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 encouranged.
		Baseline: 20% 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 focues on irrigation water reduction.
		Baseline: 20% 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***
	AHERA	G. Remediate whether or not required by code.
	NESHAP	Baseline: Per NESHAP or AHERA for bldgs
		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
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.	
	Baseline:	50% of total parking area
	Target:	80% of total parking area
Seattle Master Tree List		
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.	
	Baseline:	**Sites in residential area**: 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**: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**: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.
	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 agricultural land.
	Target:	Develop only 1) in an existing building envelope 2) on a greyfield or 3) on a brownfield.

S.2.4.B	***Avoid construction within 100 ft of a lake, river, stream or wetland buffers***	
Seattle Municipal Code Title 25	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.	
	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***	
	B. Achieve no net increase of quantity of storm water discharge leaving the site.	
	Baseline:	No increase in storm water.
	Target:	Reduce quantity of storm water leaving the site by 25%.

W.2.1.A	***Use rainwater for cooling tower make-up water.***	
	A. Collect rainwater for cooling tower make-up water.	

	Baseline:	25%-50% of make-up water
	Target:	More than 50% of make-up water

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

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:
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

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.

A. Seattle Energy Code requires all mechanical work and lighting controls be commissioned. This strategy expands the requirement to include electrical systems.

Seattle 2009 Energy Code

	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

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.

Seattle 2009 Energy Code

	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 2009 Energy Code	A. SEC requires all buildings over 20,000 SF to have energy metering for all major end uses. There are exceptions for existing buildings. 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 Ch. 12 for end use definitions.
E.1.4.A		***Use efficient gas heating equipment***
	Seattle 2009 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)
		Baseline: **Opt. 1** - Capacities less than 225,000 btu/h: Install Energy Star rated gas heating equipment (min. of 95% AFUE for natural gas and 85% AFUE for oil) **Opt. 2** - Capacities of 225,000 btu/h or greater: Meet Seattle Energy Code efficiency requirements. Note: New rating criteria is being developed for larger gas unitary equipment. Consult Energy Star and AHRI for most efficient units available.
		Target: **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** - Capacites 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.
E.1.4.B		***Increase motor efficiency for fans and pumps***
		B. Increase motor efficiency using variable speed drives
		Baseline: Use variable speed drives for fans and pumps with a motor horsepower of 5 hp or larger
		Target: Use variable speed drives for all fans and pumps serving a variable flow or variable volume system.
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 CEE specifications with an effective date of 1/6/2012.
	ASHRAE 189.1-1009	Baseline: **Unitary Equipment**: Meet Tier 0 or 1 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. For any equipment not listed in CEE specifications, use efficiency requirements of ASHRAE 189.1-2009
		Target: **All equipment**: Meet Tier 2 of applicable CEE Specification, when listed; otherwise meet Tier 1.

E.1.4.E

Use efficient domestic water heating equipment

Seattle 2009 Energy Code

E. This strategy only applies to units that provide hot potable water. Units which also provide space heat are categorized as boilers.

ASHRAE 189.1-1009

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 2009 SEC.

Target: All equipment and capacities: Meet efficiency requirements of ASHRAE 189.1-2009, Table C-12

E.1.4.F

Use efficient boiler equipment

Seattle 2009 Energy Code

F. A boiler supplies hot water or steam for space heating or a combination of space heating and domestic hot water.

ASHRAE 189.1-1009

Baseline: Opt. 1 - Capacities less than 300,000 btu/h: Install Energy Star rated equipment or equipment with an AFUE of 85% or higher. Opt. 2 - Capacities of 300,000 btu/h or higher: Meet energy Efficiency requirements of 2009 SEC.

Target: All Capacities: Meet minimum efficiency requirements of ASHRAE standard 189.1-2009 table C-7.

E.2.1.A

Upgrade envelope elements as work allows (windows, insulation, wall cavities)

Seattle 2009 Energy Code

A. Upgrade windows, insulation and wall cavities per Seattle Energy Code as work allows.

Baseline: For rehab projects: Meet or exceed current SEC. If physical constraints prohibit compliance with SEC, upgrade to highest level possible. For new buildings: Exceed SEC by 10% using Section 1330 - Componant Performance Option. Target UA to be multiplied by 0.9.

Target: For rehab projects: Meet or exceed current SEC. If physical constraints prohibit compliance with SEC, upgrade to highest level possible.
For new buildings: Exceed SEC by 10% using Section 1330 - Componant Performance Option. Target UA to be multiplied by 0.9.

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

E.2.2.B		***Reduce lighting energy use through use of automatic lighting controls***
	Seattle 2009 Energy Code	B. Reduce lighting energy use via daylight controls and occupancy sensors in spaces with intermittent use.
	Baseline:	Provide occupancy sensors for 50% of lighting load and daylight controls as prescribed by SEC.
	Target:	Provide occupancy sensors for 75% of lighting load . Provide daylight controls for 50% or more of lighting load.
E.2.2.C		***Reduce lighting power density***
	Seattle 2009 Energy Code	C. Reduce lighting power density and supplement w/task lighting or daylighting.
	Baseline:	5% reduction from current Seattle Energy Code
	Target:	10% or more reduction from current Seattle Energy Code
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. Use Energy Star CFL's
	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 N_{ox} do not exceed 30ppm All capacities, non-gaseous fuels: Emissions of N_{ox} do not exceed 40 ppm
	Target:	</=2 million btu/h: N_{ox} limit - 20ppm > 2 million btu/h: N_{ox} limit - 9ppm
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) <= 0.04 and Global Warming Potential (GWP) <= 1900 (R-22, R-407C, R-410A, R134A, R-407C)
	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 2009 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
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) <= 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.2.1.A

Provide on-site renewable energy

A. Use on-site renewable energy, including photovoltaics, solar thermal, and wind.

Baseline:	1% of building annual energy use
Target:	2.5% of building annual energy use

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 40 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

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

A. Use wood from Forestry Stewardship Council (FSC) sources

ATF

SFI

FSC

Baseline: 20% cost of wood products

Target: 50% cost of wood products

M.1.2.B

Use rapidly renewable materials, i.e., materials that are harvested within a 10 year or shorter timeframe

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 to divert recyclable waste from the landfill

CWM

A. Implement Construction Waste Management Plan.

Baseline: 75% waste diverted

Target: 85% waste diverted

M.2.2.A

Provide convenient and appropriately sized recycling collection and storage

A. Provide conveniently located and appropriately sized recycle collection & storage for paper, metal, cardboard, plastic and glass.

Baseline: √

Target: Include composting storage

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

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

BEES

C. Use software like US National Institute for Standards and Technology Building for Environmental and Economic Sustainability BEEs or Solidworks CAD Sustainability Xpress add on to perform analyis.

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

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 7/1/2005
		Target:	Meet South Coast Air Quality Management District Rule #1168, dated 1/1/2007
IE.1.1.B		***Use low-emitting interior paints and coatings***	
	Green Seal standard GS – 11	B. Use low-emitting interior paints & coatings, i.e., inside the weather barrier.	
	SCAQMD-1113	Baseline:	Meet 1997 Green Seal GC-03, 1993 Green Seal GS-11 Second Edition and South Coast Air Quality Management District Rule 1113, dated 1/1/2004
		Target:	Meet 2010 Green Seal GS-11 Third Edition and South Coast Air Quality Management District Rule 1113, dated 7/1/2006
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 Gold	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.	
		Baseline:	√
		Target:	n/a
IE.1.1.E		***Use low-emitting flooring systems***	
	CRI	E. Use low-emitting carpet, cushion and hardsurface flooring. Flooring adhesives to meet low emitting adhesives requirements.	
	NSF/ANSI 140	Baseline:	**Carpet:** Carpet and Rug Institute's (CRI) Green Label Plus; **Carpet Pad:** CRI Green Label; **Carpet Adhesive**: VOC not to exceed 50g/l; **Hardsurface 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 2009 Mechanical Code	F. 2009 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 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 respondants provide negative feedback
Target:	Conduct comfort survey annually

IE.1.3.A

Provide appropriate daylight levels.

ASHRAE 189.1-2009

A. Provide appropriate daylight levels.

Baseline:	All opaque interior surfaces in the daylight zones to have a visible light reflectance of 80% for ceilings and 70% for partitions over 56" in height per ASHRAE standard 198.1-2009 section 8.4.1.1.b.
Target:	In addition to baseline requirements: Meet Effective Aperature criteria of ASHRAE 189.1-2009 section 8.4.1.1.a- (Window to wall ratio multiplied by visible light transmittance at least 0.15)

IE.1.3.B

Install automatic daylight controls

B.Similary 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 or compact fluorescent task lighting fixtures. Permanantly mounted occupant sensing fixtures preferred, but not required.

Baseline: 75% of workstations

Target: 90% of work stations

IE.1.4.A

Select interior materials to provide appropriate amount of sound absorption for application.

A. See calculator for detailed information on how to achieve this strategy.

Baseline: Average absorption coefficent of all the surfaces (walls, floor, ceiling) in the space are between 0.2 and 0.3

Target: Implement recommendations of acoustical engineer

IE.1.4.B

Provide speech privacy between enclosed spaces.

B. Floor /ceiling assemblies shall meet the Barrier STC rating for the application - **STC 25**: Normal speech is clearly understood. Suitable for space division when speech privacy is not needed.**STC 30:** Loud speech is easily understood, and normal speech is heard but not easily understood. Suitable for room dividers where concentration is not required.**STC 35:** Loud speech is heard but not easily understood, and normal speech is heard faintly. Suitable for offices next to quiet spaces.**STC 42-45:** Loud speech is heard faintly but not understood, and normal speech is inaudible. Suitable for dividing noisy and quiet areas; tenant party walls; conference rooms and office areas.**STC 46-50:** Very loud sounds can be faintly heard (loud music). Suitable for separation between spaces which where total privacy is desired; sleeping area adjacent to active area; etc.

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.

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		***Use a raised floor system or provide flexible ducts for air diffusers.***	
		A. Use a raised floor system or provide flexible ducts for air diffusers.	
		Baseline:	Flexible ducts
		Target:	Raised floor system
IE.1.6.B		***Provide sufficient volume of outside air***	
	Seattle 2009 Mechanical Code	B. Provide sufficient volume of outside air in accordance with 2009 Seattle Mechanical Code and ASHRAE 62.1-2007	
		Baseline:	For new buildings, use ASHRAE 62.1-2007 VRP calculation or 2009 Seattle Mechanical Code to determine minimum outside air to each occupied space.
		Target:	Provide permanantly 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 2009 Mechanical Code	C. The effectiveness of the ventilation distribution is based on the configuration: ie 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 2009 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 2009 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 2009 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
Parks		***Parks***	
		Parks	

Ideal Green Park