GREEN BUILT HOMES

A Program of the Green Built Alliance

Builder Name/Company: Soufl Construction	**Sq. Ft. (conditioned):** 2544	**NC Climate Zone:** 4
Project Address: 147 Abundance Run, Asheville, NC 28805	Score ……	232

Full Name/Company of each individual taking responsibility for specific checklist items:
MS - Matt Soufl (Soufl Construction), MV - Matthew Vande (VandeMusser Design)
Date of Final Walkthrough: 1/25/24

USE OF THIS CHECKLIST

A **Columns for the Project use** - Begin by selecting which opportunities the project will fulfill to achieve certification. To mark these opportunities, the User should enter "**Y**" (for **Y**es) in the **Y** column, or "**M**" (for **M**aybe) in the **M** column. "**Y**" is used for items that will be completed for the project, and "**M**" is used for items that are under consideration by the project team. Items not being considered may be left blank. It is important that the User select enough "**Y**" items in each Opportunities Section (ex: "Site Opportunities") to meet the minimum number of points for that section. The **P and N** columns are for Rater use only (see D below).

B **PROJECT SCORE CARD** - The User can use the PROJECT SCORE CARD to track the point totals for the project. The PROJECT SCORE CARD automatically tallies the points of the opportunities that are complete, or marked with a "**Y**" or "**M**."

C **Columns for the approved Rater** (pages 4 - 19) - the Rater completes his/her review of the project by entering "**P**" (for **P**assing) in the **P** column, or "**N**" (for **N**ot passing) in the **N** column. The **Notes / Dates / Initials** column is used for Rater sign-off, and details related to that opportunity.

Don't forget to register the project by visiting www.GreenBuilt.org

We are here to help you achieve a Green Built Home. Contact Info@GreenBuilt.org or call 828-254-1995 with questions

DOCUMENTATION REQUIRED TO RECEIVE CREDIT FOR CHECKLIST ITEMS

1. Basic Information
   - a. Documentation should be submitted to the RATER (described in item 3 below).
   - b. All documentation should be provided in electronic format unless approved by Green Built staff.
2. Specific Types of Documentation - Descriptions
   - a. Providing a **"Signature"** by a Responsible Party as documentation for a checklist item indicates that the party whose initials appear in the notes column, and whose corresponding full name is listed on page 1, is accepting responsibility that the item has been completed in full and that all reasonable care has been taken to meet the stated intent of that checklist item. The Responsible Party has verbally verified to the Rater that the checklist item has been completed. Photographic documentation will be accepted for signature items if the photo clearly indicates item implementation / completion.
   - b. An **"Inspection"** indicates that the item has been verified by the Rater. Completed checklists require the signature (or initials) of the Rater next to each item requiring an inspection. **Photographic documentation** will be accepted for inspection items at the discretion of the Rater if the photo clearly indicates item implementation / completion .
3. **Raters** are pre-authorized individuals that provide the required third party inspections on registered Green Built Homes. Raters submit the Checklist and requested documentation to the Green Built Alliance once they have verified that a house has met all of the requirements for receiving a certificate from the Green Built Homes program. For a list of Raters, contact the Green Built Alliance or visit www.GreenBuilt.org.
4. **Disclaimer:** The Green Built program, its representatives, and approved Raters (see item 2b above) are only responsible for verifying Checklist requirements have been implemented. Verification **should not be considered a warranty** (express or implied) as to the quality or appropriateness of the selected feature or installation.
5. All **final measurements and calculations** are subject to a 2% deviation allowance (5% for Blower Door and Duct Blaster measurements).

PROJECT SCORE CARD	Completed Items	Yes ("Y") Items - Does NOT include Maybe ("M") items	Yes ("Y") Items - PLUS Maybe ("M") Items
Prerequisites	All Complete	n/a	n/a
Site (5 Pts Req.)	9	9	9
Water (5 Pts Req.)	21	21	21
Building Envelope (5 Pts Req.)	58	53	58
Heating and Cooling (5 Pts Req.)	17	5	5
Appliances, Lighting and Renewables (3 Pts Req.)	75	75	75
Health and Indoor Air Quality (5 Pts Req.)	26	26	26
Materials (7 Pts Req.)	20	20	20
Bonus (3 Pts Req.)	6	6	6
Total Overall Score for Home	232	215	220

Minimum total points needed to become a Green Built Home is 65

Rating Scale
65-140 points: Certified Level
141-205 points: Silver Level
206-270 points: Gold Level

206-270 points: Gold Level
271+ points: Platinum Level

Enter "P" next to each Prerequisite that has "Passed" (Approved Raters Only)					
Prerequisites (Required)			**Points**	**Documentation**	**Notes / Dates / Initials**
p	1	Comply with all federal, state and local government requirements including but not limited to: NC Building Code, NC Energy Code and local regulations.	Required	Copy of Certificate of Occupancy (CO); Evidence of Permanent Power	MS
p	2	Home meets ENERGY STAR V3.1 or NC HERO Code with HERS rating	Required	ENERGY STAR Cert or NC HERO Code Compliance Report AND HERS Cert	MV - Energy Star 3.1 / confirmed HERS 13
p	3	Perform a blower door test and meet minimum standard of 0.30 CFM50/sf of a building envelope's surface area OR 5 ACH50	Required	Blower door test results	MV
p	4	Seal all ductwork joints and penetrations with low toxic mastic (aerosolized sealant allowed for existing homes). Test all air distribution systems (at 25 Pascals measured in CFM of leakage per conditioned square footage) to have no more than 4% leakage to the outside and no more than 8% total leakage (12% if >3 returns per system) at final inspection OR rough-in testing of less than 4% total leakage if all ducts are in conditioned space	Required	Inspection and test results	MV 8.1% total / 0.0% leakage to outside (5 returns)
p	5	All space heating and cooling equipment sized according to ANSI/ACCA Manual J 8th edition, Room by Room Calculations, performed by a Responsible Party. The total cooling capacity of each cooling system must comply with Manual S or current ENERGY STAR oversizing guidelines	Required	Copy of calculations, system cooling capacity information	MV - Man J by: VandeMusser Cooling load: 24 Kbtuh Cooling capacity: 28.8 kbtuh % oversized and stage: 122.1% single stage
p	6	Install an ASHRAE 62.2 2010 or 2013 compliant mechanical ventilation system. Platinum level certification requires a balanced ventilation system.	Required	Inspection, Documentation of flow rate & fresh air delivery schedule	MV - HRV 56 cfm required, 77 cfm tested
p	7	Install and test exhaust fans vented to the outside to meet ASHRAE 62.2 compliant flow rates: •Baths with showers TESTED to exhaust 50 CFM intermittent or 20 CFM continuous. Continuous bath fans must be ENERGY STAR Labeled. • Kitchen exhaust TESTED to exhauast 100 CFM, minimum (hood or downdraft), or comply with ASHRAE Standard 62.2. >600 CFM requires intentional make up air. Note that range hoods over 600 CFM have the potential to cause comfort, energy efficiency, and air-quality issues in homes that are not easily solved by technology or inspections. Green Built Homes strongly encourages participants to consider alternatives, such as induction.	Required	Inspection and rated flow	MV - kitchen hood 138 cfm, powder 78 (continuous HRV), master bath 66 cfm, upper bath 79 cfm
p	8	Any home with combustion appliances including water heaters, furnaces or appliances: • Carbon monoxide (CO) detectors must be installed, one per floor • All gas equipment is sealed combustion, power vented, or located outside the conditioned space (including sealed crawl space). No unvented combustion equipment. (ovens and ranges excluded)	Required	Inspection and Signature	n/a - all electric
p	9	Any home with a fireplace (gas or wood burning): • Carbon monoxide (CO) detectors must be installed, one in room with fireplaces and one per floor • Gas and wood-burning fireplaces/stoves must have a dedicated outdoor combustion air supply able to withstand flame exposure. Unvented fireplaces are not permitted. • Gas fireplaces must have doors or a solid glass enclosure. Manual dampers on gas fireplaces are not permitted	Required	Inspection and Signature	n/a
p	10	Air in attached garage separated from conditioned air. • Provide air barrier between conditioned living space and garage; including weatherstripping at all penetrations, sealed drywall joints, and other measures as necessary. • Air Handlers may not be installed in a garage.	Required	Inspection	MV
p	11	For homes with a domestic hot water recirculating loop, insulate loop piping to min. R-3 and install a pump control based on one of the following: temperature sensor, occupancy sensor, demand button. Timers may not be used to meet the control requirement.	Required	Inspection	n/a
p	12	CFLs or LEDs installed in 75% of lamps in permanently installed lighting fixtures.	Required	Inspection	MV
p	13	Install window and door flashings at all openings as recommended by the window/door manufacturer in conjunction with recommendations by the weather resistant barrier manufacturer.	Required	Inspection or Signature	MS
p	14	For homes in Radon Zone 1, follow the Radon Standards of Practice/AARST ANSI Standard for radon resistant construction and perform a passive test OR have an active radon test done by a Certified Radon Measurement Professional. For homes in Radon Zone 2-3, or Homes on vented crawlspaces a passive test is required. The home must not exceed 4.0 pCi/L. Homes that are fully on stilts are exempt from the testing requirement.	Required	Inspection OR Copy of test results as applicable	MV - passive pipe installed / 3.4 pCi/L (passive test)
p	15	Develop and implement an erosion control site plan. In jurisdictions where erosion control site plans are required, no additional plan required.	Required	Copy of plan, Inspection	MV - city of Asheville
p	16	No "Rank 1" invasive species introduced into the landscape	Required	Inspection or Signature	MV

p	17	+ NET ZERO ENERGY READY CERTIFICATION ONLY: meet all of the following (see exceptions in pop up comments): a) HERS 55 or lower b) South roof area suitable for future photovoltaic collectors facing within 45° East or West of solar South and free of shade c) A minimum of 110 sq.ft of roof area per 2000 sq.ft of conditioned area d) Chase and 3/4 inch metal conduit installed	Required	Inspection or Signature	MV - PV verified with Sugar Hollow / confirmed HERS 54 w/o PV, HERS 13 with PV
	18	+ NET ZERO ENERGY CERTIFICATION ONLY: HERS 15 or lower	Required	Inspection or Signature	
	19	+ NET ZERO WATER READY CERTIFICATION ONLY: Home meets the following: Site Opportunity 2b (100% Stormwater Management), Water Opportunities 1 & 2 (consumption calculations) and Water Opportunities 4f & 5b (rainwater system to meet total demand and plumbed for non-potable use).	Required	Inspection or Signature	

Notes:

Enter "Y" (for Yes) or "M" (for Maybe) in the appropriate column; items not attempted can be left blank											
P	N	Y	M		**Site (Minimum 5 Points Required)**	**Pts**	**Score**		**Documentation**	**Notes / Dates / Initials**
							Pass	**Y/M**		
Site Disturbance										
				1	Install permanent stormwater controls (Credit available for ALL a-d)				Inspection, copy of calculations if applicable	
				a	Install rain gardens, bio-retention basis and/or infiltration strips	1				
				b	Use permeable materials for 50% of walkways and patios	1				
				c	Use permeable materials for driveways (except for required curb cut)	2				
				d	Vegetated roof system (1 point per 20% roof area) 0 Percent Drought Resistant Landscape	1-5	**0**	**0**		
				2	**OR** Design and Install permanent stormwater management system				Inspection, copy of calculations	
				a	Quantify average annual inches of stormwater runoff generated by the home using the EPA Stormwater Tool	2				
				b	Install stormwater control systems to manage runoff from at least the 2 year, 24 hour storm Percent Stormwater Control Systems	1-10	**0**	**0**		
				3	Preserve and cover topsoil onsite for reuse	1			Inspection	
				4	Remove existing invasive plant species from the landscape	3			Signature, list of species	
				5	Develop and implement a tree preservation plan	2			Inspection, Copy of Plan	
				6	Fence individual trees at drip line 0 Number of trees (1 point per tree, max 4)	1-4	**0**	**0**	Inspection	
				7	Leave >25% of trees and natural features on site undisturbed during construction	3			Inspection	
p		y		8	Tree planting (minimum 12 trees per acre of developed land)	2	**2**	**2**	Inspection or Photo	MV - 7 trees / 0.15 acre
				9	80% of stumps and limbs ground for mulch	1			Signature	
				10	80% of cleared logs milled	2			Signature	
				11	B20 blend biodiesel used for diesel fueled construction equipment	1			Signature and name of fuel provider	
				12	Site designated as part of a Firewise USA Community	1			Copy of certificate	
Location										
p		y		13	Do not build on any of the following: a. land within 100 ft. of any water body (including wetlands) b. At or below the 100 year floodplain elevation c. Prime farmland	2	**2**	**2**	Inspection, Floodplain Map, USDA Soil Survey Rating	MV
				14	Home located close to business district. (Choose ONE):				Inspection, Walk Score	
				a	Walk Score greater > 30	1				
				b	Walk Score greater > 50	3				
				c	Walk Score greater > 70	5				
				15	Access to Bike Paths (Choose ONE):				Inspection, map of lanes if requested	
				a	Bike Paths within 1 mile or bikescore >20	1				
				b	Bike Path/Lanes within 1 mile that connects to business district or bikescore > 40	2				
p		y		16	Bus access within 1/2 mile of home	2	**2**	**2**	Inspection	MV - New Haw Creek Rd
				17	Compact Development (Choose ONE):				Inspection, Other info on request	MS - less than 0.15 acre
				a	Build on site within 1/2 mile of existing water and sewer infrastructure	1				
				b	Build on infill site	2				
p		y		c	Build home on .15 acre (max.); or build in development with density of 6 or more homes per acre	3	**3**	**3**		
				d	Build home on .10 acre (max.); or build in development with density of 10 or more homes per acre	4				
				18	House meets local affordable or workforce housing guidelines	2			Signature, Sales Price	
Landscaping										
				19	Landscaping techniques that utilize perennial native, pollinator-friendly and/or edible plants (Choose ONE):				Signature, list of species on request	to have blueberries, serviceberry (NOT IN 1/25/24)
				a	Design provided to be at least 50% of the landscaped area	1				
				b	Installed in at least 50% of the landscaped area	2				
				c	Installed in 100% of the landscaped area	3				
				d	Permaculture Landscape Installed (must be designed by certified Permaculturist)	4				
				20	Food production (Choose ONE):				Inspection	
				a	A minimum of 30 sq ft of raised garden beds for single family home	1				
				b	>100 sq ft of raised garden beds for single family home	2				
				21	Protection of local wildlife (Credit available for ALL of the following)				Inspection, Documents upon request	
				a	Bear Prevention (all of the following): Provide a bear proof garbage enclosure, round door knobs on exterior doors, no edible plants located adjacent to entry ways	1				
				b	At least 50% of the site designated as a National Wildlife Federation Certified Wildlife Habitat	1				

				c	Donate land equivalent in size to the disturbed area for conservation to approved local land trust. Financial or volunteer contributions of equitable proportion also acceptable.	4				
				22	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter points				
					Subtotal for Site (5 Points Required)		**9**	**9**		

Notes:

P	N	Y	M		**Water (Minimum 5 Points Required)**	**Pts**	**Score** Pass	**Score** Y/M	**Documentation**	**Notes / Dates / Initials**
				1	Calculate the indoor water use of the project using HERS H2O, WERS, or other equivalent calculation tool approved by GBA	3			Calculation	
				2	Calculate the outdoor water needs of the project using the Water Sense water budget tool	3			Calculation	
					Outdoor					
p		y		3	Drought Resistant Landscaping Techniques include xeriscaping, mulched areas, forest, meadow, no-mow grass and/or drought tolerant plants (excludes conventional turf). (1 point per 10 percent of landscaped area) 90 Percent Drought Resistant Landscape	1-10	**9**	**9**	Inspection	MV - 90% no-mow grass, mulch
				4	Rainwater harvesting (Choose ONE):				Inspection	
				a	≥ 50 gallons	1				
				b	≥ 150 gallons	2				
				c	≥ 500 gallons	3				
				d	≥ 1500 gallons	4				
				e	Rainwater system designed to capture enough rainwater to provide 100% of outdoor and indoor water needs (may be in conjunction with other methods).	10				
				5	Code approved system for indoor rainwater use (Choose ONE)				Inspection	
				a	Pre-plumbed for non-potable use	3				
				b	Non-potable use	5				
				c	Potable use	10				
				6	Reuse of greywater (Credit available for ALL of the following):				Inspection	
				a	Pre-plumbed for outdoor use	3				
				b	Pre-plumbed for toilet flushing	3				
				c	Code approved system for outdoor use only	4				
				d	Code approved system for toilet flushing	5				
				e	100% of greywater captured, reused and/or treated onsite	6				
				7	Irrigation system is zoned separately for turf and bedding areas	1			Inspection	
				8	Irrigation system includes a soil moisture or rain sensor, or other irrigation efficiency device	1			Inspection	
					Indoor					
				9	Low flow kitchen faucets (Choose ONE):				Inspection	MV - 1.5 gpm
				a	≤ 1.8 gpm flow rate	1				
p		y		b	≤ 1.5 gpm flow rate	2	**2**	**2**		
				10	Low flow lavatory faucets (Choose ONE):				Inspection	MV - 1.2 gpm
				a	WaterSense labeled or 1.5 gpm flow rate	1				
p		y		b	< 1.5 gpm flow rate	2	**2**	**2**		
				11	Low flow showerheads (Choose ONE):				Inspection	MV - 2.0 gpm
p		y		a	≤ 2.0 gpm flow rate	2	**2**	**2**		
				b	≤ 1.75 gpm flow rate	3				
				12	High efficiency toilets (Up to 4 points):				Inspection	MV - 1.28 gpf
p		y			WaterSense labeled /1.28 gpf (1 pt per toilet, max. 2) 2 # of Toilets	1-2	**2**	**2**		
					Dual flush: 1.6/0.8 - 1.1 gpf (2 pts per toilet, max. 4) 0 # of Toilets	2-4	**0**	**0**		
p		y		13	Toilets with UNAR MaP rating of 1000 grams per flush (1 pt per toilet, max. 2) 2 # of Toilets	1-2	**2**	**2**	Inspection, make/model #	MV - Kohler K-31615-0
				14	Composting toilet installed	3			Inspection	
				15	Clothes washer is energy and water efficient (Choose ONE):				Inspection, make/model #	not installed
				a	ENERGY STAR Labeled	1				
				b	ENERGY STAR Labeled with iMEF>2.4 and iWF<3.7	2				
				16	Dishwasher is energy and water efficient (Choose ONE):				Inspection	MV - Energy Star & 2.9 gal/cycle
				a	ENERGY STAR labeled	1				
p		y		b	ENERGY STAR Labeled and uses ≤ 3.5 gallons/cycle	2	**2**	**2**		
				17	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts			Letter template	
					Subtotal for Water (5 Points Required)		**21**	**21**		

Notes:

P	N	Y	M		Building Envelope (Minimum 5 Points Required)	Pts	Score Pass	Score Y/M	Documentation	Notes / Dates / Initials
p		y		1	Home HERS Index ≤ 70 (1 to 35 points) 1 point is awarded for every 2 HERS points decrease in the HERS Index, beginning with 1 point for a HERS Index of 70. 13	1-35	28	28	Confirmed HERS Certificate	MV - confirmed HERS 13
				2	Additional Energy Efficiency Program Participation. Choose ONE of the following:				Copy of Certificate from Rater	MV
p		y		a	Energy Star for Homes Certification	5	5	5		
				b	DOE Zero Energy Ready Home Certification	8				
				3	Blower door test performed with following minimum standards met (Choose ONE):				Inspection	MV - 0.10
				a	Minimum standard of 0.20 CFM50/sf of surface area	3				
				b	Minimum standard of 0.15 CFM50/sf of surface area	4				
p		y		c	Minimum standard of 0.10 CFM50/sf of surface area	5	5	5		
Foundation Systems - Limit TWO per home (homes with only one foundation type: see comment box)										
					Slab on Grade					
				4	Vertical edge insulation creats a thermal break (Choose ONE):				Inspection or Signature	
				a	Zone3=R-5, Zone4/5=R-10	1				
				b	Zone3=R-10, Zone4/5=R-15	3				
				c	Zone3=R-15, Zone4/5=R-20	5				
				5	Insulation under entire slab (Zone3=R-5, Zone4/5=R-10)	2			Inspection or Signature	
				6	Code approved detail eliminating 2" termite view strip	1			Inspection	
					Basement with Insulated walls					
				7	Floor to ceiling insulation (Choose ONE):				Inspection	k-wall (r8)
				a	R-11 continuous or R-15 cavity	2				
				b	R-15 continuous or R-19 cavity	3				
p		y		8	Rim joist insulated with spray foam or equivalent grade 1 installation with air barrier	1	1	1	Inspection	MV
					Crawlspace with Insulated walls					
				9	Wall insulation (Choose ONE):				Inspection	
				a	R-10 continuous	2				
				b	R-12 continuous	3				
				10	Rim joist insulated with spray foam or equivalent grade 1 installation with air barrier	1			Inspection	
					Basement, Crawlspace, or Cantilevers with Floor Insulation					
				11	Floor insulation (Choose ONE):				Inspection	MV - 6" foam over garage
p		y		a	R-19 insulation with air barrier on all six sides (or spray foam)	3	3	3		
				b	R-30 insulation in contact with subfloor above	4				
				c	R-30 insulation with air barrier on all six sides (or spray foam)	5				
Wall Systems - Limit ONE per home										
					Wood Frame Wall Construction					
				12	Wood Frame Wall Insulation (Choose ONE):				Inspection	MV - 2x6 R-19
p		y		a	Wall insulation: Zone=R-19, Zone4=R-19, Zone5=R-21	2	2	2		
				b	Wall insulation: Zone3=R-21, Zone4=R-21, Zone5=R-23	3				
				13	Continuous exterior rigid insulation (minimum R-5)	2			Inspection	
				14	Insulated headers (Choose ONE):				Inspection or Signature	MV
				a	Insulated headers to >R3	1				
p		y		b	Insulated headers to >R9	2	2	2		
p		y		15	Insulated corners	1	1	1	Inspection	MV
p		y		16	Insulated t-walls	1	1	1	Inspection	MV
				17	Exterior walls framed at 24" o.c.	2			Inspection	
					Alternative Wall Construction: SIPS, ICF, Other					
				18	Continuous insulation (Choose ONE):				Inspection	
				a	Zone3=R-13, Zone4=R-15, Zone5=R-19	4				
				b	Zone3=R-16, Zone4=R-18, Zone5=R-22	7				
				19	Thermal bridging less than 5%	5				
Ceiling/Attic										
				20	Attic Improvements (Choose ONE):				Inspection	MV
p		y		a	Unvented, encapsulated attic assembly	2	2	2		
				b	Radiant barrier installed facing into air space	1				
				c	Attic kneewall with air barrier insulated above code: Zone3=R17.5, Zone4=17.5, Zone5=R21.5	1				
				21	Ceiling Insulation (Choose ONE):				Inspection	MV
				a	Vented attic insulation Zone3=R-38, Zone4/5=R-48 w/raised heel	2				
p		y		b	Spray foam at roof deck: Zone3=R-22, Zone4/5=R-25	2	2	2		
				c	Continuous Insulation: Zone3=R-20, Zone4/5=R-25	2				

				22	ENERGY STAR shingles or reflective roofing	1			Signature, Product Name	

Windows, Doors, Piping, Electrical												
				23	U-Factor (Choose ONE):							
				a	Average .32 or less	1						
p			y	b	Average .29 or less	2	**2**	**2**	Inspection	MV - 0.29 or less		
				c	Average .25 or less	3						
				24	SHGC (Choose ONE):							
				a	Average .25 or less	2			Inspection	MV - 0.20 or less		
p			y	b	Average .22 or less	3	**3**	**3**				
				25	All opaque exterior doors insulated to R-5 or greater	2			Inspection			
				26	Piping (Credit available for ANY of the following):							
				a	All hot water pipes in unconditioned spaces insulated to R-3	1			Signature, Inspection where visible			
				b	All water pipes located inside conditioned space (not in exterior walls)	2						
				c	All hot water pipes insulated to R-3	1						
p			y	27	Electrical panel located on interior wall OR with min. R-15 insulation to the outside of it	1	**1**	**1**	Inspection	MV		
				28	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts			Letter template			
					Subtotal for Building Envelope (5 Points Required)		**58**	**58**				

Notes:

P	N	Y	M		**Heating & Cooling (Minimum 5 Points Required)**	**Pts**	**Score**		**Documentation**	**Notes / Dates / Initials**
							Pass	**Y/M**		
Passive Solar Heating and Cooling Strategies										
				1	Provide one ceiling fan per 750 sf of conditioned space (no more than 5 fans required)	1			Inspection	
				2	Home orientation allows solar heating (long dimension faces within 15 degrees East or West of solar south)	4			Inspection	
				3	Provide overhang, located between one and two feet above 90% of south facing windows	3			Inspection	
				4	Implement exterior strategies to reduce heat gain and/or heat loss, such as exterior-mounted sunscreens, or operable awnings. At minimum, implement on 90% of the southern and western facing windows	5			Inspection	
				5	Implement interior strategies to reduce heat gain and/or heat loss, such as insulated window coverings. At minimum, implement on 90% of the southern and western facing windows	1			Inspection	
				6	East facing glazing less than 3% of total conditioned floor area (all glazing within 45 degrees north or south of east should be included in calculation)	2			Inspection, Calculations	10%
				7	West facing glazing less than 2% of total conditioned floor area (all glazing within 45 degrees north or south of west should be included in calculation)	2			Inspection, Calculations	4.20%
				8	South Facing Glazing (Choose ONE):					
				a	South facing glazing between 6-10% of total conditioned floor area. Glazing must be within 15 degrees E. or W. of solar south and must have proper overhangs.	4			Inspection, Calculations	not facing less than or equal to 15 degrees from south
				b	South facing glazing between 8-12% of total conditioned floor area. Glazing must be within 15 degrees E. or W. of solar south, must have proper overhangs, thermal mass and an SHGC >.45	6				
Design and Installation										
					Ducted systems					
				9	Perform duct blaster test and meet the following minimum standards when measured in CFM / 25Pa of leakage (Choose ONE):					
				a	Total Leakage of < 4% of the home's heated square footage at final or < 2% at rough-in	3			Copy of duct leakage test results	8.1% total
				b	Total Leakage of < 3% of the home's heated square footage at final or < 1% at rough-in	5				
p				10	Air handler located within thermal envelope (all units)	2	**2**		Inspection	MV
				11	Ducts located within thermal envelope (min.90%)	4			Inspection	
				12	Duct system sized, designed, and installed in accordance with latest ANSI/ACCA Manual D or equivalent calculation, using approved software	3			Signature, copy of calc	
p				13	Rigid metal supply plenum	2	**2**		Signature or Inspection	MV
				14	Pressure relief pathways (Choose ONE):					
				a	Air transfer grills or insulated jumper ducts in every bedroom	1			Inspection	MV
p				b	Return-air ducts in every bedroom	3	**3**			
				c	Rater-measured pressure differential ≤ 3 Pa	1				
				15	Room by Room airflow measured and balanced within 20% or 25cfm of design airflow	2			Signature, copy of balance report	
					Ductless systems					
				16	Ductless Heating/Cooling system- 4 points per 25% of conditioned area by ductless system, 20 points max	1-20			Signature, copy of calc	


Percentage of home
0
0

Heating and Cooling Equipment												
				17		HVAC grading meets ENERGY STAR Grade 1 Standards	2				Inspection, testing	
p				18		Fan has an Electronically Commutated (ECM) Motor	3	3			Signature	MV
p				19		HVAC system(s) with multiple-zone heating and/or cooling control	2	2			Inspection	MV
				20		Multi Stage Compressor (Choose ONE):					Inspection	MV - single stage
					a	2 Stage	2					
					b	≥ 2 or Variable Stage	3					
				21		Smart Thermostat (Choose ONE):					Inspection	MV
p		y			a	Programmable	1	1	1			
					b	Thermostat with Wifi or Home Automation System capability	2					
				22		High Efficiency Heating Equipment (Choose ONE):					Inspection	MV - HSPF2 7.8
					a	≥ 8.5 HSPF, 7.2 HSPF2, 92 AFUE Furnace, 90 AFUE Boiler or 3.3 COP	1					
p		y			b	≥ 9.0 HSPF, 7.6HSPF2, 94 AFUE Furnace, 94 AFUE Boiler or 3.9 COP	3	3	3			
					c	≥ 9.5 HSPF, 8.1HSPF2, 96 AFUE Furnace, 96 AFUE Boiler or 4.1 COP	5					
					d	≥ 13 HSPF or 10 HSPF2	7					
				23		High Efficiency Cooling Equipment (Choose ONE):					Inspection	MV - SEER2 14.8 (converts to SEER 15.3)
p		y			15.3	SEER or SEER2 (15 and Above)	1-10	1	1			
						EER (14 EER and Above)	8-14	0	0			
				24		Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts				Letter template	
						Subtotal for Heating and Cooling (5 Points Required)		**17**	**5**			

Notes:

P	N	Y	M			**Appliances, Lighting, Renewables (Min. 5 Points Req.)**	**Pts**	**Score** Pass	**Score** Y/M	**Documentation**	**Notes / Dates / Initials**
Appliances											
				1		Energy Efficient Refrigerator (Choose ONE):				Inspection, Model #	MV - GRSC2352AF3 615 kwh/yr
p		y			a	Refrigerator is ENERGY STAR labeled	1	1	1		
					b	Total refrigeration uses <550 kWh	3				
				2		Energy Efficient Clothes Dryer (Choose ONE)				Inspection	
					a	Dryer is ENERGY STAR labeled	2				
					b	Heat pump dryer or CEF>4	3				
				3		Clothesline Installed	1			Inspection	
				4		Water Heater Efficiency (Choose ONE):				Inspection, Model #	MV - Rheem XE50T10H45U0 UEF= 3.88
					a	Gas Water Heater (Tank or Tankless) (UEF) ≥ 0.79	2				
					b	Whole-Home Gas Tankless (UEF) ≥ 0.90	3				
					c	Heat Pump Water Heater (UEF) < 3.0	4				
p		y			d	Heat Pump Water Heater (UEF) ≥ 3.0	5	5	5		
					e	Solar Water Heater	6				
				5		Ground source (geothermal) water heating (Choose ONE):				Inspection	
					a	Desuperheater assist provides hot water	2				
					b	Geothermal system provides all hot water	5				
				6		Energy-efficient hot water distribution system: compact design of conventional system, central manifold distribution system or structured plumbing system.	4			Inspection	
p		y		7		Induction Cooktop	2	2	2	Inspection	MV
				8		Efficient lighting (Choose ONE):				Inspection	MV - 100%
					a	>90% of lamps in lighting fixtures are CFLs or LEDs	3				
p		y			b	100% of lamps in lighting fixtures are LEDs	5	5	5		
				9		Incorporate natural lighting strategies (Credit available for ALL of the following):				Inspection	
					a	Light tubes	1				
					b	Clerestory	1				
				10		Indoor Lighting controls: manual wall timers, occupancy or vacancy Sensors. (1 pt per switch, max. 3)	1-3			Inspection	
					0	# switches		0	0		
				11		Switchable Automatic Outdoor Lighting Controls- Motion/Photo Sensors	1			Inspection	
				12		Home automation system to manage (Credit available for ALL of the following):	1-3			Inspection	
					a	Appliances (1 pt per eligible appliance, max 3)					
					0	# Eligible Appliances		0	0		
					b	>50% Lighting	1				
				13		Whole-house energy monitoring system installed	2			Inspection	
Renewables											

				14		South roof area suitable for future solar hot water or photovoltaic collectors facing within 45° East or West of solar South, min 110 square feet of roof area per 2000 square feet of conditioned floor area	1			Inspection	
p		y		15		Make the home Solar Ready by doing one of the following: a) Min 3/4" metal conduit installed b) Quote from installer provided to homeowner (could include future ground mount system and site plan if there isn't suitable roof area)	2	**2**	**2**	Inspection	MV - Rhino Renewables
				16		Renewable Energy system contributes to home's total annual energy use (Credit available for ALL of the following):				Inspection and Signature, Source Energy and Emissions report with calculations	MV - 9440.9 generated / 12382.3 used = 76.24% (see fuel summary report)
p		y			a	On-site renewable electricity generation 76.2 Percentage of total annual energy use	1-75	**57**	**57**		
					b	Renewable energy system sized to provides 2800 kWh/year excess for charging plug-in vehicle.	5				
				17		Electric Vehicle Charging (Choose ONE):				Signature or Inspection	MV
					a	Level 1 Outlet accessible to parking area	1				
					b	Pre-wired: 240v compatible wiring to plate in parking area	2				
p		y			c	Level 2 Outlet installed in parking area	3	**3**	**3**		
				18		Battery back up installed for renewable energy system (4.5kwh min)	3			Inspection	
				19		Active solar thermal heating system provides 2% - 100% of space heating needs 0 Percentage provided by Solar Thermal	1-30	**0**	**0**	Inspection and Signature, Source Energy and Emissions report with calculations	
				20		EPA Certified, sealed combustion, wood or pellet based stove designed for space heating- with outside combustion air and gasketed doors.	2			Inspection and signature, EPA certification must be available	
				21		Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts			Letter template	
						Subtotal for Appliances, Lighting, Renewables (3 Points Required)		**75**	**75**		

Notes:

P	N	Y	M			**Health & Indoor Air Quality (Min. 5 Points Req.)**	**Pts**	**Score** Pass	**Score** Y/M	**Documentation**	**Notes / Dates / Initials**
				1		House complies with the EPA Indoor airPLUS Program	10			Copy of documentation indicating compliance	
Contaminant Control											
				2		Attached garage is isolated from house by extensive air-sealing; the garage-to-house pressure is at least 47 Pascals when the house is depressurized to 50 Pascals below ambient 0 Pascals (42=1 point, 45- 2 points, 47=3 points)	1-3	**0**	**0**	Pressure test results indicating compliance	
				3		Detached or no garage	5			Inspection	
				4		Exhaust fan in attached garage controlled by timer (100 CFM min)	2			Inspection	
p		y		5		Protect all ducts and returns with a durable covering (floors and ceilings)	1	**1**	**1**	Inspection	MV
				6		Clean ducts, furnace and filters before occupancy	2			Inspection	
				7		Filters rated MERV 8 or greater installed on forced air systems; system static pressure must be designed and calculated to perform with the higher efficiency filter installed (Choose ONE):				Inspection or Signature	MV - MERV 10
p		y			a	MERV 8	1	**1**	**1**		
					b	MERV 11	2				
					c	MERV 13 or greater (includes HEPA or "HEPA-like" filters)	3				
				8		Whole house ventilation system (Choose ONE):				Inspection and Signature	MV - HRV
					a	Distributed Ventilation System	2				
p		y			b	Balanced Ventilation System (required for Platinum Level Certification)	3	**3**	**3**		
					c	High Efficiency ERV/HRV - greater than 1.5 cfm per watt	4				
p		y		9		Third party verification that whole house ventilation system meets within 95-120% of ASHRAE 62.2 2010 or 2013 requirements	2	**2**	**2**	Inspection	MV - 56 cfm required, 77 cfm tested
				10		Exhaust fan upgrades in all full baths (credit available for ALL of the following):				Inspection	MV
p		y			a	Install ENERGY STAR labeled fans	1	**1**	**1**		
p		y			b	Rated less than 1 sone	1	**1**	**1**		
					c	Controlled by timer or occupancy sensor	1				
					d	Controlled by humidistat	2				
					e	Bath fans located directly above the shower enclosure	1				
				11		Interior relative humidity monitored and controlled (credit available for ALL of the following):				Inspection	
					a	HVAC system with dehumidification mode or controls	1				
					b	Dehumidification system installed to serve below grade areas	3				
					c	Central dehumidification system installed	6				
p		y		12		Home is all electric	3	**3**	**3**	Inspection	MV
				13		Install CO detector in mechanical equipment area	1			Inspection	

				14	Install a low level CO Monitor near every sleeping area	2			Inspection	
p		y		15	Radon-resistant gas vent system installed to EPA Guidelines (does not require activation)	3	**3**	**3**	Inspection and Signature	MV - passive pipe
				16	Alternative termite treatment that uses low toxicity chemicals or eliminates chemical termite treatments	1			Signature, type of system	

IAQ Material Use											
				17	Low-emitting/ Low Toxic Products (Credit available for ANY of the following):				Inspection, Product Info	
p		y		a	Kitchen/bath cabinetry/casework	1	1	1		MS - Marsh / CARB complaint
p		y		b	Countertops	1	1	1		MV - quartz/ wood
				c	Closet shelving	1				
p		y		d	Interior Trim	1	1	1		MV wood
				e	Caulks and Adhesives	1				
				f	Interior Paints and Primers Low VOC	1				
p		y		g	Interior Paints and Primers Zero VOC	2	2	2		MV - Sherwin Williams ProMar 200
				h	Stains, sealants and finishes (other than flooring)	1				
p		y		i	Flooring (including floor stains and finishes)	1	1	1		MV - Bona Traffic
				j	Carpet	1				
p		y		k	No Carpet in the home	2	2	2		MV
				l	Interior Doors	1				
				m	Furnishings (Min. 3 pieces)	1				
p		y		n	Wall Insulation	1	1	1		MV - Zero formaldehyde fiberglass
				o	Floor and Ceiling Insulation	1				
				p	Plumbing	1				
				q	Sheathing	1				
p		y		18	VOC dissipation prior to dwelling occupancy	2	2	2	Signature	MS
				19	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts			Letter template	
					Subtotal for Health & Indoor Air Quality (5 Points Required)		26	26		

Notes:

P	N	Y	M		**Materials (Minimum 7 Points Required)**	**Pts**	**Score** Pass	**Score** Y/M	**Documentation**	**Notes / Dates / Initials**
				1	Home is less than 2500 square feet- 1 point per 100 square feet under 2500	1-25			Inspection, Plan Review	
				2500	Conditioned Area of Home		0	0		2544 sf
Construction Material Waste										
				2	Central, organized cutting area for project site	2			Signature	
				3	Framing plan with locations of wall studs, joists, and roof structure with cut list (applies to site-built and modular framing systems; modular units automatically receive these points)	3			Signature or Inspection; Framing Plan (if not modular)	
				4	Jobsite recycling- 75% diversion rate per component achieved (Credit available for ALL of the following):				Signature, Inspection	
				a	Wood	1				
p		y		b	Cardboard	1	1	1		MS
				c	Metal	1				
				d	Plastic	1				
				e	Drywall	1				
				f	Other	1				
				5	OR Total Construction waste reduction/material reuse (Choose ONE):					
				0	*lb/sf construction waste(1 - 8 pts if below 4.2 lb/sf)*	1-8	0	0	Calculations, waste tickets	
				0	Percent of existing structure reused; 1 pt per 10% reuse	2-10	0	0	Inspection	
Durability and Moisture Management										
				6	ENERGY STAR Water Management Checklist inspected by site supervisor and copy provided to homeowner	1			Copy provided	
p		y		7	Capillary break at all wood to concrete connections	1	1	1	Signature or Inspection	MS
				8	Sealed crawlspace with at minimum 10 mil poly on floor	2			Inspection	
				9	Drainage board for below grade walls	2			Signature or Inspection	
p		y		10	Continuous foundation drain at outside perimeter edge of footing	2	2	2	Signature or Inspection	MS
p		y		11	Provide roof drip edge (metal) at ALL roof edges	1	1	1	Signature and Inspection	MV
p		y		12	Gutters/downspouts discharge water min.5 feet from foundation (100%)	1	1	1	Inspection or Photo	MV
p		y		13	Final grade slopes 1/2" per ft away from home to 10 ft or a swale	1	1	1	Inspection	MV
				14	Covered entryways for all doors opening into conditioned space.	2			Inspection	
				15	Rain screen or grooved Weather Resistant Barrier behind the exterior veneer on exposed exterior walls (Min. 90%)	3			Signature	
				16	Rain screen or grooved Weather Resistant Barrier behind the roof	3			Signature	
				17	Durable exterior cladding (Chose ONE):				Inspection and Signature, Product Name	MV - LP SmartSide
				a	30 year warranty (min 65%)	1				
p		y		b	50 year warranty (min 65%)	2	2	2		
				18	Durable roofing (Choose ONE):				Inspection and Signature, Product Name	
				a	25 year warranty (min 95%)	1				
				b	50 year warranty (min 95%)	2				

p		y		19	Primed backs, edges, and ends of exterior trim (including field cuts)	2	**2**	**2**	Signature	MS
p		y		20	Fiber cement or composite wood exterior trim, fascia, soffit (Min 90%)	2	**2**	**2**	Signature	MS
				21	Corrosion resistant rodent/bird screens at all openings >1/4 in.	1			Signature or Inspection	
				22	All exterior wood at least 12" from the soil	1			Signature or Inspection	
				23	All mature landscaping at least 18" from the home	1			Signature or Inspection	

Environmentally Preferable Materials												
				24	Environmentally Preferable Materials (credit available for ALL of the following): Rapidly Renewable, Engineered, Third Party Certified Wood, Recycled Content, Locally Produced, Low Embodied Energy, Salvaged Materials:					Signature, Inspection where visible; Product literature available upon request	
				a	Concrete (25% Fly Ash only)	1					
				b	Wall framing members - Interior	2					
				c	Wall framing members - Exterior	2					
p		y		d	Floor framing members	2	2	2			MV - trusses
p		y		e	Roof framing members	2	2	2			MV - trusses
				f	Headers (doors, windows, etc.)	1					
				g	Insulation (Min. 50%)	1					
				h	Insulation (Min. 100%, should be awarded in addition to "g")	1					
				i	Roofing	2					
				j	Siding	2					
p		y		k	Doors	1	1	1			MS - MDF doors
				l	Closet shelving	1					
				m	Kitchen Cabinetry and Casework	1					
p		y		n	Interior Trim	1	1	1			MS - Fingerjointed pine
				o	Countertops	1					
				p	Flooring (Min. 25%)	1					
				q	Flooring (Min. 75%, should be awarded in addition to "p")	1					
				r	Decking and Outdoor Structures	2					
				s	Furnishings (Min. 3 pieces)	1					
				t	Other	1					
				25	Accessible bathroom provided on the main floor with blocking for future accessory installations	1				Inspection and Signature	
				26	Roll in shower installed	1				Inspection	
				27	Cabinets and storage shelves between 18"-48" from the floor (min. 50% by volume)	1				Inspection	
				28	Kitchen sink with knee space, and stove top with controls at the front and knee space underneath (or removable cabinet beside or below the stove top)	1				Inspection and Signature	
				29	Bedroom storage shelves 18"- 48" from the floor (min. 50% by area)	1				Inspection and Signature	
				30	Clothes closet with 32" clear opening (min.) and adjustable hanging rod	1				Inspection	
				31	5' turning radius around the bed	1				Inspection and Signature	
p		y		32	Doors and faucets use lever handles; cabinet handles are 'C' or 'D' style	1	1	1		Inspection and Signature	MV
				33	Electrical panels, thermostats, breaker boxes, and any control panels are located on the main floor (max. 54" to top)	1				Inspection	
				34	Elevator planned for (if home has second floor). Vertically align one closet on the 2nd floor with one closet on the 1st floor to allow for future installation	1				Inspection and Signature	
				35	Elevator installed for accessibility	3				Inspection	
				36	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter pts				Letter template	
					Subtotal of points for Materials (7 Points Required)		**20**	**20**			

Notes:

P	N	Y	M		**Bonus (Minimum 3 Points Required)**	**Pts**	**Score**		**Documentation**	**Notes / Dates / Initials**
							Pass	**Y/M**		
				1	Homeowner Education (credit available for ALL of the following):				Inspection	MV - b, MS - c
				a	List of high performance and green building features (a copy of their final checklist and HERS certificate)	1				
p		y		b	Green Built Alliance homeowner resource link provided	2	2	2		
p		y		c	Product manufacturer's manuals or product data sheet for installed major equipment, appliances, and fixtures.	1	1	1		
				d	Provide a diagram showing the location of safety valves and controls for major home systems. Minimum systems include HVAC & water distribution.	1				
				e	Provide a thorough walkthrough to the homeowner covering items a-d	2				
				f	Pre-schedule an evaluation by a certified Healthy Homes Evaluator for 6 months after occupancy	2				
				2	Kitchen Waste Handling (credit available for ALL of the following):				Inspection	MV
p		y		a	Built-in kitchen recycling center	1	1	1		
				b	Indoor composting system, demonstrated to homeowner	1				
				c	Provide backyard compost bin or designated compost area with enclosure	1				
				3	Integrated Project Management: conduct a preliminary meeting with the key members of the project team as early as practical. Complete a Green Built Checklist indicating the credit items being targeted, and listing the team member responsible for providing the required documentation for each credit.	2			Signature, List of attendees, meeting dates	

				4	Include a minimum of three biophilic design architectural elements	2			Inspection, Narrative	
				5	Offset the home's scope 1 and scope 2 carbon footprint from construction	2			Receipt	
				6	Offset the home's operational carbon footprint for one year	1			Receipt	
				7	Include Green Built Homes checklist items in project drawings and specifications as applicable	2			Copy of Plans	
				8	Submit Advocacy letters to suppliers/manufacturers to remove red list chemicals	2			Copy of letters	
				9	Submit regulatory appeal for use of greywater/rainwater	2			Copy of appeal	
				10	Market the Green Built program (credit available for ALL of the following):				Description of marketing activities, inspection, link to website or copy of ad/article as applicable	MV
				a	Green Built pamphlets provided on-site	1				
				b	Company website or brochure displays Green Built logo	1				
				c	Company website includes a page of educational information about green building including the features and benefits of certification	1				
p		y		d	Ad or yard sign displays Green Built logo	2	**2**	**2**		
				e	Publish newspaper or magazine article on the home	2				
				f	Make presentation on Green Built to group of 10 or more	2				
				g	Giving the homeowners a membership to Green Built Alliance	1				
				h	Participate in a Green Building Tour or Parade of Homes	2				
				11	Builder is a Certified Living Wage Employer	2			listed on website	
				12	Innovation Points - Builder submits specifications for innovative products or design (max. 7 innovation pts awarded per category)	enter points			Letter template	
					Subtotal of points for Bonus (3 Points Required)		**6**	**6**		

Notes: