

Certification Package

EPA radon zone

Project Summary page

LEED for Homes Project Summary

Durability Evaluation Form

This documentation package must be submitted to GBCI by the designated LEED for Homes Provider. The certification fee should be paid through LEED Online.

E-mail certification package to: homescertification@gbci.org

Signed A	ccountabilit	mes Checklis y Forms pection Chec		0	Multi-home or Multi-building Conflict of Interest Form (if a	. •
Project Informati	on			Project Team II	nformation	
Registration #:	88138	Reg Date:	10/24/16	Team Leader	Sean Morrissey	
Project name	Newland	Residence		Company	Morrissey Builders	
Project address(es)	5333 Dre	w Avenue S	outh	Address	2333 Kennedy Street. N.E.,	, Mpls, MN 55413
City	Minneap	olis		E-mail	sean@morrisseybuilders.c	com
Metro. Area				Builder / Developer	Morrissey Builders	
State	Minneso	ta		• •	Practical Systems (HVAC)	
Zip Code	55410-20	007		members	JD Custom Framing	
Subdivision / Dev.	Infill					
Verification Team	n Informa	tion				
Provider QAD	Michael	Holcomb		QAD Company	Green Homes Institute	
Green Rater	Pat O'Ma	illey		Rater Company	Building Knowledge	
Green Rater				Rater Company		
Energy Rater				Rater Company		
Project Information	on					
Type of building:		Single de	etached	# of stories		2
Type of builder / proje	ct:	Cus	tom	# of bedrooms:	(how to choose?)	4
Affordable project?	No	Gut-rehab?	No	Floor area (square	feet): (how to choose?)	2,972
# of homes in project,	total:	1		Home Size Adjustn	nent:	3.5
# of homes in this sub	mittal:	1		EA pathway?		Performance
IECC climate zone		6	;	HERS Index (if any	')	44

1



LEED for Homes Project Checklist

Builder Name:	Morrissey Builders
Project Team Leader:	Sean Morrissey, Morrissey Builders
Home Address (Street/City/State):	5333 Drew Avenue South, Minneapolis, Minnesota

Project Description

Adjusted Certification Thresholds

MR: 5

Building Type: Single detached Project type: Custom Certified: 48.5 Gold: 78.5 # of Bedrooms: 4 Floor Area: 2,972 Silver: 63.5 Platinum: 93.5

Project Point Total

Prelim: 55.5 + 1 maybe pts

Final Credit Category Point Totals

LL: 9

Max Pts.

ID: 3 SS: 13.5

WE: 3

Preliminary Rating

EA: 24.5 EQ: 13

AE: 1

Project

Certification Level
Prelim: Certified

Final: Silver

Final: 72

Date Most Recently Updated: Updated by:

	Available Y/Pts Maybe No	Points
Innovation & Design Process (ID) (Minimum 0 ID Points Required)	Max: 11 Y:0 M:0 Notes	Final: 3
1. Integrated Project Planning		
1.1 Preliminary Rating	Prereq.	Y
Target performance tier: Gold		
1.2 Integrated Project Team (meet all of the following)	1 0 0 N	0
 a) Individuals or organizations with necessary capabilities 	c) Regular meetings held with project team	
b) All team members involved in various project phases		
1.3 Professional Credentialed with Respect to LEED for Homes	1 0 0 N please see ID 01-06 for details	0
1.4 Design Charrette	1 0 0 N	0
1.5 Building Orientation for Solar Design (meet all of the following)	1 0 0	0
a) Glazing area on north/south walls 50% greater than on east/west walls	c) At least 450 sq. ft. of south-facing roof area, oriented for solar applications	
■ b) East-west axis is within 15 degrees of due east-west	d) 90% of south-facing glazing is shaded in summer, unshaded in winter	
2. Quality Management for Durability		
2.1 Durability Planning (meet all of the following)	Prereq.	Y
a) Durability evaluation completed	c-v) Install drain and drain pans for clothes washers in/over living spaces; OR	
b) Strategies developed to address durability issues	no clothes washers in/over living spaces	
c-i) Nonpaper-faced backer board in tub, shower, spa areas	c-vi) Exhaust conventional clothes dryers directly to outdoors	
c-ii) No carpet in kitchen, bathroom, laundry, and spa areas	c-vii) Install drain and drain pan for condensing clothes dryers	
c-iii) No carpet within 3 ft of each entryway	d) Durability strategies incorporated into project documentation	
c-iv) Install drain and drain pans in tank water heaters in/over living spaces; OR	e) Durability measures listed in durability inspection checklist	
no tank water heaters in/over living spaces		

2.2	Durability Management (meet one of the following)	Prereq.				Y
	■ Builder has a quality management process in place	Builder condu	cted inspe	ction using dura	bility inspection checklist	
2.3	Third-Party Durability Management Verification	3	0	0		3
3. Innovative	or Regional Design					
3.1	✓ Innovation 1 (ruling #):	1	0	0		0
3.2	✓ Innovation 2 (ruling #):	1	0	0		0
3.3	✓ Innovation 3 (ruling #):	1	0	0		0
3.4	∠ Innovation 4 (ruling #):	1	0	0		0
Location &	Linkages (LL) (Minimum 0 LL Points Required)	Max: 10	Y:5	M:0	Notes	Final: 9
1. LEED for N	eighborhood Development					
1	LEED for Neighborhood Development	10	0	0	N	0
2. Site Selecti	on					
2	∠ Site Selection (meet all of the following)	2	2	0		2
	a) Built above 100-year floodplain defined by FEMA	=			kland prior to acquisition	
	 b) Not built on habitat for threatened or endangered species c) Not built within 100 ft of water, including wetlands 	e) Not built o	n land with	h prime soils, un	ique soils, or soils of state significance	
	c) Not built within 100 it of water, including wedards					
3. Preferred L						
	Edge Development	1	0	0		0
OR 3.2	Infill	2	0	0		2
AND/OR 3.3	Previously Developed	1	0	0		1
4. Infrastructu	re					
4	Existing Infrastructure	1	0	0		1
5. Community	Resources / Transit					
5.1	Basic Community Resources / Transit (meet one of the following)	1	1	0		0
	a) Within 1/4 mile of 4 basic community resources	c) Within 1/2	mile of tra	ansit services pro	oviding 30 rides per weekday	
	■ b) Within 1/2 mile of 7 basic community resources					
OR 5.2	Extensive Community Resources / Transit (meet one of the following)	2	2	0	Metro Transit Route 6 - 102 rides/day	2
	a) Within 1/4 mile of 7 basic community resources	c) Within 1/2	mile of tra	ansit services pro	oviding 60 rides per weekday	
	b) Within 1/2 mile of 11 basic community resources					
OR 5.3	Outstanding Community Resources / Transit (meet one of the following)	3	0	0		0
	a) Within 1/4 mile of 11 basic community resources	c) Within 1/2	mile of tra	ansit services pro	oviding 125 rides per weekday	
	b) Within 1/2 mile of 14 basic community resources					
6. Access to 0	Open Space					
	Access to Open Space	1	1	0	0.4 mi to Arden Park	1

Sustain	able Site	es (SS) (Minimum 5 SS Points Required)	Max: 22	Y:7	M:1	Notes	Final: 13.5
1. Site St	ewardshi	0					
	1.1 Er	osion Controls During Construction (meet all of the following)	Prereq.				Y
	<i>r</i>	a) Stockpile and protect disturbed topsoil from erosion.	d) Provide sv	vales to dive	rt surface water from hillsides		
	r	b) Control the path and velocity of runoff with silt fencing or equivalent.	e) Use tiers,	erosion blan	kets, compost blankets, etc. on sloped are	as.	
	r	c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.					
.	1.2 Mi	nimize Disturbed Area of Site (meet the appropriate requirements)	1	0	0 N 0.12 acre lot		1
		nere the site is not previously developed, meet all the following:					
		a) Develop tree / plant preservation plan with "no-disturbance" zones					
		b) Leave 40% of buildable lot area, not including area under roof, undisturbed					
	OR W	nere the site is previously developed, meet all the following:					
		Rehabilitate lot; undo soil compaction and remove invasive plants AND					
		Meet the requirements of SS 2.2					
	OR 🔼	d) Build on a lot of 1/7 acre or less, or 7 units per acre.					
2. Lands							
	2.1 🗷	No Invasive Plants	Prereq.				Y
	2.2 🗷	Basic Landscaping Design (meet all of the following)	2	0	0		2
	r	a) Any turf must be drought-tolerant.	d) Add mulch	n or soil ame	endments as appropriate.		
	_	b) Do not use turf in densely shaded areas.	e) All compa	cted soil mu	st be tilled to at least 6 inches.		
	r	c) Do not use turf in areas with slope of 25%					
AND/OR	2.3 🗷	Limit Conventional Turf	3	0	0		2
	3	Percentage of designed landscape softscape area that is turf					
AND/OR	2.4 🗷	Drought-Tolerant Plants	2	0	0		1
	8	Percentage of installed plants that are drought-tolerant					
OR	2.5 🗷	Reduce Overall Irrigation Demand by at Least 20%	6	0	0		0
		Percentage reduction in estimated irrigation water demand	(calculate)				
3. Reduce	e Local He	eat Island Effects					
3. Reduc		Reduce Local Heat Island Effects (meet one of the following)	1	0	0		0

4. Surface Wa	ater Management					
4.1	∠ Permeable Lot	4	3	0		3
	vegetative landscape					
	3% permeable paving					
	impermeable surfaces directed to infiltration features					
	8% other impermeable surfaces (areas not counted towards credit)					
4.2	Permanent Erosion Controls (meet one of the following)	1	1	1		0
	a) For portions of lot on steep slope, use terracing and retaining walls	☐ b) Plant tree	s, shrubs, o	r groundcover		
4.3	Management of Runoff from Roof (meet any, see Rating System for pts)	2	0	0	Vegetated swales + 158 sq. ft. rain garden	1
	a) Install permanent stormwater controls to manage runoff from the home	□ c) Install veg	etated roof	to cover 100%	of roof area	
	■ b) Install vegetated roof to cover 50% of roof area	d) Have lot of	lesigned by	professional to	manage runoff from home on-site	
5. Nontoxic P	Pest Control					
5	Pest Control Alternatives (meet any of the following, 1/2 pt each)	2	1	0	* * * *	1.5
	a) Keep all exterior wood at least 12" above soil				mite risk areas: e product to 3' above foundation	
	b) Seal external cracks, joints, etc. with caulking and install pest-proof screens			aceous earth b		
	c) Include no wood-to-concrete connections, or separate connections with dividers	= '		rrier termite cor		
	d) Install landscaping so mature plants are 24" from home	= '		nite bait system		
		v) Use nonce				
		vi) Use solid	concrete fo	undation walls	or pest-proof masonry wall design	
6. Compact D	Development					
6.1	Moderate Density	2	2	0		2
	# of total units on the lot 0.1 lot size (acres)	8.0	density ((units/acre)		
OR 6.2	P. High Density	3	0	0		0
OR 6.3	8 Very High Density	4	0	0		0
Water Effic	iency (WE) (Minimum 3 WE Points Required)	Max: 15	Y:3	M:0	Notes	Final: 3
1. Water Reus	se					
1.1	Rainwater Harvesting System	4	0	0	N	0
	Percentage of roof area used for harvesting					
	Application					
AND/OR 1.2	P. Graywater Reuse System	1	0	0	N	0
OR 1.3	Use of Municipal Recycled Water System	3	0	0	N	0

2. Irrigation Sy	ystem					
2.1		3	0	0 N		0
	a) Irrigation system designed by EPA Water Sense certified professional	g) Install tir	mer or control	ller for each watering zone		
	b) Irrigation system with head-to-head coverage	■ h) Install pr	essure-regula	ting devices		
	c) Install central shut-off valve	i) High-effic	iency nozzles	with distribution uniformity of at le	ast 0.70.	
	d) Install submeter for the irrigation system	= **	eck valves in l			
	e) Use drip irrigation for 50% of planting beds	k) Install m	oisture senso	r or rain delay controller		
	f) Create separate zones for each type of bedding					
AND/OR 2.2	Third-party Inspection	1	0	0		0
OR 2.3		4	0	0		0
	Percentage reduction in estimated irrigation water demand	(calculate)				
3. Indoor Wate	er Use					
3.1	High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)	3	3	0		3
	a) Average flow rate of lavatory faucets is ≤ 2.00 gpm	c) Average	flow rate for a	all toilets is ≤ 1.30 gpf; OR		
	b) Average flow rate for all showers is ≤ 2.00 gpm per stall	r Toilets a	are dual-flush;	OR		
	_	☐ Toilets r	meet the EPA	Water Sense specification		
3.2	Very High-Efficiency Fixtures and Fittings (meet any, 2 pts each)	6	0	0		0
	a) Average flow rate of lavatory faucets is ≤ 1.50 gpm; OR	b) Average	flow rate for a	all showers ≤ 1.75 gpm per stall		
	Lavatory faucets meet the EPA Water Sense specification	=				
	Lavatory faucets meet the EPA Water Sense specification	=		all toilets is ≤ 1.10 gpf		
Energy & At	Lavatory faucets meet the EPA Water Sense specification tmosphere (EA) (Minimum 0 EA Points Required)	=	flow rate for a	all toilets is ≤ 1.10 gpf	Notes	Final: 24.5
Energy & At	tmosphere (EA) (Minimum 0 EA Points Required)	C) Average (flow rate for a	all toilets is ≤ 1.10 gpf M:0		Final: 24.5
	tmosphere (EA) (Minimum 0 EA Points Required) Important note: projects registered after October 1st, 2014 that uses	C) Average (flow rate for a	all toilets is ≤ 1.10 gpf M:0		Final: 24.5
1. Optimize En	tmosphere (EA) (Minimum 0 EA Points Required) Important note: projects registered after October 1st, 2014 that usergy Performance	C) Average (flow rate for a	all toilets is ≤ 1.10 gpf M:0		Final: 24.5
1. Optimize En	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes	Max: 38 use the performa	Y:25.5 ance path	nall toilets is ≤ 1.10 gpf M:0 n must achieve a HERS		Y
1. Optimize En	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance	Max: 38	flow rate for a	all toilets is ≤ 1.10 gpf M:0		
1. Optimize En	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes	Max: 38 use the performa	Y:25.5 ance path	nall toilets is ≤ 1.10 gpf M:0 n must achieve a HERS		Y
1. Optimize En	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index	Max: 38 use the performa	Y:25.5 ance path	nall toilets is ≤ 1.10 gpf M:0 n must achieve a HERS		Y
1. Optimize En 1.1 1.2 7. Water Heati	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index	Max: 38 use the performa	Y:25.5 ance path	nall toilets is ≤ 1.10 gpf M:0 n must achieve a HERS		Y
1. Optimize En 1.1 1.2 7. Water Heati	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index	Max: 38 use the performa Prereq. 34	Y:25.5 ance path 22.5	M:0 n must achieve a HERS 0		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index mg Efficient Hot Water Distribution System (meet one of the following)	Max: 38 use the performa Prereq. 34	Y:25.5 ance path 22.5	mill toilets is ≤ 1.10 gpf M:0 n must achieve a HERS 0		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index mg Efficient Hot Water Distribution System (meet one of the following) a) Structured plumbing system	Max: 38 use the performa Prereq. 34	Y:25.5 ance path 22.5	M:0 n must achieve a HERS 0		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati 7.1	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index Index Index Index IECC climate zone IECC climate zone	Max: 38 Use the performa Prereq. 34	Y:25.5 ance path 22.5 design of cor	M:0 n must achieve a HERS 0 oventional system		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heatin 7.1 7.2 11. Residentia	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index ng Efficient Hot Water Distribution System (meet one of the following) a) Structured plumbing system b) Central manifold distribution system	Max: 38 Use the performa Prereq. 34	Y:25.5 ance path 22.5 design of cor	M:0 n must achieve a HERS 0 oventional system		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati 7.1 7.2 11. Residentia	Important note: projects registered after October 1st, 2014 that usergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index Ing Efficient Hot Water Distribution System (meet one of the following) a) Structured plumbing system b) Central manifold distribution system Pipe Insulation I Refrigerant Management Refrigerant Charge Test	Max: 38 Use the perform: Prereq. 34 2 C) Compact	Y:25.5 ance path 22.5 design of cor	M:0 n must achieve a HERS 0 oventional system		Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati 7.1 7.2 11. Residentia	Important note: projects registered after October 1st, 2014 that unergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index Ing Efficient Hot Water Distribution System (meet one of the following) a) Structured plumbing system b) Central manifold distribution system Pipe Insulation Refrigerant Management Refrigerant Charge Test Appropriate HVAC Refrigerants (meet one of the following)	Max: 38 Use the performation of the performat	Y:25.5 ance path 22.5 design of cor	M:0 h must achieve a HERS 0 overtional system 0	Index of 70 or lower.	Y 22.5
1. Optimize En 1.1 1.2 7. Water Heati 7.1 7.2 11. Residentia	Important note: projects registered after October 1st, 2014 that usergy Performance Performance of ENERGY STAR for Homes Exceptional Energy Performance 6 IECC climate zone 44 HERS Index Ing Efficient Hot Water Distribution System (meet one of the following) a) Structured plumbing system b) Central manifold distribution system Pipe Insulation I Refrigerant Management Refrigerant Charge Test	Max: 38 Use the performation of the performat	Y:25.5 ance path 22.5 design of cor	M:0 h must achieve a HERS 0 onventional system	Index of 70 or lower.	Y 22.5

Materials &	Resources (MR) (Minimum 2 MR	Points Required)	Max: 16	Y:6	M:0	Notes	Final: 5
1. Material-Eff	icient Framing						
1.1	Framing Order Waste Factor		Prereq.				Y
1.2	Detailed Framing Documents		1	1	0		0
AND/OR 1.3	Detailed Cut List and Lumber Order		1	0	0 N		0
	Requirements of MR 1.2 have been met		Detailed cut	list and lum	ber order corresponding to framin	ng plans or scopes	
AND/OR 1.4	Framing Efficiencies (meet any of the	following, see Rating System for pts)	3	3	0		3
	■ Precut framing packages		Stud spacing	greater tha	n 16" on center		
	Open-web floor trusses		Ceiling joist s	pacing grea	ter than 16" on center		
	■ Structural insulated panel walls		Floor joist sp	acing greate	er than 16" on center		
	■ Structural insulated panel roof		Roof rafter s	pacing great	ter than 16" on center		
	■ Structural insulated panel floors		Two of the fe	ollowing: Siz	e headers for loads; ladder block	ing; drywall clips; 2-stud corners	
OR 1.5	Off-site Fabrication (meet one of the fo	ollowing)	4	0	0		0
	a) Panelized construction		■ b) Modular, p	orefabricated	d construction		
2. Environme	ntally Preferable Products						
2.1		all of the following)	Prereq.				Y
	a) Provide suppliers with a notice of preferen	nce for FSC products; AND	b) No tropica	l wood insta	alled (exceptions for FSC-certifie	d or reclaimed wood)	
	Request country of manufacture for each	wood product					
2.2		s (meet any, 1/2 pt each)	8	2	0		2
	Assembly : component	(a) EPP		(b) Low emission	(c) Local production	
	Exterior wall: framing	type:					
	Exterior wall: siding or masonry Floor: flooring				90% hard flooring	□ □ (45%)	B B1
	Floor: flooring	(45%) type:	<u></u>		SCS FloorScore	(90%)	(8)
	Floor: flooring				Green Label Plus		Ħ
	Floor: framing	type:					:
	Foundation: aggregate Foundation: cement	type:					#
	Interior wall: framing	type:					i
	Interior wall, ceiling: gypsum board	type:				: + c + c + c + c + c + c + c + c + c +	E1
	Interior wall, ceiling, millwork; paint Landscape: decking and patio	type: type:			type: Zero VC		48
	Other: cabinet	type:					
	Other: counter	type:					181
	Other: door Other: interior trim	type:					äl.
	Other: adhesive, sealant				type:		
	Other: window frame	type:					541
	Roof: framing	type: type: type: type: 28% Recycle type:	ad Ctaal			<u> </u>	ill.
	Roof: roofing Roof, floor, wall: cavity insulation	type: 28% Recycle type:	<u>ed Ste</u> el		type		
	Roof, floor, wall (2 of 3): sheathing	type: type: type: PEX					101
	Other: water supply piping						i
	Other: driveway	type:					

3. Waste Mana	gement						
3.1	Construction Waste Management Plann	ing (meet both of the following)	Prereq.				Y
	a) Investigate local options for waste diversion	1	b) Document	diversion r	rate for construction was	ste	
3.2	Construction Waste Reduction (use one	of the following methods)	3	0	0		0
	6.5 a) pounds waste / square foot						
	cubic yards waste / 1,000 s	quare feet					
	b) percentage of waste diverte	ed					
Indoor Envir	ronmental Quality (EQ) (Minimur	n 6 EQ Points Required)	Max: 21	Y:8	M:0	Notes	Final: 13
1. ENERGY ST	AR with Indoor Air Package						
1	ENERGY STAR with Indoor Air Package	e	13	0	0		0
2. Combustion	Venting						
2.1	Basic Combustion Venting Measures (m	neet all of the following)	Prereq.				Y
	a) no unvented combustion appliances		r d) space, water	er heating	equipment designed wi	th closed combustion; OR	
	b) carbon monoxide monitors on each floor (o	f each unit, if applicable)	space and	water hea	ting equipment has pow	ver-vented exhaust; OR	
	c) no fireplace installed, OR					in detached or open-air facility; OR	
	all fireplaces and woodstoves have doors		no space-	or water-h	neating equipment with	combustion	
2.2	Enhanced Combustion Venting Measure	es (meet one of the following)	2	1	0		2
	Type of Fireplace or stove	Better practice (1 pt)			Best practice ((must also meet	• /	
	None Masonry wood-burning fireplace Factory-built wood-burning fireplace Woodstove and fireplace insert Natural gas, propane, or alcohol stove Pellet stove	■ masonry heater ■ listed by testing lab and meel ■ listed by testing lab and meel ② listed, power- or direct-venter ■ EPA certified or meets safety	s EPA standards d, fixed doors		□ back-dra □ back-dra □ back-dra □ back-dra ☑ electroni	automatically ft potential test ft potential test ft potential test c pilot r direct-venting	
3. Moisture Co	ntrol						
3	Moisture Load Control (meet one of the	following)	1	0	0		0
	a) Additional dehumidification system		■ b) Central HV	AC system	equipped with additiona	al dehumidification mode	
4. Outdoor Air	Ventilation						
4.1	Basic Outdoor Air Ventilation (mee	•	Prereq.				Y
	a) Qualifies under ASHRAE Std. 62.2-2007 clir	nate exemption.	c) Intermitten		on		
	b) Continuous ventilation		d) Passive ver				
4.2	Enhanced Outdoor Air Ventilation	,	2	2	0		2
	a) Meets EQ 4.1 part (a), active ventilation sys	stem installed	b) Install heat		·		
4.3	Third-Party Performance Testing		1	0	0		1

5. Local	Exhau	ıst					
	5.1		Prereq.				Υ
		a) Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow requirement	c) Air exhaust	ed to outdo	oors		
		b) Fans and ducts designed and installed to ASHRAE Std. 62.2	d) ENERGY ST	TAR labeled	bathroom exh	aust fans	
	5.2	Enhanced Local Exhaust (meet one of the following)	1	0	0		1
		a) Occupancy sensor	c) Automatic t	imer tied t	o switch to ope	rate fan for 20+ minutes post-occupancy	
		b) Automatic humidistat controller	d) Continuous	ly operatin	g exhaust fan		
	5.3	Third-Party Performance Testing	1	0	0		1
6. Distrib	bution	of Space Heating and Cooling					
	6.1		Prereq.				Y
	6.2	Return Air Flow / Room-by-Room Controls (meet one of the following)	1	0	0		1
		A. Forced-Air Systems	B. Nonducted	HVAC S	ystems		
		a) Return air opening of 1 sq. inch per cfm of supply	■ Flow control v	alves on ev	very radiator; C	DR .	
		b) Limited pressure differential between closed room and adjacent spaces	■ Radiant floor	system wit	h thermostatic	controls in every room	
	6.3		2	0	0	3 zones, infloor heat in basement	0
		A. Forced-Air Systems	B. Nonducted		-		
		■ Have supply air flow rates in each room tested and confirmed	■ Install at least	two distin	ct zones with i	ndependent thermostat control	
7. Air Filt	Itering						
	7.1	Good Filters	Prereq.			MERV 8	Y
	7.2	Better Filters	1	0	0		0
OR	7.3	Best Filters	2	0	0		0
8. Contai	minan	t Control					
	8.1		1	0	0		1
	8.2	Indoor Contaminant Control (meet any of the following, 1 pt each)	2	1	0		1
		a) Design and install permanent walk-off mats at each entry	c) Install cent	ral vacuum	system with e	xhaust to outdoors	
		b) Design shoe removal and storage space near primary entryway					
	8.3		1	0	0		0
9. Radon		b) Design shoe removal and storage space near primary entryway Preoccupancy Flush	1	0	0		0
9. Radon		b) Design shoe removal and storage space near primary entryway Preoccupancy Flush	1 Prereq.	0	0		0 Y
9. Radon	n Prote	b) Design shoe removal and storage space near primary entryway Preoccupancy Flush		0	0		0 Y

10. Garage Po	ollutant Protection		
10.1	No HVAC in Garage	Prereq.	Υ
10.2	Minimize Pollutants from Garage (meet all of the following)	2 0 0	0
	a) In conditioned spaces above garage:	b) In conditioned spaces next to garage	
	■ Seal all penetrations and connecting floor and ceiling joist bays	Weather-strip all doors	
		Carbon monoxide detectors in rooms that share a door with garage	
		■ Seal all penetrations and cracks at the base of walls	
AND/OR 10.3	B Exhaust Fan in Garage (meet one of the following)	1 0 0	0
	a) Fan runs continuously	■ b) Fan designed with automatic timer control	
OR 10.4	Detached Garage or No Garage	3 3 0	3
	& Education (AE) (Minimum 0 AE Points Required) of the Homeowner or Tenant	Max: 3 Y:1 M:0 Notes	Final: 1
1.1		Prereq.	Υ
	r a) Operations and training manual	b) One-hour walkthrough with occupant(s)	
1.2		1 1 0	1
4.2		1 0 0	
1.3	Public Awareness (meet three of the following)	1 0 0	0
1.3	Public Awareness (meet three of the following) a) Open house on at least four weekends	c) Newspaper article on the project	0
_ 1.3			0
	a) Open house on at least four weekends	c) Newspaper article on the project	0
	a) Open house on at least four weekendsb) Website about features and benefits of LEED homes	c) Newspaper article on the project	0

USGBC makes no warranty with respect to any LEED certified project, including any warranty of habitability, merchantability, or fitness for a particular purpose. There are no warranties, express or implied, written or oral, statutory or otherwise, with respect to the certifications provided by USGBC. By way of example only, and without limiting the broad scope of the foregoing, it is understood that LEED certification, whether at the Certified level or any other level, does not mean that the project is structurally sound or safe, constructed in accordance with applicable laws, regulations or codes, free of mold or mildew, free of volatile organic compounds or allegens, or free of soil gases including radon. SIGNATURES BY RESPONSIBLE PARTIES By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been met for the indicated credits and will, if audited, provide the necessary supporting documents. Project Team Leader Sean Morrissey Company Morrissey Builders

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed. I have evaluated this project's documentation package and conducted the necessary QA/QC procedures with the Green Rater, and I hereby declare and affirm to USGBC that the homes included in this submittal are ready to earn LEED for Homes certification, as per the attached checklist.

Provider QAD	Michael Holcomb	Company	Green Homes Institute
Signature		Date	

Date

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed.

I also hereby confirm that all verification services were performed in accordance with the LEED for Homes Verification & Submittal Guidelines and Addendum.

Signature

Green Rater	Pat O'Malley	Company	Building Knowledge
Signature		Date	

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed.

I also hereby confirm that all verification services were performed in accordance with the LEED for Homes Verification & Submittal Guidelines and Addendum.

Green Rater	Company	
Signature	Date	

LEED for Homes Project Checklist

Addendum: Prescriptive Approach for Energy and Atmosphere (EA) Credits

Points cannot be earned in both the Prescriptive (below) and the Performance	Max Pts. Preliminary Rating	Project					
paths of the EA section.	Available Y/Pts Maybe No Note	es Points					
Energy & Atmosphere (EA) (Must earn points equal to HERS 70)	Max: 38 Y:25.5 M:0 Note	es Final: 24.5					
Important note: projects registered after October 1st, 2014	hat use the prescriptive path must achieve at least the follow	ving:					
13 points (projects in climate zone 1-5	, or 9.5 points (projects in climate zone 6-8)						
2. Insulation	-						
2.1 Basic Insulation (meet both of the following)	Prereq.						
a) Insulation meets R-value requirements of IECC	b) Insulation meets HERS Grade II specifications for installation						
2.2 Enhanced Insulation (meet both of the following)	2 0 0	0					
a) Insulation exceeds R-value requirements of IECC by 5%	b) Insulation meets HERS Grade I specifications for installation						
3. Air Infiltration							
3.1 Reduced Envelope Leakage	Prereq.						
Air leakage rate in ACH50							
3.2 Greatly Reduced Envelope Leakage	2 0 0	0					
OR 3.3 Minimal Envelope Leakage	3 0 0	0					
4. Windows							
4.1 Good Windows (meet all of the following)	Prereq.						
a) Windows and glass doors meet ENERGY STAR BOP window specifications	b) Skylight glazing area is ≤ 3% of floor area AND						
	Skylights meet ENERGY STAR requirements for skylights						
4.2 Enhanced Windows	2 0 0	0					
OR 4.3 Exceptional Windows	3 0 0	0					
5. Heating and Cooling Distribution System							
5.1 Reduced Distribution Losses (meet all of the following, as appropriate)	Prereq.						
A. Forced-Air Systems	B. Nonducted HVAC Systems						
a) Duct leakage of ≤ 4.0 CFM at 25 Pascals per 100 sq.ft.							
b) No ducts in exterior walls unless extra insulation is added							
c) At least R-6 insulation around ducts in unconditioned spaces							
5.2 Greatly Reduced Distribution Losses (meet the following, as appropriate)	2 0 0 P. Nandustad HVAC Systems	0					
A. Forced-Air Systems ■ Duct leakage of ≤ 3.0 CFM at 25 Pascals per 100 sq.ft.	B. Nonducted HVAC Systems Keep the boiler and pipes entirely within conditioned envelope						
OR 5.3 Minimal Distribution Losses (meet one of the following, as appropriate) A. Forced-Air Systems	3 0 0 B. Nonducted HVAC Systems	0					
a) Duct leakage of ≤ 1.0 CFM at 25 Pascals per 100 sq.ft.	Outdoor reset control to set distribution temp. based on outdoor temp.						
b) Air-handler and all ductwork is within conditioned envelope and EA 3.3 is met							
c) Air-handler and all ductwork visibly within conditioned spaces (not in walls, etc.)							

6. Space Heating and Cooling Equipment								
	6.1	∠ Good HVAC Design and Installation (meet all of the following)	Prereq.					
		a) Design and size HVAC equipment using ACCA Manual J or equivalent		c) Install ENERGY STAR programmable thermostat OR				
		■ b) Install efficient heating AND cooling equipment (see Table)		Heat pump or hydronic installed and exempted from part (c)				
		Type of cooling system				Type of heating system		
		Cooling efficiency (SEER / EER)				Heating Efficiency (AFUE / HSPF / COP)		
	6.2	High-Efficiency HVAC	2	0	0		0	
OR	6.3	Very High Efficiency HVAC	4	0	0		0	
7. Water	Heatin	g						
	7.1		2	0	0		0	
			c) Compact design of conventional system					
	7.0	b) Central manifold distribution system			2		•	
		Pipe Insulation	1	0	0		0	
	7.3	Efficient Domestic Hot Water Equipment	3	0	0		0	
		Type of DHW system						
		Efficiency Solar: Percentage of annual DHW load						
8. Lighting								
	8.1	ENERGY STAR Lights	Prereq.					
	8.2	Improved Lighting (meet one of the following, see Rating System for pts)	1.5	0	0		0	
		a) Indoor lighting - 3 additional ENERGY STAR lights in high-use rooms	b) Exterior	lighting - motio	on sensor controls or	integrated PV		
OR	8.3	Advanced Lighting Package (meet one of the following)	3	0	0		0	
		■ a) 60% of fixtures are ENERGY STAR fixtures	□ b) 80% of I	amps are ENER	RGY STAR CFLs			
9. Applia	nces							
	9.1	High-Efficiency Appliances (meet any, see Rating System for pts)	2	0	0		0	
		a) ENERGY STAR labeled refrigerator	c) ENERGY	STAR labeled of	dishwasher using 6.0	gallons per cycle or less		
		■ b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms	d) ENERGY	STAR clothes v	washer			
	9.2	Water-Efficiency Clothes Washer	1	0	0		0	
10. Rene	wable	Energy						
	10	∠ Renewable Energy System	10	0	0		0.0	
		Reference electric load, kWh/yr (based on HERS model)			Electrici	ty supplied by renewable system, kWh/yr		
		0.0% Percentage of annual reference electric load met by renewable system						
11. Residential Refrigerant Management								
		Refrigerant Charge Test	Prereq.					
i	11.2	Appropriate HVAC Refrigerants (meet one of the following)	1	0	0		0	
'			c) Use refri	gerants that co		arming potential equation		
		b) Use non-HCFC refrigerants	_					