

## NAHB Model Green Home Building Guidelines Calculator

Project: Bryant Residence  
 Plan: 5039 Duchy Drive, Mebane, NC  
 Builder: Chandler Design-Build Inc  
 Date: 10/30/09



### PROJECT SUMMARY

SECTION DESCRIPTION	REQUIRED SCORE			PROJECT SCORE	LEVEL ACHIEVED
	BRONZE	SILVER	GOLD		
1 Lot Design, Preparation and Development	8	10	12	<b>66</b>	<b>GOLD</b>
2 Resource Efficiency	44	60	77	<b>122</b>	<b>GOLD</b>
3 Energy Efficiency	37	62	100	<b>168</b>	<b>GOLD</b>
4 Water Efficiency	6	13	19	<b>44</b>	<b>GOLD</b>
5 Indoor Environmental Quality	32	54	72	<b>86</b>	<b>GOLD</b>
6 Operation, Maintenance and Homeowner Education	7	7	9	<b>19</b>	<b>GOLD</b>
7 Global Impact	3	5	6	<b>11</b>	<b>GOLD</b>
8 Additional Points from Sections of your Choice	100	100	100	<b>221</b>	<b>GOLD</b>
<b>TOTAL PROJECT LEVEL ACHIEVED</b>					<b>GOLD</b>

NOTES: [\[enter comments here\]](#)

**NOTE:** This sheet shows the NAHB calculation using their original point system. It does not reflect the HBA-DOC's modified point system. The only modification is the addition of point-splitting. This was necessary to make the calculation more quantitative versus qualitative.

# Green Home Builders of the Triangle Certified Home



**Level Achieved:** GOLD

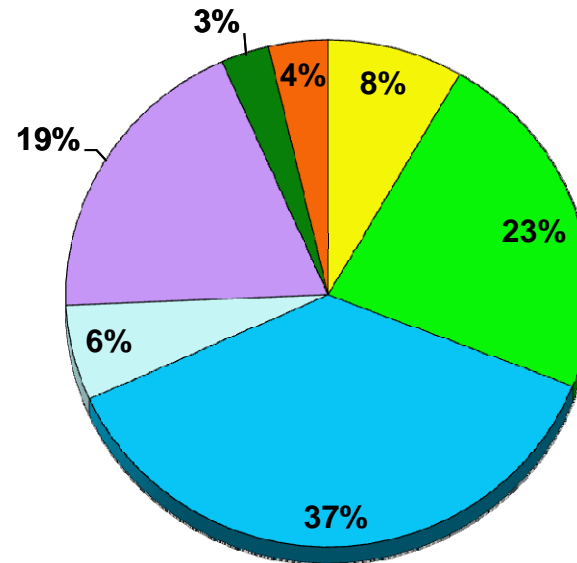
**Project:** Bryant Residence  
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***A Third Party Verified  
Green Building Program***

Green Building entails striking a careful balance between not only energy efficiency, but also taking into account water and material efficiency, impact to the land, community, indoor air quality and homeowner education. Every home in the Green Home Builders of the Triangle Program strikes their own green balance by meeting a minimum number of points in each of the categories below. Documentation for each green strategy implemented is independently reviewed before a certificate is issued for the home.

## Green Balance

- Lot Design, Preparation and Development
- Resource Efficiency
- Energy Efficiency
- Water Efficiency & Quality
- Indoor Environmental Quality
- Operation, Maintenance and Homeowner Education
- Global Impact



**GOLD**

## Section 1 Lot Design, Preparation and Development



SECTION	DESCRIPTION	NAHB POINTS	GHB POINTS	COMPLY	NAHB SCORE	GHB SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	pass/no pass	SIGNATURE / COMMENTS	
1.2.1	Establish a knowledgeable team	6	6	y	6	6						W	E		Michael Chandler - builder, Beth Williams - designer, Bruce Paden - arborist	
1.3.1.A	Complete a natural resources inventory used to drive/create the site plan.	6	1.5	y	6	1.5						W	E		<a href="#">Called in Bruce Paden tree service to assess standing trees and devise preservation plan</a>	
1.3.1.B	Create a protection and maintenance plan for priority natural resources/areas during construction. See Section 1.4 for guidance in forming the plan.	6	1.5	y		1.5			B			W	E	pass	<a href="#">terraced site and developed a storm water retention, levelspreader strategy</a>	
1.3.1.D	Provide basic training in tree and other natural resource protection to onsite supervisor.	6	1.5	y		1.5			B			W	E	pass	M. Chandler has ten years training w/ Haw River Assembly and also plant taxonomy training from UNC	
1.3.2	Site the home and other built features to optimize solar resource by placing long side of home within 30 degrees of South (No pts if points received in 3.4.1.A or 3.4.1.B)	6	6	y	6	6	3						E	pass	<a href="#">Three panels on roof, extensive shading structures on un-shaded south and west windows, 37" roof overhangs.</a>	
1.3.3.A	Limit development footprint on steep slopes (slopes greater than or equal to 25%).	5	1.25				3					I	E	n/a	<a href="#">terraced site w/ retaining walls and rain gardens</a>	
1.3.3.C	Align road or extended driveway with natural topography to minimize its grade and reduce cut and fill.	5	1.25	y	5	1.25	3					I	E	pass	<a href="#">Site plan uses topography to manage storm drainage</a>	
1.3.3.D	Reduce long-term erosion effects through the design and implementation of terracing, retaining walls, landscaping, and restabilization techniques.	5	1.25	y		1.25	3					I	E	pass	<a href="#">terraced site w/ retaining walls and rain gardens</a>	
1.3.4.C	Demarcate limits of clearing and grading.	6	2	y	6	2	3			P		W	E	pass	<a href="#">established and protected trees per tree service recommendation.</a>	
1.3.5.B	Develop and implement storm water management plans that minimize concentrated flows and seek to mimic natural hydrology.	8	2	y	8	2	3					I	W	E	pass	<a href="#">terraced site w/ retaining walls and rain gardens</a>
1.3.5.C	Minimize impervious surfaces and use permeable materials for driveways, parking areas, walkways, and patios (percentage implementation)	8	4	y		4	3					I	W	E	pass	<a href="#">Site plan uses topography to manage storm drainage</a>
1.3.6.C	Limit turf areas of landscaped area, selecting native and regionally appropriate trees and vegetation in a way that complements the natural setting.	8	1	y	8	1	3					I	W	E	pass	<a href="#">restored meadow and tree copse</a>
1.3.7	Maintain wildlife habitat	5	5	y	5	5	3		B			I	W	E	pass	<a href="#">site plan keeps development out of ravine and preserves tree copse</a>
1.4.1	Provide onsite supervision and coordination during clearing, grading, trenching, paving, and installation of utilities	5	5	y	5	5			B			W	E	pass	M. Chandler has ten years training w/ Haw River Assembly and also plant taxonomy training from UNC	
1.4.2	Conserve existing onsite vegetation	5	5	y	5	5	3			P	I		E	pass	<a href="#">site plan keeps development out of ravine and preserves tree copse</a>	
1.4.3.A	Demarcate limits of clearing and grading.	6	1	y	6	1	3			P			E	pass	<a href="#">established and protected trees per tree service recommendation.</a>	
1.4.3.C	Install and maintain sediment and erosion controls.	6	1	y		1	3			P			E	pass	<a href="#">terraced site w/ retaining walls and rain gardens</a>	



SECTION	DESCRIPTION	NAHB POINTS	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	pass/no pass	SIGNATURE / COMMENTS
1.5.4	Encourage naturalization of final landscaping through mulching	0	1	y	0	1				P	I		E	pass	<a href="#">construction photos</a>
1.5.5	Grind stumps and limbs for mulch	0	2	y	0	2	S			P	I		E	pass	All brush and slash hauled to Carolina Resource Recovery for grinding into mulch.

**TOTAL SCORE FOR SECTION 1:**

- **66** **48**  
 - NAHB GHBT

Minimum Required Points for Bronze Level:

- 8 12

Minimum Required Points for Silver Level:

- 10 14

Minimum Required Points for Gold Level:

- 12 16

## Section 2 Resource Efficiency



SECTION	DESCRIPTION	NAHB POINTS	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	pass?	SIGNATURE / COMMENTS	
2.1.2.A	19.2-inch or 24-inch on-center framing, floor systems	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">Floor framing plan from Panelization company</a>	
2.1.2.B	19.2-inch or 24-inch on-center framing, bearing walls	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">wall panel plan</a>	
2.1.2.C	24-inch on-center framing, roof systems	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">roof framing plan</a>	
2.1.2.F	Right-sized headers or insulated (box) headers (where required)	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">construction photos</a>	
2.1.2.G	Eliminate headers in non-bearing walls	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">wall panel plan</a>	
2.1.2.I	Ladders blocking at interior-wall-to-exterior-wall intersections	0.8	0.8	y	0.8	0.8	3			P	I		E	pass		
2.1.2.J	Two-stud corner framing	0.8	0.8	y	0.8	0.8	3			P	I		E	pass	<a href="#">construction photos</a>	
2.1.5.A	Pigmented and stamped concrete-surfaced interior floors (of a slab-on grade foundation)	4	1	y	4	1		S	B	P		W	E	pass	<a href="#">construction photos</a>	
2.1.5.C	Windows with finished surfaces not requiring paint or stain	4	1	y		1		S	B	P		W	E	pass	<a href="#">window spec, clad low-E</a>	
2.1.5.D	Siding not requiring paint or stain	4	1	y		1		S	B	P		W	E	pass	<a href="#">Stucco siding on drain screen</a>	
2.1.6.A	Provide a pre-cut (joist) or pre-manufactured (truss) floor and roof framing package	3	3	2	6	6		S	B	P	I		E	pass	<a href="#">trussed floor and roof</a>	
2.1.6.B	Provide a panelized wall framing system	6	6	y	6	6		S	B	P	I		E	pass	<a href="#">wall panel plan</a>	
2.2.1	Provide a covered entry (1 pt per door, max 3)	2	1	2	4	2				B	P	I		E	pass	<a href="#">floor plan</a>
2.2.2	Use recommended-sized roof overhangs (Durham climate index is 60-70. Therefore, eave overhang should be ≥ 18 inches and rake overhang should be ≥ 12 inches)	7	9	y	7	9				B	P	I		E	pass	<a href="#">37" overhangs including gutters</a>
2.2.3	Install perimeter drain for all basement footings, crawl spaces & slabs..	7	7	y	7	7				B	P	I		E	pass	<a href="#">Chem weld rubber membrane w/ socked drain and 12" washed gravel</a>
2.2.4	Install drip edge at eave and gable roof edges	6	6	y	6	6				B	P	W		E	pass	<a href="#">construction photos</a>
2.2.5	Install gutter and downspout system...	6	6	y	6	6				B	P			E	pass	<a href="#">construction photos</a>
2.2.6	Divert surface water...	7	7	y	7	7				B	P	I	W	E	pass	<a href="#">construction photos</a>
2.2.7	Install continuous and physical foundation termite barrier...	7	7	y	7	7		S	B	P	I			E	pass	<a href="#">construction photos</a>
2.2.9	Provide a water-resistive barrier (WRB) or drainage plane system...	8	8	y	8	8				B	P	I		E	pass	<a href="#">construction photos</a>
2.2.11	Install enhanced foundation waterproofing	7	7	y	7	7		S	B	P	I			E	pass	<a href="#">Chem weld rubber membrane w/ socked drain and 12" washed gravel</a>
2.2.12	Employ and show on plans the following flashing details...	9	9	y	9	9				B	P	I		E	pass	<a href="#">Cut sheet stapled to specs</a>
2.4.1	Use Recycled content building materials, including finger-jointed wood studs (1 pt for each material, 6 points max)	1	1	2	3	2		S	B		I	W		E	pass	<a href="#">fiberglass insulation has recycled content; nichiha siding</a>
2.5.1	Develop and implement a construction and demolition waste management plan...	7	7	y	7	7				B		W		E	pass	<a href="#">Standard CDB practice</a>
2.5.3	Recycle construction waste offsite... (6 pts for 2 materials, 2 pts for each material thereafter)	12	12	2	6	6		S	B			W		E	pass	<a href="#">Brush, logs, cardboard, bottles.</a>
2.6.1	Use materials manufactured from renewable resources... (1 pt per material, 5 pts max)	1	1	1		1		S			I	W		E	pass	<a href="#">dimensional lumber;</a>
2.6.2	Use certified wood for wood and wood-based materials... (4 pts per material)	4	4	2	8	8		S						E	pass	<a href="#">Trim lumber and wood ceilings from Wrenn Wood siler city NC, FSC certified</a>
2.7.1	Use products that contain fewer resources...	3	3	y	3	3						W		E	pass	<a href="#">engineered lumber</a>
2.8.1	Use locally available, indigenous materials (Note 10% of each material must be extracted / processed / manufactured within 300 miles)	5	5	y	5	5						W		E	pass	<a href="#">Trim lumber and wood ceilings from Wrenn Wood siler city NC, FSC certified</a>



SECTION	DESCRIPTION	NAHB POINTS	GGBT POINTS	COMPLY	NAHB SCORE	GGBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	pass?	SIGNATURE / COMMENTS
2.8.3	Use siding treated with EPA approved borates, back-prime siding or use other composite material conducive to mixed humid climate	0	4	y	0	4	3			P	W	E	pass	Stucco on drain screen	
2.8.4	Exterior trim, railings & columns made of rot resistant materials such as but not limited to kiln-dried pressure treated wood, composite, vinyl, fiberglass, etc.	0	4	y	0	4	3			P	W	E	pass	Hardi Trim at windows and doors so they can be removed for repair w/o damaging stucco	

**TOTAL SCORE FOR SECTION 2:**

	-	<b>122</b>	<b>129</b>
	-	NAHB	GGBT
Minimum Required Points for Bronze Level:	-	44	44
Minimum Required Points for Silver Level:	-	60	60
Minimum Required Points for Gold Level:	-	77	77

## Section 3 Energy Efficiency



SECTION	DESCRIPTION	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	pass?	SIGNATURE / COMMENTS
3.1.1	Home is equivalent to the IECC 2003...	Required	y	Required	Required	3	S				W	pass	<a href="#">Energy Star report</a>
3.1.2	Size space heating and cooling equipment with Manual-J...	Required	y	Required	Required	3	S					pass	<a href="#">Submit summary sheet</a>
3.1.3	Conduct third party plan review to verify compliance with Energy Section	Required	y	Required	Required	3						pass	<a href="#">Energy Star report</a>
3.3.1.A.2	ICFS*, or	8	y	8	8	3	S	P	I			pass	<a href="#">ICF slab edge forms</a>
3.3.1.A.3	Advanced Framing...	6	y	6	6	3	S	P	I			pass	<a href="#">Wall panel plan</a>
3.3.1.B	Incorporate air sealing package to reduce infiltration. (Note: all measures that apply to home must be implemented to receive any points)	10	y	10	10	3		P				pass	<a href="#">Energy Star report</a>
3.3.1.C	Use ENERGY STAR® – rated windows appropriate for local climate (Note: for DOC region, U Factor: 0.40 or less; SHGC: 0.55 or less)	8	y	8	8	3	S	P					<a href="#">U 0.30 SHGC 0.30</a>
3.3.2.A	Size, design, and install duct system using ANSI/ACCA Manual D® or equivalent.	8	y	8	8	3	S					pass	<a href="#">Man D by SEM</a>
3.3.2.B	Design radiant or hydronic space heating systems using industry-approved guidelines	8	y	8	8	3	S					pass	<a href="#">Rad design by RoyceTech</a>
3.3.2.D	Verify performance of the heating/cooling system. HVAC contractor to perform the following:	8	y	8	8	3	S					pass	
3.3.2.E	Use HVAC installer and service technician certified by...	6	y	6	6	3	S					pass	<a href="#">Factory certified technicians</a>
3.3.2.G.3	SEER 15-18	6	y	6	6	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.H.3	9.0-10.5HSPF	9	y	9	9	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.K	Seal ducts, plenums, and equipment to reduce leakage. Use mastic. No panning joists.	6	y	6	6	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.L.1	No building cavities used as ductwork	2	y	0	2	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.L.2	Install all equipment in conditioned envelop	8	y	8	8	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.L.3	No ductwork in exterior walls	2	y	0	2	3	S					pass	<a href="#">Energy Star report</a>
3.3.2.P	Install ENERGY STAR labeled mechanical exhaust from every bathroom ducted to the outside.	8	y	8	8	3	S	P				pass	<a href="#">Energy Star report</a>
3.3.3.A	Water heater Energy Factor (EF) equal to or greater than those listed in the following table.	4	y	4	4	3	S	P	I			pass	<a href="#">Solar/ Quietside 95% eff combo</a>
3.3.3.B	Install whole house instantaneous (tankless) water heater...	4	y	4	4	3	S	P	I			pass	<a href="#">Solar/ Quietside 95% eff combo</a>
3.3.4.B	Install all recessed lighting fixtures within the conditioned envelope of the building (housing does not penetrate thermal envelope)	7	y	7	7	3	S			I		pass	<a href="#">Energy Star report</a>
3.3.4.E.1	Refrigerator	3	y	3	3	3	S	P	I			pass	<a href="#">Selections worksheet</a>
3.3.4.E.2	Dishwasher	3	y	3	3	3	S	P	I			pass	<a href="#">Selections worksheet</a>
3.3.4.E.3	Washing machine.	5	y	5	5	3	S	P	I			pass	<a href="#">Selections worksheet</a>
3.3.5.1.A	Use sun-tempered design: building orientation, sizing of glazing, design of overhangs...		y										



SECTION	DESCRIPTION	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	pass?	SIGNATURE / COMMENTS
3.3.5.1.A.1	Long side of the home faces within 15 degrees of south (note 15 degrees is NC Tax credit level) (NAHB is 30 degrees, and all must be met)	1.50	y	1.43	1.50	3	S			I		pass	<a href="#">site plan</a>
3.3.5.1.A.7	Overhangs designed to provide shading on south-facing glass (at a minimum), or adjustable canopies or awnings. (See Users Guide for charts that indicate length of overhang, amount and period of shading according to latitude.)	1.50	y	1.43	1.50	3	S			I		pass	<a href="#">shade trellises and 37" overhangs</a>
3.3.5.1.C.1	Exterior shading on east and west windows, e.g., shade trees, moveable awnings or louvers, covered porches	2	y	2	2	3	S			I		pass	<a href="#">shade trellises and 37" overhangs</a>
3.3.5.1.C.2	Overhangs designed to provide shading on south-facing glazing. (Use supplied charts that indicate length of overhang, amount and period of shading according to latitude.) (Not to be double-counted if credited in 3.3.5.1.A above.)	2	y	2	2	3	S			I		pass	<a href="#">shade trellises and 37" overhangs</a>
3.3.5.1.C.3	Windows located to facilitate cross ventilation.	2	y	2	2	3	S			I		pass	<a href="#">floor plan</a>
3.3.5.2.A.2	Domestic hot water and space heat	10	y	10	10	3	S			I		pass	<a href="#">Solar/ Quietside 95% eff combo</a>
3.3.6.1	Conduct onsite third party inspection to verify installation of energy related features such as:	8	y	8	8	3						pass	<a href="#">Energy Star report</a>
3.3.6.2.A	Building envelope leakage: blower door test results < 0.35 ACHnat	8	y	8	8	3						pass	<a href="#">Energy Star report</a>
	Leakage to unconditioned space < 5% of rated blower capacity.	4	y	4	4	3						pass	<a href="#">Energy Star report</a>
	Total leakage < 10% of rated blower capacity.	4	y	4	4	3						pass	<a href="#">Energy Star report</a>
3.3.7.F	Sealed Attic or other roof deck insulation system	8	y	0	8	3	S		P			pass	<a href="#">spray foam photos</a>
3.3.7.I	Use Sprayed Foam insulation to increase thermal envelope effectiveness	4	y	0	4	3	S		P	I		pass	<a href="#">spray foam photos</a>
3.3.7.M	Use 2x6 framing on walls where plumbing or electrical boxes exist in order to allow for proper insulation (2 pts per wall)	2	14	0	28	3	S		P	I		pass	<a href="#">12" R-46 all</a>
3.3.7.N	Insulate any slab that is within heated space	2	y	0	2	3	S		P	I		pass	<a href="#">ICF slan forms 2" xps under</a>

**Performance Path (Option 1)**

Base Level	-	0	0
Bonus Points from Prescriptive Path section	-	121	167
<b>Performance Path (Option 1) Score, including applicable bonus points from Prescriptive</b>	-	<b>131</b>	<b>177</b>

**Prescriptive Path (Option 2)**

Base Level	-	100	100
Bonus Points	-	68	114
<b>Prescriptive Path (Option 2) Score</b>	-	<b>168</b>	<b>214</b>

**TOTAL BEST SCORING OPTION**

Base Level	-	100	100
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SECTION DESCRIPTION	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	pass?	SIGNATURE / COMMENTS
Bonus Points		-	68	114								
<b>TOTAL SCORE FOR SECTION 3 (best between Options 1 and 2):</b>		-	<b>168</b>	<b>214</b>								
		-	NAHB	GHBT								
Minimum Required Points for Bronze Level:		-	37	37								
Minimum Required Points for Silver Level:		-	62	62								
Minimum Required Points for Gold Level:		-	100	100								

## Section 4 Water Efficiency & Quality



SECTION	DESCRIPTION	NAHB POINTS	GGBT POINTS	COMPLY	NAHB SCORE	GGBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	pass?	SIGNATURE / COMMENTS
4.1.2	Water heater located within 30 feet pipe run of all bathrooms and kitchen	9	9	y	9	9	3	S		P	I		E	pass	<a href="#">central tank heated by Quietside / Solar combo</a>
4.1.3	ENERGY STAR® water-conserving appliances (dishwasher , clothes washer) installed (3 pts per appliance)	7	3	2	14	6	3	S		P	I		E	pass	<a href="#">Selection worksheet</a>
4.1.4	Water efficient showerhead with flow rate < 2.5 GPM per valve (2 pts per head)	2	2	0			3	S		P	I		E	?	<a href="#">Selection worksheet</a>
4.1.5	Water-efficient sink faucets/aerators < 2.2 gallons/minute. (2 pts per faucet)	2	2	3	6	6	3	S		P	I		E	pass	<a href="#">Selection worksheet</a>
4.1.6.B	<1.4 GPF	6	6	y	6	6	3	S		P	I		E	pass	1.28 gpf
4.1.10	Collect and use rainwater as permitted by local code...	9	7	y	9	7	3	S		P	I		E	pass	
4.2.4	Install whole house water filter to improve water quality and safety	0	1	y	0	1		S		P		W	E	pass	<a href="#">WH filter at mech center</a>

**TOTAL SCORE FOR SECTION 4:**

- **44** **35**

- NAHB GGBT

Minimum Required Points for Bronze Level:

- 6 9

Minimum Required Points for Silver Level:

- 13 13

Minimum Required Points for Gold Level:

- 19 19

## Section 5 Indoor Environmental Quality



SECTION	DESCRIPTION	NAHB POINTS	GGBT POINTS	COMPLY	NAHB SCORE	GGBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	pass?	SIGNATURE / COMMENTS
5.1.1	For vented space heating and water heating equipment, builder must install direct vent equipment, OR install induced/mechanical draft combustion equipment.	8	8	y	8	8	3	S		P	I		pass	<a href="#">Rinnai in crawlspace, sealed combustion wood stove. (construction photos)</a>
5.1.2	Install space heating and water heating equipment in a sealed mechanical room or closet with an outdoor source of combustion and ventilation air.	6	6	y	6	6	3	S		P	I		pass	<a href="#">Rinnai in crawlspace, (construction photos)</a>
5.1.3	Install direct-vent, sealed-combustion gas fireplace, sealed wood fireplace, or sealed woodstove; OR No fireplace or woodstove installed.	6	6	y	6	6	3	S		P	I		pass	<a href="#">sealed combustion water heater</a>
5.1.7	Mask HVAC outlets during construction...	5	5	y	5	5				P				<a href="#">Construction photos</a>
5.2.1.A	Vent kitchen range exhaust to the outside.	7	7	y	7	7	3	S		P	I		pass	<a href="#">Construction photos</a>
5.2.2.B	Balanced exhaust and supply fans. Supply intakes must be properly located to not introduce polluted air back into the home.	9	9	y	9	9	3	S					pass	
5.2.3	Install MERV 9 filters on central air or ventilation systems.	3	3	y	3	3	3	S		P	I		pass	<a href="#">ext media filter in mech room</a>
5.2.5	Install sub-slab de-pressurization system or radon mitigation system...	6	6	y	6	6	3	S		P	I		pass	<a href="#">under slab ventilation system</a>
5.2.6	Verify all exhaust flows meet design specifications.	9	9	y	9	9	3	S					pass	<a href="#">flow hood test on bath fans</a>
5.3.1	Control bathroom exhaust fan with a timer or humidistat.	6	6	y	6	6	3	S		P	I		pass	<a href="#">E-star Bath fans on timed occupancy sensors</a>
5.3.2	Install moisture resistant backerboard...	6	6	y	6	6	3	S		P	I		pass	<a href="#">Construction photos</a>
5.3.3	Install vapor retarder directly under slab (6-mil)...	9	9	y	9	9	3	S		P	I		pass	<a href="#">6 mil and 2" xps</a>
5.3.4	Protect unused moisture-sensitive materials...	6	6	y	6	6				P	W		pass	<a href="#">Construction photos</a>
5.4.1	No garage or detached garage	0	9	y	0	9			B	P	I		pass	<a href="#">floor plan</a>
5.4.5	Sealed attic	0	5	y	0	5	3	S		P	I		pass	<a href="#">8" spray foam</a>
5.4.7	Home sited away from major power lines to minimize electromagnetic fields	0	2	y	0	2	3	S					pass	<a href="#">site plan</a>
5.4.19	Carbon monoxide detectors near all combustion appliances or areas	0	2	y	0	2	3	S					pass	<a href="#">installed for builder's challenge</a>
5.4.22	Formaldehyde free insulation	0	2	y	0	2	3	S					pass	<a href="#">spray foam and JM form free floor insulation.</a>
5.4.23	Add capillary break on footing to prevent moisture migration into foundation wall	0	3	y	0	3	3	S					pass	<a href="#">6 mil poly between top of ICF and Slab</a>

**TOTAL SCORE FOR SECTION 5:**

- **86**     **109**  
 - NAHB     GGBT  
 - 32     48  
 - 54     54  
 - 72     72

Minimum Required Points for Bronze Level:  
 Minimum Required Points for Silver Level:  
 Minimum Required Points for Gold Level:

## Section 6 Operation, Maintenance, and Homeowner Education



SECTION	DESCRIPTION	NAHB POINTS	GHBT POINTS	COMPLY	NAHB SCORE	GHBT SCORE	3rd Party	Sub/Supplier	Builder Sig.	Photo	Illustration	Written	FORMAT (E, P)	RESP. PARTY	SIGNATURE / COMMENT
6.1.1.A	Narrative detailing importance of maint. & oper. to keep a green built home green	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.B	Local Green Building Program certificate.	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.C	Warranty, operation, and maintenance instructions for equipment and appliances	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.D	Household recycling opportunities	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.E	Information on how to enroll in a program so that the home receives energy from a renewable energy provider	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.F	Explanation of the benefits of using compact fluorescent light bulbs in high usage areas	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.G	A list of habits/actions to optimize water and energy use	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.H	Local public transportation options (if applicable)	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.1.1.I	Clearly labeled diagram showing safety valves & controls for major house systems.	1	1	y	1	1						W	E	pass	<a href="#">Home owners manual</a>
6.2.1	(Choose at least 5)...	2	2	y	2	2						W	E	pass	<a href="#">Home owners manual</a>
6.2.1.A	A list of local service providers that focus on regularly scheduled maintenance and proper operation of equipment and the structure (sealants, caulks, gutter and downspout system; shower/tub surrounds, irrigation systems, etc).			y											
6.2.1.B	A photo record of framing with utilities installed. Photos should be taken prior to installing insulation, clearly marked, and provided in homeowner's manual.			y											
6.2.1.C	List of Green Home Building Guidelines items included in the home.			y											
6.2.1.E	Instructions for proper handling and disposal of hazardous materials.			y											
6.2.1.G	Information about native or low-water landscape			y											
6.2.1.I	Instructions for checking crawlspace for termite tubes periodically			y											
6.2.1.J	Instructions for keeping gutters clean. Instructions should note that downspouts should divert water at least five feet away from foundation			y											
6.2.1.L	Location of organic or locally grown fruits, vegetables and other food products			y											
6.3.1	Instruct homeowner/occupants about the building's goals...	7	5	y	7	5						W	E	pass	<a href="#">Home owners manual</a>
6.4.1	Encourage homeowners/occupants to recycle by providing built-in space in the home's design (e.g., kitchen, garage, covered outdoor space) for recycling containers.	1	1	y	1	1	3		P	I		E	pass	<a href="#">Home owners manual</a>	

**TOTAL SCORE FOR SECTION 6:**

-	<b>19</b>	<b>17</b>
-	NAHB	GHBT
-	7	7
-	7	7
-	9	9

Minimum Required Points for Bronze Level:

Minimum Required Points for Silver Level:

Minimum Required Points for Gold Level:



## Revision History

12/1/2007 Added more detail to summary page for clarity of bonus points  
Modified to reflect Triangle Program

10/1/2007 rev.b: removed 3.3.2.e.2, erroneously included in original release, does not currently exist in GB guidelines.

7/1/2007 Moved all HBA-DOC modifications to innovative section at bottom of each section (note some changes could not be moved)  
Added Customer Friendly Report (under construction)  
Added Silver & Gold point system (basically increased section 8 Additional Points)  
Corrected PP additional points calculation  
Added new items

10/5/2006 Original Issue  
Bronze level only  
Modified some items and point scheme to regionalize for DOC area.