Instructions for Worksheet (reference AEGB Commercial Guidebook)

1. Verify completion of all 8 measures of the Basic Requirements to qualify for any Rating by indicating "yes".
2. Signify intent of additional green measures by entering the available points in the Yes, ? (maybe), or No column.

AUSTIN ENERGY GREEN BUILDING

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Basic Requirements										
1	Building Systems Commissioning (Cx)	1. OPR & BOD 2. CX requirements in CD 3. Cx plan 4. verification 5. O&M documentation & training 6. Cx report. peci.org/CxTechnical/Tools_Guides/guides.htm		Req'd							
2	Storm Water Runoff & Water Quality Control	Meet current city drainage and water quality standards and ordinances for the project site watershed. ci.austin.tx.us/watershed/ordinance_map.htm		Req'd							
3	Roofing to Reduce Heat Island	Meet current City of Austin Energy Code roofing requirements with vegetated or reflective roofs (<2:12 pitch: SR ≥ 0.70 or SRI ≥ 78, ≥2:12 pitch: SR ≥ 0.35 or SRI ≥ 29) energystar.gov/ia/products/prod_lists/roof_prods_prod_list.pdf		Req'd							
4	Building Energy Use Efficiency	Exceed current City of Austin Energy Code Building Interior Lighting and Envelope requirements by 15% each or exceed code building performance model by 15%. energycodes.gov/comcheck/		Req'd							
5	Building Water Use Reduction	Reduce planned indoor potable water consumption below the baseline (ANSI/ASME standards & City of Austin Ordinance) by at least 10%. Ref: Water Use Reduction Calculator ci.austin.tx.us/watercon/		Req'd							
6	Low VOC Interior Paints and Coatings	Meet standards for Green Seal GS-11 for paints, primers, and anti-corrosive coatings and SCAQMD Rule 1113 for all other coatings applied on-site to building interior. Ref: Low Emitting Calculator greenseal.org/certification/standards/paints_and_coatings.pdf aqmd.gov/rules/reg/reg11/r1113.pdf		Req'd							
7	Storage and Collection of Recyclables	Provide appropriately sized, easily accessible area dedicated to the separation, collection and storage of materials for recycling, including at minimum, the top two (four for multi-family >100 units) identified recyclable waste stream items. ci.austin.tx.us/sws/recyclerules.htm		Req'd							
8	Construction Waste Management	Recycle and/or salvage at least 50% by weight non-hazardous construction & demolition waste excluding excavated soil & stone. Ref: Construction Waste Calculator austinenergy.com/Energy%20Efficiency/Programs/Green%20Building/Sourcebook/constructionWasteManagement.htm		Req'd							
	Basic Requirements NOT ACHIEVED										
	Team										
1	Integrated Project Design Team & Sustainable Goals	1. Choose team members early in design phase. 2. Document sustainability goals. 3. Hold sustainability team meetings during each phase of design through construction to track progress. 4. Include sustainability goals in specifications. 5. Incorporate sustainability features, proposed certification into pre-construction meeting. wbdg.org/index.php		1							

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Total Points - Team			**1**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Site										
1a	Site Selection - Environmental Sensitivity	Site is not located in the Drinking Water Protected Zone. Site is not a greenfield.		2							
1b	Site Selection - Desired Development Area	Site located within the Urban Watershed Desired Development Zone. Coagis1.ci.austin.tx.us/website/COAViewer dev/viewer.htm		4							
2	Diverse, Walkable Communities	Building(s) connects with neighboring properties with pedestrian and/or bicycle only paths (shading preferred) that are separate from vehicular traffic. Project includes or is located within 1/2 mile walking distance of residences and at least 10 Basic Services which are accessible via a safe route intended for use by pedestrians that does not require crossing a road more than 5 lanes wide or 35 miles per hour. ci.austin.tx.us/development/downloads/final.pdf walkscore.com/index.shtml oregon.gov/ODOT/HWY/BIKEPED/planproc.shtml		1							
3	Brownfield Redevelopment	Rehabilitate contaminated site. epa.gov/region09/waste/sfund/prg/index.html		1							
4	Site Characteristics Study	Document existing site characteristics, map all potential natural hazards (including traffic and pollution sources). Plan to maintain or restore existing site features. Site building to minimize impact and to utilize natural characteristics.		1							
5a	Transportation Alternatives - Public Transportation	Locate building within 1/4 mile of at least 2 bus stops or within 1/2 mile of a rail stop (or future rail stop with proposed completion within 5 years). capmetro.org/riding/trip_info.asp		1							
5b	Transportation Alternatives - Bicycle Use	Bicycle securing areas and shower/changing facilities for 10% or more of the building occupants. One bicycle parking space per rider, one shower per 25 riders, temporary lockers. Safe routing on property. www.ci.austin.tx.us/bicycle/		1							
5c	Transportation Alternatives - Parking Capacity	Parking does not exceed minimum local zoning requirements. Preferred parking for carpools for 5% (min.) of building occupants. www.amlegal.com/austin_nxt/gateway.dll/Texas/austin/title25landdevelopment/chapter25-6transportation?f=templates$fn=altmain-nf.htm$3.0#JD_25-6-471		1							
6a	Site Development - Protect or Restore Open Areas	Greenfield sites: Limit disturbance to 40 ft beyond building perimeter; 10 ft beyond walkways, patios, surface parking; 15 ft beyond roadways & utility trenches; 25 feet beyond any pervious areas that require additional staging. Previously developed sites: At least 50% of the post-development open area (site area minus building footprint) is vegetated using native/adapted plants. Vegetated roof areas may be included in open area calculations, if plants meet the definition of native/adapted.		1							
6b	Site Development - Maximize Vegetated Open Area	Provide vegetated open area* using native/adapted plants equal to 20% of the project site area. *May include vegetated roof areas, if plants meet the definition of native/adapted. ci.austin.tx.us/growgreen/plants.htm		1							

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
7a	Additional Heat Island Reduction - Site	1. 50% of site hardscape any combination of: Vegetative open grid paving (at least 50% pervious), paving materials with SRI 29 min., vegetative shading planted over non-roof impervious surfaces within 5 years. OR 2. Locate 50% of parking underground or in structured parking with top deck surface of SRI 29 min. eetd.lbl.gov/HeatIsland/		1							
7b	Additional Heat Island Reduction - Roofing	Install any combination of vegetated and reflective roofs (<2:12 pitch: SR ≥ 0.75 or SRI ≥ 85, ≥2:12 pitch: SR ≥ 0.45 or SRI ≥ 35) coolroofs.org/aboutthecrrc_owners.html		1							
8	Light Pollution Reduction	Exterior lighting meets COA Code-Chpt.25-2, E, Art. 2.5; IESNA RP-33 Light Trespass; and Illuminance levels at specific facilities. ci.austin.tx.us/development/downloads/final.pdf		1							
9	Integrated Pest Management (IPM)	Implement IPM plan to minimize environmental impact and use least toxic practices for site and building management. ci.austin.tx.us/watershed/ipm.htm		1							
10	Outdoor Environmental Quality	Shaded seating for minimum of 10% of building occupants. http://solardat.uoregon.edu/SunChartProgram.html		1							
	Total Points - Site			**19**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Energy										
1	Additional Energy Use Efficiency	Exceed current code building by 17.5% or better using the ASHRAE 90.1-2004 App. G Performance Rating Method. **Point Allocation:** 17.5% = 1 pt, 20% = 2 pts, 22.5% = 3 pts, 25% = 4 pts, 27.5% = 5pts, 30% = 6 pts, 32.5% = 7 pts, 35% = 8 pts, 37.5% = 9 pts, 40% = 10 pts, 42.5% = 11 pts, 45% = 12 pts. realread.com/prst/pageview/browse.cgi?book=1931862664		12							
2	Green Energy	GreenChoice® commercial agreement. If GreenChoice® unavailable, 2-year contract for Texas or Green-e certified National RECs for 100% of building's annual electricity use. austinenergy.com/Energy%20Efficiency/Programs/Green%20Choice/		1							
3a	Renewables 2%	On-site renewable energy system for 2% of energy needs. PV and solar thermal meet performance requirements of AE Rebate programs. nrel.gov/		1							
3b	Renewables 5%	On-site renewable energy system for 5% of energy needs and AE rebate program performance requirements. austinenergy.com/Energy%20Efficiency/Programs/Rebates/Solar%20Rebates/guidelines.htm		1							
4	Additional Commissioning (Cx)	1. Cx agent design review < 50% CD's. 2. Demonstrate bldg. systems operate in accordance w/ OPR & BOD. 3. Demonstrate bldg. structure & envelope performance in accordance w/ OPR & BOD. 4. Seasonal re-Cx through warranty period. 5. Cx report peci.org/CxTechnical/Tools_Guides/guides.html		1							
5	District Cooling	Tie into an Austin Energy district cooling loop. austinenergy.com/Commercial/Other%20Services/On-Site%20Energy%20Systems/districtcooling.htm		1							
	Total Points - Energy			**17**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Water										
1a	Irrigation Water Reduction 50%	Use high efficiency irrigation, rainwater catchment, and/or climate appropriate plant materials. Reduce by 50% over baseline. Ref: Irrigation Water Use Reduction and Rainwater & Condensate Calculators ci.austin.tx.us/watercon/		1							
1b	Irrigation Water Reduction 75%	Reduce by 75% over baseline. Ref: Irrigation Water Use Reduction and Rainwater & Condensate Calculators www.ci.austin.tx.us/growgreen/		1							
1c	Irrigation Water Reduction 100%	Reduce by 100% over baseline. Ref: Irrigation Water Use Reduction and Rainwater & Condensate Calculators		1							
2a	Indoor Potable Water Use Reduction 15%	Use low-flow fixtures. Reduce by 15% over baseline (ANSI/ASME standards & City of Austin Ordinance). Ref: Building Water Use Reduction Calculator ci.austin.tx.us/watercon/		1							
2b	Indoor Potable Water Use Reduction 20%	Reduce by 20% over baseline. Ref: Building Water Use Reduction Calculator energystar.gov/index.cfm?c=appliances.pr_appliances		1							
2c	Indoor Potable Water Use Reduction 25%	Reduce by 25% over baseline. Ref: Building Water Use Reduction Calculator www.epa.gov/watersense		1							
2d	Indoor Potable Water Use Reduction 30%	Reduce by 30% over baseline. Ref: Building Water Use Reduction Calculator		1							
3	Stormwater Management	1. Manage by infiltration 25% of the water quality volume (WQV) for sites ≥ 50% existing IC **OR** 2. 50% of the WQV for sites < 50% existing IC. Ref. ECM 1.6.7 www.amlegal.com/austin_nxt2/gateway.dll?f=templates&fn=default.htm&vid=amlegal:austin_environment		1							
	Total Points - Water			**8**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Indoor Environmental Quality (IEQ)										
1	Indoor Air Quality Monitoring	Install permanent carbon dioxide monitoring system that provides feedback in a useable form to make adjustments for ventilation system. Commission all systems to the preferred parameters for optimal performance. epa.gov/iaq/index.html		1							
2	Indoor Chemical & Pollutant Sources	Identify and ventilate areas of point source pollutants (i.e. copy machines, print shops, janitors closets, labs) 1. Provide ventilation directly to the outside of the building. 2. Construct a full height deck to deck partition or a hard lid ceiling enclosure between these areas and occupied spaces. 3. Operate at negative pressure relative to surrounding areas under all operating conditions by testing. www.epa.gov/iaq/largebldgs/i-beam/index.html		1							
3	Daylighting	Provide adequate daylighting which minimize glare and integrate daylighting systems with electric lighting systems and controls. www1.eere.energy.gov/buildings/commercial/lighting.html		1							
4	Views to Outside	Glazing systems and interior partitions allow for a minimum of 75% of regularly occupied spaces a view of vision glazing (between 2'-6" and 7'-6" above finish floor) and a view of the outdoors.		1							
5	Thermal Comfort	Install mechanical systems (thermal, ventilation and dehumidification) and controls to provide thermal comfort for all operating conditions according to ASHRAE 55-2004.		1							
6	Individual Controllability	Install and commission systems for individual occupant controllability for thermal comfort for 75% of the occupants. newbuildings.org/		1							
7a	Low-Emitting Materials - Adhesives and Sealants	All sealants and adhesives applied on-site to building interior meet South Coast Air Quality Management District (SCAQMD) Rule 1168. Ref: Low Emitting Calculator aqmd.gov/rules/reg/reg11/r1168.pdf		1							
7b	Low-Emitting Materials - Flooring Systems	All flooring systems meet SCAQMD Rule 1113 and 1168. All installed carpet meets CRI Green Label Plus min. std. All carpet pads meet CRI Green Label min. std. All resilient flooring is FloorScore certified. All engineered wood and laminate flooring contain no added urea-formaldehyde. Ref: Low Emitting Calculator carpet-rug.org/drill_down_2.cfm?page=8&sub=17&requesttimeout=350 scscertified.com/iaq/floorscore 1.html		1							
7c	Low-Emitting Materials - Composite Wood & Agrifiber Products	All installed composite wood and agrifiber products have no added urea-formaldehyde. Ref: Low Emitting Calculator greenseal.org/resources/reports/CGR_particleboard.pdf		1							

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
7d	Low-Emitting Materials - Insulation	All installed insulation (excluding piping) contains no added urea-formaldehyde. Ref: Low Emitting Calculator www.chps.net/manual/lem_table.htm		1							

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
8	Moisture Prevention	1. No vinyl wall coverings or vapor barriers for surface treatments on interior of exterior wall (also include in tenant agreements.) 2. Install building envelope drainage plane systems, including flashing and overhang systems. 3. Document building will be pressurized.		1							
9	Acoustic Quality	1. Define appropriate background sound levels, reverberation decay times, speech intelligibility, & sound isolation. Identify spaces where impact noises are likely & address potential problems. 2. Mechanical & duct systems designed to meet guideline RC, NC or NCB of ASHRAE Applications Design Guidelines for HVAC Sound & Vibration Control Chpt. 3. Appropriate vibration isolation for mounted equipment. 4. Select non-"tonal" equipment. 5. Specify surface finishes and/or masking systems to provide appropriate sound intelligibility & privacy. 6. Specify partitions, ceilings, floor/ceiling assemblies, building layouts, & vestibules to provide adequate sound isolation between spaces. 7. Mitigate intermittent noise sources, e.g. footfall & loading dock noise. www.acoustics.com/		1							
10	Outdoor Pollutant Sources	Entrances, operable windows, and fresh air intakes shall be located a minimum 30 feet away from designated smoking areas & air intakes shall meet the min. separation distance requirements of ASHRAE STD. 62.1-2004, Table 5-1. Install signage designating smoking and no-smoking areas. Install entryway systems (grills, grates, mats) at least 6 feet long. Mitigate air borne contaminates from outdoor air pollutant sources. www.epa.gov/iaq/largebldgs/i-beam/text/		1							
11	Construction Indoor Air Quality	Implement SMACNA Guidelines for Occupied Buildings Under Construction, or similar plan. Plan should include key areas of IAQ protection: Scheduling, Source Control, HVAC Protection, Pathway Interruption and Housekeeping. Protect absorptive materials (stored on-site or installed) from moisture damage. For permanently installed air handlers used during construction, use MERV 8 (min.) filters in each return grill and replace all filters immediately prior to occupancy. www.smacna.org/bookstore/		1							
	Total Points - Indoor Environmental Quality			**14**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Materials and Resources										
1	Additional Construction Waste Management	Recycle or Salvage at least 75% by weight of construction demolition and land clearing debris. Ref: Const. Waste Calculator austinenergy.com/Energy%20Efficiency/Programs/Green%20Building/Sourcebook/constructionWasteManagement.htm		1							
2a	Building Reuse - Envelope and Structure 40%	Incorporate at least 40% (surface area) of existing building envelope and structure. Ref: Bldg. Reuse Calculator		1							
2aa	Building Reuse - Envelope and Structure 80%	Incorporate at least 80% (surface area) of existing building envelope and structure. Ref: Bldg. Reuse Calculator		1							
2b	Building Reuse - Interior Non-Structural Elements	Incorporate at least 50% (surface area) of interior non-structural elements. Ref: Bldg. Reuse Calculator		1							
3a	Salvaged Materials 5%	Use salvaged or refurbished materials for 5% ($ value) of project building materials. Ref: Bldg. Materials Calculator ubma.org/		1							
3b	Salvaged Materials 10%	Use salvaged or refurbished materials for 10% ($ value) of project building materials. Ref: Bldg. Materials Calculator re-store.com/		1							
4a	Recycled Content 10%	Use Recycle Content materials for 10% ($ value) of project building materials. Recycled Content = 100% post-consumer + 50% pre-consumer Ref: Bldg. Materials Calculator epa.gov/cpg/		1							
4b	Recycled Content 20%	20% ($ value) of project building materials have Recycled Content. Ref: Bldg. Materials Calculator www.cleantexas.org/index.cfm?fuseaction=public.resources_texasrecycle		1							
5a	Texas Sourced Materials 30%	Building materials and products extracted or manufactured regionally within Texas for at least: 30% ($ value) of project building materials. Ref: Bldg. Materials Calculator cleantexas.org/index.cfm?fuseaction=public.resources_texasrecycle		1							
5b	Texas Sourced Materials 50%	50% ($ value) of project building materials meet requirements above. Ref: Bldg. Materials Calculator austinenergy.com/Energy%20Efficiency/Programs/Green%20Building/Sourcebook/materials.htm		1							
6	Certified Wood	Use Certified Wood (FSC) for at least 50% ($ value) of project wood-based materials. Ref: Certified Wood Calculator certifiedwoodsearch.org		1							
7	Low VOC Paints, Coatings, Adhesives, Sealants	Meet standards for GS-11 for all paints, primers, and anti-corrosive coatings and SCAQMD Rule 1113 for all other coatings and SCAQMD 1168 for all adhesives and sealants applied on-site to building exterior. Ref: Low Emitting Calculator greenseal.org/certification/standards/paints_and_coatings.pdf aqmd.gov/rules/reg/reg11/r1113.pdf aqmd.gov/rules/reg/reg11/r1168.pdf		1							
	Total Points - Materials & Resources			**12**	**0**	**0**	**0**	**0**	**0**		

	Category	Requirements	Web Link	Points	Design Team			AEGB		Strategies / Comments	Team Member
					Yes	?	No	√ 'd	Final		
	Education										
1	Educational Outreach	Provide at least 2 services to include: comprehensive signage, case study, and/or outreach program (ex. guided tours).		1							
	Total Points - Education			**1**	**0**	**0**	**0**	**0**	**0**		
	Innovation										
1				1							
2				1							
3				1							
4				1							
5				1							
	Total Points - Innovation			**5**	**0**	**0**	**0**	**0**	**0**		
	Total Points - Voluntary Measures			**77**	**0**	0	0	0	**0**	**BASIC REQUIREMENTS NOT ACHIEVED.**	

Point Requirements for Star Ratings

Design Team goal is 0 points equating to a 1 Star Rating.

★	Basic Requirements
★★	30-36 points
★★★	37-43 points
★★★★	44-58 points
★★★★★	59 or more points