

# BUILDING PLANS REVIEW CHECKLIST

## Commercial



**NYSERDA**

3rd Party Support Provider:

Provider Number:

Permit Number:

Project Name:

Project Address:

Building Type:

Review Date:

Updated:

Permit Applicant:

Phone:  Email:

Plans Examiner:

Phone:  Email:

This is a dynamic document that creates a custom energy code checklist for a project scope. This checklist can also be used to create a set of example correction comments that may be used or modified by the plans examiner. If your municipality has adopted a more efficient code than New York Stretch that code will not be reflected in this checklist. The following checklist is a new tool created by NYSERDA to support Building Officials and Third-party Support providers in Plan Review and Inspection. As you use the documents you are encouraged to provide feedback so NYSERDA can continue to refine the document.

**Would you like to use the sample correction comments feature?**

YES

The dynamic version of this checklist is available on <https://www.nysersda.ny.gov/All%20Programs/Programs/Energy%20Code%20Training>

Compliance Pathway				
<input type="checkbox"/> Performance	<input type="checkbox"/> Prescriptive <sup>1</sup>			
ECCCNYS Compliance Option				
<input type="checkbox"/> ECCCNYS Commercial Provisions	<input type="checkbox"/> ASHRAE 90.1 - 2016 <sup>2</sup> (as amended)	<input type="checkbox"/> NYStretch Supplement to ECCCNYS (IECC path)	<input type="checkbox"/> NYStretch Supplement to ECCCNYS (ASHRAE path)	
Compliance Scope (Check all that apply and confirm required forms are included in permit application)				
<input type="checkbox"/> Envelope	<input type="checkbox"/> HVAC	<input type="checkbox"/> Service Water Heating	<input type="checkbox"/> Lighting & Electrical	<input type="checkbox"/> Commissioning

<sup>1</sup> If complying via COMcheck™, use its compliance checklist instead of this form.

<sup>2</sup> For ASHRAE 90.1-2016 Section 11 or Appendix G compliance please use the compliance form developed by US DoE and PNNL. <https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form>

General (prescriptive)	Applicable To This Project?	Plan Sheet Location?	Addressed In CDs?	
			Yes	No
Confirm the following items on the construction documents. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.				
G1. Which energy code is the project complying with?	<a href="#">C401.2</a>			
G2. Does the project scope fall under the commercial provisions of the Energy Code?	<a href="#">C101.3</a> <a href="#">ASHRAE 90.1-2016 Section 2.2</a>			
G3. Which climate zone is the building in?	<a href="#">Table C301.1</a> <a href="#">ASHRAE 169 Table Annex 1-1</a>			
G4. Are all plan sheets signed, dated and stamped by the designer of record (as required, and applicable by local and state guidelines)?	<i>Local and State guidelines</i>			



**NYSERDA**

<p><b>G5.</b> Are all disciplines complying prescriptively with one of the options below?</p> <ol style="list-style-type: none"> <li>1. 2020 ECCCNY - Insulation Component R-value-based Method</li> <li>2. 2020 ECCCNY - Assembly U-factor, C-factor or F-factor-based Method</li> <li>3. 2020 ECCCNY - Component Performance Alternative</li> <li>4. ASHRAE Standard 90.1-2016 with NYS amendments</li> </ol>	<p><a href="#">C402-C406 &amp; C408 (new) or C402-C405 &amp; C502.2 (additions)</a>  <a href="#">ASHRAE 90.1-2016 Sections 5-10</a></p>				
<p><b>G6.</b> Is the project pursuing compliance with NYStretch Energy Code 2020?</p>	<p><a href="#">NYStretch Energy Code 2020</a></p>				
<p><b>General (performance)</b></p>		<p>Applicable To This Project?</p>	<p>Plan Sheet Location?</p>	<p>Addressed In CDs? Yes No</p>	
<p>Confirm the following items on the construction documents. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.</p>					
<p><b>G1.</b> Does the project scope fall under the commercial provisions of the Energy Code?</p>	<p><a href="#">C101</a></p>				
<p><b>G2.</b> Are all plan sheets signed, dated and stamped by the designer of record (as required, and applicable by local and state guidelines)?</p>	<p><i>Local and state guidelines</i></p>				
<p><b>G3.</b> Which climate zone is the building in?</p>	<p><a href="#">Table C301.1</a></p>				
<p><b>G4.</b> Is total building energy cost (proposed design) equal to or less than 85% of the standard reference design building, i.e., 15% or more energy cost savings shown?</p>	<p><a href="#">C401.2</a></p>				
<p><b>G5.</b> Is the project pursuing compliance with NYStretch Energy Code 2020?</p>	<p><a href="#">NYStretch Energy Code 2020</a></p>				
<p><b>Envelope (prescriptive)</b></p>		<p>Applicable To This Project?</p>	<p>Plan Sheet Location?</p>	<p>Addressed In CDs? Yes No</p>	
<p>Most building envelope requirements will be found in the architectural plans and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment. Please refer to Tables C402.1.3, C402.1.4, and C402.4, or for ASHRAE 90.1-2016 compliance: Tables 5.5-4, 5.5-5, 5.5-6</p>					
<p><b>E1.</b> Do the thermal envelope R-values and U-factors on the construction plans meet or exceed the requirements?</p>	<p><a href="#">Tables C402.1.3, C402.1.4, and C402.4</a>  <a href="#">ASHRAE 90.1-2016 Tables 5.5-4, 5.5-5, 5.5-6</a></p>				
<p><b>E2.</b> Does the thermal envelope of the building meet air leakage requirements via one the following: 1. thermal envelope testing (C402.5 or ASHRAE 90.1-2016 Section 5.4.3.1.3 a), 2. materials compliance (C402.5.1.2 or ASHRAE 90.1-2016 Section 5.4.3.1.3 b), 3. assemblies compliance (C402.5.1.2.2 or ASHRAE 90.1-2016 Section 5.4.3.1.3 c)?</p>	<p><a href="#">C402.5.1</a>  <a href="#">ASHRAE 90.1-2016 Section 5.4.3.1.3</a></p>				
<p><b>E3.</b> If complying with air leakage requirements via materials or assemblies requirements, is continuous air barrier shown for windows &amp; connections, walls, roofs and floors and the material specified in drawing details or specifications?</p>	<p><a href="#">C402.5.1.2</a>  <a href="#">ASHRAE 90.1-2016 Section 5.4.3.1</a></p>				
<p><b>E4.</b> Does the air leakage of fenestration and access openings meet the requirements?</p>	<p><a href="#">C402.5.2 &amp; C402.5.4</a>  <a href="#">ASHRAE 90.1-2016 Section 5.4.3.2</a></p>				

E5. Are cargo door openings and loading door openings equipped with weather seals that restrict infiltration?	<a href="#">C402.5.6</a> <a href="#">ASHRAE 90.1-2016 Section</a>				
E6. Do vestibule(s) > 3,000sf spaces, meet design requirements in C402.5.7, or meet a listed exemption?	<a href="#">C402.5.7</a> <a href="#">ASHRAE 90.1-2016 Section 5.4.3.4</a>				
E7. If applicable, are recessed luminaires installed in the building thermal envelope: sealed, IC-rated, and comply with air leakage requirements?	<a href="#">C402.5.8</a> <a href="#">ASHRAE 90.1-2016 Section 5.8.1.6</a>				
E8. Is vertical fenestration area equal to or less than 30% of gross above-grade wall area for IECC, or if daylighting criteria are met under C402.4.1.1, not more than 40%? Is it equal or less than 40% for ASHRAE compliance?	<a href="#">C402.4.1</a> <a href="#">ASHRAE 90.1-2016 Tables 5.5</a>				
E9. If applicable, are skylight fenestration area requirements met?	<a href="#">C402.4.2</a> <a href="#">ASHRAE 90.1-2016 Section 5.5.4.2.3</a>				
E10. Are assembly U-factor and SHGC values from either the window/skylight schedule or specifications equal to or less than the U-factor and SHGC maximums listed in Table C402.4 (or the area-weighted calculations shown)?	<a href="#">C402.4</a> <a href="#">ASHRAE 90.1-2016 Tables 5.5-4, 5.5-5, 5.5-6</a>				
E11. NYStretch only: If the total area of mechanical equipment penetrations exceeds 1% of the opaque above-grade wall area, is the mechanical equipment penetration area calculated as a separate wall assembly with a default U-0.5?	<a href="#">C402.1.4.2</a>				
E12. NYStretch only: If applicable, do structural elements of balconies and parapets that penetrate the building thermal envelope comply with continuous insulation requirements?	<a href="#">C402.2.8</a> <a href="#">ASHRAE 90.1-2016 Section 5.4.1.1</a>				
E13. NYStretch only: If applicable, i.e., new buildings 25,000-50,000 SF and less than or equal to 75 ft in height, does the project show compliance with air barrier testing requirements?	<a href="#">C402.5, C402.5.9</a> <a href="#">ASHRAE 90.1-2016 Section 5.4.3.1.3</a>				

<b>Envelope (performance)</b>	Applicable To This Project?	Plan Sheet Location	Addressed In CDs?	
			Yes	No

Most building envelope requirements will be found in the architectural plans and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment. Please refer to Tables C402.1.3, C402.1.4, and C402.4

E1. Is continuous air barrier shown for windows & connections, walls, roofs and floors and the material specified in drawing details or specifications?	<a href="#">C402.5.1</a>				
E2. Is air barrier compliance inspection and air leakage testing plan provided?	<a href="#">C402.5.1.2</a>				
E3. Does the air leakage of fenestration meet the requirements?	<a href="#">C402.5.2</a>				
E4. Are doors, access openings from conditioned space to shafts, chutes, stairways, and elevator lobbies gasketed, weatherstripped, or sealed?	<a href="#">C402.5.4</a>				
E5. Are cargo door openings and loading door openings equipped with weatherseals that restrict infiltration?	<a href="#">C402.5.6</a>				

E6. Do vestibule(s) > 3,000sf spaces, meet design requirements in C402.5.7, or meet a listed exemption?	<a href="#">C402.5.7</a>				
E7. If applicable, are recessed luminaires installed in the building thermal envelope: sealed, IC-rated, and labeled as having an air leakage rate of not more than 2.0 cfm?	<a href="#">C402.5.8</a>				
E8. NYStretch only: If the total area of mechanical equipment penetrations exceeds 1% of the opaque above-grade wall area, is the mechanical equipment penetration area calculated as a separate wall assembly with a default U-0.5?	<a href="#">C402.1.4.2</a>				
E9. NYStretch only: If applicable, do structural elements of balconies and parapets that penetrate the buildign thermal envelope comply with continuous insulation requirements?	<a href="#">C402.2.8</a>				
E10. NYStretch only: If applicable, i.e., new buildings 25,000-50,000 SF and less than or equal to 75 ft in height, does the project show compliance with air barrier testing requirements?	<a href="#">C402.5</a> , <a href="#">C402.5.9</a>				
<b>HVAC (prescriptive)</b>		<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b> Yes No	
Most HVAC system requirements will be found in the mechanical plans and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
H1. Are mechanical zones >25,000 sf divided into isolation areas (if applicable)?	<a href="#">C403.2.1</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.3.3.4</a>				
H2. Is ventilation provided in accordance with code requirements, including minimum ventilation rates?	<i>Chapter 4 of Mechanical Code of New York State</i> <a href="#">ASHRAE 90.1-2016 Section 6.5.3.7</a>				
H3. Does HVAC equipment sizing comply with code requirements?	<a href="#">C403.3.1</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.2.1</a>				
H4. Do HVAC equipment efficiencies meet or exceed code minimum efficiency requirements?	<a href="#">Tables C403.3.2(1)-C403.3.2(10)</a> <a href="#">ASHRAE 90.1-2016 Tables 6.8.1-1 to 6.8.1-10</a>				
H5. Do the proposed HVAC equipment comply with section C403.4 Heating and cooling system controls?	<a href="#">C403.4</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.3</a>				
H6. For fan systems with cooling capacity >=54,000 Btu/h, do the mechanical schedule notes, or control notes provide economizer description?	<a href="#">C403.5</a> <a href="#">ASHRAE 90.1-2016 Section 6.5.1</a>				
H7. Air economizers - do the economizers have high limit shutoff control setting specified?	<a href="#">Table C403.5.3.3</a> <a href="#">ASHRAE 90.1-2016 6.5.1.1.3</a>				
H8. Are the economizers specified to modulate and provide up to 100% of design supply air as outdoor air for cooling (air economizers), or 100% of the expected system cooling load (water economizers), in specifications or control notes?	<a href="#">C403.5.3</a> <a href="#">ASHRAE 90.1-2016 Sections 6.5.1.1.1, 6.5.1.2.1</a>				
H9. Do economizers comply with fault detection and diagnostics requirements?	<a href="#">C403.5.5</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.3.12</a>				

H10. Are demand control ventilation, energy recovery ventilation, and other requirements mentioned in C403.7 met, if applicable?	<a href="#">C403.7</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.3.8</a>				
H11. Are the HVAC system fan motor nameplate (brake) horsepower values within the listed equation outputs?	<a href="#">Option 1 - C403.8.1</a> <a href="#">Option 2 - C403.8.2</a> <a href="#">ASHRAE 90.1-2016 Table 6.5.3.1-1</a>				
H12. Is any HVAC equipment with DX cooling $\geq 65,000$ Btu/h, and any chilled water or evaporative cooling system capable of varying the indoor fan airflow as a function of load (variable speed)?	<a href="#">C403.8.5</a> <a href="#">ASHRAE 90.1-2016 6.5.3.2.1</a>				
H13. In addition to having thermostats in each zone, do the mechanical drawings or specifications show that thermostats have a deadband/temperature range of not less than 5 °F, automatic start, setback, and shutdown capabilities?	<a href="#">C403.4.1</a> <a href="#">ASHRAE 90.1-2016 Section 6.4.3.1</a>				
H14. If design has heat pumps with supplementary electric resistance heat, are there controls to prevent electric resistance operation when the heat pump can provide the heating load, except for defrost?	<a href="#">C403.4.1.1</a> <a href="#">ASHRAE 90.1-2016 Section 6.3.2, h</a>				
H15. Are requirements for mechanical systems serving multiple zones met?	<a href="#">C403.6</a> <a href="#">ASHRAE 90.1-2016 Section 6.5.3.2.3, 6.5.3.3</a>				
H16. Are supply air ducts and plenums insulated with at least R-6 insulation in unconditioned spaces; and R-8 insulation outside the building in climate zone 4, R-12 insulation in climate zones 5 and 6?	<a href="#">C403.11.1</a> <a href="#">ASHRAE 90.1-2016 Table 6.8.2</a>				
H.17 Do heating and cooling system pipe insulation values meet the minimum thresholds?	<a href="#">C403.11.3</a> <a href="#">ASHRAE 90.1-2016 Table 6.8.3-1</a>				
H.18 If applicable, do mechanical systems located outside of the thermal envelope meet the requirements of C403.12?	<a href="#">ASHRAE 90.1-2016 Section 6.4.3.7</a>				
<b>HVAC (performance)</b>		<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b> Yes No	
Most HVAC system requirements will be found in the mechanical plans and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
H1. Are mechanical zones $>25,000$ sf divided into isolation areas (if applicable)?	<a href="#">C403.2.1</a>				
H2. Is ventilation provided in accordance with Mechanical Code of New York State, including minimum ventilation rates?	<i>Chapter 4 of Mechanical Code of New York State</i>				
H3. Does HVAC equipment sizing comply with code requirements?	<a href="#">C403.3.1</a>				
H4. Do HVAC equipment efficiencies meet or exceed code minimum efficiency requirements?	<a href="#">Tables C403.3.2(1)-C403.3.2(10)</a>				
H5. Are demand control ventilation, energy recovery ventilation, and other requirements mentioned in C403.7 met, if applicable?	<a href="#">C403.7</a>				
H6. Are the HVAC system fan motor nameplate (brake) horsepower values within the listed equation outputs?	<a href="#">Option 1 - C403.8.1</a> <a href="#">Option 2 - C403.8.2</a>				

H7. Is any HVAC equipment with DX cooling $\geq 65,000$ Btu/h, and any chilled water or evaporative cooling system capable of varying the indoor fan airflow as a function of load (variable speed)?	<a href="#">C403.8.5</a>				
H8. In addition to having thermostats in each zone, do the mechanical drawings or specifications show that thermostats have a deadband/temperature range of not less than 5 °F, automatic start, setback, and shutdown capabilities?	<a href="#">C403.4.1</a>				
H9. If design has heat pumps with supplementary electric resistance heat, are there controls to prevent electric resistance operation when the heat pump can provide the heating load, except for defrost?	<a href="#">C403.4.1.1</a>				
H10. Are supply air ducts and plenums insulated with at least R-6 insulation in unconditioned spaces; and R-8 insulation outside the building in climate zone 4, R-12 insulation in climate zones 5 and 6?	<a href="#">C403.11.1</a>				
H11. Do heating and cooling system pipe insulation values meet minimums in C403.11.3?	<a href="#">C403.11.3</a>				
H.12 If applicable, do mechanical systems located outside of the thermal envelope meet the requirements of C403.12?	<a href="#">C403.12</a>				

<b>Service Water Heating Systems (prescriptive)</b>	<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b>	
	Yes	No	Yes	No

Relevant service water heating system information can be found in plumbing equipment schedules, diagrams, and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.

WH1. Does the plumbing equipment schedule list all of the equipment shown in plumbing floor plans and diagrams, and show their efficiencies?	<a href="#">C404</a> <a href="#">ASHRAE 90.1-2016 Section 7.4</a>				
WH2. Does the service water heating equipment meet minimum performance requirements?	<a href="#">Table C404.2</a> <a href="#">C404.2.1 if applicable</a> <a href="#">ASHRAE 90.1-2016 Table 7.8</a>				
WH3. Is pipe insulation (R-value or thickness) shown in the pipe specification or in a note block on the plans?	<a href="#">Table C403.11.3, C404.4</a> <a href="#">ASHRAE 90.1-2016 Section 7.4.3,</a> <a href="#">Table 6.8.3-1</a>				
WH4. Do service water heating pipe insulation values meet minimums in C403.11.3?	<a href="#">Table C403.11.3, C404.4</a> <a href="#">ASHRAE 90.1-2016 Section 7.4.3,</a> <a href="#">Table 6.8.3-1</a>				
WH5. Does heated water supply piping comply with pipe length and volume requirements?	<a href="#">C404.5</a>				
WH6. Are temperature maintenance controls in place as required?	<a href="#">C404.6</a> <a href="#">ASHRAE 90.1-2016 Section 7.4.4.1</a>				
WH7. If applicable, are controls in place for pools and permanent spas to regulate their energy consumption?	<a href="#">C404.9</a> <a href="#">ASHRAE 90.1-2016 Section 7.4.5.1</a>				

<b>Service Water Heating (performance)</b>	<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b>	
	Yes	No	Yes	No

Relevant service water heating system information can be found in plumbing equipment schedules, diagrams, and specifications. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.

WH1. Does the plumbing equipment schedule list all of the equipment shown in plumbing floor plans and diagrams, and show their efficiencies?	<a href="#">C404</a>				
WH2. Does the service water heating equipment meet minimum performance requirements?	<a href="#">Table C404.2</a> <a href="#">C404.2.1 if applicable</a>				
WH3. Is pipe insulation (R-value or thickness) shown in the pipe specification or in a note block on the plans?	<a href="#">Table C403.11.3, C404.4</a>				
WH4. Do service water heating pipe insulation values meet minimums in C403.11.3?	<a href="#">Table C403.11.3, C404.4</a>				
WH5. Does heated water supply piping comply with pipe length and volume requirements?	<a href="#">C404.5</a>				
WH6. If applicable, are controls in place for pools and permanent spas to regulate their energy consumption?	<a href="#">C404.9</a>				
<b>Electrical and Lighting Systems (prescriptive)</b>		<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b> Yes No	
Lighting system documentation at minimum, should provide exterior and interior lighting luminaire schedules, lighting floor plans with fixtures and controls shown, and have information on meters, transformer, elevator systems as applicable and required. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
L1. Do the drawings have lighting floor plans with fixtures and lighting controls (occupancy/vacancy, daylighting), luminaire schedule - for interior and exterior lighting? And do the fixture names match between floor plans/site plan and the luminaire schedules?	<a href="#">C405</a> <a href="#">ASHRAE 90.1-2016 Chapter 9</a>				
L2. Are daylight zones shown on the architectural or electrical floorplans?	<a href="#">C405.2.3</a> <a href="#">ASHRAE 90.1-2016 Section 9.4.1</a>				
L3. Are lighting power density (W/sf) calculations included in the permit application?	<a href="#">C405.3.2</a> <a href="#">ASHRAE 90.1-2016 Section 9.2.2.3</a>				
L4. Are occupant sensor controls shown in floor plans where required?	<a href="#">C405.2.1</a> <a href="#">ASHRAE 90.1-2016 Section 9.4.1</a>				
L5. Are daylight-responsive controls shown in the floor plans within daylight zones when lighting power exceeds 150 W?	<a href="#">C405.2.3</a> <a href="#">ASHRAE 90.1-2016 Section 9.4.1</a>				
L6. Is interior lighting power within the code mandated allowance (reviewed by doing takeoffs in a few spaces)?	<a href="#">C405.3.2</a> <a href="#">ASHRAE 90.1-2016 Section 9.2.2.3</a>				
L7. Is exterior lighting power within the code mandated allowance (reviewed by doing takeoffs for some of the exterior features and comparing to code allowance)?	<a href="#">C405.4</a> <a href="#">ASHRAE 90.1-2016 Section 9.4.2</a>				
L8. Are other electrical requirements such as for dwelling electrical meters, transformers, motors, elevators met as applicable?	<a href="#">C405.5-C405.9</a> <a href="#">ASHRAE 90.1-2016 Section 8.4.4</a>				
L9. Are automatic receptacle controls in place as required by ASHRAE 90.1-2016?	<a href="#">ASHRAE 90.1-2016 Section 8.4.2</a>				
L10. Is electrical energy monitoring implemented as required by ASHRAE 90.1-2016?	<a href="#">ASHRAE 90.1-2016 Section 8.4.3</a>				

L11. NYStretch only: if applicable, do outdoor parking area lighting controls automatically reduce the power of each luminaire by a minimum of 50 percent when no activity has been detected for at least 15 minutes?	<a href="#">C405.2.6.5</a>				
L12. NYStretch only: if applicable, do new traction elevators with a rise of 75 ft or more have a prower conversion system?	<a href="#">C405.8.1.1</a> <a href="#">ASHRAE 90.1-2016 Section 10.4.3.5</a>				
L13. NYStretch only: if applicable, do commercial kitchen equipment comply with the minimum efficiency requirements?	<a href="#">C405.9</a> <a href="#">ASHRAE 90.1-2016 Section 10.4.6</a>				
L14. NYStretch only: for parking garages and lots with more than 10 spaces, do at least 5% of the parking spaces (minimum 2) have panel capacity and conduit, and provide outlets for electric vehicle charging?	<a href="#">C405.10</a> <a href="#">ASHRAE 90.1-2016 Section 10.4.7</a>				
L15. NYStretch only: if applicable, is designated roof space for future PV or solar thermal system provided?	<a href="#">C405.11</a> <a href="#">ASHRAE 90.1-2016 Section 10.4.8</a>				
L16. NYStretch only: for new buildings 25,000+ SF, for group G buildings with 10,000+ SF common area, is monitoring energy use implemented?	<a href="#">C405.12</a>				

<b>Lighting and Electrical Systems (performance)</b>	Applicable To This Project?	Plan Sheet Location	Addressed In CDs?	
			Yes	No

Lighting system documentation at minimum, should provide exterior and interior lighting luminaire schedules, lighting floor plans with fixtures and controls shown, and have information on meters, transformer, elevator systems as applicable and required. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.

L1. Do the drawings have lighting floor plans with fixtures and lighting controls (occupancy/vacancy, daylighting), luminaire schedule - for interior and exterior lighting? And do the fixture names match between floor plans/site plan and the luminaire schedules?	<a href="#">C405</a>				
L2. Are daylight zones shown on the architectural or electrical floorplans?	<a href="#">C405.2.3</a>				
L3. Are daylight-responsive controls shown in floor plans within daylight zones when lighting power exceeds 150 W?	<a href="#">C405.2.3</a>				
L4. Are occupant sensor controls shown in floor plans where required by C405.2.1?	<a href="#">C405.2.1</a>				
L5. Does exterior lighting power match the specified value in drawings or specifications (reviewed by doing takeoffs for some of the exterior features and comparing to code allowance)?	<a href="#">C405.4</a>				
L6. Are other electrical requirements such as for dwelling electrical meters, transformers, motors, elevators met as applicable in C405.5-C405.9?	<a href="#">C405.5-C405.9</a>				
L7. NYStretch only: if applicable, is designated roof space for future PV or solar thermal system provided?	<a href="#">C405.11</a>				

<b>Additional Efficiency Packages (prescriptive)</b>	Applicable To This Project?	Plan Sheet Location?	Addressed In CDs?	
			Yes	No

Which drawings or specifications include the additional efficiency package depends on which package is chosen by the project team. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.



P1. Do the drawings declare which additional efficiency package the project complies with, or during the review process it becomes clear that the project complies with one of the efficiency packages?	<a href="#">C406.1</a>				
<b>Total Building Performance (performance)</b>		<b>Applicable To This Project?</b>	<b>Plan Sheet Location?</b>	<b>Addressed In CDs?</b> Yes No	
The total building energy cost savings shall be at least 15% lower than of the standard reference design, in compliance with C401.2 Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
T1. If applicable, is the reduction in energy cost from on-site renewable energy at or below 5% of the proposed design's total energy cost?	<a href="#">C407.3</a>				
T2. Does the compliance report include : building address, inspection checklist with building component characteristics, estimated annual energy cost for standard reference design and proposed design, name of individual completing the compliance report, name and version of the compliance software tool?	<a href="#">C407.4.1</a>				
T3. If applicable and deemed necessary, are the following documents provided (they are permitted to be required): documentation of the building component characteristics of the standard reference design, thermal zoning diagrams, input and output reports from the energy analysis simulation program, an explanation of any error or warning messages, a certification by the builder providing the building component characteristics?	<a href="#">C407.4.2</a>				
T4. Are modeling configuration specifications provided to verify proper modeling methods and techniques?	<a href="#">Table C407.5.1(1)</a>				
T5. Is the standard reference design HVAC system chosen and modeled in accordance with the HVAC system map, Table 407.5.1(2)?	<a href="#">Table C407.5.1(2)</a>				
T6. Are input and output reports from the energy analysis simulation program provided? These reports and other supporting documentation listed in C407.4.2 can be requested.	<a href="#">C407.4.2</a>				
T7. NYStretch only: is total building performance compliance demonstrated under ASHRAE 90.1-2016 Section 11 or Appendix G (with NYStretch amendments and additions)?	<a href="#">C407.1</a>				
<b>System Commissioning (prescriptive)</b>		<b>Applicable To This Project?</b>	<b>Plan Sheet Location</b>	<b>Addressed In CDs?</b> Yes No	
Provisions for commissioning are indicated in the specifications, unless the project meets the C408.2 Exceptions. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
C1. Is a commissioning plan provided for mechanical and service hot water systems in the drawings and/or specifications, or as a separate document?	<a href="#">C408.2.1</a> <a href="#">ASHRAE 90.1-2016 Section 6.7.2.4</a>				
C2. NYStretch only: do construction documents include documentation of the continuous air barrier components and a field inspection checklist?	<a href="#">C408.4.1</a>				
C3. NYStretch only: for existing buildings and additions, are commissioning requirements met?	<a href="#">C502</a> , <a href="#">C503</a>				

System Commissioning (performance)	Applicable To This Project?	Plan Sheet Location	Addressed In CDs?		
			Yes	No	
Provisions for commissioning are indicated in the specifications, unless the project meets the C408.2 Exceptions. Any items applicable to the project not addressed in the construction documents (CDs) should be provided a correction comment.					
C1. Is a commissioning plan provided for mechanical and service hot water systems in the drawings and/or specifications, or as a separate document?	<a href="#">C408.2.1</a>				
C2. NYStretch only: do construction documents include documentation of the continuous air barrier components and a field inspection checklist?	<a href="#">C408.4.1</a>				
C3. NYStretch only: for existing buildings and additions, are commissioning requirements met?	<a href="#">C502</a> , <a href="#">C503</a>				

Reference	Example Prescriptive Plan Check Correction Comments
G1	Must meet the requirements per ECCCNY 2020 C401.2. Please correct inconsistencies and resubmit.
G2	Must meet the requirements per ECCCNY 2020 C101.3 or ASHRAE 90.1-2016 Section 2.2. Please correct inconsistencies and resubmit.
G4	Must meet the requirements per Local and State guidelines. Please correct inconsistencies and resubmit.
G5	Must meet the requirements per ECCCNY 2020 C402-C406 & C408 (new), or C402-C405 & C502.2 (additions), or ASHRAE 90.1-2016 Sections 5-10. Please correct inconsistencies and resubmit.
G6	Must meet the requirements per NYStretch Energy Code 2020. Please correct inconsistencies and resubmit.
E1	Must meet the requirements per ECCCNY 2020 Tables C402.1.3, C402.1.4, and C402.4, or ASHRAE 90.1-2016 compliance: Tables 5.5-4, 5.5-5, 5.5-6. Please correct inconsistencies and resubmit.
E2	Must meet the requirements per ECCCNY 2020 C402.5.1, or ASHRAE 90.1-2016 Section 5.4.3.1.3. Please correct inconsistencies and resubmit.
E3	Must meet the requirements per ECCCNY 2020 C402.5.1.2, or ASHRAE 90.1-2016 Section 5.4.3.1. Please correct inconsistencies and resubmit.
E4	Must meet the requirements per ECCCNY 2020 C402.5.2 & C402.5.4, or ASHRAE 90.1-2016 Section 5.4.3.2. Please correct inconsistencies and resubmit.
E5	Must meet the requirements per ECCCNY 2020 C402.5.6, or ASHRAE 90.1-2016 Section 5.4.3.3. Please correct inconsistencies and resubmit.
E6	Must meet the requirements per ECCCNY 2020 C402.5.7, or ASHRAE 90.1-2016 Section 5.4.3.4. Please correct inconsistencies and resubmit.
E7	Must meet the requirements per ECCCNY 2020 C402.5.8, or ASHRAE 90.1-2016 Section 5.8.1.6. Please correct inconsistencies and resubmit.
E8	Must meet the requirements per ECCCNY 2020 C402.4.1, or ASHRAE 90.1-2016 Tables 5.5. Please correct inconsistencies and resubmit.
E9	Must meet the requirements per ECCCNY 2020 C402.4.2, or ASHRAE 90.1-2016 Section 5.5.4.2.3. Please correct inconsistencies and resubmit.
E10	Must meet the requirements per ECCCNY 2020 C402.4, or ASHRAE 90.1-2016 Tables 5.5-4, 5.5-5, 5.5-6. Please correct inconsistencies and resubmit.
E11	Must meet the requirements per NYStretch 2020 C402.1.4.2. Please correct inconsistencies and resubmit.

E12	Must meet the requirements per NYStretch 2020 C402.2.8, or ASHRAE 90.1-2016 Section 5.4.1.1. Please correct inconsistencies and resubmit.
E13	Must meet the requirements per NYStretch 2020 C402.5, C402.5.9, or ASHRAE 90.1-2016 Section 5.4.3.1.3. Please correct inconsistencies and resubmit.
H1	Must meet the requirements per ECCCNY 2020 C403.2.1, or ASHRAE 90.1-2016 Section 6.4.3.3.4. Please correct inconsistencies and resubmit.
H2	Must meet the requirements per Chapter 4 of Mechanical Code of New York State, or ASHRAE 90.1-2016 Section 6.5.3.7. Please correct inconsistencies and resubmit.
H3	Must meet the requirements per ECCCNY 2020 C403.3.1, or ASHRAE 90.1-2016 Section 6.4.2.1. Please correct inconsistencies and resubmit.
H4	Must meet the requirements per ECCCNY 2020 Tables C403.3.2(1)-C403.3.2(10), or ASHRAE 90.1-2016 Tables 6.8.1-1 to 6.8.1-10. Please correct inconsistencies and resubmit.
H5	Must meet the requirements per ECCCNY 2020 C403.4, or ASHRAE 90.1-2016 Section 6.4.3. Please correct inconsistencies and resubmit.
H6	Must meet the requirements per ECCCNY 2020 C403.5, or ASHRAE 90.1-2016 Section 6.5.1. Please correct inconsistencies and resubmit.
H7	Must meet the requirements per ECCCNY 2020 Table C403.5.3.3, or ASHRAE 90.1-2016 6.5.1.1.3. Please correct inconsistencies and resubmit.
H8	Must meet the requirements per ECCCNY 2020 C403.5.3, or ASHRAE 90.1-2016 Sections 6.5.1.1.1, 6.5.1.2.1. Please correct inconsistencies and resubmit.
H9	Must meet the requirements per ECCCNY 2020 C403.5.5, or ASHRAE 90.1-2016 Section 6.4.3.12. Please correct inconsistencies and resubmit.
H10	Must meet the requirements per ECCCNY 2020 C403.7, or ASHRAE 90.1-2016 Section 6.4.3.8. Please correct inconsistencies and resubmit.
H11	Must meet the requirements per ECCCNY 2020 Option 1 - C403.8.1, or Option 2 - C403.8.2, or ASHRAE 90.1-2016 Table 6.5.3.1-1. Please correct inconsistencies and resubmit.
H12	Must meet the requirements per ECCCNY 2020 C403.8.5, or ASHRAE 90.1-2016 6.5.3.2.1. Please correct inconsistencies and resubmit.
H13	Must meet the requirements per ECCCNY 2020 C403.4.1, or ASHRAE 90.1-2016 Section 6.4.3.1. Please correct inconsistencies and resubmit.
H14	Must meet the requirements per ECCCNY 2020 C403.4.1.1, or ASHRAE 90.1-2016 Section 6.3.2, h. Please correct inconsistencies and resubmit.
H15	Must meet the requirements per ECCCNY 2020 C403.6, or ASHRAE 90.1-2016 Section 6.5.3.2.3, 6.5.3.3. Please correct inconsistencies and resubmit.

H16	Must meet the requirements per ECCCNY 2020 C403.11.1, or ASHRAE 90.1-2016 Table 6.8.2. Please correct inconsistencies and resubmit.
H17	Must meet the requirements per ECCCNY 2020 C403.11.3, or ASHRAE 90.1-2016 Table 6.8.3-1. Please correct inconsistencies and resubmit.
H18	Must meet the requirements per ECCCNY 2020 C403.12, or ASHRAE 90.1-2016 Section 6.4.3.7. Please correct inconsistencies and resubmit.
WH1	Must meet the requirements per ECCCNY 2020 C404, or ASHRAE 90.1-2016 Section 7.4. Please correct inconsistencies and resubmit.
WH2	Must meet the requirements per ECCCNY 2020 Table C404.2 and C404.2.1 if applicable, or ASHRAE 90.1-2016 Table 7.8. Please correct inconsistencies and resubmit.
WH3	Must meet the requirements per ECCCNY 2020 Table C403.11.3, C404.4, or ASHRAE 90.1-2016 Section 7.4.3, Table 6.8.3-1. Please correct inconsistencies and resubmit.
WH4	Must meet the requirements per ECCCNY 2020 Table C403.11.3, C404.4, or ASHRAE 90.1-2016 Section 7.4.3, Table 6.8.3-1. Please correct inconsistencies and resubmit.
WH5	Must meet the requirements per ECCCNY 2020 C404.5. Please correct inconsistencies and resubmit.
WH6	Must meet the requirements per ECCCNY 2020 C404.6, or ASHRAE 90.1-2016 Section 7.4.4.1. Please correct inconsistencies and resubmit.
WH7	Must meet the requirements per ECCCNY 2020 C404.9, or ASHRAE 90.1-2016 Section 7.4.5.1. Please correct inconsistencies and resubmit.
L1	Must meet the requirements per ECCCNY 2020 C405, or ASHRAE 90.1-2016 Chapter 9. Please correct inconsistencies and resubmit.
L2	Must meet the requirements per ECCCNY 2020 C405.2.3, or ASHRAE 90.1-2016 Section 9.4.1. Please correct inconsistencies and resubmit.
L3	Must meet the requirements per ECCCNY 2020 C405.3.2, or ASHRAE 90.1-2016 Section 9.2.2.3. Please correct inconsistencies and resubmit.
L4	Must meet the requirements per ECCCNY 2020 C405.2.1, or ASHRAE 90.1-2016 Section 9.4.1. Please correct inconsistencies and resubmit.
L5	Must meet the requirements per ECCCNY 2020 C405.2.3, or ASHRAE 90.1-2016 Section 9.4.1. Please correct inconsistencies and resubmit.
L6	Must meet the requirements per ECCCNY 2020 C405.3.2, or ASHRAE 90.1-2016 Section 9.2.2.3. Please correct inconsistencies and resubmit.
L7	Must meet the requirements per ECCCNY 2020 C405.4, or ASHRAE 90.1-2016 Section 9.4.2. Please correct inconsistencies and resubmit.

L8	Must meet the requirements per ECCCNY 2020 C405.5-C405.9, or ASHRAE 90.1-2016 Section 8.4.4. Please correct inconsistencies and resubmit.
L9	Must meet the requirements per ASHRAE 90.1-2016 Section 8.4.2. Please correct inconsistencies and resubmit.
L10	Must meet the requirements per ASHRAE 90.1-2016 Section 8.4.3. Please correct inconsistencies and resubmit.
L11	Must meet the requirements per NYStretch 2020 C405.2.6.5. Please correct inconsistencies and resubmit.
L12	Must meet the requirements per NYStretch 2020 C405.8.1.1, or ASHRAE 90.1-2016 Section 10.4.3.5. Please correct inconsistencies and resubmit.
L13	Must meet the requirements per NYStretch 2020 C405.9, or ASHRAE 90.1-2016 Section 10.4.6. Please correct inconsistencies and resubmit.
L14	Must meet the requirements per NYStretch 2020 C405.10, or ASHRAE 90.1-2016 Section 10.4.7. Please correct inconsistencies and resubmit.
L15	Must meet the requirements per NYStretch 2020 C405.11, or ASHRAE 90.1-2016 Section 10.4.8. Please correct inconsistencies and resubmit.
L16	Must meet the requirements per NYStretch 2020 C405.12. Please correct inconsistencies and resubmit.
P1	Must meet the requirements per ECCCNY 2020 C406.1. Please correct inconsistencies and resubmit.
C1	Must meet the requirements per ECCCNY 2020 C408.2.1, or ASHRAE 90.1-2016 Section 6.7.2.4. Please correct inconsistencies and resubmit.
C2	Must meet the requirements per NYStretch 2020 C408.4.1. Please correct inconsistencies and resubmit.
C3	Must meet the requirements per NYStretch 2020 C502, C503. Please correct inconsistencies and resubmit.

Reference	Example Performance Plan Check Correction Comments
G1	Must meet the requirements per ECCCNY 2020 C101.3. Please correct inconsistencies and resubmit.
G2	Must meet the requirements per Local and State guidelines. Please correct inconsistencies and resubmit.
G4	Must meet the requirements per ECCCNY 2020 C401.2. Please correct inconsistencies and resubmit.
G5	Must meet the requirements per NYStretch Energy Code 2020. Please correct inconsistencies and resubmit.
E1	Must meet the requirements per ECCCNY 2020 Table C402.5.1. Please correct inconsistencies and resubmit.
E2	Must meet the requirements per ECCCNY 2020 C402.5.1.2. Please correct inconsistencies and resubmit.
E3	Must meet the requirements per ECCCNY 2020 C402.5.2. Please correct inconsistencies and resubmit.
E4	Must meet the requirements per ECCCNY 2020 C402.5.4. Please correct inconsistencies and resubmit.
E5	Must meet the requirements per ECCCNY 2020 C402.5.6. Please correct inconsistencies and resubmit.
E6	Must meet the requirements per ECCCNY 2020 Table C402.5.7. Please correct inconsistencies and resubmit.
E7	Must meet the requirements per ECCCNY 2020 C402.5.8. Please correct inconsistencies and resubmit.
E8	Must meet the requirements per NYStretch 2020 C402.1.4.2. Please correct inconsistencies and resubmit.
E9	Must meet the requirements per NYStretch 2020 C402.2.8. Please correct inconsistencies and resubmit.
E10	Must meet the requirements per NYStretch 2020 C402.5, C402.5.9. Please correct inconsistencies and resubmit.
H1	Must meet the requirements per ECCCNY 2020 C403.2.1. Please correct inconsistencies and resubmit.
H2	Must meet the requirements per Chapter 4 of Mechanical Code of New York State. Please correct inconsistencies and resubmit.

H3	Must meet the requirements per ECCCNY 2020 C403.3.1. Please correct inconsistencies and resubmit.
H4	Must meet the requirements per ECCCNY 2020 Tables C403.3.2(1)-C403.3.2(10). Please correct inconsistencies and resubmit.
H5	Must meet the requirements per ECCCNY 2020 Tables C403.7. Please correct inconsistencies and resubmit.
H6	Must meet the requirements per ECCCNY 2020 Option 1 - C403.8.1 or Option 2 - C403.8.2. Please correct inconsistencies and resubmit.
H7	Must meet the requirements per ECCCNY 2020 C403.8.5. Please correct inconsistencies and resubmit.
H8	Must meet the requirements per ECCCNY 2020 C403.4.1. Please correct inconsistencies and resubmit.
H9	Must meet the requirements per ECCCNY 2020 C403.4.1.1. Please correct inconsistencies and resubmit.
H10	Must meet the requirements per ECCCNY 2020 C403.11.1. Please correct inconsistencies and resubmit.
H11	Must meet the requirements per ECCCNY 2020 C403.11.3. Please correct inconsistencies and resubmit.
H12	Must meet the requirements per ECCCNY 2020 C403.12. Please correct inconsistencies and resubmit.
WH1	Must meet the requirements per ECCCNY 2020 C404. Please correct inconsistencies and resubmit.
WH2	Must meet the requirements per ECCCNY 2020 Table C404.2 or C404.2.1 if applicable. Please correct inconsistencies and resubmit.
WH3	Must meet the requirements per ECCCNY 2020 Table C403.11.3, C404.4. Please correct inconsistencies and resubmit.
WH4	Must meet the requirements per ECCCNY 2020 Table C403.11.3, C404.4. Please correct inconsistencies and resubmit.
WH5	Must meet the requirements per ECCCNY 2020 C404.5. Please correct inconsistencies and resubmit.
WH6	Must meet the requirements per ECCCNY 2020 C404.9. Please correct inconsistencies and resubmit.
L1	Must meet the requirements per ECCCNY 2020 C405. Please correct inconsistencies and resubmit.



L2	Must meet the requirements per ECCCNY 2020 C405.2.3. Please correct inconsistencies and resubmit.
L3	Must meet the requirements per ECCCNY 2020 C405.2.3. Please correct inconsistencies and resubmit.
L4	Must meet the requirements per ECCCNY 2020 C405.2.1. Please correct inconsistencies and resubmit.
L5	Must meet the requirements per ECCCNY 2020 C405.4. Please correct inconsistencies and resubmit.
L6	Must meet the requirements per ECCCNY 2020 C405.5-C405.9. Please correct inconsistencies and resubmit.
L7	Must meet the requirements per NYStretch 2020 C405.11. Please correct inconsistencies and resubmit.
T1	Must meet the requirements per ECCCNY 2020 C407.3. Please correct inconsistencies and resubmit.
T2	Must meet the requirements per ECCCNY 2020 C407.4.1. Please correct inconsistencies and resubmit.
T3	Must meet the requirements per ECCCNY 2020 C407.4.2. Please correct inconsistencies and resubmit.
T4	Must meet the requirements per ECCCNY 2020 Table C407.5.1(1). Please correct inconsistencies and resubmit.
T5	Must meet the requirements per ECCCNY 2020 Table C407.5.1(2). Please correct inconsistencies and resubmit.
T6	Must meet the requirements per ECCCNY 2020 C407.4.2. Please correct inconsistencies and resubmit.
T7	Must meet the requirements per NYStretch 2020 C407.1. Please correct inconsistencies and resubmit.
C1	Must meet the requirements per ECCCNY 2020 C408.2.1. Please correct inconsistencies and resubmit.
C2	Must meet the requirements per NYStretch 2020 C408.4.1. Please correct inconsistencies and resubmit.
C3	Must meet the requirements per NYStretch 2020 C502, C503. Please correct inconsistencies and resubmit.

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## Declaration Statement

Based on the plan reviews conducted under my direct supervision, it is my professional judgement that, to the best of my knowledge, and based on the information provided, the compliance or non-compliance of the checklist items are accurately documented above.

Name:

Signature:

Date:



**NYSERDA**