Village of Menands Energy Code Information Sheet

- 1. All new construction and existing building renovation in the Village of Menands must comply with the current Energy Conservation Construction Code of New York State (ECCCNYS), hereafter referred to as "the Code".
- 2. Conformance with the Code must be demonstrated prior to issuance of a <u>Certificate of Occupancy</u>. Construction documents must represent the entire project, including the building and thermal envelope, HVAC, water-service heating, and lighting and electrical power systems.
- 3. All residential buildings must comply with the residential provisions of the Code. Residential buildings include: Detached one and two-family dwellings; multiple single-family dwellings (townhouses); and Group R-2, R-3, and R-4 that are three stories or less above grade (see New York State Building Code Chapter 3 Use and Occupancy Classification).
- 4. All buildings that are not defined as residential must comply with the commercial provisions of the Code.
- 5. Few buildings are exempt from the Code. Historic buildings are exempt only if they are listed on the Federal or State resister. Locally designated historic must still comply with the Code.
- 6. To demonstrate compliance with Code, designers must select one of several compliance paths detailed in sections C401-C406 and R401-406 in the Code.
- 7. Designers may demonstrate compliance with the Code using the computer or web-based tools *COMcheck* and *REScheck* if they so choose.
- 8. For a list of the minimum detail construction documents must show to demonstrate compliance with the Code, see Table 1.
- 9. Inspections, as mandated by the Code, are required throughout the construction process. It is the responsibility of the applicant to inform the code official when each component is ready to be inspected. For a general inspection schedule, see Table 2.
- 10. For a general description of what the code enforcement inspector may be looking for, see Table 3.

Table 1: Minimum Inclusions in Construction Documents

Indicate the location, nature and extent of the work proposed Drawings Must Show Envelope Insulation materials and their R-values Fenestration U-factors and solar heat gain coefficients (SHGCs) Area-weighted U-factor and SHGC calculations Air sealing details Building thermal envelope depiction Mechanical Mechanical system design criteria Mechanical system design criteria Mechanical and service water-heating system and equipment type, sizes, and efficiencies Economizer description* Equipment and system controls (including narrative describing function, operation and setpoints) Fan motor horsepower (hp) and controls* Duct sealing, duct and pipe insulation and location Lighting and Electrical Power Lighting fixture schedule with wattage and control narrative* Location of daylight zones on floor plans* Commissioning Construction document indicates provisions for commissioning and completion requirements* Create a commissioning glan* Submit commissioning statement to the Department of Buildings (DOB) that says the project complies with or is exempt from commissioning requirements*	Drawings Must	. De drawn to cools	
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Table 2: General Inspection Schedule

Inspection	Commercial	Residential
Footing and	• R-value, location, thickness, dep	oth of burial and protection of insulation
Foundation Inspection		
Framing and Rough-in Inspection	Made before application of inter	
nispection	 Insulation and corresponding R- fenestration properties and instal 	
Plumbing Rough-in	Types of insulation and	Types of insulation and
Inspection	corresponding R-values and	corresponding R-values and
	protection; required controls;	protection; and required controls
	and required heat traps	1
Mechanical Rough-in	 Installed HVAC equipment 	Installed HVAC equipment type
Inspection	type and size; required	and size; required controls;
	controls; system insulation and	system insulation and
	corresponding R-value; system and damper air leakage; and	corresponding R-value; system air leakage control;
	required energy recovery and	programmable thermostats;
	economizers	dampers; whole-house
	00011011112013	ventilation; and minimum fan
		efficiency
Electrical Rough-in	 Installed lighting systems, 	Not required
Inspection	components and controls, and	
	installation of an electric meter for each dwelling unit	
	(submetering)	
Final Inspection	Verification that required	Verification of the installation of
•	building controls were	all required building systems,
	installed and work correctly;	equipment and controls, and their
	commissioning was	proper operation and required
	completed; and any findings of	number of high-efficacy lamps
	non-compliance have been corrected	and fixtures
	Building considered for final	
	inspection once the applicant	
	has received the	
	Commissioning Report (see	
	C408.2.4)	

Table 3: General Description of Inspections

Envelope	Visually inspect insulation and air sealing details		
	Confirm insulation R-value		
	Confirm fenestration labels for U-factor, SHGC, VT		
	Confirm that dimensions of windows, doors, and skylights match		
	drawings		
	Check that penetrations are properly sealed		
	 Visually inspect vestibules, loading docks, and projections 		
	Report results of blower door tests		
Mechanical and Plumbing	Confirm tight-fitting fireplace doors		
	• Test a minimum of 20% of shutoff dampers for proper operation		
	• Visually inspect that HVAC and hot-water equipment matches		
	drawings for functionality and setpoints		
	Visually inspect duct and pipe information		
	• Test a minimum of 20% of ducts for leakage		
Electrical Power and	Visually inspect submeters and high-efficacy lamps		
Lighting	• Commercial Only:		
	 Visually inspect light fixtures to confirm lighting 		
	power allowance		
	 Visually inspect exterior lighting fixtures 		
	 Visually inspect lighting controls and test for 		
	functionality and proper operation		
	 Check exit signs and motors for compliance 		
Other	• Are maintenance manuals present? Do they match equipment?		
	• Is Permanent Certificate installed?		