

DOCUMENTS REQUIRED FOR GREEN-ENERGY PLAN REVIEW MONTGOMERY COUNTY ENERGY AND GREEN CODES (2022-ASHRAE 90.1, 2021-IgCC)

Montgomery County has adopted ASHRAE 90.1-2022 with amendments (see pg. 2).

Note: Documents referenced below are on the DPS Commercial Building website in the **Energy and Green Building** section: <https://www.montgomerycountymd.gov/DPS/divisions/commercial/index.html>

Along with the permitting package, the following analyses and calculations are required to be submitted. All energy design documentation must be signed, sealed and dated by a design professional registered in the state of Maryland. Provide these documents as standalone PDFs; please do not print them on the drawings. You may need to submit all or some of the following:

1. [Prescriptive path] COMCheck (ASHRAE 90.1-2022). New construction and additions, first time tenant fit-outs (initial buildout) and substantial alterations (90.1-2022 11.1.4.1) must submit a full COMCheck. This must be the full report, **including the Inspection Checklist with all the supporting documents (e.g. drawing numbers, specs numbers, explanations, etc.) to demonstrate the energy code compliance.** For other projects, COMCheck may or may not be required.
 - a. Please include "COMCheck" in the filename.
 - b. NOTE: the 2018 Energy Code Analysis Checklist is no longer used.
 - c. Address how the minimum credits are to be achieved in Section 11, Additional Energy Efficiency Requirements.
 - d. Complete the amendment checklist below.
2. [Prescriptive path] HVAC Load Calculations. Provide a full set of HVAC load calculations including both input and output data based on ASHRAE Standard 183 for sizing the HVAC equipment.
3. [Prescriptive path] Appendix L TSPR Report (<https://energycode.pnl.gov/HVACSystemPerformance/>)
 - a. For new construction and additions between 5,000 and 20,000 ft², depending on applicability based on L1.1.1.2 (IgCC 701.4 Prescriptive option is deleted and replace by Appendix L).
 - b. For projects that do not qualify for TSPR, comply with prescriptive or performance provisions of ASHRAE 90.1.
4. [Performance path] *Energy Code Analysis Checklist-Mandatory Reqs* - see DPS website under Forms and Documents (in lieu of COMCheck).
5. [Performance path] Energy Model Analysis Report. See [PNNL-35193 Technical Brief](#), Section 3.1, Table 4.2.1.1-1.
 - a. For new buildings and additions greater than 20,000 ft² the energy compliance path must be performance, with PEI = 0.67 per ER 13-24.
6. Walk in cooler or freezer specifications for energy code compliance.
7. For core & shell new construction, the design team shall provide tenant-owner-lease agreement for future tenant work. It must include design criteria for energy and green building code compliance, such as the required energy performance data for building envelope, lighting, mechanical system, indoor air quality, etc.
8. *2021 IgCC Checklist* - see DPS website under Forms and Documents, and if applicable, scorecards (e.g. NGBS).
9. Provide demolition and construction waste management plan for new construction and additions. This standalone document shall be part of the permitting package for review and approval before the permit issuance.

MONTGOMERY COUNTY AMENDMENTS CHECKLIST

Link to Executive Regulation (ER) 13-24 : <https://www.montgomerycountymd.gov/DPS/Resources/Files/Green/MCER13-24.pdf> The following amendments need to be addressed in the drawings and/or COMCheck:

- A. Section 5.4.3.4.5 Door Switches. Section 6.5.10 Door Switches has been deleted.
- B. Section 5.5.3.1.4 Roof Solar Reflectance and Thermal Emittance.
- C. Section 11.1.4.2 Initial Build-out Construction regardless of square footage.
- D. Section 11.5.2.2. Improved HVAC Performance - "All credits are only applicable when using non-gas-fueled equipment."
- E. Section 11.5.2.3. Reduced Energy Use in Service Water Heating - "All credits are only applicable when using non-gas-fueled equipment except for commercial kitchen applications."
- F. Section 11.5.2.3.3. Improved Service Hot-Water Temperature Maintenance. Delete a.

COMPLIANCE PATHS

The following lookup table lists types of projects and the allowed compliance paths. Notes:

- Appendix L: Mechanical System Performance Rating Method, using site energy, specified in Amendments ER 13-24 08.00.02.160, pg. 51 and 08.00.02.118, pg. 30. Check eligibility in Appendix L, L1.1.1 Allowable HVAC Systems. Supported by the Total System Performance Ratio (TSPR) tool:
<https://energycode.pnl.gov/HVACSystemPerformance/>
- Appendix G with PNNL-35193 Section 3.1 specified in Amendment ER 13-24 08.00.02.118, pg. 28. Appendix G describes the Performance Rating Method which provides a percentage of baseline building energy use.

Project Characteristics		Compliance Paths	
Work type	Gross floor area	Energy compliance path	Green building required
New construction, additions	Less than 5,000 ft ²	Prescriptive (with or without Appendix L (TSPR)) OR Performance-Appendix G with PNNL-35193	No
	5,000 – 20,000 ft ²	Prescriptive with Appendix L (TSPR) <i>If not eligible for Appendix L:</i> Prescriptive (Sections 4.2.2 through 4.2.5 and Sections 5,6,7,8,9,10, and 11) OR Performance-Appendix G with PNNL-35193	Yes
	Greater than 20,000 ft ²	Performance-Appendix G with PNNL-35193 (Sections 4.2.2 through 4.2.5 and 5.4, 6.4, 7.4, 8.4, 9.4, and 10.4)	Yes
Alterations	n/a	Prescriptive OR Performance-Appendix G	No
First time tenant fit-out	n/a	Per base building design criteria and ASHRAE 90.1	Per base building