

# Florida Building Code, 8th Edition (2023) - Energy Conservation

EnergyGauge Summit® Fla/Com-2023, Effective Date: Dec 31, 2023

C401.2.1: ASHRAE Energy Cost Budget Option

Compliance applying ASHRAE Section 11

## Check List

Applications for compliance with the Florida Building Code, Energy Conservation shall include:

- The full compliance report generated by the software that contains the project summary, compliance summary, certifications and detailed component compliance reports.
- The compliance report must include the full input report generated by the software as contiguous part of the compliance report.
- Boxes appropriately checked in the Mandatory Section of the compliance report.

## PROJECT SUMMARY

**Short Desc:** 23152

**Description:** Sanibel Fire and Rescue Station

**Owner:** Sanibel Fire & Rescue

**Address1:** 5171 Sanibel-Captiva Road

**City:** Sanibel

**Address2:**

**State:** FL

**Zip:** 33957

**Type:** Fire Station

**Class:** New Finished building

**Jurisdiction:** SANIBEL, LEE COUNTY, FL (461300)

**Conditioned Area:** 4227 SF

**Conditioned & UnConditioned Area:** 4927 SF

**No of Stories:** 1

**Area entered from Plans** 4927 SF

**Permit No:** 0

**Max Tonnage** 18.9

**If different, write in:** \_\_\_\_\_

**Building Rotation:** 135 Deg Clockwise. Walls & windows will be rotated accordingly

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	3062.00	4757.00	<b>PASSED</b>
LIGHTING CONTROLS			<b>PASSES</b>
EXTERNAL LIGHTING			<b>No Entry</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>No Entry</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

**IMPORTANT MESSAGE**

Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report



Project: 23152  
 Title: Sanibel Fire and Rescue Station 172  
 Type: Fire Station  
 (WEA File: FL\_FORT\_MYERS\_PAGE\_FIELD.tm3)

**Building End Uses**

	1) Proposed	2) Baseline
<b>Total</b>	<i>209.90</i>	<i>329.30</i>
	<i>\$3,062</i>	<i>\$4,757</i>
<b>ELECTRICITY(MBtu/kWh/\$)</b>	<i>209.90</i>	<i>329.30</i>
	<i>61480</i>	<i>96497</i>
	<i>\$3,062</i>	<i>\$4,757</i>
<b>AREA LIGHTS</b>	<i>29.00</i>	<i>31.10</i>
	<i>8490</i>	<i>9117</i>
	<i>\$423</i>	<i>\$449</i>
<b>MISC EQUIPMT</b>	<i>36.70</i>	<i>36.70</i>
	<i>10766</i>	<i>10766</i>
	<i>\$536</i>	<i>\$531</i>
<b>PUMPS &amp; MISC</b>	<i>0.10</i>	<i>0.00</i>
	<i>16</i>	<i>6</i>
	<i>\$1</i>	<i>\$0</i>
<b>SPACE COOL</b>	<i>133.20</i>	<i>175.20</i>
	<i>39022</i>	<i>51329</i>
	<i>\$1,943</i>	<i>\$2,531</i>
<b>SPACE HEAT</b>	<i>4.90</i>	<i>3.50</i>
	<i>1436</i>	<i>1019</i>
	<i>\$72</i>	<i>\$50</i>
<b>VENT FANS</b>	<i>6.00</i>	<i>82.80</i>
	<i>1750</i>	<i>24260</i>
	<i>\$87</i>	<i>\$1,196</i>

Credits Applied: None

Passing Criteria = 4757

Design (including any credits) = 3062

Passing requires Proposed Building cost to be at most 100% of Baseline cost. This Proposed Building is at 64.4%

<b>PASSES</b>
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External Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
					None	

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### Lighting Controls Compliance

Acronym	ID	Description	Area (sq.ft)	Compliance
<u>100</u>	12	<u>Lobby (General) - Reception and Waiting</u>	142	Lighting Controls PASSES
<u>101</u>	17	<u>Office - Enclosed</u>	81	Lighting Controls PASSES
<u>102</u>	6	<u>Toilet and Washroom</u>	43	Lighting Controls PASSES
<u>104</u>	23	<u>Locker Room</u>	149	Lighting Controls PASSES
<u>105</u>	6	<u>Toilet and Washroom</u>	60	Lighting Controls PASSES
<u>108</u>	23	<u>Locker Room</u>	159	Lighting Controls PASSES
<u>110</u>	1	<u>Electrical Mechanical Equipment Room - General</u>	98	Lighting Controls PASSES
<u>111</u>	31.001	<u>Workshop</u>	116	Lighting Controls PASSES
<u>112</u>	3	<u>Storage &amp; Warehouse - Bulky Active Storage</u>	92	Lighting Controls PASSES
<u>113</u>	1	<u>Electrical Mechanical Equipment Room - General</u>	301	Lighting Controls PASSES
<u>201</u>	5	<u>Corridor</u>	381	Lighting Controls PASSES
<u>202</u>	10.012	<u>Laundry-Washing</u>	71	Lighting Controls PASSES
<u>203</u>	6	<u>Toilet and Washroom</u>	13	Lighting Controls PASSES
<u>205</u>	8.001	<u>Exercise Area (Exercise Center)</u>	368	Lighting Controls PASSES

<u>206</u>	<u>7 Food Service - Kitchen</u>	<u>434</u> Lighting Controls PASSES
<u>207</u>	<u>8 Food Service - Leisure Dining</u>	<u>210</u> Lighting Controls PASSES
<u>208</u>	<u>16.001 Private Living Space</u>	<u>397</u> Lighting Controls PASSES
<u>213</u>	<u>6 Toilet and Washroom</u>	<u>79</u> Lighting Controls PASSES
<u>212</u>	<u>6 Toilet and Washroom</u>	<u>79</u> Lighting Controls PASSES
<u>201A</u>	<u>5 Corridor</u>	<u>68</u> Lighting Controls PASSES
<u>214</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>159</u> Lighting Controls PASSES
<u>215</u>	<u>17 Office - Enclosed</u>	<u>130</u> Lighting Controls PASSES
<u>216</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>109</u> Lighting Controls PASSES
<u>217</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>109</u> Lighting Controls PASSES
<u>218</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>109</u> Lighting Controls PASSES
<u>219</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>109</u> Lighting Controls PASSES
<u>220</u>	<u>22.003 Fire station Sleeping Quarters</u>	<u>109</u> Lighting Controls PASSES
<u>204</u>	<u>1 Electrical Mechanical Equipment Room - General</u>	<u>52</u> Lighting Controls PASSES
<u>Pr0Zo3Sp1</u>	<u>2 Storage &amp; Warehouse - Inactive Storage</u>	<u>700</u> Lighting Controls PASSES

**PASSES**



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### System Report Compliance

**AHU-1**      **System 1**      **Variable Air Volume  
Packaged System**      **No. of Units  
1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 1355000 - 240000 Btu/h Cooling Capacity	226500	11.20	11.20	14.80	14.80	PASSES
Heating System	Electric Furnace	80229	1.00	1.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	5000	0.42	1.12			PASSES

**AC-2**      **System 2**      **Constant Volume Air Cooled  
Split System < 65000 Btu/hr**      **No. of Units  
1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled Split System < 45000 Btu/h Cooling Capacity	18000	18.50	14.30	8.00		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	600	0.06	0.82			PASSES

**PASSES**

### Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance

**None**

<b>Water Heater Compliance</b>							
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
							None

<b>Piping System Compliance</b>							
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
							None

## Mandatory Requirements (as applicable)

Requirements compiled by US Department of Energy and Pacific Northwest National Laboratory. Adopted for FBC with permission. Not all may be applicable

Topic	Section	Component	Description	Yes	N/A	Exempt
<b>1. To be checked by Designer or Engineer</b>						
5140 Controls	10.4.3	Mechanical	Elevators are designed with the proper lighting, ventilation power, and standby mode. []- Exception 1:10.4.3: Requirement does not apply.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5012 Insulation	5.5.3.5	Envelope	Slab edge insulation depth/length shall be per Tables 5.5-0 through 5.5-8.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5027 Fenestration	5.5.3.6	Envelope	U-factor of opaque doors associated with the building thermal envelope meets requirements.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5021 Fenestration	5.5.4.3a	Envelope	Vertical fenestration shall have a U-factor <= the values specified in Tables 5.5-0 through 5.5-8.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5022 Fenestration	5.5.4.3b	Envelope	Skylight shall have a U-factor <= the values specified in Tables 5.5-0 through 5.5-8.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5023 Fenestration	5.5.4.4.1	Envelope	Vertical fenestration SHGC value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5024 Fenestration	5.5.4.4.2	Envelope	Skylight SHGC value.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5014 Insulation	5.8.1.7.3	Envelope	Insulation in contact with the ground has <=0.3% water absorption rate per ASTM C272.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5016 Insulation	6.4.4.1.5	Envelope	Bottom surface of floor structures incorporating radiant heating insulated to >=R-3.5. []- Exception 1:6.4.4.1.5: Requirement does not apply.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5045 HVAC	6.5.1, 6.5.1.1, 6.5.1.3, 6.5.1.4	Mechanical	<p>Air economizers provided where required (and not exempted), meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.</p> <p>[]- Exception 1:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: High-efficiency cooling equipment has been installed. The qualifying minimum equipment efficiency has been computed and is represented above.</p> <p>[]- Exception 2:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Air/evap condenser serving space with open-case refrigeration.</p> <p>[]- Exception 3:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Filtration requirements applicable to the conditioned area would be compromised per Section 6.2.1 in Standard 62.1.</p> <p>[]- Exception 4:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Medical facility where 75% of design air is to be humidified above 35°F, other buildings more than 25% of design air designed is it to be humidified above 35°F dew-point temperature (not applicable to computer rooms).</p> <p>[]- Exception 5:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Systems that will be operated &lt; 20 hours per week.</p> <p>[]- Exception 6:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Systems serving residential spaces with system capacity &lt; 675 kBtu/h.</p> <p>[]- Exception 7:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: System has condenser heat recovery serving service water heat.</p> <p>[]- Exception 8:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: System serves computer room that have total design cooling load &lt; 3,000 kBut/h and building not served by centralized chilled water plant, or room design load &lt; 600 kBtu/hr and is served by centralized chilled water plant, or cooling towers are not permit</p> <p>[]- Exception 9:6.5.1_6.5.1.1_6.5.1.3_6.5.1.4: Transmission and infiltration losses at outdoor temp = 60°F are &gt; sensible design cooling loads (net of losses).</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5046 HVAC	6.5.1, 6.5.1.2, 6.5.1.2.1, 6.5.1.3	Mechanical	<p>Water economizers provided where required , meet the requirements for design capacity, maximum pressure drop and integrated economizer control. Capable if providing 100% of the expected system cooling load when outdoor air &lt;= 50F.</p> <p>[]- Exception 1:6.5.1_6.5.1.2_6.5.1.2.1_6.5.1.3: Requirement does not apply.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5047 HVAC	6.5.1.5	Mechanical	<p>Economizer operation will not increase heating energy use during normal operation.</p> <p>[]- Exception 1:6.5.1.5: Economizers on VAV systems that raise zone heating due to a reduction in supply air temperature.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5058 HVAC	6.5.1.5	Mechanical	<p>Water economizer specified on hydronic cooling and humidification systems designed to maintain inside humidity at &gt;35 °F dewpoint if an economizer is required.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

5053 HVAC	6.5.2.2.3	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements. []- Exception 1:6.5.2.2.3: A deadband of less than 20°F is allowed where a temperature optimization controller is used.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5167 HVAC	6.5.2.6	Mechanical	Units that provide ventilation air to multiple zones and operate in conjunction with zone heating and cooling systems are prevented from using heating or heat recovery to warm supply air above 60°F when representative building loads or outdoor air temperature indicate that most zones demand cooling. []- Exception 1:6.5.2.6: Requirement does not apply.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5059 HVAC	6.5.3.1.1	Mechanical	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp. []- Exception 1:6.5.3.1.1: Hospital and laboratory systems that utilize flow control devices on exhaust and/or return.  []- Exception 2:6.5.3.1.1: Individual exhaust fans with motor nameplate horsepower of 1 hp or less.  []- Exception 3:6.5.3.1.1: Fans exhausting air from fume hoods.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5060 HVAC	6.5.3.1.2	Mechanical	For each HVAC fan less than 6 bhp, the selected fan motor shall be no larger than the first available motor with a nameplate rating greater than 1.5 times the bhp and For each HVAC fan 6 bhp and larger, the selected fan motor shall be no larger than the first available motor with a nameplate rating greater than 1.3 times the bhp. []- Exception 1:6.5.3.1.2: Motors equipped with electronic speed control devices to vary the fan airflow as a function of load.  []- Exception 2:6.5.3.1.2: Systems complying with Section 6.5.3.1.1, Option 1.  []- Exception 3:6.5.3.1.2: Fans with motor nameplate horsepower of less than 1 hp.  []- Exception 4:6.5.3.1.2: Fans with a fan nameplate electrical input power of less than 0.89 kW.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5166 HVAC	6.5.3.2.4	Mechanical	Return and relief fans used to meet Section 6.5.1.1.5 have relief air rate controlled to maintain building pressure through differential supply-return airflow tracking. Systems with supply fans allowed to control the relief system based on outdoor air damper position. Fans have variable speed control or other devices for managing total return/relief fan system demand per section threshold. []- Exception 1:6.5.3.2.4: Return or relief fans with total motor size <= 0.5 hp.  []- Exception 2:6.5.3.2.4: Staged relief fans with >= 4 stages.  []- Exception 3:6.5.3.2.4: Requirement does not apply.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

5169 HVAC	6.5.3.4	Mechanical	<p>Parallel-flow fan-powered VAV air terminals have automatic controls to a) turn off the terminal fan except when space heating is required or if required for ventilation; b) turn on the terminal fan as the first stage of heating before the heating coil is activated; and c) during heating for warmup or setback temperature control, either operate the terminal fan and heating coil without primary air or reverse the terminal damper logic and provide heating from the central air handler through primary air.</p> <p>[]- Exception 1:6.5.3.4: Requirement does not apply.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5062 HVAC	6.5.3.6	Mechanical	<p>Motors for fans <math>\geq 1/12</math> hp and <math>&lt; 1</math> hp are electronically-commutated motors or have a minimum motor efficiency of 70%. These motors are also speed adjustable for either balancing or remote control.</p> <p>[]- Exception 1:6.5.3.6: Motors in the airstream within fan-coils and termina units that operate only when providing heat.</p> <p>[]- Exception 2:6.5.3.6: Motors installed in space conditioning equipment certified under Section 6.4.1.</p> <p>[]- Exception 3:6.5.3.6: Motors covered by Table 10.8-4 or 10.8-5.</p> <p>[]- Exception 4:6.5.3.6: Requirement does not apply.</p>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5170 HVAC	6.5.3.7	Mechanical	<p>Required minimum outdoor air rate is the larger of minimum outdoor air rate or minimum exhaust air rate required by Standard 62.1, Standard 170, or applicable codes or accreditation standards. Outdoor air ventilation systems shall comply with one of the following: a) design minimum system outdoor air provided <math>&lt; 135\%</math> of the required minimum outdoor air rate, b) dampers, ductwork, and controls allow the system to supply <math>\geq</math> the required minimum outdoor air rate with a single set-point adjustment., or c) system includes exhaust air energy recovery complying with Section 6.5.6.1.</p> <p>[]- Exception 1:6.5.3.7: Requirement does not apply.</p>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5168 HVAC	6.5.4.7	Mechanical	<p>Chilled-water cooling coils provide a 15°F or higher temperature difference between leaving and entering water temperatures and a minimum of 57°F leaving water temperature at design conditions</p> <p>[]- Exception 1:6.5.4.7: Chilled-water cooling coils that have an air-side pressure drop exceeding 0.70 in. of water when rated at 500 fpm face velocity and dry conditions.</p> <p>[]- Exception 2:6.5.4.7: Individual fan-cooling units with a design supply airflow rate 5000 cfm and less.</p> <p>[]- Exception 3:6.5.4.7: Constant-air-volume systems.</p> <p>[]- Exception 4:6.5.4.7: Coils selected at the maximum temperature difference allowed by the chiller.</p> <p>[]- Exception 5:6.5.4.7: Passive coils (no mechanically supplied airflow).</p> <p>[]- Exception 6:6.5.4.7: Coils with design entering chilled-water temperatures of 50°F and higher.</p> <p>[]- Exception 7:6.5.4.7: Coils with design entering air dry-bulb temperatures of 65°F and lower.</p> <p>[]- Exception 8:6.5.4.7: Requirement does not apply.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5077 HVAC	6.5.5.2.3	Mechanical	None	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5078 HVAC	6.5.6.1	Mechanical	<p>Exhaust air energy recovery on systems meeting Tables 6.5.6.1.2-1, and 6.5.6.1.2-2.</p> <p>[]- Exception 1:6.5.6.1: Laboratory fume hood systems with a total exhaust rate &lt;= 5000 cfm.</p> <p>[]- Exception 2:6.5.6.1: Systems serving spaces that are not cooled and heated to &lt;60°F.</p> <p>[]- Exception 3:6.5.6.1: Systems with more than 60% of the outdoor heating energy is provided from site-recovered or site solar energy.</p> <p>[]- Exception 4:6.5.6.1: Systems requiring dehumidification with cooling coil energy recovery in series with the cooling coil.</p> <p>[]- Exception 5:6.5.6.1: Where the largest exhaust source is less than 75% of the design outdoor airflow.</p> <p>[]- Exception 6:6.5.6.1: Enthalpy energy recovery ratio requirements at heating design condition in Climate Zones 0, 1, and 2.</p> <p>[]- Exception 7:6.5.6.1: Enthalpy recovery ratio requirements at cooling design condition in Climate Zones 3C, 4C, 5B, 5C, 6B, 7, and 8.</p> <p>[]- Exception 8:6.5.6.1: Operating &lt; 20 hours per week at the outdoor air percentage covered by Table 6.5.6.1.2-1.</p> <p>[]- Exception 9:6.5.6.1 Exception9: Requirement does not apply.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

5130 HVAC	6.7.3.3	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5171 HVAC	6.8.1-13 or 6.8.1-14	Mechanical	Electrically operated DX-DOAS units meet requirements per Tables 6.8.1-13 or 6.8.1-14. [- Exception 1:6.8.1-13_6.8.1-14: Requirement does not apply.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5090 HVAC	7.4.2	Mechanical	Service water heating equipment meets efficiency requirements. [- Exception 1:7.4.2: Water heating equipment >140 gallon capacity is not required to meet standby loss requirements when insulated, no pilot light, and flue damper or fan-assisted combustion.  [- Exception 2:7.4.2: Storage water heater capacity <20 gallons.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5092 HVAC	7.5.2	Mechanical	Service water heating equipment used for space heating complies with the service water heating equipment requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5156 HVAC	7.5.3	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment $\geq 1,000$ kBtu/h serves the entire building, thermal efficiency must be $\geq 90$ Et. Where multiple pieces of water-heating equipment serve the building with combined rating is $\geq 1,000$ kBtu/h, the combined input-capacity-weighted-average thermal efficiency, thermal efficiency must be $\geq 90$ Et. Exclude input rating of equipment in individual dwelling units and equipment $\geq 100$ kBtu/h. [- Exception 1:7.5.3: 25 percent of the annual service water heating requirement is provided by site-solar or site-recovered energy.  [- Exception 2:7.5.3: Requirement does not apply.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>2. To be checked by Plan Reviewer</b>						
5100 Other Equipment	10.4.1	Mechanical	Electric motors meet requirements where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5001 Plan Review	4.2.2, 5.4.3.1.1, 5.7	Envelope	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5002 Plan Review	4.2.2, 6.4.4.2.1, 6.7.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5003 Plan Review	4.2.2, 7.7.1, 10.4.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



5004 Plan Review	4.2.2, 8.4.1.1, 8.4.1.2, 8.7	Project	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and document where exceptions are claimed. Feeder connectors sized in accordance with approved plans and branch circuits sized for maximum drop of 3%.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5005 Plan Review	4.2.2, 9.4.3, 9.7	Interior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5019 Air Leakage	5.4.3.3	Envelope	<p>Vestibules are installed where building entrances separate conditioned space from the exterior, and meet exterior envelope requirements. Doors have self-closing devices, and are <math>\geq 7</math> ft apart (<math>\leq 16</math> ft apart for adjoining floor area <math>\leq 40000</math> sq.ft.). Vestibule floor area <math>\leq 50</math> sq.ft. or 2 percent of the adjoining conditioned floor area.</p> <p><input type="checkbox"/>- Exception 1:5.4.3.3: Building entrances with revolving doors.</p> <p><input type="checkbox"/>- Exception 2:5.4.3.3: Doors not intended to be used as a building entrance.</p> <p><input type="checkbox"/>- Exception 3:5.4.3.3: Doors opening directly from a dwelling unit.</p> <p><input type="checkbox"/>- Exception 4:5.4.3.3: Building entrances in buildings located in Climate Zone 1 or 2.</p> <p><input type="checkbox"/>- Exception 5:5.4.3.3: Doors opening into semiheated spaces.</p> <p><input type="checkbox"/>- Exception 6:5.4.3.3: Enclosed elevator lobbies for building entrances directly from parking garages.</p> <p><input type="checkbox"/>- Exception 7:5.4.3.3: Building entrances in buildings that are located in Climate Zone 3, where the building is less than four stories above grade and less than 10,000 ft<sup>2</sup> in gross conditioned floor area.</p> <p><input type="checkbox"/>- Exception 8:5.4.3.3: Building entrances in buildings that are located in Climate Zone 0, 4, 5, 6, 7, or 8, where the building is less than 1000 ft<sup>2</sup> in gross conditioned floor area.</p> <p><input type="checkbox"/>- Exception 9:5.4.3.3: Doors that open directly from a space <math>\leq 3000</math> ft<sup>2</sup> and separated from the building entrance.</p> <p><input type="checkbox"/>- Exception 10:5.4.3.3: Self-closing doors in buildings in Climate Zones 0, 3, and 4 that have an air curtain complying with Section 10.4.5.</p> <p><input type="checkbox"/>- Exception 11:5.4.3.3: Self-closing doors in buildings 15 stories or less in Climate Zones 5 through 8 that have an air curtain complying with Section 10.4.5.</p> <p><input type="checkbox"/>- Exception 12:5.4.3.3: Requirement does not apply.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5020 Plan Review	5.5.4.2.3	Envelope	<p>In buildings &gt; 2,500 ft<sup>2</sup>, any enclosed spaces directly under a roof with ceiling heights &gt; 15 ft. and used as an office, lobby, atrium, concourse, corridor, storage (including nonrefrigerated warehouse), gymnasium, fitness/exercise area, playing area, gymnasium seating area, convention exhibit/event space, courtroom, automotive service, fire station engine room, manufacturing corridor/transition and bay areas, retail, library reading and stack areas, distribution/sorting area, transportation baggage and seating areas, or workshop, the following requirements apply: The daylight zone under skylights is <math>\geq</math> half the floor area and (a) the skylight area to daylight zone is <math>\geq</math> 3 percent with a skylight VT <math>\geq</math> 0.40 or (b) the minimum skylight effective aperture <math>\geq</math> 1 percent. The skylights have a measured haze value &gt; 90 percent.</p> <p>[]- Exception 1:5.5.4.2.3: Enclosed spaces in Climate Zones 6 through 8.</p> <p>[]- Exception 2:5.5.4.2.3: Areas with obstructions that block direct beam sunlight on <math>\geq</math> 1/2 of the roof over the enclosed area for more than 1,500 daytime hours per year between 8 am and 4 pm.</p> <p>[]- Exception 3:5.5.4.2.3: Spaces where the daylight zone under rooftop monitors is &gt; 50 percent of the enclosed space floor area.</p> <p>[]- Exception 4:5.5.4.2.3: Enclosed spaces where 90 percent of the skylight area is shaded on June 21 at noon by permanent architectural features of the building (documentation required).</p> <p>[]- Exception 5:5.5.4.2.3: Enclosed spaces where the total area minus the primary and secondary sidelighted area(s) is less than 2500 ft<sup>2</sup> and where the lighting is controlled according to sidelighting requirements described in Section 9.4.1.1(e).</p> <p>[]- Exception 6:5.5.4.2.3: Requirement does not apply.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5063 HVAC	6.4.3.10	Mechanical	<p>DDC system installed and capable of and configured to provide control logic including monitoring zone and system demand for fan pressure, pump pressure, heating, and cooling; transferring zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers; automatically detecting and alerting system operator when zones and systems excessively drive the reset logic; allow operator removal of zone(s) from the reset algorithm; AND capable of trending and graphically displaying input and output points.</p> <p>[]- Exception 1:6.4.3.10: DDC is not required for systems using the simplified approach to compliance in accordance with Section 6.3</p> <p>[]- Exception 2:6.4.3.10: Requirement does not apply.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5121 HVAC	6.4.3.3.2	Mechanical	<p>Setback controls allow automatic restart and temporary operation as required for maintenance.</p> <p><input type="checkbox"/>- Exception 1:6.4.3.3.2: Radiant floor and ceiling heating systems with heat setback <math>\geq</math> 4F below occupied heating setpoint.</p> <p><input type="checkbox"/>- Exception 2:6.4.3.3.2: Systems designed for continuous operation.</p> <p><input type="checkbox"/>- Exception 3:6.4.3.3.2: Systems with capacity &lt;15,000 Btu/h and with manual controls.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5122 HVAC	6.4.3.3.3	Mechanical	<p>Systems with setback controls and DDC include optimum start controls. Optimum start algorithm considers mass radiant slab floor temperature.</p> <p><input type="checkbox"/>- Exception 1:6.4.3.3.3: Systems designed for continuous operation.</p> <p><input type="checkbox"/>- Exception 2:6.4.3.3.3: Systems with capacity &lt;15,000 Btu/h and with manual controls.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5123 HVAC	6.4.3.3.4	Mechanical	<p>Zone isolation devices and controls.</p> <p><input type="checkbox"/>- Exception 1:6.4.3.3.4: Exhaust and outdoor air connections having fan systems 5000 cfm or smaller.</p> <p><input type="checkbox"/>- Exception 2:6.4.3.3.4: Exhaust airflow less than 10% of design.</p> <p><input type="checkbox"/>- Exception 3:6.4.3.3.4: Zones and systems intended to operate continuously or are inoperative when all other zones are inoperative.</p> <p><input type="checkbox"/>- Exception 4:6.4.3.3.4: Systems with capacity &lt;15,000 Btu/h and with manual controls.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5165 Controls	6.4.3.3.5	Mechanical	<p>Hotels/motel w/ &gt; 50 guest rooms have automatic controls for the HVAC equipment serving each room configured per Section 6.4.3.3.5 subsections 1-3.</p> <p><input type="checkbox"/>- Exception 1:6.4.3.3.5: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5036 HVAC	6.4.3.4.4	Mechanical	<p>Ventilation fans &gt; 0.75 hp have automatic controls to shut off fan when not required.</p> <p><input type="checkbox"/>- Exception 1:6.4.3.4.4: HVAC systems intended to operate continuously.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5037 HVAC	6.4.3.8	Mechanical	<p>Demand control ventilation provided for spaces &lt;500 ft<sup>2</sup> and &lt;25 people/1000 ft<sup>2</sup> occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow &lt;3,000 cfm.</p> <p>[]- Exception 1:6.4.3.8: Systems with heat recovery.</p> <p>[]- Exception 2:6.4.3.8: Multiple-zone systems without DDC of individual zones communicating with a central control panel.</p> <p>[]- Exception 3:6.4.3.8: Systems with a design outdoor airflow less than 750 cfm.</p> <p>[]- Exception 4:6.4.3.8: Spaces where 75 percent of the supply outdoor airflow is required for makeup air that is exhausted from the space or transfer air required for makeup air that is exhausted from the space(s).</p> <p>[]- Exception 5:6.4.3.8: Space is one of following occupancy type: Correctional cells, daycare sickrooms, science labs, laboratories, beauty and nail salons, and bowling alley seating.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5054 HVAC	6.5.2.3	Mechanical	<p>Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.</p> <p>[]- Exception 1:6.5.2.3: Capability of first reducing supply air volume 50% or less of the design rate or minimum outdoor air ventilation, or per regulatory standard, whichever is larger, before combined heating/cooling occurs.</p> <p>[]- Exception 2:6.5.2.3: Cooling capacity &lt;65 kBtu/h and capability to unload cooling equipment.</p> <p>[]- Exception 3:6.5.2.3: Cooling capacity &lt;40 kBtu/h.</p> <p>[]- Exception 4:6.5.2.3: Rigid humidity requirements.</p> <p>[]- Exception 5:6.5.2.3: Site-recovered or site-solar energy sources or.</p> <p>[]- Exception 6:6.5.2.3: Use of a desiccant systems.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5061 HVAC	6.5.3.1.3	Mechanical	<p>Fan have a fan energy index (FEI) <math>\geq 1.00</math> and a variable-air-volume system that meets the requirements of Section 6.5.3.2.1 shall have an FEI <math>\geq 0.95</math> at the design point of operation.</p> <p><input type="checkbox"/>- Exception 1:6.5.3.1.3: Embedded fans with a motor nameplate horsepower of less than 1.0 hp or with a fan nameplate electrical input power of less than 0.89 kW.</p> <p><input type="checkbox"/>- Exception 2:6.5.3.1.3: Individual fans with motor nameplate horsepower of <math>\leq 5</math> hp.</p> <p><input type="checkbox"/>- Exception 3:6.5.3.1.3: Multiple fans in series or parallel have a combined motor nameplate horsepower of <math>\leq 5</math> hp and are operated functionally as a single fan.</p> <p><input type="checkbox"/>- Exception 4:6.5.3.1.3: Fans integral to equipment listed under Section 6.4.1.1.</p> <p><input type="checkbox"/>- Exception 5:6.5.3.1.3: Ceiling fans.</p> <p><input type="checkbox"/>- Exception 6:6.5.3.1.3: Fans included in equipment having certified seal for air or energy performance of the equipment package.</p> <p><input type="checkbox"/>- Exception 7:6.5.3.1.3: Powered wall/roof ventilators (PRV).</p> <p><input type="checkbox"/>- Exception 8:6.5.3.1.3: Fans not covered by AMCA 205.</p> <p><input type="checkbox"/>- Exception 9:6.5.3.1.3: Fans operate during emergency conditions.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5038 HVAC	6.5.3.2.1	Mechanical	<p>DX cooling systems <math>\geq 65</math> kBtu/h and chilled-water and evaporative cooling fan motor hp <math>\geq \frac{1}{4}</math> designed to vary supply fan airflow as a function of load and comply with operational requirements.</p> <p><input type="checkbox"/>- Exception 1:6.5.3.2.1: Chilled-water and evaporative cooling units with <math>&lt; 1</math> hp fan motors not used to provide ventilation air and the indoor fan cycles with the load.</p> <p><input type="checkbox"/>- Exception 2:6.5.3.2.1: Minimum speed requirements of Standard 62.1 will be applied.</p> <p><input type="checkbox"/>- Exception 3:6.5.3.2.1: Requirement does not apply.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5065 HVAC	6.5.3.2.3	Mechanical	<p>Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure. Controls provide: zone damper monitoring or indicator of static pressure need; autodetection, alarm, and operator override of zones excessively triggering reset logic.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5066 HVAC	6.5.3.3	Mechanical	<p>Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.</p> <p>[]- Exception 1:6.5.3.3: VAV systems that recirculate air from other zones without directly mixing it with outdoor air or dual-duct dual-fan VAV systems, or VAV systems with fan-powered terminal units.</p> <p>[]- Exception 2:6.5.3.3: Systems where the design exhaust airflow is more than 70% of design outdoor air intake flow.</p> <p>[]- Exception 3:6.5.3.3: Requirement does not apply.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5067 HVAC	6.5.3.5	Mechanical	<p>Multiple zone HVAC systems have supply air temperature reset controls.</p> <p>[]- Exception 1:6.5.3.5: Systems that do not reheat, recool, or mix heated and cooled supply air.</p> <p>[]- Exception 2:6.5.3.5: Systems that use site recovered or site solar energy for at least 75% of the energy for reheating (on an annual basis).</p> <p>[]- Exception 3:6.5.3.5: Requirement does not apply.</p> <p>[]- Exception 4:6.5.3.5: Systems in Climate Zones 0A, 1A, and 3A with less than 3000 cfm of design outdoor air.</p> <p>[]- Exception 5:6.5.3.5: Systems in Climate Zone 2A with less than 10,000 cfm of design outdoor air.</p> <p>[]- Exception 6:6.5.3.5: Systems in Climate Zones 0A, 1A, 2A, and 3A with at least 80% outdoor air and employing exhaust air energy recovery complying with Section 6.5.6.1.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5068 HVAC	6.5.4.1	Mechanical	<p>System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers. Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 MBtu/h and 10 MBtu/h has 4:1 turndown ratio, boiler input &gt; 10.0 MBtu/h has 5:1 turndown ratio.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5069 HVAC	6.5.4.2	Mechanical	<p>HVAC pumping systems with <math>\geq 3</math> control values designed for variable fluid flow (see section details).</p> <p>[]- Exception 1:6.5.4.2: Differential pressure set-point reset is not required where valve position is used to comply with Section 6.5.4.4.</p> <p>[]- Exception 2:6.5.4.2: Variable-pump flow control not required on heating-water pumps where more than 50% of annual heat is generated by an electric boiler.</p> <p>[]- Exception 3:6.5.4.2: Variable flow not required for primary pumps in a primary/secondary system.</p> <p>[]- Exception 4:6.5.4.2: Variable flow not required for a coil pump provided for freeze protection.</p> <p>[]- Exception 5:6.5.4.2: Variable flow not required for heat recovery coil runaround loops.</p> <p>[]- Exception 6:6.5.4.2: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5070 HVAC	6.5.4.3, 6.5.4.3.1, 6.5.4.3.2	Mechanical	<p>Fluid flow shutdown in pumping systems to multiple chillers or boilers when systems are shut down.</p> <p>[]- Exception 1:6.5.4.3_6.5.4.3.1_6.5.4.3.2: with Section 6.5.4.4.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5071 HVAC	6.5.4.4	Mechanical	<p>Temperature reset by representative building loads for chiller and boiler systems design capacity <math>&gt;300,000</math> Btu/h.</p> <p>[]- Exception 1:6.5.4.4: Where chilled-water supply is already cold, such as chilled water supplied from a district cooling or thermal energy storage system, such that blending would be required to achieve the reset chilled-water supply temperature.</p> <p>[]- Exception 2:6.5.4.4: Where a specific temperature is required for a process application.</p> <p>[]- Exception 3:6.5.4.4: Water temperature reset is not required where valve position is used to comply with Section 6.5.4.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5072 HVAC	6.5.4.5.1	Mechanical	<p>Two-position automatic valve interlocked to shut off water flow when when the compressor is off.</p> <p>[]- Exception 1:6.5.4.5.1: Units employing a fluid economizer.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5073 HVAC	6.5.4.5.2	Mechanical	<p>Hydronic heat pumps and water-cooled unitary air conditioners with pump systems <math>&gt;5</math> hp have controls or devices to reduce pump motor demand.</p> <p>[]- Exception 1:6.5.4.5.2: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5075 HVAC	6.5.5.2.1	Mechanical	<p>Fan systems with motors or array of motors (including the motor service factor) with connected power totaling <math>\geq 5</math> hp associated with heat rejection equipment to have controls and/or devices that result in fanmotor demand of <math>\leq 30\%</math> of design wattage at 50% of design airflow and automatically modulates fan speed to control the leaving fluid temperature or condensing temp/pressure of heat rejection device.</p> <p>[]- Exception 1:6.5.5.2.1: Condenser fans serving multiple refrigerant or fluid cooling circuits.</p> <p>[]- Exception 2:6.5.5.2.1: Condenser fans serving flooded condensers.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5076 HVAC	6.5.5.2.2	Mechanical	<p>Multicell heat rejection equipment with variable-speed fan drives installed that operate the maximum number of fans allowed that comply with manufacturers specs and control all fans to the same fan speed required for the instantaneous cooling duty.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5080 HVAC	6.5.7.1	Mechanical	<p>Conditioned supply air to space with mechanical exhaust <math>\leq</math> the greater of criteria of supply flow, required ventilation rate, exhaust flow minus the available transfer air (see section details).</p> <p>[]- Exception 1:6.5.7.1: Biosafety level <math>\geq 3</math>.</p> <p>[]- Exception 2:6.5.7.1: Vivarium spaces.</p> <p>[]- Exception 3:6.5.7.1: Spaces with regulated positive pressure air flows.</p> <p>[]- Exception 4:6.5.7.1: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5081 HVAC	6.5.7.2.1	Mechanical	<p>Replacement air introduced directly into the hood cavity of kitchen exhaust hoods shall not exceed 10% of the hood exhaust airflow rate</p> <p>[]- Exception 1:6.5.7.2.1: Where hoods are used to exhaust ventilation air that would otherwise exfiltrate or be exhausted by other fan systems.</p> <p>[]- Exception 2:6.5.7.2.1: Certified grease extractor hoods that require a face velocity no greater than 60 fpm.</p> <p>[]- Exception 3:6.5.7.2.1: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5082 HVAC	6.5.7.2.2	Mechanical	<p>Kitchen hoods with a total exhaust airflow rate <math>&gt; 5000</math> cfm meet replacement air, ventilation system, or energy recovery requirements shown in Table 6.5.7.2.2.</p> <p>[]- Exception 1:6.5.7.2.2: Systems where transfer air that would otherwise be exhausted is used for at least 75% of all the replacement air.</p> <p>[]- Exception 2:6.5.7.2.2: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5083 HVAC	6.5.7.2.3	Mechanical	<p>Kitchen hoods with a total exhaust airflow rate <math>&gt; 5000</math> cfm meet replacement air, ventilation system, or energy recovery requirements.</p> <p>[]- Exception 1:6.5.7.2.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5085 HVAC	6.5.7.3	Mechanical	<p>Fume hoods exhaust systems <math>\geq 5,000</math> cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.</p> <p>[]- Exception 1:6.5.7.2: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



5086 HVAC	6.5.8.1	Mechanical	Unenclosed spaces that are heated use only radiant heat. [- Exception 1:6.5.8.1: Loading docks with air curtains.  [- Exception 2:6.5.8.1: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5164 Other Equipment	6.8.1-14	Mechanical	Vapor compression based indoor pool dehumidifiers (single package (indoor air/water cooled or w/out air-cooled condenser) or split system indoor air-cooled ) must meet the minimum efficiency rating. [- Exception 1:6.8.1-14: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5091 HVAC	7.5.1	Mechanical	Combined space and water heating system not allowed unless standby loss less than calculated maximum. AHJ has approved or combined connected load <150 kBtu/h.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5159 Controls	9.4.1.2a	Interior Lighting	Parking garage lighting is equipped with automatic shutoff controls per Section 9.4.1.1(i). [- Exception 1:9.4.1.2a: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5160 Controls	9.4.1.2b	Interior Lighting	Parking garage luminaire power is automatically reduced by at least 50% when zone < 3600 ft2 has no occupancy after 10 minutes. [- Exception 1:9.4.1.2b: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5161 Controls	9.4.1.2c	Interior Lighting	Parking garage luminaires in or around covered entrances/exits between building and garage automatically reduced no more than the general light level from sunset to sunrise. [- Exception 1:9.4.1.2c: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5162 Controls	9.4.1.2d	Interior Lighting	Parking garage power to any luminaire within 20 ft of perimeter wall openings totaling at least 24 ft2 shall be automatically reduced through continuous dimming in response to available daylight. [- Exception 1:9.4.1.2d: Lighting in non-parking daylight transition areas.  [- Exception 2:9.4.1.2d: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5158 Controls	9.4.1.4d	Exterior Lighting	Outdoor parking area luminaires > 78W and <= 24 ft height controlled to reduce wattage by 50% when area unoccupied over 15 minutes. Controlled power limited to <= 1500W. [- Exception 1:9.4.1.4d: Covered vehicle entrance/exit areas requiring lighting for safety, security and eye adaptation.  [- Exception 2:9.4.1.4d: Manufacturer installed luminaires integral to signage.  [- Exception 3:9.4.1.4d: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5157 Wattage	9.4.3	Interior Lighting	At least 75% of all permanently installed lighting fixtures in dwelling units have >= 55 lm/W efficacy or a >= 45 lm/W total luminaire efficacy.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5006 Plan Review	9.7	Exterior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. To be checked by Inspector</b>						
5008 Insulation	4.2.4	Envelope	Installed below-grade wall insulation type and R-value consistent with insulation specifications reported in plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5010 Insulation	4.2.4	Envelope	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5102 Insulation	4.2.4	Envelope	Installed roof insulation type and R-value consistent with insulation specifications reported in plans. For some ceiling systems, verification may need to occur during Framing Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5104 Insulation	4.2.4	Envelope	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5106 Insulation	4.2.4	Envelope	Installed floor insulation type and R-value consistent with insulation specifications reported in plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5017 Air Leakage	5.4.3.1	Envelope	Continuous air barrier is wrapped, sealed, caulked, gasketed, and/or taped in an approved manner, except in semiheated spaces in climate zones 1-6. [- Exception 1:5.4.3.1: Single wythe concrete masonry buildings in climate zone 2B.  [- Exception 2:5.4.3.1: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5116 Air Leakage	5.4.3.2	Envelope	Weatherseals installed on all loading dock cargo doors in Climate Zones 4-8. [- Exception 1:5.4.3.3: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5108 Insulation	5.8.1.1	Envelope	Building envelope insulation is labeled with R-value or insulation certificate has been provided listing R-value and other relevant data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5009 Insulation	5.8.1.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5011 Insulation	5.8.1.2	Envelope	Slab edge insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5105 Insulation	5.8.1.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5107 Insulation	5.8.1.2	Envelope	Floor insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5103 Insulation	5.8.1.2, 5.8.1.3	Envelope	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the ceiling slope is > 3:12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5110 Insulation	5.8.1.4	Envelope	Eaves are baffled to deflect air to above the insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5111 Insulation	5.8.1.5	Envelope	Insulation is installed in substantial contact with the inside surface separating conditioned space from unconditional space. [- Exception 1:5.8.1.5: Insulation materials rely on air spaces adjacent to reflective surfaces in order to achieve rated performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5112 Insulation	5.8.1.6	Envelope	Recessed equipment installed in building envelope assemblies does not compress the adjacent insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5013 Insulation	5.8.1.7	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5113 Insulation	5.8.1.7.1	Envelope	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5114 Insulation	5.8.1.7.2	Envelope	Foundation vents do not interfere with insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5115 Insulation	5.8.1.8	Envelope	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5109 Insulation	5.8.1.9	Envelope	Building envelope insulation extends over the full area of the component at the proposed rated R or U value.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5025 Fenestration	5.8.2.1, 5.8.2.3, 5.8.2.4, 5.8.2.5	Envelope	Fenestration products rated (U-factor, SHGC, and VT) in accordance with NFRC or energy code defaults are used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5026 Fenestration	5.8.2.2	Envelope	Fenestration and door products are labeled, or a signed and dated certificate listing the U-factor, SHGC, VT, and air leakage rate has been provided by the manufacturer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5018 Air Leakage	5.8.3.2	Envelope	Factory-built and site-assembled fenestration and doors are labeled or certified as meeting air leakage requirements. [- Exception 1:5.8.3.2: Field fabricated.  [- Exception 2:5.8.3.2: Metal coiling doors in semiheated spaces in zones 1-6 when leakage is <= 1.0 CFM/ft2.  [- Exception 3:5.8.3.2: Building complies with whole building air leakage rate of 0.4 cfm/sq.ft.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5146 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7a	Mechanical	Heat Rejection Equipment - Propeller or Axial Fan Open-Circuit Cooling Tower: Minimum Efficiency Requirement >=40.2 gpm/hp .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5147 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7a	Mechanical	Heat Rejection Equipment - Centrifugal Fan Open-Circuit Cooling Tower: Minimum Efficiency Requirement >=20.0 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5148 SYSTEM_SPECIF	6.4.1.1, 6.8.1-7b	Mechanical	Heat Rejection Equipment - Propeller or Axial Fan Closed-Circuit Cooling Tower: Minimum Efficiency Requirement >=16.1 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5149	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7b	Mechanical	Heat Rejection Equipment - Centrifugal Fan Closed-Circuit Cooling Tower: Minimum Efficiency Requirement $\geq 7.0$ gpm/hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5173	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7c	Mechanical	Heat Rejection Equipment - Propeller or Axial Fan Dry Coolers (air-cooled fluid coolers): Minimum Efficiency Requirement $\geq 4.5$ gpm/hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5151	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment - Air-Cooled Condensers: Minimum Efficiency Requirement $\geq 176$ kBtu/h-hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5152	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment - Propeller or Axial Evaporative Condenser: Minimum Efficiency Requirement $\geq 160$ kBtu/h-hp w/ R-448A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5153	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment - Propeller or Axial Evaporative Condenser: Minimum Efficiency Requirement $\geq 134$ kBtu/h-hp w/ Ammonia test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5154	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment - Centrifugal Evaporative Condenser: Minimum Efficiency Requirement $\geq 137$ kBtu/h-hp w/ R-448A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5155	SYSTEM_SPECIF	6.4.1.1, 6.8.1-7g	Mechanical	Heat Rejection Equipment - Centrifugal Evaporative Condenser: Minimum Efficiency Requirement $\geq 110$ kBtu/h-hp w/ Ammonia test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5031	HVAC	6.4.1.4, 6.4.1.5	Mechanical	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5144	SYSTEM_SPECIF	6.4.1.4, 6.4.1.5	Mechanical	Equipment minimum efficiency:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5145	SYSTEM_SPECIF	6.4.1.4, 6.4.1.5	Mechanical	Equipment minimum efficiency:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5032	HVAC	6.4.1.6.2	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only. [- Exception 1:6.4.1.5.2: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5117	HVAC	6.4.3.1.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control. [- Exception 1:6.4.3.1.1: Perimeter systems with one control for each exposure and with the thermostat located within the zones served.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5118	HVAC	6.4.3.1.2	Mechanical	Thermostatic controls have a 5 °F deadband. [- Exception 1:6.4.3.1.2: Thermostats requiring manual changeover between heating and cooling.  [- Exception 2:6.4.3.1.2: Where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.  [- Exception 3:6.4.3.1.2: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5050	HVAC	6.4.3.11.1	Mechanical	Electric motor driven chilled-water plants have measurement devices installed and measure the electricity use and efficiency [- Exception 1:6.4.3.11.1: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5051 HVAC	6.4.3.11.2	Mechanical	Electricity use and efficiency are trended every 15 minutes and graphically displayed, including hourly, daily, monthly, and annual data. Data are preserved for 36 months or more. [- Exception 1:6.4.3.11.2: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5125 HVAC	6.4.3.12	Mechanical	Air economizer has a fault detection and diagnostics (FDD) system (see details for configuration and operational requirements). [- Exception 1:6.4.3.12: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5119 HVAC	6.4.3.2	Mechanical	Temperature controls have setpoint overlap restrictions. [- Exception 1:9.4.3: Lighting is controlled by dimmers or automatic control devices.  [- Exception 2:9.4.3: Hotel/motel guest rooms.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5120 HVAC	6.4.3.3.1	Mechanical	HVAC systems equipped with at least one automatic shutdown control. [- Exception 1:6.4.3.3.1: Controls for residential occupancies may start and stop the system under two schedules per week.  [- Exception 2:6.4.3.3.1: Systems designed for continuous operation.  [- Exception 3:6.4.3.3.1: Systems with capacity <15,000 Btu/h and with manual controls.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5033 HVAC	6.4.3.4.1	Mechanical	Stair and elevator shaft vents have motorized dampers that automatically close. [- Exception 1:6.4.3.4.1: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5034 HVAC	6.4.3.4.2, 6.4.3.4.3	Mechanical	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. [- Exception 1:6.4.3.4.2_6.4.3.4.3: Ventilation systems serving unconditioned spaces.  [- Exception 2:6.4.3.4.2_6.4.3.4.3: Gravity dampers acceptable in buildings <3 stories.  [- Exception 3:6.4.3.4.2_6.4.3.4.3: Outdoor air intakes and exhaust and relief dampers in buildings of any height located in Climate Zones 0, 1, 2, and 3.  [- Exception 4:6.4.3.4.2_6.4.3.4.3: Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm where dampers are interlocked with fan.  [- Exception 5:6.4.3.4.2_6.4.3.4.3: Exhaust systems serving Type 1 kitchen exhaust hoods  [- Exception 6:6.4.3.4.2_6.4.3.4.3: Systems intended to operate continuously	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5035 HVAC	6.4.3.4.5	Mechanical	<p>Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.</p> <p>[]- Exception 1:6.4.3.4.5: Garages with no mechanical cooling or heating that have an area of less than 30,000 ft2.</p> <p>[]- Exception 2:6.4.3.4.5: Garages with no mechanical cooling or heating that have a ratio of garage area to ventilation system motor nameplate hp greater than 1500 ft2/hp.</p> <p>[]- Exception 3:6.4.3.4.5: Where the authority having jurisdiction does not allow this requirement.</p> <p>[]- Exception 4:6.4.3.4.5: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5124 HVAC	6.4.3.5	Mechanical	<p>Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.</p> <p>[]- Exception 1:6.4.3.5: Heat pumps regulated by and meeting NAECA requirements and using internal electric resistance heating.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5126 HVAC	6.4.3.6	Mechanical	<p>When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited. Humidity control prohibits the use of fossil fuel or electricity to produce RH &gt; 30% in the warmest zone humidified and RH &lt; 60% in the coldest zone dehumidified.</p> <p>[]- Exception 1:6.4.3.6: Zones served by desiccant systems.</p> <p>[]- Exception 2:6.4.3.6: Systems in zones requiring specific humidity levels as approval by AHJ.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5015 HVAC	6.4.3.7	Mechanical	<p>Freeze protection and snow/ice melting system sensors for future connection to controls.</p> <p>[]- Exception 1:6.4.3.7: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5088 HVAC	6.4.3.9	Mechanical	<p>Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures &gt; 45°F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint ≤ 60°F and cooling setpoint ≥ 80°F.</p> <p>[]- Exception 1:6.4.3.9: Heating/cooling provided by site-recovered energy or with transfer air that would otherwise be exhausted.</p> <p>[]- Exception 2:6.4.3.9: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5039 HVAC	6.4.4.1.1	Mechanical	<p>Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5040 HVAC	6.4.4.1.2	Mechanical	<p>HVAC ducts and plenums insulated per Table 6.8.2. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.</p> <p><input type="checkbox"/>- Exception 1:6.4.4.1.2: Factory-installed as part of HVAC equipment.</p> <p><input type="checkbox"/>- Exception 2:6.4.4.1.2: Ducts/plenums located in heated, semi-heated, or cooled spaces.</p> <p><input type="checkbox"/>- Exception 3:6.4.4.1.2: R-3.5 for runouts &lt;10 ft to air terminals/outlets.</p> <p><input type="checkbox"/>- Exception 4:6.4.4.1.2: Backs of air outlets or outlet plenums to unconditioned or indirectly condition spaces.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5041 HVAC	6.4.4.1.3	Mechanical	<p>HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may need to occur during Foundation Inspection.</p> <p><input type="checkbox"/>- Exception 1:6.4.4.1.3: Piping within HVAC equipment.</p> <p><input type="checkbox"/>- Exception 2:6.4.4.1.3: Fluid temperatures between 60 and 105°F.</p> <p><input type="checkbox"/>- Exception 3:6.4.4.1.3: Fluid not heated or cooled.</p> <p><input type="checkbox"/>- Exception 4:6.4.4.1.3: Runouts &lt;4 ft in length.</p> <p><input type="checkbox"/>- Exception 5:6.4.4.1.3: Pipe unions in heating systems.</p> <p><input type="checkbox"/>- Exception 6:6.4.4.1.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5042 HVAC	6.4.4.1.4	Mechanical	<p>Thermally ineffective panel surfaces of sensible heating panels have insulation <math>\geq</math> R-3.5.</p> <p><input type="checkbox"/>- Exception 1:6.4.4.1.4: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5043 HVAC	6.4.4.2.1	Mechanical	<p>Ducts and plenums having pressure class ratings are Seal Class A construction.</p> <p><input type="checkbox"/>- Exception 1:6.4.4.2.1: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5044 HVAC	6.4.4.2.2	Mechanical	<p>Ductwork operating &gt;3 in. water column requires air leakage testing.</p> <p><input type="checkbox"/>- Exception 1:6.4.4.2.2: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5089 Controls	6.5.10	Mechanical	<p>Doors separating conditioned space from the outdoors have controls that disable/reset heating and cooling system when open.</p> <p><input type="checkbox"/>- Exception 1:6.5.10: Building entrances have automatic closing devices.</p> <p><input type="checkbox"/>- Exception 2:6.5.10: Space has no thermostat.</p> <p><input type="checkbox"/>- Exception 3:6.5.10: Alteration project to existing building.</p> <p><input type="checkbox"/>- Exception 4:6.5.10: Loading dock.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5048 HVAC	6.5.2.1	Mechanical	<p>Zone controls can limit reheating, recooling, simultaneous heating and cooling and sequence heating and cooling to each zone.</p> <p>[]- Exception 1:6.5.2.1: Zones for which the volume of air that is reheated, recooled, or mixed is no greater than required to meet Standard 62.1; 20% of the zone design peak supply for systems with DDC and 30% for other systems; air flow rate approved by the AHJ; OR airflow rat</p> <p>[]- Exception 2:6.5.2.1: Zones with DDC include: larger of &lt;=20% zone peak flow, flow required per Standard 62.1, higher rate approved by AHJ for outlying conditions, OR airflow rate that complies with applicable codes/accreditation standards; air flow reheated/recooled/mixed &lt;=</p> <p>[]- Exception 3:6.5.2.1: 75% of the energy is provided from site-recovered or site-solar energy.</p> <p>[]- Exception 4:6.5.2.1: Laboratory exhaust systems compliant with Section 6.5.7.3.</p> <p>[]- Exception 5:6.5.2.1: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5049 HVAC	6.5.2.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5052 HVAC	6.5.2.2.2	Mechanical	Two-pipe hydronic systems using a common distribution system have controls to allow a deadband >=15 °F, allow operation in one mode for at least 4 hrs before changeover, and have rest controls to limit heating and cooling supply temperature to <=30 °F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5055 HVAC	6.5.2.4.1	Mechanical	Humidifiers with airstream mounted preheating jackets have preheat auto-shutoff value set to activate when humidification is not required. >[]- Exception 1:6.5.2.4.1: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5056 HVAC	6.5.2.4.2	Mechanical	Humidification system dispersion tube hot surfaces in the airstreams of ducts or air-handling units insulated >= R-0.5. >[]- Exception 1:6.5.2.4.2: Mechanical cooling (including economizer operation) does not occur simultaneously with humidification.  >[]- Exception 2:6.5.2.4.2: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5057 HVAC	6.5.2.5	Mechanical	Preheat coils controlled to stop heat output whenever mechanical cooling, including economizer operation, is active.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5064 HVAC	6.5.3.2.2	Mechanical	VAV fans have static pressure sensors positioned so setpoint <=1.2 in. w.c. design pressure. >[]- Exception 1:6.5.3.2.2: Systems with DDC of individual boxes reporting to the central control panel and reset of static pressure setpoint based on the zone requiring the most pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



5074 HVAC	6.5.4.6	Mechanical	<p>Chilled-water and condenser water piping sized according to design flow rate and total annual hours of operation (Table 6.5.4.6).</p> <p>[]- Exception 1:6.5.4.6: Design flow rates exceeding the values in Table 6.5.4.6 are allowed in specific sections of piping if the piping in question is not in the critical circuit at design conditions and is not predicted to be in the critical circuit during more than 30% of ope</p> <p>[]- Exception 2:6.5.4.6: Piping systems that have equivalent or lower total pressure drop than the same system constructed with standard weight steel pipe with piping and fittings sized per Table 6.5.4.6.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5150 SYSTEM_SPECIF	6.5.5.3	Mechanical	<p>Centrifugal fan open-circuit cooling towers having combined rated capacity <math>\geq</math> 1100 gpm meets minimum efficiency requirement: <math>\geq</math>40.2 gpm/hp.</p> <p>[]- Exception 1:6.5.5.3: Centrifugal open-circuit cooling towers with external sound attenuation or that have ducted inlet or discharge.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5079 HVAC	6.5.6.2	Mechanical	<p>Condenser heat recovery system that can heat water to 85 °F or provide 60% of peak heat rejection is installed for preheating of service hot water.</p> <p>[]- Exception 1:6.5.6.2: Facility operates <math>&lt;</math> 24/7.</p> <p>[]- Exception 2:6.5.6.2: Total installed heat capacity of water cooled systems <math>\leq</math> 6 MMBtu/h of heat rejection.</p> <p>[]- Exception 3:6.5.6.2: Design SWH load <math>\leq</math> 1 MMBtu/h.</p> <p>[]- Exception 4:6.5.6.2: Facilities using condenser heat recovery for space heating with heat recovery exceeding 30% of the peak water-cooled condenser load.</p> <p>[]- Exception 5:6.5.6.2: Facilities providing 60% of their service water heating from site-solar, site-recovered, or other energy sources.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5084 HVAC	6.5.7.2.4	Mechanical	<p>Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.</p> <p>[]- Exception 1:6.5.7.2.4: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5087 HVAC	6.5.9	Mechanical	<p>Hot gas bypass limited to: <math>\leq</math>240 kBtu/h – 15% ; <math>&gt;</math> 240 kBtu/h – 10%</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5141 HVAC	7.4.3	Mechanical	<p>All piping in recirculating system insulated</p> <p>[]- Exception 1:7.4.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5142 HVAC	7.4.3	Mechanical	<p>First 8 ft of outlet piping in nonrecirculating storage system, or branch piping connected to recirculated, heat traced, or impedance heated piping is insulated.</p> <p>[]- Exception 1:7.4.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5143 HVAC	7.4.3	Mechanical	<p>All heat traced or externally heated piping insulated</p> <p>[]- Exception 1:7.4.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5028 HVAC	7.4.4.1	Mechanical	Temperature controls installed on service water heating systems ( $\leq 120^{\circ}\text{F}$ to maximum temperature for intended use). [- Exception 1:7.4.4.1: Manufacturer's instructions specify a higher minimum setting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5029 HVAC	7.4.4.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace when hot water is not required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5131 HVAC	7.4.4.3	Mechanical	Public lavatory faucet water temperature $\leq 110^{\circ}\text{F}$ .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5132 HVAC	7.4.4.4	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5133 HVAC	7.4.5.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light. [- Exception 1:7.4.5.1: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5134 HVAC	7.4.5.2	Mechanical	Pool covers are provided for heated pools and pools heated to $>90^{\circ}\text{F}$ have a cover $\geq R-12$ . [- Exception 1:7.4.5.2: Pools deriving $>60\%$ of the energy for heating from site-recovered.  [- Exception 2:7.4.5.2: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5135 HVAC	7.4.5.3	Mechanical	Time switches are installed on all pool heaters and pumps. [- Exception 1:7.4.5.3: Where 24-hr pump operation required for public health.  [- Exception 2:7.4.5.3: Solar and waste heat recovery pool heating require pumps.  [- Exception 3:7.4.5.3: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5030 HVAC	7.4.6	Mechanical	Heat traps installed on non-circulating storage water tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5093 Controls	8.4.2	Project	At least 50% of all 125 volt 15- and 20-Amp receptacles are controlled by an automatic control device. [- Exception 1:8.4.2: Receptacles intended for 24 hour operation of equipment.  [- Exception 2:8.4.2: Spaces where safety or security concerns prohibit automatic shutoff.  [- Exception 3:8.4.2: Space type is not private office, open office, conference room, Copy/Print room, break room, or classroom  [- Exception 4:8.4.2: Requirement does not apply.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5163 Controls	8.4.3	Project	<p>New buildings have electrical energy use measurement devices installed. Where tenant spaces exist, each tenant is monitored separately. In buildings with a digital control system the energy use is transmitted to to control system and displayed graphically.</p> <p><input type="checkbox"/>- Exception 1:8.4.3: Buildings less than 25,000 ft2.</p> <p><input type="checkbox"/>- Exception 2:8.4.3: Individual tenant spaces less than 10,000 ft2.</p> <p><input type="checkbox"/>- Exception 3:8.4.3: Dwelling units.</p> <p><input type="checkbox"/>- Exception 4:8.4.3: Residential buildings with less than 10,000 ft2 of common area.</p> <p><input type="checkbox"/>- Exception 5:8.4.3: Critical and Equipment branches of NEC Article 517.</p> <p><input type="checkbox"/>- Exception 6:8.4.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5138 Wattage	9.2.2.3	Interior Lighting	<p>Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5094 Controls	9.4.1.1	Interior Lighting	<p>Automatic control requirements prescribed in Table 9.6.1, for the appropriate space type, are installed. Mandatory lighting controls (labeled as 'REQ') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5095 Controls	9.4.1.1	Interior Lighting	<p>Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.</p> <p><input type="checkbox"/>- Exception 1:9.4.1.1: Remote locations permitted for safety or security if used with a clearly labeled indicator pilot light.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5096 Controls	9.4.1.1f	Interior Lighting	<p>Daylight areas under skylights and roof monitors that have more than 150 W combined input power for general lighting are controlled by photocontrols.</p> <p><input type="checkbox"/>- Exception 1:9.4.1.1f: Daylighted areas under skylights existing adjacent structures or natural objects block direct beam sunlight for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.</p> <p><input type="checkbox"/>- Exception 2:9.4.1.1f: Daylighted areas where the skylight VT is less than 0.006.</p> <p><input type="checkbox"/>- Exception 3:9.4.1.1f: Buildings in climate zone 8 where the input power of the general lighting is less than 200W.</p> <p><input type="checkbox"/>- Exception 4:9.4.1.1f: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5172 Controls	9.4.1.1g	Interior Lighting	Automatic partial OFF (full OFF complies) control requirements prescribed in Table 9.6.1, for the appropriate space type, are installed. Mandatory lighting controls (labeled as 'REQ') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented. <input type="checkbox"/> - Exception 1:9.4.1.1g: The space has an installed LPD of no more than 0.80 W/ft2  <input type="checkbox"/> - Exception 2:9.4.1.1g: The space is lighted by HID lamp  <input type="checkbox"/> - Exception 3:9.4.1.1g: The general lighting power in the space is automatically reduced by at least 30% within 20 minutes of all occupants leaving the space  <input type="checkbox"/> - Exception 4:9.4.1.1g: Lighting load does not exceed 0.02 W/ft2 multiplied by the gross lighted floor area of the building  <input type="checkbox"/> - Exception 5:9.4.1.1g: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5098 Controls	9.4.1.3	Interior Lighting	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5097 Controls	9.4.1.4	Exterior Lighting	Automatic lighting controls for exterior lighting installed. <input type="checkbox"/> - Exception 1:9.4.1.4: Covered vehicle entrance/exit areas requiring lighting for safety, security and eye adaptation.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5139 Wattage	9.4.2	Exterior Lighting	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5099 Wattage	9.6.2	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5101 Wattage	9.6.4	Interior Lighting	Where space LPD requirements are adjusted based on room cavity ratios, dimensions are consistent with approved plans. <input type="checkbox"/> - Exception 1:9.6.4: Requirement does not apply.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>4. To be checked by Inspector at Project Completion and Prior to Issuance of Certificate of Occupancy</b>				

5007 Plan Review	4.2.5.2	Mechanical	<p>Commissioning shall be performed as stated in Sections 5.9.2, 6.9.2, 7.9.2, 8.9.2, 9.9.2, 10.9.2, 11.2(d), and G1.2.1(c). Commissioning must utilize ASHRAE/IES Standard 202 or other generally accepted engineering standards acceptable to the building official. FPT and verification requirements for commissioning are as stated in Section 4.2.5.1. Commissioning shall document compliance of the building systems, controls, and building envelope with required provisions of this standard. Commissioning requirements shall be incorporated into the construction documents.</p> <p>[]- Exception 1:4.2.5.2: Buildings, additions, or alterations with less than 10,000 ft<sup>2</sup> of conditioned space and combined heating, cooling, and service water heating equipment totaling less than 960,000 Btu/h in capacity.</p> <p>[]- Exception 2:4.2.5.2: Buildings or portions of buildings that use the Simplified Approach Option for HVAC Sys-tems in Section 6.3.</p> <p>[]- Exception 3:4.2.5.2: Dwelling units.</p> <p>[]- Exception 4:4.2.5.2: Nonrefrigerated warehouses.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5127 Post Construction	6.7.3.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5128 Post Construction	6.7.3.2	Mechanical	Furnished operation and maintenance manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5129 Post Construction	6.7.3.3	Mechanical	<p>An air and/or hydronic system balancing report is provided for HVAC systems serving zones &gt;5,000 ft<sup>2</sup> of conditioned area.</p> <p>[]- Exception 1:6.7.3.3: Pumps with pump motors of less than or equal to 10 hp</p> <p>[]- Exception 2:6.7.3.3: when throttling results in no greater than 5% of the nameplate horsepower draw, or 3 hp, whichever is greater, above that required if the impeller was trimmed</p> <p>[]- Exception 3:6.7.3.3: Requirement does not apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5136 Post Construction	8.7.1	Interior Lighting	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5137 Post Construction	8.7.3	Interior Lighting	Furnished operation and maintenance instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**EnergyGaugeSummit® 8.0**  
**INPUT DATA REPORT**

**Project Information**

**Project Name:** 23152

**Project Title:** Sanibel Fire and Rescue Station 172

**Address:** 5171 Sanibel-Captiva Road

**State:** FL

**Zip:** 33957

**Owner:** Sanibel Fire & Rescue

**Orientation:** 135 Deg Clockwise. Walls & Windows will be rotated accordingly

**Building Type:** Fire Station

**Building Classification:** New Finished building

**No.of Stories:** 1

**GrossArea:** 4927 SF

**Zones**

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	AHU-1	Zone 1	CONDITIONED	4175.0	1	4175.0	<input type="checkbox"/>
2	AC-2	Zone 2	CONDITIONED	52.0	1	52.0	<input type="checkbox"/>
3	UnCon	Zone 3	UNCONDITIONED	700.0	1	700.0	<input type="checkbox"/>

## Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multiplier	Total Area [sf]	Total Volume [cf]	
<b>In Zone:</b>		<b>AHU-1</b>								
1	100	Lobby	Lobby (General) - Reception and Waiting	1.00	142.00	12.00	1	142.0	1704.0	<input type="checkbox"/>
2	101	First Aid	Office - Enclosed	1.00	81.00	12.00	1	81.0	972.0	<input type="checkbox"/>
3	102	Public RR	Toilet and Washroom	1.00	43.00	12.00	1	43.0	516.0	<input type="checkbox"/>
4	104	Decontamination	Locker Room	1.00	149.00	12.00	1	149.0	1788.0	<input type="checkbox"/>
5	105	Decon RR	Toilet and Washroom	1.00	60.00	12.00	1	60.0	720.0	<input type="checkbox"/>
6	108	Turnout Gear	Locker Room	1.00	159.00	12.00	1	159.0	1908.0	<input type="checkbox"/>
7	110	Electrical	Electrical Mechanical Equipment Room - General	1.00	98.00	12.00	1	98.0	1176.0	<input type="checkbox"/>
8	111	Workshop	Workshop	1.00	116.00	12.00	1	116.0	1392.0	<input type="checkbox"/>
9	112	Med Storage	Storage & Warehouse - Bulky Active Storage	1.00	92.00	12.00	1	92.0	1104.0	<input type="checkbox"/>
10	113	Mechanical	Electrical Mechanical Equipment Room - General	1.00	301.00	12.00	1	301.0	3612.0	<input type="checkbox"/>
11	201	Corridor	Corridor	1.00	381.00	12.00	1	381.0	4572.0	<input type="checkbox"/>
12	202	Laundry	Laundry-Washing	1.00	71.00	12.00	1	71.0	852.0	<input type="checkbox"/>
13	203	Janitor	Toilet and Washroom	1.00	13.00	12.00	1	13.0	156.0	<input type="checkbox"/>
14	205	Fitness	Exercise Area (Exercise Center)	1.00	368.00	12.00	1	368.0	4416.0	<input type="checkbox"/>
15	206	Kitchen	Food Service - Kitchen	1.00	434.00	12.00	1	434.0	5208.0	<input type="checkbox"/>
16	207	Dining	Food Service - Leisure Dining	1.00	210.00	12.00	1	210.0	2520.0	<input type="checkbox"/>
17	208	Day Room	Private Living Space	1.00	397.00	12.00	1	397.0	4764.0	<input type="checkbox"/>
18	213	Crew Restroom	Toilet and Washroom	1.00	79.00	12.00	1	79.0	948.0	<input type="checkbox"/>
19	212	Crew Restroom	Toilet and Washroom	1.00	79.00	12.00	1	79.0	948.0	<input type="checkbox"/>
20	201A	Slide Pole Access	Corridor	1.00	68.00	12.00	1	68.0	816.0	<input type="checkbox"/>

21	214	Officer's Quarters	Fire station Sleeping Quarters	1.00	159.00	12.00	1	159.0	1908.0	<input type="checkbox"/>
22	215	Watch Room	Office - Enclosed	1.00	130.00	12.00	1	130.0	1560.0	<input type="checkbox"/>
23	216	Bunk 5	Fire station Sleeping Quarters	1.00	109.00	12.00	1	109.0	1308.0	<input type="checkbox"/>
24	217	Bunk 4	Fire station Sleeping Quarters	1.00	109.00	12.00	1	109.0	1308.0	<input type="checkbox"/>
25	218	Bunk 3	Fire station Sleeping Quarters	1.00	109.00	12.00	1	109.0	1308.0	<input type="checkbox"/>
26	219	Bunk 2	Fire station Sleeping Quarters	1.00	109.00	12.00	1	109.0	1308.0	<input type="checkbox"/>
27	220	Bunk 1	Fire station Sleeping Quarters	1.00	109.00	12.00	1	109.0	1308.0	<input type="checkbox"/>
<b>In Zone:</b>		<b>AC-2</b>								
1	204	IT Room	Electrical Mechanical Equipment Room - General	1.00	52.00	12.00	1	52.0	624.0	<input type="checkbox"/>
<b>In Zone:</b>		<b>UnCon</b>								
1	Pr0Zo3Sp1	Zo0Sp1	Storage & Warehouse - Inactive Storage	1.00	700.00	1.00	1	700.0	700.0	<input type="checkbox"/>

### Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No. of Ctrl pts	
<b>In Zone:</b>		<b>AHU-1</b>						
<b>In Space: 100</b>								
1	LED	General Lighting	3	8	24	Manual On/Off	1	<input type="checkbox"/>
2	LED	General Lighting	2	18	36	Manual On/Off	1	<input type="checkbox"/>
<b>In Space: 101</b>								
1	LED	General Lighting	2	8	16	Manual On/Off	1	<input type="checkbox"/>
<b>In Space: 102</b>								
1	LED	General Lighting	2	8	16	Manual On/Off	1	<input type="checkbox"/>
<b>In Space: 104</b>								
1	LED	General Lighting	3	30	90	Manual On/Off	1	<input type="checkbox"/>
<b>In Space: 105</b>								



	1	LED	General Lighting	1	26	26	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	3	8	24	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>108</b>								
	1	LED	General Lighting	2	30	60	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>110</b>								
	1	LED	General Lighting	2	30	60	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>111</b>								
	1	LED	General Lighting	3	30	90	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>112</b>								
	1	LED	General Lighting	2	30	60	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>113</b>								
	1	LED	General Lighting	5	52	262	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>201</b>								
	1	LED	General Lighting	10	29	290	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>202</b>								
	1	LED	General Lighting	2	29	58	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>203</b>								
	1	LED	General Lighting	1	30	30	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>205</b>								
	1	LED	General Lighting	2	18	36	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>206</b>								
	1	LED	General Lighting	7	18	126	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	3	30	90	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	3	8	24	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>207</b>								
	1	LED	General Lighting	5	18	90	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	8	8	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>208</b>								
	1	LED	General Lighting	18	8	144	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	5	8	40	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>213</b>								

	1	LED	General Lighting	1	26	26	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	2	18	36	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>212</b>								
	1	LED	General Lighting	1	26	26	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	2	18	36	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>201A</b>								
	1	LED	General Lighting	1	29	29	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>214</b>								
	1	LED	General Lighting	2	18	36	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	8	8	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>215</b>								
	1	LED	General Lighting	4	29	116	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>216</b>								
	1	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	72	72	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	1	7	7	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>217</b>								
	1	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	72	72	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	1	7	7	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>218</b>								
	1	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	72	72	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	1	7	7	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>219</b>								
	1	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
	2	LED	General Lighting	1	72	72	Manual On/Off	1	<input type="checkbox"/>
	3	LED	General Lighting	1	7	7	Manual On/Off	1	<input type="checkbox"/>
<b>In Space:</b>	<b>220</b>								

1	LED	General Lighting	1	18	18	Manual On/Off	1	<input type="checkbox"/>
2	LED	General Lighting	1	72	72	Manual On/Off	1	<input type="checkbox"/>
3	LED	General Lighting	1	7	7	Manual On/Off	1	<input type="checkbox"/>
<b>In Zone: AC-2</b>								
<b>In Space: 204</b>								
1	LED	General Lighting	1	52	52	Manual On/Off	1	<input type="checkbox"/>
<b>In Zone: UnCon</b>								
<b>In Space: Pr0Zo3Sp1</b>								
1	LED	General Lighting	1	1	1	Manual On/Off	1	<input type="checkbox"/>

**Walls** (Walls will be rotated clockwise by building rotation value)

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Orientation	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	<input type="checkbox"/>
<b>In Zone: AHU-1</b>												
1	Pr0Zo1Wa1	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	10.67	12.00	1	128.0	SouthEast	0.0743			13.5	<input type="checkbox"/>
2	Pr0Zo1Wa2	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	11.67	12.00	1	140.0	SouthWest	0.0743			13.5	<input type="checkbox"/>
3	Pr0Zo1Wa3	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	10.00	12.00	1	120.0	NorthWest	0.0743			13.5	<input type="checkbox"/>
4	Pr0Zo1Wa4	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	10.33	12.00	1	124.0	SouthWest	0.0743			13.5	<input type="checkbox"/>
5	Pr0Zo1Wa5	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	4.00	12.00	1	48.0	SouthEast	0.0743			13.5	<input type="checkbox"/>
6	Pr0Zo1Wa6	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	14.00	12.00	1	168.0	SouthWest	0.0743			13.5	<input type="checkbox"/>
7	Pr0Zo1Wa7	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	5.67	12.00	1	68.0	NorthWest	0.0743			13.5	<input type="checkbox"/>

8	Pr0Zo1Wa8	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	12.75	12.00	1	153.0	SouthWest	0.0743	13.5	<input type="checkbox"/>
9	Pr0Zo1Wa9	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	13.67	12.00	1	164.0	NorthWest	0.0743	13.5	<input type="checkbox"/>
10	Pr0Zo1Wa10	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	9.00	12.00	1	108.0	SouthWest	0.0743	13.5	<input type="checkbox"/>
11	Pr0Zo1Wa11	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	20.00	12.00	1	240.0	NorthWest	0.0743	13.5	<input type="checkbox"/>
12	Pr0Zo1Wa12	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	18.67	12.00	1	224.0	NorthEast	0.0743	13.5	<input type="checkbox"/>
13	Pr0Zo1Wa13	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	2.67	12.00	1	32.0	SouthEast	0.0743	13.5	<input type="checkbox"/>
14	Pr0Zo1Wa14	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	19.33	12.00	1	232.0	NorthEast	0.0743	13.5	<input type="checkbox"/>
15	Pr0Zo1Wa15	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	18.00	12.00	1	216.0	SouthEast	0.0743	13.5	<input type="checkbox"/>
16	Pr0Zo1Wa16	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	12.67	12.00	1	152.0	NorthEast	0.0743	13.5	<input type="checkbox"/>
17	Pr0Zo1Wa17	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	14.00	12.00	1	168.0	SouthEast	0.0743	13.5	<input type="checkbox"/>
18	Pr0Zo1Wa18	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	8.00	12.00	1	96.0	NorthEast	0.0743	13.5	<input type="checkbox"/>
19	Pr0Zo1Wa19	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	25.00	12.00	1	300.0	NorthEast	0.0743	13.5	<input type="checkbox"/>
20	Pr0Zo1Wa20	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	17.50	12.00	1	210.0	SouthEast	0.0743	13.5	<input type="checkbox"/>

21	Pr0Zo1Wa21	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	11.00	12.00	1	132.0	SouthWest	0.0743	13.5	<input type="checkbox"/>	
22	Pr0Zo1Wa22	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	48.75	12.00	1	585.0	SouthEast	0.0743	13.5	<input type="checkbox"/>	
23	Pr0Zo1Wa23	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	51.00	12.00	1	612.0	SouthWest	0.0743	13.5	<input type="checkbox"/>	
24	Pr0Zo1Wa24	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	61.50	12.00	1	738.0	NorthWest	0.0743	13.5	<input type="checkbox"/>	
25	Pr0Zo1Wa25	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	12.75	12.00	1	153.0	NorthEast	0.0743	13.5	<input type="checkbox"/>	
26	Pr0Zo1Wa26	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	5.67	12.00	1	68.0	NorthWest	0.0743	13.5	<input type="checkbox"/>	
27	Pr0Zo1Wa27	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	7.00	12.00	1	84.0	NorthEast	0.0743	13.5	<input type="checkbox"/>	
28	Pr0Zo1Wa28	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	2.00	12.00	1	24.0	SouthEast	0.0743	13.5	<input type="checkbox"/>	
29	Pr0Zo1Wa29	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	12.00	12.00	1	144.0	NorthEast	0.0743	13.5	<input type="checkbox"/>	
<b>In Zone:</b>		<b>AC-2</b>									
1	IT Room West Wall	Metal siding/2x4@24"+R1 3Batt/5/8"Gyp	5.75	12.00	1	69.0	NorthEast	0.0743	13.5	<input type="checkbox"/>	

**Windows** (Windows will be rotated clockwise by building rotation value)

No	Description	Orientation	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]
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In Zone: AHU-1													
<b>In Wall:</b>	<b>1N1</b>	1	Pr0Zo1Wa1Wi1	SouthEast	No	0.2800	0.23	0.57	7.25	7.25	1	52.6	<input type="checkbox"/>
<b>In Wall:</b>	<b>1S4</b>	1	Pr0Zo1Wa11Wi1	NorthWest	No	0.2800	0.23	0.57	6.00	5.00	1	30.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2E2</b>	1	Pr0Zo1Wa23Wi1	SouthWest	No	0.2800	0.23	0.57	4.00	5.00	1	20.0	<input type="checkbox"/>
		2	Pr0Zo1Wa23Wi2	SouthWest	No	0.2800	0.23	0.57	11.33	5.00	1	56.7	<input type="checkbox"/>
<b>In Wall:</b>	<b>2N1</b>	1	Pr0Zo1Wa20Wi1	SouthEast	No	0.2800	0.23	0.57	6.00	5.00	2	60.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2N2</b>	1	Pr0Zo1Wa22Wi1	SouthEast	No	0.2800	0.23	0.57	4.00	5.00	2	40.0	<input type="checkbox"/>
		2	Pr0Zo1Wa22Wi2	SouthEast	No	0.2800	0.23	0.57	12.00	8.00	1	96.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2S1</b>	1	Pr0Zo1Wa24Wi1	NorthWest	No	0.2800	0.23	0.57	11.33	5.00	1	56.7	<input type="checkbox"/>
		2	Pr0Zo1Wa24Wi2	NorthWest	No	0.2800	0.23	0.57	3.00	5.00	5	75.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2W1</b>	1	Pr0Zo1Wa19Wi1	NorthEast	No	0.2800	0.23	0.57	4.00	5.00	2	40.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2W3</b>	1	Pr0Zo1Wa27Wi1	NorthEast	No	0.2800	0.23	0.57	4.00	5.00	1	20.0	<input type="checkbox"/>
<b>In Wall:</b>	<b>2W4</b>	1	Pr0Zo1Wa29Wi1	NorthEast	No	0.2800	0.23	0.57	4.00	5.00	1	20.0	<input type="checkbox"/>

### Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]			
In Zone: AHU-1														
<b>In Wall:</b>	<b>1S1</b>	1	Pr0Zo1Wa3Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1E2</b>	1	Pr0Zo1Wa4Dr1	Solid core flush (2.25)	No	3.00	7.00	2	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1E3</b>	1	Pr0Zo1Wa6Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1E4</b>													

1	Pr0Zo1Wa8Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1S3</b>											
1	Pr0Zo1Wa9Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1E5</b>											
1	Pr0Zo1Wa10Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1S4</b>											
1	Pr0Zo1Wa11Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>1W3</b>											
1	Pr0Zo1Wa16Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>2N2</b>											
1	Pr0Zo1Wa22Dr1	Solid core flush (2.25)	No	3.00	8.00	1	24.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>
<b>In Wall:</b>	<b>2S2</b>											
1	Pr0Zo1Wa26Dr1	Solid core flush (2.25)	No	3.00	7.00	1	21.0	0.3504	0.00	0.00	2.85	<input type="checkbox"/>

### Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	<input type="checkbox"/>
<b>In Zone: AHU-1</b>												
1	Lobby Roof	Mtl Bldg Roof/R-19 Batt	142.00	1.00	1	142.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
2	First Aid Roof	Mtl Bldg Roof/R-19 Batt	81.00	1.00	1	81.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
3	Public RR Roof	Mtl Bldg Roof/R-19 Batt	43.00	1.00	1	43.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
4	Decontamination Roof	Mtl Bldg Roof/R-19 Batt	149.00	1.00	1	149.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
5	Decon RR Roof	Mtl Bldg Roof/R-19 Batt	60.00	1.00	1	60.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
6	Turnout Gear Roof	Mtl Bldg Roof/R-19 Batt	159.00	1.00	1	159.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
7	Electrical Roof	Mtl Bldg Roof/R-19 Batt	98.00	1.00	1	98.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>

8	Workshop Roof	Mtl Bldg Roof/R-19 Batt	116.00	1.00	1	116.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
9	Mechanical Roof	Mtl Bldg Roof/R-19 Batt	301.00	1.00	1	301.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
10	Corridor Roof	Mtl Bldg Roof/R-19 Batt	381.00	1.00	1	381.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
11	Laundry Roof	Mtl Bldg Roof/R-19 Batt	71.00	1.00	1	71.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
12	Janitor	Mtl Bldg Roof/R-19 Batt	13.00	1.00	1	13.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
13	Fitness Roof	Mtl Bldg Roof/R-19 Batt	368.00	1.00	1	368.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
14	Kitchen Roof	Mtl Bldg Roof/R-19 Batt	434.00	1.00	1	434.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
15	Dining Roof	Mtl Bldg Roof/R-19 Batt	210.00	1.00	1	210.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
16	Day Room Roof	Mtl Bldg Roof/R-19 Batt	397.00	1.00	1	397.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
17	Crew Restroom Roof	Mtl Bldg Roof/R-19 Batt	79.00	1.00	1	79.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
18	Crew Restroom Roof	Mtl Bldg Roof/R-19 Batt	79.00	1.00	1	79.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
19	Slide Pole Access Roof	Mtl Bldg Roof/R-19 Batt	68.00	1.00	1	68.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
20	Officer's Quarters Roof	Mtl Bldg Roof/R-19 Batt	159.00	1.00	1	159.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
21	Watch Room Roof	Mtl Bldg Roof/R-19 Batt	130.00	1.00	1	130.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
22	Bunk 5 Roof	Mtl Bldg Roof/R-19 Batt	109.00	1.00	1	109.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
23	Bunk 4 Roof	Mtl Bldg Roof/R-19 Batt	109.00	1.00	1	109.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
24	Bunk 3 Roof	Mtl Bldg Roof/R-19 Batt	109.00	1.00	1	109.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
25	Bunk 2 Roof	Mtl Bldg Roof/R-19 Batt	109.00	1.00	1	109.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
26	Bunk 1 Roof	Mtl Bldg Roof/R-19 Batt	109.00	1.00	1	109.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>
<b>In Zone: AC-2</b>												
1	IT Room Roof	Mtl Bldg Roof/R-19 Batt	52.00	1.00	1	52.0	0.00	0.0492	1.34	9.49	20.3	<input type="checkbox"/>



### Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]
In Zone:										
In Roof: <span style="float: right;"><input type="checkbox"/></span>										

### Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: AHU-1											
1	Lobby Floor	1 ft. soil, concrete floor, carpet and rubber pad	142.00	1.00	1	142.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
2	First Aid Floor	1 ft. soil, concrete floor, carpet and rubber pad	81.00	1.00	1	81.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
3	Public RR Floor	1 ft. soil, concrete floor, carpet and rubber pad	43.00	1.00	1	43.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
4	Decontamination Floor	1 ft. soil, concrete floor, carpet and rubber pad	149.00	1.00	1	149.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
5	Decon RR Floor	1 ft. soil, concrete floor, carpet and rubber pad	60.00	1.00	1	60.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
6	Turnout Gear Floor	1 ft. soil, concrete floor, carpet and rubber pad	159.00	1.00	1	159.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
7	Electrical Floor	1 ft. soil, concrete floor, carpet and rubber pad	98.00	1.00	1	98.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>

8	Workshop Floor	1 ft. soil, concrete floor, carpet and rubber pad	98.00	1.00	1	98.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
9	Med Storage Floor	1 ft. soil, concrete floor, carpet and rubber pad	92.00	1.00	1	92.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>
10	Mechanical Floor	1 ft. soil, concrete floor, carpet and rubber pad	301.00	1.00	1	301.0	0.2681	34.00	113.33	3.73	<input type="checkbox"/>

### Systems

<b>AHU-1</b>	<b>System 1</b>	<b>Variable Air Volume Packaged System</b>							<b>No. Of Units 1</b>
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Efficiency</b>	<b>IPLV</b>				<input type="checkbox"/>	
1	Cooling System	226500.00	11.20	14.80				<input type="checkbox"/>	
2	Heating System	80229.00	1.00					<input type="checkbox"/>	
3	Air Handling System -Supply	5000.00	0.42					<input type="checkbox"/>	
<b>AC-2</b>	<b>System 2</b>	<b>Constant Volume Air Cooled Split System &lt; 65000 Btu/hr</b>							<b>No. Of Units 1</b>
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Efficiency</b>	<b>IPLV</b>				<input type="checkbox"/>	
1	Cooling System	18000.00	18.50	8.00				<input type="checkbox"/>	
2	Air Handling System -Supply	600.00	0.06					<input type="checkbox"/>	

### Plant

<b>Equipment</b>	<b>Category</b>	<b>Size</b>	<b>Inst.No</b>	<b>Eff.</b>	<b>IPLV</b>	<input type="checkbox"/>

### Water Heaters

<b>W-Heater Description</b>	<b>Capacity Cap.Unit</b>	<b>I/P Rt.</b>	<b>Efficiency</b>	<b>Loss</b>

	<input type="checkbox"/>
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### Ext-Lighting

Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]

Piping							
No	Type	Operating Temperature [F]	Insulation Conductivity [ Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?	

### Fenestration Used

Name	Glass Type	No. of Panels	Glass Conductance [Btu/h.sf.F]	SHGC	VLT
ASHULTplClrW d-Vy-Fg frm	User Defined	3	0.2800	0.2300	0.5700

### Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]
187	Mat1187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000
178	Mat1178	CARPET W/RUBBER PAD	Yes	1.2300				

265	Matl265	Soil, 1 ft	No	2.0000	1.0000	0.5000	100.00	0.2000	<input type="checkbox"/>
48	Matl48	6 in. Heavyweight concrete	No	0.5000	0.5000	1.0000	140.00	0.2000	<input type="checkbox"/>
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	<input type="checkbox"/>
4	Matl4	Steel siding	No	0.0002	0.0050	26.0000	480.00	0.1000	<input type="checkbox"/>
271	Matl271	2x4@24" oc + R13 Batt	Yes	13.0000					<input type="checkbox"/>
279	Matl279	Solid core flush (2.25")	Yes	2.8537					<input type="checkbox"/>
94	Matl94	BUILT-UP ROOFING, 3/8IN	No	0.3366	0.0313	0.0930	70.00	0.3500	<input type="checkbox"/>

### Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1055	Metal siding/2x4@24"+R13Batt/5/8"Gyp	No	Yes	0.07			13.5	<input type="checkbox"/>
	<b>Layer</b>	<b>Material No.</b>	<b>Material</b>	<b>Thickness [ft]</b>	<b>Framing Factor</b>			
	1	4	Steel siding	0.0050	0.000			<input type="checkbox"/>
	2	271	2x4@24" oc + R13 Batt	0.2917	0.000			<input type="checkbox"/>
	3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.000			<input type="checkbox"/>
No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1056	Mtl Bldg Roof/R-19 Batt	No	No	0.05	1.34	9.49	20.3	<input type="checkbox"/>
	<b>Layer</b>	<b>Material No.</b>	<b>Material</b>	<b>Thickness [ft]</b>	<b>Framing Factor</b>			
	1	94	BUILT-UP ROOFING, 3/8IN	0.0313	0.000			<input type="checkbox"/>
	2	23	6 in. Insulation	0.5000	0.000			<input type="checkbox"/>

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1057	1 ft. soil, concrete floor, carpet and rubber pad	No	No	0.27	34.00	113.33	3.7	<input type="checkbox"/>
	<b>Layer</b>	<b>Material No.</b>	<b>Material</b>	<b>Thickness [ft]</b>	<b>Framing Factor</b>			
	1	265	Soil, 1 ft	1.0000	0.000			<input type="checkbox"/>
	2	48	6 in. Heavyweight concrete	0.5000	0.000			<input type="checkbox"/>
	3	178	CARPET W/RUBBER PAD		0.000			<input type="checkbox"/>
No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1058	Solid core flush (2.25)	No	Yes	0.35			2.9	<input type="checkbox"/>
	<b>Layer</b>	<b>Material No.</b>	<b>Material</b>	<b>Thickness [ft]</b>	<b>Framing Factor</b>			
	1	279	Solid core flush (2.25")		0.000			<input type="checkbox"/>

# Profiles

<b>0</b>	0	No Classification	No Classification	
	201	People	2	Fractional Null Schedule
	202	Lighting	2	Fractional Null Schedule
	203	Infiltration	2	Fractional Null Schedule
	204	Equipment	2	Fractional Null Schedule
	205	Sources	2	Fractional Null Schedule
	206	HeatTemp	202	Set Point 55
	207	CoolTemp	201	Set Point 99
	208	Hot Water Schedule	2	Fractional Null Schedule
	1,001	Heating Schedule	1	ON-OFF Null Schedule
	1,002	Cooling Schedule	1	ON-OFF Null Schedule
	1,003	Fan Operation Schedule	1	ON-OFF Null Schedule
<b>501</b>	501	ACM-NonRes	ACM Nonres	
	201	People	519	ACM Nonres People
	202	Lighting	507	ACM Nonres Lights
	203	Infiltration	516	ACM Nonres Infiltration
	204	Equipment	510	ACM Nonres Equipment
	205	Sources	2	Fractional Null Schedule
	206	HeatTemp	501	ACM Nonres Heating
	207	CoolTemp	504	ACM Nonres Cooling
	208	Hot Water Schedule	522	ACM Nonres Hot Water
	1,001	Heating Schedule	410	Always ON
	1,002	Cooling Schedule	410	Always ON
	1,003	Fan Operation Schedule	513	ACM Nonres Fans
<b>573</b>	573	ACM-ReswoSetback	ACM ReswoSetback	
	201	People	591	ACM ReswoSetback People
	202	Lighting	579	ACM ReswoSetback Lights
	203	Infiltration	588	ACM ReswoSetback Infiltration

204	Equipment	582	ACM ReswoSetback Equipment
205	Sources	2	Fractional Null Schedule
206	HeatTemp	573	ACM ReswoSetback Heating
207	CoolTemp	576	ACM ReswoSetback Cooling
208	Hot Water Schedule	594	ACM ReswoSetback Hot Water
1,001	Heating Schedule	410	Always ON
1,002	Cooling Schedule	410	Always ON
1,003	Fan Operation Schedule	585	ACM ReswoSetback Fans

## Schedules

<b>1</b>	1	On/Off	ON-OFF Null Schedule						
Hourly Sch. for: 12/31/1989	Monday ShHr1	Tuesday ShHr1	Wednesday ShHr1	Thursday ShHr1	Friday ShHr1	Saturday ShHr1	Sunday ShHr1	Holiday ShHr1	
<b>2</b>	2	Fraction	Fractional Null Schedule						
Hourly Sch. for: 12/31/1989	Monday ShHr2	Tuesday ShHr2	Wednesday ShHr2	Thursday ShHr2	Friday ShHr2	Saturday ShHr2	Sunday ShHr2	Holiday ShHr2	
<b>44</b>	44	Absolute	SetPt78						
Hourly Sch. for: 12/31/1989	Monday ShHr179	Tuesday ShHr179	Wednesday ShHr179	Thursday ShHr179	Friday ShHr179	Saturday ShHr179	Sunday ShHr179	Holiday ShHr179	
<b>45</b>	45	Absolute	Set Point 70						
Hourly Sch. for: 12/31/1989	Monday ShHr180	Tuesday ShHr180	Wednesday ShHr180	Thursday ShHr180	Friday ShHr180	Saturday ShHr180	Sunday ShHr180	Holiday ShHr180	
<b>201</b>	201	Absolute	Set Point 99						
Hourly Sch. for: 12/31/1989	Monday ShHr201	Tuesday ShHr201	Wednesday ShHr201	Thursday ShHr201	Friday ShHr201	Saturday ShHr201	Sunday ShHr201	Holiday ShHr201	
<b>202</b>	202	Absolute	Set Point 55						
Hourly Sch. for: 12/31/1989	Monday ShHr202	Tuesday ShHr202	Wednesday ShHr202	Thursday ShHr202	Friday ShHr202	Saturday ShHr202	Sunday ShHr202	Holiday ShHr202	



<b>410</b>	410		On/Off	Always ON					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr410	ShHr410	ShHr410	ShHr410	ShHr410	ShHr410	ShHr410	ShHr410	
<b>412</b>	412		Absolute	Florida Commercial Electric Rate					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
3/31/1989	ShHr413	ShHr413	ShHr413	ShHr413	ShHr413	ShHr415	ShHr415	ShHr415	
10/31/1989	ShHr412	ShHr412	ShHr412	ShHr412	ShHr412	ShHr412	ShHr414	ShHr414	
12/31/1989	ShHr413	ShHr413	ShHr413	ShHr413	ShHr413	ShHr415	ShHr415	ShHr415	
<b>501</b>	501		Absolute	ACM Nonres Heating					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr501	ShHr501	ShHr501	ShHr501	ShHr501	ShHr502	ShHr503	ShHr503	
<b>504</b>	504		Absolute	ACM Nonres Cooling					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr504	ShHr504	ShHr504	ShHr504	ShHr504	ShHr505	ShHr506	ShHr506	
<b>507</b>	507		Fraction	ACM Nonres Lights					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr507	ShHr507	ShHr507	ShHr507	ShHr507	ShHr508	ShHr509	ShHr509	
<b>510</b>	510		Fraction	ACM Nonres Equipment					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr510	ShHr510	ShHr510	ShHr510	ShHr510	ShHr511	ShHr512	ShHr512	
<b>513</b>	513		On/Off	ACM Nonres Fans					
Hourly Sch. for:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday	
12/31/1989	ShHr513	ShHr513	ShHr513	ShHr513	ShHr513	ShHr514	ShHr515	ShHr515	

<b>516</b>	516	Fraction	ACM Nonres Infiltration						
Hourly Sch. for: 12/31/1989	Monday ShHr516	Tuesday ShHr516	Wednesday ShHr516	Thursday ShHr516	Friday ShHr516	Saturday ShHr517	Sunday ShHr518	Holiday ShHr518	
<b>519</b>	519	Fraction	ACM Nonres People						
Hourly Sch. for: 12/31/1989	Monday ShHr519	Tuesday ShHr519	Wednesday ShHr519	Thursday ShHr519	Friday ShHr519	Saturday ShHr520	Sunday ShHr521	Holiday ShHr521	
<b>522</b>	522	Fraction	ACM Nonres Hot Water						
Hourly Sch. for: 12/31/1989	Monday ShHr522	Tuesday ShHr522	Wednesday ShHr522	Thursday ShHr522	Friday ShHr522	Saturday ShHr523	Sunday ShHr524	Holiday ShHr524	
<b>573</b>	573	Absolute	ACM ReswoSetback Heating						
Hourly Sch. for: 12/31/1989	Monday ShHr573	Tuesday ShHr573	Wednesday ShHr573	Thursday ShHr573	Friday ShHr573	Saturday ShHr574	Sunday ShHr575	Holiday ShHr575	
<b>576</b>	576	Absolute	ACM ReswoSetback Cooling						
Hourly Sch. for: 12/31/1989	Monday ShHr576	Tuesday ShHr576	Wednesday ShHr576	Thursday ShHr576	Friday ShHr576	Saturday ShHr577	Sunday ShHr578	Holiday ShHr578	
<b>579</b>	579	Fraction	ACM ReswoSetback Lights						
Hourly Sch. for: 12/31/1989	Monday ShHr579	Tuesday ShHr579	Wednesday ShHr579	Thursday ShHr579	Friday ShHr579	Saturday ShHr580	Sunday ShHr581	Holiday ShHr581	
<b>582</b>	582	Fraction	ACM ReswoSetback Equipment						
Hourly Sch. for: 12/31/1989	Monday ShHr582	Tuesday ShHr582	Wednesday ShHr582	Thursday ShHr582	Friday ShHr582	Saturday ShHr583	Sunday ShHr584	Holiday ShHr584	

<b>585</b>	585		On/Off	ACM ReswoSetback Fans					
Hourly Sch. for: 12/31/1989	Monday ShHr585	Tuesday ShHr585	Wednesday ShHr585	Thursday ShHr585	Friday ShHr585	Saturday ShHr586	Sunday ShHr587	Holiday ShHr587	
<b>588</b>	588		Fraction	ACM ReswoSetback Infiltration					
Hourly Sch. for: 12/31/1989	Monday ShHr588	Tuesday ShHr588	Wednesday ShHr588	Thursday ShHr588	Friday ShHr588	Saturday ShHr589	Sunday ShHr590	Holiday ShHr590	
<b>591</b>	591		Fraction	ACM ReswoSetback People					
Hourly Sch. for: 12/31/1989	Monday ShHr591	Tuesday ShHr591	Wednesday ShHr591	Thursday ShHr591	Friday ShHr591	Saturday ShHr592	Sunday ShHr593	Holiday ShHr593	
<b>594</b>	594		Fraction	ACM ReswoSetback Hot Water					
Hourly Sch. for: 12/31/1989	Monday ShHr594	Tuesday ShHr594	Wednesday ShHr594	Thursday ShHr594	Friday ShHr594	Saturday ShHr595	Sunday ShHr596	Holiday ShHr596	
<b>1,001</b>	1,001		Absolute	Absolute null schedule					
Hourly Sch. for: 12/31/1989	Monday ShHr10001	Tuesday ShHr10001	Wednesday ShHr10001	Thursday ShHr10001	Friday ShHr10001	Saturday ShHr10001	Sunday ShHr10001	Holiday ShHr10001	
<b>1,002</b>	1,002		Absolute	Absolute null schedule					
Hourly Sch. for: 12/31/1989	Monday ShHr10002	Tuesday ShHr10002	Wednesday ShHr10002	Thursday ShHr10002	Friday ShHr10002	Saturday ShHr10002	Sunday ShHr10002	Holiday ShHr10002	

## Hourly Schedules

Id	Acronym	Type	Values	Hours 1 thru 8								
				Hours 9 - 16	Hours 17 - 24							
1	ShHr1	On/Off	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
			On-Off Null Schedule	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
				OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	ShHr2	Fraction	0	0	0	0	0	0	0	0	0	
			Fraction Null Schedule	0	0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0	0	0
3	ShHr3	Absolute	0	0	0	0	0	0	0	0	0	
			Absolute Null Schedule	0	0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0	0	0
179	ShHr179	Absolute	78	78	78	78	78	78	78	78	78	
			Set point 78 F All Day	78	78	78	78	78	78	78	78	78
				78	78	78	78	78	78	78	78	78
180	ShHr180	Absolute	70	70	70	70	70	70	70	70	70	
			Set Point 70 F All Day	70	70	70	70	70	70	70	70	70
				70	70	70	70	70	70	70	70	70
201	ShHr201	Absolute	99	99	99	99	99	99	99	99	99	
			Set point 99	99	99	99	99	99	99	99	99	99
				99	99	99	99	99	99	99	99	99
202	ShHr202	Absolute	45	45	45	45	45	45	45	45	45	
			Set Point 55	45	45	45	45	45	45	45	45	45
				45	45	45	45	45	45	45	45	45
410	ShHr410	On/Off	ON	ON	ON	ON	ON	ON	ON	ON	ON	
			Always On schedule	ON	ON	ON	ON	ON	ON	ON	ON	ON
				ON	ON	ON	ON	ON	ON	ON	ON	ON
411	ShHr411	On/Off	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
			Always Off Schedule	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
				OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
412	ShHr412	Absolute	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	
			Florida Avg. Week Day Summer Elec	0.03804	0.03804	0.03804	0.0686	0.0686	0.0686	0.0686	0.0686	0.0686
				0.0686	0.0686	0.0686	0.0686	0.0686	0.0686	0.03804	0.03804	0.03804

413	ShHr413	Absolute	0.03804	0.03804	0.03804	0.03804	0.03804	0.0686	0.0686	0.0686
	Florida Avg. Week Day Winter Electri		0.0686	0.0686	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
			0.03804	0.0686	0.0686	0.0686	0.0686	0.0686	0.03804	0.03804
414	ShHr414	Absolute	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
	Florida Avg. Week End Summer Elec		0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
			0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
415	ShHr415	Absolute	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
	Florida Avg. Week End Winter Electri		0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
			0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804	0.03804
501	ShHr501	Absolute	60	60	60	60	60	65	65	70
	ACM Nonres Heating Weekday		70	70	70	70	70	70	70	70
			70	70	65	60	60	60	60	60
502	ShHr502	Absolute	60	60	60	60	60	65	65	65
	ACM Nonres Heating Saturday		65	65	65	65	65	65	65	65
			60	60	60	60	60	60	60	60
503	ShHr503	Absolute	60	60	60	60	60	65	65	65
	ACM Nonres Heating Sunday		65	65	65	65	65	65	65	65
			60	60	60	60	60	60	60	60
504	ShHr504	Absolute	77	77	77	77	77	73	73	73
	ACM Nonres Cooling Weekday		73	73	73	73	73	73	73	73
			73	73	77	77	77	77	77	77
505	ShHr505	Absolute	77	77	77	77	77	73	73	73
	ACM Nonres Cooling Saturday		73	73	73	73	73	73	73	73
			73	73	77	77	77	77	77	77
506	ShHr506	Absolute	77	77	77	77	77	73	73	73
	ACM Nonres Cooling Sunday		73	73	73	73	73	73	73	73
			73	73	77	77	77	77	77	77
507	ShHr507	Fraction	0.05	0.05	0.05	0.05	0.1	0.2	0.4	0.7
	ACM Nonres Lights Weekday		0.8	0.85	0.85	0.85	0.85	0.85	0.85	0.85
			0.85	0.8	0.35	0.1	0.1	0.1	0.1	0.1
508	ShHr508	Fraction	0.05	0.05	0.05	0.05	0.05	0.1	0.15	0.25
	ACM Nonres Lights Saturday		0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2
			0.2	0.15	0.1	0.1	0.1	0.1	0.1	0.1
509	ShHr509	Fraction	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.15
	ACM Nonres Lights Sunday		0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
			0.15	0.1	0.1	0.1	0.05	0.05	0.05	0.05

510	ShHr510	Fraction	0.15	0.15	0.15	0.15	0.15	0.2	0.35	0.6
	ACM Nonres Equipment	Weekday	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
			0.65	0.45	0.3	0.2	0.2	0.15	0.15	0.15
511	ShHr511	Fraction	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.2
	ACM Nonres Equipment	Saturday	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2
			0.2	0.15	0.15	0.15	0.15	0.15	0.15	0.15
512	ShHr512	Fraction	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.2
	ACM Nonres Equipment	Sunday	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
			0.2	0.15	0.15	0.15	0.15	0.15	0.15	0.15
513	ShHr513	On/Off	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
	ACM Nonres Fans	Weekday	ON	ON	ON	ON	ON	ON	ON	ON
			ON	ON	ON	ON	OFF	OFF	OFF	OFF
514	ShHr514	On/Off	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
	ACM Nonres Fans	Saturday	ON	ON	ON	ON	ON	ON	ON	OFF
			OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
515	ShHr515	On/Off	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	ACM Nonres Fans	Sunday	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
			OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
516	ShHr516	Fraction	1	1	1	1	1	0	0	0
	ACM Nonres Infiltration	Weekday	0	0	0	0	0	0	0	0
			0	0	0	0	1	1	1	1
517	ShHr517	Fraction	1	1	1	1	1	0	0	0
	ACM Nonres Infiltration	Saturday	0	0	0	0	0	0	0	1
			1	1	1	1	1	1	1	1
518	ShHr518	Fraction	1	1	1	1	1	1	1	1
	ACM Nonres Infiltration	Sunday	1	1	1	1	1	1	1	1
			1	1	1	1	1	1	1	1
519	ShHr519	Fraction	0	0	0	0	0.05	0.1	0.25	0.65
	ACM Nonres People	Weekday	0.65	0.65	0.65	0.6	0.6	0.65	0.65	0.65
			0.65	0.4	0.25	0.1	0.05	0.05	0.05	0
520	ShHr520	Fraction	0	0	0	0	0	0	0.05	0.15
	ACM Nonres People	Saturday	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
			0.15	0.05	0.05	0.05	0	0	0	0
521	ShHr521	Fraction	0	0	0	0	0	0	0	0.05
	ACM Nonres People	Sunday	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
			0.05	0.05	0.05	0.05	0	0	0	0

522	ShHr522	Fraction	0	0	0	0	0.1	0.1	0.5	0.5
	ACM Nonres Hot Water Weekday		0.5	0.5	0.7	0.9	0.9	0.5	0.5	0.7
			0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1
523	ShHr523	Fraction	0	0	0	0	0	0	0.1	0.2
	ACM Nonres Hot Water Saturday		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
			0.2	0.1	0.1	0.1	0	0	0	0
524	ShHr524	Fraction	0	0	0	0	0	0	0	0.1
	ACM Nonres Hot Water Sunday		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
			0.1	0.1	0.1	0.1	0	0	0	0
573	ShHr573	Absolute	68	68	68	68	68	68	68	68
	ACM ReswoSetback Heating Weekda		68	68	68	68	68	68	68	68
			68	68	68	68	68	68	68	68
574	ShHr574	Absolute	68	68	68	68	68	68	68	68
	ACM ReswoSetback Heating Saturda		68	68	68	68	68	68	68	68
			68	68	68	68	68	68	68	68
575	ShHr575	Absolute	68	68	68	68	68	68	68	68
	ACM ReswoSetback Heating Sunday		68	68	68	68	68	68	68	68
			68	68	68	68	68	68	68	68
576	ShHr576	Absolute	78	78	78	78	78	78	78	78
	ACM ReswoSetback Cooling Weekda		78	78	78	78	78	78	78	78
			78	78	78	78	78	78	78	78
577	ShHr577	Absolute	78	78	78	78	78	78	78	78
	ACM ReswoSetback Cooling Saturda		78	78	78	78	78	78	78	78
			78	78	78	78	78	78	78	78
578	ShHr578	Absolute	78	78	78	78	78	78	78	78
	ACM ReswoSetback Cooling Sunday		78	78	78	78	78	78	78	78
			78	78	78	78	78	78	78	78
579	ShHr579	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Lights Weekday		0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3
580	ShHr580	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Lights Saturday		0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3
581	ShHr581	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Lights Sunday		0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3

582	ShHr582	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Equip	Weekday	0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3
583	ShHr583	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Equip	Saturday	0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3
584	ShHr584	Fraction	0.1	0.1	0.1	0.1	0.1	0.3	0.45	0.45
	ACM ReswoSetback Equip	Sunday	0.45	0.45	0.3	0.3	0.3	0.3	0.3	0.3
			0.3	0.3	0.6	0.8	0.9	0.8	0.6	0.3
585	ShHr585	On/Off	ON	ON	ON	ON	ON	ON	ON	ON
	ACM ReswoSetback Fans	Weekday	ON	ON	ON	ON	ON	ON	ON	ON
			ON	ON	ON	ON	ON	ON	ON	ON
586	ShHr586	On/Off	ON	ON	ON	ON	ON	ON	ON	ON
	ACM ReswoSetback Fans	Saturday	ON	ON	ON	ON	ON	ON	ON	ON
			ON	ON	ON	ON	ON	ON	ON	ON
587	ShHr587	On/Off	ON	ON	ON	ON	ON	ON	ON	ON
	ACM ReswoSetback Fans	Sunday	ON	ON	ON	ON	ON	ON	ON	ON
			ON	ON	ON	ON	ON	ON	ON	ON
588	ShHr588	Fraction	1	1	1	1	1	1	1	1
	ACM ReswoSetback Infil	Weekday	1	1	1	1	1	1	1	1
			1	1	1	1	1	1	1	1
589	ShHr589	Fraction	1	1	1	1	1	1	1	1
	ACM ReswoSetback Infil	Saturday	1	1	1	1	1	1	1	1
			1	1	1	1	1	1	1	1
590	ShHr590	Fraction	1	1	1	1	1	1	1	1
	ACM ReswoSetback Infil	Sunday	1	1	1	1	1	1	1	1
			1	1	1	1	1	1	1	1
591	ShHr591	Fraction	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.4
	ACM ReswoSetback People	Weekday	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
			0.5	0.5	0.5	0.7	0.7	0.8	0.9	0.9
592	ShHr592	Fraction	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.4
	ACM ReswoSetback People	Saturday	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
			0.5	0.5	0.5	0.7	0.7	0.8	0.9	0.9
593	ShHr593	Fraction	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.4
	ACM ReswoSetback People	Sunday	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
			0.5	0.5	0.5	0.7	0.7	0.8	0.9	0.9



594	ShHr594	Fraction	0	0	0	0.05	0.05	0.05	0.8	0.7
	ACM ReswoSetback SWH Weekday		0.5	0.4	0.25	0.25	0.25	0.25	0.5	0.6
			0.7	0.7	0.4	0.25	0.2	0.2	0.05	0.05
595	ShHr595	Fraction	0	0	0	0.05	0.05	0.05	0.8	0.7
	ACM ReswoSetback SWH Saturday		0.5	0.4	0.25	0.25	0.25	0.25	0.5	0.6
			0.7	0.7	0.4	0.25	0.2	0.2	0.05	0.05
596	ShHr596	Fraction	0	0	0	0.05	0.05	0.05	0.8	0.7
	ACM ReswoSetback SWH Sunday		0.5	0.4	0.25	0.25	0.25	0.25	0.5	0.6
			0.7	0.7	0.4	0.25	0.2	0.2	0.05	0.05
),001	ShHr10001	Absolute	0	0	0	0	0	0	0	0
	Absolute Null Schedule		0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
),002	ShHr10002	Absolute	0	0	0	0	0	0	0	0
	Absolute Null Schedule		0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0