

sustainable building code checklist

[january 10 draft]

high country conservation center

www.hc3.org

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [available at www.hc3.org] and sustainable building ordinance as adopted by . .

7	project:		tracking #:	
8	location:		phone:	
9	applicant:		email:	

1 mandatory measures				required input	required value	project input	comply	
12	1.1	insulation	1	exterior walls	R value	19 min		no
13			2	roof ceiling	R value	38 min		no
14			3	basement wall	R value	10 min		no
15			4	crawl space wall insulation	R value	10 min		no
16			5	under slab	R value	10 min		no
17			6	slab edge	R value	10 min		no
18			7	floor over crawl space	R value	19 min		no
19	1.2	exterior windows and glazed doors		U value	0.40 max			yes
20	1.3	solid exterior doors		U value	0.50 max			yes
21	1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min		no
22			2	forced air furnace efficiency	efficiency	88% min		no
23	1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min		no
24			2	electric water htr efficiency	efficiency	93% min		no
25	1.6	energy efficient controls [programmable thermostats]		Y/N	Y			no
26	1.7	owners manual [prior to C.O.]		Y/N	Y			no

2 secondary measures				required input	baseline value	project input	required points	
28	2.1	new construction area [sq ft conditioned space]:		sq ft	3,000		(60)	
29	2.2	remodel area [sq ft conditioned space]:		sq ft	0		0	
30	2.3	% renewable/engineered lumber [roof]:		percent	60%		7	
31	2.4	% renewable/engineered lumber [floor]:		percent	80%		9	
32	2.5	% renewable/engineered lumber [beams & headers]:		percent	80%		9	
33	2.6	daylighting [# spaces that do not have natural light]:		qty without	2 pts each		0	
34	2.7	air movement [reqd over 10 foot ceilings]		qty without	5 pts each		0	
35	2.8	high window insulation [required above 10 feet AFF]		sq ft wdw	1 pt/10 sf		0	
36	2.9	recycling center [reqd at kitchen and garage]		not provided	3 pts each		0	
37	2.10	energy star rated appliances [all reqd to be rated]		non rated	3 pts each		0	
38	2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]		each	5 pts each		0	
39	2.12	outdoor water amenities [hot tubs, spas, pools]		sq ft water	1 pt/10 sf		0	
40	2.13	outdoor heated surfaces [drives, walks, patios]		sq ft	1 pt/50 sf		0	
41								
42								
43	2.14	total required points						(35)

3 offset points			points
45	3.1	required secondary measures [from section 2]	(35)
46	3.2	offset points [total from continuation sheet]	0
47	3.3	total [must be zero minimum]	35

4 signature block	
48	4.1 applicant's signature:
49	4.2 print name:
50	4.3 note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet		possible points	required input	required value	project input	project points
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note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.

[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8		0

3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y		0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y		0
3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y		0
4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
1	Deconstruction Plan submitted to HC3	4	Y/N	Y		0
2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%		0
3	Metal Recycled	4 max	percent	1pt/25%		0
4	Concrete Recycled	4 max	percent	1pt/25%		0
5	Compaction (grinding or shredding)	4 max	percent	1pt/25%		0
6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

3.4	Construction Recycling	possible points	required input	required value	project input	project points
1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%		0
2	Metal Recycled	4 max	percent	1pt/25%		0
3	Cardboard Recycled	4 max	percent	1pt/25%		0
4	Compaction (grinding or shredding)	4 max	percent	1pt/25%		0
5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

3.5	Passive Solar Design	possible points	required input	required value	project input	project points
1	East-West Axis within 30 deg of True South	5	Y/N	Y		0
2	Properly Designed Overhangs	2	Y/N	Y		0
3	Unimpeded Solar Access	3	Y/N	Y		0
4	Sun Tempered Design	5	Y/N	Y		0
5	True Passive Solar Design	5	Y/N	Y		0
6	Unconditioned Garage	2	Y/N	Y		0

3.6	Building Envelope	possible points	required input	required value	project input	project points
1	Advanced Sealing Package	4	Y/N	Y		0
1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y		0
2	Energy heels 6" or greater on trusses	4	Y/N	Y		0
3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y		0
4	Insulated Headers (80% minimum R-10)	2	Y/N	Y		0
5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35		0
6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y		0

3.7	Mechanical Systems	possible points	required input	required value	project input	project points
1	Active Solar Space Heating System	2	Y/N	Y		0
2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW		0
3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW		0
4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	0%	0

107	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	0%	0
108	6	Furnace Centrally Located	2	Y/N	Y		0
109	7	In Floor Radiant Heat Installed	4	Y/N	Y		0
110	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y		0
111	9	Energy Star House	4	Y/N	Y		0
112	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y		0
113	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y		0
114	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y		0
115	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y		0
116	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y		0

117

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0
122	5	Clothes Washer is front-loading	1	Y/N	Y	0
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	0
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	0
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y	0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y	0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y	0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y	0
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	0

130

3.9	Insulation	possible points	required input	required value	project input	project points
131	1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19	0
132	2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38	0
133	3	Blow or Sprayed Insulation in 50% or more of all exterior walls	5	Y/N	Y	0
134	4	Insulate All Hot Water Pipes to all Locations to be Insulated	3	Y/N	Y	0
135	5	Insulate All HW Pipes in Unconditioned space to be Insulated	4	Y/N	Y	0
136	6	Window Quilts/Ins Shades @ 75% of exterior window area	4	Y/N	Y	0
137	7	Wall Insulation is 70% recycled-content material	3	Y/N	Y	0
138	8	Roof Insulation is 70% recycled-content material	3	Y/N	Y	0
139	9	Formaldehyde-free insulation	2	Y/N	Y	0
140	10	Non-toxic water-based spray on insulation	2	Y/N	Y	0
141	11	HCFC-free rigid foam insulation	2	Y/N	Y	0
142	12	Existing Clg Insulated to R-38 or capacity [add/rem]	5	Y/N	Y	0
143	13	Insulate Existing Walls per resource guide [add/rem]	5	Y/N	Y	0
144	14	Change single-pane wdws U-0.40 or less [add/rem]	5	Y/N	Y	0

145

3.10	Foundation	possible points	required input	required value	project input	project points
146	1	Insulated Concrete Foundation System Used	4	Y/N	Y	0
147	2	Recycled Content Insulated Concrete Foundation System	4	Y/N	Y	0
148	3	Frost-protected shallow foundation	4	Y/N	Y	0
149	4	Western coal fly ash concrete	3	Y/N	Y	0
150	5	Non-asphalt based dampproofing	2	Y/N	Y	0
151	6	Non-solvent based foundation waterproofing	2	Y/N	Y	0

152

3.11	Structural Frame	possible points	required input	required value	project input	project points
153	1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%	0
154	2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%	0

155

159	3	Factory-built or panelized construction	4	Y/N	Y		0
160	4	Finger Jointed Plate Material	2	Y/N	Y		0
161	5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
162	6	Recycled Content Wall Sheathing	2	Y/N	Y		0
163	7	Finger jointed studs	3	Y/N	Y		0
164	8	Use of Locally-Produced Beams, Studs, Lumbe	10 max	percent	1pt/10%		0
165	9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
166	10	Recycled Content Deck Material	3	Y/N	Y		0
167	11	Renewable (FSC or other) Deck Material	3	Y/N	Y		0
168	12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

170	3.12	Sub Floor	possible points	required input	required value	project input	project points
171	1	OSB in Sub Floor	3	Y/N	Y		0
172	2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

174	3.13	Windows & Doors	possible points	required input	required value	project input	project points
175	1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.00	0
176	2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.00	0
177	3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
178	4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
179	5	All doors made from FSC or other wood	2	Y/N	Y		0

181	3.14	Roof	possible points	required input	required value	project input	project points
182	1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
183	2	Metal Roof with minumum 30 year life	3	Y/N	Y		0

185	3.15	Wall Finishes	possible points	required input	required value	project input	project points
186	1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
187	2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
188	3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y		0
189	4	Natural Clay	2	Y/N	Y		0
190	5	Locally produced trim	4 max	percent	1pt/25%		0

192	3.16	Floor Finishes	possible points	required input	required value	project input	project points
193	1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0
194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%		0
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%		0
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%		0
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y		0
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y		0

208	3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
209	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%		0

210	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
211	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%		0
212	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%		0
213	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y		0
214	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y		0
215	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y		0
216	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y		0
217	9	Eliminate ALL Particleboard inside building	2	Y/N	Y		0
218	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%		0
219	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%		0
220	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%		0
221	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%		0
222	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%		0
223	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%		0
224	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%		0
225	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%		0

226

227	3.18	Water Efficiency	possible points	required input	required value	project input	project points
228	1	Dual-flush toilets installed	2	Y/N	Y		0
229	2	Drip irrigation installed	2	Y/N	Y		0
230	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y		0
231	4	Graywater used for irrigation	2	Y/N	Y		0
232	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

233

234	3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
235	1	Radon Mitigation System Installed	2	Y/N	Y		0
236	2	Rough-in for Radon System	1	Y/N	Y		0
237	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y		0
238	4	Install HEPA filter sized for whole house	1	Y/N	Y		0
239	5	Furnace and/or Duc\t-mounted Air Cleaner	1	Y/N	Y		0
240	6	Exhaust Fan in Garage	1	Y/N	Y		0
241	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
242	8	Range Hood Vented to Outside	1	Y/N	Y		0
243	9	No Attached Garage	1	Y/N	Y		0
244	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2		0

245

246	3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
247	1	Building is LEED Residential Certified	total reqd	Y/N	Y		0
248	2	Building is Built-Green Certified	total reqd	Y/N	Y		0
249	3	Building is Commissioned	total reqd	Y/N	Y		0

250

251	3.21	Innovation Points	possible points	required input	required value	project input	project points
252	1	Innovative Product	TBD				
253	2	Innovative Design	TBD				
254	3	New Technology	TBD				

255

256	3.22	total offset points for this project:					0
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sustainable building code checklist [december 4 draft]

high country conservation center www.hc3.org

editors notes:

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #1 [2000 sf no garage]	tracking #:	
location:		phone:	
applicant:		email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	38	yes
		3	basement wall	R value	19 min	n/a	yes
		4	crawl space wall insulation	R value	20 min	20	yes
		5	under slab	R value	18 min	n/a	yes
		6	slab edge	R value	18 min	n/a	yes
		7	floor over crawl space	R value	30 min	30	yes
1.2	exterior windows and glazed doors		U value	0.40 max	0.40	no	
1.3	solid exterior doors		U value	0.50 max	0.50	no	
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	87%	yes
		2	forced air furnace efficiency	efficiency	88% min	88%	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	n/a	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]		Y/N	Y	y	yes	
1.7	owners manual [prior to C.O.]		Y/N	Y	y	yes	

per adv group

2 secondary measures				required input	baseline value	project input	required points
2.1	new construction area [sq ft conditioned space]:		sq ft	3,000	2,000	(20)	
2.2	remodel area [sq ft conditioned space]:		sq ft	0	0	0	
2.3	% renewable/engineered lumber [roof]:		percent	60%	100%	(4)	
2.4	% renewable/engineered lumber [floor]:		percent	80%	0%	8	
2.5	% renewable/engineered lumber [beams & headers]:		percent	80%	0%	8	
2.6	daylighting [# spaces that do not have natural light]:		qty without	2 pts each	3	6	
2.7	air movement [reqd over 10 foot ceilings]		qty without	5 pts each		0	
2.8	high window insulation [required above 10 feet AFF]		sq ft wdw	1 pt/10 sf		0	
2.9	recycling center [reqd at kitchen and garage]		not provided	3 pts each		0	
2.10	energy star rated appliances [all reqd to be rated]		non rated	3 pts each		0	
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]		each	5 pts each		0	
2.12	outdoor water amenities [hot tubs, spas, pools]		sq ft water	1 pt/10 sf		0	
2.13	outdoor heated surfaces [drives, walks, patios]		sq ft	1 pt/50 sf		0	
2.14	total required points						(2)

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

3 offset points			points
3.1	required secondary measures [from section 2]		(2)
3.2	offset points [total from continuation sheet]		0
3.3	total [must be zero minimum]		2

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet		possible points	required input	required value	project input	project points
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ed notes per carly's 9/11 sprdsht

note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.
[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8		0
3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y		0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y		0

?

3

 okay to combine rows?

3	
3	

67	3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y		0
68	4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3	
4	1 point/10 yards (4 max)

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
70	1	Deconstruction Plan submitted to HC3	4	Y/N	Y	0
72	2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
73	3	Metal Recycled	4 max	percent	1pt/25%	0
74	4	Concrete Recycled	4 max	percent	1pt/25%	0
75	5	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
76	6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

4	
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)

3.4	Construction Recycling	possible points	required input	required value	project input	project points
78	1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
79	2	Metal Recycled	4 max	percent	1pt/25%	0
80	3	Cardboard Recycled	4 max	percent	1pt/25%	0
81	4	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
82	5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)

3.5	Passive Solar Design	possible points	required input	required value	project input	project points
85	1	East-West Axis within 30 deg of True South	5	Y/N	Y	0
86	2	Properly Designed Overhangs	2	Y/N	Y	0
87	3	Unimpeded Solar Access	3	Y/N	Y	0
88	4	Sun Tempered Design	5	Y/N	Y	0
89	5	True Passive Solar Design	5	Y/N	Y	0
90	6	Unconditioned Garage	2	Y/N	Y	0

5	
2	
3	
5	
5	
2	added 9/20; not in right plac

3.6	Building Envelope	possible points	required input	required value	project input	project points
93	1	Advanced Sealing Package	4	Y/N	Y	0
94	1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	0
95	2	Energy Heals of 6" or more on Trusses	4	Y/N	Y	0
96	3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y	0
97	4	Insulated Headers (80% minimum R-10)	2	Y/N	Y	0
98	5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35	0
99	6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	0

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4	okay to combine rows?
4	

3.7	Mechanical Systems	possible points	required input	required value	project input	project points
102	1	Active Solar Space Heating System	2	Y/N	Y	0
103	2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW	0
104	3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW	0
105	4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	87%
106	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	88%
107	6	Furnace Centrally Located	2	Y/N	Y	0
108	7	In Floor Radiant Heat Installed	4	Y/N	Y	0
109	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y	0
110	9	Energy Star House	4	Y/N	Y	0
111	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	0
112	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y	0
113	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y	0
114	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	0
115	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y	0

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4	okay to combine rows?
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pts per 9/20 meeting, sim solar rough-in

verify-base on 6000 sf, match ann BTU to I

pts per 9/20 meeting, sim solar rough-in

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3	additions/remodels only
3	additions/remodels only
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COLUMN RECONFIG 10/18/07

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0
122	5	Clothes Washer is front-loading	1	Y/N	Y	0
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	0
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	0
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y	0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y	0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y	0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y	0
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	0

ALSO CHANGE COLORS [BLUE=INPUT,

? refer to resource guide here?

? what are max points?

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4	% value
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"RG"?

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19		0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38		0
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y		0
4	Insulate All Hot Water Pipes to all Locations to F	3	Y/N	Y		0
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y		0
6	Window Quilts/Ins Shades @ 75% of exterior wi	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y		0
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add/	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/re	5	Y/N	Y		0

? 2 pt increment due to formula per 9.20 meeting

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5	additions/remodels only
5	additions/remodels only
5	additions/remodels only

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y		0
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y		0
5	Non-asphalt based dampproofing	2	Y/N	Y		0
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

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3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0
3	Factory-built or panelized construction	4	Y/N	Y		0
4	Finger Jointed Plate Material	2	Y/N	Y		0
5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
6	Recycled Content Wall Sheathing	2	Y/N	Y		0
7	Finger jointed studs	3	Y/N	Y		0
8	Use of Locally-Produced Beams, Studs, Lumber	10 max	percent	1pt/10%		0
9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
10	Recycled Content Deck Material	3	Y/N	Y		0
11	Renewable (FSC or other) Deck Material	3	Y/N	Y		0
12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

? no top set to formula [yet] ? 10 1 per 10% (max 10)

4	1 per 25% (max 4)
4	1 per 25% (max 4)
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10	1 per 10% (max 10)
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3.12	Sub Floor	possible points	required input	required value	project input	project points
1	OSB in Sub Floor	3	Y/N	Y		0
2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

? 3 both/and? ? 1 both/and?

3	both/and?
1	both/and?

3.13	Windows & Doors	possible points	required input	required value	project input	project points
1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.40	0
2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
5	All doors made from FSC or other wood	2	Y/N	Y		0

per randy W research ?-(V)- 1/2 of line above per 9/20 meeting

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3.14	Roof	possible points	required input	required value	project input	project points
1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
2	Metal Roof with mininum 30 year life	3	Y/N	Y		0

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3.15	Wall Finishes	possible points	required input	required value	project input	project points
1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y		0
4	Natural Clay	2	Y/N	Y		0
5	Locally produced trim	4 max	percent	1pt/25%		0

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4	1 per 25% (max 4)

3.16	Floor Finishes	possible points	required input	required value	project input	project points
1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0

?-title 4 1 per 25% (max 4)

4	1 per 25% (max 4)
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194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%		0
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%		0
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%		0
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y		0
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y		0

4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
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3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
208	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%	0
209	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%	0
210	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%	0
211	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%	0
212	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y	0
213	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y	0
214	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y	0
215	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y	0
216	9	Eliminate ALL Particleboard inside building	2	Y/N	Y	0
217	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%	0
218	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%	0
219	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%	0
220	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%	0
221	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%	0
222	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%	0
223	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%	0
224	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	0

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4	1 per 25% (max 4)
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4	1 per 25% (max 4)

3.18	Water Efficiency	possible points	required input	required value	project input	project points
227	1	Dual-flush toilets installed	2	Y/N	Y	0
228	2	Drip irrigation installed	2	Y/N	Y	0
229	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	0
230	4	Graywater used for irrigation	2	Y/N	Y	0
231	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y	0

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3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
234	1	Radon Mitigation System Installed	2	Y/N	Y	0
235	2	Rough-in for Radon System	1	Y/N	Y	0
236	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y	0
237	4	Install HEPA filter sized for whole house	1	Y/N	Y	0
238	5	Furnace and/or Dust-mounted Air Cleaner	1	Y/N	Y	0
239	6	Exhaust Fan in Garage	1	Y/N	Y	0
240	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y	0
241	8	Range Hood Vented to Outside	1	Y/N	Y	0
242	9	No Attached Garage	1	Y/N	Y	0
243	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2	0

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2	1 per door/2 max

3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
246	1	Building is LEED Residential Certified	total reqd	Y/N	Y	0
247	2	Building is Built-Green Certified	total reqd	Y/N	Y	0
248	3	Building is Commissioned	total reqd	Y/N	Y	0

automatic pass=# reqd points
automatic pass=# reqd points
automatic pass=# reqd points

3.21	Innovation Points	possible points	required input	required value	project input	project points
251	1	Innovative Product	TBD			
252	2	Innovative Design	TBD			
253	3	New Technology	TBD			

254	3.22	total offset points for this project:				0
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sustainable building code checklist [december 4 draft]

high country conservation center www.hc3.org

editors notes:

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #2 [3500 sq ft including heated garage]	tracking #:	
location:	514 wellington road, breckenridge	phone:	
applicant:	matthew stais architects - typical 2007 design	email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	38	yes
		3	basement wall	R value	19 min	19	yes
		4	crawl space wall insulation	R value	20 min	20	yes
		5	under slab	R value	18 min	18	yes
		6	slab edge	R value	18 min	18	yes
		7	floor over crawl space	R value	30 min	30	yes
1.2	exterior windows and glazed doors			U value	0.40 max	0.30	no
1.3	solid exterior doors			U value	0.50 max	0.50	no
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	92%	yes
		2	forced air furnace efficiency	efficiency	88% min	88%	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	n/a	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]			Y/N	Y	y	yes
1.7	owners manual [prior to C.O.]			Y/N	Y	y	yes

per adv group

2 secondary measures				required input	baseline value	project input	required points
2.1	new construction area [sq ft conditioned space]:			sq ft	3,000	3,500	10
2.2	remodel area [sq ft conditioned space]:			sq ft	0	0	0
2.3	% renewable/engineered lumber [roof]:			percent	60%	80%	(2)
2.4	% renewable/engineered lumber [floor]:			percent	80%	0%	8
2.5	% renewable/engineered lumber [beams & headers]:			percent	80%	50%	3
2.6	daylighting [# spaces that do not have natural light]:			qty without	2 pts each	3	6
2.7	air movement [reqd over 10 foot ceilings]			qty without	5 pts each	1	5
2.8	high window insulation [required above 10 feet AFF]			sq ft wdw	1 pt/10 sf	8	1
2.9	recycling center [reqd at kitchen and garage]			not provided	3 pts each		0
2.10	energy star rated appliances [all reqd to be rated]			non rated	3 pts each		0
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]			each	5 pts each	1	5
2.12	outdoor water amenities [hot tubs, spas, pools]			sq ft water	1 pt/10 sf	50	5
2.13	outdoor heated surfaces [drives, walks, patios]			sq ft	1 pt/50 sf		0
2.14	total required points						41

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

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*** need rounding for reqd points

*** need rounding for reqd points

3 offset points			points
3.1	required secondary measures [from section 2]		41
3.2	offset points [total from continuation sheet]		81
3.3	total [must be zero minimum]		40

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet					
	possible points	required input	required value	project input	project points

ed notes per carly's 9/11 sprdsht

note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.

[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8		0
3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y		0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y		0

?

3

 okay to combine rows?

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3	

67	3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y		0
68	4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3	
4	1 point/10 yards (4 max)

69

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
70	1	Deconstruction Plan submitted to HC3	4	Y/N	Y	0
71	2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
72	3	Metal Recycled	4 max	percent	1pt/25%	0
73	4	Concrete Recycled	4 max	percent	1pt/25%	0
74	5	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
75	6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

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4	1 per 25% (4 max)
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4	1 per 25% (4 max)

77

3.4	Construction Recycling	possible points	required input	required value	project input	project points	
78	1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	50%	2
79	2	Metal Recycled	4 max	percent	1pt/25%	50%	2
80	3	Cardboard Recycled	4 max	percent	1pt/25%	50%	2
81	4	Compaction (grinding or shredding)	4 max	percent	1pt/25%		0
82	5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

4	1 per 25% (4 max)
4	1 per 25% (4 max)
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4	1 per 25% (4 max)

84

3.5	Passive Solar Design	possible points	required input	required value	project input	project points	
85	1	East-West Axis within 30 deg of True South	5	Y/N	Y	0	
86	2	Properly Designed Overhangs	2	Y/N	Y	y	2
87	3	Unimpeded Solar Access	3	Y/N	Y		0
88	4	Sun Tempered Design	5	Y/N	Y		0
89	5	True Passive Solar Design	5	Y/N	Y		0
90	6	Unconditioned Garage	2	Y/N	Y		0

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92

3.6	Building Envelope	possible points	required input	required value	project input	project points	
93	1	Advanced Sealing Package	4	Y/N	Y	0	
94	1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	y	1
95	2	Energy Heals of 6" or more on Trusses	4	Y/N	Y	y	4
96	3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y		0
97	4	Insulated Headers (80% minimum R-10)	2	Y/N	Y		0
98	5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35		0
99	6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	y	4

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4	okay to combine rows?
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3.7	Mechanical Systems	possible points	required input	required value	project input	project points	
102	1	Active Solar Space Heating System	2	Y/N	Y	0	
103	2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW	0	
104	3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW	0	
105	4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	92%	4
106	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	88%	0
107	6	Furnace Centrally Located	2	Y/N	Y		0
108	7	In Floor Radiant Heat Installed	4	Y/N	Y	y	4
109	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y		0
110	9	Energy Star House	4	Y/N	Y		0
111	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	y	3
112	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y		0
113	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y		0
114	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	y	4
115	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y		0

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4	okay to combine rows?
4	

pts per 9/20 meeting, sim solar rough-in

verify-base on 6000 sf, match ann BTU to I

pts per 9/20 meeting, sim solar rough-in

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3	additions/remodels only
3	additions/remodels only
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COLUMN RECONFIG 10/18/07

117

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points	
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0	
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0	
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0	
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0	
122	5	Clothes Washer is front-loading	1	Y/N	Y	y	1
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	y	1
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y		0
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y		0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y		0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y		0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y	y	4
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y		0

ALSO CHANGE COLORS [BLUE=INPUT,

? refer to resource guide here?

? what are max points?

1	
1	
4	% value
1	
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4	
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"RG"?

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19		0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38		0
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y		0
4	Insulate All Hot Water Pipes to all Locations to F	3	Y/N	Y		0
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y		0
6	Window Quilts/Ins Shades @ 75% of exterior wi	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y		0
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add/	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/re	5	Y/N	Y		0

? 2 pt increment due to formula per 9/20 meeting

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5	additions/remodels only
5	additions/remodels only
5	additions/remodels only

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y	y	4
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y	y	3
5	Non-asphalt based dampproofing	2	Y/N	Y		0
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

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3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0
3	Factory-built or panelized construction	4	Y/N	Y		0
4	Finger Jointed Plate Material	2	Y/N	Y		0
5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
6	Recycled Content Wall Sheathing	2	Y/N	Y		0
7	Finger jointed studs	3	Y/N	Y		0
8	Use of Locally-Produced Beams, Studs, Lumber	10 max	percent	1pt/10%		0
9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
10	Recycled Content Deck Material	3	Y/N	Y		0
11	Renewable (FSC or other) Deck Material	3	Y/N	Y	y	3
12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

4	1 per 25% (max 4)
4	1 per 25% (max 4)
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no top set to formula [yet]	
10	1 per 10% (max 10)
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3.12	Sub Floor	possible points	required input	required value	project input	project points
1	OSB in Sub Floor	3	Y/N	Y	y	3
2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

? 3 both/and?
? 1 both/and?

3.13	Windows & Doors	possible points	required input	required value	project input	project points
1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.30	12
2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
5	All doors made from FSC or other wood	2	Y/N	Y		0

per randy W research
?(V)- 1/2 of line above per 9/20 meeting

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3.14	Roof	possible points	required input	required value	project input	project points
1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
2	Metal Roof with mininum 30 year life	3	Y/N	Y		0

3	
3	

3.15	Wall Finishes	possible points	required input	required value	project input	project points
1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y		0
4	Natural Clay	2	Y/N	Y		0
5	Locally produced trim	4 max	percent	1pt/25%		0

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4	1 per 25% (max 4)

3.16	Floor Finishes	possible points	required input	required value	project input	project points
1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0

?-title

4	1 per 25% (max 4)
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194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%	30%	1
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%	30%	1
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%		0
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y	y	2
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y	y	2

4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
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207	3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
208	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
209	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
210	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%		0
211	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%		0
212	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y		0
213	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y		0
214	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y		0
215	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y		0
216	9	Eliminate ALL Particleboard inside building	2	Y/N	Y		0
217	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%		0
218	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%		0
219	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%		0
220	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%		0
221	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%		0
222	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%		0
223	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%		0
224	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	100%	4

4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
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4	1 per 25% (max 4)
4	1 per 25% (max 4)

225	3.18	Water Efficiency	possible points	required input	required value	project input	project points
226	1	Dual-flush toilets installed	2	Y/N	Y		0
227	2	Drip irrigation installed	2	Y/N	Y		0
228	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	y	1
229	4	Graywater used for irrigation	2	Y/N	Y		0
230	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

2
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1
2
2

231	3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
232	1	Radon Mitigation System Installed	2	Y/N	Y		0
233	2	Rough-in for Radon System	1	Y/N	Y	y	1
234	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y	y	3
235	4	Install HEPA filter sized for whole house	1	Y/N	Y		0
236	5	Furnace and/or Dust-mounted Air Cleaner	1	Y/N	Y		0
237	6	Exhaust Fan in Garage	1	Y/N	Y		0
238	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
239	8	Range Hood Vented to Outside	1	Y/N	Y	y	1
240	9	No Attached Garage	1	Y/N	Y		0
241	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2	y	2

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1	
2	1 per door/2 max

242	3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
243	1	Building is LEED Residential Certified	total reqd	Y/N	Y		0
244	2	Building is Built-Green Certified	total reqd	Y/N	Y		0
245	3	Building is Commissioned	total reqd	Y/N	Y		0

automatic pass=# reqd points
automatic pass=# reqd points
automatic pass=# reqd points

246	3.21	Innovation Points	possible points	required input	required value	project input	project points
247	1	Innovative Product	TBD				
248	2	Innovative Design	TBD				
249	3	New Technology	TBD				

250	3.22	total offset points for this project:					81
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sustainable building code checklist [december 4 draft]

high country conservation center www.hc3.org

editors notes:

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #3 [6500 sq ft including heated garage]	tracking #:	
location:	highlands at breck custom home	phone:	
applicant:	matthew stais architects - typical 2007 design	email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	38	yes
		3	basement wall	R value	19 min	19	yes
		4	crawl space wall insulation	R value	20 min	20	yes
		5	under slab	R value	18 min	18	yes
		6	slab edge	R value	18 min	18	yes
		7	floor over crawl space	R value	30 min	30	yes
1.2	exterior windows and glazed doors		U value	0.40 max	0.30	no	
1.3	solid exterior doors		U value	0.50 max	0.50	no	
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	92%	yes
		2	forced air furnace efficiency	efficiency	88% min	88%	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	n/a	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]		Y/N	Y	y	yes	
1.7	owners manual [prior to C.O.]		Y/N	Y	y	yes	

per adv group

2 secondary measures				required input	baseline value	project input	required points	
2.1	new construction area [sq ft conditioned space]:		sq ft	3,000	6,500	70	*** need rounding for reqd points	
2.2	remodel area [sq ft conditioned space]:		sq ft	0	0	0		
2.3	% renewable/engineered lumber [roof]:		percent	60%	0%	6	*** need rounding for reqd points	
2.4	% renewable/engineered lumber [floor]:		percent	80%	80%	0	*** need rounding for reqd points	
2.5	% renewable/engineered lumber [beams & headers]:		percent	80%	60%	2	*** need rounding for reqd points	
2.6	daylighting [# spaces that do not have natural light]:		qty without	2 pts each	2	4		
2.7	air movement [reqd over 10 foot ceilings]		qty without	5 pts each	2	10		
2.8	high window insulation [required above 10 feet AFF]		sq ft wdw	1 pt/10 sf	40	4	*** need rounding for reqd points	
2.9	recycling center [reqd at kitchen and garage]		not provided	3 pts each	0	0		
2.10	energy star rated appliances [all reqd to be rated]		non rated	3 pts each	0	0		
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]		each	5 pts each	1	5		
2.12	outdoor water amenities [hot tubs, spas, pools]		sq ft water	1 pt/10 sf	0	0	*** need rounding for reqd points	
2.13	outdoor heated surfaces [drives, walks, patios]		sq ft	1 pt/50 sf	100	2	*** need rounding for reqd points	
2.14	total required points						103	

3 offset points			points
3.1	required secondary measures [from section 2]		103
3.2	offset points [total from continuation sheet]		103
3.3	total [must be zero minimum]		0

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet		possible points	required input	required value	project input	project points
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ed notes per carly's 9/11 sprdsht

note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.
[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8		0
3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y		0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y		0

?

3

 okay to combine rows?

3	
3	

67	3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y		0
68	4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3	
4	1 point/10 yards (4 max)

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
70	1	Deconstruction Plan submitted to HC3	4	Y/N	Y	0
72	2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
73	3	Metal Recycled	4 max	percent	1pt/25%	0
74	4	Concrete Recycled	4 max	percent	1pt/25%	0
75	5	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
76	6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

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4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)

3.4	Construction Recycling	possible points	required input	required value	project input	project points	
78	1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	75%	3
79	2	Metal Recycled	4 max	percent	1pt/25%	75%	3
80	3	Cardboard Recycled	4 max	percent	1pt/25%	75%	3
81	4	Compaction (grinding or shredding)	4 max	percent	1pt/25%		0
82	5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

4	1 per 25% (4 max)
4	1 per 25% (4 max)
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4	1 per 25% (4 max)
4	1 per 25% (4 max)

3.5	Passive Solar Design	possible points	required input	required value	project input	project points	
85	1	East-West Axis within 30 deg of True South	5	Y/N	Y	0	
86	2	Properly Designed Overhangs	2	Y/N	Y	y	2
87	3	Unimpeded Solar Access	3	Y/N	Y		0
88	4	Sun Tempered Design	5	Y/N	Y		0
89	5	True Passive Solar Design	5	Y/N	Y		0
90	6	Unconditioned Garage	2	Y/N	Y		0

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2	added 9/20; not in right plac

3.6	Building Envelope	possible points	required input	required value	project input	project points	
93	1	Advanced Sealing Package	4	Y/N	Y	0	
94	1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	y	1
95	2	Energy Heals of 6" or more on Trusses	4	Y/N	Y	n/a	0
96	3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y		0
97	4	Insulated Headers (80% minimum R-10)	2	Y/N	Y		0
98	5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35		0
99	6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	y	4

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4	okay to combine rows?
4	

3.7	Mechanical Systems	possible points	required input	required value	project input	project points	
102	1	Active Solar Space Heating System	2	Y/N	Y	0	
103	2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW	0	
104	3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW	0	
105	4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	92%	4
106	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	88%	0
107	6	Furnace Centrally Located	2	Y/N	Y	y	2
108	7	In Floor Radiant Heat Installed	4	Y/N	Y	y	4
109	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y	y	4
110	9	Energy Star House	4	Y/N	Y		0
111	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	y	3
112	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y		0
113	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y		0
114	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	y	4
115	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y	y	5

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4	okay to combine rows?
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pts per 9/20 meeting, sim solar rough-in

verify-base on 6000 sf, match ann BTU to I

pts per 9/20 meeting, sim solar rough-in

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3	additions/remodels only
3	additions/remodels only
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COLUMN RECONFIG 10/18/07

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points	
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0	
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0	
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0	
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0	
122	5	Clothes Washer is front-loading	1	Y/N	Y	y	1
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	y	1
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	y	4
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y		0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y		0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y		0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y		0
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	2	0

?	refer to resource guide here?
?	what are max points?
1	
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4	% value
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"RG"?

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19		0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38		0
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y	y	5
4	Insulate All Hot Water Pipes to all Locations to F	3	Y/N	Y	y	3
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y	y	4
6	Window Quilts/Ins Shades @ 75% of exterior wi	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y	2	0
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add/	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/re	5	Y/N	Y		0

? 2 pt increment due to formula per 9.20 meeting

5	
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5	additions/remodels only
5	additions/remodels only
5	additions/remodels only

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y	y	4
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y	y	3
5	Non-asphalt based dampproofing	2	Y/N	Y		0
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

4	
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3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0
3	Factory-built or panelized construction	4	Y/N	Y		0
4	Finger Jointed Plate Material	2	Y/N	Y		0
5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
6	Recycled Content Wall Sheathing	2	Y/N	Y		0
7	Finger jointed studs	3	Y/N	Y		0
8	Use of Locally-Produced Beams, Studs, Lumber	10 max	percent	1pt/10%		0
9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
10	Recycled Content Deck Material	3	Y/N	Y		0
11	Renewable (FSC or other) Deck Material	3	Y/N	Y	y	3
12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	
2	
2	
2	
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no top set to formula [yet]	
10	1 per 10% (max 10)
3	
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3.12	Sub Floor	possible points	required input	required value	project input	project points
1	OSB in Sub Floor	3	Y/N	Y	y	3
2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

? 3 both/and?
? 1 both/and?

3.13	Windows & Doors	possible points	required input	required value	project input	project points
1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.30	12
2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
5	All doors made from FSC or other wood	2	Y/N	Y		0

per randy W research
?-(V)- 1/2 of line above per 9/20 meeting

4	
4	
2	

3.14	Roof	possible points	required input	required value	project input	project points
1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
2	Metal Roof with mininum 30 year life	3	Y/N	Y		0

3	
3	

3.15	Wall Finishes	possible points	required input	required value	project input	project points
1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y	4	0
4	Natural Clay	2	Y/N	Y		0
5	Locally produced trim	4 max	percent	1pt/25%		0

3	
3	
4	
2	
4	1 per 25% (max 4)

3.16	Floor Finishes	possible points	required input	required value	project input	project points
1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0

?-title

4	1 per 25% (max 4)
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194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%	25%	1
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%	25%	1
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%		0
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y	y	2
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y	y	2

4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
2	
2	

3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points	
209	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%	0	
210	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%	0	
211	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%	0	
212	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%	0	
213	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y	0	
214	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y	0	
215	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y	0	
216	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y	0	
217	9	Eliminate ALL Particleboard inside building	2	Y/N	Y	0	
218	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%	0	
219	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%	0	
220	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%	0	
221	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%	0	
222	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%	0	
223	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%	0	
224	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%	0	
225	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	100%	4

4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
2	
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4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)

3.18	Water Efficiency	possible points	required input	required value	project input	project points	
228	1	Dual-flush toilets installed	2	Y/N	Y	0	
229	2	Drip irrigation installed	2	Y/N	Y	0	
230	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	y	1
231	4	Graywater used for irrigation	2	Y/N	Y		0
232	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

2
2
1
2
2

3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points	
235	1	Radon Mitigation System Installed	2	Y/N	Y	0	
236	2	Rough-in for Radon System	1	Y/N	Y	y	1
237	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y	y	3
238	4	Install HEPA filter sized for whole house	1	Y/N	Y		0
239	5	Furnace and/or Dust-mounted Air Cleaner	1	Y/N	Y		0
240	6	Exhaust Fan in Garage	1	Y/N	Y		0
241	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
242	8	Range Hood Vented to Outside	1	Y/N	Y	y	1
243	9	No Attached Garage	1	Y/N	Y		0
244	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2	y	2

2	
1	
3	
1	
1	
1	
1	
1	
2	1 per door/2 max

3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
247	1	Building is LEED Residential Certified	total reqd	Y/N	Y	0
248	2	Building is Built-Green Certified	total reqd	Y/N	Y	0
249	3	Building is Commissioned	total reqd	Y/N	Y	0

automatic pass=# reqd points
automatic pass=# reqd points
automatic pass=# reqd points

3.21	Innovation Points	possible points	required input	required value	project input	project points
252	1	Innovative Product	TBD			
253	2	Innovative Design	TBD			
254	3	New Technology	TBD			

3.22	total offset points for this project:	103
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sustainable building code checklist [december 4 draft]

high country conservation center www.hc3.org

editors notes:

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #4 [16,291 sq ft incl garage & barn]	tracking #:	
location:	shadow creek ranch	phone:	
applicant:	matthew stais architects	email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	38	yes
		3	basement wall	R value	19 min	19	yes
		4	crawl space wall insulation	R value	20 min	20	yes
		5	under slab	R value	18 min	18	yes
		6	slab edge	R value	18 min	18	yes
		7	floor over crawl space	R value	30 min	30	yes
1.2	exterior windows and glazed doors		U value	0.40 max	0.30	no	
1.3	solid exterior doors		U value	0.50 max	0.50	no	
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	92%	yes
		2	forced air furnace efficiency	efficiency	88% min	n/a	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	70%	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]		Y/N	Y	y	yes	
1.7	owners manual [prior to C.O.]		Y/N	Y	y	yes	

per adv group

2 secondary measures				required input	baseline value	project input	required points
2.1	new construction area [sq ft conditioned space]:		sq ft	3,000	16,291	266	*** need rounding for reqd points
2.2	remodel area [sq ft conditioned space]:		sq ft	0	0	0	
2.3	% renewable/engineered lumber [roof]:		percent	60%	40%	2	*** need rounding for reqd points
2.4	% renewable/engineered lumber [floor]:		percent	80%	100%	(2)	*** need rounding for reqd points
2.5	% renewable/engineered lumber [beams & headers]:		percent	80%	80%	0	*** need rounding for reqd points
2.6	daylighting [# spaces that do not have natural light]:		qty without	2 pts each	8	16	
2.7	air movement [reqd over 10 foot ceilings]		qty without	5 pts each	3	15	
2.8	high window insulation [required above 10 feet AFF]		sq ft wdw	1 pt/10 sf	132	13	*** need rounding for reqd points
2.9	recycling center [reqd at kitchen and garage]		not provided	3 pts each	0	0	
2.10	energy star rated appliances [all reqd to be rated]		non rated	3 pts each	0	0	
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]		each	5 pts each	1	5	
2.12	outdoor water amenities [hot tubs, spas, pools]		sq ft water	1 pt/10 sf	0	0	*** need rounding for reqd points
2.13	outdoor heated surfaces [drives, walks, patios]		sq ft	1 pt/50 sf	1,400	28	*** need rounding for reqd points
2.14	total required points					343	

3 offset points		points
3.1	required secondary measures [from section 2]	343
3.2	offset points [total from continuation sheet]	344
3.3	total [must be zero minimum]	1

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet					
	possible points	required input	required value	project input	project points

ed notes per carly's 9/11 sprdsht

note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.
[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1 Simple Footprint		possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8	0	0
3.2 Land Use		possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y	Y	3
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y	Y	3

? 3 okay to combine rows?

3	
3	

67	3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y	Y	3
68	4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3	
4	1 point/10 yards (4 max)

69

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
70	1	Deconstruction Plan submitted to HC3	4	Y/N	Y	0
71	2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
72	3	Metal Recycled	4 max	percent	1pt/25%	0
73	4	Concrete Recycled	4 max	percent	1pt/25%	0
74	5	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
75	6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

4	
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)

77

3.4	Construction Recycling	possible points	required input	required value	project input	project points
78	1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
79	2	Metal Recycled	4 max	percent	1pt/25%	0
80	3	Cardboard Recycled	4 max	percent	1pt/25%	0
81	4	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
82	5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)
4	1 per 25% (4 max)

84

3.5	Passive Solar Design	possible points	required input	required value	project input	project points
85	1	East-West Axis within 30 deg of True South	5	Y/N	Y	0
86	2	Properly Designed Overhangs	2	Y/N	Y	2
87	3	Unimpeded Solar Access	3	Y/N	Y	0
88	4	Sun Tempered Design	5	Y/N	Y	0
89	5	True Passive Solar Design	5	Y/N	Y	0
90	6	Unconditioned Garage	2	Y/N	Y	0

5	
2	
3	
5	
5	
2	added 9/20; not in right plac

92

3.6	Building Envelope	possible points	required input	required value	project input	project points
93	1	Advanced Sealing Package	4	Y/N	Y	0
94	1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	1
95	2	Energy Heels of 6" or more on Trusses	4	Y/N	Y	0
96	3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y	0
97	4	Insulated Headers (80% minimum R-10)	2	Y/N	Y	0
98	5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35	0
99	6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	4

4	
1	
4	
4	
2	
4	okay to combine rows?
4	

100

3.7	Mechanical Systems	possible points	required input	required value	project input	project points
101	1	Active Solar Space Heating System	2	Y/N	Y	0
102	2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW	0
103	3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW	51
104	4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	92%
105	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	n/a
106	6	Furnace Centrally Located	2	Y/N	Y	2
107	7	In Floor Radiant Heat Installed	4	Y/N	Y	4
108	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y	4
109	9	Energy Star House	4	Y/N	Y	0
110	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	3
111	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y	0
112	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y	0
113	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	4
114	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y	0

4	
1	
4	
4	
2	
4	okay to combine rows?
4	

pts per 9/20 meeting, sim solar rough-in

verify-base on 6000 sf, match ann BTU to I

pts per 9/20 meeting, sim solar rough-in

4	
4	
4	
3	
3	additions/remodels only
3	additions/remodels only
4	
5	

COLUMN RECONFIG 10/18/07

117

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0
122	5	Clothes Washer is front-loading	1	Y/N	Y	1
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	0
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	4
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y	0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y	0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y	0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y	0
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	0

ALSO CHANGE COLORS [BLUE=INPUT,

? refer to resource guide here?

? what are max points?

1	
1	
4	% value
1	
2	
2	
4	
2	

"RG"?

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19		0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38		0
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y	y	5
4	Insulate All Hot Water Pipes to all Locations to F	3	Y/N	Y	y	3
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y	y	4
6	Window Quilts/Ins Shades @ 75% of exterior wi	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y	2	0
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add/	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/re	5	Y/N	Y		0

? 2 pt increment due to formula per 9.20 meeting

5	
3	
4	
4	
3	
3	
2	
2	
2	
5	additions/remodels only
5	additions/remodels only
5	additions/remodels only

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y	y	4
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y		0
5	Non-asphalt based dampproofing	2	Y/N	Y		0
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

4	
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3	
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2	

3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0
3	Factory-built or panelized construction	4	Y/N	Y		0
4	Finger Jointed Plate Material	2	Y/N	Y		0
5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
6	Recycled Content Wall Sheathing	2	Y/N	Y		0
7	Finger jointed studs	3	Y/N	Y		0
8	Use of Locally-Produced Beams, Studs, Lumber	10 max	percent	1pt/10%		0
9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
10	Recycled Content Deck Material	3	Y/N	Y		0
11	Renewable (FSC or other) Deck Material	3	Y/N	Y	y	3
12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

? no top set to formula [yet]

4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	
2	
2	
2	
3	
10	1 per 10% (max 10)
3	
3	

3.12	Sub Floor	possible points	required input	required value	project input	project points
1	OSB in Sub Floor	3	Y/N	Y		0
2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

? 3 both/and?
? 1 both/and?

3	
1	

3.13	Windows & Doors	possible points	required input	required value	project input	project points
1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.30	12
2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
5	All doors made from FSC or other wood	2	Y/N	Y		0

per randy W research
?-(V)- 1/2 of line above per 9/20 meeting

4	
4	
2	

3.14	Roof	possible points	required input	required value	project input	project points
1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
2	Metal Roof with mininum 30 year life	3	Y/N	Y		0

3	
3	

3.15	Wall Finishes	possible points	required input	required value	project input	project points
1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y	4	0
4	Natural Clay	2	Y/N	Y		0
5	Locally produced trim	4 max	percent	1pt/25%		0

3	
3	
4	
2	
4	1 per 25% (max 4)

3.16	Floor Finishes	possible points	required input	required value	project input	project points
1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0

?-title 4 1 per 25% (max 4)

4	
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194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%	25%	1
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%		0
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%	25%	1
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y		0
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y		0

4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
4	1 per 25% (max 4)
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4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
4	1 per 25% (max 4)
2	
2	

207	3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
208	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
209	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
210	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%		0
211	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%		0
212	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y		0
213	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y		0
214	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y		0
215	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y		0
216	9	Eliminate ALL Particleboard inside building	2	Y/N	Y		0
217	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%		0
218	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%		0
219	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%		0
220	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%		0
221	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%		0
222	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%		0
223	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%		0
224	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	100%	4

4	1 per 25% (max 4)
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4	1 per 25% (max 4)

225	3.18	Water Efficiency	possible points	required input	required value	project input	project points
226	1	Dual-flush toilets installed	2	Y/N	Y		0
227	2	Drip irrigation installed	2	Y/N	Y		0
228	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	y	1
229	4	Graywater used for irrigation	2	Y/N	Y		0
230	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

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231	3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
232	1	Radon Mitigation System Installed	2	Y/N	Y		0
233	2	Rough-in for Radon System	1	Y/N	Y	y	1
234	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y	y	3
235	4	Install HEPA filter sized for whole house	1	Y/N	Y		0
236	5	Furnace and/or Dust-mounted Air Cleaner	1	Y/N	Y		0
237	6	Exhaust Fan in Garage	1	Y/N	Y		0
238	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
239	8	Range Hood Vented to Outside	1	Y/N	Y	y	1
240	9	No Attached Garage	1	Y/N	Y		0
241	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2		0

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2	1 per door/2 max

242	3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
243	1	Building is LEED Residential Certified	total reqd	Y/N	Y		0
244	2	Building is Built-Green Certified	total reqd	Y/N	Y		0
245	3	Building is Commissioned	total reqd	Y/N	Y		0

automatic pass=# reqd points
automatic pass=# reqd points
automatic pass=# reqd points

246	3.21	Innovation Points	possible points	required input	required value	project input	project points
247	1	Innovative Product	TBD				
248	2	Innovative Design	TBD				
249	3	New Technology	TBD				

250	3.22	total offset points for this project:					344
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sustainable building code checklist [december 4 draft]

high country conservation center www.hc3.org

editors notes:

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #5 [3403 sq ft , 2140 sf htd drive]	tracking #:	
location:	gibson residence	phone:	
applicant:	matthew stais architects	email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	46	yes
		3	basement wall	R value	19 min	19	yes
		4	crawl space wall insulation	R value	20 min	n/a	yes
		5	under slab	R value	18 min	18	yes
		6	slab edge	R value	18 min	18	yes
		7	floor over crawl space	R value	30 min	n/a	yes
1.2	exterior windows and glazed doors			U value	0.40 max	0.40	no
1.3	solid exterior doors			U value	0.50 max	0.50	no
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	92%	yes
		2	forced air furnace efficiency	efficiency	88% min	n/a	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	70%	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]			Y/N	Y	y	yes
1.7	owners manual [prior to C.O.]			Y/N	Y	y	yes

per adv group

2 secondary measures				required input	baseline value	project input	required points
2.1	new construction area [sq ft conditioned space]:			sq ft	3,000	3,403	8
2.2	remodel area [sq ft conditioned space]:			sq ft	0	0	0
2.3	% renewable/engineered lumber [roof]:			percent	60%	100%	(4)
2.4	% renewable/engineered lumber [floor]:			percent	80%	100%	(2)
2.5	% renewable/engineered lumber [beams & headers]:			percent	80%	100%	(2)
2.6	daylighting [# spaces that do not have natural light]:			qty without	2 pts each	4	8
2.7	air movement [reqd over 10 foot ceilings]			qty without	5 pts each		0
2.8	high window insulation [required above 10 feet AFF]			sq ft wdw	1 pt/10 sf	88	9
2.9	recycling center [reqd at kitchen and garage]			not provided	3 pts each		0
2.10	energy star rated appliances [all reqd to be rated]			non rated	3 pts each		0
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]			each	5 pts each	1	5
2.12	outdoor water amenities [hot tubs, spas, pools]			sq ft water	1 pt/10 sf		0
2.13	outdoor heated surfaces [drives, walks, patios]			sq ft	1 pt/50 sf	2,140	43
2.14	total required points						65

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

*** need rounding for reqd points

3 offset points		points
3.1	required secondary measures [from section 2]	65
3.2	offset points [total from continuation sheet]	66
3.3	total [must be zero minimum]	1

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet		possible points	required input	required value	project input	project points
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ed notes per carly's 9/11 sprdsht

note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.

[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8		0
3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y		0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y		0

?

3

 okay to combine rows?

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3	

67	3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y		0
68	4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3	
4	1 point/10 yards (4 max)

69

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
70	1	Deconstruction Plan submitted to HC3	4	Y/N	Y	0
71	2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
72	3	Metal Recycled	4 max	percent	1pt/25%	0
73	4	Concrete Recycled	4 max	percent	1pt/25%	0
74	5	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
75	6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

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4	1 per 25% (4 max)
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4	1 per 25% (4 max)

3.4	Construction Recycling	possible points	required input	required value	project input	project points
78	1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	0
79	2	Metal Recycled	4 max	percent	1pt/25%	0
80	3	Cardboard Recycled	4 max	percent	1pt/25%	0
81	4	Compaction (grinding or shredding)	4 max	percent	1pt/25%	0
82	5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%	0

4	1 per 25% (4 max)
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4	1 per 25% (4 max)

3.5	Passive Solar Design	possible points	required input	required value	project input	project points
85	1	East-West Axis within 30 deg of True South	5	Y/N	Y	5
86	2	Properly Designed Overhangs	2	Y/N	Y	2
87	3	Unimpeded Solar Access	3	Y/N	Y	3
88	4	Sun Tempered Design	5	Y/N	Y	0
89	5	True Passive Solar Design	5	Y/N	Y	0
90	6	Unconditioned Garage	2	Y/N	Y	0

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2	added 9/20; not in right plac

3.6	Building Envelope	possible points	required input	required value	project input	project points
93	1	Advanced Sealing Package	4	Y/N	Y	0
94	1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	1
95	2	Energy Heels of 6" or more on Trusses	4	Y/N	Y	0
96	3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y	0
97	4	Insulated Headers (80% minimum R-10)	2	Y/N	Y	0
98	5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35	0
99	6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	0

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4	okay to combine rows?
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3.7	Mechanical Systems	possible points	required input	required value	project input	project points
102	1	Active Solar Space Heating System	2	Y/N	Y	0
103	2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW	0
104	3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW	0
105	4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	4
106	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	4
107	6	Furnace Centrally Located	2	Y/N	Y	2
108	7	In Floor Radiant Heat Installed	4	Y/N	Y	4
109	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y	0
110	9	Energy Star House	4	Y/N	Y	0
111	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	0
112	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y	0
113	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y	0
114	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	4
115	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y	0

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pts per 9/20 meeting, sim solar rough-in

verify-base on 6000 sf, match ann BTU to I

pts per 9/20 meeting, sim solar rough-in

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3	additions/remodels only
3	additions/remodels only
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3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points
118	1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW	0
119	2	Wind-generated electric system, on site	unlimited	KW	5pts/KW	0
120	3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y	0
121	4	100% Renewable Energy from Utility or REC	5	Y/N	Y	0
122	5	Clothes Washer is front-loading	1	Y/N	Y	1
123	6	Clothes Line Installed Inside or Outside	1	Y/N	Y	0
124	7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	4
125	8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y	0
126	9	Automatic Daylight Dimming Controls	2	Y/N	Y	0
127	10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y	0
128	11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y	0
129	12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	0

COLUMN RECONFIG 10/18/07

ALSO CHANGE COLORS [BLUE=INPUT,

? refer to resource guide here?

? what are max points?

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4	% value
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"RG"?

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19	19	0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38	46	4
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y	y	5
4	Insulate All Hot Water Pipes to all Locations to F	3	Y/N	Y	y	3
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y	y	4
6	Window Quilts/Ins Shades @ 75% of exterior wi	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y		0
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add/	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/re	5	Y/N	Y		0

? 2 pt increment due to formula per 9.20 meeting

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5	additions/remodels only
5	additions/remodels only
5	additions/remodels only

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y		0
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y		0
5	Non-asphalt based dampproofing	2	Y/N	Y		0
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

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3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0
3	Factory-built or panelized construction	4	Y/N	Y		0
4	Finger Jointed Plate Material	2	Y/N	Y		0
5	Low-toxic OSB wall sheathing	2	Y/N	Y		0
6	Recycled Content Wall Sheathing	2	Y/N	Y		0
7	Finger jointed studs	3	Y/N	Y	y	3
8	Use of Locally-Produced Beams, Studs, Lumber	10 max	percent	1pt/10%		0
9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
10	Recycled Content Deck Material	3	Y/N	Y	y	3
11	Renewable (FSC or other) Deck Material	3	Y/N	Y	y	3
12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

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4	1 per 25% (max 4)
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no top set to formula [yet]	
10	1 per 10% (max 10)
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3.12	Sub Floor	possible points	required input	required value	project input	project points
1	OSB in Sub Floor	3	Y/N	Y		0
2	Low-Toxic OSB in Sub Floor	1	Y/N	Y		0

? 3 both/and?
? 1 both/and?

3.13	Windows & Doors	possible points	required input	required value	project input	project points
1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.40	0
2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
5	All doors made from FSC or other wood	2	Y/N	Y		0

per randy W research
?-(V)- 1/2 of line above per 9/20 meeting

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3.14	Roof	possible points	required input	required value	project input	project points
1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
2	Metal Roof with mininum 30 year life	3	Y/N	Y		0

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3.15	Wall Finishes	possible points	required input	required value	project input	project points
1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y	4	0
4	Natural Clay	2	Y/N	Y		0
5	Locally produced trim	4 max	percent	1pt/25%		0

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4	1 per 25% (max 4)

3.16	Floor Finishes	possible points	required input	required value	project input	project points
1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%		0

?-title 4 1 per 25% (max 4)

194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%		0
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%		0
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%		0
200	8	Natural Linoleum	4 max	% total flr	1pt/25%		0
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%	50%	2
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y		0
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y		0

4	1 per 25% (max 4)
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207	3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
208	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
209	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
210	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%		0
211	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%		0
212	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y		0
213	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y		0
214	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y		0
215	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y		0
216	9	Eliminate ALL Particleboard inside building	2	Y/N	Y		0
217	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%		0
218	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%		0
219	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%		0
220	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%		0
221	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%		0
222	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%		0
223	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%		0
224	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	50%	2

4	1 per 25% (max 4)
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4	1 per 25% (max 4)
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4	1 per 25% (max 4)
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4	1 per 25% (max 4)
4	1 per 25% (max 4)

225	3.18	Water Efficiency	possible points	required input	required value	project input	project points
226	1	Dual-flush toilets installed	2	Y/N	Y		0
227	2	Drip irrigation installed	2	Y/N	Y		0
228	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	y	1
229	4	Graywater used for irrigation	2	Y/N	Y		0
230	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

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231	3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
232	1	Radon Mitigation System Installed	2	Y/N	Y		0
233	2	Rough-in for Radon System	1	Y/N	Y	y	1
234	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y		0
235	4	Install HEPA filter sized for whole house	1	Y/N	Y		0
236	5	Furnace and/or Dust-mounted Air Cleaner	1	Y/N	Y		0
237	6	Exhaust Fan in Garage	1	Y/N	Y		0
238	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
239	8	Range Hood Vented to Outside	1	Y/N	Y	y	1
240	9	No Attached Garage	1	Y/N	Y		0
241	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2		0

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1	
3	
1	
1	
1	
1	
1	
1	
2	1 per door/2 max

242	3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
243	1	Building is LEED Residential Certified	total reqd	Y/N	Y		0
244	2	Building is Built-Green Certified	total reqd	Y/N	Y		0
245	3	Building is Commissioned	total reqd	Y/N	Y		0

automatic pass=# reqd points
automatic pass=# reqd points
automatic pass=# reqd points

246	3.21	Innovation Points	possible points	required input	required value	project input	project points
247	1	Innovative Product	TBD				
248	2	Innovative Design	TBD				
249	3	New Technology	TBD				

250	3.22	total offset points for this project:					66
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sustainable building code checklist

[janeury 10 draft]

high country conservation center

www.hc3.org

this checklist is meant to be used in conjunction with HC3 sustainable building resource guide [availbale at www.hc3.org] and sustainable building ordinance as adopted by . .

project:	test house #6 [8000 sf plus 1000 sf garage]	tracking #:	
location:	summit county	phone:	
applicant:	matthew stais architects	email:	

1 mandatory measures				required input	required value	project input	comply
1.1	insulation	1	exterior walls	R value	19 min	19	yes
		2	roof ceiling	R value	38 min	38	yes
		3	basement wall	R value	10 min	10	yes
		4	crawl space wall insulation	R value	10 min	n/a	yes
		5	under slab	R value	10 min	10	yes
		6	slab edge	R value	10 min	n/a	yes
		7	floor over crawl space	R value	19 min	n/a	yes
1.2	exterior windows and glazed doors		U value	0.40 max	0.35	yes	
1.3	solid exterior doors		U value	0.50 max	0.50	yes	
1.4	energy efficient heat source	1	boiler efficiency rating	efficiency	87% min	94%	yes
		2	forced air furnace efficiency	efficiency	88% min	n/a	yes
1.5	energy efficient water heater	1	gas fired water htr efficiency	efficiency	63% min	n/a	yes
		2	electric water htr efficiency	efficiency	93% min	n/a	yes
1.6	energy efficient controls [programmable thermostats]		Y/N	Y	y	yes	
1.7	owners manual [prior to C.O.]		Y/N	Y	y	yes	

2 secondary measures				required input	baseline value	project input	required points
2.1	new construction area [sq ft conditioned space]:		sq ft	3,000	9,000	120	
2.2	remodel area [sq ft conditioned space]:		sq ft	0	0	0	
2.3	% renewable/engineered lumber [roof]:		percent	60%	81%	(2)	
2.4	% renewable/engineered lumber [floor]:		percent	80%	101%	(2)	
2.5	% renewable/engineered lumber [beams & headers]:		percent	80%	61%	2	
2.6	daylighting [# spaces that do not have natural light]:		qty without	2 pts each	3	6	
2.7	air movement [reqd over 10 foot ceilings]		qty without	5 pts each	2	10	
2.8	high window insulation [required above 10 feet AFF]		sq ft wdw	1 pt/10 sf	50	5	
2.9	recycling center [reqd at kitchen and garage]		not provided	3 pts each		0	
2.10	energy star rated appliances [all reqd to be rated]		non rated	3 pts each		0	
2.11	outdoor gas fire pits/fireplaces/stoves [excl BBQ]		each	5 pts each		0	
2.12	outdoor water amenities [hot tubs, spas, pools]		sq ft water	1 pt/10 sf	70	7	
2.13	outdoor heated surfaces [drives, walks, patios]		sq ft	1 pt/50 sf	144	2	
2.14	total required points						148

3 offset points		points
3.1	required secondary measures [from section 2]	148
3.2	offset points [total from continuation sheet]	151
3.3	total [must be zero minimum]	3

4 signature block	
4.1	applicant's signature:
4.2	print name:
4.3	note: signature indicates the applicant will comply with stated requirements.

offset points continuation sheet		possible points	required input	required value	project input	project points
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note: refer to HC3 Sustainable Building Resource Guide for details and requirements for all offset points.

[ed note: this draft includes all options for offset points. Application form will contain blank lines for applicants to complete.]

3.1	Simple Footprint	possible points	required input	required value	project input	project points
1	Number of Building Corners	3 max	# corners	4-6-8	51	0

3.2	Land Use	possible points	required input	required value	project input	project points
1	Save and Reuse all Topsoil On Site	3	Y/N	Y	n	0
2	Save and Reuse all Excavated Fill On Site	3	Y/N	Y	n	0
3	All Site Rock Reclaimed and Used on Site	3	Y/N	Y	n	0
4	On Site Batch Plant/Crushed Rock Used on Site	4 max	# cu yds	1pt/10yds		0

3.3	Deconstruction Recycling	possible points	required input	required value	project input	project points
1	Deconstruction Plan submitted to HC3	4	Y/N	Y	n/a	0
2	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%		0
3	Metal Recycled	4 max	percent	1pt/25%		0
4	Concrete Recycled	4 max	percent	1pt/25%		0
5	Compaction (grinding or shredding)	4 max	percent	1pt/25%		0
6	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

3.4	Construction Recycling	possible points	required input	required value	project input	project points
1	Wood Recycled or Donated to Reuse Center	4 max	percent	1pt/25%	50%	2
2	Metal Recycled	4 max	percent	1pt/25%	50%	2
3	Cardboard Recycled	4 max	percent	1pt/25%	50%	2
4	Compaction (grinding or shredding)	4 max	percent	1pt/25%	50%	2
5	Fixtures/Materials Donated to Reuse Center	4 max	percent	1pt/25%		0

3.5	Passive Solar Design	possible points	required input	required value	project input	project points
1	East-West Axis within 30 deg of True South	5	Y/N	Y	y	5
2	Properly Designed Overhangs	2	Y/N	Y	y	2
3	Unimpeded Solar Access	3	Y/N	Y		0
4	Sun Tempered Design	5	Y/N	Y	y	5
5	True Passive Solar Design	5	Y/N	Y	y	5
6	Unconditioned Garage	2	Y/N	Y		0

3.6	Building Envelope	possible points	required input	required value	project input	project points
1	Advanced Sealing Package	4	Y/N	Y	y	4
1	Sill Plate Sealed with Foam Sill Sealer	1	Y/N	Y	y	1
2	Energy heels 6" or greater on trusses	4	Y/N	Y	y	4
3	Insulated Exterior Wall Sheathing (R-3.5 or better)	4	Y/N	Y		0
4	Insulated Headers (80% minimum R-10)	2	Y/N	Y	y	2
5	Blower Door Test 0.45 ACH or less	8 max	ACH	.45-.40-.35		0
6	Unvented Crawlspace per ASHRAE 23.11	4	Y/N	Y	y	4

3.7	Mechanical Systems	possible points	required input	required value	project input	project points
1	Active Solar Space Heating System	2	Y/N	Y		0
2	Active Solar Domestic Hot Water System	unlimited	KW	5pts/KW		0
3	Ground Source Heating/Cooling System	unlimited	KW	5pts/KW		0
4	High Efficiency Boiler (91% or greater)	4	efficiency	91%	94%	4

107	5	High Efficiency Forced Air... (92% or greater)	4	efficiency	92%	XXX	XXX
108	6	Furnace Centrally Located	2	Y/N	Y		0
109	7	In Floor Radiant Heat Installed	4	Y/N	Y	y	4
110	8	HVAC Sizing, Balancing, & Sealing	4	Y/N	Y		0
111	9	Energy Star House	4	Y/N	Y		0
112	10	Air to Air Heat Exchanger System Installed	3	Y/N	Y	y	3
113	11	Convert Electric Heat to Gas [add/rem only]	3	Y/N	Y		0
114	12	Replace Elec HW Tank w/Gas [add/rem only]	3	Y/N	Y		0
115	13	Sidearm Water Heater Served by the Boiler	4	Y/N	Y	y	4
116	14	South Roof Area Designed for Solar Collector &	5	Y/N	Y	y	5

3.8	Electrical/Lighting/Appliances	possible points	required input	required value	project input	project points
1	Solar-generated [PV] electric system, on site	unlimited	KW	5pts/KW		0
2	Wind-generated electric system, on site	unlimited	KW	5pts/KW		0
3	Rough-in for Solar PV per Resource Guide	2	Y/N	Y		0
4	100% Renewable Energy from Utility or REC	5	Y/N	Y	y	5
5	Clothes Washer is front-loading	1	Y/N	Y	y	1
6	Clothes Line Installed Inside or Outside	1	Y/N	Y	y	1
7	Compact Fluorescent or LED Bulbs per RG	4	Y/N	Y	y	4
8	Occupancy/Motion Sensor Controls Installed	1	Y/N	Y		0
9	Automatic Daylight Dimming Controls	2	Y/N	Y		0
10	Motion Sensor or Timers on Exterior Lights	2	Y/N	Y	y	2
11	No Recessed Lights in an exterior insulated ceiling	4	Y/N	Y		0
12	Air-Loc, IC rated recessed light fixtures	2	Y/N	Y	y	2

3.9	Insulation	possible points	required input	required value	project input	project points
1	add'l wall insulation [R value; 2 pt/2R over 19]	10 max	R value	19		0
2	add'l roof insulation [R value; 1 pt/2R over 38]	5 max	R value	38		0
3	Blow or Sprayed Insulation in 50% or more of all	5	Y/N	Y	y	5
4	Insulate All Hot Water Pipes to all Locations to	3	Y/N	Y	y	3
5	Insulate All HW Pipes in Unconditioned space to	4	Y/N	Y	y	4
6	Window Quilts/Ins Shades @ 75% of exterior w	4	Y/N	Y		0
7	Wall Insulation is 70% recycled-content materia	3	Y/N	Y		0
8	Roof Insulation is 70% recycled-content materia	3	Y/N	Y		0
9	Formaldehyde-free insulation	2	Y/N	Y		0
10	Non-toxic water-based spray on insulation	2	Y/N	Y	y	2
11	HCFC-free rigid foam insulation	2	Y/N	Y		0
12	Existing Clg Insulated to R-38 or capacity [add/r	5	Y/N	Y		0
13	Insulate Existing Walls per resource guide [add	5	Y/N	Y		0
14	Change single-pane wdws U-0.40 or less [add/r	5	Y/N	Y		0

3.10	Foundation	possible points	required input	required value	project input	project points
1	Insulated Concrete Foundation System Used	4	Y/N	Y	y	4
2	Recycled Content Insulated Concrete Foundatio	4	Y/N	Y		0
3	Frost-protected shallow foundation	4	Y/N	Y		0
4	Western coal fly ash concrete	3	Y/N	Y	y	3
5	Non-asphalt based dampproofing	2	Y/N	Y	y	2
6	Non-solvent based foundation waterproofing	2	Y/N	Y		0

3.11	Structural Frame	possible points	required input	required value	project input	project points
1	Structural Insulated Panels (SIPS) for walls	4 max	percent	1pt/25%		0
2	Structural Insulated Panels (SIPS) for roofs	4 max	percent	1pt/25%		0

159	3	Factory-built or panelized construction	4	Y/N	Y		0
160	4	Finger Jointed Plate Material	2	Y/N	Y		0
161	5	Low-toxic OSB wall sheathing	2	Y/N	Y	y	2
162	6	Recycled Content Wall Sheathing	2	Y/N	Y		0
163	7	Finger jointed studs	3	Y/N	Y	y	3
164	8	Use of Locally-Produced Beams, Studs, Lumbe	10 max	percent	1pt/10%		0
165	9	Reclaimed Structural Materials	10 max	percent	1pt/10%		0
166	10	Recycled Content Deck Material	3	Y/N	Y	y	3
167	11	Renewable (FSC or other) Deck Material	3	Y/N	Y		0
168	12	75% Salvaged or Reclaimed Deck Material	3	Y/N	Y		0

170	3.12	Sub Floor	possible points	required input	required value	project input	project points
171	1	OSB in Sub Floor	3	Y/N	Y	y	3
172	2	Low-Toxic OSB in Sub Floor	1	Y/N	Y	y	1

174	3.13	Windows & Doors	possible points	required input	required value	project input	project points
175	1	windows/patio doors: lower U value [6 pts/.05 < 0.40]	24 max	U value	0.40	0.35	6
176	2	exterior swing doors: lower U value [3 pts/.05 < 0.50]	12 max	U value	0.50	0.50	0
177	3	Salvaged/reclaimed doors (75% total doors)	4	Y/N	Y		0
178	4	Salvaged, reclaimed windows (50% total)	4	Y/N	Y		0
179	5	All doors made from FSC or other wood	2	Y/N	Y		0

181	3.14	Roof	possible points	required input	required value	project input	project points
182	1	Recycled Content Matl, min 30-year life	3	Y/N	Y		0
183	2	Metal Roof with minumum 30 year life	3	Y/N	Y		0

185	3.15	Wall Finishes	possible points	required input	required value	project input	project points
186	1	Fiber cement siding >=50% of exterior wall	3	Y/N	Y		0
187	2	Recycled/Reclaimed Wood Siding (>=50%)	3	Y/N	Y		0
188	3	Low VOC/Low Toxic Paint/Stain (>=75%)	4	Y/N	Y		0
189	4	Natural Clay	2	Y/N	Y		0
190	5	Locally produced trim	4 max	percent	1pt/25%		0

192	3.16	Floor Finishes	possible points	required input	required value	project input	project points
193	1	Wood Flooring: Reused/Reclaimed/Remilled	4 max	% total flr	1pt/25%	50%	2
194	2	Wood Flooring from FSC or other wood	4 max	% total flr	1pt/25%		0
195	3	Ceramic Tile is Recycled Content	4 max	% total flr	1pt/25%	50%	2
196	4	Ceramic Tile is Reclaimed/Salvaged	4 max	% total flr	1pt/25%		0
197	5	Bamboo Flooring	4 max	% total flr	1pt/25%		0
198	6	Cork Flooring	4 max	% total flr	1pt/25%		0
199	7	Natural Fiber Carpet	4 max	% total flr	1pt/25%	50%	2
200	8	Natural Linoleum	4 max	% total flr	1pt/25%		0
201	9	Recycled-Content Carpet	4 max	% total flr	1pt/25%		0
202	10	Recycled-Content/Natural-Fiber Carpet Pad	4 max	% total flr	1pt/25%		0
203	11	Carpet Squares in High Traffic Areas	4 max	% total flr	1pt/25%		0
204	12	Stone, Granite or Concrete Floors	4 max	% total flr	1pt/25%	25%	1
205	13	Solvent-free/Low-toxic Construction Adhesive	2	Y/N	Y		0
206	14	Solvent-free/Low-Toxic Wood Finishes	2	Y/N	Y	y	2

208	3.17	Cabinetry & Other Finishes	possible points	required input	required value	project input	project points
209	1	Cabinets: Recycled Wood Particleboard	4 max	% total	1pt/25%		0

210	2	Shelving/Ctrs: Recycled Wood Particleboard	4 max	% total	1pt/25%		0
211	3	Cabinets: Agricultural Waste Particleboard	4 max	% total	1pt/25%		0
212	4	Shelving/Ctrs: Ag Waste Particleboard	4 max	% total	1pt/25%		0
213	5	Cabinets: Formaldehyde-free Particlebd/MDF	2	Y/N	Y	y	2
214	6	Shelving/Ctrs: Formaldehyde-free Ptbd/MDF	2	Y/N	Y	y	2
215	7	Exposed Particleboard sealed [water-based]	1	Y/N	Y	y	1
216	8	Solvent-free or low-toxic woodwork finishes	2	Y/N	Y	y	2
217	9	Eliminate ALL Particleboard inside building	2	Y/N	Y		0
218	10	Cabinets Made from Renewable Fiber	4 max	% total	1pt/25%		0
219	11	Cabinets Made from FSC or other wood	4 max	% total	1pt/25%	y	4
220	12	Countertops Made from Renewable Fiber	4 max	% total	1pt/25%		0
221	13	Reclaimed Tiles on Countertops and Walls	4 max	% total	1pt/25%		0
222	14	Recycled-Content Tiles on Ctrtops and Walls	4 max	% total	1pt/25%	25%	1
223	15	Locally-sourced Wood Used in Cabts/Finishes	4 max	% total	1pt/25%		0
224	16	Reused/Reclaimed Cabinets and/or Fixtures	4 max	% total	1pt/25%		0
225	17	Stone, Granite, or Concrete Countertops	4 max	% total	1pt/25%	25%	1

226

227	3.18	Water Efficiency	possible points	required input	required value	project input	project points
228	1	Dual-flush toilets installed	2	Y/N	Y		0
229	2	Drip irrigation installed	2	Y/N	Y	y	2
230	3	Eng/Veg swales to filter stormwater runoff	1	Y/N	Y	y	1
231	4	Graywater used for irrigation	2	Y/N	Y		0
232	5	Native Plants Salvaged & Replanted On Site	2	Y/N	Y		0

233

234	3.19	Indoor Environmental Quality	possible points	required input	required value	project input	project points
235	1	Radon Mitigation System Installed	2	Y/N	Y	y	2
236	2	Rough-in for Radon System	1	Y/N	Y	y	1
237	3	Mechanical Ventilation Installed (15 cfm/person)	3	Y/N	Y	y	3
238	4	Install HEPA filter sized for whole house	1	Y/N	Y	y	1
239	5	Furnace and/or Duct-mounted Air Cleaner	1	Y/N	Y		0
240	6	Exhaust Fan in Garage	1	Y/N	Y		0
241	7	Carbon Monoxide Detector in Mech Room	1	Y/N	Y		0
242	8	Range Hood Vented to Outside	1	Y/N	Y	y	1
243	9	No Attached Garage	1	Y/N	Y		0
244	10	Permanent Mat/Snowgate at Main Door	2 max	quantity	0-1-2	2	2

245

246	3.20	Other Building Certification Programs	possible points	required input	required value	project input	project points
247	1	Building is LEED Residential Certified	total reqd	Y/N	Y		0
248	2	Building is Built-Green Certified	total reqd	Y/N	Y		0
249	3	Building is Commissioned	total reqd	Y/N	Y		0

250

251	3.21	Innovation Points	possible points	required input	required value	project input	project points
252	1	Innovative Product	TBD				
253	2	Innovative Design	TBD				
254	3	New Technology	TBD				

255

256	3.22	total offset points for this project:					151
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