environment although it is only about 10% less in expense. It was also noted that the current Senior Center is not totally air-conditioned at this time whereas the new building would be.

HVAC systems were discussed relating to the pool and gym areas.

It was recommended to note the Senior Center Energy Cost Budget noted on the Summary Sheet for $19,818 covers a fully 100% cooled building as compared to the current center which is not fully cooled.

Mrs. Arnow brought up that the center will be an American Red Cross shelter and by law will need to house the pets of those individuals in the shelter. What effect will the housing of numerous pets be on the ventilation system? Mr. Arcari noted that when the detailed design is done, the units will be adjusted as necessary to accommodate this requirement. Discussion was also held regarding the need for a generator at the center. Mr. Arcari noted the center would need an independent source of energy which means a diesel generator. The entire building would need to be powered due to the environmental issues associated with the pool being off line for any length of time.

Mrs. Arnow noted the town has several Memorandums of Understanding (MOU) with various businesses in town for supplies during a power outage due to a storm. The location near Stop & Shop eliminates traveling long distances to obtain and deliver such supplies.

Old Business

1. Mr. Arcari and Mrs. Arnow noted the website is being updated and that the timeline will be in place soon. Mr. Arcari will look into slowing down the flip of the pages which has not been corrected.

2. Mr. Pifko presented for approval one invoice from QA for $771.90 to cover web design and concept design. While the Committee members reviewed the invoice, Mr. Pifko noted that Mr. Flannigan, the City Planner from Bristol, sent a letter stating he was impressed with the design of the property. Motion was made by Mr. Marconi to approve the payment of the first invoice for $771.90. Seconded by Mr. Costa and approved unanimously. Mr. Pifko presented a second invoice from QA which had been presented previously for approval but noted that Mrs. Arnow had asked for a more specific breakdown of costs. This invoice is for $23,349.39. Mrs. Arnow noted the work described is within the scope of work with QA. Further discussion. Motion was made by Mr. Costa to authorize the payment of the QA invoice up to the $23,349.39 amount after the financial breakdown is received by Mrs. Arnow. Seconded by Mr. Marconi and approved unanimously.

3. Mrs. Hayes-O’Brien felt the Committee should be making another presentation to the Town Council since the last presentation was in February. Mr. Pifko has spoken with Mr. Massaro regarding the project but she felt that a more formal presentation should be made to the Town Council. Several topics could be updated such as staffing and insurance. Mrs. Hayes-O’Brien suggested the Committee ask to be placed on the agenda for a more formal presentation.
Next Meeting
The next scheduled meeting will be October 19 at 7:00 pm. The Committee agreed they should do a wrap up of the project and write a formal recommendation/summary report for the Town Council.

Adjournment
There being no further business, motion was made by Mr. Marconi, to adjourn the meeting at 8:54 pm. Seconded by Mr. Pifko and approved unanimously.

Respectfully submitted,

Barbara Crandall
Clerk
Trumbull Community Center

Energy Model Summary

September 28, 2017

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<th>Facility</th>
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<tr>
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<tr>
<td>Pool</td>
<td>$45,435</td>
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<td>(3,400 Square Foot Pool &amp; 6,600 Square Foot Space)</td>
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<tr>
<td>Gym</td>
<td>$ 5,783</td>
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<tr>
<td>(8,000 Square Feet)</td>
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<td>Senior Center</td>
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<td>(18,750 Square Feet)</td>
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<td><strong>Total</strong></td>
<td>$75,507</td>
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| **Existing Facilities**   |                                         |
| Hillcrest Pool Facility   | $60,000 - $70,000                       |
| Senior Center             | $21,772                                 |
| (19,000-21,000 Square Feet) |                                      |

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2321 Whitney Avenue Suite 301 Hamden CT 06518
203 239 4200 PH 203 234 7376 Fax
www.teamdtc.com
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<tr>
<th></th>
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<td>Lunch and Learn</td>
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<td>Conference Room</td>
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<td>Pool</td>
<td>Lap Swim</td>
<td>Aquacize*</td>
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<td>Gym</td>
<td>Walking Group</td>
<td>Pickleball</td>
<td>Meeting Space for Non-Profits, Community Organizations OR *</td>
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<td>Open Gym</td>
<td>Youth Intramurals*</td>
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<td>9pm</td>
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<td>Family Open Gym</td>
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* Denotes potential revenue
Federal Definition

A place where older adults come together for services and activities that reflect their experience and skills, respond to their diverse needs and interests, enhance their dignity, support their independence and encourage their involvement in the Center and the community.

Designated Community Focal Points
Connecticut’s Population Projection

- **Growth in CT population age 65+**
- **Growth in total CT population**
- **Growth in CT population age 21 to 64**
Trumbull’s Population

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF
Participant Profile

- Approximately 70% of senior center participants are women; half of them live alone.
- Senior center participants have higher levels of health, social interaction, life satisfaction and lower levels of income.
- The average age of participants is 75.
- 75% of participants visit their center 1 to 3 times per week. They spend an average of 3.3 hours per visit.
Senior Center’s Role

Reduce Isolation
- Reduced burden on EMT and mental health services
- Good neighbors make good citizens

Healthy Aging, Health Promotion and Disease Prevention
- Reduced burden on town EMT, Hospital, Public Health and State Medicaid

Connect to community services & financial assistance
- One stop shopping reduce on-demand transportation
- Financial assistance helps to remain home
Enhanced Role

**Lifetime Learning**
- Informed citizenry
- Serve on key community committees

**Volunteer Opportunities**
- Giving back to support education, safety, charity on the local level

**Gateway to Care**
- Early detection of need reducing crisis interventions
Community Assessment

- What people most want is to be part of a full community that includes people of all ages and abilities
- One size does not fit all
- Allegiance to MY community
- Desirable destinations
Trumbull’s Potential

- Continue to evolve and adapt to today’s senior
- Build linkages with strategic partners, expand collaborations
- Become a community haven where all residents understand its value and support its growth
Credits & Contacts

- National Council on Aging (NCOA), http://www.ncoa.org
- SWCAA (2009). Needs Assessment of the Bridgeport Community in consideration of senior center consolidation
- Presented by: Marie Allen, Executive Director, Southwestern CT Agency on Aging & Independent Living (SWCAA) mallen@swcaa.org www.swcaa.org (203) 814-3661
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</thead>
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<td>HVAC Narrative</td>
<td>II</td>
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<tr>
<td>Pool Energy Model Details</td>
<td>III</td>
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<tr>
<td>Gym Energy Model Details</td>
<td>IV</td>
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<td>Senior Center Energy Model Details</td>
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<td>Floor Energy Model Details</td>
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Trumbull Community Center

Energy Model Summary

September 28, 2017

New Community Center

Pool Energy Cost Budget $45,435
(3,400 Square Foot Pool & 6,600 Square Foot Space)

Gym Energy Cost Budget $5,783
(8,000 Square Feet)

Senior Center Energy Cost Budget $19,818
(18,750 Square Feet)

Lower Level Energy Cost Budget $4,471
(4,700 Square Feet)

Total $75,507

Existing Facilities

Hillcrest Pool Facility Energy Cost $60,000 - $70,000

Senior Center Energy Cost $21,772
(19,000-21,000 Square Feet)
## Energy Cost Budget / PRM Summary

**Project Name:** TRUMBULL COMMUNITY CENTER  
**City:** TRUMBULL, CT  
**Weather Data:** Hartford, Connecticut  
**Date:** September 22, 2017

Note: The percentage displayed for the "Proposed/ Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.

<table>
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<tr>
<th>* Alt-1 TRUMBULL COMMUNITY</th>
<th>Energy $10^6$ Btu/yr</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
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### Energy Cost Budget

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**Energy Cost Budget / PRM Summary**

**Project Name:** TRUMBULL COMMUNITY CENTER  
**City:** TRUMBULL, CT  
**Weather Data:** Hartford, Connecticut

**Date:** September 22, 2017

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### Energy Consumption Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>Energy (10^6 Btu/yr)</th>
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**Total Building Consumption:** 187.8

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### Energy Cost Summary

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<td>Gas</td>
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**Total:** 188 $ 5,783
# Energy Cost Budget / PRM Summary

**Project Name:** TRUMBULL COMMUNITY CENTER  
**City:** TRUMBULL, CT  
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**Date:** September 22, 2017

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### TRUMBULL COMMUNITY

<table>
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<th>Energy 10^6 Btu/yr</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
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<tr>
<td><strong>Lighting - Conditioned</strong></td>
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### Total Number of hours heating load not met

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### Total Number of hours cooling load not met

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### Electricity

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## Energy Cost Budget / PRM Summary

### Project Details
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### Energy Details

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<td></td>
<td>106.0</td>
<td>62</td>
<td>33</td>
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<table>
<thead>
<tr>
<th>Space Cooling</th>
<th><strong>Electricity</strong></th>
<th>Proposed / Base %</th>
<th>Peak kBtu/h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.2</td>
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<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fans - Conditioned</th>
<th><strong>Electricity</strong></th>
<th>Proposed / Base %</th>
<th>Peak kBtu/h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.4</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Receptacles - Conditioned</th>
<th><strong>Electricity</strong></th>
<th>Proposed / Base %</th>
<th>Peak kBtu/h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.9</td>
<td>6</td>
<td>5</td>
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</tbody>
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**Total Building Consumption:** 172.0

### Energy Cost Details

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<th>Energy Source</th>
<th><strong>Electricity</strong></th>
<th><strong>Gas</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Btu/yr</strong></td>
<td>66.0</td>
<td>106.0</td>
</tr>
<tr>
<td><strong>Cost/yr</strong></td>
<td>3,093</td>
<td>1,378</td>
</tr>
</tbody>
</table>

**Total:** 172, **Cost:** 4,471
Trumbull Community Center

HVAC Narrative

June 15, 2017

General

Complete new mechanical systems are to be provided for the entire building, including both the renovated portions of the building and new additions. The new systems will be designed in accordance with the requirements of the following codes and standards:

- 2012 International Mechanical Code (IMC)
- 2012 International Energy Conservation Code (IECC)
- 2005 Connecticut State Building Code (CSBC)
- Other State and Local Codes
- ASHRAE Standard 62.1

Design Conditions, Heating/Cooling Load Calculations

Outdoor Design Conditions:

- Cooling design condition – 91.0 deg. F Dry Bulb
  73.0 deg. F Wet Bulb

- Heating design condition – 2.0 deg. F Dry Bulb
  0.3 deg. F Wet Bulb

Inside Design Conditions:

- Cooling design condition – 74.0 deg. F – Occupied
  80.0 deg. F – Unoccupied

- Heating design condition – 72.0 deg. F – Occupied
  60.0 deg. F – Unoccupied
Proposed System Types

Most areas of the building except for the Gym and Pool Area will be served by a combination of variable refrigerant flow (VRF) systems (Mitsubishi, Daikin, or similar) with heat recovery and dedicated outdoor air units (DOAS). For conceptual estimating, it is anticipated that the VRF systems with heat recovery will have a total capacity of 80 tons. These systems will provide heating and cooling to the spaces they serve. A VRF system consists of an outdoor condensing unit located on the roof, indoor ducted fan-coil units supplying air to each space, and refrigerant piping connecting the indoor and outdoor units. One DOAS unit (Aaon or similar) will be provided to supply ventilation air to all spaces served by VRF systems. The DOAS unit will be a gas-fired, variable air volume, packaged rooftop unit with an energy recovery wheel, which will provide heating, ventilation, and cooling to the space. This unit will include modulating gas input for heating, variable capacity direct expansion (DX) cooling, an energy recovery wheel to conserve energy by transferring energy from exhaust air to the incoming outdoor air, and hot-gas reheat coil for dehumidification. It will distribute ventilation air via ductwork to the spaces. Relief and exhaust air will be ducted back to an exhaust fan in the dedicated outdoor air unit, allowing energy from this air to be used to temper the incoming outdoor air.

The Gym will be served by one variable air volume air-handling unit (Aaon or similar) with hot water heating and variable capacity direct expansion (DX) cooling (condensing unit located on the roof) with hot-gas reheat for dehumidification control. This unit will provide heating, cooling, and ventilation to the space, and will have an approximate cooling capacity of 20-tons and an airflow of 8,000 cfm. This unit will incorporate demand control ventilation, which will modulate the amount of outside air based on occupancy and carbon dioxide levels. Air will be distributed via exposed ducts at the ceiling of the Gym.

The Pool Area will be served by a dedicated pool unit (PoolPak or similar), with hot water heating (reheat), direct expansion (DX) cooling (condensing unit located on roof), heat recovery, and an integral pool water condenser / heater. This unit will provide heating, cooling, dehumidification, and ventilation to the space. Its cooling capacity will be approximately 35-tons with an airflow of 11,500 cfm. The air temperature in the pool area will be maintained at 85 degrees F for both comfort reasons, and to minimize pool water evaporation and eliminate window condensation. Budget equipment pricing for this unit is $160,000. A water-to-water heat exchanger will use heating hot water to heat the pool water to 83 degrees F.

Heating hot water will be provided by a new boiler plant located in the Mezzanine above the Locker Rooms. Two or three gas-fired, high efficiency, condensing boilers (Aerco or similar) will provide hot water for the Gym air-handling unit, pool unit, pool water heat exchanger, and radiant ceiling panels serving the Upper Level.
Piping Materials:

Refrigerant piping will be Type L copper tube with soldered joints. All refrigerant piping will be insulated, including liquid, suction, hot-gas, discharge, and heat-recovery piping.

Heating hot water piping will be Schedule 40 steel pipe with welded joints for piping 2-1/2" and larger, and Type L copper piping with soldered joints for piping 2" and smaller.

HVAC System Controls – Alternate #1

The building control system will be a complete direct digital control (DDC) system employing the latest, best available technology for energy saving strategies, and will include BACnet and Web enabled interfaces, microcomputer workstation, application software, control units, sensors, thermostats, temperature and pressure transmitters, gauges, valves, dampers, operators, relays, and other equipment and appurtenances, including electrical wiring. The system will provide 365 day scheduling with override, monitoring, reporting, alarming and set point controlling capabilities for all HVAC equipment and zones. The VRF systems utilize self-contained controls that are in addition to the DDC controls. The DDC system will monitor the self-contained controls of the VRF systems.

HVAC System Controls – Alternate #2

The HVAC system controls will be packaged DDC controls provided by the equipment manufacturers. The VRF systems will utilize self-contained controls, which will all tie back into a master VRF system controller. This master controller will include a Web enabled interface, and provide scheduling with override, monitoring, reporting, alarming, and set point controlling capabilities for all VRF system equipment and zones. The DOAS units, Gym system, and Pool Area system will utilize full, packaged DDC controls provided by the unit manufacturer.
**TRUMBULL COMMUNITY CENTER**

**Location**
TRUMBULL, CT

**Building owner**

**Program user**

**Company**

**Comments**

By

Dataset name

<table>
<thead>
<tr>
<th>Calculation time</th>
<th>11:25 AM on 09/22/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRACE® 700 version</td>
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<table>
<thead>
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<th>Location</th>
<th>Hartford, Connecticut</th>
</tr>
</thead>
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<td>Latitude</td>
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<td>Longitude</td>
<td>72.0 deg</td>
</tr>
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<td>Time Zone</td>
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<tr>
<td>Elevation</td>
<td>15 ft</td>
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<tr>
<td>Barometric pressure</td>
<td>29.9 in. Hg</td>
</tr>
</tbody>
</table>

| Air density | 0.0760 lb/cu ft |
| Air specific heat | 0.2444 Btu/lb·°F |
| Density-specific heat product | 1.1147 Btu/h·cfm·°F |
| Latent heat factor | 4.906.9 Btu·min/h·cu ft |
| Enthalpy factor | 4.5604 lb·min/hr·cu ft |
| Summer design dry bulb | 88.0 °F |
| Summer design wet bulb | 73.0 °F |
| Winter design dry bulb | 7.0 °F |
| Summer clearness number | 1.00 |
| Winter clearness number | 1.00 |
| Summer ground reflectance | 0.20 |
| Winter ground reflectance | 0.20 |
| Carbon Dioxide Level | 400 ppm |
| Design simulation period | January - December |
| Cooling load methodology | TETD-TA1 |
| Heating load methodology | UATD |
## TRUMBULL COMMUNITY CENTER

**Project Name:** TRUMBULL COMMUNITY CENTER  
**City:** TRUMBULL, CT  
**Weather Data:** Hartford, Connecticut  
**Date:** September 22, 2017

**Note:** The percentage displayed for the "Proposed/ Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.

### Energy Cost Budget / PRM Summary

<table>
<thead>
<tr>
<th>Energy Component</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
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</thead>
<tbody>
<tr>
<td><strong>Lighting - Conditioned</strong></td>
<td></td>
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</tr>
<tr>
<td>Electricity</td>
<td>40.2</td>
<td>2</td>
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<tr>
<td><strong>Space Heating</strong></td>
<td>1,039.6</td>
<td>60</td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td>759</td>
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<td><strong>Space Cooling</strong></td>
<td>261.9</td>
<td>15</td>
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<tr>
<td>Electricity</td>
<td></td>
<td>112</td>
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<tr>
<td><strong>Pumps</strong></td>
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<td>Electricity</td>
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<td><strong>Heat Rejection</strong></td>
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<tr>
<td>Electricity</td>
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<td><strong>Fans - Conditioned</strong></td>
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<td>18</td>
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<tr>
<td>Electricity</td>
<td></td>
<td>63</td>
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<tr>
<td><strong>Stand-alone Base Utilities</strong></td>
<td>59.8</td>
<td>3</td>
</tr>
<tr>
<td>Electricity</td>
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</table>

**Total Building Consumption:** 1,720.5

<table>
<thead>
<tr>
<th>Energy Component</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

### Energy Cost Budget Report

**Electricity:**
- 680.9 10^6 Btu/yr
- 31,921 $/yr

**Gas:**
- 1,039.6 10^6 Btu/yr
- 13,514 $/yr

**Total:**
- 1,720 10^6 Btu/yr
- 45,435 $/yr
# MONTHLY ENERGY CONSUMPTION

By Yeaton Associates Inc.

<table>
<thead>
<tr>
<th>Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Pk Cons. (kWh)</td>
<td>14,771</td>
<td>13,258</td>
<td>14,879</td>
<td>15,335</td>
<td>16,517</td>
<td>21,555</td>
<td>24,977</td>
<td>24,197</td>
<td>19,598</td>
<td>16,150</td>
<td>15,073</td>
<td>14,990</td>
<td>211,300</td>
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<tr>
<td>On-Pk Demand (kW)</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>49</td>
<td>49</td>
<td>53</td>
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<td>Gas</td>
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<tr>
<td>On-Pk Cons. (therms)</td>
<td>1,163</td>
<td>1,044</td>
<td>1,086</td>
<td>827</td>
<td>788</td>
<td>585</td>
<td>599</td>
<td>599</td>
<td>623</td>
<td>851</td>
<td>964</td>
<td>1,119</td>
<td>10,249</td>
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<tr>
<td>On-Pk Demand (therms/hr)</td>
<td>5</td>
<td>4</td>
<td>4</td>
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<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Building Source</td>
<td>263,354 Btu/(ft²-year)</td>
<td>489,070 Btu/(ft²-year)</td>
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<tr>
<td>Floor Area</td>
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</tbody>
</table>

## Environmental Impact Analysis

- **CO2**: 145,979 lbm/year
- **SO2**: 495 gm/year
- **NOX**: 174 gm/year
## EQUIPMENT ENERGY CONSUMPTION

### Alternative: 1 TRUMBULL COMMUNITY CENTER POOL

<table>
<thead>
<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
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<tr>
<td><strong>Lights</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Electric (kWh)</td>
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<td>893.1</td>
<td>1,044.2</td>
<td>946.8</td>
<td>1,016.0</td>
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<td>1,016.0</td>
<td>975.0</td>
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<td>11,792.0</td>
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<td>4.0</td>
<td>4.0</td>
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<td>4.0</td>
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<tr>
<td><strong>Cooling Coil Condensate</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Recoverable Water (1000gal)</td>
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<td>3.4</td>
<td>4.0</td>
<td>4.3</td>
<td>4.3</td>
<td>6.2</td>
<td>6.2</td>
<td>8.1</td>
<td>5.3</td>
<td>4.4</td>
<td>4.2</td>
<td>4.1</td>
<td>58.3</td>
</tr>
<tr>
<td>Peak (1000gal/Hr)</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Bsu 1: Filter and Heater Pump</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Electric (kWh)</td>
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<td>1,344.0</td>
<td>1,488.0</td>
<td>1,440.0</td>
<td>1,488.0</td>
<td>1,440.0</td>
<td>1,488.0</td>
<td>1,440.0</td>
<td>1,488.0</td>
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<td>1,488.0</td>
<td>1,440.0</td>
<td>17,520.0</td>
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<td>2.0</td>
<td>2.0</td>
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<tr>
<td><strong>Bsu 2: Pool Heating</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Proc. Hot Water (therms)</td>
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<td>504.0</td>
<td>558.0</td>
<td>540.0</td>
<td>558.0</td>
<td>540.0</td>
<td>558.0</td>
<td>540.0</td>
<td>558.0</td>
<td>540.0</td>
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<td>6,570.0</td>
</tr>
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<td>Peak (therms/HR)</td>
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<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
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<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Cpl 1: POOL UNIT [Sum of dsn coil capacities=45.40 tons]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>POOL UNIT [Clg Nominal Capacity/F.L.Rate=45.40 tons / 42.33 kW]</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric (kWh)</td>
<td>4,705.2</td>
<td>4,175.6</td>
<td>4,684.3</td>
<td>5,495.7</td>
<td>5,752.8</td>
<td>9,054.6</td>
<td>9,854.9</td>
<td>10,632.4</td>
<td>6,558.0</td>
<td>5,115.8</td>
<td>4,705.2</td>
<td>4,705.2</td>
<td>76,473.0</td>
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<td>Peak (kW)</td>
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<td>25.1</td>
<td>25.8</td>
<td>26.2</td>
<td>25.1</td>
<td>31.8</td>
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<td>30.2</td>
<td>29.5</td>
<td>26.4</td>
<td>25.6</td>
<td>25.6</td>
<td>32.7</td>
</tr>
<tr>
<td>POOL UNIT (Cooling Equipment - Heat Recovered From Condenser Loop)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Energy Recovered (therms)</td>
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<td>412.0</td>
<td>442.3</td>
<td>477.5</td>
<td>494.5</td>
<td>764.1</td>
<td>654.7</td>
<td>912.0</td>
<td>690.5</td>
<td>485.9</td>
<td>477.4</td>
<td>484.6</td>
<td>6,760.1</td>
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<tr>
<td>Peak (therms/HR)</td>
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<td>3.3</td>
<td>3.1</td>
<td>2.7</td>
<td>2.5</td>
<td>3.1</td>
<td>2.9</td>
<td>3.1</td>
<td>3.3</td>
<td>2.7</td>
<td>3.0</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>90.1 Min Air Cooled Condenser [Design Heat Rejection/F.L.Rate=57.43 tons / 3.18 kW]</strong></td>
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<td>546.3</td>
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<td>0.5</td>
<td>0.7</td>
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<td>Cntl panel &amp; interlocks - 0.05 KW [F.L.Rate=0.05 kW] (Misc Accessory Equipment)</td>
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<td>Electric (kWh)</td>
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<td>Peak (kW)</td>
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<tr>
<td><strong>Hpl 1: POOL BOILER SPACE HEATING [Sum of dsn coil capacities=882.5 mbh]</strong></td>
<td></td>
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<tr>
<td>Boiler - 004 [Nominal Capacity/F.L.Rate=1,103 mbh / 12.53 Thers] (Heating Equipment)</td>
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<tr>
<td>Gas (therms)</td>
<td>549.9</td>
<td>490.5</td>
<td>475.8</td>
<td>242.8</td>
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<td>Peak (therms/HR)</td>
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**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** CC POOL ECONO.TRC  
TRACE® 700 v6.3.2 calculated at 11:25 AM on 09/22/2017
## EQUIPMENT ENERGY CONSUMPTION

**Alternative: 1  TRUMBULL COMMUNITY CENTER POOL**

<table>
<thead>
<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td><strong>Hpl 1: POOL BOILER SPACE HEATING [Sum of dsn coil capacities=882.5 mbh]</strong></td>
<td></td>
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<tr>
<td>Var vol cnd water pump [F.L.Rate=1.87 kW] (Misc Accessory Equipment)</td>
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<tr>
<td>Electric (kWh)</td>
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<tr>
<td><strong>Hpl 2: POOL BOILER FOR WATER HEATING [Sum of dsn coil capacities=75 mbh]</strong></td>
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<tr>
<td>Boiler - 005 [Nominal Capacity/F.L.Rate=500 mbh / 5.68 Therms] (Heating Equipment)</td>
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<tr>
<td>Gas (therms)</td>
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<td>553.2</td>
<td>610.3</td>
<td>584.2</td>
<td>601.8</td>
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<tr>
<td><strong>Sys 1: Pool</strong></td>
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<tr>
<td>FC Centrifugal const vol [DsnAirflow/F.L.Rate=11,200 cfm / 12.71 kW] (Main Clg Fan)</td>
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<tr>
<td>Electric (kWh)</td>
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<td>7,032.7</td>
<td>6,734.1</td>
<td>7,000.9</td>
<td>6,797.6</td>
<td>6,937.4</td>
<td>7,032.7</td>
<td>6,734.1</td>
<td>7,000.9</td>
<td>6,765.8</td>
<td>6,937.4</td>
<td>82,238.2</td>
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<tr>
<td>Peak (kW)</td>
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<td>12.7</td>
<td>12.7</td>
<td>12.7</td>
<td>12.7</td>
<td>12.7</td>
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<td>12.7</td>
<td>12.7</td>
<td>12.7</td>
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<td>FC Centrifugal const vol [DsnAirflow/F.L.Rate=11,200 cfm / 5.72 kW] (System Exhaust Fan)</td>
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<tr>
<td>Electric (kWh)</td>
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<td>565.5</td>
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</table>
## System Component Selection Summary

### Alternative 1

**System Description:** Pool  
System Type: Single Zone  
Number of Zones: 1  
Number of Rooms: 1

<table>
<thead>
<tr>
<th>Component</th>
<th>Sizing Method</th>
<th>Location</th>
<th>Quantity</th>
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<tbody>
<tr>
<td><strong>Cooling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Clg Coil</td>
<td>Peak</td>
<td>Zone</td>
<td>1</td>
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<tr>
<td>Primary Clg Fan</td>
<td>Peak</td>
<td>Zone</td>
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<tr>
<td><strong>Heating</strong></td>
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<tr>
<td>Main Htg Coil</td>
<td>Peak</td>
<td>Zone</td>
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<tr>
<td>Reheat Coil</td>
<td>Peak</td>
<td>Room</td>
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<td><strong>Miscellaneous</strong></td>
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<td>System Exhaust Fan</td>
<td>Vent+Inf-RmExh</td>
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<tr>
<td>Return Fan</td>
<td>Return Airflow</td>
<td>System</td>
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### Cooling Coil Selection

<table>
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<tr>
<th>Component</th>
<th>Time Of Peak Mo/Hr</th>
<th>Total Capacity MBh</th>
<th>Sensible Capacity MBh</th>
<th>Airflow At Coil Peak cfm</th>
<th>Enter DB/ WB/ HR °F</th>
<th>Enter DB/ WB/ HR °F</th>
<th>Leave DB/ WB/ HR °F</th>
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<tr>
<td>Main Clg Coil</td>
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<td>45.4</td>
<td>544.7</td>
<td>320.8</td>
<td>8,634</td>
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<td>73.2</td>
<td>104.6</td>
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### Heating Coil Selection

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<th>Component</th>
<th>Total Capacity MBh</th>
<th>Airflow cfm</th>
<th>Entering Dry Bulb °F</th>
<th>Leaving Dry Bulb °F</th>
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<tr>
<td>Main Htg Coil</td>
<td>-722.9</td>
<td>11,200</td>
<td>55.0</td>
<td>112.9</td>
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<tr>
<td>Reheat Coil</td>
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<td>11,200</td>
<td>55.0</td>
<td>85.0</td>
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### Miscellaneous Component Selection

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<th>Component</th>
<th>Design Airflow cfm</th>
<th>Outside Air %</th>
<th>SADB Clg °F</th>
<th>SADB Htg °F</th>
<th>Clg VAV Minimum cfm</th>
<th>Htg VAV Maximum cfm</th>
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<td>Optional Vent Fan</td>
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<td>System Exhaust Fan</td>
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<tr>
<td>Primary Fan</td>
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<td>3.3</td>
<td>22.9</td>
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Project Name:  
TRUMBULL COMMUNITY CENTER  
Dataset Name:  
CC POOL ECONO.TRC  
TRACE® 700 v6.3.2 calculated at 11:25 AM on 09/22/2017  
Alternative - 1  
System Component Selection Summary  
Page 1 of 1
Entered Values

TRACE® 700 version 6.3.2

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: O.TRC
Location: TRUMBULL, CT
Building Owner: 
Program User: 
Company: 
Comments: 

Cooling Design Period: January thru December
Peak Hour Override: 0
Daylight Savings Period: 
Summer Period: 
Cooling Methodology: TETD-TA1
Heating Methodology: UATD
Infiltration Methodology: Vary with wind speed
Outside Film Methodology: Vary with wind speed
Terrain Methodology: Center of a large city
Room Circ Rate: Medium
Wall Load To Plenum: YES
Building Orientation: 0 degrees from north
Simulation Hours: Reduced year
Calendar Code: Standard (1978)
Energy Simulation Period: January thru December

Location: Hartford, Connecticut
Summer Design Dry Bulb: 88.00 °F
Summer Design Wet Bulb: 73.00 °F
Winter Design Dry Bulb: 7.00 °F
Summer Clearness Number: 1.00
Winter Clearness Number: 1.00
Summer Ground Reflectance: 0.20
Winter Ground Reflectance: 0.20
Carbon Dioxide Level: 400 ppm

Force VAV Min => Nominal Ventilation at Design: No
Allow Energy Recovery/Transfer at Design: Yes
Retest Design Peaks: Yes
Calculate Building Block Loads: No
Close ventilation dampers during unoccupied hours: Yes
Room Description: 076 POOL

GENERAL INFORMATION
- Floor Area: 6,630 ft²
- Plenum Height: 0.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Room Mass: Time delay based on actual mass
- Ceiling R-Value: 1.786 hr*ft²°F/Btu
- Is There Carpet?: NO
- Design Clg DB / Drift Point: 85.0 °F / 85.0 °F
- Design Htg DB / Drift Point: 85.0 °F / 85.0 °F
- Design Relative Humidity: 60 %
- Moisture Capacitance: Medium
- Cig Tstt: None
- Htg Tstt: None
- Thermostat Location: Room
- Floor Multiplier: 1
- Humidistat Location: Room
- Room Multiplier: 1
- CO2 Sensor Location: Room
- Room Type: Conditioned

Zone Description: No Zone

PEOPLE
- People Type: None
- # of People: 75 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Gym/Pool
- Workstation: 1.0 workstation/person
- Lighting Schedule: Trumbull Lighting Gym/Pool
- Lighting Amount: 1.0

LIGHTS
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- % Load to RA: 20 %
- Lighting: Trumbull Lighting Gym/Pool
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

AIRFLOW INFORMATION
- Vent Type: None
- Vent Value: 2,566.00 cfm
- Vent Schedule: Trumbull VENT Pool
- Infil Type: Neutral, Tight Const.
- Infil Value: 0.05 air changes/hr
- Infil Schedule: Available (100%)
- Vav Airflow: Available (100%)
- Vav Schedule: Neutral, Tight Const.
- Supply: 11,200.00 cfm
- Aux Supply: To be calculated
- Room Exhaust: To be calculated
- Rm Exh Sched: Available (100%)

SYSTEM INFORMATION
- System Description: Pool
- Design Htg DB / Drift Point: 85.0 °F / 85.0 °F
- Design Relative Humidity: 85.0 °F / 85.0 °F
- Room Multiplier: 2,566.00 cfm
- Room Exhaust: 2,566.00 cfm
- 0.05 air changes/hr
- 11,200.00 cfm
- To be calculated
- 11,200.00 cfm
- To be calculated
- Available (100%)
- Available (100%)
- Available (100%)

ENVIRONMENTAL INFORMATION
- Project Name: TRUMBULL COMMUNITY CENTER
- Dataset Name: Alternative - 1 Entered Values - Rooms Page 1 of 1
**SYSTEM ENTERED VALUES**

### Pool - Single Zone

#### Design Air Conditions

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<thead>
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<th>Max</th>
<th>Min</th>
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<tbody>
<tr>
<td>Cooling supply:</td>
<td>65.0 °F</td>
<td>55.0 °F</td>
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<tr>
<td>Heating supply:</td>
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<table>
<thead>
<tr>
<th></th>
<th>Supply duct temperature diff:</th>
<th>Reheat Temperature diff:</th>
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<tbody>
<tr>
<td>Design humidity ratio diff:</td>
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<tr>
<td>Min room relative humidity:</td>
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#### Direct / Indirect Dehumidification

- **Type:** Direct dehumidification by controlling rel hum in worst case rm
- **Max room RH:** 60%
- **Main cooling min Leaving Temp:** 55.0 °F
- **Airflow at low speed:**
- **Airflow at medium speed:**

#### Economizer

- **Type:** Wet Bulb
- **Airflow at low speed:**
- **Airflow at medium speed:**
- **Design Air Conditions**: 65.0 °F 55.0 °F

#### Advanced Options

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Cool off</td>
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</tr>
<tr>
<td>Cool on</td>
<td></td>
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<tr>
<td>Cool override</td>
<td></td>
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<tr>
<td>Cool off delay</td>
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<tr>
<td>Cool on delay</td>
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#### Coils

<table>
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<tr>
<th>Operation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Cool off</td>
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<td>Cool on</td>
<td></td>
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<tr>
<td>Cool override</td>
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<td>Cool off delay</td>
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<td>Cool on delay</td>
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#### Fans

<table>
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<tr>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
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<tbody>
<tr>
<td>Primary</td>
<td>1.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00102 kW/Cfm</td>
<td>Newtown Pool Fan</td>
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<td>90</td>
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<tr>
<td>Secondary</td>
<td>0.0 in. wg</td>
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<td>0.00000 kW</td>
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<td>0.00000 kW</td>
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<td>System Exhaust</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00046 kW/Cfm</td>
<td>Available (100%)</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Optional ventilation</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td>85</td>
</tr>
</tbody>
</table>

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** TRACE® 700 v6.3.2 calculated at 11:25 AM on 09/22/2017

Alternative - 1 Entered Values Systems page 1 of 1
**Cooling Plant: POOL UNIT**

- **Sizing method:** Peak
- **Heat rejection type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Off (0%)

**Equipment tag: POOL UNIT**

**Cooling Type:** 90.1-10 Min AC SS/SP Other 240-760 MBh

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Capacity</th>
<th>Energy Rate</th>
<th>Pumps Type</th>
<th>Full Load Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling:</td>
<td></td>
<td>12.8700 EER (compressor only)</td>
<td>Chilled water: None</td>
<td></td>
</tr>
<tr>
<td>Heat recovery:</td>
<td></td>
<td></td>
<td>Condenser water: None</td>
<td></td>
</tr>
<tr>
<td>Tank charging:</td>
<td></td>
<td></td>
<td>Heat recovery or aux cond: None</td>
<td></td>
</tr>
<tr>
<td>Tank charging &amp; heat recovery:</td>
<td></td>
<td></td>
<td>Free cooling: None</td>
<td></td>
</tr>
</tbody>
</table>

**Heat Rejection and Thermal Storage**

- **Heat rejection type:** 90.1 Min Air Cooled Condenser
- **Thermal storage type:** None
- **T-storage capacity:** 0 ton-hr
- **T-storage schedule:** Storage

<table>
<thead>
<tr>
<th>Reset Based On</th>
<th>Reset Curve</th>
<th>Max Reset TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilled Water: None</td>
<td>None</td>
<td>10,000°F</td>
</tr>
<tr>
<td>Condenser Water: None</td>
<td>None</td>
<td>0°F</td>
</tr>
</tbody>
</table>
Heating Plant: POOL BOILER FOR WATER HEATING

<table>
<thead>
<tr>
<th>Heating Plant: POOL BOILER FOR WATER HEATING</th>
<th>Heating Type: ModCon 500</th>
<th>POOL BOILER FOR WATER HEATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating capacity: 500.0 Mbh</td>
<td>Thermal storage type:</td>
<td>POOL BOILER FOR WATER HEATING</td>
</tr>
<tr>
<td>Energy rate: 88.00 % Effic.</td>
<td>Thermal storage capacity: 0 ton-hr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thermal storage schedule: Storage</td>
<td></td>
</tr>
<tr>
<td>Hot water pump cons: 0.00 Ft Water</td>
<td>Equipment schedule:</td>
<td>Available (100%)</td>
</tr>
<tr>
<td></td>
<td>Demand limiting priority:</td>
<td></td>
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<tr>
<td>Hot water pump cons: 0.00 Ft Water</td>
<td>Demand limiting priority:</td>
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</table>

Heating Plant: POOL BOILER SPACE HEATING

<table>
<thead>
<tr>
<th>Heating Plant: POOL BOILER SPACE HEATING</th>
<th>Heating Type: ModCon 500</th>
<th>POOL BOILER SPACE HEATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating capacity: 125.0 %Plant Capacity</td>
<td>Thermal storage type:</td>
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</tr>
<tr>
<td>Energy rate: 88.00 % Effic.</td>
<td>Thermal storage capacity: 0 ton-hr</td>
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<tr>
<td></td>
<td>Thermal storage schedule: Storage</td>
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<td>Hot water pump cons: 30.00 Ft Water</td>
<td>Equipment schedule:</td>
<td>Available (100%)</td>
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<td>Demand limiting priority:</td>
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Base Utilities

<table>
<thead>
<tr>
<th>Plant assigned to: POOL BOILER FOR WATER HEATING</th>
<th>Description: Pool Heating</th>
<th>Schedule: Available (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: Pool Heating</td>
<td>Demand limiting priority:</td>
<td>Hourly demand: 0.75 therms</td>
</tr>
<tr>
<td>Plant assigned to: Stand-alone</td>
<td>Description: Filter and Heater Pump</td>
<td>Schedule: Available (100%)</td>
</tr>
<tr>
<td>Type: Misc. Pumps</td>
<td>Demand limiting priority:</td>
<td>Hourly demand: 2.00 kW</td>
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Miscellaneous accessories

<table>
<thead>
<tr>
<th>Plant assigned to: POOL UNIT</th>
<th>Type: None</th>
<th>Schedule: Off (0%)</th>
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<tbody>
<tr>
<td>Equipment tag: All</td>
<td>Description:</td>
<td>Energy: 0.00 kW</td>
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</tbody>
</table>

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: CC POOL ECONO.TRC
ECONOMIC PARAMETERS

Project Name: TRUMBULL COMMUNITY CENTER
Location: TRUMBULL, CT

Study Life: 20 Yrs  Income Tax Rate: 0.000 %
Mortgage Life: 20 Yrs  Cost of Capital: 10.000 %
Depreciation Life: 20 Yrs  Property tax rate: 0.000 %
Mortgage Interest Rate: 10.000 %  Insurance Expense rate: 0.000 %
Percent Financed: 0.0 %  
Depreciation Method: None  
Declining Balance Taxes: 100.0 %  

Annual Inflation Rate Of:
Maintenance Expense 0.000 %
Replacement Expense 0.000 %
Property Taxes 0.000 %
Insurance Expense 0.000 %

<table>
<thead>
<tr>
<th>Alt #</th>
<th>First Cost</th>
<th>First Cost</th>
<th>Additional First Cost</th>
<th>Total First Cost</th>
<th>Maintenance Cost</th>
<th>Maintenance Cost</th>
<th>Total Maint. Cost</th>
<th>Total Alt. Cost</th>
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<td>0.00</td>
<td>0.00</td>
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<tr>
<td><strong>By</strong></td>
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<td>11:28 AM on 09/22/2017</td>
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<td><strong>Elevation</strong></td>
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<td><strong>Barometric pressure</strong></td>
<td>29.9 in. Hg</td>
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<tr>
<td><strong>Air density</strong></td>
<td>0.0760 lb/cu ft</td>
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<tr>
<td><strong>Air specific heat</strong></td>
<td>0.2444 Btu/lb-°F</td>
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<tr>
<td><strong>Density-specific heat product</strong></td>
<td>1.1147 Btu/h-cfm-°F</td>
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<td></td>
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</tr>
<tr>
<td><strong>Latent heat factor</strong></td>
<td>4,906.9 Btu·min/h-cu ft</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Enthalpy factor</strong></td>
<td>4.5604 lb-min/hr-cu ft</td>
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<tr>
<td><strong>Summer design dry bulb</strong></td>
<td>88.0 °F</td>
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<td><strong>Summer design wet bulb</strong></td>
<td>73.0 °F</td>
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<td><strong>Winter design dry bulb</strong></td>
<td>7.0 °F</td>
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<td><strong>Summer clearness number</strong></td>
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<td><strong>Winter clearness number</strong></td>
<td>1.00</td>
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<tr>
<td><strong>Summer ground reflectance</strong></td>
<td>0.20</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Winter ground reflectance</strong></td>
<td>0.20</td>
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<tr>
<td><strong>Carbon Dioxide Level</strong></td>
<td>400 ppm</td>
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<tr>
<td><strong>Design simulation period</strong></td>
<td>January - December</td>
<td></td>
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<tr>
<td><strong>Cooling load methodology</strong></td>
<td>TETD-TA1</td>
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<td></td>
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<tr>
<td><strong>Heating load methodology</strong></td>
<td>UATD</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Energy Cost Budget / PRM Summary

<table>
<thead>
<tr>
<th>Energy Consumption Category</th>
<th>Base Case</th>
<th>Proposed Percentage</th>
<th>Peak kBtu/mo</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lighting - Conditioned</strong></td>
<td>Electricity</td>
<td>49.0</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Space Heating</strong></td>
<td>Gas</td>
<td>89.2</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Space Cooling</strong></td>
<td>Electricity</td>
<td>9.7</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Heat Rejection</strong></td>
<td>Electricity</td>
<td>0.9</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Fans - Conditioned</strong></td>
<td>Electricity</td>
<td>39.0</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Total Building Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The percentage displayed for the "Proposed/ Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.

### Electricity Costs

<table>
<thead>
<tr>
<th>Energy Consumption Category</th>
<th>Cost/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>4,624</td>
</tr>
<tr>
<td>Gas</td>
<td>1,159</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,783</td>
</tr>
</tbody>
</table>

---

Project Name: TRUMBULL COMMUNITY CENTER

City: TRUMBULL, CT

Weather Data: Hartford, Connecticut

Date: September 22, 2017

---

Note: The percentage displayed for the "Proposed/ Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.
### Monthly Energy Consumption

#### Alternative: 1

**TRUMBULL COMMUNITY CENTER GYM**

<table>
<thead>
<tr>
<th>Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electric</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>On-Pk Cons. (kWh)</td>
<td>2,144</td>
<td>1,940</td>
<td>2,178</td>
<td>2,207</td>
<td>2,222</td>
<td>2,773</td>
<td>3,309</td>
<td>3,031</td>
<td>2,360</td>
<td>2,369</td>
<td>2,274</td>
<td>2,093</td>
<td>28,901</td>
</tr>
<tr>
<td>On-Pk Demand (kW)</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td>11</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>20</td>
<td>20</td>
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<td><strong>Gas</strong></td>
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<tr>
<td>On-Pk Cons. (therms)</td>
<td>208</td>
<td>183</td>
<td>136</td>
<td>28</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>35</td>
<td>88</td>
<td>189</td>
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<tr>
<td>On-Pk Demand (therms/hr)</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

### Energy Consumption

- **Building**: 23,276 Btu/(ft²-year)
- **Source**: 48,310 Btu/(ft²-year)

### Environmental Impact Analysis

- **CO2**: 19,966 lbm/year
- **SO2**: 68 gm/year
- **NOX**: 24 gm/year

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** CC GYM.TRC  
TRACE® 700 v6.3.2 calculated at 11:28 AM on 09/22/2017
# EQUIPMENT ENERGY CONSUMPTION

## Alternative: 1  TRUMBULL COMMUNITY CENTER GYM

### Monthly Consumption

<table>
<thead>
<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lights</strong></td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Electric (kWh)</td>
<td>1,202.1</td>
<td>1,086.9</td>
<td>1,270.9</td>
<td>1,152.3</td>
<td>1,236.5</td>
<td>1,221.0</td>
<td>1,167.7</td>
<td>1,270.9</td>
<td>1,152.3</td>
<td>1,236.5</td>
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<tr>
<td>Peak (kW)</td>
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<td>4.8</td>
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<tr>
<td><strong>Cooling Coil Condensate</strong></td>
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<td><strong>90.1 Min Air Cooled Condenser [Design Heat Rejection/F.L.Rate=19.88 tons / 1.10 kW]</strong></td>
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<td><strong>Total-energy wheel (OA precondition) [Stage 1 Energy Recovery]</strong></td>
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<tr>
<td><strong>FC Centrifugal var freq drv [DsnAirflow/F.L.Rate=5,897 cfm / 5.75 kW]</strong></td>
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<tr>
<td>Dataset Name:</td>
<td>CC GYM.TRC</td>
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TRACE® 700 v6.3.2 calculated at 11:28 AM on 09/22/2017

Alternative - 1  Equipment Energy Consumption report page 1 of 2
### EQUIPMENT ENERGY CONSUMPTION

#### Alternative: 1  TRUMBULL COMMUNITY CENTER GYM

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<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
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TRACE® 700 v6.3.2 calculated at 11:28 AM on 09/22/2017
Dataset Name: CC GYM.TRC

---

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** CC GYM.TRC
## Alternative 1

### System Description:
- **Gym**
- **System Type:** Single Zone Variable Air Volume
- **Number of Zones:** 1
- **Number of Rooms:** 1

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<th>Component</th>
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<th>Location</th>
<th>Quantity</th>
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<td><strong>Cooling</strong></td>
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<td>Main Clg Coil</td>
<td>Block</td>
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<tr>
<td>Primary Clg Fan</td>
<td>Block</td>
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<tr>
<td><strong>Heating</strong></td>
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<tr>
<td>Main Htg Coil</td>
<td>Peak</td>
<td>Zone</td>
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<tr>
<td>System Exhaust Fan</td>
<td>Vent+Inf-RmExh</td>
<td>System</td>
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<tr>
<td>Return Fan</td>
<td>Return Airflow</td>
<td>System</td>
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<thead>
<tr>
<th>Coil Location</th>
<th>Component Location</th>
<th>Component</th>
<th>Time Of Peak Mo/Hr</th>
<th>Total Capacity MBh</th>
<th>Sensible Capacity MBh</th>
<th>Airflow At Coil Peak cfm</th>
<th>Enter DB/ WB/ HR °F</th>
<th>Leave DB/ WB/ HR °F</th>
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<tr>
<td>System Zone Room</td>
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<th>Airflow cfm</th>
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<td>Design Airflow</td>
<td>Outside Air %</td>
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<td>Gym</td>
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<td>Gym</td>
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<td>052 GYMNASIUM</td>
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Entered Values

TRACE® 700 version 6.3.2

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: TRUMBULL, CT

Location: Hartford, Connecticut
Summer Design Dry Bulb: 88.00 °F
Summer Design Wet Bulb: 73.00 °F
Winter Design Dry Bulb: 7.00 °F
Summer Clearness Number: 1.00
Winter Clearness Number: 1.00
Summer Ground Reflectance: 0.20
Winter Ground Reflectance: 0.20
Carbon Dioxide Level: 400 ppm

Cooling Design Period: January thru December
Peak Hour Override: 0
Daylight Savings Period:
Summer Period:
Cooling Methodology: TETD-TA1
Heating Methodology: UATD
Infiltration Methodology: Vary with wind speed
Outside Film Methodology: Vary with wind speed
Terrain Methodology: Center of a large city
Room Circ Rate: Medium
Wall Load To Plenum: YES
Building Orientation: 0 degrees from north
Simulation Hours: Reduced year
Calendar Code: Standard (1978)
Energy Simulation Period: January thru December

Close ventilation dampers during unoccupied hours: Yes
### Room Description: 052 GYMNASIUM

- **Floor Area:** 8,069 ft\(^2\)
- **Plenum Height:** 0.0 ft
- **Height Above Flr:** 24.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr*ft\(^2\)·°F/Btu
- **Is There Carpet?** : YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Clg Tstat:** None
- **Htg Tstat:** None
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned
- **Project Name:** TRUMBULL COMMUNITY CENTER

### GENERAL INFORMATION

- **Flr-Flr Height:** 0.0 ft
- **People Type:** None
- **# of People:** 243 People
- **People Sensible:** 250 Btu/h
- **People Schedule:** Trumbull Occ Gym/Pool
- **Workstation:** 1.0 workstation/person

### LIGHTS

- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull Lighting Gym/Pool
- **Lighting Amount:** 1.0

### GENERAL INFORMATION

- **Vent Value:** 0.00 cfm/person
- **Vent Schedule:** Trumbull VENT Gym/Pool
- **Infil Value:** 0.10 cfm/sq ft
- **Infil Schedule:** Available (100%)

### LIGHTS

- **People Schedule:** Trumbull Occ Gym/Pool
- **Lighting Schedule:** Trumbull Lighting Gym/Pool
- **Lighting Amount:** 1.0

### Shaft Information

- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 70.0 °F / 70.0 °F
- **Room Multiplier:** 0.00
- **Room Exhaust:** Available (100%)
- **System Description:** Gym

### Wall Descriptions

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<th>Area</th>
<th>Dir</th>
<th>Tilt</th>
<th>Const Type / Schedule</th>
<th>U Value</th>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
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<th>Internal Shading</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 6</td>
<td>596 ft(^2)</td>
<td>260</td>
<td>0</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 7</td>
<td>1,009 ft(^2)</td>
<td>170</td>
<td>0</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 8</td>
<td>288 ft(^2)</td>
<td>170</td>
<td>0</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening - 1</td>
<td>1,933 ft(^2)</td>
<td>80</td>
<td>0</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 9</td>
<td>8,069 ft(^2)</td>
<td>0</td>
<td>0</td>
<td>Trumbull Floor</td>
<td>0.288</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Glass Descriptions

- **Newington Town Hall:** 288
- **Standard Door:** 184
- **Newington Town Hall:** 480

### System Description

- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type

**TRACE® 700 v6.3.2 calculated at 11:28 AM on 09/22/2017**

**Alternative - 1 Entered Values - Rooms Page 1 of 1**
**Gym - Single Zone Variable Air Volume**

### Design Air Conditions

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling supply</td>
<td>57.0 °F</td>
<td>55.0 °F</td>
</tr>
<tr>
<td>Leaving cooling coil</td>
<td>90.0 °F</td>
<td></td>
</tr>
<tr>
<td>Heating supply</td>
<td>90.0 °F</td>
<td></td>
</tr>
</tbody>
</table>

### Supply Side Options

<table>
<thead>
<tr>
<th></th>
<th>Sensible</th>
<th>Latent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clg effectiveness at 100% airflow:</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Clg effectiveness at 75% airflow:</td>
<td>79%</td>
<td>75%</td>
</tr>
<tr>
<td>Htg effectiveness at 100% airflow:</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Htg effectiveness at 75% airflow:</td>
<td>79%</td>
<td>75%</td>
</tr>
</tbody>
</table>

#### Supply Air Preconditioning
- Total-energy wheel (OA precondition)
- Preconditioning effectiveness at 100% airflow: 74%
- Preconditioning effectiveness at 75% airflow: 79%
- Design air leaving dry bulb: 74%
- Design air leaving humidity ratio: 79%
- Coolant type: N/A
- Coolant approach: N/A
- Economizer lockout: Yes
- Part load control: Modulated
- Static pressure drop: 1.0 in. wg
- Bypass dampers: Yes
- Parasitic energy: 0.4 kW

#### Heat Exchangers
- Heat recovery effectiveness: 74%
- HS recovery effectiveness: 79%

### Exhaust Side Options

<table>
<thead>
<tr>
<th></th>
<th>Sensible</th>
<th>Latent</th>
<th>Exhaust Side Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat source:</td>
<td>200 °F</td>
<td></td>
<td>Evap precooler</td>
</tr>
<tr>
<td>Fan static pressure:</td>
<td>0.0 in. wg</td>
<td></td>
<td>Type: None</td>
</tr>
<tr>
<td>Fan static pressure drop:</td>
<td>1.0 in. wg</td>
<td></td>
<td>Default Eff:</td>
</tr>
<tr>
<td>Integral heat recovery:</td>
<td>Yes</td>
<td></td>
<td>Dry Eff:</td>
</tr>
<tr>
<td>Bypass dampers:</td>
<td>Yes</td>
<td></td>
<td>Max OA:</td>
</tr>
<tr>
<td>Frost prevention</td>
<td>Off</td>
<td></td>
<td>Min OA:</td>
</tr>
<tr>
<td>Type:</td>
<td>Off</td>
<td></td>
<td>Swvr Oadb:</td>
</tr>
<tr>
<td>Set point:</td>
<td></td>
<td></td>
<td>Blowdown Rat:</td>
</tr>
<tr>
<td>OA threshold:</td>
<td></td>
<td></td>
<td>Circ Pump:</td>
</tr>
</tbody>
</table>

### Advanced Options

- Cooling coil sizing method: Block
- Cooling coil location: Zone
- Block cooling airflow: Supply fan motor location: Supply
- Return fan motor location: Return
- Supply fan configuration: Draw Thru
- Fan mechanical efficiency: 75%
- Fan static pressure drop: 0.0 in. wg
- Supply duct location: Return/Outdoor Deck
- Return air path: DUCTED
- Ventilation deck location: Return/Optimal Deck
- Supply fan sizing: Block
- Supply fan static pressure: 1.0 in. wg
- Supply duct location: Other
- Return air path: DUCTED
- Space convective gains to occupied layer: 100 %
- Underfloor plenum height: 0.8 hr·ft²·°F/Btu
- Conductive resistance of raised floor: 0.8 hr·ft²·°F/Btu
- Upstream nominal leakage fraction: 0 %
- Downstream constant leakage fraction: 0 %
- Aux cooling coil losses to plenum: 0 %
- Ctrl Method: Control Type
- Auxiliary cooling coil: Activate After Primary System
- None
- Auxiliary heating coil: Activate After Primary System
- None
- Auxiliary fan: No Fan

### System Ventilation

- System ventilation flag: ASHRAE Std 62.1-2004-2010 w/ Vent Reset
- System ventilation schedule: Off (0%)
- Optimum start schedule: Off (0%)
- Optimum stop schedule: Off (0%)
- CO2-based DCV: Proportional Control
- Night purge schedule: Off (0%)
- Optimum start schedule: Off (0%)
- Optimum stop schedule: Off (0%)

**TRACE® 700 v6.3.2 calculated at 11:28 AM on 09/22/2017**

### Alternative - System Entered Values

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values Systems page 1 of 2
# Gym - Single Zone Variable Air Volume

**Coils**

<table>
<thead>
<tr>
<th>Coils</th>
<th>Capacity</th>
<th>Schedule</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main cooling:</td>
<td>100.0% of Design Cooling Capacity</td>
<td>Available (100%)</td>
<td>People 100%</td>
</tr>
<tr>
<td>Aux cooling:</td>
<td>Available (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main heating:</td>
<td>100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td>Misc loads 100%</td>
</tr>
<tr>
<td>Aux heating:</td>
<td>Available (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preheat:</td>
<td>100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Reheat:</td>
<td>100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Humidification:</td>
<td>100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
</tbody>
</table>

**Fans**

<table>
<thead>
<tr>
<th>Fans</th>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>FC Centrifugal var freq drv</td>
<td>1.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Return</td>
<td>FC Centrifugal var freq drv</td>
<td>0.8 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>System Exhaust</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Optional ventilation</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Auxiliary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

**Fan Cycling**

Cycle with occupancy: 0.0 ft
### ENTERED VALUES

#### PLANTS

**Cooling Plant: GYM**
- **Sizing method:** Peak
- **Heat rejection type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Secondary pump consumption:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Off (0%)

**Geothermal Loop**
- **Flow scheme:** Fully mixed
- **Flow rate:** 0%
- **Heat exchanger approach:** 0°F
- **Loop pump:** None
- **Pump F.L. rate:** 0.00ft water

**Equipment tag: GYM**

**Cooling Type:** 90.1-10 Min AC SS/SP Elec 135-240 MBh

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Capacity</th>
<th>Energy Rate</th>
<th>Pumps Type</th>
<th>Full Load Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12.5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Packaged EER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Equipment Options**

- **Sequencing type:** Single
- **Demand lim priority:** 12 °F
- **T-storage capacity:** 0 ton-hr
- **T-storage schedule:** Storage

**Heat Rejection and Thermal Storage**

- **Heat rejection type:** None
- **Thermal storage type:** None
- **T-storage capacity:** 0 ton-hr
- **T-storage schedule:** Storage

**Package energy breakout**

- **Primary fan**
- **Secondary fan**
- **Exhaust fan**
- **Optional ventilation fan**
- **Condenser fan**

**Heating Plant: GYM UNIT REHEAT**
- **Sizing method:** Peak
- **Cogeneration type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Secondary pump consumption:** None
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Off (0%)

**Equipment tag: GYM**

**Heating Type:** 90.1-10 Min Gas Furnace >225 MBh

- **Heating capacity:** 80.00 % Effic.
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Storage
- **Equipment schedule:** Available (100%)
- **Demand limiting priority:** 12.5000 °F

---

*Project Name: TRUMBULL COMMUNITY CENTER  
Dataset Name: CC GYM.TRC*
## Base Utilities

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>Stand-alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demand limiting priority:</th>
<th>Schedule: Off (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hourly demand: 0.00 kW</td>
</tr>
</tbody>
</table>

## Miscellaneous accessories

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>GYM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment tag:</td>
<td>All</td>
</tr>
</tbody>
</table>

| Type:             | None |

<table>
<thead>
<tr>
<th>Description:</th>
<th>Schedule: Off (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Energy: 0.00 kW</td>
</tr>
</tbody>
</table>
### ECONOMIC PARAMETERS

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Location:** TRUMBULL, CT  
**Building Owner:** Program User: DAVID KYLE, PE  
**Company:** YEATON ASSOCIATES  
**Comments:**

| Study Life: | 20 Yrs | Income Tax Rate: | 0.000 % |
| Mortgage Life: | 20 Yrs | Cost of Capital: | 10.000 % |
| Depreciation Life: | 20 Yrs | Property tax rate: | 0.000 % |
| Mortgage Interest Rate: | 10.000 % | Insurance Expense rate: | 0.000 % |
| Percent Financed: | 0.0 % | Annual Inflation Rate Of |
| Depreciation Method: | None | Maintenance Expense | 0.000 % |
| Declining Balance Taxes: | 100.0 % | Replacement Expense | 0.000 % |

#### Alt #

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Location: TRUMBULL, CT
Building owner:
Program user:
Company:
Comments:

By:
Dataset name:

Calculation time: 11:30 AM on 09/22/2017
TRACE® 700 version: 6.3.2

Location: Hartford, Connecticut
Latitude: 41.0 deg
Longitude: 72.0 deg
Time Zone: 5
Elevation: 15 ft
Barometric pressure: 29.9 in. Hg

Air density: 0.0760 lb/cu ft
Air specific heat: 0.2444 Btu/lb·°F
Density-specific heat product: 1.1147 Btu/h-cfm·°F
Latent heat factor: 4,906.9 Btu·min/h·cu ft
Enthalpy factor: 4.5604 lb·min/hr·cu ft

Summer design dry bulb: 88.0 °F
Summer design wet bulb: 73.0 °F
Winter design dry bulb: 7.0 °F
Summer clearness number: 1.00
Winter clearness number: 1.00
Summer ground reflectance: 0.20
Winter ground reflectance: 0.20
Carbon Dioxide Level: 400 ppm

Design simulation period: January - December
Cooling load methodology: TETD-TA1
Heating load methodology: UATD
## Energy Cost Budget / PRM Summary

### Project Name: TRUMBULL COMMUNITY CENTER

**City:** TRUMBULL, CT  
**Weather Data:** Hartford, Connecticut  
**Date:** September 22, 2017

Note: The percentage displayed for the "Proposed/ Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.

### * Alt-1 TRUMBULL COMMUNITY

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lighting - Conditioned</strong></td>
<td>60.9 12 38</td>
<td></td>
</tr>
<tr>
<td><strong>Space Heating</strong></td>
<td>36.2 7 24</td>
<td></td>
</tr>
<tr>
<td><strong>Space Cooling</strong></td>
<td>29.9 6 104</td>
<td></td>
</tr>
<tr>
<td><strong>Fans - Conditioned</strong></td>
<td>58.7 11 45</td>
<td></td>
</tr>
<tr>
<td><strong>Receptacles - Conditioned</strong></td>
<td>42.2 8 15</td>
<td></td>
</tr>
<tr>
<td><strong>Stand-alone Base Utilities</strong></td>
<td>158.5 31 55</td>
<td></td>
</tr>
</tbody>
</table>

### Total Building Consumption

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Total</th>
<th>Cost/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>517.6</td>
<td>19,818</td>
</tr>
</tbody>
</table>

### Total Number of hours heating load not met

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>heating load not met</td>
</tr>
<tr>
<td></td>
<td>cooling load not met</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Cost/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>18,112</td>
</tr>
<tr>
<td>Gas</td>
<td>1,706</td>
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</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Cost/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>19,818</td>
</tr>
</tbody>
</table>

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**Trace® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**

**Dataset Name:** CC 2ND FL TRC

**Project Name:** TRUMBULL COMMUNITY CENTER
### MONTHLY ENERGY CONSUMPTION

#### Alternative: 1
TRUMBULL COMMUNITY CENTER 2nd FLOOR

<table>
<thead>
<tr>
<th>Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric On-Pk Cons. (kWh)</td>
<td>11,448</td>
<td>10,330</td>
<td>10,674</td>
<td>8,219</td>
<td>8,457</td>
<td>8,717</td>
<td>8,977</td>
<td>9,075</td>
<td>7,895</td>
<td>9,016</td>
<td>9,553</td>
<td>10,840</td>
<td>113,200</td>
</tr>
<tr>
<td>Electric On-Pk Demand (kW)</td>
<td>50</td>
<td>51</td>
<td>52</td>
<td>46</td>
<td>50</td>
<td>65</td>
<td>70</td>
<td>66</td>
<td>47</td>
<td>50</td>
<td>49</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Gas On-Pk Cons. (therms)</td>
<td>152</td>
<td>138</td>
<td>125</td>
<td>101</td>
<td>86</td>
<td>78</td>
<td>100</td>
<td>79</td>
<td>92</td>
<td>95</td>
<td>113</td>
<td>154</td>
<td>1,312</td>
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<tr>
<td>Gas On-Pk Demand (therms/hr)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

#### Energy Consumption

<table>
<thead>
<tr>
<th>Building Source</th>
<th>Energy Consumption (Btu/(ft²-year))</th>
<th>Environmental Impact Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>27,607</td>
<td>CO2: 78,205 lbm/year</td>
</tr>
<tr>
<td>Source</td>
<td>69,199</td>
<td>SO2: 265 gm/year</td>
</tr>
<tr>
<td>Floor Area</td>
<td>18,747 ft²</td>
<td>NOX: 93 gm/year</td>
</tr>
</tbody>
</table>

Project Name: TRUMBULL COMMUNITY CENTER  
Dataset Name: CC 2ND FL.TRC  
TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017  
Alternative - 1 Monthly Energy Consumption report Page 1 of 1
### Alternative: 1 TRUMBULL COMMUNITY CENTER 2nd FLOOR

#### Equipment Energy Consumption

<table>
<thead>
<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>744.0</td>
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<td>792.0</td>
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<td>792.0</td>
<td>756.0</td>
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<td><strong>Bsu 5: Domestic Hot Water Load</strong></td>
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<tr>
<td>Proc. Hot Water (therms)</td>
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<td>79.7</td>
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**Cpl 1: VRF UPPER FLOOR [Sum of dsn coil capacities=45.14 tons]**

<table>
<thead>
<tr>
<th>VRF UPPER FLOOR [Ctg Nominal Capacity/F.L. Rate=45.14 tons / 42.21 kW] (Cooling Equipment - Cooling Mode)</th>
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<tbody>
<tr>
<td>Electric (kWh)</td>
<td>11.1</td>
<td>13.7</td>
<td>31.4</td>
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<td>113.1</td>
<td>571.8</td>
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<td>651.3</td>
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<td>9.6</td>
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<td>Peak (kW)</td>
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<td>12.7</td>
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<td>21.2</td>
<td>9.3</td>
<td>10.8</td>
<td>10.4</td>
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**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** CC 2ND FL.TRC  
**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
## EQUIPMENT ENERGY CONSUMPTION

### Alternative: 1  TRUMBULL COMMUNITY CENTER 2nd FLOOR

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<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
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</thead>
<tbody>
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<td>Cpl 1: VRF UPPER FLOOR</td>
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<td>2,128.5</td>
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<td>5.9</td>
<td>3.9</td>
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<td>0.0</td>
<td>0.9</td>
<td>4.1</td>
<td>5.2</td>
<td>6.4</td>
<td>7.1</td>
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<td>Energy Recovered (therms)</td>
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<td>22.7</td>
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<td>10.9</td>
<td>21.3</td>
<td>102.8</td>
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<td>Peak (therms/Hr)</td>
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<td>0.2</td>
<td>0.1</td>
<td>0.0</td>
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<td>0.1</td>
<td>0.5</td>
<td>0.2</td>
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<td>Cntl panel &amp; interlocks - 0.5 KW [F.L.Rate=0.50 kW]</td>
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<td>336.0</td>
<td>372.0</td>
<td>350.0</td>
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<td>485.4</td>
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<td>94.7</td>
<td>85.3</td>
<td>80.0</td>
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<td>85.9</td>
<td>77.8</td>
<td>99.5</td>
<td>78.5</td>
<td>92.0</td>
<td>86.3</td>
<td>86.1</td>
<td>101.6</td>
<td>1,060.3</td>
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<td>MAU KITCHEN [Nominal Capacity/F.L.Rate=144.8 mbh / 1.81 Therms]</td>
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<td>1.1</td>
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<td>0.5</td>
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<tr>
<td>Peak (therms/Hr)</td>
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<td>86.9</td>
<td>79.4</td>
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<td>82.4</td>
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<td>1.2</td>
<td>1.0</td>
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<td>0.5</td>
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<td>40.0</td>
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<td>48.0</td>
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Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: CC 2ND FL TRC

TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
Alternative - 1  Equipment Energy Consumption report page 2 of 3
### EQUIPMENT ENERGY CONSUMPTION

#### Alternative: 1  TRUMBULL COMMUNITY CENTER 2nd FLOOR

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<tr>
<th>Equipment - Utility</th>
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<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
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<td><strong>Sys 1: VRF Floor 2</strong></td>
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</tr>
<tr>
<td>Electric (kWh)</td>
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## System Component Selection Summary

### Alternative 1

**System Description:** Kitchen MAU

- **System Type:** Ventilation and Heating
- **Number of Zones:** 1
- **Number of Rooms:** 1

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<th>Quantity</th>
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### Roof Level Component Summary

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### Roof Level Component Summary

#### Cooling Coil Selection

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<th>Airflow cfm</th>
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#### Heating Coil Selection

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#### Component Location

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<th>Outside Air (%)</th>
<th>SADB Clg</th>
<th>SADB Htg</th>
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#### Miscellaneous Component Selection

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## System Component Selection Summary

### System Exhaust Fan
- **System**: Vent+Inf-RmExh
- **Component**: System
- **Sizing**: 1

### Return Fan
- **System**: Return Airflow
- **Component**: System
- **Sizing**: 1

### Optional Vent Fan
- **System**: Ventilation Airflow
- **Component**: System
- **Sizing**: 1

### Room Exhaust Fan
- **Component**: RmExh Input
- **Sizing**: Room 1

### Coil Location
- **System Zone Room Component**
- **Of Peak Time**
- **Mo/Hr**
- **Total Capacity**
- **ton MBh**
- **Sensible Capacity**
- **MBh**
- **Airflow At Coil Peak**
- **cfm**
- **Enter DB/ WB/ HR °F °F gr/lb**
- **Leave DB/ WB/ HR °F °F gr/lb**

### Cooling Coil Selection
- **Component**
- **Time Of Peak**
- **Mo/Hr**
- **Total Capacity**
- **ton MBh**
- **Sensible Capacity**
- **MBh**
- **Airflow At Coil Peak**
- **cfm**
- **Enter DB/ WB/ HR °F °F gr/lb**
- **Leave DB/ WB/ HR °F °F gr/lb**

### Example Data
- **VRF Floor 2**
  - **Optional Vent Clg Coil**
  - **Main Clg Coil 7/15**
  - **Main Clg Coil 7/17**
  - **Main Clg Coil 8/17**
  - **Main Clg Coil 9/15**
  - **Main Clg Coil 9/14**
  - **Main Clg Coil 7/16**
  - **Main Clg Coil 7/16**
  - **Main Clg Coil 7/16**
  - **Main Clg Coil 7/10**
  - **Main Clg Coil 7/16**
  - **Main Clg Coil 7/16**
  - **Main Clg Coil 7/15**
  - **Main Clg Coil 7/14**
  - **Main Clg Coil 7/17**

### Project Name
- **TRUMBULL COMMUNITY CENTER**

### Dataset Name
- **CC 2ND FL.TRC**

---

**Project Name**: TRUMBULL COMMUNITY CENTER

**Dataset Name**: CC 2ND FL.TRC

** TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**

**Alternative - 1 System Component Selection Summary Page 2 of 8**
## System Component Selection Summary

### Coil Location

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### Heating Coil Selection

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Project Name: TRUMBULL COMMUNITY CENTER  
Dataset Name: CC 2ND FL.TRC

TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017  
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Dataset Name: CC 2ND FL.TRK
# Entered Values

**TRACE® 700 version 6.3.2**

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Room Description: 53 KITCHEN

GENERAL INFORMATION
- Floor Area: 540 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr*ft²°F/Btu
- Is there Carpet?: YES
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50 %
- Ceiling R-Value: Medium
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

Zone Description: No Zone

PEOPLE
- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational
- Workstation: 1.0 workstation/person

LIGHTS
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- % Load to RA: 20%
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

AIRFLOW INFORMATION
- Vent Type: 100 Percent Outdoor Air
- Vent Value: 100.00 % Cig Airflow
- Vent Schedule: Trumbull VENT Classroom/Recreational
- Infl Value: 0.30 air changes/hr
- Infl Schedule: Available (100%)
- Vav Sched: To be calculated
- Supply: 2,000.00 cfm
- Aux Supply: To be calculated
- Room Exhaust: 2,000.00 cfm
- Rm Exh Sched: Trumbull Occ Classroom/Recreational

System Description: Kitchen MAU

Description | Area | Type / Energy Type | Area | Shade Coef | U Value | External Shading | Internal Shading |
--- | --- | --- | --- | --- | --- | --- | --- |
Roof - 1 | 540 ft² | Overhang - None | 0 | 0.70 | 0 | None | None |
Wall - 1 | 557 ft² | Newington Town Hall | 66 | 0.40 | 0.27 | Overhang - None | None |
Wall - 2 | 244 ft² | Electricity | 0 | 100 | 0.00 | 100 | 0.60.00 |
Opening - 1 | Window | | | | | | |
Misc Load 1 | 800.000 W | | | | | | |

곤환성: 53 KITCHEN

GENERAL INFORMATION
- Floor Area: 540 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr*ft²°F/Btu
- Is there Carpet?: YES
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50 %
- Ceiling R-Value: Medium
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

Zone Description: No Zone

PEOPLE
- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational
- Workstation: 1.0 workstation/person

LIGHTS
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- % Load to RA: 20%
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

AIRFLOW INFORMATION
- Vent Type: 100 Percent Outdoor Air
- Vent Value: 100.00 % Cig Airflow
- Vent Schedule: Trumbull VENT Classroom/Recreational
- Infl Value: 0.30 air changes/hr
- Infl Schedule: Available (100%)
- Vav Sched: To be calculated
- Supply: 2,000.00 cfm
- Aux Supply: To be calculated
- Room Exhaust: 2,000.00 cfm
- Rm Exh Sched: Trumbull Occ Classroom/Recreational

System Description: Kitchen MAU

Description | Area | Type / Energy Type | Area | Shade Coef | U Value | External Shading | Internal Shading |
--- | --- | --- | --- | --- | --- | --- | --- |
Roof - 1 | 540 ft² | Overhang - None | 0 | 0.70 | 0 | None | None |
Wall - 1 | 557 ft² | Newington Town Hall | 66 | 0.40 | 0.27 | Overhang - None | None |
Wall - 2 | 244 ft² | Electricity | 0 | 100 | 0.00 | 100 | 0.60.00 |
Opening - 1 | Window | | | | | | |
Misc Load 1 | 800.000 W | | | | | | |
**Room Description:** 013 DANCE & FITNESS

**Zone Description:** No Zone

**System Description:** VRF Floor 2

### GENERAL INFORMATION
- **Floor Area:** 1,455 ft²
- **People Type:** None
- **Flr-Flr Height:** 14.0 ft
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** NO
- **Design Cig DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Htg Tstat:** None
- **Thermostat Location:** Room
- **Floor Multiplier:** 1
- **Humistat Location:** Room
- **Room Multiplier:** 1
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **# of People:** 25 sq ft/person
- **People Sensible:** 400 Btu/h
- **People Latent:** 400 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **People Sensible:** 400 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Health club/ aerobics room
- **Vent Value:** 20.00 cfm/person
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infil Value:** Available (100%)
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)
- **Room Exhaust:** Available (100%)
- **Room Exhaust:** Available (100%)
- **Rm Exh Sched:** Available (100%)

### Glass

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Dir</th>
<th>Tilt</th>
<th>Energy Type</th>
<th>U Value</th>
<th>Shade Coef</th>
<th>Energy Type</th>
<th>U Value</th>
<th>Shade Coef</th>
<th>Energy Type</th>
<th>U Value</th>
<th>Shade Coef</th>
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<td>Roof - 1</td>
<td>1,455 ft²</td>
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<td>90</td>
<td>Trumbull</td>
<td>0.0254</td>
<td>0.70</td>
<td>Overhang</td>
<td>- None</td>
<td>None</td>
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<tr>
<td>Wall - 1</td>
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<td>260</td>
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<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td>Newington Town Hall</td>
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<td>Wall - 2</td>
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<td>None</td>
<td>0.00</td>
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<td>Window</td>
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<td></td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td>Newington Town Hall</td>
<td>90</td>
<td>0.40</td>
<td>Overhang</td>
<td>None</td>
<td>0.00</td>
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<tr>
<td>Wall - 3</td>
<td>78 ft²</td>
<td>170</td>
<td>0</td>
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<td>0.90</td>
<td>Newington Town Hall</td>
<td>22</td>
<td>0.40</td>
<td>Overhang</td>
<td>None</td>
<td>0.00</td>
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<tr>
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<td>Window</td>
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<td></td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td>Newington Town Hall</td>
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<td>Overhang</td>
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<td>0.00</td>
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<tr>
<td>Wall - 4</td>
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<td>0.0486</td>
<td>0.90</td>
<td>Newington Town Hall</td>
<td>22</td>
<td>0.40</td>
<td>Overhang</td>
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<td>0.00</td>
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<td>Window</td>
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<td></td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td>Newington Town Hall</td>
<td>22</td>
<td>0.40</td>
<td>Overhang</td>
<td>None</td>
<td>0.00</td>
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**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 2 of 39  
**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
## Room Description: 014 CARDIO

### GENERAL INFORMATION
- **Floor Area:** 450 ft²
- **Floor-Flr Height:** 14.0 ft
- **Plenum Height:** 2.0 ft
- **Slab Cntr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Htg Tstat:** None
- **Thermostat Location:Room**
- **Room Multiplier:** 1
- **Humidistat Location:Room**
- **Room Multiplier:** 1
- **CO2 Sensor Location:Room**
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **# of People:** 400 Btu/h
- **People Sensible:** 400 Btu/h
- **People Latent:** 400 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 1.0
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Health club/ aerobics room
- **Vent Value:** 20.00 cfm/person
- **Vent Schedule:** Health club/ aerobics room
- **Vav Sched:** Neutral, Tight Const.
- **Vav Airflow:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)

### System Description: VRF Floor 2

### Zone Description: No Zone

### Glass

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Const Type / Schedule</th>
<th>U Value</th>
<th>Energy Type</th>
<th>Type / Shade</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
<th>Adj Pct</th>
<th>Pct Temp/ Sen/ Rm/ Ret/ Frc/ Rad</th>
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<tbody>
<tr>
<td>Wall - 1</td>
<td>236 ft²</td>
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<td>0.0486</td>
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<td>0.27</td>
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<td>None</td>
<td>0.00</td>
<td></td>
<td></td>
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<tr>
<td>Opening - 1</td>
<td>428 ft²</td>
<td>170 Window</td>
<td>0.0486</td>
<td>Newington Town Hall</td>
<td>64</td>
<td>0.40</td>
<td>0.27</td>
<td>Overhang - None</td>
<td>None</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Room Description: 016 ARTS & CRAFTS 1

### General Information
- **Floor Area:** 700 ft²
- **Height Above Flr:** 16.5 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr*ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### People
- **People Type:** None
- **# of People:** 28 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

### Lights
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### Airflow Information
- **Vent Type:** Art classroom
- **Vent Value:** 10.00 cfm/person
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infil Type:** Neutral, Tight Const.
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)
- **System Description:** VRF Floor 2
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type

### Glass

<table>
<thead>
<tr>
<th>Description</th>
<th>Area Amount</th>
<th>Const Type / Energy Type</th>
<th>U Value</th>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
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</thead>
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<td>Roof - 1</td>
<td>700 ft²</td>
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<td>0.0254</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Wall - 1</td>
<td>374 ft²</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>-</td>
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</tr>
<tr>
<td>Opening - 1</td>
<td>Window</td>
<td>Newington Town Hall</td>
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<td>0.27</td>
<td>60</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Opening - 2</td>
<td>Window</td>
<td>Newington Town Hall</td>
<td>0.40</td>
<td>0.27</td>
<td>37</td>
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<td>0.00</td>
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<tr>
<td>Misc Load 1</td>
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<td>Trumbull lighting</td>
<td>Electricity</td>
<td>Overhang - None</td>
<td>None</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>

---

**Notes:**
- **Design Tstat:** None
- **Room Exhaust:** Available (100%)
- **CO2 Sensor Location:** Room
- **Thermostat Location:** Room

---

**Additional Information:**
- **Moisture Capacitance:** Medium
- **Humidity Schedule:** Available (100%)
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)
- **System Description:** VRF Floor 2
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type

---

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 4 of 39
Room Description: 017 ARTS & CRAFTS 2

Zone Description: No Zone

System Description: VRF Floor 2

GENERAL INFORMATION
Floor Area: 700 ft²  Flr-Flr Height: 16.5 ft
Plenum Height: 0.0 ft  Height Above Flr:
Slab Cnstr Type: 4" LW Concrete
Room Mass: Time delay based on actual mass
Ceiling R-Value: 1.786 hr·ft²·°F/Btu
Is There Carpet?: YES
Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
Design Relative Humidity: 50 %
Moisture Capacitance: Medium
Cig Tstat: None
Htg Tstat: None
Thermostat Location:Room  Floor Multiplier: 1
Humidistat Location:Room  Room Multiplier: 1
CO2 Sensor Location:Room
Room Type:Conditioned

PEOPLE
People Type: None
# of People: 28 People
People Sensible: 250 Btu/h
People Latent: 250 Btu/h
People Schedule: Trumbull Occ Classroom/Recreational
Workstation: 1.0 workstation/person

LIGHTS
Lighting Type: Recessed fluorescent, not vented, 80% load to space
Fixture Type: RECFL-NV
Lighting Schedule: Trumbull lighting Classroom/Recreational
Lighting Amount: 0.6 W/sq ft
Ballast Factor: 1.0

AIRFLOW INFORMATION
Vent Type: Art classroom
Vent Value: 10.00 cfm/person  0.18 cfm/sq ft
Vent Schedule: Trumbull VENT Classroom/Recreational
Infil Type: Neutral, Tight Const.
Infil Fan: 0.30 air changes/hr
Infil Schedule: Available (100%)
Vav Airflow: To be calculated
Supply: To be calculated
Aux Supply: To be calculated
Room Exhaust: Available (100%)
Room Multiplier: 10.00 cfm/person 0.18 cfm/sq ft
0.30 air changes/hr

SYSTEM DESCRIPTION
System Description: VRF Floor 2
28 People

ARTS & CRAFTS 2

No Zone

40 W/sq ft

Trace 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
Alternative - 1 Entered Values - Rooms Page 5 of 39

PROJECT NAME
TRUMBULL COMMUNITY CENTER

DATASET NAME
Room Description: 021 MENS  
Zone Description: No Zone  
System Description: VRF Floor 2

### GENERAL INFORMATION
- **Floor Area:** 155 ft²  
- **Flr-Fir Height:** 12.0 ft  
- **Plenum Height:** 2.0 ft  
- **Height Above Flr:**  
- **Slab Cnstr Type:** 4* LW Concrete  
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu  
- **Is There Carpet?:** YES  
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F  
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F  
- **Design Relative Humidity:** 50 %  
- **Moisture Capacitance:** Medium  
- **Clig Tatst:** None  
- **Htg Tatst:** None  
- **Thermostat Location:Room:** Floor Multiplier: 1  
- **Humidistat Location:Room:** Room Multiplier: 1  
- **CO2 Sensor Location:Room:**  
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None  
- **# of People:** 0 People  
- **People Sensible:** 250 Btu/h  
- **People Latent:** 250 Btu/h  
- **People Schedule:** Trumbull Occ Classroom/Recreational  
- **Workstation:** 1.0 workstation/person  
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space  
- **Fixture Type:** RECFL-NV  
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational  
- **Lighting Amount:** 0.6 W/sq ft  
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION

#### GLASS

- **Area Grnd**  
- **Shade**  
- **Coef**  
- **U Value**  
- **Type / Energy Type**  
- **Area**  
- **Shade**  
- **U Value**  
- **External**  
- **Internal**  
- **Shading**  
- **Shading**  
- **Adj**  
- **Pct**  
- **Pct**  
- **Pct**  
- **Pct**  
- **Frc / Temp/ Sen / Rm / Ret / Frc / Len**  
- **Grnd**  
- **Cool**  
- **Heat**  
- **Perm**  
- **Loss**  
- **Refl**  
- **Trmp**  
- **Trmp**  
- **Len**  
- **Coef**

#### AIRFLOW INFORMATION

- **Rm Exh Sched:** Available (100%)  
- **Vent Type:** Office space  
- **Vent Value:** 5.00 cfm/person  
- **Vent Schedule:** Off (0%)  
- **Vent Type:** Office space  
- **Vent Value:** 5.00 cfm/sq ft  
- **Vent Schedule:** Off (0%)  
- **Infilt Type:** None  
- **Infilt Value:** 0.00 air changes/hr  
- **Infilt Schedule:** Available (100%)  
- **Vav Airflow:** To be calculated  
- **Vav Sched:** Available (100%)  
- **Supply:** To be calculated  
- **Aux Supply:** To be calculated  
- **Room Exhaust:** None

---

Room Description: 022 WOMENS  
Zone Description: No Zone  
System Description: VRF Floor 2

### GENERAL INFORMATION
- **Floor Area:** 155 ft²  
- **Flr-Fir Height:** 12.0 ft  
- **Plenum Height:** 2.0 ft  
- **Height Above Flr:**  
- **Slab Cnstr Type:** 4* LW Concrete  
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu  
- **Is There Carpet?:** YES  
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F  
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F  
- **Design Relative Humidity:** 50 %  
- **Moisture Capacitance:** Medium  
- **Clig Tatst:** None  
- **Htg Tatst:** None  
- **Thermostat Location:Room:** Floor Multiplier: 1  
- **Humidistat Location:Room:** Room Multiplier: 1  
- **CO2 Sensor Location:Room:**  
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None  
- **# of People:** 0 People  
- **People Sensible:** 250 Btu/h  
- **People Latent:** 250 Btu/h  
- **People Schedule:** Trumbull Occ Classroom/Recreational  
- **Workstation:** 1.0 workstation/person  
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space  
- **Fixture Type:** RECFL-NV  
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational  
- **Lighting Amount:** 0.6 W/sq ft  
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION

#### GLASS

- **Area Grnd**  
- **Shade**  
- **Coef**  
- **U Value**  
- **Type / Energy Type**  
- **Area**  
- **Shade**  
- **U Value**  
- **External**  
- **Internal**  
- **Shading**  
- **Shading**  
- **Adj**  
- **Pct**  
- **Pct**  
- **Pct**  
- **Pct**  
- **Frc / Temp/ Sen / Rm / Ret / Frc / Len**  
- **Grnd**  
- **Cool**  
- **Heat**  
- **Perm**  
- **Loss**  
- **Refl**  
- **Trmp**  
- **Trmp**  
- **Len**  
- **Coef**

#### AIRFLOW INFORMATION

- **Rm Exh Sched:** Available (100%)  
- **Vent Type:** Office space  
- **Vent Value:** 5.00 cfm/person  
- **Vent Schedule:** Off (0%)  
- **Vent Type:** Office space  
- **Vent Value:** 5.00 cfm/sq ft  
- **Vent Schedule:** Off (0%)  
- **Infilt Type:** None  
- **Infilt Value:** 0.00 air changes/hr  
- **Infilt Schedule:** Available (100%)  
- **Vav Airflow:** To be calculated  
- **Vav Sched:** Available (100%)  
- **Supply:** To be calculated  
- **Aux Supply:** To be calculated  
- **Room Exhaust:** None

---

Project Name: TRUMBULL COMMUNITY CENTER  
Dataset Name: Alternative - 1 Entered Values - Rooms Page 6 of 39
### Room Description: 109 STORAGE

**GENERAL INFORMATION**
- **Floor Area:** 75 ft²
- **Flr-Flr Height:** 12.0 ft
- **Slab Cnstr Type:** 4” LW Concrete
- **Ceiling R-Value:** 1.786 hr*ft²°F/Btu
- **Is There Carpet?:** YES
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**ZONE DESCRIPTION:**
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### System Description: VRF Floor 2

**AIRFLOW INFORMATION**
- **Cooling (Peop-based)**
  - **Vent Type:** Office space
  - **Vent Value:** 0.00 cfm/sq ft
  - **Infl Type:** Off (0%)
  - **Infl Value:** 0.00 air changes/hr
- **Cooling (Peop-based)**
  - **Vent Type:** Office space
  - **Vent Value:** 0.00 cfm/sq ft
  - **Infl Type:** Off (0%)
  - **Infl Value:** 0.00 air changes/hr

**Room Exhaust:**
- **Room Exhaust:** Available (100%)

### Room Description: 110 STORAGE

**GENERAL INFORMATION**
- **Floor Area:** 55 ft²
- **Flr-Flr Height:** 14.0 ft
- **Slab Cnstr Type:** 4” LW Concrete
- **Ceiling R-Value:** 1.786 hr*ft²°F/Btu
- **Is There Carpet?:** YES
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**ZONE DESCRIPTION:**
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### System Description: VRF Floor 2

**AIRFLOW INFORMATION**
- **Cooling (Peop-based)**
  - **Vent Type:** Office space
  - **Vent Value:** 0.00 cfm/sq ft
  - **Infl Type:** Off (0%)
  - **Infl Value:** 0.00 air changes/hr
- **Cooling (Peop-based)**
  - **Vent Type:** Office space
  - **Vent Value:** 0.00 cfm/sq ft
  - **Infl Type:** Off (0%)
  - **Infl Value:** 0.00 air changes/hr

**Room Exhaust:**
- **Room Exhaust:** Available (100%)

### ENTERED VALUES

**ROOM BY ROOM**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Const Type</th>
<th>U Value</th>
<th>Type/Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>75 ft²</td>
<td>0.0254</td>
<td>0.70</td>
<td></td>
<td>0</td>
<td>Overhang</td>
<td>None</td>
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<tr>
<td>Wall - 1</td>
<td>86 ft²</td>
<td>0.0486</td>
<td>0.90</td>
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<td></td>
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<tr>
<td>Wall - 2</td>
<td>164 ft²</td>
<td>0.0486</td>
<td>0.90</td>
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<td></td>
<td></td>
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</table>
### Room Description: 117 MEDICAL SERV & SHELTER STOR

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Const Type / Schedule</th>
<th>U Value</th>
<th>Type / Energy Type</th>
<th>Area ft²</th>
<th>Shade Coef</th>
<th>U Value Btu/h·ft²·°F</th>
<th>External Shading</th>
<th>Internal Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening - 1</td>
<td>423 ft²</td>
<td>80</td>
<td>0.0486</td>
<td>Standard Door</td>
<td>196</td>
<td>0.00</td>
<td>0.20</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
<tr>
<td>Opening - 2</td>
<td>350 ft²</td>
<td>80</td>
<td>0.0486</td>
<td>Standard Door</td>
<td>60</td>
<td>0.40</td>
<td>0.27</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
<tr>
<td>Floor - 1</td>
<td>350 ft²</td>
<td>6&quot; HW Conc</td>
<td>0.6588</td>
<td>Standard Door</td>
<td>196</td>
<td>0.00</td>
<td>0.20</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Zone Description: No Zone

- **Floor Area:** 350 ft²
- **Plenum Height:** 0.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Ceiling clg supply, ceiling return**
- **Default based on system type**

### System Description: VRF Floor 2

- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Off (0%)
- **Infl Type:** None
- **Infl Value:** 0.00 air changes/hr
- **Vav Airflow:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)

### Light Details

- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 1.0
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV

### People

- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

### Room Multiplier: 5.00 cfm/person 0.06 cfm/sq ft

### Std 62.1-2004

- **Cooling Ez:** Ceiling clg supply, ceiling return 100 %
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return 80 %
- **Er:** Default based on system type
## Room Description: 122 HEALTH SCREENING NURSE

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area</td>
<td>150 ft²</td>
</tr>
<tr>
<td>Plenum Height</td>
<td>2.0 ft</td>
</tr>
<tr>
<td>Slab Cntr Type</td>
<td>4&quot; LW Concrete</td>
</tr>
<tr>
<td>Ceiling R-Value</td>
<td>1.786 hr ft⁻¹°F/Btu</td>
</tr>
<tr>
<td>Is there Carpet?:</td>
<td>YES</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point</td>
<td>74.0 °F / 74.0 °F</td>
</tr>
<tr>
<td>Design Htg DB / Drift Point</td>
<td>70.0 °F / 70.0 °F</td>
</tr>
<tr>
<td>Design Relative Humidity</td>
<td>50 %</td>
</tr>
<tr>
<td>Moisture Capacitance</td>
<td>Medium</td>
</tr>
<tr>
<td>Ctg Tctal</td>
<td>None</td>
</tr>
<tr>
<td>Humdistant Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>CO2 Sensor Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>Room Type:</td>
<td>Conditioned</td>
</tr>
</tbody>
</table>

### GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Type</td>
<td>Recessed fluorescent, not vented, 80% load to space</td>
</tr>
<tr>
<td>Fixture Type</td>
<td>RECFL-NV</td>
</tr>
<tr>
<td>Lighting Schedule</td>
<td>Trumbull lighting Classroom/Recreational</td>
</tr>
<tr>
<td>Lighting Amount</td>
<td>0.6 W/sq ft</td>
</tr>
<tr>
<td>Ballast Factor</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### PEOPLE

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>People Type</td>
<td>None</td>
</tr>
<tr>
<td># of People</td>
<td>1 People</td>
</tr>
<tr>
<td>People Sensible</td>
<td>250 Btu/h</td>
</tr>
<tr>
<td>People Latent</td>
<td>250 Btu/h</td>
</tr>
<tr>
<td>People Schedule</td>
<td>Trumbull Occ Office</td>
</tr>
</tbody>
</table>

### AIRFLOW INFORMATION

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling (Peop-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating (Area-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Type</td>
<td>Office space</td>
<td></td>
</tr>
<tr>
<td>Vent Value</td>
<td>5.00 cfm/person</td>
<td></td>
</tr>
<tr>
<td>Vent Schedule</td>
<td>Trumbull VENT Office</td>
<td></td>
</tr>
<tr>
<td>Infl Type</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Infl Value</td>
<td>0.00 air changes/hr</td>
<td></td>
</tr>
<tr>
<td>Infl Schedule</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Vav Airflow</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Vav Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Aux Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Rm Exh Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
</tbody>
</table>

### Glass

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling (Peop-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating (Area-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Type</td>
<td>Office space</td>
<td></td>
</tr>
<tr>
<td>Vent Value</td>
<td>5.00 cfm/person</td>
<td></td>
</tr>
<tr>
<td>Vent Schedule</td>
<td>Trumbull VENT Office</td>
<td></td>
</tr>
<tr>
<td>Infl Type</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Infl Value</td>
<td>0.00 air changes/hr</td>
<td></td>
</tr>
<tr>
<td>Infl Schedule</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Vav Airflow</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Vav Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Aux Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Rm Exh Sched</td>
<td>Available (100%)</td>
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## Room Description: 124 BATHROOM

<table>
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<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Floor Area</td>
<td>65 ft²</td>
</tr>
<tr>
<td>Plenum Height</td>
<td>2.0 ft</td>
</tr>
<tr>
<td>Slab Cntr Type</td>
<td>4&quot; LW Concrete</td>
</tr>
<tr>
<td>Room Mass: Time delay based on actual mass</td>
<td></td>
</tr>
<tr>
<td>Ceiling R-Value</td>
<td>1.786 hr ft⁻¹°F/Btu</td>
</tr>
<tr>
<td>Is there Carpet?:</td>
<td>YES</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point</td>
<td>74.0 °F / 74.0 °F</td>
</tr>
<tr>
<td>Design Htg DB / Drift Point</td>
<td>70.0 °F / 70.0 °F</td>
</tr>
<tr>
<td>Design Relative Humidity</td>
<td>50 %</td>
</tr>
<tr>
<td>Moisture Capacitance</td>
<td>Medium</td>
</tr>
<tr>
<td>Ctg Tctal</td>
<td>None</td>
</tr>
<tr>
<td>Humdistant Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>CO2 Sensor Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>Room Type:</td>
<td>Conditioned</td>
</tr>
</tbody>
</table>

### GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Type</td>
<td>Recessed fluorescent, not vented, 80% load to space</td>
</tr>
<tr>
<td>Fixture Type</td>
<td>RECFL-NV</td>
</tr>
<tr>
<td>Lighting Schedule</td>
<td>Trumbull lighting Classroom/Recreational</td>
</tr>
<tr>
<td>Lighting Amount</td>
<td>0.6 W/sq ft</td>
</tr>
<tr>
<td>Ballast Factor</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### PEOPLE

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>People Type</td>
<td>None</td>
</tr>
<tr>
<td># of People</td>
<td>0 People</td>
</tr>
<tr>
<td>People Sensible</td>
<td>250 Btu/h</td>
</tr>
<tr>
<td>People Latent</td>
<td>250 Btu/h</td>
</tr>
<tr>
<td>People Schedule</td>
<td>Trumbull Occ Classroom/Recreational</td>
</tr>
</tbody>
</table>

### AIRFLOW INFORMATION

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling (Peop-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating (Area-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Type</td>
<td>Office space</td>
<td></td>
</tr>
<tr>
<td>Vent Value</td>
<td>5.00 cfm/person</td>
<td></td>
</tr>
<tr>
<td>Vent Schedule</td>
<td>Trumbull VENT Office</td>
<td></td>
</tr>
<tr>
<td>Infl Type</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Infl Value</td>
<td>0.00 air changes/hr</td>
<td></td>
</tr>
<tr>
<td>Infl Schedule</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Vav Airflow</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Vav Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Aux Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Rm Exh Sched</td>
<td>Available (100%)</td>
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### Glass

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling (Peop-based)</td>
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<td></td>
</tr>
<tr>
<td>Heating (Area-based)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Type</td>
<td>Office space</td>
<td></td>
</tr>
<tr>
<td>Vent Value</td>
<td>5.00 cfm/person</td>
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</tr>
<tr>
<td>Vent Schedule</td>
<td>Trumbull VENT Office</td>
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<tr>
<td>Infl Type</td>
<td>None</td>
<td></td>
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<tr>
<td>Infl Value</td>
<td>0.00 air changes/hr</td>
<td></td>
</tr>
<tr>
<td>Infl Schedule</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Vav Airflow</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Vav Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Aux Supply</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>Rm Exh Sched</td>
<td>Available (100%)</td>
<td></td>
</tr>
</tbody>
</table>

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Project Name: TRUMBULL COMMUNITY CENTER

Dataset Name: Alternative - 1 Entered Values - Rooms Page 9 of 39

TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017

TRUMBULL COMMUNITY CENTER

Roof - 1

<table>
<thead>
<tr>
<th>Slab Cntr Type:</th>
<th>4* LW Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceiling R-Value</td>
<td>1.786 hr ft⁻¹°F/Btu</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point</td>
<td>74.0 °F / 74.0 °F</td>
</tr>
<tr>
<td>Design Htg DB / Drift Point</td>
<td>70.0 °F / 70.0 °F</td>
</tr>
<tr>
<td>Design Relative Humidity</td>
<td>50 %</td>
</tr>
<tr>
<td>Moisture Capacitance</td>
<td>Medium</td>
</tr>
<tr>
<td>Ctg Tctal</td>
<td>None</td>
</tr>
<tr>
<td>Humdistant Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>CO2 Sensor Location: Room</td>
<td>Room Multiplier: 1</td>
</tr>
<tr>
<td>Room Type:</td>
<td>Conditioned</td>
</tr>
</tbody>
</table>

Roof Multiplier: 1

Room Multiplier: 1
## ENTERTED VALUES

### ROOM BY ROOM

#### Room Description: 142 FOOD PANTRY OFFICE

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
<th>PEOPLE</th>
<th>AIRFLOW INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area: 125 ft²</td>
<td>People Type: General Office Space</td>
<td>Cooling (Peop-based)</td>
</tr>
<tr>
<td>Plenum Height: 2.0 ft</td>
<td># of People: 143 sq ft/person</td>
<td>Heating (Area-based)</td>
</tr>
<tr>
<td>Slab Cnstr Type: 4&quot; LW Concrete</td>
<td>People Sensible: 250 Btu/h</td>
<td>Vent Type: Office space</td>
</tr>
<tr>
<td>Ceiling R-Value: 1.786 hr·ft²·°F/Btu</td>
<td>People Latent: 200 Btu/h</td>
<td>Vent Value: 5.00 cfm/person</td>
</tr>
<tr>
<td>Is There Carpet?: YES</td>
<td>People Schedule: Trumbull Occ Office</td>
<td>Vent Schedule: Trumbull VENT Office</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Workstation: 1.0 workstation/person</td>
<td>Infl Type: None</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 70.0 °F / 70.0 °F</td>
<td>Fixure Type: RECL-NV</td>
<td>Infl Val: 0.00 air changes/hr</td>
</tr>
<tr>
<td>Design Relative Humidity: 50 %</td>
<td>Lighting Type: Recessed fluorescent, not vented, 80% load to space</td>
<td>Vav airflow:</td>
</tr>
<tr>
<td>Moisture Capacitance: Medium</td>
<td>Lighting Schedule: Trumbull lighting Classroom/Recreational</td>
<td>Vav Sched: Available (100%)</td>
</tr>
<tr>
<td>Clg Tst: None</td>
<td>Lighting Amount: 0.6 W/sq ft</td>
<td>Supply: To be calculated</td>
</tr>
<tr>
<td>Humidistat Location: Room</td>
<td>Ballast Factor: 1.0</td>
<td>Aux Supply: To be calculated</td>
</tr>
<tr>
<td>CO2 Sensor Location: Room</td>
<td></td>
<td>Room Exhaust:</td>
</tr>
<tr>
<td>Room Type: Conditioned</td>
<td></td>
<td>Rm Exh Sched: Available (100%)</td>
</tr>
</tbody>
</table>

#### Room Description: 143 STORAGE

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
<th>PEOPLE</th>
<th>AIRFLOW INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area: 43 ft²</td>
<td>People Type: None</td>
<td>Cooling (Peop-based)</td>
</tr>
<tr>
<td>Plenum Height: 2.0 ft</td>
<td># of People: 0 People</td>
<td>Heating (Area-based)</td>
</tr>
<tr>
<td>Slab Cnstr Type: 4&quot; LW Concrete</td>
<td>People Sensible: 250 Btu/h</td>
<td>Vent Type: Office space</td>
</tr>
<tr>
<td>Ceiling R-Value: 1.786 hr·ft²·°F/Btu</td>
<td>People Latent: 250 Btu/h</td>
<td>Vent Value: 5.00 cfm/person</td>
</tr>
<tr>
<td>Is There Carpet?: YES</td>
<td>People Schedule: Trumbull Occ Classroom/Recreational</td>
<td>Vent Schedule: Off (0%)</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Workstation: 1.0 workstation/person</td>
<td>Infl Type: None</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 70.0 °F / 70.0 °F</td>
<td>Fixure Type: RECL-NV</td>
<td>Infl Val: 0.00 air changes/hr</td>
</tr>
<tr>
<td>Design Relative Humidity: 50 %</td>
<td>Lighting Type: Recessed fluorescent, not vented, 80% load to space</td>
<td>Vav airflow:</td>
</tr>
<tr>
<td>Moisture Capacitance: Medium</td>
<td>Lighting Schedule: Trumbull lighting Storage</td>
<td>Vav Sched: Available (100%)</td>
</tr>
<tr>
<td>Clg Tst: None</td>
<td>Lighting Amount: 0.6 W/sq ft</td>
<td>Supply: To be calculated</td>
</tr>
<tr>
<td>Humidistat Location: Room</td>
<td>Ballast Factor: 1.0</td>
<td>Aux Supply: To be calculated</td>
</tr>
<tr>
<td>CO2 Sensor Location: Room</td>
<td></td>
<td>Room Exhaust:</td>
</tr>
<tr>
<td>Room Type: Conditioned</td>
<td></td>
<td>Rm Exh Sched: Available (100%)</td>
</tr>
</tbody>
</table>

### ROOM DESCRIPTION:

**Area/ Const Type / U Value**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Const Type</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>125 ft²</td>
<td>0</td>
<td>0.0254</td>
</tr>
</tbody>
</table>

**Lighting Schedule:**

- **People Schedule:** Trumbull Occ Office
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECL-NV
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**Airflow Information:**

- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Office
- **Infl Type:** None
- **Infl Val:** 0.00 air changes/hr
- **Vav Sched:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** |
- **Rm Exh Sched:** Available (100%)
## Room by Room

### Room Description: 144 STORAGE

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
<th>PEOPLE</th>
<th>AIRFLOW INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area: 43 ft²</td>
<td>People Type: None</td>
<td>Cooling (Peop-based)</td>
</tr>
<tr>
<td>Flr-Flr Height: 12.0 ft</td>
<td># of People: 0 People</td>
<td>Heating (Area-based)</td>
</tr>
<tr>
<td>Plenum Height: 2.0 ft</td>
<td>People Sensible: 250 Btu/h</td>
<td>Vent Type: Office space</td>
</tr>
<tr>
<td>Height Above Flr:</td>
<td>People Latent: 250 Btu/h</td>
<td>Vent Value: 5.00 cfm/person</td>
</tr>
<tr>
<td>Slab Cnstr Type: 4&quot; LW Concrete</td>
<td>People Schedule: Trumbull Occ Classroom/Recreational</td>
<td>Vent Sched: Available (100%)</td>
</tr>
<tr>
<td>Room Mass: Time delay based on actual mass</td>
<td></td>
<td>Infl Type: None</td>
</tr>
<tr>
<td>Ceiling R-Value: 1.786 hr*ft²/°F/Btu</td>
<td></td>
<td>Infl Value: 0.00 air changes/hr</td>
</tr>
<tr>
<td>Is There Carpet?: YES</td>
<td></td>
<td>Infl Sched: Available (100%)</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Vav Airflow:</td>
<td></td>
</tr>
<tr>
<td>Design Htg DB / Drift Point: 70.0 °F / 70.0 °F</td>
<td>Vav Sched: Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Design Relative Humidity: 50 %</td>
<td>Supply: To be calculated</td>
<td></td>
</tr>
<tr>
<td>Moisture Capacitance: Medium</td>
<td>Aux Supply: To be calculated</td>
<td></td>
</tr>
<tr>
<td>Cig Tstt: None</td>
<td>Room Exhaust:</td>
<td></td>
</tr>
<tr>
<td>Htg Tstt: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermostat Location:Room</td>
<td>Room Multiplier: 1</td>
<td></td>
</tr>
<tr>
<td>Floor Multiplier: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidistat Location:Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 Sensor Location:Room</td>
<td>Room Multiplier: 1</td>
<td></td>
</tr>
<tr>
<td>CO2 Sensor Location:Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Type:Conditioned</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Room Description: 145 STORAGE

<table>
<thead>
<tr>
<th>GENERAL INFORMATION</th>
<th>PEOPLE</th>
<th>AIRFLOW INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area: 22 ft²</td>
<td>People Type: None</td>
<td>Cooling (Peop-based)</td>
</tr>
<tr>
<td>Flr-Flr Height: 12.0 ft</td>
<td># of People: 0 People</td>
<td>Heating (Area-based)</td>
</tr>
<tr>
<td>Plenum Height: 2.0 ft</td>
<td>People Sensible: 250 Btu/h</td>
<td>Vent Type: Office space</td>
</tr>
<tr>
<td>Height Above Flr:</td>
<td>People Latent: 250 Btu/h</td>
<td>Vent Value: 5.00 cfm/person</td>
</tr>
<tr>
<td>Slab Cnstr Type: 4&quot; LW Concrete</td>
<td>People Schedule: Trumbull Occ Classroom/Recreational</td>
<td>Vent Sched: Available (100%)</td>
</tr>
<tr>
<td>Room Mass: Time delay based on actual mass</td>
<td></td>
<td>Infl Type: None</td>
</tr>
<tr>
<td>Ceiling R-Value: 1.786 hr*ft²/°F/Btu</td>
<td></td>
<td>Infl Value: 0.00 air changes/hr</td>
</tr>
<tr>
<td>Is There Carpet?: YES</td>
<td></td>
<td>Infl Sched: Available (100%)</td>
</tr>
<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Vav Airflow:</td>
<td></td>
</tr>
<tr>
<td>Design Htg DB / Drift Point: 70.0 °F / 70.0 °F</td>
<td>Vav Sched: Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Design Relative Humidity: 50 %</td>
<td>Supply: To be calculated</td>
<td></td>
</tr>
<tr>
<td>Moisture Capacitance: Medium</td>
<td>Aux Supply: To be calculated</td>
<td></td>
</tr>
<tr>
<td>Cig Tstt: None</td>
<td>Room Exhaust:</td>
<td></td>
</tr>
<tr>
<td>Htg Tstt: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermostat Location:Room</td>
<td>Room Multiplier: 1</td>
<td></td>
</tr>
<tr>
<td>Floor Multiplier: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidistat Location:Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 Sensor Location:Room</td>
<td>Room Multiplier: 1</td>
<td></td>
</tr>
<tr>
<td>CO2 Sensor Location:Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Type:Conditioned</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Room Description: 146 STORAGE

**GENERAL INFORMATION**
- **Floor Area:** 22 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES

**People**
- **People Type:** None
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

**Lights**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**Coef**
- Workstation: 1.0 workstation/person

**Shading**

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
<th>Shade</th>
<th>U Value Btu/h·ft²·°F</th>
<th>External</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Airflow**
- **System Description:** VRF Floor 2

### Room Description: 149 JAN

**GENERAL INFORMATION**
- **Floor Area:** 26 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES

**People**
- **People Type:** None
- **People Sensible:** 0 Btu/h
- **People Latent:** 0 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

**Lights**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 250 Btu/h
- **Ballast Factor:** 0.6

**Coef**
- Workstation: 1.0 workstation/person

**Shading**

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
<th>Shade</th>
<th>U Value Btu/h·ft²·°F</th>
<th>External</th>
<th>Internal</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Airflow**
- **System Description:** VRF Floor 2

### Room Description: No Zone

**Zone Description:** No Zone

**General Information**

<table>
<thead>
<tr>
<th>Area</th>
<th>Const Type /</th>
<th>Dir</th>
<th>Tilt</th>
<th>Schedule</th>
<th>U Value Btu/h·ft²·°F</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>22 ft²</td>
<td>0</td>
<td>90</td>
<td>Trumbull</td>
<td>0.0254</td>
<td>0.70</td>
</tr>
</tbody>
</table>

**People**

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
<th>Shade</th>
<th>U Value Btu/h·ft²·°F</th>
<th>External</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

**Airflow**

### Room Description: No Zone

**Zone Description:** No Zone

**General Information**

<table>
<thead>
<tr>
<th>Area</th>
<th>Const Type /</th>
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<th>Schedule</th>
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**People**

<table>
<thead>
<tr>
<th>Type</th>
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<tbody>
<tr>
<td></td>
<td></td>
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</tr>
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</table>

**Airflow**

### Room Description: No Zone

**Zone Description:** No Zone

**General Information**

<table>
<thead>
<tr>
<th>Area</th>
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<tbody>
<tr>
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<td>0.70</td>
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**People**

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<th>Type</th>
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<th>Shade</th>
<th>U Value Btu/h·ft²·°F</th>
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<tr>
<td></td>
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<td></td>
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</tbody>
</table>

**Airflow**

### Room Description: No Zone

**Zone Description:** No Zone

**General Information**

<table>
<thead>
<tr>
<th>Area</th>
<th>Const Type /</th>
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<th>Tilt</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>Roof - 1</td>
<td>26 ft²</td>
<td>0</td>
<td>90</td>
<td>Trumbull</td>
<td>0.0254</td>
<td>0.70</td>
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</tbody>
</table>

**People**

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
<th>Shade</th>
<th>U Value Btu/h·ft²·°F</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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</table>

**Airflow**

### Room Description: No Zone

**Zone Description:** No Zone

**General Information**

<table>
<thead>
<tr>
<th>Area</th>
<th>Const Type /</th>
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<tr>
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</table>

**People**

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Airflow**
### Room Description: 150 OFFICE
- **Floor Area:** 45 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Room Mass:** Time delay based on actual mass
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50 %
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling Cnstr:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### PEOPLE
- **People Type:** General Office Space
- **# of People:** 143 sq ft/person
- **People Sensible:** 250 Btu/h
- **People Latent:** 200 Btu/h
- **People Schedule:** Trumbull Occ Office
- **Workstation:** 1.0 workstation/person
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling Cnstr:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### Room Description: 151 STORAGE
- **Floor Area:** 28 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling Cnstr:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### PEOPLE
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling Cnstr:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### LIGHTS
- **Lighting Schedule:** Trumbull lighting Storagedata
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

---

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 14 of 39

**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**

**TRUMBULL COMMUNITY CENTER**
### GENERAL INFORMATION
- **Room Description:** 152 STORAGE
- **Floor Area:** 50 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 7.86 hr·ft²·°F/Btu
- **Is there Carpet?** Yes
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
- **Workstation:** 1.0 workstation/person

### SYSTEM INFORMATION
- **System Description:** VRF Floor 2

### ENTERED VALUES
- **Energy Type:** Type / Area Grnd / Shade
- **Type / Shade:** Internal
- **Type / Shade:** Loss Perm Heat Cool

---

### GENERAL INFORMATION
- **Room Description:** 153 STORAGE
- **Floor Area:** 50 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 7.86 hr·ft²·°F/Btu
- **Is there Carpet?** Yes
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load

---

### SYSTEM INFORMATION
- **System Description:** VRF Floor 2

### ENTERED VALUES
- **Energy Type:** Type / Area Grnd / Shade
- **Type / Shade:** Internal
- **Type / Shade:** Loss Perm Heat Cool

---

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 15 of 39

**Trace® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
## Room by Room

### 154 STORAGE

#### GENERAL INFORMATION
- **Floor Area:** 50 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### PEOPLE
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

#### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

#### AIRFLOW INFORMATION

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooling (Peop-based)</strong></td>
<td><strong>Room Exhaust:</strong></td>
<td><strong>Vent Type:</strong> Office space</td>
<td><strong>Vent Value:</strong> 5.00 cfm/person</td>
<td>0.06 cfm/sq ft</td>
<td><strong>Vent Schedule:</strong> Off (0%)</td>
</tr>
<tr>
<td><strong>Heating (Area-based)</strong></td>
<td><strong>Vav Sched:</strong> Available (100%)</td>
<td><strong>Infl Type:</strong> None</td>
<td><strong>Infl Value:</strong> 0.00 air changes/hr</td>
<td><strong>Infl Schedule:</strong> Available (100%)</td>
<td><strong>Vav Airflow:</strong></td>
</tr>
<tr>
<td><strong>Aux Supply:</strong></td>
<td><strong>Supply:</strong> To be calculated</td>
<td><strong>To be calculated</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 155 STORAGE

#### GENERAL INFORMATION
- **Floor Area:** 25 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

#### PEOPLE
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

#### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

#### AIRFLOW INFORMATION

<table>
<thead>
<tr>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooling (Peop-based)</strong></td>
<td><strong>Room Exhaust:</strong></td>
<td><strong>Vent Type:</strong> Office space</td>
<td><strong>Vent Value:</strong> 5.00 cfm/person</td>
<td>0.06 cfm/sq ft</td>
<td><strong>Vent Schedule:</strong> Off (0%)</td>
</tr>
<tr>
<td><strong>Heating (Area-based)</strong></td>
<td><strong>Vav Sched:</strong> Available (100%)</td>
<td><strong>Infl Type:</strong> None</td>
<td><strong>Infl Value:</strong> 0.00 air changes/hr</td>
<td><strong>Infl Schedule:</strong> Available (100%)</td>
<td><strong>Vav Airflow:</strong></td>
</tr>
<tr>
<td><strong>Aux Supply:</strong></td>
<td><strong>Supply:</strong> To be calculated</td>
<td><strong>To be calculated</strong></td>
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<td></td>
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**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 16 of 39  
**Trace® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
### Room Description: 156 SEATING & LOUNGE

**GENERAL INFORMATION**
- Floor Area: 710 ft²
- Plenum Height: 0.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: YES
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50%
- Moisture Capacitance: Medium
- Cig Tstt: None
- Htg Tstt: None
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

**ZONE DESCRIPTION:** No Zone

**PEOPLE**
- People Type: Hotel/Motel Lobby
  - # of People: 33 sq ft/person
  - People Sensible: 250 Btu/h
  - People Latent: 200 Btu/h
  - People Schedule: Trumbull Occ Classroom/Recreational
  - Workstation: 1.0 workstation/person
  - Lighting Type: Recessed fluorescent, not vented, 80% load to space
  - Lighting Schedule: Trumbull lighting Classroom/Recreational
  - Lighting Amount: 0.6 W/sq ft
  - Ballast Factor: 1.0

**LIGHTS**
- Workstation: 1.0 workstation/person

**SYSTEM DESCRIPTION:** VRF Floor 2

**AIRFLOW INFORMATION**
- Cooling (Peop-based): None
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Schedule: Trumbull VENT Classroom/Recreational
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Infl Schedule: Available (100%)
  - Vav Airflow: To be calculated
  - Vav Sched: To be calculated
  - Supply: To be calculated
  - Aux Supply: To be calculated
  - Room Exhaust: To be calculated

### Room Description: 157 STORAGE

**GENERAL INFORMATION**
- Floor Area: 33 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: YES
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50%
- Moisture Capacitance: Medium
- Cig Tstt: None
- Htg Tstt: None
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

**ZONE DESCRIPTION:** No Zone

**PEOPLE**
- People Type: None
  - # of People: 0 People
  - People Sensible: 250 Btu/h
  - People Latent: 200 Btu/h
  - People Schedule: Trumbull Occ Classroom/Recreational
  - Workstation: 1.0 workstation/person
  - Lighting Type: Recessed fluorescent, not vented, 80% load to space
  - Lighting Schedule: Trumbull lighting Storage
  - Lighting Amount: 0.6 W/sq ft
  - Ballast Factor: 1.0

**LIGHTS**
- Workstation: 1.0 workstation/person

**SYSTEM DESCRIPTION:** VRF Floor 2

**AIRFLOW INFORMATION**
- Cooling (Peop-based): None
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Infl Schedule: Available (100%)
  - Vav Airflow: To be calculated
  - Vav Sched: To be calculated
  - Supply: To be calculated
  - Aux Supply: To be calculated
  - Room Exhaust: To be calculated

---

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 17 of 39
### 158 COATS

#### GENERAL INFORMATION

- **Floor Area:** 28 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cntr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 90.0 °F / 90.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling: Wall Type:** 4" LW Concrete
- **Ceiling: Height:** 2.0 ft
- **Ceiling: Area:** 75 ft²
- **Heating Tilt:** Available (100 %)
- **Cooling Tilt:** Available (100 %)

#### PEOPLE

- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

#### LIGHTS

- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** REFL-NV
- **% Load to RA:** 20 %

#### AIRFLOW INFORMATION

- **Cooling (Peop-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Vent Schedule:** Trumbull VENT Classroom/Recreational
  - **Infil Type:** None
  - **Infil Value:** 0.00 air changes/hr
  - **Infil Schedule:** Available (100 %)
  - **Vav Flow:**
    - **Supply:** To be calculated
    - **Aux Supply:** To be calculated
  - **Room Exhaust:**
    - **Rm Exh Sched:** Available (100 %)

- **Heating (Area-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 0.06 cfm/sq ft
  - **Vent Schedule:** Trumbull VENT Classroom/Recreational
  - **Infil Type:** None
  - **Infil Value:** 0.00 air changes/hr
  - **Infil Schedule:** Available (100 %)
  - **Vav Flow:**
    - **Supply:** To be calculated
    - **Aux Supply:** To be calculated
  - **Room Exhaust:**
    - **Rm Exh Sched:** Available (100 %)

#### ROOM EXHAUST

- **Type:** Vent Schedule:
  - **Room Type:** Trumbull VENT Classroom/Recreational
  - **Wall Type:** Trumbull VENT Classroom/Recreational

#### AIRFLOW INFORMATION

- **Cooling Ez:** Ceiling cgl supply, ceiling return
  - **Cooling Ez Temp:** Ceiling supply > Trm+15°F(8°C), ceiling return
  - **Cooling Ez Pct:** 80 %
  - **Cooling Ez Adj:**
    - **Htg Ez Adj:**
      - **Htg Ez Temp:**
    - **Htg Ez Pct:**
    - **Htg Ez Adj:**

- **Heating Ez:**
  - **Heating Ez Temp:** Ceiling supply > Trm+15°F(8°C), ceiling return
  - **Heating Ez Pct:**
  - **Heating Ez Adj:**

#### ROOM BY ROOM

### 18 KILN

#### GENERAL INFORMATION

- **Floor Area:** 75 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cntr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 90.0 °F / 90.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling: Wall Type:** 4" LW Concrete
- **Ceiling: Height:** 2.0 ft
- **Ceiling: Area:** 138 ft²
- **Heating Tilt:** Available (100 %)
- **Cooling Tilt:** Available (100 %)

#### PEOPLE

- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

#### LIGHTS

- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** REFL-NV
- **% Load to RA:** 20 %

#### AIRFLOW INFORMATION

- **Cooling (Peop-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 200.00 cfm
  - **Vent Schedule:** Trumbull VENT Classroom/Recreational
  - **Infil Type:** None
  - **Infil Value:** 0.00 air changes/hr
  - **Infil Schedule:** Available (100 %)
  - **Vav Flow:**
    - **Supply:** To be calculated
    - **Aux Supply:** To be calculated
  - **Room Exhaust:**
    - **Rm Exh Sched:** Available (100 %)

- **Heating (Area-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 0.00 air changes/hr
  - **Vent Schedule:** Trumbull VENT Classroom/Recreational
  - **Infil Type:** None
  - **Infil Value:** 0.00 air changes/hr
  - **Infil Schedule:** Available (100 %)
  - **Vav Flow:**
    - **Supply:** To be calculated
    - **Aux Supply:** To be calculated
  - **Room Exhaust:**
    - **Rm Exh Sched:** Available (100 %)

#### ROOM EXHAUST

- **Type:** Vent Schedule:
  - **Room Type:** Trumbull VENT Classroom/Recreational
  - **Wall Type:** Trumbull VENT Classroom/Recreational

#### AIRFLOW INFORMATION

- **Cooling Ez:** Ceiling cgl supply, ceiling return
  - **Cooling Ez Temp:** Ceiling supply > Trm+15°F(8°C), ceiling return
  - **Cooling Ez Pct:** 80 %
  - **Cooling Ez Adj:**
    - **Htg Ez Adj:**
      - **Htg Ez Temp:**
    - **Htg Ez Pct:**
    - **Htg Ez Adj:**

- **Heating Ez:**
  - **Heating Ez Temp:** Ceiling supply > Trm+15°F(8°C), ceiling return
  - **Heating Ez Pct:**
  - **Heating Ez Adj:**

#### ROOM BY ROOM

### 18 KILN

#### GENERAL INFORMATION

- **Floor Area:** 75 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cntr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 90.0 °F / 90.0 °F
- **Design Relative Humidity:** 50 %
- **Ceiling: Wall Type:** 4" LW Concrete
- **Ceiling: Height:** 2.0 ft
- **Ceiling: Area:** 138 ft²
- **Heating Tilt:** Available (100 %)
- **Cooling Tilt:** Available (100 %)
## Room Description: 20 STORAGE

**GENERAL INFORMATION**
- Floor Area: 55 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr*ft²·°F/Btu

**PEOPLE**
- People Type: None
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational
- Workstation: 1.0 workstation/person

**LIGHTS**
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECF-LV
- Lighting Schedule: Trumbull lighting Storage
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

**ENERGY TYPE**
- **People**
  - People Sensible: 250 Btu/h
  - People Latent: 250 Btu/h

**System Description: VRF Floor 2**

**AIRFLOW INFORMATION**
- Cooling (Peop-based)
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Supply: To be calculated
  - Aux Supply: To be calculated
- Heating (Area-based)
  - Vent Type: Office space
  - Vent Value: 0.06 cfm/sq ft
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Room Exhaust: None
  - Rm Exh Sched: Available (100%)

**Enter Value**
- Rate: 1.000 W/sq ft Electricity

**Zone Description: No Zone**

---

## Room Description: 23 ADMINISTRATION

**GENERAL INFORMATION**
- Floor Area: 365 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr*ft²·°F/Btu

**PEOPLE**
- People Type: General Office Space
- People Sensible: 143 sq ft/person
- People Latent: 200 Btu/h
- People Schedule: Trumbull Occ Office
- Workstation: 1.0 workstation/person

**LIGHTS**
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECF-LV
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

**ENERGY TYPE**
- **People**
  - People Sensible: 143 sq ft/person
  - People Latent: 200 Btu/h

**System Description: VRF Floor 2**

**AIRFLOW INFORMATION**
- Cooling (Peop-based)
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Schedule: Trumbull VENT Office
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Supply: To be calculated
  - Aux Supply: To be calculated
- Heating (Area-based)
  - Vent Type: Office space
  - Vent Value: 0.06 cfm/sq ft
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Room Exhaust: None
  - Rm Exh Sched: Available (100%)

**Enter Value**
- Rate: 1.000 W/sq ft Electricity

**Zone Description: No Zone**

---

## Misc Load 1

**GENERAL INFORMATION**
- Amount: 1.000 W/sq ft
- Trumbull lighting

**Zone Description: No Zone**

---

**System Description: VRF Floor 2**

**AIRFLOW INFORMATION**
- Cooling (Peop-based)
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Supply: To be calculated
  - Aux Supply: To be calculated
- Heating (Area-based)
  - Vent Type: Office space
  - Vent Value: 0.06 cfm/sq ft
  - Vent Schedule: Off (0%)
  - Infl Type: None
  - Infl Value: 0.00 air changes/hr
  - Vav Airflow: None
  - Vav Sched: Available (100%)
  - Room Exhaust: None
  - Rm Exh Sched: Available (100%)

**Enter Value**
- Rate: 1.000 W/sq ft Electricity

Project Name: TRUMBULL COMMUNITY CENTER

Dataset Name: Alternative - 1 Entered Values - Rooms Page 19 of 39
## ENTERED VALUES
### ROOM BY ROOM

### GENERAL INFORMATION
- **Floor Area:** 640 ft²
- **Ft-Fr Height:** 12.0 ft
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr ft² °F/Btu
- **Is There Carpet?**: YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Htg Tstat:** None
- **Humidstat Location:** Room
- **Floor Multiplier:** 1
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infil Type:** Neutral, Average Const.
- **Infil Value:** 0.60 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)
- **Supp:** To be calculated
- **Room Exhaust:** Available (100%)
- **Room Exhaust:** Available (100%)
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type

### System Description: VRF Floor 2

### Project Name: TRUMBULL COMMUNITY CENTER
### Dataset Name: Alternative - 1 Entered Values - Rooms Page 20 of 39

---

### Glass

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/ Const Type / Schedule</th>
<th>U Value Btu/h ft² °F Alpha</th>
<th>Type / Energy Type</th>
<th>Area ft²</th>
<th>Shade Coef</th>
<th>U Value Btu/h ft² °F</th>
<th>External Shading</th>
<th>Internal Shading</th>
<th>Adj Temp/</th>
<th>Pct</th>
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<tbody>
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<td>Overhang - None</td>
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<td>0.00</td>
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# Room by Room

## Room Description: 29 GAMES

**GENERAL INFORMATION**
- **Floor Area:** 100 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Ttat:** None
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**P E O P L E**
- **People Type:** Classroom
- **# of People:** 20 sq ft/person
- **People Sensible:** 250 Btu/h
- **People Latent:** 200 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

**Lit H T S**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECF-LV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

## Zone Description: No Zone

**AIRFLOW INFORMATION**
- **Cooling (Pep-based):** To be calculated
- **Cooling (Peop-based):** To be calculated
- **Heating (Area-based):** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated

## System Description: VRF Floor 2

**ENERGY TYPE**
- **People:**
  - **Type:** Classroom
  - **# of People:** 20 sq ft/person
  - **People Sensible:** 250 Btu/h
  - **People Latent:** 200 Btu/h
  - **People Schedule:** Trumbull Occ Classroom/Recreational

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECF-LV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

## Room Description: 30 CARDS

**GENERAL INFORMATION**
- **Floor Area:** 450 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Ttat:** None
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**P E O P L E**
- **People Type:** Classroom
- **# of People:** 20 sq ft/person
- **People Sensible:** 250 Btu/h
- **People Latent:** 200 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

**Lit H T S**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECF-LV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

## Zone Description: No Zone

**AIRFLOW INFORMATION**
- **Cooling (Pep-based):** To be calculated
- **Cooling (Peop-based):** To be calculated
- **Heating (Area-based):** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated

## System Description: VRF Floor 2

**ENERGY TYPE**
- **People:**
  - **Type:** Classroom
  - **# of People:** 20 sq ft/person
  - **People Sensible:** 250 Btu/h
  - **People Latent:** 200 Btu/h
  - **People Schedule:** Trumbull Occ Classroom/Recreational

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixure Type:** RECF-LV
- **% Load to RA:** 20 %
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

# Project Name: TRUMBULL COMMUNITY CENTER
**Dataset Name:** TRACER® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
**Alternative - 1 Entered Values - Rooms Page 21 of 39**
**Room Description:** 32 SC ASST DIRECTOR OFFICE

### GENERAL INFORMATION
- **Floor Area:** 165 ft²
- **Fir-Fir Height:** 12.0 ft
- **Plenum Height:** 2.0 ft
- **Height Above Fir:**
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **# of People:** 143 sq ft/person
- **People Sensible:** 250 Btu/h
- **People Latent:** 200 Btu/h
- **People Schedule:** Trumbull Occ Office
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Htg Tstat:** None
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** General Office Space
- **# of People:** 143 sq ft/person
- **People Sensible:** 250 Btu/h
- **People Latent:** 200 Btu/h
- **People Schedule:** Trumbull Occ Office
- **Workstation:** 1.0 workstation/person
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Office
- **Infil Type:** Neutral, Tight Const.
- **Infil Value:** 0.30 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** Yes
- **Vav Sched:** Available (100%)
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)

### System Description: VRF Floor 2
- **System Description:** VRF Floor 2
- **Ventilation:** Available (100%)
- **Room Exhaust:** Available (100%)
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm15°F(8°C), ceiling return

### Project Name: TRUMBULL COMMUNITY CENTER
### Dataset Name: Alternative - 1 Entered Values - Rooms Page 22 of 39
**GENERAL INFORMATION**

Floor Area: 165 ft²

Plenum Height: 2.0 ft

Slab Cnstr Type: 4" LW Concrete

Room Mass: Time delay based on actual mass

Ceiling R-Value: 1.786 hr-ft²-°F/Btu

Is There Carpet?: YES

Design Clg DB / Drift Point: 74.0 °F / 74.0 °F

Design Htg DB / Drift Point: 70.0 °F / 70.0 °F

Design Relative Humidity: 50%

Moisture Capacitance: Medium

Cig Tstat: None

Htg Tstat: None

Thermostat Location: Room

Humidistat Location: Room

CO2 Sensor Location: Room

Room Type: Conditioned

---

**PEOPLE**

People Type: General Office Space

# of People: 143 sq ft/person

People Sensible: 250 Btu/h

People Latent: 200 Btu/h

People Schedule: Trumbull Occ Office

---

**LIGHTS**

Lighting Type: Recessed fluorescent, not vented, 80% load to space

Fixture Type: RECFL-NV

Lighting Schedule: Trumbull lighting Classroom/Recreational

Lighting Amount: 0.6 W/sq ft

Ballast Factor: 1.0

---

**AIRFLOW INFORMATION**

Vent Type: Office space

Vent Value: 5.00 cfm/person

Vent Schedule: Trumbull VENT Office

Infil Type: Neutral, Tight Const.

Infil Value: 0.30 air changes/hr

Infil Schedule: Available (100%)

Vav Airflow: To be calculated

Vav Sched: To be calculated

Supply: To be calculated

Aux Supply: To be calculated

Room Exhaust: Available (100%)

Room Exhaust Sched: To be calculated

---

**SYSTEM DESCRIPTION**

System Description: VRF Floor 2

---

**LIGHTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area Amount</th>
<th>Const Type / Energy Type</th>
<th>U Value Btu/h-ft²-°F</th>
<th>Area ft²</th>
<th>Shade Coef</th>
<th>U Value Btu/h-ft²-°F</th>
<th>External Shading</th>
<th>Internal Shading</th>
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</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>165 ft²</td>
<td>Trumbull</td>
<td>0.0254</td>
<td>0</td>
<td>0.70</td>
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<td>Overhang - None</td>
<td>None</td>
</tr>
<tr>
<td>Wall - 1</td>
<td>52 ft²</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>260</td>
<td>0.27</td>
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<td>Overhang - None</td>
<td>None</td>
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<tr>
<td>Opening - 1</td>
<td>1.000 W/sq ft</td>
<td>Trumbull lighting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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**PROJECT NAME:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 23 of 39

**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
### Room by Room

#### Room Description: 35 TRANSPORTATION
- **Floor Area:** 155 ft²
- **Plenum Height:** 2.0 ft
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
  - **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
  - **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
  - **Humidistat Location:** None
- **Ceiling Height:** 12.0 ft

#### Zone Description: No Zone
- **People Type:** General Office Space
  - **# of People:** 143 sq ft/person
  - **People Sensible:** 250 Btu/h
  - **People Latent:** 200 Btu/h
  - **People Schedule:** Trumbull Occ Office
  - **Workstation:** 1.0 workstation/person
  - **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
  - **Lighting Amount:** 0.6 W/sq ft
  - **Ballast Factor:** 1.0

#### System Description: VRF Floor 2
- **System Type:** Neutral, Tight Const.
- **Room Exhaust:** Available (100%)

### Room Description: 36 CONFERENCE
- **Floor Area:** 400 ft²
- **Plenum Height:** 2.0 ft
- **Ceiling Height:** 12.0 ft
- **Slab Cnstr Type:** 4* LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
  - **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
  - **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
  - **Humidistat Location:** None
- **Ceiling Height:** 12.0 ft

#### Zone Description: No Zone
- **People Type:** Conference Room
  - **# of People:** 20 sq ft/person
  - **People Sensible:** 245 Btu/h
  - **People Latent:** 155 Btu/h
  - **People Schedule:** Trumbull Occ Office
  - **Workstation:** 1.0 workstation/person
  - **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
  - **Lighting Amount:** 0.6 W/sq ft
  - **Ballast Factor:** 1.0

#### System Description: VRF Floor 2
- **System Type:** Neutral, Tight Const.
- **Room Exhaust:** Available (100%)

---

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 24 of 39

TRUCE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
## Room Description: 43 SOFT CLASS & LIBRARY

### GENERAL INFORMATION
- **Floor Area:** 500 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** Library
- **# of People:** 50 sq ft/person
- **People Sensible:** 245 Btu/h
- **People Latent:** 155 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infil Type:** Neutral, Tight Const.
- **Infil Value:** 0.30 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:**
  - **Supply:** To be calculated
  - **Aux Supply:** To be calculated
  - **Room Exhaust:** Available (100%)

### System Description: VRF Floor 2
- **System Description:** VRF Floor 2
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Cooling (Peop-based):** 100 %
- **Heating (Area-based):** 80 %
- **Er:** Default based on system type

### Glass

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<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Const Type</th>
<th>U Value Btu/h·ft²·°F</th>
<th>Alpha</th>
<th>Type/Energy Type</th>
<th>Area ft²</th>
<th>Shade Coef</th>
<th>U Value Btu/h·ft²·°F</th>
<th>External Shading Coef</th>
<th>Internal Shading Coef</th>
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</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>500 ft²</td>
<td>90</td>
<td>0.0254 0.70</td>
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<td>Overhang - None</td>
<td>None</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 1</td>
<td>51 ft²</td>
<td>260</td>
<td>0.0486 0.90</td>
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<td>Overhang - None</td>
<td>None</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall - 2</td>
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<td>0.0486 0.90</td>
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<td>None</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Opening - 1</td>
<td>Window</td>
<td></td>
<td>0.0486 0.90</td>
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<td>Overhang - None</td>
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<td>Wall - 3</td>
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<td>0.0486 0.90</td>
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<td>Opening - 1</td>
<td>Window</td>
<td></td>
<td>0.0486 0.90</td>
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<td>Overhang - None</td>
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<tr>
<td>Misc Load 1</td>
<td>0.220 W/sq ft</td>
<td>Trumbull lighting</td>
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<td>Electricity</td>
<td>100</td>
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**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms

**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**

**Alternative - 1 Entered Values - Rooms Page 25 of 39**
### Room Description: 44 DIRECTOR OFFICE

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Const Type</th>
<th>U Value</th>
<th>Type/energy Type</th>
<th>Area</th>
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<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
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<tbody>
<tr>
<td>Roof - 1</td>
<td>130 ft²</td>
<td>Trumbull</td>
<td>0.0254</td>
<td>0.70</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
<tr>
<td>Wall - 1</td>
<td>137 ft²</td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>0.90</td>
<td>0</td>
<td>0.27</td>
<td>0</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
<tr>
<td>Opening - 1</td>
<td>1.000 W/sq ft</td>
<td>Window</td>
<td>Trumbull Town Hall</td>
<td>40</td>
<td>0.40</td>
<td>0.27</td>
<td>Overhang - None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Misc Load 1</td>
<td></td>
<td>Trumbull lighting</td>
<td>Electricity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GENERAL INFORMATION
- Floor Area: 130 ft²
- Plenum Height: 2.0 ft
- Slab Cntr Type: 4" LW Concrete
- Room Mass: Time delay based on actual mass
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Slab Cntr Type: 4" LW Concrete
- Room Mass: Time delay based on actual mass
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is there Carpet?: YES
- Design Clg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50 %
- Moisture Capacitance: Medium
- Cig Tatl: None
- Htg Tatl: None
- Thermostat Location: Room
- Floor Multiplier: 1
- Humidistat Location: Room
- Room Multiplier: 1
- CO2 Sensor Location: Room
- Room Type: Conditioned

### PEOPLE
- People Type: General Office Space
- # of People: 143 sq ft/person
- People Sensible: 250 Btu/h
- People Latent: 200 Btu/h
- People Schedule: Trumbull Occ Office
- Workstation: 1.0 workstation/person

### LIGHTS
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

### AIRFLOW INFORMATION
- Cooling (Peop-based): Office space
- Heating (Area-based): Office space
- Vent Type: Office space
- Vent Value: 5.00 cfm/person
- Vent Value: 0.06 cfm/sq ft
- Vent Schedule: Trumbull VENT Office
- Infl Type: Neutral, Tight Const.
- Infl Value: 0.30 air changes/hr
- Infl Schedule: Available (100%)
- Vav Airflow: To be calculated
- Vav Sched: Available (100%)
- Supply: To be calculated
- Aux Supply: To be calculated
- Room Exhaust: Available (100%)
- Rm Exh Sched: Available (100%)

### System Description: VRF Floor 2
- 143 sq ft/person
- 0.6 W/sq ft
- 200 Btu/h

---

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 26 of 39
### General Information
- **Floor Area:** 225 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Humidistat Location:** Room
- **Room Mass Multiplier:** 1
- **Room CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### People Information
- **People Type:** Conference Room
- **# of People:** 46
- **People Sensible:** 245 Btu/h
- **People Latent:** 155 Btu/h
- **People Schedule:** Trumbull Occ Office
- **Workstation:** 1.0 workstation/person
- **PEOPLE**

### Lighting Information
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **% Load to RA:** 20%
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

### Airflow Information
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Office
- **Infil Type:** Neutral, Tight Const.
- **Infil Value:** 0.30 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)

### System Description
- **System Description:** VRF Floor 2

### Glass Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Dir</th>
<th>Tilt</th>
<th>Const Type / Schedule</th>
<th>U Value</th>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall - 1</td>
<td>227 ft²</td>
<td>350</td>
<td></td>
<td>Trumbull Community Ctr</td>
<td>0.0486</td>
<td>Newington Town Hall</td>
<td>80</td>
<td>0.40</td>
<td>0.27</td>
<td>Overhang - None</td>
<td>None</td>
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<tr>
<td>Opening - 1</td>
<td>168 ft²</td>
<td>260</td>
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<td>Window</td>
<td>0.0486</td>
<td>Newington Town Hall</td>
<td>40</td>
<td>0.40</td>
<td>0.27</td>
<td>Overhang - None</td>
<td>None</td>
</tr>
</tbody>
</table>

**TRUCE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 27 of 39
### Room Description: 50 MULTI-PURPOSE

- **Floor Area**: 3,532 ft²
- **Flr-Flr Height**: 14.0 ft
- **Plenum Height**: 2.0 ft
- **Slab Cnstr Type**: 4" LW Concrete
- **Room Mass**: Time delay based on actual mass
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **There Carpet?**: YES
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50 %
- **Moisture Capacitance**: Medium
- **Ceiling Clg Type**: None
- **Ceiling Htg Type**: None
- **Humidistat Location**: Room
- **CO2 Sensor Location**: Room
- **Room Type**: Conditioned

### Zone Description: No Zone

- **People Type**: None
  - # of People: 345 People
  - People Sensible: 250 Btu/h
  - People Latent: 250 Btu/h
  - People Schedule: Trumbull lighting Storage
- **Room Description**: Workstation: 1.0 workstation/person
- **Lighting Type**: Recessed fluorescent, not vented, 80% load to space
  - Fixture Type: RECFL-NV
  - % Load to RA: 20 %
  - Lighting Schedule: Trumbull lighting Storage
  - Lighting Amount: 0.6 W/sq ft
  - Ballast Factor: 1.0

### AIRFLOW INFORMATION

- **Vent Type**: Office space
  - **Vent Value**: 5.00 cfm/person
  - **Vent Schedule**: Trumbull VENT Classroom/Recreational
- **Infil Value**: 0.30 air changes/hr
  - **Infil Schedule**: Available (100%)
  - **Vav Airflow**: Available (100%)
- **Supply**: To be calculated
  - **Aux Supply**: To be calculated
  - **Room Exhaust**: Available (100%)

### System Description: VRF Floor 2

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Dir</th>
<th>Tilt</th>
<th>Const Type / Schedule</th>
<th>U Value</th>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
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<th>Pct Temp</th>
<th>Adj Pct Temp</th>
<th>Adj Rad</th>
<th>Adj Frc</th>
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<td>Roof - 1</td>
<td>3,532 ft²</td>
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<td>90</td>
<td>Trumbull</td>
<td>0.0254</td>
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<td>0.20</td>
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<td>Wall - 1</td>
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<td>170</td>
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<td>0.0486</td>
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<td>Overhang - None</td>
<td>None</td>
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<td>Opening - 1</td>
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<td>Door</td>
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<td>0.20</td>
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<td>Door</td>
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**Project Name**: TRUMBULL COMMUNITY CENTER

**Dataset Name**: Alternative - 1 Entered Values - Rooms Page 28 of 39
### Room Description: 55 MENS RR

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>Const Type / Energy Type</th>
<th>U Value</th>
<th>Alpha</th>
<th>Type / Area / Shade</th>
<th>U Value</th>
<th>External</th>
<th>Internal</th>
<th>Temp/ Sens/ Rm/ Ret/ Frc/ Len</th>
<th>Adj</th>
<th>Pct</th>
<th>Pct</th>
<th>Pct</th>
<th>Rad</th>
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<tbody>
<tr>
<td><em>root - 1</em></td>
<td>155 ft²</td>
<td>0</td>
<td>90 Trumbull</td>
<td>0.0254</td>
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### Zone Description: No Zone

### System Description: VRF Floor 2

<table>
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<tr>
<th>Description</th>
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<th>U Value</th>
<th>Alpha</th>
<th>Type / Area / Shade</th>
<th>U Value</th>
<th>External</th>
<th>Internal</th>
<th>Temp/ Sens/ Rm/ Ret/ Frc/ Len</th>
<th>Adj</th>
<th>Pct</th>
<th>Pct</th>
<th>Pct</th>
<th>Rad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root - 1</td>
<td>175 ft²</td>
<td>0</td>
<td>90 Trumbull</td>
<td>0.0254</td>
<td>0.70</td>
<td>Overhang - None</td>
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### Room Description: 56 WOMENS RR

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<th>Type / Area / Shade</th>
<th>U Value</th>
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<th>Internal</th>
<th>Temp/ Sens/ Rm/ Ret/ Frc/ Len</th>
<th>Adj</th>
<th>Pct</th>
<th>Pct</th>
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<th>Rad</th>
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<td>Root - 1</td>
<td>175 ft²</td>
<td>0</td>
<td>90 Trumbull</td>
<td>0.0254</td>
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<td>Zone Description</td>
<td>System Description</td>
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<tr>
<td><strong>57 LOUNGE</strong></td>
<td><strong>No Zone</strong></td>
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<tr>
<td><strong>GENERAL INFORMATION</strong></td>
<td><strong>PEOPLE</strong></td>
<td><strong>AIRFLOW INFORMATION</strong></td>
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<td>Floor Area: 190 ft²</td>
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</tr>
<tr>
<td>Plenum Height: 2.0 ft</td>
<td># of People: 6 People</td>
<td>Vent Type: Office space</td>
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<tr>
<td>Slab Cntr Type: 4&quot; LW Concrete</td>
<td>People Sensible: 250 Btu/h</td>
<td>Vent Value: 5.00 cfm/person</td>
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<tr>
<td>Ceiling R-Value: 1.786 hr·ft²·°F/Btu</td>
<td>People Latent: 250 Btu/h</td>
<td>Vent Schedule: Trumbull VENT Classroom/Recreational</td>
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</tr>
<tr>
<td>Is Ther Carpet?: YES</td>
<td>People Schedule: Trumbull Occ Classroom/Recreational</td>
<td>Infilt Type: None</td>
<td></td>
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</tr>
<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Workstation: 1.0 workstation/person</td>
<td>Infilt Value: 0.00 air changes/hr</td>
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<tr>
<td>Design Htg DB / Drift Point: 70.0 °F / 70.0 °F</td>
<td>Lighting Type: Recessed fluorescent, not vented, 80% load to space</td>
<td>Vav Airflow: Vav Sched: Available (100%)</td>
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<tr>
<td>Moisture Capacitance: Medium</td>
<td>% Load to RA: 20 %</td>
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<tr>
<td>Clg Ttst: None</td>
<td>Lighting Schedule: Trumbull lighting Classroom/Recreational</td>
<td>Room Exhaust: Rm Exh Sched: Available (100%)</td>
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<tr>
<td>Humidistat Location: Room</td>
<td>Lighting Amount: 0.6 W/sq ft</td>
<td><strong>Std 62.1-2004</strong></td>
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<td>CO2 Sensor Location: Room</td>
<td>Ballast Factor: 1.0</td>
<td>Cooling Ez: Ceiling cgl supply, ceiling return 100 %</td>
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<tr>
<td>Room Type: Conditioned</td>
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<td>Heating Ez: Ceiling supply &gt; Trm+15°F(8°C), ceiling return 80 %</td>
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<td><strong>60 CAFE/STORE</strong></td>
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<td><strong>VRF Floor 2</strong></td>
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<tr>
<td><strong>GENERAL INFORMATION</strong></td>
<td><strong>PEOPLE</strong></td>
<td><strong>AIRFLOW INFORMATION</strong></td>
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<td>Slab Cntr Type: 4&quot; LW Concrete</td>
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<tr>
<td>Room Mass: Time delay based on actual mass</td>
<td>People Latent: 250 Btu/h</td>
<td>Vent Schedule: Trumbull VENT Classroom/Recreational</td>
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<tr>
<td>Ceiling R-Value: 1.786 hr·ft²·°F/Btu</td>
<td>People Schedule: Trumbull Occ Classroom/Recreational</td>
<td>Infilt Type: None</td>
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<tr>
<td>Is Ther Carpet?: YES</td>
<td>Workstation: 1.0 workstation/person</td>
<td>Infilt Value: 0.00 air changes/hr</td>
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<tr>
<td>Design Clg DB / Drift Point: 74.0 °F / 74.0 °F</td>
<td>Lighting Type: Recessed fluorescent, not vented, 80% load to space</td>
<td>Vav Airflow: Vav Sched: Available (100%)</td>
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<td>Design Htg DB / Drift Point: 70.0 °F / 70.0 °F</td>
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<td>Design Relative Humidity: 50 %</td>
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<tr>
<td>Moisture Capacitance: Medium</td>
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<td>Room Exhaust: Rm Exh Sched: Available (100%)</td>
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<tr>
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<td><strong>Std 62.1-2004</strong></td>
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<tr>
<td>Humidistat Location: Room</td>
<td>Ballast Factor: 1.0</td>
<td>Cooling Ez: Ceiling cgl supply, ceiling return 100 %</td>
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<tr>
<td>CO2 Sensor Location: Room</td>
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<td>Heating Ez: Ceiling supply &gt; Trm+15°F(8°C), ceiling return 80 %</td>
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<tr>
<td>Room Type: Conditioned</td>
<td></td>
<td>Er: Default based on system type</td>
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</table>

**ENERGED VALUES**

**ROOM BY ROOM**

---

**PROJECT NAME:** TRUMBULL COMMUNITY CENTER

**DATASET NAME:** Alternative - 1 Entered Values - Rooms Page 30 of 39
Room Description: 61 VESTIBULE

GENERAL INFORMATION
- Floor Area: 185 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Room Mass: Time delay based on actual mass
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: YES
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Relative Humidity: 50 %
- Ceiling R-Value: Medium
- Cig Tstat: None
- Htg Tstat: None
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

Zone Description: No Zone

PEOPLE
- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational

LIGHTS
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

AIRFLOW INFORMATION
- Vent Type: Office space
- Vent Value: 5.00 cfm/person
- Vent Schedule: Trumbull VENT Classroom/Recreational
- Infil Type: Neutral, Loose Const.
- Infil Value: 2.50 air changes/hr
- Infil Schedule: Available (100%)
- Vav Airflow: To be calculated
- Vav Sched: To be calculated
- Supply: To be calculated
- Aux Supply: To be calculated
- Room Exhaust: Available (100%)
- Room Multiplier: 1

System Description: VRF Floor 2

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: Alternative - 1 Entered Values - Rooms Page 31 of 39
Room Description: 62 CLASSROOM 1

- **GENERAL INFORMATION**
  - Floor Area: 550 ft²
  - Plenum Height: 2.0 ft
  - Slab Cnstr Type: 4" LW Concrete
  - Room Mass: Time delay based on actual mass
  - Ceiling R-Value: 1.786 hr*ft²·°F/Btu
  - Is There Carpet?: YES
  - Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
  - Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
  - Design Relative Humidity: 50 %
  - Slab Cnstr Type: 4" LW Concrete
  - Lumins Type: Recessed fluorescent, not vented, 80% load to space
  - Fixture Type: RECFL-NV
  - % Load to RA: 20 %

- **PEOPLE**
  - People Type: None
  - # of People: 28 People
  - People Sensible: 250 Btu/h
  - People Latent: 250 Btu/h
  - People Schedule: Trumbull Occ Classroom/Recreational
  - Workstation: 1.0 workstation/person
  - Lighting Schedule: Trumbull lighting Classroom/Recreational
  - Lighting Amount: 0.6 W/sq ft
  - Ballast Factor: 1.0

- **LIGHTS**
  - Light Type: Recessed fluorescent, not vented, 80% load to space
  - Fixture Type: RECFL-NV
  - % Load to RA: 20 %

- **AIRFLOW INFORMATION**
  - Vent Type: Office space
  - Vent Value: 5.00 cfm/person
  - Vent Value: 0.06 cfm/sq ft
  - Vent Schedule: Trumbull VENT Classroom/Recreational
  - Infil Type: Neutral, Tight Const.
  - Infil Value: 0.30 air changes/hr
  - Infil Schedule: Available (100%)
  - Vav Airflow: To be calculated
  - Vav Sched: To be calculated
  - Supply: To be calculated
  - Aux Supply: To be calculated
  - Ceiling clg supply, ceiling return
  - Ceiling supply > Trm+15°F(8°C), ceiling return
  - Default based on system type

- **SYSTEM INFORMATION**
  - System Description: VRF Floor 2
  - Conditioned
  - 28 People
  - 0.6 W/sq ft
  - 250 Btu/h

- **GLASS**
  - Description: Roof - 1
  - Area: 550 ft²
  - Const Type: Trumbull
  - U Value: 0.0254
  - Shade: 0.70
  - Alpha: 0
  - Type: Overhang - None
  - Energy Type: None
  - Adj Pct: None

  - Description: Wall - 1
  - Area: 192 ft²
  - Const Type: Trumbull Community Ctr
  - U Value: 0.0486
  - Shade: 0.90
  - Alpha: 0
  - Type: Newington Town Hall
  - Energy Type: None
  - Adj Pct: None

  - Description: Opening - 1
  - Area: 0.220 W/sq ft
  - Const Type: Trumbull lighting
  - U Value: 0
  - Shade: 0
  - Alpha: 0
  - Type: Electricity
  - Energy Type: None

- **Notations:**
  - Project Name: TRUMBULL COMMUNITY CENTER
  - Dataset Name: Alternative - 1 Entered Values - Rooms Page 32 of 39
  - TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
## GENERAL INFORMATION
- **Floor Area**: 600 ft²
- **Plenum Height**: 2.0 ft
- **Slab Cnstr Type**: 4" LW Concrete
- **Room Mass**: Time delay based on actual mass
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50%
- **Moisture Capacitance**: Medium
- **Cig Tstat**: None
- **Humidistat Location**: Room
- **Room Multiplier**: 1
- **CO2 Sensor Location**: Room
- **Room Type**: Conditioned

## PEOPLE
- **People Type**: None
- **# of People**: 28 People
- **People Sensible**: 250 Btu/h
- **People Latent**: 250 Btu/h
- **People Schedule**: Trumbull Occ Classroom/Recreational
- **Workstation**: 1.0 workstation/person
- **Lighting Type**: Recessed fluorescent, not vented, 80% load to space
- **Fixture Type**: RECFL-NV
- **Lighting Schedule**: Trumbull lighting Classroom/Recreational
- **Lighting Amount**: 1.0
- **Ballast Factor**: 1.0

## AIRFLOW INFORMATION
- **Vent Type**: Office space
- **Vent Value**: 5.00 cfm/person
- **Vent Schedule**: Trumbull VENT Classroom/Recreational
- **Infil Type**: Neutral, Poor Const.
- **Infil Value**: 1.00 air changes/hr
- **Infil Schedule**: Available (100%)
- **Vav Airflow**: To be calculated
- **Vav Sched**: To be calculated
- **Supply**: To be calculated
- **Aux Supply**: To be calculated
- **Room Exhaust**: Available (100%)

## LIGHTS
- **Design Htg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Relative Humidity**: 70.0 °F / 70.0 °F
- **Room Multiplier**: 1
- **Room Sens**: Ceiling clg supply, ceiling return
- **Room Htg Sens**: Ceiling supply > Trm+15°F (8°C), ceiling return
- **Cooling Ez**: Ceiling clg supply, ceiling return
- **Heating Ez**: Ceiling supply > Trm+15°F (8°C), ceiling return
- **Cooling Type**: Ceiling clg supply, ceiling return
- **Heating Type**: Ceiling supply > Trm+15°F (8°C), ceiling return

## MATERIALS
- **Room CO2 Sensor Location**: Room
- **Room Thermostat Location**: Room

## ENTRANCE DETAILS

### Room Description: 63 CLASSROOM 2
- **Floor Area**: 600 ft²
- **Plenum Height**: 12.0 ft
- **Slab Cnstr Type**: 4" LW Concrete
- **Room Mass**: Time delay based on actual mass
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50%
- **Moisture Capacitance**: Medium
- **Cig Tstat**: None
- **Humidistat Location**: Room
- **Room Multiplier**: 1
- **CO2 Sensor Location**: Room
- **Room Type**: Conditioned

### Zone Description: No Zone
- **Vent Type**: Office space
- **Vent Value**: 5.00 cfm/person
- **Vent Schedule**: Trumbull VENT Classroom/Recreational
- **Infil Type**: Neutral, Poor Const.
- **Infil Value**: 1.00 air changes/hr
- **Infil Schedule**: Available (100%)
- **Vav Airflow**: To be calculated
- **Vav Sched**: To be calculated
- **Supply**: To be calculated
- **Aux Supply**: To be calculated
- **Room Exhaust**: Available (100%)

### System Description: VRF Floor 2
- **Cooling Ez**: Ceiling clg supply, ceiling return
- **Heating Ez**: Ceiling supply > Trm+15°F (8°C), ceiling return
- **Room CO2 Sensor Location**: Room
- **Room Thermostat Location**: Room

---

**Project Name**: TRUMBULL COMMUNITY CENTER

**Dataset Name**: Alternative - 1 Entered Values - Rooms Page 33 of 39
## ENTERED VALUES

### ROOM BY ROOM

### 82 LOBBY FOYER

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Const Type / U Value</th>
<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof - 1</td>
<td>300 ft²</td>
<td></td>
<td>0.0254</td>
<td>0.70</td>
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<td>Window</td>
<td></td>
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### 83 PLATFORM

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<th>Type / Energy Type</th>
<th>Area</th>
<th>Shade Coef</th>
<th>U Value</th>
<th>External Shading</th>
<th>Internal Shading</th>
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<tbody>
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<td>100 ft²</td>
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<td>Ceiling R-Value</td>
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<td></td>
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<tr>
<td>Is there Carpet?</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>70.0 °F / 70.0 °F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Relative Humidity</td>
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<td></td>
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</tr>
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<td>Moisture Capacitance</td>
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<td>CO2 Sensor Location:Room</td>
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<td>Room Type:Conditioned</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### System Description

- **VRF Floor 2**
- **Cooling (Peop-based)**: Cooling Ez: Ceiling clg supply, ceiling return 100%
- **Heating (Peop-based)**: Heating Ez: Ceiling supply > Trm+15°F(8°C), ceiling return 80%
- **Airflow Information**
  - Vav Sched: Available (100%) 0.00 air changes/hr 0.00 air changes/hr
  - Vav Airflow: To be calculated To be calculated
  - Supply: To be calculated To be calculated
  - Aux Supply: To be calculated To be calculated
  - Room Exhaust: To be calculated To be calculated

### General Information

- **Floor Area**: 300 ft²
- **Plenum Height**: 2.0 ft
- **Slab Cnstr Type**: 4" LW Concrete
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Is there Carpet?**: YES
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50 %
- **Moisture Capacitance**: Medium
- **Cig Tat: None**
- **Htg Tat: None**
- **Thermostat Location:Room**
- **CO2 Sensor Location:Room**
- **Room Type:Conditioned**
### Room Description: 84 GALLERY/LOUNGE

**GENERAL INFORMATION**
- **Floor Area:** 240 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4× LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Lighting Schedule:** Trumbull Occ Classroom/Recreational
- **People Schedule:** Trumbull Occ Classroom/Recreational

**PEOPLE**
- **People Type:** None
- **# of People:** 4 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational

**LIGHTS**
- **Workstation:** 1.0 workstation/person
- **Lighting Schedule:** Trumbull Occ Classroom/Recreational
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
- **Ballast Factor:** 1.0

**AIRFLOW INFORMATION**
- **Vent Type:** Office space
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Vav Sched:** Available (100%)

**SYSTEM INFORMATION**
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type

### Room Description: 85 CORRIDOR

**GENERAL INFORMATION**
- **Floor Area:** 1,600 ft²
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4× LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Lighting Schedule:** Trumbull Occ Classroom/Recreational

**CIRCUIT INFORMATION**
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
- **Ballast Factor:** 1.0

**AIRFLOW INFORMATION**
- **Vent Type:** Office space
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Vav Sched:** Available (100%)

**SYSTEM INFORMATION**
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Er:** Default based on system type
### Room Description: 86 DANCE STOR

**GENERAL INFORMATION**
- **Floor Area:** 80 ft²
- **Flr-Flr Height:** 14.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu

**Is there Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Humidistat Location:** Room
- **Room Mass:** Time delay based on actual mass
- **Room Type:** Conditioned

**Room Description:**
- **Amount Schedule:** 50 %
- **Htg Tstat:** None
- **Clg Tstat:** None
- **Design Htg DB / Drift Point:** 70.0 °F
- **Design Clg DB / Drift Point:** 74.0 °F
- **Room Multiplier:** 1
- **Floor Area:** 100 ft²
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **People Type:** None
- **Workstation:** 1.0 workstation/person
- **Vav Airflow:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated
- **Cooling EZ:** Ceiling clg supply, ceiling return
- **Heating EZ:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Off (0%)
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Schedule:** Available (100%)
- **Infl Type:** None
- **Infl Value:** 0.00 air changes/hr
- **Infl Schedule:** Available (100%)
- **Vav Sched:** Available (100%)
- **Aux Supply:** To be calculated
- **Vent Schedule:** Available (100%)

### Room Description: 89 SHARED STORAGE

**GENERAL INFORMATION**
- **Floor Area:** 100 ft²
- **Flr-Flr Height:** 12.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu

**Is there Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Moisture Capacitance:** Medium
- **Cig Tstat:** None
- **Humidistat Location:** Room
- **Room Mass:** Time delay based on actual mass
- **Room Type:** Conditioned

**Room Description:**
- **Amount Schedule:** 50 %
- **Htg Tstat:** None
- **Clg Tstat:** None
- **Design Htg DB / Drift Point:** 70.0 °F
- **Design Clg DB / Drift Point:** 74.0 °F
- **Room Multiplier:** 1
- **Floor Area:** 100 ft²
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **People Type:** None
- **Workstation:** 1.0 workstation/person
- **Vav Airflow:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated
- **Cooling EZ:** Ceiling clg supply, ceiling return
- **Heating EZ:** Ceiling supply > Trm+15°F(8°C), ceiling return
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Off (0%)
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Schedule:** Available (100%)
- **Infl Type:** None
- **Infl Value:** 0.00 air changes/hr
- **Infl Schedule:** Available (100%)
- **Vav Sched:** Available (100%)
- **Aux Supply:** To be calculated
- **Vent Schedule:** Available (100%)

### Zone Description: No Zone

**GENERAL INFORMATION**
- **Type / Energy Type / U Value / I Value / Area / Const Type / Area / Shade / U Value / External / Internal / Airflow**

### System Description: VRF Floor 2

**AIRFLOW INFORMATION**
- **Cooling (Peop-based)**
- **Heating (Area-based)**

---

**ENTERED VALUES**

**ROOM BY ROOM**
**GENERAL INFORMATION**

- **Floor Area**: 550 ft²
- **Slab Cnstr Type**: 4" LW Concrete
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50%
- **Infil Type**: Office space
- **Infil Value**: Trumbull VENT Classroom/Recreational
- **Vav Sched**: Available (100%)
- **Aux Supply**: To be calculated
- **Room Exhaust**: Available (100%)

**PEOPLE**

- **People Type**: None
- **People Sensible**: 250 Btu/h
- **People Schedule**: Trumbull Occ Classroom/Recreational
- **Workstation**: 1.0 workstation/person
- **Lighting Type**: Recessed fluorescent, not vented, 80% load
- **Fixure Type**: RECFL-NV
- **Lighting Schedule**: Trumbull lighting Classroom/Recreational
- **Lighting Amount**: 1.0
- **Ballast Factor**: 1.0

**AIRFLOW INFORMATION**

- **Vent Type**: Office space
- **Vent Value**: 5.00 cfm/person, 0.06 cfm/sq ft
- **Vent Schedule**: Trumbull VENT Classroom/Recreational
- **Infil Type**: Neutral, Tight Const.
- **Infil Value**: 0.30 air changes/hr
- **Infil Schedule**: Available (100%)
- **Supply**: To be calculated
- **Aux Supply**: To be calculated
- **Rm Exh Sched**: Available (100%)

**LIGHTS**

- **Lighting Schedule**: Trumbull lighting Classroom/Recreational
- **Lighting Amount**: 0.6 W/sq ft

**SYSTEM DESCRIPTION**

- **System Description**: VRF Floor 2

---

**PROJECT NAME**: TRUMBULL COMMUNITY CENTER

**DATASET NAME**: Alternative - 1 Entered Values - Rooms Page 37 of 39

**TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017**
GENERAL INFORMATION

Room Description: 92 VESTIBULE

- Floor Area: 130 ft²
- Flr-Flr Height: 12.0 ft
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Room Mass: Time delay based on actual mass
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: NO

Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
Design Htg DB / Drift Point: 70.0 °F / 70.0 °F

- Design Relative Humidity: 74.0 °F / 74.0 °F
- Humidistat Location: Medium
- Room CO2 Sensor Location: Room
- Room Thermostat Location: None
- Room Multiplier: 5.00 cfm/person 0.06 cfm/sq ft
- Room Exhaust: Ceiling clg supply, ceiling return
- Ceiling supply > Trm+15°F(8°C), ceiling return
- Default based on system type

- Room Htg Tstat: 100%
- Ceiling supply > Trm+15°F(8°C)
- Heaing Ez: None
- Heating Ez: 80 %
- Cooling Ez: None
- Cooling Ez: Default based on system type
- Rm Exh Sched: Available (100%)
- Vav Airflow: To be calculated
- Vav Sched: To be calculated

People Information

- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent : 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational

Workstation: 1.0 workstation/person

LIGHTS

- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

AIRFLOW INFORMATION

- Cooling (Peop-based) Type: Office space
- Vent Type: Office space
- Vent Value: 0.06 cfm/sq ft
- Vent Schedule: Trumbull VENT Classroom/Recreational
- Infil Type: Neutral, Loose Const.
- Infil Value: 2.50 air changes/hr
- Infil Schedule: Available (100%)
- Vav Airflow: To be calculated
- Vav Sched: To be calculated
- Room Exhaust: Available (100%)

System Description: VRF Floor 2

- Project Name: TRUMBULL COMMUNITY CENTER
- Dataset Name: Alternative - 1 Entered Values - Rooms Page 38 of 39

TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
**Room Description:** 95 RECEPTION

**General Information**
- **Floor Area:** 185 ft²
- **Flr-Flr Height:** 12.0 ft
- **Plenum Height:** 2.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Design Clg DB / Drift Point:** 50%
- **Floor Multiplier:** 1
- **Thermostat Location:** Room
- **Ceiling clg supply, ceiling return**
- **Cooling Ez:** Ceiling clg supply, ceiling return
- **Heating Ez:** Ceiling supply > Trm+15°F(8°C), ceiling return

**People**
- **People Type:** None
- **# of People:** 0
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

**Lights**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**Airflow Information**
- **Cooling (Peop-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Vent Schedule:** Trumbull VENT Office
  - **Infl Type:** None
  - **Infl Value:** 0.00 air changes/hr
  - **Infl Schedule:** Available (100%)
  - **Supply:** To be calculated
  - **Aux Supply:** To be calculated
  - **Room Exhaust:** Available (100%)

- **Heating (Area-based):**
  - **Supply:** To be calculated

**System Description:** VRF Floor 2

**Glass**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>U Value</th>
<th>Energy Type</th>
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<th>Tmp</th>
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<tbody>
<tr>
<td>Roof - 1</td>
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<td>Electricity</td>
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<td>60.00</td>
</tr>
</tbody>
</table>
**SYSTEM ENTERED VALUES**

**VRF Floor 2 - Variable Refrigerant Flow**

### Design Air Conditions

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling supply</td>
<td>56.0 °F</td>
<td>54.0 °F</td>
</tr>
<tr>
<td>Leaving cooling coil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating supply</td>
<td>98.0 °F</td>
<td>95.0 °F</td>
</tr>
<tr>
<td>Supply duct temperature</td>
<td>0.0 °F</td>
<td></td>
</tr>
<tr>
<td>Reheat Temperature diff</td>
<td>0.0 °F</td>
<td></td>
</tr>
<tr>
<td>Design humidity ratio diff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min room relative humidity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Optional Ventilation

<table>
<thead>
<tr>
<th>Configuration:</th>
<th>Cooling SADB:</th>
<th>Heating SADB:</th>
<th>Heating SADP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dehumidify (priority) or Cool / Heat</td>
<td>60 °F</td>
<td>68 °F</td>
<td>Cooling SADB hi limit:</td>
</tr>
<tr>
<td>Control method:</td>
<td>Optimize</td>
<td>Supply Air Dew Point</td>
<td>Cooling SADB low limit:</td>
</tr>
<tr>
<td>Deck location:</td>
<td>Ducted</td>
<td>Cooling SADP:</td>
<td>Cooling SADP low limit:</td>
</tr>
<tr>
<td>Level location:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling schedule:</td>
<td>Available (100%)</td>
<td>Heating schedule:</td>
<td>Available (100%)</td>
</tr>
</tbody>
</table>

### Stage 1 Exhaust Air Heat Recovery

<table>
<thead>
<tr>
<th>Type: Total-energy wheel (OA precondition)</th>
<th>Sup-side deck: Ventilation upstream</th>
<th>Exh-side deck: System exhaust</th>
<th>Schedule: Available (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clg effectiveness at 100% airflow: 74%</td>
<td>Htg effectiveness at 100% airflow: 74%</td>
<td>Clg effectiveness at 100% airflow: 71%</td>
<td>Htg effectiveness at 100% airflow: 71%</td>
</tr>
<tr>
<td>Clg effectiveness at 75% airflow: 79%</td>
<td>Htg effectiveness at 75% airflow: 79%</td>
<td>Clg effectiveness at 75% airflow: 75%</td>
<td>Htg effectiveness at 75% airflow: 75%</td>
</tr>
<tr>
<td><strong>Supply Side Options</strong></td>
<td><strong>Exhaust Side Options</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design air leaving dry bulb:</td>
<td>Heat source:</td>
<td><strong>Frost prevention</strong></td>
<td></td>
</tr>
<tr>
<td>Design air leaving humidity ratio:</td>
<td>Fan static pressure :</td>
<td>Type: Off</td>
<td></td>
</tr>
<tr>
<td>Coolant type: N/A</td>
<td>1.0 in. wg</td>
<td>Set point</td>
<td></td>
</tr>
<tr>
<td>Coolant approach: N/A</td>
<td>Bypass dampers:</td>
<td>OA threshold:</td>
<td></td>
</tr>
<tr>
<td>Parasitic energy: 0.4 kW</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economizer lockout:</strong></td>
<td>Part load control: Modulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply Side Options</strong></td>
<td>Static pressure drop:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economizer lockout:</strong></td>
<td>Bypass dampers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply Side Options</strong></td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Advanced Options

<table>
<thead>
<tr>
<th>Cooling coil sizing method: Block</th>
<th>Cooling coil location: Room</th>
<th>Cooling coil location: Room</th>
<th>Return fan motor location: Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block cooling airflow:</td>
<td>Ducted</td>
<td>Return fan motor location:</td>
<td>Supply fan configuration: Blow Thru</td>
</tr>
<tr>
<td>Ventilation deck location: Ducted</td>
<td>Supply duct location: Other</td>
<td>Supply fan sizing: Peak</td>
<td></td>
</tr>
<tr>
<td>Supply duct location: Ducted</td>
<td>Return air path: DUCTED</td>
<td>Fan mechanical efficiency : 75%</td>
<td>Std62 Max Vent (Z) Ratio:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supply air path / duct location: Other</td>
<td>Night purge schedule: Off (0%)</td>
</tr>
<tr>
<td>Reset per worst case room schedule: Off (0%)</td>
<td>Max reset:</td>
<td>Space convective gains to occupied layer: 100 %</td>
<td>Optimum start schedule: Off (0%)</td>
</tr>
<tr>
<td>Use system default outside air reset: Yes</td>
<td></td>
<td>Conductive resistance of raised floor: 0.8 hr·ft²·°F/Btu</td>
<td>Optimum stop schedule: Off (0%)</td>
</tr>
<tr>
<td>Auxiliary cooling coil Activate After Primary System</td>
<td>Control Method</td>
<td>CO2-based DCV: Proportional Control</td>
<td>Supply air path / duct location: Other</td>
</tr>
<tr>
<td>Auxiliary heating coil Activate After Primary System</td>
<td>Control Type</td>
<td>System ventilation flag: ASHRAE Std 62.1-2004-2010 w/ Vent Reset</td>
<td>Space convective gains to occupied layer: 100 %</td>
</tr>
<tr>
<td>Auxiliary fan No Fan</td>
<td>Control Method</td>
<td>Underfloor plenum height:</td>
<td>Conductive resistance of raised floor: 0.8 hr·ft²·°F/Btu</td>
</tr>
<tr>
<td></td>
<td>Control Type</td>
<td>Upstream nominal leakage fraction: 0 %</td>
<td>Downstream constant leakage fraction: 0 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aux cooling coil losses to plenum: 0 %</td>
<td></td>
</tr>
</tbody>
</table>

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017

**Alternative - 1 Entered Values Systems** page 1 of 5
## VRF Floor 2 - Variable Refrigerant Flow

### Coils

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Schedule</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main cooling: 100.0 % of Design Capacity by adjusting airflow</td>
<td>Available (100%)</td>
<td>People 100%</td>
</tr>
<tr>
<td>Aux cooling:</td>
<td>Available (100%)</td>
<td>Lights 100%</td>
</tr>
<tr>
<td>Main heating: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td>Misc loads 100%</td>
</tr>
<tr>
<td>Aux heating:</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Preheat: 100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Reheat: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Humidification: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
</tbody>
</table>

### Fans

<table>
<thead>
<tr>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>VRF Indoor Unit Ducted - PEFY</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00052 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Secondary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Return</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>System Exhaust</td>
<td>FC Centrifugal var freq driv</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>FC Centrifugal const vol</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00032 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Optional ventilation</td>
<td>FC Centrifugal var freq driv</td>
<td>1.5 in. wg</td>
<td>NA</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Newington Ventilation</td>
<td>90</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
</tbody>
</table>

### Design Air Conditions

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling supply:</td>
<td>56.0 °F</td>
<td>54.0 °F</td>
</tr>
<tr>
<td>Heating supply:</td>
<td>98.0 °F</td>
<td>95.0 °F</td>
</tr>
</tbody>
</table>

### Optional Ventilation

<table>
<thead>
<tr>
<th>Configuration:</th>
<th>Dehumidify (priority) or Cool / Heat</th>
<th>Cooling SADB:</th>
<th>Cooling SADB hi limit:</th>
<th>Heating SADB:</th>
<th>Heating SADB low limit:</th>
<th>Cooling schedule:</th>
<th>Heating schedule:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control method:</td>
<td>Optimize Supply Air Dew Point</td>
<td>Cooling SADP:</td>
<td>Cooling SADP hi limit:</td>
<td>Heating SADP:</td>
<td>Cooling SADP low limit:</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
</tr>
<tr>
<td>Deck location:</td>
<td>Ducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level location:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Stage 1 Exhaust Air Heat Recovery

<table>
<thead>
<tr>
<th>Type:</th>
<th>Total-energy wheel (OA precondition)</th>
<th>Sup-side deck:</th>
<th>Ventilation upstream</th>
<th>Exh-side deck:</th>
<th>System exhaust</th>
<th>Schedule:</th>
<th>Available (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Ig effectiveness at 100% airflow:</td>
<td>74%</td>
<td>Htg effectiveness at 100% airflow:</td>
<td>74%</td>
<td>C Ig effectiveness at 100% airflow:</td>
<td>71%</td>
<td>Htg effectiveness at 100% airflow:</td>
<td>71%</td>
</tr>
<tr>
<td>C Ig effectiveness at 75% airflow:</td>
<td>79%</td>
<td>Htg effectiveness at 75% airflow:</td>
<td>79%</td>
<td>C Ig effectiveness at 75% airflow:</td>
<td>75%</td>
<td>Htg effectiveness at 75% airflow:</td>
<td>75%</td>
</tr>
</tbody>
</table>

### Exhaust Side Options

<table>
<thead>
<tr>
<th>Heat source: 200 °F</th>
<th>Fan static pressure: 0.0 in. wg</th>
<th>Fan static pressure drop: 1.0 in. wg</th>
<th>Integral heat recovery: No</th>
<th>Bypass dampers: Yes</th>
<th>Frost prevention</th>
<th>Evap precooler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: None</td>
<td>Dry Eff:</td>
<td>Max OA:</td>
<td>Min OA:</td>
<td>Swovr Oadb:</td>
<td>Blowdown Rat:</td>
<td>Circ Pump:</td>
</tr>
<tr>
<td>Default Eff:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017

**Alternative - 1 Entered Values Systems** page 2 of 5
**SYSTEM ENTERED VALUES**

**VRF Floor 2 - Variable Refrigerant Flow**

### Advanced Options

- **Cooling coil sizing method:** Block
- **Cooling coil location:** Room
- **Ventilation deck location:** Ducted
- **Supply duct location:** Other
- **Return air path:** DUCTED

### Controls

- **Control Method:** None
- **Control Type:** None

### Cooling Coil Sizing

- **Main cooling:** 100.0% of Design Capacity by adjusting airflow
- **Aux cooling:** Available (100%)
- **Main heating:** 100.0% of Design Capacity
- **Aux heating:** Available (100%)

### Humidification

- **Humidification:** 100.0% of Design Capacity

### Capacity Schedule

- **People:** 100%
- **Lights:** 100%
- **Misc loads:** 100%

### Fans

<table>
<thead>
<tr>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>VRF Indoor Unit Ducted - PEFY</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00052 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Secondary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Return</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>System Exhaust</td>
<td>FC Centrifugal var freq driv</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Room Exhaust</td>
<td>FC Centrifugal const vol</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00032 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Optional ventilation</td>
<td>FC Centrifugal var freq driv</td>
<td>1.5 in. wg</td>
<td>NA</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Newport Cooling</td>
<td>90</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Fan Cycling</td>
<td></td>
<td></td>
<td></td>
<td>Cycle with occupancy</td>
<td>0.0 ft</td>
<td>90</td>
</tr>
</tbody>
</table>

**System ventilation flag:** ASHRAE Std 62.1-2004-2010 w/ Vent Reset
## SYSTEM ENTERED VALUES

### Kitchen MAU - Ventilation and Heating

#### Design Air Conditions

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling supply:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaving cooling coil:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating supply:</td>
<td>90.0 °F</td>
<td>70.0 °F</td>
</tr>
<tr>
<td>Supply duct temperature diff:</td>
<td>0.0 °F</td>
<td></td>
</tr>
<tr>
<td>Reheat Temperature diff:</td>
<td></td>
<td>0.0 °F</td>
</tr>
<tr>
<td>Design humidity ratio diff:</td>
<td></td>
<td>Min room relative humidity:</td>
</tr>
</tbody>
</table>

#### Advanced Options

- **Cooling coil sizing method:** No Coil
- **Cooling coil location:** Room
- **Block cooling airflow:** Cooling coil sizing:
- **Ventilation deck location:** Return/Outdoor Deck
- **Supply duct location:** Return Air
- **Return air path:** DUCTED
- **Supply fan sizing:** No Fan
- **Supply fan motor location:** Supply
- **Return fan motor location:** Return
- **Cooling coil location:** No Coil
- **Ventilation deck location:** Return/Outdoor Deck
- **Supply duct location:** Return Air
- **Return air path:** DUCTED
- **Fan mechanical efficiency:** 75%
- **Supply duct temperature diff:** 0.0 °F
- **Return duct temperature diff:** 0.0 °F
- **Design humidity ratio diff:** Min room relative humidity:
- **Min room relative humidity:**

#### Reset per worst case room schedule:

- **Off (0%)**

#### Use system default outside air reset:

- **Yes**

#### Auxiliary cooling coil

- **Control Method:** Activate After Primary System
- **Control Type:** None

#### Auxiliary heating coil

- **Control Method:** Activate After Primary System
- **Control Type:** None

#### Auxiliary fan

- **Control Method:** No Fan
- **Control Type:**

#### Coils

| Main cooling: | 0.0 % of Design Capacity by adjusting airfl | Available (100%) |
| Aux cooling:  | Available (100%)                          | People 100%     |
| Main heating: | 100.0 % of Design Capacity                 | Available (100%) |
| Aux heating:  | Available (100%)                          | Misc loads 100% |
| Preheat:      | 100.0 % of Design Capacity                 | Available (100%) |
| Reheat:       | 100.0 % of Design Capacity                 | Available (100%) |
| Humidification: | 100.0 % of Design Capacity           | Available (100%) |

#### Fans

<table>
<thead>
<tr>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Secondary FC Centrifugal const vol</td>
<td>1.0 in. wg</td>
<td>NA</td>
<td>0.00032 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Return</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>System Exhaust</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Room Exhaust FC Centrifugal const vol</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00032 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Optional ventilation</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Auxiliary</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Fan Cycling</td>
<td>None</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Design Air Conditions

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling supply:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaving cooling coil:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating supply:</td>
<td>90.0 °F</td>
<td>70.0 °F</td>
</tr>
<tr>
<td>Supply duct temperature diff:</td>
<td>0.0 °F</td>
<td></td>
</tr>
<tr>
<td>Reheat Temperature diff:</td>
<td></td>
<td>0.0 °F</td>
</tr>
<tr>
<td>Design humidity ratio diff:</td>
<td></td>
<td>Min room relative humidity:</td>
</tr>
</tbody>
</table>

---

Project Name: TRUMBULL COMMUNITY CENTER

Dataset Name: TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
### Advanced Options

<table>
<thead>
<tr>
<th>Supply Duct Location</th>
<th>Return Air Path</th>
<th>Night Purge Schedule</th>
<th>Optimum Start Schedule</th>
<th>Optimum Stop Schedule</th>
<th>CO2-based DCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return Air</td>
<td>DUCTED</td>
<td>Off (0%)</td>
<td>Off (0%)</td>
<td>Off (0%)</td>
<td>None</td>
</tr>
</tbody>
</table>

### System Entered Values

#### Kitchen MAU - Ventilation and Heating

#### System Entered Values

<table>
<thead>
<tr>
<th>Cooling Coil Sizing Method</th>
<th>Supply Fan Motor Location</th>
<th>Return Fan Motor Location</th>
<th>Supply Fan Configuration</th>
<th>Night Purge Schedule</th>
<th>Optimum Start Schedule</th>
<th>Optimum Stop Schedule</th>
<th>CO2-based DCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Coil</td>
<td>Supply</td>
<td>Return</td>
<td>Draw Thru</td>
<td>Off (0%)</td>
<td>Off (0%)</td>
<td>Off (0%)</td>
<td>None</td>
</tr>
</tbody>
</table>

#### Reset per Worst Case Room Schedule

<table>
<thead>
<tr>
<th>Use System Default Outside Air Reset</th>
<th>CO2-based DCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>None</td>
</tr>
</tbody>
</table>

#### System Ventilation Flag

<table>
<thead>
<tr>
<th>Sum Room OA Reqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ducted Room OA</td>
</tr>
</tbody>
</table>

#### Control Method

<table>
<thead>
<tr>
<th>Auxiliary Cooling Coil</th>
<th>Auxiliary Heating Coil</th>
<th>Auxiliary Fan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate After Primary System</td>
<td>Activate After Primary System</td>
<td>No Fan</td>
</tr>
</tbody>
</table>

#### Main Cooling

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

#### Auxiliary Heating

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Optional Ventilation

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Humidification

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Static Press.

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### System Exhaust

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Room Exhaust

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Optional Ventilation

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Auxiliary Fan

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

#### Fan Cycling

<table>
<thead>
<tr>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle with occupancy 0.0 ft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ECONOMIC PARAMETERS

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Location:** TRUMBULL, CT

**Study Life:** 20 Yrs  
**Mortgage Life:** 20 Yrs  
**Depreciation Life:** 20 Yrs  
**Mortgage Interest Rate:** 10.000 %  
**Percent Financed:** 0.0 %  
**Depreciation Method:** None

**Income Tax Rate:** 0.000 %  
**Cost of Capital:** 10.000 %  
**Property tax rate:** 0.000 %  
**Insurance Expense rate:** 0.000 %

**Annual Inflation Rate Of**
- Maintenance Expense: 0.000 %
- Replacement Expense: 0.000 %
- Property Taxes: 0.000 %
- Insurance Expense: 0.000 %

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
### Cooling Plant: VRF UPPER FLOOR

**Sizing method:** Peak  
**Heat rejection type:** None  
**Secondary distribution pump:** None  
**Secondary pump consumption:** 0 Ft Water  
**Thermal storage capacity:** 0 ton-hr  
**Thermal storage schedule:** Off (0%)  

**Geothermal Loop**  
- **TLoop Ent Bldg:** None  
- **Flow scheme:** Fully mixed  
- **Flow rate:** 100.00% of condenser flow rate  
- **Loop fluid glycol:** 0%  
- **Heat exchanger approach:** 0°F  
- **Loop pump:** None  
- **Pump F.L. rate:** 0.00 ft water  

#### Equipment tag: VRF UPPER FLOOR

**Cooling Type:** Trane VRF Heat Recovery 26-36 Ton  

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Capacity</th>
<th>Energy Rate</th>
<th>Pumps</th>
<th>Full Load Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling:</td>
<td></td>
<td>3.7600</td>
<td>Chilled water: None</td>
<td></td>
</tr>
<tr>
<td>Heat recovery:</td>
<td>13.5 Mbh/ton</td>
<td>4.1600 Package COP</td>
<td>Condenser water: None</td>
<td></td>
</tr>
<tr>
<td>Tank charging:</td>
<td></td>
<td></td>
<td>Heat recovery or aux cond: None</td>
<td></td>
</tr>
<tr>
<td>Heat Recovery and Thermal Storage</td>
<td></td>
<td></td>
<td>Free cooling: None</td>
<td></td>
</tr>
</tbody>
</table>

**Heat rejection type:** Included in Compressor Power  
**Thermal storage type:** None  
**T-storage capacity:** 0 ton-hr  
**T-storage schedule:** Storage  

**Sequencing type:** Single  
**Demand lim priority:**  
**Dsn chilled water delta T:** 10 °F  
**Dsn cond water delta T:** 0 °F  

**Reset Based On**  
- **Max Reset TD:** 0°F  

**Package energy breakout**  
- **Primary fan:** No  
- **Secondary fan:** No  
- **Exhaust fan:** No  
- **Optional ventilation fan:** No  
- **Condenser fan:** Yes  

**Apply same fans for heat recovery energy breakout:** No
### Heating Plant: BOILER

- **Sizing method:** Peak
- **Cogeneration type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr

### Equipment tag: BOILER

- **Heating capacity:** 125.0 % Plant Capacity
- **Energy rate:** 94.00 % Effic.
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Storage
- **Equipment schedule:** Available (100%)
- **Demand limiting priority:**

### Heating Plant: DHW Boiler

- **Sizing method:** Peak
- **Cogeneration type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr

### Equipment tag: DHW Boiler

- **Heating capacity:** 500.0 Mbh
- **Energy rate:** 94.00 % Effic.
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Storage
- **Equipment schedule:** Available (100%)
- **Demand limiting priority:**

### Heating Plant: MAU KITCHEN

- **Sizing method:** Peak
- **Cogeneration type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr

### Equipment tag: MAU KITCHEN

- **Heating capacity:**
- **Energy rate:** 80.00 % Effic.
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Storage
- **Equipment schedule:** Available (100%)
- **Demand limiting priority:**
### ENTERED VALUES

## PLANTS

### Base Utilities

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>Stand-alone</th>
<th>Type: IT Load</th>
<th>Demand limiting priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description: IT Load</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>Stand-alone</th>
<th>Type: Exterior Lights</th>
<th>Demand limiting priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description: Exterior Lights</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>Stand-alone</th>
<th>Type: Elevator</th>
<th>Demand limiting priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description: Elevator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>Stand-alone</th>
<th>Type: Rooftop Exhaust Fan</th>
<th>Demand limiting priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description: Rooftop Exhaust Fan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>DHW Boiler</th>
<th>Type: Domestic Hot Water Load</th>
<th>Demand limiting priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description: Domestic Hot Water Load</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Miscellaneous accessories

<table>
<thead>
<tr>
<th>Plant assigned to:</th>
<th>BOILER</th>
<th>Type: None</th>
<th>Schedule: Off (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment tag:</td>
<td>All</td>
<td>Description:</td>
<td>Energy: 0.00 kW</td>
</tr>
</tbody>
</table>

---

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: CC 2ND FL.TRC

TRACE® 700 v6.3.2 calculated at 11:30 AM on 09/22/2017
Alternative - 1  Entered Values - Plants Page 3 of 3
## TRUMBULL COMMUNITY CENTER

### 1ST FLOOR SPACES

<table>
<thead>
<tr>
<th>Location</th>
<th>TRUMBULL, CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building owner</td>
<td></td>
</tr>
<tr>
<td>Program user</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

| By             |              |
| Dataset name   |              |

| Calculation time | 11:42 AM on 09/22/2017 |
| TRACE® 700 version | 6.3.2 |
| Location         | Hartford, Connecticut |
| Latitude         | 41.0 deg |
| Longitude        | 72.0 deg |
| Time Zone        | 5 |
| Elevation        | 15 ft |
| Barometric pressure | 29.9 in. Hg |
| Air density      | 0.0760 lb/cu ft |
| Air specific heat | 0.2444 Btu/lb·°F |
| Density-specific heat product | 1.1147 Btu/h·cfm·°F |
| Latent heat factor | 4,906.9 Btu·min/h·cu ft |
| Enthalpy factor  | 4.5604 lb·min/hr·cu ft |
| Summer design dry bulb | 88.0 °F |
| Summer design wet bulb | 73.0 °F |
| Winter design dry bulb | 7.0 °F |
| Summer clearness number | 1.00 |
| Winter clearness number | 1.00 |
| Summer ground reflectance | 0.20 |
| Winter ground reflectance | 0.20 |
| Carbon Dioxide Level | 400 ppm |
| Design simulation period | January - December |
| Cooling load methodology | TETD-TA1 |
| Heating load methodology | UATD |
**Energy Cost Budget / PRM Summary**

| Project Name: TRUMBULL COMMUNITY CENTER | Date: September 22, 2017 |
| City: TRUMBULL, CT | Weather Data: Hartford, Connecticut |

Note: The percentage displayed for the "Proposed/Base %" column of the base case is actually the percentage of the total energy consumption.

* Denotes the base alternative for the ECB study.

<table>
<thead>
<tr>
<th>* Alt-1 TRUMBULL COMMUNITY</th>
<th>Proposed / Base %</th>
<th>Peak kBtuh</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lighting - Conditioned</strong></td>
<td>Electricity</td>
<td>17.9</td>
</tr>
<tr>
<td><strong>Space Heating</strong></td>
<td>Electricity</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>106.0</td>
</tr>
<tr>
<td><strong>Space Cooling</strong></td>
<td>Electricity</td>
<td>12.2</td>
</tr>
<tr>
<td><strong>Fans - Conditioned</strong></td>
<td>Electricity</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Receptacles - Conditioned</strong></td>
<td>Electricity</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>Total Building Consumption</strong></td>
<td></td>
<td><strong>172.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Alt-1 TRUMBULL COMMUNITY</th>
<th>Number of hours heating load not met</th>
<th>Number of hours cooling load not met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>* Alt-1 TRUMBULL COMMUNITY</th>
<th>Energy 10^6 Btu/yr</th>
<th>Cost/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electricity</strong></td>
<td>66.0</td>
<td>3,093</td>
</tr>
<tr>
<td><strong>Gas</strong></td>
<td>106.0</td>
<td>1,378</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>172</td>
<td>4,471</td>
</tr>
</tbody>
</table>
### Monthly Energy Consumption

#### Alternative: 1  TRUMBULL COMMUNITY CENTER

<table>
<thead>
<tr>
<th>Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electric</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Pk Cons. (kWh)</td>
<td>2,144</td>
<td>1,944</td>
<td>1,953</td>
<td>1,431</td>
<td>1,375</td>
<td>1,272</td>
<td>1,285</td>
<td>1,338</td>
<td>1,255</td>
<td>1,552</td>
<td>1,734</td>
<td>2,044</td>
<td>19,328</td>
</tr>
<tr>
<td>On-Pk Demand (kW)</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td><strong>Gas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Pk Cons. (therms)</td>
<td>95</td>
<td>85</td>
<td>80</td>
<td>93</td>
<td>86</td>
<td>78</td>
<td>100</td>
<td>79</td>
<td>92</td>
<td>86</td>
<td>86</td>
<td>102</td>
<td>1,060</td>
</tr>
<tr>
<td>On-Pk Demand (therms/hr)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Energy Consumption**

- Building: 36,432 Btu/(ft²-year)
- Source: 65,565 Btu/(ft²-year)
- Floor Area: 4,721 ft²

**Environmental Impact Analysis**

<table>
<thead>
<tr>
<th></th>
<th>CO₂</th>
<th>SO₂</th>
<th>NOₓ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13,353 lbm/year</td>
<td>45 gm/year</td>
<td>16 gm/year</td>
</tr>
</tbody>
</table>

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: CC 1ST FL.TRC
### Alternative: 1  TRUMBULL COMMUNITY CENTER

#### Monthly Consumption

<table>
<thead>
<tr>
<th>Equipment - Utility</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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| Misc. Ld            |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Electric (kWh)      | 267.9 | 242.2 | 282.2 | 257.0 | 275.1 | 271.3 | 260.8 | 282.2 | 257.0 | 275.1 | 261.4 | 260.8 | 3,195.5 |
| Peak (kW)           | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5  | 1.5 |

| Cooling Coil Condensate |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Recoverable Water (1000gal) | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.2  | 0.1  | 0.0  | 0.0  | 0.1  | 0.0  | 0.0  | 0.1 |
| Proc. Hot Water (therms) | 86.2  | 77.7  | 73.2  | 85.5  | 79.7  | 72.5  | 92.7  | 73.2  | 85.5  | 79.7  | 79.0  | 92.7  | 977.6 |
| Peak (therms/HR)      | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3 |

| Bsu 1: Domestic Hot Water Load |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Proc. Hot Water (therms) | 86.2  | 77.7  | 73.2  | 85.5  | 79.7  | 72.5  | 92.7  | 73.2  | 85.5  | 79.7  | 79.0  | 92.7  | 977.6 |
| Peak (therms/HR)      | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3 |

| Cpl 1: VRF LOWER FLOOR [Sum of dsn coil capacities=4.43 tons] |     |     |     |     |     |      |      |     |      |     |     |     |       |
| VRF LOWER FLOOR [Ctg Nominal Capacity/F.L.Rate=4.43 tons / 3.97 kW] | 0.0  | 0.0  | 0.0  | -0.2  | 0.8  | 28.1  | 89.0  | 57.8  | 11.7  | -0.1  | 0.0  | 0.0  | 187.2 |
| Peak (kW)           | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 0.4  | 1.3  | 1.0  | 0.5  | 0.0  | 0.0  | 0.0  | 1.3 |
| VRF LOWER FLOOR [Htg Nominal Capacity/F.L.Rate=59.85 mbh / 4.08 kW] | 698.5  | 630.8  | 483.6  | 187.7  | 122.5  | 14.6  | 6.6  | 15.2  | 58.5  | 230.4  | 375.1  | 635.5  | 3,458.8 |
| Peak (kW)           | 1.6  | 1.6  | 1.4  | 1.0  | 0.6  | 0.3  | 0.1  | 0.2  | 0.6  | 0.8  | 1.2  | 1.5  | 1.6 |
| Cpl 1: VRF LOWER FLOOR [Cooling Equipment - Heat Recovered From Condenser Loop] |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Energy Recovered (therms) | 0.0  | 0.0  | 0.0  | 0.2  | 1.2  | 1.9  | 1.8  | 2.5  | 1.8  | 1.2  | 0.0  | 0.0  | 10.6 |
| Peak (therms/HR)      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 |

| Cntl panel & interlocks - 0.5 KW [F.L.Rate=0.50 kW] |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Electric (kWh)      | 372.0  | 336.0  | 372.0  | 360.0  | 343.0  | 261.0  | 252.0  | 258.5  | 298.0  | 372.0  | 360.0  | 372.0  | 3,956.5 |
| Peak (kW)           | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.5 |

| Heat pump defrost cycle [F.L.Rate=1.42 kW] |     |     |     |     |     |      |      |     |      |     |     |     |       |
| Electric (kWh)      | 52.8  | 47.7  | 37.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 11.0  | 23.4  | 44.0  | 216.2 |
| Peak (kW)           | 0.1  | 0.1  | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 0.1  | 0.1  | 0.1 |
### EQUIPMENT ENERGY CONSUMPTION

#### Alternative: 1  TRUMBULL COMMUNITY CENTER

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<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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Project Name: TRUMBULL COMMUNITY CENTER

Dataset Name: CC 1ST FL TRC

TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017
Alternative - 1  Equipment Energy Consumption report page 2 of 2
### System Component Selection Summary

#### Alternative 1

**System Description:** VRF Floor 1  
System Type: Variable Refrigerant Flow  
Number of Zones: 16  
Number of Rooms: 16

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<th>Component</th>
<th>Sizing Method</th>
<th>Location</th>
<th>Quantity</th>
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<tr>
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<td>Room</td>
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<tr>
<td>Primary Clg Fan</td>
<td>Peak</td>
<td>Room</td>
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<td>Block</td>
<td>System</td>
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<td><strong>Heating</strong></td>
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<td>Room</td>
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#### Cooling Coil Selection

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<th>Sensible Capacity MBh</th>
<th>Airflow At Coil Peak cfm</th>
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<th>Leave DB/ WB/ HR °F °F gr/lb</th>
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#### Heating Coil Selection

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<th>Airflow cfm</th>
<th>Entering Dry Bulb °F</th>
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## System Component Selection Summary

### Heating Coil Selection

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<th>Airflow cfm</th>
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<th>Outside Air %</th>
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### Entered Values

**TRACE® 700 version 6.3.2**

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<tr>
<td><strong>Peak Hour Override:</strong> 0</td>
<td><strong>Summer Design Wet Bulb:</strong> 73.00 °F</td>
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<td><strong>Daylight Savings Period:</strong></td>
<td><strong>Winter Design Dry Bulb:</strong> 7.00 °F</td>
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<td><strong>Summer Clearness Number:</strong> 1.00</td>
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<tr>
<td><strong>Cooling Methodology:</strong> TETD-TA1</td>
<td><strong>Winter Clearness Number:</strong> 1.00</td>
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<td><strong>Summer Ground Reflectance:</strong> 0.20</td>
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<tr>
<td><strong>Infiltration Methodology:</strong> Vary with wind speed</td>
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<td><strong>Force VAV Min =&gt; Nominal Ventilation at Design:</strong> No</td>
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<td><strong>Room Circ Rate:</strong> Medium</td>
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<td><strong>Wall Load To Plenum:</strong> YES</td>
<td><strong>Retest Design Peaks:</strong> Yes</td>
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<td><strong>Calculate Building Block Loads:</strong> No</td>
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<td><strong>Simulation Hours:</strong> Reduced year</td>
<td><strong>Close ventilation dampers during unoccupied hours:</strong> Yes</td>
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<td><strong>Calendar Code:</strong> Standard (1978)</td>
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**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:**

**Location:** TRUMBULL, CT

**Building Owner:**

**Program User:**

**Company:**

**Comments:**
### Room Description: 067 LOBBY/FOYER

- **Floor Area:** 1,100 ft²
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **People Type:** None
- **# of People:** 6 People
- **People Sensible:** 245 Btu/h
- **People Latent:** 155 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0
- **Design Clg DB / Drift Point:** 50 %
- **Floor Multiplier:** 1
- **Ceiling clg supply, ceiling return, Ceiling supply > Trm+15°F, ceiling return**
- **Design Clg / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 70.0 °F / 70.0 °F
- **Room Multiplier:** 6 People
- **Room Sensible:** 6 People
- **0.6 W/sq ft
- **Height Above Flr:** 10.0 ft
- **People Sensible:** 245 Btu/h
- **People Latent:** 155 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0
- **Design Clg / Drift Point:** 50 %
- **Floor Multiplier:** 1
- **Ceiling clg supply, ceiling return, Ceiling supply > Trm+15°F, ceiling return**
- **Design Clg / Drift Point:** 74.0 °F / 74.0 °F
- **Design Relative Humidity:** 70.0 °F / 70.0 °F
- **Room Multiplier:** 6 People

### Zone Description: No Zone

- **Vent Type:** Office space
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Sched:** Available (100%)
- **Infil Type:** Neutral, Tight Const.
- **Infil Value:** 0.30 air changes/hr
- **Infil Sched:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated
- **Room Exhaust Sched:** Available (100%)

### System Description: VRF Floor 1

- **Cooling (Peop-based):** Office space
- **Heating (Area-based):** Office space
- **Vent Type:** Office space
- **Vent Value:** 0.06 cfm/sq ft
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infil Type:** Neutral, Tight Const.
- **Infil Value:** 0.30 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** To be calculated
- **Room Exhaust Sched:** Available (100%)

### Glass Properties

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**TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017**

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** Alternative - 1 Entered Values - Rooms Page 1 of 9
### Room Description: 073 POOL STORAGE

#### GENERAL INFORMATION
- **Floor Area:** 145 ft²
- **Plenum Height:** 0.0 ft
- **Slab Cntr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Htg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg Supply:** Medium
- **Design Clg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Clg Supply:** Medium
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium
- **Ceiling supply > Trm+15°F(8°C), ceiling return:** Available (100%)
- **Room Exhaust:** None
- **System Description:** VRF Floor 1

#### PEOPLE
- **People Type:** None
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

#### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
to space
- **Lighting Schedule:** Trumbull building lighting storage
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

#### AIRFLOW INFORMATION
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Off (0%)
### Room Values: 108 CHEM & ELEC

**GENERAL INFORMATION**
- **Floor Area:** 100 ft²
- **Gross Area:** 100 ft²
- **Plenum Height:** 0.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 0.786 hr·ft²·°F/Btu
- **Design Htg DB / Drift Point:** 70.0 °F
- **Design Clg DB / Drift Point:** 60.0 °F
- **Ceiling Height:** 24.0 ft
- **Room Height:** 10.0 ft
- **Design Relative Humidity:** 40 %
- **Ceiling Height Above Fir:** 10.0 ft
- **Design Relative Humidity:** 40 %
- **Ceiling Height Above Fir:** 10.0 ft

**PEOPLE**
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 0 Btu/h
- **People Latent:** 0 Btu/h

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Classroom/Recreational

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Storage
- **Lighting Amount:** 0.6 W/sq ft

### Room Values: 113 FAMILY LOCKER

**GENERAL INFORMATION**
- **Floor Area:** 600 ft²
- **Gross Area:** 600 ft²
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 0.786 hr·ft²·°F/Btu
- **Design Htg DB / Drift Point:** 70.0 °F
- **Design Clg DB / Drift Point:** 60.0 °F
- **Ceiling Height:** 24.0 ft
- **Room Height:** 10.0 ft
- **Design Relative Humidity:** 40 %
- **Ceiling Height Above Fir:** 10.0 ft
- **Design Relative Humidity:** 40 %
- **Ceiling Height Above Fir:** 10.0 ft

**PEOPLE**
- **People Type:** None
- **# of People:** 4 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
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- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**

**ENERGY TYPE**
- **Type:** Area
- **Area:** 100 ft²
- **Shade:** 0.6 W/sq ft
- **Lighting Schedule:** Trumbull lighting
- **People Schedule:** Trumbull Occ Gym/Pool

**Tilt**
- **Tilt:** 0.6588
- **Tilt Type:** Conditioned

**LIGHTS**
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Lighting Schedule:** Trumbull lighting Gym/Pool
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM INFORMATION**
### Room Description: 119 LOCKER CORRIDOR

**GENERAL INFORMATION**
- **Floor Area:** 300 ft²
- **Ft/Ft Height:** 24.0 ft
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr-ft²·°F/Btu

**Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium

**Ctg Tstt:** None
- **Thermolocation:** Room
- **Floor Multiplier:** 1
- **Humidistat Location:** Room
- **Room Multiplier:** 1
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

<table>
<thead>
<tr>
<th><strong>Description</strong></th>
<th><strong>Area</strong></th>
<th><strong>Const Type / Area</strong></th>
<th><strong>U Value</strong></th>
<th><strong>Type / Energy Type</strong></th>
<th><strong>Shading</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Floor - 1</strong></td>
<td>300 ft²</td>
<td></td>
<td>0.6588</td>
<td>Constant</td>
<td></td>
<td></td>
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</tbody>
</table>

### Room Description: 127 LIFEGUARD OFFICE

**GENERAL INFORMATION**
- **Floor Area:** 345 ft²
- **Ft/Ft Height:** 24.0 ft
- **Plenum Height:** 0.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Ceiling R-Value:** 1.786 hr-ft²·°F/Btu

**Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50%
- **Moisture Capacitance:** Medium

**Ctg Tstt:** None
- **Thermolocation:** Room
- **Floor Multiplier:** 1
- **Humidistat Location:** Room
- **Room Multiplier:** 1
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

<table>
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<th><strong>Description</strong></th>
<th><strong>Area</strong></th>
<th><strong>Const Type / Area</strong></th>
<th><strong>U Value</strong></th>
<th><strong>Type / Energy Type</strong></th>
<th><strong>Shading</strong></th>
<th><strong>Shading</strong></th>
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<td>345 ft²</td>
<td></td>
<td>0.6588</td>
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</table>
### Room Description: 128 WOMENS LOCKER

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<th>Const Type / Dim</th>
<th>U Value Type</th>
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<th>U Value</th>
<th>External</th>
<th>Internal</th>
<th>Shading</th>
<th>Shading</th>
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</thead>
<tbody>
<tr>
<td>Floor Area</td>
<td>435 ft²</td>
<td>6&quot; HW Conc</td>
<td>0.6588</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### GENERAL INFORMATION

- **Floor Area**: 435 ft²
- **Flr-Fr Height**: 24.0 ft
- **Plenum Height**: 10.0 ft
- **Height Above Flr**: 6" HW Conc
- **Slab Cnstr Type**: 4" LW Concrete
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Is there Carpet?**: YES
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50 %
- **Moisture Capacitance**: Medium
- **Cig Ttat**: None
- **Htg Ttat**: None
- **Thermostat Location**: Room
- **Floor Multiplier**: 1
- **Humidistat Location**: Room
- **Room Multiplier**: 1
- **CO2 Sensor Location**: Room
- **Room Type**: Conditioned

#### PEOPLE

- **People Type**: None
- **# of People**: 5 People
- **People Sensible**: 250 Btu/h
- **People Latent**: 250 Btu/h
- **People Schedule**: Trumbull Occ Classroom/Recreational
- **Fixure Type**: RECFL-NV
- **Lighting Amount**: 0.6 W/sq ft
- **Ballast Factor**: 1.0
- **Workstation**: 1.0 workstation/person

#### LIGHTS

- **Lighting Type**: Recessed fluorescent, not vented, 80% load to space
- **% Load to RA**: 20 %
- **Lighting Schedule**: Trumbull lighting Classroom/Recreational
- **Lighting Schedule**: Workstation: 1.0 workstation/person

#### AIRFLOW INFORMATION

- **Vent Type**: Office space
- **Vent Value**: 0.00 cfm/person
- **Vent Value**: 0.38 cfm/sq ft
- **Vent Schedule**: Trumbull VENT Pool
- **Infil Type**: None
- **Infil Type**: None
- **Infil Value**: 0.00 air changes/hr
- **Infil Value**: 0.00 air changes/hr
- **Vav Airflow**: To be calculated
- **Vav Sched**: To be calculated
- **Aux Supply**: To be calculated
- **Room Exhaust**: To be calculated
- **Er**: Default based on system type

### Room Description: 129 MENS LOCKER

<table>
<thead>
<tr>
<th>Description</th>
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<th>Const Type / Dim</th>
<th>U Value Type</th>
<th>Energy Type</th>
<th>Type / Area</th>
<th>Shade</th>
<th>U Value</th>
<th>External</th>
<th>Internal</th>
<th>Shading</th>
<th>Shading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area</td>
<td>435 ft²</td>
<td>6&quot; HW Conc</td>
<td>0.6588</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### GENERAL INFORMATION

- **Floor Area**: 435 ft²
- **Flr-Fr Height**: 24.0 ft
- **Plenum Height**: 10.0 ft
- **Height Above Flr**: 6" HW Conc
- **Slab Cnstr Type**: 4" LW Concrete
- **Ceiling R-Value**: 1.786 hr·ft²·°F/Btu
- **Is there Carpet?**: YES
- **Design Clg DB / Drift Point**: 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point**: 70.0 °F / 70.0 °F
- **Design Relative Humidity**: 50 %
- **Moisture Capacitance**: Medium
- **Cig Ttat**: None
- **Htg Ttat**: None
- **Thermostat Location**: Room
- **Floor Multiplier**: 1
- **Humidistat Location**: Room
- **Room Multiplier**: 1
- **CO2 Sensor Location**: Room
- **Room Type**: Conditioned

#### PEOPLE

- **People Type**: None
- **# of People**: 5 People
- **People Sensible**: 250 Btu/h
- **People Latent**: 250 Btu/h
- **People Schedule**: Trumbull Occ Classroom/Recreational
- **Fixure Type**: RECFL-NV
- **Lighting Amount**: 0.6 W/sq ft
- **Ballast Factor**: 1.0
- **Workstation**: 1.0 workstation/person

#### LIGHTS

- **Lighting Type**: Recessed fluorescent, not vented, 80% load to space
- **% Load to RA**: 20 %
- **Lighting Schedule**: Trumbull lighting Classroom/Recreational
- **Lighting Schedule**: Workstation: 1.0 workstation/person

#### AIRFLOW INFORMATION

- **Vent Type**: Office space
- **Vent Value**: 0.00 cfm/person
- **Vent Value**: 0.38 cfm/sq ft
- **Vent Schedule**: Trumbull VENT Pool
- **Infil Type**: None
- **Infil Type**: None
- **Infil Value**: 0.00 air changes/hr
- **Infil Value**: 0.00 air changes/hr
- **Vav Airflow**: To be calculated
- **Vav Sched**: To be calculated
- **Aux Supply**: To be calculated
- **Room Exhaust**: To be calculated
- **Er**: Default based on system type

---

**Project Name**: TRUMBULL COMMUNITY CENTER
**Dataset Name**: Alternative - 1 Entered Values - Rooms Page 5 of 9
**TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017**
**Room Description: 131 PARKS & REC OPEN OFFICE**

### GENERAL INFORMATION
- **Floor Area:** 135 ft²
- **Height Above Flr:** 24.0 ft
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4” LW Concrete
- **Ceiling R-Value:** 1.786 hr*ft²°F/Btu

**Lighting Schedule:**
- **Fixture Type:** RECFL-NV
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**Room Type:** Conditioned

**People Type:** General Office Space
- **# of People:** 143 sq ft/person

**Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
**Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
**Design Relative Humidity:** 50 %
**Moisture Capacitation:** Medium

**Humidistat Location:** Room
**Thermostat Location:** Room
**CO2 Sensor Location:** Room
**Room Multiplier:** 1

### AIRFLOW INFORMATION
- **System Description:** VRF Floor 1
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Office
- **Infil Type:** None
- **Infil Value:** 0.00 air changes/hr
- **Infil Schedule:** Available (100%)
- **Vav Airflow:** To be calculated
- **Vav Sched:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated

### ROOM BY ROOM

**Misc Load 1**
- **Description:** Trumbull lighting
- **Area:** 1.000 W/sq ft
- **Dir:** Electricity
- **Schedule:** None

**Floor - 1**
- **Floor Area:** 135 ft²
- **Height Above Flr:** 6.0 ft
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4” LW Concrete
- **Ceiling R-Value:** 1.786 hr*ft²°F/Btu

**Lighting Schedule:**
- **Fixture Type:** RECFL-NV
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**Room Type:** Conditioned

**People Type:** General Office Space
- **# of People:** 143 sq ft/person

**Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
**Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
**Design Relative Humidity:** 50 %
**Moisture Capacitation:** Medium

**Humidistat Location:** Room
**Thermostat Location:** Room
**CO2 Sensor Location:** Room
**Room Multiplier:** 1

### PROJECT INFORMATION
- **Project Name:** TRUMBULL COMMUNITY CENTER
- **Dataset Name:** Alternative - 1 Entered Values - Rooms Page 6 of 9

**Note:** TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017
### Room Description: 134 STORAGE

**GENERAL INFORMATION**
- Floor Area: 8 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: YES
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Relative Humidity: 50%
- Moisture Capacitance: Medium
- Cig Tst: None
- Htg Tst: None
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

**ZONE DESCRIPTION**
- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational
- Workstation: 1.0 workstation/person
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- Lighting Schedule: Trumbull lighting Storage
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

**SYSTEM DESCRIPTION**
- Cooling (Peop-based)
- Vent Type: Office space
- Vent Value: 5.00 cfm/person 0.06 cfm/sq ft
- Vent Schedule: Off (0%)
- Infl Type: None
- Infl Value: 0.00 air changes/hr
- Infl Schedule: Available (100%)
- Vav Flow: To be calculated
- Vav Sched: To be calculated
- Room Exhaust: To be calculated
- Rm Exh Sched: Available (100%)

### Room Description: 137 STORAGE

**GENERAL INFORMATION**
- Floor Area: 8 ft²
- Plenum Height: 2.0 ft
- Slab Cnstr Type: 4" LW Concrete
- Ceiling R-Value: 1.786 hr·ft²·°F/Btu
- Is There Carpet?: YES
- Design Htg DB / Drift Point: 70.0 °F / 70.0 °F
- Design Clg DB / Drift Point: 74.0 °F / 74.0 °F
- Design Relative Humidity: 50%
- Moisture Capacitance: Medium
- Cig Tst: None
- Htg Tst: None
- Thermostat Location: Room
- Humidistat Location: Room
- CO2 Sensor Location: Room
- Room Type: Conditioned

**ZONE DESCRIPTION**
- People Type: None
- # of People: 0 People
- People Sensible: 250 Btu/h
- People Latent: 250 Btu/h
- People Schedule: Trumbull Occ Classroom/Recreational
- Workstation: 1.0 workstation/person
- Lighting Type: Recessed fluorescent, not vented, 80% load to space
- Fixture Type: RECFL-NV
- Lighting Schedule: Trumbull lighting Classroom/Recreational
- Lighting Amount: 0.6 W/sq ft
- Ballast Factor: 1.0

**SYSTEM DESCRIPTION**
- Cooling (Peop-based)
- Vent Type: Office space
- Vent Value: 5.00 cfm/person 0.06 cfm/sq ft
- Vent Schedule: Off (0%)
- Infl Type: None
- Infl Value: 0.00 air changes/hr
- Infl Schedule: Available (100%)
- Vav Flow: To be calculated
- Vav Sched: To be calculated
- Room Exhaust: To be calculated
- Rm Exh Sched: Available (100%)

---

**ENTERED VALUES**

**ROOM BY ROOM**

---

**GENERAL INFORMATION**

**ZONE INFORMATION**

**SYSTEM INFORMATION**

---

**LEGAL INFORMATION**

---

**REFERENCES**

---

**NOTES**

---
### Room Description: 138 VESTIBULE

**GENERAL INFORMATION**
- **Floor Area:** 175 ft²
- **Plenum Height:** 10.0 ft
- **Slab Cnstr Type:** 4* LW Concrete
- **Ceiling R-Value:** 0.90
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Ttatl:** None
- **HTg Ttatl:** None
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**PEOPLE**
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0
- **Ventilation Type:** RECFL-NV
- **% Load to RA:** 20 %

**LIGHTS**
- **Lighting Schedule:** Trumbull lighting Classroom/Recreational
- **Lighting Amount:** 0.6 W/sq ft

**SYSTEM DESCRIPTION**
- **Heating (Area-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Relative Humidity:** 65 %
  - **INFL Schedule:** Neutral, Loose Const.
  - **INFL Value:** 2.50 air changes/hr

**AIRFLOW INFORMATION**
- **Cooling (Peop-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Relative Humidity:** 65 %
  - **INFL Schedule:** Neutral, Loose Const.
  - **INFL Value:** 2.50 air changes/hr

### Room Description: 139 MECHANICAL

**GENERAL INFORMATION**
- **Floor Area:** 200 ft²
- **Plenum Height:** 0.0 ft
- **Slab Cnstr Type:** 4* LW Concrete
- **Ceiling R-Value:** 0.90
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:** Medium
- **Cig Ttatl:** None
- **HTg Ttatl:** None
- **Thermostat Location:** Room
- **Humidistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

**PEOPLE**
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person
- **Lighting Type:** Recessed fluorescent, not vented, 80% load
- **Lighting Amount:** 0.6 W/sq ft
- **Ballast Factor:** 1.0

**SYSTEM DESCRIPTION**
- **Heating (Area-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Relative Humidity:** 65 %
  - **INFL Schedule:** Neutral, Loose Const.
  - **INFL Value:** 2.50 air changes/hr

**AIRFLOW INFORMATION**
- **Cooling (Peop-based):**
  - **Vent Type:** Office space
  - **Vent Value:** 5.00 cfm/person
  - **Relative Humidity:** 65 %
  - **INFL Schedule:** Neutral, Loose Const.
  - **INFL Value:** 2.50 air changes/hr

---

**Dataset Name:** TRUMBULL COMMUNITY CENTER

**Project Name:** TRUMBULL COMMUNITY CENTER

**TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017 TRUMBULL COMMUNITY CENTER**

Alternative - 1 Entered Values - Rooms Page 8 of 9
### Room Description: 140 GYM STORAGE

- **Floor Area:** 200 ft²
- **Flr-Flr Height:** 24.0 ft
- **Plenum Height:** 0.0 ft
- **Slab Cnstr Type:** 4" LW Concrete
- **Room Mass:** Time delay based on actual mass
- **Ceiling R-Value:** 1.786 hr·ft²·°F/Btu
- **Is There Carpet?:** YES
- **Design Clg DB / Drift Point:** 74.0 °F / 74.0 °F
- **Design Htg DB / Drift Point:** 70.0 °F / 70.0 °F
- **Design Relative Humidity:** 50 %
- **Moisture Capacitance:**
- **Cig Tstat:** None
- **Htg Tstat:** None
- **Thermostat Location:** Room
- **Humistat Location:** Room
- **CO2 Sensor Location:** Room
- **Room Type:** Conditioned

### PEOPLE
- **People Type:** None
- **# of People:** 0 People
- **People Sensible:** 250 Btu/h
- **People Latent:** 250 Btu/h
- **People Schedule:** Trumbull Occ Classroom/Recreational
- **Workstation:** 1.0 workstation/person

### LIGHTS
- **Lighting Type:** Recessed fluorescent, not vented, 80% load to space
- **Fixture Type:** RECFL-NV
- **Lighting Schedule:** Trumbull building lighting Storage
- **Lighting Amount:** 1.0
- **Ballast Factor:** 1.0

### AIRFLOW INFORMATION
- **Vent Type:** Office space
- **Vent Value:** 5.00 cfm/person
- **Vent Schedule:** Trumbull VENT Classroom/Recreational
- **Infl Type:** None
- **Infl Value:** 0.00 air changes/hr
- **Infl Schedule:** Available (100%)
- **Vav Sched:** Available (100%)
- **Supply:** To be calculated
- **Aux Supply:** To be calculated
- **Room Exhaust:** Available (100%)

### GLASS

<table>
<thead>
<tr>
<th>Description</th>
<th>Area/Amount</th>
<th>Const Type</th>
<th>U Value</th>
<th>Shade</th>
<th>Type/Energy Type</th>
<th>Area/ft²</th>
<th>Shade</th>
<th>U Value</th>
<th>External</th>
<th>Internal</th>
<th>Gmd</th>
<th>Cool</th>
<th>Heat</th>
<th>Perm</th>
<th>Loss</th>
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<td>0.90</td>
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<tr>
<td>Floor - 1</td>
<td>200 ft²</td>
<td>6&quot; HW Conc</td>
<td>0.6588</td>
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**System Description: VRF Floor 1**

**Project Name:** TRUMBULL COMMUNITY CENTER

**Dataset Name:** TRUMBULL COMMUNITY CENTER

**Dataset Description:** Alternative - 1 Entered Values - Rooms Page 9 of 9

**TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017**
### Design Air Conditions

<table>
<thead>
<tr>
<th>Design Air Conditions</th>
<th>Max</th>
<th>Min</th>
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<tbody>
<tr>
<td>Cooling supply</td>
<td>56.0 °F</td>
<td>54.0 °F</td>
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<tr>
<td>Heating supply</td>
<td>98.0 °F</td>
<td>95.0 °F</td>
</tr>
<tr>
<td>Supply duct temperature diff</td>
<td>0.0 °F</td>
<td>0.0 °F</td>
</tr>
<tr>
<td>Reheat Temperature diff</td>
<td>0.0 °F</td>
<td>0.0 °F</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Design humidity ratio diff</th>
<th>Min room relative humidity:</th>
</tr>
</thead>
</table>

### Optional Ventilation

- **Configuration**: Dehumidify (priority) or Cool / Heat
- **Control method**: Optimize Supply Air Dew Point
- **Deck location**: Ducted
- **Level location**: Cooling SADP:

### Stage 1 Exhaust Air Heat Recovery

<table>
<thead>
<tr>
<th>Stage 1 Exhaust Air Heat Recovery</th>
<th>Type: Total-energy wheel (OA precondition)</th>
<th>Sup-side deck: Ventilation upstream</th>
<th>Exh-side deck: System exhaust</th>
<th>Schedule: Available (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sensible</strong></td>
<td><strong>Latent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clg effectiveness at 100% airflow: 74%</td>
<td>Htg effectiveness at 100% airflow: 74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clg effectiveness at 75% airflow: 79%</td>
<td>HTg effectiveness at 75% airflow: 79%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply Side Options</td>
<td>Exhaust Side Options</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design air leaving dry bulb:</td>
<td>Heat source:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design air leaving humidity ratio:</td>
<td>Part load control:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coolant type: N/A</td>
<td>Static pressure drop:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coolant approach: N/A</td>
<td>Bypass dampers:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parasitic energy: 0.4 kW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Advanced Options

- **Cooling coil sizing method**: Block
- **Cooling coil location**: Room
- **Block cooling airflow**: Supply fan motor location: Supply
- **Ventilation deck location**: Ducted
- **Supply duct location**: Other
- **Return air path**: DUCTED
- **Control Method**: Control Type
- **Auxiliary cooling coil**: Activate After Primary System
- **Auxiliary heating coil**: Activate After Primary System
- **Auxiliary fan**: No Fan

### System Entered Values

**VRF Floor 1 - Variable Refrigerant Flow**

- **Design Air Conditions**: Max and Min values for cooling and heating supply.
- **Optional Ventilation**: Configuration and control settings.
- **Stage 1 Exhaust Air Heat Recovery**: Sensible and Latent heat recovery data.
- **Advanced Options**: Various system settings and controls.
## VRF Floor 1 - Variable Refrigerant Flow

### Coils

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Schedule</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main cooling: 100.0 % of Design Capacity by adjusting a</td>
<td>Available (100%)</td>
<td>People 100%</td>
</tr>
<tr>
<td>Aux cooling: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td>Lights 100%</td>
</tr>
<tr>
<td>Main heating: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td>Misc loads 100%</td>
</tr>
<tr>
<td>Aux heating: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Preheat: 100.0% of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Reheat: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
<tr>
<td>Humidification: 100.0 % of Design Capacity</td>
<td>Available (100%)</td>
<td></td>
</tr>
</tbody>
</table>

### Fans

<table>
<thead>
<tr>
<th>Type</th>
<th>Static Press.</th>
<th>90.1 SP Adj</th>
<th>Full Load Energy Rate</th>
<th>Schedule</th>
<th>Efficiency</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary VRF Indoor Unit Ducted - PEFY</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00052 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Secondary None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Return None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>System Exhaust FC Centrifugal var freq drv</td>
<td>0.5 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Room Exhaust None</td>
<td>0.0 in. wg</td>
<td>0.0 in. wg</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Optional ventilation FC Centrifugal var freq drv</td>
<td>1.5 in. wg</td>
<td>NA</td>
<td>0.00035 kW/Cfm-in wg</td>
<td>Newington Ventilation</td>
<td>Available (100%)</td>
<td>90</td>
</tr>
<tr>
<td>Auxiliary None</td>
<td>0.0 in. wg</td>
<td>NA</td>
<td>0.00000 kW</td>
<td>Available (100%)</td>
<td>Available (100%)</td>
<td>85</td>
</tr>
<tr>
<td>Fan Cycling</td>
<td></td>
<td></td>
<td></td>
<td>Cycle with occupancy 0.0 ft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Dataset Name:** Alternative - 1 Entered Values Systems
### Cooling Plant: VRF LOWER FLOOR

- **Sizing method:** Peak
- **Heat rejection type:** None
- **Secondary distribution pump:** None
- **Secondary pump consumption:** 0 Ft Water
- **Thermal storage type:** None
- **Thermal storage capacity:** 0 ton-hr
- **Thermal storage schedule:** Off (0%)

### Geothermal Loop

- **TLoop Ent Bldg:** None
- **Flow scheme:** Fully mixed
- **TLoop schedule:** None
- **Flow fluid glycol:** 0%
- **Flow rate:** 100.00% of condenser flow rate
- **Heat exchanger approach:** 0°F
- **Loop pump:** None
- **Pump F.L. rate:** 0.00 ft water

### Equipment tag: VRF LOWER FLOOR

#### Equipment Options

<table>
<thead>
<tr>
<th>Equipment Options</th>
<th>Trane VRF Heat Recovery 14-24 Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy source</td>
<td>BOILER</td>
</tr>
<tr>
<td>Reject cond heat</td>
<td>Heating plant</td>
</tr>
<tr>
<td>Cond. heat to plant</td>
<td>BOILER</td>
</tr>
<tr>
<td>Equip schedule</td>
<td>Available (100%)</td>
</tr>
</tbody>
</table>

#### Operating Mode Capacity Energy Rate

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Capacity</th>
<th>Energy Rate</th>
<th>Pumps Type</th>
<th>Full Load Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling:</td>
<td>3.9300</td>
<td>Packaged COP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat recovery:</td>
<td>4.3000</td>
<td>Packaged COP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Heat rejection type: Included in Compressor Power

<table>
<thead>
<tr>
<th>Heat rejection type</th>
<th>Demand limit priority</th>
<th>Dsn chilled water delta T</th>
<th>Dsn cond water delta T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### T-storage capacity: 0 ton-hr

<table>
<thead>
<tr>
<th>T-storage schedule:</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Package energy breakout

- **Primary fan:** None
- **Secondary fan:** None
- **Exhaust fan:** None
- **Optional ventilation fan:** No
- **Condenser fan:** Yes

**Included in full load energy rate:** No

**Apply same fans for heat recovery energy breakout:** No
## ENTERED VALUES

### PLANTS

**Heating Plant: BOILER**

- Sizing method: Peak
- Cogeneration type: None
- Secondary distribution pump: None
- Secondary pump consumption: 0 ft Water
- Thermal storage type: None
- Thermal storage capacity: 0 ton-hr

**Equipment tag: BOILER**

<table>
<thead>
<tr>
<th>Heating capacity</th>
<th>Energy rate</th>
<th>Heating Type: ModCon 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>125.0 % Plant Capacity</td>
<td>94.00 % Effic.</td>
<td>BOILER</td>
</tr>
</tbody>
</table>

- Thermal storage type: None
- Thermal storage capacity: 0 ton-hr
- Thermal storage schedule: Storage

- Hot water pump type: Var vol cnd water pump
- Hot water pump cons: 30.00 ft Water
- Equipment schedule: Available (100%)
- Demand limiting priority: 

**Heating Plant: DHW BOILER**

- Sizing method: Peak
- Cogeneration type: None
- Secondary distribution pump: None
- Secondary pump consumption: 0 ft Water
- Thermal storage type: None
- Thermal storage capacity: 0 ton-hr

**Equipment tag: DHW BOILER**

<table>
<thead>
<tr>
<th>Heating capacity</th>
<th>Energy rate</th>
<th>Heating Type: ModCon 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>125.0 % Plant Capacity</td>
<td>94.00 % Effic.</td>
<td>DHW BOILER</td>
</tr>
</tbody>
</table>

- Thermal storage type: None
- Thermal storage capacity: 0 ton-hr
- Thermal storage schedule: Storage

- Hot water pump type: Var vol cnd water pump
- Hot water pump cons: 0.00 ft Water
- Equipment schedule: Available (100%)
- Demand limiting priority: 

**Base Utilities**

- Plant assigned to: DHW BOILER
- Type: Domestic Hot Water Load
- Description: Domestic Hot Water Load
- Schedule: Trumbull DHW Schedule
- Hourly demand: 30.00 Mbh

**Miscellaneous accessories**

- Plant assigned to: VRF LOWER FLOOR
- Equipment tag: All
- Type: None
- Description: 
- Schedule: Off (0%)
- Energy: 0.00 kW

---

Project Name: TRUMBULL COMMUNITY CENTER
Dataset Name: CC 1ST FL.TRC

TRACE® 700 v6.3.2 calculated at 11:42 AM on 09/22/2017
Alternative - 1   Entered Values - Plants Page 2 of 2
**ECONOMIC PARAMETERS**

**Project Name:** TRUMBULL COMMUNITY CENTER  
**Location:** TRUMBULL, CT

<table>
<thead>
<tr>
<th>Study Life:</th>
<th>20 Yrs</th>
<th>Income Tax Rate:</th>
<th>0.000 %</th>
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</thead>
<tbody>
<tr>
<td>Mortgage Life:</td>
<td>20 Yrs</td>
<td>Cost of Capital:</td>
<td>10.000 %</td>
</tr>
<tr>
<td>Depreciation Life:</td>
<td>20 Yrs</td>
<td>Property tax rate:</td>
<td>0.000 %</td>
</tr>
<tr>
<td>Mortgage Interest Rate:</td>
<td>10.000 %</td>
<td>Insurance Expense rate:</td>
<td>0.000 %</td>
</tr>
<tr>
<td>Percent Financed:</td>
<td>0.0 %</td>
<td>Annual Inflation Rate Of</td>
<td></td>
</tr>
<tr>
<td>Depreciation Method:</td>
<td>None</td>
<td>Maintenance Expense</td>
<td>0.000 %</td>
</tr>
<tr>
<td>Declining Balance Taxes:</td>
<td>100.0 %</td>
<td>Replacement Expense</td>
<td>0.000 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>0.00</td>
<td>0.00</td>
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</tbody>
</table>