More information can be found in the associated text

Number	Links	Description
		Clearly define construction limits from building perimeter, roads, utilities and stormwater detention facilities.
		A. Within 40 feet of building perimeter, 5 feet from roads, walks and utility trenches; and 25 feet beyond storm water detention facilities and playing fields.
		Baseline: √ Target: n/a
S.1.1.B		***Avoid construction on land within a wildlife corridor such as a wetland or stream buffer***
	Seattle Municipal Code Title 25	B. See Seattle Municipal Code for specific requirements on allowable distance and buffer relative to project size.
		Baseline: meet code regardless of project size Target: Do not disturb
S.1.1.C		***Maximize vegetated open space on site including pedestrian hardscape and/or recreational amenities that are vegetated***
		C. Native/adapted or drought tolerant plants are encouraged.
		Baseline: 25% of site area (excluding bldg footprint) Target: 50% of site area (excluding bldg footprint)
S.1.1.D		***Limit use of turf grass to areas where required for programmatic reasons like playfields***
		D. Where turf is required, use a drought tolerant and low maintenance seed mix.
		Baseline: √ Target: n/a
S.1.1.E		***Do not disturb slopes greater than 15%.***
		E. Do not disturb slopes greater than 15%.
		Baseline: √ Target: n/a
S.1.1.F		***Protect existing or restore native or adapted vegetation on previously disturbed sites***
		F. Vegetated roof areas may be included. Similar to S.3.1.B. which focuses on plant selection for new landscape work and W.4.1.C. which focuses on irrigation water reduction.
		Baseline: 25% of site area (excluding bldg footprint) Target: 30% of site area (excluding bldg footprint)
S.1.1.G		***Remediate environmentally hazardous material in soil and/or building***
	Asbestos NESHAP	G. Remediate whether or not required by code.
	EPA Asbestos Overview	Baseline: Per NESHAP (National Emission Standard for Hazardous Air Pollutants) and AHERA (Asbestos Hazard Emergency Response Act)
	AHERA	Target: n/a
S.2.1.A		***Design to avoid bird collisions by using fritted glass, an auto shutoff of night time lighting, or by avoiding highly reflective glass***
		A. Also consider temporary measures, such as netting, bird decals and streamers, in problem areas during migration season.
		Baseline: n/a Target: √
S.2.1.B		***Select light colored or open grid paving for pedestrian hardscape***
		B. Select paving with an SRI of 29 or higher to reduce heat island effect.
		Baseline: 30% of hardscape Target: 50% of hardscape

Number	Links	Description
S.2.1.C		***Provide shade for parking areas using trees, canopies, solar panels, vegetated roof areas or by locating parking underground***
		C. Shade through the use of tree canopies that are established within 5 years, light colored canopies with an SRI of 29 or higher, structures covered by solar panels, vegetated roof areas, or by locating parking areas underground. The effective shade coverage on the parking area shall be the arithmetic mean of the shade coverage calculated at 10am, noon, and 3pm on the summer solstice.
	Seattle Master Tree List	Baseline: 50% of total parking area Target: 80% of total parking area
S.2.2.A		***Limit trespass of exterior lighting over site boundary and upward into night sky by using shielded fixtures***
		A. Only light areas as required for safety and comfort, suitable for that lighting zone (LZ)
	Dark Sky Friendly Lighting Directory	Baseline: **Sites in residential areas (LZ1)**: Design exterior lighting to produce a maximum initial illuminance value no greater than 0.10 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 10 feet beyond the site boundary. No more than 2% of total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down)**.** **Sites in neighborhood and commercial areas (LZ2)** :Design exterior lighting to produce a maximum initial illuminance value no greater than 0.20 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site boundary. No more than 5% of total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir (straight down). **Site in downtown areas (LZ3)**:Design exterior lighting to produce a maximum initial illuminance value no greater than 0.60 horizontal and vertical foot-candles at the site boundary and no greater than 0.01 horizontal foot-candles 15 feet beyond the site boundary. Alternately - source fixtures with the appropriate BUG (Backlight Uplight Glare) rating for the project Light Zone and placement Target: n/a
S.2.3.A		***Align buildings so that major elevations face north and south***
		A. Limit east and west exposures.
		Baseline: North and south facing glazing is at least 50% greater than east and west facing glazing Target: East-west axis of building is within 15 degrees of due east-west
S.2.4.A		***Avoid construction within environmentally critical areas***
		A. Develop on appropriate sites.
		Baseline: Develop on a greenfield site, parkland or agricultural land ONLY when the building's purpose is related to the use of the land. Examples - park shelter on parkland, or agricultural building on Target: Develop only 1) in an existing building envelope 2) on a greyfield or 3) on a brownfield.

Number	Links	Description
S.2.4.B		***Avoid construction within 100 ft of a lake, river, stream or wetland buffers***
	Municipal Code 25.06 Floodplain Development	B. See Seattle Municipal Code (SMC) for specific buffer requirements which vary for wetlands and water ways. The Land use code may require more than 100 foot buffer in some cases. However while the SMC allows averaging of the buffer, this strategy requires no development within 100 feet, and does not allow averaging of the buffer.
	Municipal Code 25.09 Environmentally Critical	Baseline: Regardless of code exemption Target: Do not disturb
S.3.1.A		***Protect existing trees intended to remain by providing temporary fence***
		A. Provide temporary fence around drip line prior to start of construction. Baseline: √ Target: n/a
S.3.1.B		***Select native or adapted vegetation for landscape***
		B. Similar to S.1.1.F. which is focused on site restoration of existing vegetation and W.4.1.C. which focuses on irrigation water reduction. Baseline: 50% of landscape area Target: 100% of landscape area
W.1.1.A		***Provide a green roof.***
		A. Provide a vegetated roof. Baseline: 50% of roof area Target: 75% of roof area
W.1.1.B		***Maintain no net increase, or decrease quantity of stormwater discharge leaving the site***
	Stormwater Code	B. Achieve no net increase of quantity of storm water discharge leaving the site. Use an 90th percentile rain event as basis for analysis and design. Use rain infiltration features, capture and reuse as suitable for site conditions and use.
	Green Stormwater Infrastructure (SPU)	Baseline: No increase in storm water. Target: Reduce quantity of storm water leaving the site by 25%.
W.2.1.A		***Reduce potable water use for cooling tower make-up water.***
	Dept of Energy Cooling Tower BMPs	A. Reduce potable water use for cooling tower make-up water through improved chemical management and use of nonpotable water (e.g. air handler condensate, single pass cooling system water, properly treated greywater or rainwater).
		Baseline: Install conductivity meter to monitor and manage chemical concentrations to reduce losses due to blowdown/makeup water. Target: More than 25% of make-up water from nonpotable sources
W.2.2.A		***Install low flow plumbing fixtures***
		A. Install low flow plumbing fixtures including lavatory faucets, showerheads and kitchen sink faucets. Baseline: Exceed Seattle Plumbing Code with 2.0 gpm kitchen sink and showerhead Target: Exceed Seattle Plumbing Code with 1.75 gpm kitchen sink and showerhead plus 0.5 gpm lavatory w/auto sensor

Number	Links	Description
W.2.2.B		***Install low volume flush fixtures***
		B. Install low volume flush fixtures for water closets and urinals.
		Baseline: Exceed Seattle Plumbing Code with dual flush or low flush WC: 1.28 gpf and urinal: 0.5 gpf.
		Target: Exceed Seattle Plumbing Code with dual flush or low flush WC: 1.28/ and urinal: 0.125 gpf
W.2.2.C		***Install water efficient commercial food service equipment.***
		C. Specify water efficient commercial food service equipment including low flow pre-rinse spray valves and Energy Star rated equipment.
		Baseline: Use pre-rinse spray valves which operate at 1.3 gpm or less; Provide hands free controls for all faucets in the food prep area (including hand wash sinks, pot fillers and washing sinks); Provide Energy Star Rated Commercial Dishwashers and Steam Cookers as required by SEC.
		Target: In addition to baseline if in scope of work: 100% of eligible water using commercial equipment shall be Energy Star Rated (includes Combination Ovens, Ice Machines, and commercial clothes washers).
W.2.3.A		***Submeter high water use operations like irrigation or domestic hot water***
		A. Provide submeters for high water use operations per code regardless of project size.
		Baseline: Irrigation
		Target: Wet cooling towers, commercial kitchens, laundries, Domestic Hot Water (DHW) boilers
W.3.1.A		***Direct stormwater to pervious areas to remove 80% of total suspended solids***
		A. Capture and treat stormwater run-off with biofiltration swales, rain gardens or a water quality vault.
		Baseline: √
		Target: n/a
W.3.2.A		***Implement erosion control measures prior to land disturbance***
		A. Implement measures per code regardless of project size, including temporary seeding, mulching, earth dike, silt fence, sediment trap or sediment basin . Similar to W.3.2.B. which focuses on maintenance rather than implementation.
		Baseline: √
		Target: n/a
W.3.2.B		***Enforce temporary erosion control measures for duration of construction.***
		B. Enforce temporary erosion control measures for duration of construction. Similar to W.3.2.A. which focuses on implementation rather than maintenance.
		Baseline: √
		Target:

Number	Links	Description
W.3.2.C		***Install permanent vegetation or cover site areas prior to removal of temporary erosion control measures***
		C. Prior to removal of temporary erosion control measures, install permanent vegetation or cover site areas per code regardless of project size.
		Baseline: √ Target: n/a
W.3.2.D		***Do not use construction materials in roofing or site areas that contribute to waterway contamination via stormwater runoff***
		D. Avoid using construction materials such as copper and zinc roof appurtenances, galvanized materials, treated lumber, parking lot coal tar, and pesticides.
		Baseline: √ Target: n/a
W.3.3.A		***Provide above ground fuel tanks with secondary containment.***
		A. Provide above ground tanks with secondary containment.
		Baseline: √ Target: n/a
W.3.3.B		***Provide leak detection system for tanks and piping***
		B. Provide leak detection system with monitors and alarms for tanks and piping (includes fuel tanks).
		Baseline: √ Target: n/a
W.3.3.C		***Place parking under structure***
		C. Place parking under structure with oil/grease separator.
		Baseline: 50% of parking Target: 100% of parking
W.4.1.A		***Provide high efficiency irrigation***
		A. Provide high efficiency irrigation systems such as high efficiency head or drip irrigation to limit water evaporation.
		Baseline: √ Target: n/a
W.4.1.B		***Collect rainwater or graywater for irrigation.***
		B. Use nonpotable water for irrigation, including onsite rainwater or graywater or municipally supplied nonpotable water.
		Baseline: 50% of irrigation water Target: 100% of irrigation water
W.4.1.C		***Select plants that are native or adapted to minimize irrigation requirements***
		C. Similar to S.1.1.F. which is focused on site restoration of existing vegetation and S.3.1.B. which is intended to promote natural habitat.
		Baseline: 50% of landscape area Target: 100% of landscape area

Number	Links	Description
W.5.1.A		***Provide on-site wastewater treatment infrastructure***
		A. Provide on-site wastewater treatment infrastructure such as a living machine for wastewater treatment or graywater system for wastewater reuse.
		Baseline: Below grade piping for graywater
		Target: Living machine
E.1.1.A		***Commission building energy systems.***
	Seattle Energy Code	A. Seattle Energy Code requires all mechanical work and lighting controls be commissioned. This strategy expands the requirement to include electrical systems.
		Baseline: Commission all mechanical and electrical work, regardless of project size, to meet the Seattle Energy Code.
		Target: Increase Cx scope to include peer review of design and construction documents, specifications and submittals. Cx to participate in operator training and provide post occupancy review between 6-18 months after occupancy.
E.1.2.A		***Provide demand control ventilation (DCV) to respond to variable occupancy loads.***
		A. Provide demand control ventilation (DCV) to respond to varying occupancy loads.
		Baseline: Ventilation controls respond to occupancy levels in densely occupied spaces (25 people/1000 SF - i.e. conference rooms, training rooms, break rooms).
		Target: Ventilation controls respond to occupancy in any space with varying occupancy (i.e. open and private offices).
E.1.2.B		***Provide building automation system***
	Seattle Energy Code	B. Seattle Energy Codes requires a 7-day programmable thermostat as a minimum. For buildings with a cooling load over 65 tons more complex control systems are required. The system must be capable of trending and demand response setpoint adjustment. This strategy requires a building automation system regardless of system complexity. Controls can be expanded to include lighting and hot water.
		Baseline: Direct Digital Controls (DDC) for building HVAC.
		Target: Expand DDC system to control lighting, and domestic hot water.
E.1.3.A		***Submeter all major energy end uses***
	Seattle Energy Code	A. SEC requires all buildings over 20,000 SF to have energy metering for all major end uses. There are special provisions for existing buildings (see Sect. C506). This strategy encourages existing buildings to upgrade and for buildings below the 20,000 SF threshold to meet the requirements of the code.
		Baseline: Install measurement devices with remote communication capability for each energy source regardless of project size.
		Target: Install measurement devices with remote communication capability for each energy source AND end use regardless of project size. See SEC Sect. C409.3.1-6 for end use definitions.

Number	Links	Description
E.1.4.A		***Reduce carbon emissions from heating equipment.***
	Seattle Energy Code	A. Use efficient warm air furnaces (includes the heating side of combination warm-air furnaces/air-condition units; duct furnaces and unit heaters). Consult Energy Star and AHRI for most efficient units available.
		Baseline: **Opt. 1** - Capacities less than 225,000 btu/h: Install natural gas fired heating equipment with an AFUE of 98% and/or oil fired heating equipment with and AFUE of 87% . **Opt. 2** - Capacities of 225,000 btu/h or greater: Provide heating equipment with a minimum thermal efficiency of 82%. Note: New rating criteria is being developed for larger gas unitary equipment. Consult Energy Star and AHRI for most efficient units available.
		Target: Use electric heat pump equipment, no gas.
E.1.4.B		***Increase motor efficiency for fans and pumps***
	Seattle Energy Code	B. Increase motor efficiency using variable speed drives and equipment choices.
		Baseline: Choose appropriate size and use variable speed drives for fans and pumps with a motor horsepower of 5 hp or larger. Use electronically commutated motor on motors under 1 hp. Baseline is to comply with latest code even where exempt.
		Target: n/a
E.1.4.C		***Use Energy Star equipment & appliances***
		C. Use Energy Star equipment & appliances (includes commercial food service equipment) for eligible equipment.
		Baseline: 100% of Eligible Appliances; 50% of Eligible Equipment.
		Target: 100% Eligible Appliances; 75% Eligible Equipment.
E.1.4.D		***Use efficient cooling equipment***
	CEE	D. Use efficient cooling equipment per the most recent CEE specifications.
	CEE Appendix A	Baseline: **Unitary Equipment**: Meet lowest Tier (1 or 2) of CEE Specification for Unitary AC; **Heat Pumps:** meet Tier 1 of CEE Specification; **Variable Refrigerant Flow systems**: Meet Tier 1 of CEE Specification for VRF Multi-split AC or Heat Pump. For any equipment not listed in CEE specifications, use efficiency requirements of SEC.
		Target: **All equipment**: Meet highest applicable Tier of CEE Specification.

Number	Links	Description
E.1.4.E		***Use efficient domestic water heating equipment***
	Seattle Energy Code	E. This strategy only applies to units that provide hot potable water. Units which also provide space heat are categorized as boilers.
	Energy Star Commercial WH Criteria	Baseline: Install Energy Star rated equipment for water heaters which are Energy Star eligible. All others meet most restrictive requirements either ASHRAE 90.1-2010 or latest SEC.
	Energy Star Residential WH Criteria	Target: Use Heat Pump water heater with EF ≥ 2.0
E.1.4.F		***Use efficient boiler equipment***
	Seattle Energy Code	F. A boiler supplies hot water for space heating or a combination of space heating and domestic hot water.
		Baseline: Opt. 1 - Capacities less than 300,000 Btu/h: Gas fired boilers to have a min. efficiency of 89% AFUE; oil fired boilers to have a minimum efficiency of 87% AFUE Opt. 2 - Capacities of 300,000 Btu/h or higher: Gas fired boilers to have a minimum thermal efficiency (TE or Et) of 89%; oil fired boilers to have a thermal efficiency of 85%
		Target: Opt. 1 - Capacities less than 300,000 Btu/h: Gas and oil fired boilers to have a min. efficiency of 90% AFUE Opt. 2 - Capacities of 300,000 Btu/h or higher: Gas and oil fired boilers to have a minimum thermal efficiency (TE or E_t) of 94% and a turndown ratio ≥ 5:1
E.2.1.A		***Upgrade envelope elements as work allows (windows, insulation, wall cavities)***
	Seattle Energy Code	A. Upgrade windows, insulation and wall cavities per Seattle Energy Code as work allows.
		Baseline: For additions and alterations comply with Chapter 5 of latest SEC as applicable. For new buildings comply with latest SEC envelope requirements.
		Target: For new buildings, improve envelope components UA by 10% over new code.
E2.1.B		***Provide horizontal exterior shading devices for south windows.***
		B. Provide horizontal exterior shading devices for south windows.
		Baseline: 30% of windows shaded
		Target: 60% of windows shaded
E2.1.C		***Select light-colored roofing materials***
		C. Select light-colored roofing materials: For low slope roofs provide Solar Reflectance Index (SRI) of 78 or higher. For slopes greater than 2:12, select roofing materials with SRI of 29 or higher.
		Baseline: 75% of roof area (excluding equipment area).
		Target: 100% of roof area (excluding equipment area).
E.2.2.A		***Size lighting control zones as small as feasible.***
		A. Size lighting control zones as small as feasible.
		Baseline: Regardless of project size or scope
		Target: n/a

Number	Links	Description
E.2.2.B		***Reduce lighting energy use through use of automatic lighting controls***
	Seattle Energy Code	B. Reduce lighting energy use via daylight controls and occupancy sensors in spaces with intermittent use.
		Baseline: Provide occupancy and daylight controls according to latest Energy Code.
		Target: n/a
E.2.2.C		***Reduce lighting power density***
	Seattle Energy Code	C. Reduce lighting power density and supplement w/task lighting or daylighting.
		Baseline: Reduce lighting power density by 5%
		Target: Comply with Jan 2018 standards listed in SEC
E.2.2.D		***Use efficient lighting fixtures***
		D. Use efficient electric lighting.
		Baseline: Use lamps with high efficacy (Lumen/Watt) such as T8 or T5, or LED. Use Energy Star CFL's and LEDs
		Target: n/a
C.1.1.A		***Use low emission boilers and furnaces***
	SCAQMD - 1146	A. Use low nitrogen oxides boilers and low carbon monoxide furnaces. Comply with current standard of South Coast Air Quality Management District Rule 1146
		Baseline: All capacities gaseous fuels: Emissions of K_{nox} do not exceed 30 ppm All capacities, non-gaseous fuels: Emissions of K_{nox} do not exceed 40 ppm
		Target: ≤ 2 million Btu/h: NO_x limit - 20 ppm > 2 million Btu/h: NO_x limit - 9 ppm
C.1.2.A		***Phase out CFCs in existing buildings and replace with new equipment or refrigerants***
		A. Replace CFCs in existing equipment with new refrigerants regardless of code or scope of work requirement.
		Baseline: Ozone Depletion Potential (ODP) ≤ 0.02 and Global Warming Potential (GWP) ≤ 1900 (R-407C, R-410A, R134A)
		Target: Ozone Depletion Potential (ODP) = 0.02 and Global Warming Potential (GWP) < 150 (R-123, CO_2, NH_3, Propane)
C.1.2.B		***Provide leak detection and remote alarm where refrigerants are used***
	Seattle Mechanical Code	B. Excludes appliances with less than 0.5 pounds of refrigerant. Seattle Mechanical Codes limits the amount of refrigerant equipment can contain without being located either outside or in an enclosed machine room. Machinery rooms are required to have refrigerant leak detection and alarms. The primary intent of the code is to protect occupants from refrigerant leaks.
		Baseline: Regardless of project size
		Target: n/a

Number	Links	Description
C.1.2.C		***Select equipment with refrigerants that have low ozone depleting potential & low global warming potential***
		C. Select new HVAC and refrigeration and fire suppression equipment with refrigerants that have low ozone depleting potential (ODP) & low global warming potential (GWP).
		Baseline: Ozone Depletion Potential (ODP) = 0.02 and Global Warming Potential (GWP) < 150 (R-123, CO_2, NH_3, Propane)
		Target: No refrigerants
C.2.1.A		***Provide on-site renewable energy***
	Seattle Energy Code	A. Use on-site renewable energy, including photovoltaics, solar thermal, and wind.
		Baseline: Provide minimum watts per s.f. of conditioned space as indicated in code
		Target: 25% capacity increase over code requirement
C.3.1.A		***Limit parking capacity to code minimum***
		A. Limit parking capacity to code. Where there is a minimum and maximum requirement, provide no more than the minimum.
		Baseline: √
		Target: n/a
C.3.1.B		***Provide secure bike parking and shower/changing rooms***
		B. Provide secure bike parking for peak occupancy (FTEs + maximum visitors) and shower/changing rooms for FTEs.
		Baseline: Bike parking for 5% of peak and showers for 0.5% of FTEs
		Target: Bike parking for 10% of peak and showers for 1% of FTEs
C.3.1.C		***Provide preferred carpool/vanpool parking***
		C. Provide preferred carpool/vanpool parking spaces based on total parking spaces.
		Baseline: 5% of total parking spaces
		Target: 10% of total parking spaces
C.3.2.A		***Provide preferred parking for low emitting/fuel efficient vehicles***
	ACEEE	A. Locate preferred parking for low emitting/fuel efficient vehicles closest to the entrance exclusive of ADA. Eligible vehicles are classified as Zero Emission Vehicles by the California Air Resources Board or have achieved a minimum score of 45 on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide.
		Baseline: 5% of total parking spaces
		Target: 10% of total parking spaces

Number	Links	Description
C.3.2.B		***Provide Level 2 electric vehicle charging stations (240v).***
		B. Provide Level 2 electric vehicle charging stations (240v).
		Baseline: 1 per 100 spaces
		Target: 2 per 100 spaces
M.1.1.A		***Use materials manufactured within 500 miles of site.***
		A. Source materials manufactured within 500 miles of the project site.
		Baseline: 20% cost of materials
		Target: 40% cost of materials
M.1.1.B		***Use materials harvested or extracted within 500 miles of site.***
		B. Source materials harvested or extracted within 500 miles of the project site.
		Baseline: 5% cost of materials
		Target: 10% cost of materials
M.1.2.A		**Use wood from Forest Stewardship Council (FSC) sources**
	FSC	A. Use wood from Forestry Stewardship Council (FSC) sources
		Baseline: 20% cost of wood products
		Target: 50% cost of wood products
M.1.2.B		**Use bio-based products that meet the Sustainable Agriculture Network standard.**
	Sustainable Agriculture Network	B. Materials include cork, linoleum, wheatgrass, bamboo, cellulose insulation, etc.
		Baseline: 1% cost of materials
		Target: 2.5% cost of materials
M.2.1.A		***Implement a construction waste management plan as to divert recyclable waste from the landfill***
	Waste Diversion Plan and Assessment permit form	A. Implement Construction Waste Management Plan. See SPU page regarding mandatory reporting requirements. The SDCI Permit Form directory has a form for the required Plan. Materials must be taken to a Seattle certified facility. (List on SPU page).
	SPU C&D Waste	Baseline: 75% waste diverted
	King County C&D Recycling	Target: 85% waste diverted
M.2.2.A		***Provide convenient and appropriately sized recycling and composting collection and storage***
		A. Provide conveniently located and appropriately sized recycle collection & storage for paper, metal, cardboard, plastic and glass, and compost.
		Baseline: √
		Target: Add collection for batteries, fluorescent lamps and e-waste.

Number	Links	Description
M.3.1.A		***Retain non-structural interior elements of existing building***
		A. Retain non-structural interior elements of existing building . Including finished flooring, finished ceiling, walls, casework and doors.
		Baseline: 40% of surface area
		Target: 60% of surface area
M.3.1.B		***Retain structural components of existing building***
		B. Retain structural components of existing building, including roof, wall and floors but excluding windows.
		Baseline: 50% of existing walls, floors and roof by surface area
		Target: 75% of existing walls, floors and roof by surface area
M.3.2.A		***Use demountable floor-to-ceiling partitions and non-demising walls***
		A. Use demountable floor-to-ceiling partitions for interior non structural and non-demising walls in lieu of standard wall construction (GWB).
		Baseline: 30% of interior non-structural walls
		Target: 60% of interior non-structural walls
M.3.2.B		***Select building assemblies based on life-cycle cost analysis***
	LCCA Technical Resources at King County Green Tools	B. Select building assemblies based on life-cycle cost analysis and 15 year payback periods.
		Baseline: Use life cycle cost analysis to select major building components
		Target: Use life cycle cost analysis to select foundation & floor, structural systems & walls, roof, envelope
M.3.2.C		***Select building assemblies based on life-cycle assessment***
	ASMI-Impact Estimator	C. Use software to perform life cycle assessment. Athena Sustainable Materials Institute (ASMI) and Solidworks CAD Sustainability Xpress add-on can help analyze buildings and assemblies. US National Institute for Standards and Technology (NIST) Building for Environmental and Economic Sustainability (BEEs) offers analysis at the product level.
	BEES	Baseline: Use life cycle assessment software to select major building components
		Target: Use life cycle assessment software to select foundation and floor, structural systems and walls, roof, envelope
M.3.2.D		***Use building materials that contain recycled content.***
		D. Calculation is based on total cost of building materials only, excluding labor and MEP. Post consumer content, already used by consumers and discarded, to be valued at 100% of proportionate cost. Pre-consumer content, waste from manufacturing reintroduced into the process, to be valued at 50% of proportionate cost.
		Baseline: 5% total cost of bldg materials
		Target: 20% total cost of bldg materials

Number	Links	Description
M.3.2.E		***Re-use furniture and furnishings***
		E. Use current replacement value to establish cost of re-used items.
		Baseline: 30% of furniture and furnishings budget
		Target: 60% of furniture and furnishings budget
M.3.2.F		***Select well built furnishings for durability.***
		F. Select well built furnishings for durability.
		Baseline: 10 years
		Target: 20 years
IE.1.1.A		***Use low-emitting interior adhesives and sealants***
	SCAQMD - 1168	A. Use low-emitting interior adhesives & sealants, i.e., inside the weather barrier.
		Baseline: Meet South Coast Air Quality Management District Rule #1168, dated 1/7/2005
		Target: na
IE.1.1.B		***Use low-emitting interior paints and coatings***
	SCAQMD - 1113	B. Use low-emitting interior paints & coatings, i.e., inside the weather barrier.
	Green Seal 11	Baseline: Meet 2010 Green Seal GS-11 Third Edition or South Coast Air Quality Management District Rule 1113, dated 2/5/16
	UL GreenGuard Gold	Target: Use products that are emissions tested and compliant with the California Department of Public Health (CDPH) Standard Method V1.1-2010. Examples of testing certifications that are compliant include: UL Greenguard Gold; SCS Indoor Advantage Gold; ClearChem Declared (Berkeley Analytical); Intertek ETL Environmental VOC+; Materials Analytical Services (MAS) Certified Green
IE.1.1.C		***Use low-emitting systems furniture and seating***
	Healthier Products & Building Materials	C. Use low-emitting systems furniture & seating certified by large chamber emissions protocols for all new purchases.
	Scientific Certification Systems Indoor Advantage	Baseline: Green Guard or Indoor Advantage Gold Certified
		Target: n/a
IE.1.1.D		***Use wood and agrifiber products that contain no added urea formaldehyde***
		D. Use wood and agrifiber products that contain no added urea formaldehyde such as plywood, MDF, OSB.
	CARB Composite Wood	Baseline: CARB compliant for Ultra Low Emitting Formaldehyde
		Target: Labeled as containing No Added Urea Formaldehyde.

Number	Links	Description
IE.1.1.E		***Use low-emitting flooring systems***
	CRI	E. Use low-emitting carpet, cushion and hard surface flooring. Flooring adhesives to meet low emitting adhesives requirements.
	NSF/ANSI 140	Baseline: **Carpet, Pad and Adhesive:** Carpet and Rug Institute's (CRI) Green Label Plus; **Hard surface Flooring:** Floorscore Certified (except for solid wood and mineral based flooring) Target: **Carpet:** NSF/ANSI 140 Gold
IE.1.1.F		***Locate outdoor air intakes away from outdoor pollution sources***
	Seattle Mechanical Code	F. Seattle Mechanical Codes requires a minimum of 10 ft. horizontal separation between air intakes and any hazardous or noxious contaminant source. Contaminant sources are considered to be vents, streets, alleys, parking areas, and loading docks. (Exhaust from residential bathroom, kitchen and laundries are not considered hazardous and therefore smaller separations are required). This strategy increases the separation distance.
		Baseline: 10' from plumbing vents; 40' from parking areas and loading docks; no smoking within 25' of openings Target: Increase distance to 60' from parking areas and loading docks. Do not allow smoking anywhere on the site.
IE.1.1.G		***Use envelope consultant to incorporate design measures to minimize water intrusion.***
		G. Use envelope consultant to incorporate design measures to minimize water intrusion.
		Baseline: Member of design team Target: 3rd party consultant
IE.1.2.A		***Provide thermal comfort controls to occupants***
		A. Provide thermal comfort controls to occupants.
		Baseline: 1 control zone per orientation and for each multi-occupant space, and Adjustable window coverings Target: In addition, provide operable windows
IE.1.2.B		***Implement thermal comfort survey***
		B. If project includes HVAC modifications, conduct thermal comfort survey. Survey to be based on 7pt scale format of agree strongly, agree, agree somewhat, neutral, disagree somewhat, disagree, disagree strongly.
		Baseline: Conduct survey. Implement corrective action plan if more than 20% of respondents provide negative feedback Target: Conduct comfort survey annually

Number	Links	Description
IE.1.3.A		***Provide appropriate daylight levels.***
	Seattle Energy Code	A. Provide appropriate daylight levels.
		Baseline: Baseline: For all interior opaque surfaces in the daylight zones provide a visible light reflectance value (LRV) of 80% for ceilings, 65% for walls over 56" in height. (LRV is readily available information from paint and ceiling tile manufacturers)
		Target: Target: In addition to baseline requirements, meet an Effective Aperature criteria of at least 0.15 (Effective Aperature is the window to wall ratio multiplied by visible light transmittance)
IE.1.3.B		***Install automatic daylight controls***
	Seattle Energy Code	B. Similarly to E2.2.B- Install automatic daylight controls within 15' of all perimeter glazing, regardless of code compliance threshold.
		Baseline: Multi-Step Dimming
		Target: Continuous Dimming
IE.1.3.C		***Maximize occupied floor area w/ access to daylight.***
		C. Build full height walls at interior of floor and not at the perimeter so as to not obscure line of sight to windows. Minimum of 10 footcandles and maximum of 500 footcandles.
		Baseline: 50% of regularly occupied spaces are located within daylight zones and <=30% full height walls at perimeter
		Target: 75% or more of regularly occupied spaces are located within daylight zones and 0 full height walls at perimeter
IE.1.3.D		***Provide efficient task lighting at individual workstations in open office areas with limited lighting controls***
		D. Provide efficient LED task lighting fixtures. Permanently mounted occupant sensing fixtures preferred, but not required.
		Baseline: 75% of workstations
		Target: 90% of work stations
IE.1.4.A		***Meet the reverberation time requirements for the room type(s)***
		A. Offices, conference rooms, teleconference rooms <0.6; open plan office without sound masking <0.8; open plan office with sound masking 0.8; courtroom unamplified <0.7; amplified <1; library <1. (Requirements are in T60 (sec) at 500Hz, 1000Hz and 2000 Hz)
		Baseline: Meet recommended requirements.
		Target: Implement recommendations of acoustical engineer for specific space configurations and needs

Number	Links	Description
IE.1.4.B		***Provide speech privacy between enclosed spaces.***
		B. Floor /ceiling assemblies shall meet the Barrier STC rating for the application -STC 45 between standard offices; STC 50 between executive offices, offices and conference rooms; STC 60 between mechanical equipment rooms and other occupied spaces.
		Baseline: Design interior floor and ceiling assemblies to meet the above criteria when Seattle Building Code does not have a requirement for STC between spaces.
		Target: Conduct acoustic comfort survey after completion. Take corrective action if significant speech privacy issues exist.
IE.1.4.C		***Mitigate noise from HVAC equipment & plumbing***
		C. Background noise levels (from equipment) should not exceed guidelines in ASHRAE 2011 HVAC Applications Chapter 48, Table 1 for applicable space types, See guide book for additional details. Calculate or measure sound levels.
		Baseline: √
		Target: n/a
IE.1.5.A		***Implement job-site indoor air quality plan during construction***
		A. Implement job-site indoor air quality (IAQ) plan during construction, regardless of code threshold.
		Baseline: √
		Target: n/a
IE.1.5.B		***Perform building flush out prior to occupancy.***
		B. Flush out building with outside air prior to occupancy.
		Baseline: 3500 CFM/SF at 60 degrees F and 60% humidity
		Target: 14000 CFM/SF at 60 degrees F and 60% humidity
IE.1.6.A		***Design duct work and electric/cable runs for accessibility and flexibility***
		A. Use interstitial floors, raised floors or careful dropped ceiling or exposed ceiling design to allow for changes in room configurations
		Baseline: Carefully planned drop or exposed ceilings
		Target: Raised floor or interstitial floor system

Number	Links	Description
IE.1.6.B		***Provide sufficient volume of outside air***
	Seattle Mechanical Code	B. Provide sufficient volume of outside air in accordance with current Seattle Mechanical Code and ASHRAE 62.1-2007
		Baseline: For new buildings, use ASHRAE 62.1-2007 VRP calculation or Seattle Mechanical Code to determine minimum outside air to each occupied space.
		Target: Provide permanently mounted outdoor air flow measurement device. OR for Constant Volume air supply systems; provide a damper position feedback system. See guidebook for details.
IE.1.6.C		***Provide effective zone ventilation distribution.***
	Seattle Mechanical Code	C. The effectiveness of the ventilation distribution is based on the configuration: i.e. Ceiling supply of warm air with a ceiling return is less effective than a ceiling supply of warm air with a floor return. In addition, the distribution effectiveness change on the operating condition of the system (heating or cooling). The Seattle Mechanical Code and ASHRAE 62.1 take this into account in the minimum outside air requirement by applying a factor to less effective configurations. The less effective configurations require a higher volume of outside air which in turn increases energy use.
		Baseline: Provide a system with a worst case operating condition ventilation distribution effectiveness (Ez) of at least 0.8 as determined by SMC Table 403.3.1.2.
		Target: Provide a system with a worst case operating condition ventilation distribution effectiveness (Ez) of at 1.0 as determined by SMC Table 403.3.1.2.
IE.1.6.D		***Meet code ventilation requirements with natural ventilation or a combination of both mechanical and natural ventilation, regardless of project size.***
		D. Meet code ventilation requirements with natural ventilation or a combination of both mechanical and natural ventilation, regardless of project size.
		Baseline: Incorporate operable windows to provide ventilation for areas within 25 feet of perimeter. (Minimum requirement of 4% net open area of floor area within 25 feet of window).
		Target: n/a