

Prescriptive Pathway Checklist

This pathway requires that you achieve the minimum point value of 65 points. The performance pathway requires a HES and completion of all items.

Your points: of 65 (total possible: 152+)

These prescriptive checklist requirements are considered fully met if any of the following certifications have been achieved (requires City of Ann Arbor approval):

Passive House (PHIUS)
 Living Building Challenge
 LEED Zero

2021 IECC Zero Code
 Net Zero Certification
 DOE Zero Energy Ready

GreenStar
 WUFI

Category	Requirement	Point Value	Your Score	Notes	Verification
Insulation					
Attic	R-30	1		Current Code	Inspector visual check or Insulation certificate from installer. Building permits also acceptable
	R-38 or the minimum for new construction attic insulation	2			
	≥R-50	3			
	Radiant Barrier: stapled or perforated over-insulation	1			
Exterior Walls	R-13 continuous or better	1			Visual check, insulation certificate from installer, or building permit.
	≥R-19 continuous or better	2			
Basement/ Crawl Space	Framed Floor; R-13	1		Only available if no ducts or HVAC equipment are located in unconditioned space below floor	Insulation certificate from installer or visual if accessible by inspector
	Framed Floor; R-19	2			
	Framed Floor; ≥R-30	3			
	Basement/foundation walls: ≥R-10 continuous/R-13 cavity	1		Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	
	Crawl space walls: R-15 continuous/R-19 cavity	1			
Rim joists insulated, ≥R-2 with rigid or spray foam	1				
Max possible:		10	0	Target minimum: 5	

Air Sealing	Blower door test ACH50: 6	1			Certificate of blower door test by BPI, HES, or HERS rater
	*Blower door test ACH50: 5	2		*requires proper ventilation	
	*Blower door test ACH50: 4	3		*requires proper ventilation	
	*Blower door test ACH50: ≤ 3	5		*requires proper ventilation	
	Fenestrations caulked (or foam sealed) and weatherstripped	1		Windows & doors throughout unit	Visual (or installer certificate)
	Full-attic air sealing; all top plates & penetrations	3			Installer certificate
	Electrification bonus: All old chimney holes properly sealed	1			Installer certificate
	Rim joists fully air-sealed with caulk or spray foam	2			Installer certificate
Recessed lighting	1		Fixtures installed in the thermal envelope shall be air tight, IC rated, and sealed to the drywall.	Installer certificate	

Max possible: **13** **0** Target minimum: 3 points

Electrification	100% LED lighting (bulbs/fixtures) throughout interior & exterior	1		1 point max for full-LED	Visual check
	Electrification readiness: new 200+ amp panel and wiring for all future appliances	4		Including induction cooktop/range, dryer, water heater, and space heating.	Electrical Permit
	Full electrification achieved, cannot combine with readiness	7			Permit & gas meter removed
	Electric Vehicle Charger - fully installed	3		3 points each, 15 points max	Electrical Permit

Electrification max possible: **23** **0** Target minimum: 4

Appliances

Water Heater - Residential	Gas - Tankless - Energy Star - UEF ≥ 0.90	1		UEF = Uniform Energy Factor. MUST provide tenants with gas health disclosure EF = Energy Factor	
	Electric - Storage - Energy Star rated or (EF) >0.95	2			
	Electric - Tankless	3			
	Electric - Heat Pump (aka "hybrid electric")	6		Air source or geothermal	
	Solar Water Heater (with backup)	8			
Water Heater - Commercial	Gas - Tankless - Energy Star rated	1		A "commercial" water heater should serve more than 6 separate units. Gas appliances MUST provide tenants with gas health disclosure.	Purchase Receipt with Energy Star model rating
	Heat Pump	2			
	Heat Pump + Coefficient of Performance (COPh) >4.0	3			
Refrigerator	Energy Star Most Efficient: 450 kWh/yr	1			Purchase receipt/model rating
	Energy Star Most Efficient; ≥ 300 kWh/yr	2			
Dishwasher	Energy Star rated	1		Plus 1 water point	Purchase receipt/model rating
Range/ cooktop	Electric - standard	1			
	Electric - induction	3			Purchase receipt/model rating
Clothes Washer	Energy Star rated	1		Plus 1 water point, must be HE	Purchase receipt/model rating
Clothes Dryer	Electric - Energy Star	1			Purchase receipt/model rating
	Electric - Heat Pump	3			

Appliances max possible: **18** **0** Target minimum: 6

HVAC

Heating

Furnace - Gas - AFUE <95%	0			Purchase receipt/installer verification
Furnace - Gas - AFUE ≥95%	1			
Air-source heat pump; ducted	6			
Air-source heat pump; ductless; whole house conversion	7			
Geothermal Heat Pump	9			
Solar Thermal	6			
Commercial Boilers - Energy Star rated	1			
Max possible:	9	0		

Cooling

Central A/C - Energy Star - SEER ≥20.0	1			
Air Source Heat Pump	4		Can combine points w/ heating	
Max possible:	4	0		

Distribution

Duct Leakage	All visible ducts taped, caulked, or otherwise sealed	1		Mastic, caulk, or metal tape duct sealing can reduce air loss by 20-30%	Visual
	11-30 CFM @ 25 Pa	2			Installer certificate/visual
	≤10 CFM @ 25 Pa	3			
Insulation	<75% Ducts insulated to >R-4 or in conditioned space	1		Visible ducts	Visual
	≥75% Ducts insulated to ≥R-4 or in conditioned space	2		Visible ducts	Visual
Zoned	Each dwelling unit has a separate, controllable thermostat	1			
Location	All pipes/ducts located within thermal envelope	3			
Mechanical Ventilation	Balanced or supply ventilation	1			
	Electronically Commutated Motor (ECM)	1			
Max possible:		11	0	Target minimum: 5	

Other

Ventilation	MERV 8 or better filtration	1			
Ventilation - Bathroom	Energy Star rated fan - vented through ceiling/roof	1			Purchase receipt/model rating
	Energy Star rated fan - vented through wall/soffit	2			
Hot water pipes	Fully insulated; thermal barrier between hot/cold supply	2			Visual/Installer certificate
Max possible:		5	0	Target minimum: 2	

Occupant

Controls/data	*Wifi-enabled programmable thermostat provided by landlord	1		*Operation manuals must be provided to tenant	Purchase receipt/visual
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	*Wifi-enabled water heater provided by landlord	1		*Operation manuals must be provided to tenant	Purchase receipt/visual
Health	Carbon monoxide (CO) alarm, detectable to ≤ 29 ppm	1			Purchase receipt/visual
Waste	City compost bin provided on site	1			Visual
Education	Tenant attends energy conservation class	1		Tenant mustn't be required to pay for class	Certificate of completion
	Provide operation/training manuals for appliances	1			Tenant testament of receipt
Max possible:		6	0	Target Minimum: 2	

Bonus Points for Innovative Measures

Category	Item	Points		Details	Verification
Transportation	Secure, protected bicycle parking; 1 point per 5 spaces	1			Visual
	Provide tenant(s) with bus passes instead of parking passes	2			
Windows/ Fenestration	Seasonal storm windows	5		Only available if building is >50 years old and windows are single-pane with wood frame. 5 points awarded if 100% of the windows have storms installed.	Visual
	...if Energy Star rated, +2	2			Purchase receipt/model rating
Solar PV	Rooftop or other on-site solar	20		Only available if array covers >80% usable space.	Electrical Permit
	...with on-site backup storage (batteries, compressed air, etc.)	10			
Lighting	Motion sensors on all exterior/shared space light fixtures	1			Purchase receipt/visual
Billing	Ratio-based Utility Billing System (RUBS)	2		Putting users in more direct contact with energy bills can encourage use reductions	
Approval	Unlisted Innovative Measures	Discretionary		Must be approved by City of Ann Arbor	
	Technical Impracticality: Carbon Offsets	Discretionary		Must be approved by City of Ann Arbor; up to 10 points per metric ton of CO2 offset	
		53		No minimum	

Water Conservation - 3 points required, does NOT count toward overall score

Toilets	Low-flow or dual flush: Avg GPF <1.6	1		Dual flush kits acceptable. 1 pt per toilet (2 max)	Plumbing Permit/visual
Dishwasher	Energy Star rated	1			
Clothes Washer	Energy Star rated	1		Must be HE	Purchase receipt/model rating
Bathroom	Low-flow shower heads and faucet aerator	1		Average GPM <2.2	
Kitchen	Low-flow faucets aerator	1		Average GPM <2.5	
Max possible:		6	0	Mandatory minimum: 3	