SECTION E: MIT Kendall Project LEED Scorecards

NoMa Building 1

# LEED v4 for New Construction - Kendall Square Building 1 last updated: June 1, 2015

	Achiev	/ability	/
hi	med	low	NP
59	23	24	4

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 or more points Achievability rating: Hi = 90%, Med = 60%, Low = 10%, NP = not possible.

# 69 Projected Points

	Prerequi	sites	Standard
Y	SS Prereq 1	Construction Activity Pollution Prevention	Create and implement erosion control plan that meets the 2003 EPA Construction General Perm
Y	WE Prereq 1	Outdoor Water Use Reduction: 30%	Reduce outdoor water use by 30% over the baseline specified in LEED.
Y	WE Prereq 2	Indoor Water Use Reduction: 20%	Reduce indoor water use by 20% over the baseline specified in LEED and meet requirements for
Y	WE Prereq 3	Building-Level Water Metering	Install permanent water meters for building and grounds
Y	EA Prereq 1	Fundamental Commissioning and Verification	Engage commissioning agent, and develop and execute a commissioning plan. Prepare O&M pla
Y	EA Prereq 2	Minimum Energy Performance	Reduce energy cost by 5%, compared to ASHRAE 90.1-2010, Appendix G; meet mandatory prov
Y	EA Prereq 3	Building-Level Energy Metering	Install meters to provide data on total energy consumption AND commit to share data with the U
Y	EA Prereq 4	Fundamental Refrigerant Management	Eliminate CFCs in building HVAC&R.
Y	MR Prereq 1	Storage & Collection of Recyclables	Provide space for the collection and storage of paper, cardboard, glass, plastic, and metals.
Y	MR Prereq 2	Construction and Demolition Waste Management Planning	Develop and implement a construction and demolition waste management plan
Y	IEQ Prereq 1	Minimum IAQ Performance	Meet sections 4 through 7 of ASHRAE 62.1-2010.
Y	IEQ Prereq 2	Environmental Tobacco Smoke (ETS) Control	Prohibit smoking inside building, and locate exterior smoking areas at least 25 feet away from bu

Γ	1	0	0	0	Integrative Process		Standard
	1				IP Credit 1	Integrative Process	Perform preliminary energy model and water budget before the completion of SD and document in C

1	2	0	Location	a & Transportation	Standard
		16	LT Credit 1	LEED for Neighborhood Development Location	Locate the project in within a development certified under LEED for Neighborhood Development
			LT Credit 2	Sensitive Land Protection	Locate the development footprint on land that has been previously developed.
	2		LT Credit 3	High Priority Site	Locate the project on a site where contaminated soil/groundwater remediation is required or in hist
			LT Credit 4	Surrounding Density and Diverse Uses	Locate on a site with an existing density of 22,000sf/acre - 35,000 sf/acre and within 1/2 mile of 4-8
			LT Credit 5	Access to Quality Transit	Locate project within 1/2 mile of a rail station or ferry terminal or 1/4 mile of bus, streetcar or ridesh
1			LT Credit 6	Bicycle Facilities	Access to bicycle network. Short term (2.5% peak visitors) and long term (5% all occupants) bike p
			LT Credit 7	Reduced Parking Footprint	Preferred parking for carpools for 5% of the total parking spaces
			LT Credit 8	Green Vehicles	Preferred parking for Green Vehicles: 5% of all parking spaces and electric vehicle charging or alte
	1	1 2 2 2 1 1		16         LT Credit 1           2         LT Credit 2           2         LT Credit 3           LT Credit 4         LT Credit 5           1         L         LT Credit 6           2         LT Credit 7	Image: Construction       Image: Construction         Image: Constretee       Image: Constretee

6	2	1	1	Sustain	able Sites	Standard
1				SS Credit 1	Site Assessment	Complete comprehensive site survey; topography, hydrology, climate, vegetation, soils, human us
		1	1	SS Credit 2	Site Development: Protect or Restore Habitat	Protect 40% of greenfield and restore 30% of previously developed site (2pts) or provide \$0.40/s
	1			SS Credit 3	Open Space	Provide outdoor space greater than or equal to 30% of the total site area (including building footp
3				SS Credit 4	Rainwater Management	Manage runoff for the 95th percentile (2pt), 98th percentile (+1pt) with low-impact development (
2				SS Credit 5	Heat Island Reduction	Meet high albedo requirements for roof and site OR place a minimum of 75% parking under cover
	1			SS Credit 6	Light Pollution Reduction	Meet uplight and light trespass requirements and do not exceed exterior signage luminance requi
		•				
			_			

8	2	1	0	Water Ef	ficiency	Standard
1				WE Credit 1	Outdoor Water Use Reduction: 50% Reduction	Reduce potable water used for irrigation by 50%.
	1			WE Credit 1	Outdoor Water Use Reduction: No Potable Water	No potable water use for irrigation.
3				WE Credit 2	Water Use Reduction: 25% / 30% / 35%	Reduce building water use over LEED baseline .
1	1	1		WE Credit 2	Water Use Reduction: 40% / 45% / 50%	Reduce building water use over LEED baseline .
2				WE Credit 3	Cooling Tower Water Use	Conduct a water analysis to optimize cooling tower cycles. Maximizing cycles (1pt), >10 cycled
1				WE Credit 4	Water Metering	Install permanent water meters for two or more water subsystems.



ermit.

for process water use.

plan for current facilities.

provisions of ASHRAE 90.1-2010.

e USGBC for 5 years

building.

OPR & BOD.

historic district/building.

4-8 basic services.

eshare.

e parking and FTE showers

alternative fuel facility for 2%

n use and human health effects.

0/sf to accredited land trust (1pt). otprint).

nt (LID) and green infrastructure.

over (1pt).

quirements.

led or 20% non-potable water use (2pts).

12	5	15	1	Energy	& Atmosphere	Standard
4		2		EA Credit 1	Enhanced Commissioning	CD review, post occupancy review, recommissioning manual (3pts) AND develop monitoring procedures (4pts) AND/OR (2pts)
3				EA Credit 2	Optimize Energy Performance: 6% / 8% / 10%	Reduce building energy cost by 6% / 8% / 10% compared to ASHRAE 90.1-2010, Appendix G.
3				EA Credit 2	Optimize Energy Performance: 12% / 14% / 16%	Reduce building energy cost by 12% / 14% / 16% compared to ASHRAE 90.1-2010, Appendix G.
1	2			EA Credit 2	Optimize Energy Performance: 18% / 20% / 22%	Reduce building energy cost by 18%/ 20%/ 22% compared to ASHRAE 90.1-2010, Appendix G.
	2	1		EA Credit 2	Optimize Energy Performance: 24% / 26% / 29%	Reduce building energy cost by 24% / 26% / 29% compared to ASHRAE 90.1-2010, Appendix G.
		3		EA Credit 2	Optimize Energy Performance: 32% / 35% / 38%	Reduce building energy cost by 32%/ 35%/ 38% compared to ASHRAE 90.1-2010, Appendix G.
		3		EA Credit 2	Optimize Energy Performance: 42% / 46% / 50%	Reduce building energy cost by 42%/ 46%/ 50% compared to ASHRAE 90.1-2010, Appendix G.
	1			EA Credit 3	Advanced Energy Metering	Install energy metering for whole building energy and individual energy end uses representing 10% of more of total cons
		2		EA Credit 4	Demand Response	Design building and equipment for participation in demand response programs through load shedding or shifting.
		2	1	EA Credit 5	Renewable Energy Production: 1% / 5% / 10%	Produce renewable energy on-site for 1% / 5% / 10% of building energy consumption, calculated by cost.
1				EA Credit 6	Enhanced Refrigerant Management	Select refrigerants with low global warming potential and ozone depletion potential.
		2		EA Credit 7	Green Power and Carbon Offsets	Engage a 5 year contract for at least 50% or 100% of the project's energy from green power, carbon offsets, or RECs

5	3	3	2	Materi
		3	2	MR Credit 1
1	1			MR Credit 2
1	1			MR Credit 3
1	1			MR Credit4
2				MR Credit 5

ials & Resources

MR Credit 1	Building Life-Cycle Impact Reduction
MR Credit 2	Building Product Disclosure & Optimization: Environmental Product Declarations
MR Credit 3	Building Product Disclosure & Optimization: Sourcing of Raw Materials
MR Credit4	Building Product Disclosure & Optimization: Material Ingredients
MR Credit 5	Construction & Demolition Waste Management: 50% / 75%

Standard

Conduct a life-cycle assessment that demonstrates a minimum of 10% reduction in at least three of the six impact measures (3pts). Credit can also be earned for building and material reuse, or renovation of an abandoned building (2-5pts).

Use 20 products sourced from five different manufacturers that meet disclosure criteria (1pt) AND/OR use products that exhibit optimized performance , 50% by cost (1 pt)

Use 20 products sourced from five different manufacturers that have publicly released a report from their raw material suppliers (1pt) AND/OR products that meet responsible extraction criteria, 25% material cost (1pt)

Use 20 products sourced from five different manufacturers that demonstrate the chemical inventory of the products (1pt AND/OR use products that document their material ingredient optimization, 25% material cost (1pt) Divert 50%, three material streams (1pt) OR 75%, four material streams (2pts), OR generate less than 2.5 lbs waste/sf (2pts)

	8	6	2	0	Indoor I	Environmental Quality	Standard
	2				IEQ Credit 1	Enhanced Air Quality Strategies	Provide entryway systems, prevent interior cross-contamination, and specify MERV 13 filters (1pt) ANE or increase ventilation or monitor CO2 (1pt).
	1	1	1		IEQ Credit 2	Low-Emitting Materials: 2 / 4 / 5 categories	Achieve the threshold level of compliance with emissions and content standards for 2, 4 or 5 product ca
	1				IEQ Credit 3	Construction IAQ Management Plan	Develop an IAQ plan for construction and preoccupancy phases that meets SMACNA IAQ Guidelines f Construction
	1	1			IEQ Credit 4	Indoor Air Quality Assessment	Perform pre-occupancy building flush out (1pt) or testing (2pts).
ſ	1				IEQ Credit 5	Thermal Comfort	Meet ASHRAE 55-2010, Thermal Comfort Conditions for Human Occupancy.
ſ	2				IEQ Credit 6	Interior Lighting	Provide lighting controls for 90% of individuals AND/OR meet four of LEED's lighting quality requirement
ſ		2	1		IEQ Credit 7	Daylight: 55% / 75%	Demonstrate through annual simulations that daylight autonomy300/50% (sDA300/50%) is achieved (
		1			IEQ Credit 8	Quality Views	Provide direct views to the outside in 75% of regularly occupied spaces which meets 2 out of 4 LEED v
		1			IEQ Credit 9	Acoustic Performance	Meet requirements for HVAC background noise, sound isolation, reverberation time, & sound reinforce

4	2	0	0	Innovati	on in Design		Standard
1				ID Credit 1.1	Innovation in Design, Green Education	Pending GBCI review and comment.	
1				ID Credit 1.2	Innovation in Design, Green Cleaning	Pending GBCI review and comment.	
1				ID Credit 1.3	Innovation in Design, Low Mercury Lighting	Pending GBCI review and comment.	
	1			ID Credit 1.4	Innovation in Design, Organic Landscape Management	Pending GBCI review and comment.	
	1			ID Credit 1.5	Innovation in Design, Integrated Pest Management	Pending GBCI review and comment.	
1				ID Credit 2	LEED <sup>™</sup> Accredited Professional	LEED Accredited Professional on design team.	
				-			
	_	_	_	Deuteur.	I Delevite		

2	2	0	0	Regiona	i Priority	Standard
1				RP Credit 1.1	Regional Priority, Indoor Water Use Reduction	Pursuant to USGBC determined zone-based regional priority credit (Up to 6 points, required pt th
1				RP Credit 1.2	Regional Priority, Optimize Energy Performance	Pursuant to USGBC determined zone-based regional priority credit (Up to 18 points, required pt t
	1			RP Credit 1.3	Regional Priority, High Priority Site	Pursuant to USGBC determined zone-based regional priority credit (2 points, required point thres
	1			RP Credit 1.4	Regional Priority, Rainwater Management	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt th
				RP Credit	Regional Priority, Renewable Energy Production	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt th



ing procedures (4pts) AND/OR envelope Cx

nting 10% of more of total consumption.

ND/OR prevent exterior contaminatior

categories s for Occupied Buildings Under

nents.

ed (2/3pts) view criteria.

cement for all occupied spaces.

t threshold = 4) pt threshold = 8) reshold = 2) t threshold = 2) t threshold = 2)

SoMa Site and Buildings 2-6

# LEED v4 - Kendall Master Site

EA Prereq 4

MR Prereq 2

IEQ Prereq 2

SS Credit 6

# last updated: April 23, 2015

hi med 29 6

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Y

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ni	Achiev med	<b>ability</b> low	NP				<b>Silver</b> 50 to 59 points 0%, <b>Med</b> = 60%, <b>Low</b> = 7	1	Platinum	80 or more points
9	6	4	0	30	Projected	d Points				
					Prerequi	isites				
Y				SS	Prereq 1	Construc	tion Activity Pollution P	revention		Create and implement ero
Y				WE	Prereq 1	Outdoor \	Water Use Reduction: 3	0%		Reduce outdoor water use

Construction and Demolition Waste Management Planning

Fundamental Refrigerant Management

Light Pollution Reduction

Environmental Tobacco Smoke (ETS) Control

Reduce outdoor water use by 30% over the baseline specified in LEED.

Eliminate CFCs in building HVAC&R.

Develop and implement a construction and demolition waste management plan

Prohibit smoking inside building, and locate exterior smoking areas at least 25 feet away from building.

Standard

17	0	3	0	Locatio	n & Transportation	Standard
			20	LT Credit 1	LEED for Neighborhood Development Location	Locate the project in within a development certified under LEED for Neighborhood Development
2				LT Credit 2	Sensitive Land Protection	Locate the development footprint on land that has been previously developed.
		3		LT Credit 3	High Priority Site	Locate the project on a site where contaminated soil/groundwater remediation is required or in historic dis
6				LT Credit 4	Surrounding Density and Diverse Uses	Locate on a site with an existing density of 22,000sf/acre - 35,000 sf/acre and within 1/2 mile of 4-8 basic
6				LT Credit 5 Access to Quality Transit		Locate project within 1/2 mile of a rail station or ferry terminal or 1/4 mile of bus, streetcar or rideshare.
1				LT Credit 6	Bicycle Facilities	Access to bicycle network. Short term (2.5% peak visitors) and long term (5% all occupants) bike parking
1				LT Credit 7	Reduced Parking Footprint	Preferred parking for carpools for 5% of the total parking spaces
1				LT Credit 8	Green Vehicles	Preferred parking for Green Vehicles: 5% of all parking spaces and electric vehicle charging or alternative
6	2	4	0	Suctain	able Sites	Standard
0	3		0			
1				SS Credit 1	Site Assessment	Complete comprehensive site survey; topography, hydrology, climate, vegetation, soils, human use and h
	2			SS Credit 2	Site Development: Protect or Restore Habitat	Protect 40% of greenfield and restore 30% of previously developed site (2pts) or provide \$0.40/sf to accr
	1			SS Credit 3	Open Space	Provide outdoor space greater than or equal to 30% of the total site area (including building footprint).
3				SS Credit 4	Rainwater Management	Manage runoff for the 95th percentile (2pt), 98th percentile (+1pt) with low-impact development (LID) and
2				SS Credit 5	Heat Island Reduction	Meet high albedo requirements for roof and site OR place a minimum of 75% parking under cover (1pt).

1	1	0	0	Water Ef	ficiency		Standard
1				WE Credit 1	Outdoor Water Use Reduction: 50% Reduction	Reduce potable water used for irrigation by 50%.	
	1			WE Credit 1	Outdoor Water Use Reduction: No Potable Water	No potable water use for irrigation.	

ID Credit 1.1 ID Credit 1.2	Innovation in Design, Green Education Innovation in Design, Green Cleaning	Pending GBCI review and comment. Pending GBCI review and comment.	
ID Credit 1.2	Innovation in Design, Green Cleaning	Pending GBCI review and comment.	
ID Credit 1.3	Innovation in Design, Organic Landscape Management	Pending GBCI review and comment.	
ID Credit 1.4	Innovation in Design, Integrated Pest Management	Pending GBCI review and comment.	
ID Credit 2	LEED <sup>™</sup> Accredited Professional	LEED Accredited Professional on design team.	
	ID Credit 1.4	ID Credit 1.4 Innovation in Design, Integrated Pest Management	ID Credit 1.4 Innovation in Design, Integrated Pest Management Pending GBCI review and comment.

1	1	0	0	Regional	I Priority	Standard
	1			RP Credit 1.3	Regional Priority, High Priority Site	Pursuant to USGBC determined zone-based regional priority credit (2 points, required point thr
1				RP Credit 1.4	Regional Priority, Rainwater Management	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt



## erosion control plan that meets the 2003 EPA Construction General Permit.

storic district/building.

-8 basic services.

parking and FTE showers

ternative fuel facility for 2%

se and human health effects.

to accredited land trust (1pt).

\_ID) and green infrastructure.

Meet uplight and light trespass requirements and do not exceed exterior signage luminance requirements.

threshold = 2) pt threshold = 2)

Still BU	LOING CO	LEE	D v4 for BD+C: Core and Shell							
		Proje	ect Checklist			-	t N	lame:	Building 2	
62	380				Da	ate:			5/6/2015	
Y 1	? N	Credit	Integrative Process	1						
17	3 0	Locat	tion and Transportation	20	6	5	3	Mate	erials and Resources	14
		Credit	LEED for Neighborhood Development Location	20	Y	Ť	10	Prereg	Storage and Collection of Recyclables	Require
2		Credit	Sensitive Land Protection	2	Y			Prereg	Construction and Demolition Waste Management Planning	Require
	3	Credit	High Priority Site	3	3		3	Credit	Building Life-Cycle Impact Reduction	6
6	-	Credit	Surrounding Density and Diverse Uses	6		2		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
6		Credit	Access to Quality Transit	6	1	1		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		Credit	Bicycle Facilities	1		2		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
1		Credit	Reduced Parking Footprint	1	2			Credit	Construction and Demolition Waste Management	2
1		Credit	Green Vehicles	1			-	-	C C	
					4	3	3	Indo	or Environmental Quality	10
8	2 2	Susta	ainable Sites	11	Y		1 -	Prereg	Minimum Indoor Air Quality Performance	Required
Y		Prereg	Construction Activity Pollution Prevention	Required	Y	1		Prereq	Environmental Tobacco Smoke Control	Required
1		Credit	Site Assessment	1	1	1		Credit	Enhanced Indoor Air Quality Strategies	2
-	2	_	Site Development - Protect or Restore Habitat	2	2	1	-	Credit	Low-Emitting Materials	2
	1	Credit	Open Space	1	2	-	-	Credit	-	3
3	-	Credit	Rainwater Management	3	- 1	-	3	-	Construction Indoor Air Quality Management Plan Daylight	3
3 2	_	-	5	2		1	3	Credit		3
2	-	Credit	Heat Island Reduction			1		Credit	Quality Views	1
2	1	Credit	Light Pollution Reduction	1	0	0	0	Inne		<u> </u>
2		Credit	Tenant Design and Construction Guidelines	1	2	U	U	Credit	Vation Innovation	<b>6</b> 5
6	3 4	Water	r Efficiency	11	1	-		Credit	LEED Accredited Professional	1
Y	•   •	Prereq	Outdoor Water Use Reduction	Required						
Y		Prereg	Indoor Water Use Reduction	Required	2	2	0	Reai	ional Priority	4
Y		Prereq	Building-Level Water Metering	Required	1	-		Credit	Regional Priority: Specific Credit	1
2	2	Credit	Outdoor Water Use Reduction	2	1			Credit	Regional Priority: Specific Credit	1
	1 2	_	Indoor Water Use Reduction	6		1		Credit	Regional Priority: Specific Credit	1
-	2	Credit	Cooling Tower Water Use	2		1	-	Credit	Regional Priority: Specific Credit	1
1	-	Credit	Water Metering	-						
					52	30	26	ТОТ	ALS Possible Points:	110
6	12 14	Enero	gy and Atmosphere	33					0 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to	
Y		Prereq	Fundamental Commissioning and Verification	Required					· · · · · · · · · · · · · · · · · · ·	
Y		Prereq	Minimum Energy Performance	Required						
Y		Prereg	Building-Level Energy Metering	Required						
Y		Prereg	Fundamental Refrigerant Management	Required						
	3 1	- ·	Enhanced Commissioning	6						
	3 11	_	Optimize Energy Performance	18						
		_	Advanced Energy Metering	1						
		Credit								
	1	Credit		2						
3	1 2	Credit	Demand Response	2						
3	1	Credit Credit	Demand Response Renewable Energy Production	3						
3	1 2	Credit	Demand Response	-						



SITE M



Y Y Y Y Y LEED v4 for Core and Shell Development Project Scorecard

Project Name: Site N Project Address: Main Street Cambridge, MA Updated: May 12, 2015 TOTALS

 IOTALS
 Certified: 40-49 points
 Silver: 50-59 points
 Gold: 60-79 points
 Platinum: 80+ points

GENERAL PROJECT DOCUMENTATION						
PI form 1 Minimum Program Requirements	Required					
PI form 2 Project Summary Details	Required					
PI form 3 Occupant Usage Data	Required					
PI form 4 Schedule and Overview Documents	Required					
PI form 5 Building Systems Control	Required					

Yes	?+	?-	No				
1	0	0	0	Integrativ	ve Process	1	5/12 updates
1				Credit 1	Integrative Process	1	
Yes	?+	?-	No				
17	0	3	0	Location	+ Transportation	20	5/12 updates
				Credit 1	LEED for Neighborhood Development	20	
2				Credit 2	Sensitive Land Protection	2	
		3		Credit 3	High Priority Site	3	
6				Credit 4	Surrounding Density and Diverse Uses	6	Master Site Credit
6				Credit 5	Access to Quality Transit	6	Master Site Credit
1				Credit 6	Bicycle Facilities	1	Master Site Credit
1				Credit 7	Reduced Parking Footprint	1	Master Site Credit
1				Credit 8	Green Vehicles	1	Master Site Credit
Yes	?+	?-	No				
8	1	1	0		ABLE SITES	11	5/12 updates
Ŷ				Prereq 1	Construction Activity Pollution Prevention	Required	REQUIRED
1				Credit 1	Site Assessment	1	Master Site Credit
2	<u> </u>			Credit 2	Site Development - Protect or Restore Habitat	2	MITIMCo interested in pursing crecit via Option 2. Via Land Trust support
	1			Credit 3	Open Space	1	Consider attempting on a project basis - dependent on final design
3				Credit 4	Rainwater Management	3	Master Site Credit
1		1		Credit 5	Heat Island Reduction	1 to 2	Master Site Credit
		1		Credit 6	Light Pollution Reduction	1	Consider pursing on project basis
1				Credit 7	Tenant Design and Construction Guidelines	1	Assumes owner will provide non-binding Tenant Design and Construction Guidelines to potential tenants
Yes 7	?	2	No 1	WATER	EFFICIENCY	11	5/12 updates
Y	Ľ.	-		Prereg 1	Outdoor Water Use Reduction	Required	REQUIRED. Master Site
Y				Prereg 2	Inddoor Water Use Reduction	Required	REQUIRED
Y				Prereg 3	Building Level Water Metering	Required	REQUIRED
2				Credit 1	Outdoor Water Use Reduction 50%	2	Master Site Credit; assumes reduced potable water use for irrigation by 50% OR no irrigation
4		1	1	Credit 2	Indoor Water Use Reduction 30%-50%	2 to 6	Assumes project will achieve a 40% water use reduction and attempt to reach the 40% threshold
	1	1		Credit 3	Cooling Tower Water Use	1 to 2	Consider attempting this credit requires conducting a one-time potable water analysis to measure 5 established control parameters and determining the max allowed concentration level of each in the make up water. Limit cooling tower cycles.
1				Credit 4	Water Metering	1	Consider attempting - requires additional water end use metering

	2	2	19	ENERGY	& ATMOSPHERE	33	5/12 updates
				Prereq 1	Fundamental Commissioning of Building Energy Systems	Required	REQUIRED
				Prereq 2	Minimum Energy Performance	Required	REQUIRED
				Prereq 3	Building Level Energy Metering	Required	REQUIRED
				Prereq 4	Fundamental Refrigerant Management	Required	
				Credit 1	Enhanced Commissioning	2 to 6	Project will pursue enhanced commissioning; monitor based commissioning and building envelop commissioning.
1		2	12	Credit 2	Optimize Energy Performance	up to 18	Pending AHA energy model updates. HOLD until MEP design is further developed
1	1			Credit 3	Advanced Energy Metering	1	Consider attempting this credit. Requires installation of advanced energy metering for the base building and to enal tenants to independently meter energy consumption for all systems within their space NOTE: MIT is typically interested in a high level of energy metering
			2	Credit 4	Demand Response	2	Assumed 'no'
			3	Credit 5.1	Renewable Energy Production	3	Dependent on design team input; Assumed 'no'
				Credit 5.2	Enhanced Refrigerant Management	1	Dependent on design team input
	+		2	Credit 6	Green Power and Carbon off-sets	1 to 2	Not a design decision
?			No				-
2	2	3	3	MATERIA	ALS & RESOURCES	14	5/12 updates
				Prereq 1	Storage and Collection of Recyclables	Required	REQUIRED
				Prereq 2	Construction and Demolition Waste Management Planning	Required	REQUIRED. Master Site prerequisite. May on be applicable if the CM is the same for all projects and construction occurs simultaneously or progressively
			3	Credit 1	Building Life-Cycle Impact Reduction	2 to 6	Assumes project will pursue Option 4 whole-building life-cycle assessment
1		1		Credit 2	Building Product Disclosure and Optimization - Environmental Product Declaration	2	Assumes project will attempt Option 1 EPDs for 20 products from at least 5 different manufacturers
		1		Credit 3	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2	Assumes project will attempt Option 2 Leadership extraction practices and consider Option 1 Raw material source extraction reporting
1		1		Credit 4	Building Product Disclosure and Optimization - Material Ingredients	2	Assumes project will attempt Option 2 Leadership extraction practices
				Credit 5	Construction and Demolition Waste Management	2	Assumes technical specifications will include a section for Construction Waste Management in Division 1
?			No				
0	)	2	3	INDOOR	ENVIROMENTAL QUALITY	10	5/12 updates
				Prereq 1	Minimum Indoor Air Quality Performance	Required	REQUIRED
					Environmental Tobacco Smoke (ETS) Control		
				Prereq 2		Required	REQUIRED. Master site prerequisite
		1		Prereq 2 Credit 1	Enhanced Indoor Air Quality Strategies	Required 2	REQUIRED. Master site prerequisite Assumes project will meet criteria for walk off mats, filtration, etc.
		1					
				Credit 1	Enhanced Indoor Air Quality Strategies	2	Assumes project will meet criteria for walk off mats, filtration, etc.
			3	Credit 1 Credit 2	Enhanced Indoor Air Quality Strategies Low Emitting Materials	2 1 to 3	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met
			3	Credit 1 Credit 2 Credit 3	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan	2 1 to 3 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling
?			3 No	Credit 1 Credit 2 Credit 3 Credit 4	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight	2 1 to 3 1 3	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1
? 0				Credit 1 Credit 2 Credit 3 Credit 4 Credit 5	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight	2 1 to 3 1 3	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling
? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views	2 1 to 3 1 3 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout
2 2 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN	2 1 to 3 1 3 1 6	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout 5/12 updates
? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1	2 1 to 3 1 3 1 6	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout 5/12 updates Master Site Credit
? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education	2 1 to 3 1 3 1 6 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout 5/12 updates Master Site Credit Master Site Credit
? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views TON IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Cleaning	2 1 to 3 1 3 1 6 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit Master Site Credit
? ? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views TON IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Cleaning ID -Organic Landscape Management or Integrated Pest Control	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit
? 0		1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views TON IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Cleaning	2 1 to 3 1 3 1 6 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit Master Site Credit
? 0		1	No 0	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Education ID - Green Cleaning ID - Organic Landscape Management or Integrated Pest Control LEED® Accredited Professional	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit Master Site Credit
?		0	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views TON IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Cleaning ID -Organic Landscape Management or Integrated Pest Control	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit Master Site Credit
?		0	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 REGION	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Cleaning ID - Organic Landscape Management or Integrated Pest Control LEED® Accredited Professional AL PRIORITY - zip code 02139	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1 1 1 4	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout  5/12 updates Master Site Credit Master Site Credit Master Site Credit Master Site Credit Site Credit Master Site Credit Assumed Site Credit
?		0	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.1 Credit 1.2 Credit 1.3 Credit 1.5 Credit 2 REGION Credit 1 Credit 1 Credit 1	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Education ID - Green Education ID - Green Education ID - Green Cleaning ID -Organic Landscape Management or Integrated Pest Control LEED® Accredited Professional AL PRIORITY - zip code 02139 Regional Priority for 02139: Renewable Energy Production: Optimize Energy Performance 8pt threshold; High Prio Regional Priority for 02139: Renewable Energy Production: Optimize Energy Performance 8pt threshold; High Prio Regional Priority for 02139: Renewable Energy Production: Optimize Energy Performance 8pt threshold; High Prio	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1 1 1 1 4 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout 5/12 updates Master Site Credit Master Site Credit 5/12 updates Rainwater Management
?		1 0 1 1 1 1	No	Credit 1 Credit 2 Credit 3 Credit 4 Credit 5 INNOVAT Credit 1.2 Credit 1.3 Credit 1.4 Credit 1.5 Credit 2 REGION/ Credit 2	Enhanced Indoor Air Quality Strategies Low Emitting Materials Construction Indoor Air Quality Management Plan Daylight Quality Views ION IN DESIGN ID - Exemplary Performance in SSc4.1 ID - Exemplary Performance SSc7.2 ID - Green Education ID - Green Education ID - Green Cleaning ID -Organic Landscape Management or Integrated Pest Control LEED® Accredited Professional AL PRIORITY - zip code 02139 Regional Priority for 02139: Renewable Energy Production; Optimize Energy Performance &pt threshold; High Prio	2 1 to 3 1 3 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Assumes project will meet criteria for walk off mats, filtration, etc. Assumes 4 of the possible 6 categories will be met Assumes technical specifications will include a section for Indoor Air Quality Management in Division 1 Assumed 'no'. Requires daylight modeling Dependent on typical tenant layout 5/12 updates Master Site Credit Master Site Credit

Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80+ points

#### LEED v4 for New Construction - Kendall Square Building 4 last updated: May 4, 2015

Achievability hi med low NP 58 26 17 9

 Certified
 40 to 49 points
 Silver
 50 to 59 points
 Gold
 60 to 79 points
 Platinum
 80 or more points

 Achievability rating:
 HI = 90%, Med = 60%, Low = 10%, NP = not possible.
 Platinum
 80 or more points

#### 70 Projected Points

	Prerequi	sites	Standard		
Υ	SS Prereq 1	Construction Activity Pollution Prevention	Create and implement erosion control plan that meets the 2003 EPA Construction General Permit.		
Y (////////////////////////////////////	WE Prereq 1	Outdoor Water Use Reduction: 30%	Reduce outdoor water use by 30% over the baseline specified in LEED.		
Y (////////////////////////////////////	WE Prereq 2	Indoor Water Use Reduction: 20%	Reduce indoor water use by 20% over the baseline specified in LEED and meet requirements for process water use.		
Y ////////////////////////////////////	WE Prereq 3	Building-Level Water Metering	Install permanent water meters for building and grounds		
Y (///)(////////////////////////////////	EA Prereq 1	Fundamental Commissioning and Verification	Engage commissioning agent, and develop and execute a commissioning plan. Prepare O&M plan for current facilities.		
Y (////////////////////////////////////	EA Prereq 2	Minimum Energy Performance	Reduce energy cost by 5%, compared to ASHRAE 90.1-2010, Appendix G; meet mandatory provisions of ASHRAE 90.1-2010.		
Y ////////////////////////////////////	EA Prereq 3	Building-Level Energy Metering	Install meters to provide data on total energy consumption AND commit to share data with the USGBC for 5 years		
Y (////////////////////////////////////	EA Prereq 4	Fundamental Refrigerant Management	Eliminate CFCs in building HVAC&R.		
Y ////////////////////////////////////	MR Prereq 1	Storage & Collection of Recyclables	Provide space for the collection and storage of paper, cardboard, glass, plastic, and metals.		
Y ////////////////////////////////////	MR Prereq 2	Construction and Demolition Waste Management Planning	Develop and implement a construction and demolition waste management plan		
Y (////////////////////////////////////	IEQ Prereq 1	Minimum IAQ Performance	Meet sections 4 through 7 of ASHRAE 62.1-2010.		
Y (////////////////////////////////////	IEQ Prereq 2	Environmental Tobacco Smoke (ETS) Control	Prohibit smoking inside building, and locate exterior smoking areas at least 25 feet away from building.		

1	0	0	0	Integrative Process
1				IP Credit 1 Integrative Process

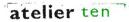
Perform preliminary energy model and water budget before the completion of SD and document in OPR & BOD.

Standard

12	2	2	0	Location	& Transportation	Standard
			16	LT Credit 1	LEED for Neighborhood Development Location	Locate the project in within a development certified under LEED for Neighborhood Development
1				LT Credit 2	Sensitive Land Protection	Locate the development footprint on land that has been previously developed.
		2		LT Credit 3	High Priority Site	Locate the project on a site where contaminated soil/groundwater remediation is required or in historic district/building.
5				LT Credit 4	Surrounding Density and Diverse Uses	Locate on a site with an existing density of 22,000sf/acre - 35,000 sf/acre and within 1/2 mile of 4-8 basic services.
5				LT Credit 5	Access to Quality Transit	Locate project within 1/2 mile of a rail station or ferry terminal or 1/4 mile of bus, streetcar or rideshare.
1				LT Credit 6	Bicycle Facilities	Access to bicycle network. Short term (2.5% peak visitors) and long term (5% all occupants) bike parking and FTE showers
	1			LT Credit 7	Reduced Parking Footprint	Preferred parking for carpools for 5% of the total parking spaces
	1			LT Credit 8	Green Vehicles	Preferred parking for Green Vehicles: 5% of all parking spaces and electric vehicle charging or alternative fuel facility for 2%

6	3	0	1	Sustaina	able Sites	Standard
1				SS Credit 1	Site Assessment	Complete comprehensive site survey; topography, hydrology, climate, vegetation, soils, human use and human health effects.
	1		1	SS Credit 2	Site Development: Protect or Restore Habitat	Protect 40% of greenfield and restore 30% of previously developed site (2pts) or provide \$0.40/sf to accredited land trust (1pt).
	1			SS Credit 3	Open Space	Provide outdoor space greater than or equal to 30% of the total site area (including building footprint).
3				SS Credit 4	Rainwater Management	Manage runoff for the 95th percentile (2pt), 98th percentile (+1pt) with low-impact development (LID) and green infrastructure.
2				SS Credit 5	Heat Island Reduction	Meet high albedo requirements for roof and site OR place a minimum of 75% parking under cover (1pt).
	1			SS Credit 6	Light Pollution Reduction	Meet uplight and light trespass requirements and do not exceed exterior signage luminance requirements.

3	4	2	2	Water E	fficiency	Standard
1				WE Credit 1	Outdoor Water Use Reduction: 50% Reduction	Reduce potable water used for irrigation by 50%.
		1		WE Credit 1	Outdoor Water Use Reduction: No Potable Water	No potable water use for irrigation.
2	1			WE Credit 2	Water Use Reduction: 25% / 30% / 35%	Reduce building water use over LEED baseline .
	2	1		WE Credit 2	Water Use Reduction: 40% / 45% / 50%	Reduce building water use over LEED baseline .
			2	WE Credit 3	Cooling Tower Water Use	Conduct a water analysis to optimize cooling tower cycles. Maximizing cycles (1pt), >10 cycled or 20% non-potable water use (2pts).
	1			WE Credit 4	Water Metering	Install permanent water meters for two or more water subsystems.



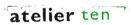
14	3	12	4	Energy a	& Atmosphere	Standard
6				EA Credit 1	Enhanced Commissioning	CD review, post occupancy review, recommissioning manual (3pts) AND develop monitoring procedures (4pts) AND/OR envelope Cx (2pts)
3				EA Credit 2	Optimize Energy Performance: 6% / 8% / 10%	Reduce building energy cost by 6% / 8% / 10% compared to ASHRAE 90.1-2010, Appendix G.
3				EA Credit 2	Optimize Energy Performance: 12% / 14% / 16%	Reduce building energy cost by 12% / 14% / 16% compared to ASHRAE 90.1-2010, Appendix G.
2	1			EA Credit 2	Optimize Energy Performance: 18% / 20% / 22%	Reduce building energy cost by 18%/ 20%/ 22% compared to ASHRAE 90.1-2010, Appendix G.
	2	1		EA Credit 2	Optimize Energy Performance: 24% / 26% / 29%	Reduce building energy cost by 24% / 26% / 29% compared to ASHRAE 90.1-2010, Appendix G.
		3		EA Credit 2	Optimize Energy Performance: 32% / 35% / 38%	Reduce building energy cost by 32%/ 35%/ 38% compared to ASHRAE 90.1-2010, Appendix G.
		3		EA Credit 2	Optimize Energy Performance: 42% / 46% / 50%	Reduce building energy cost by 42%/ 46%/ 50% compared to ASHRAE 90.1-2010, Appendix G.
		1		EA Credit 3	Advanced Energy Metering	Install energy metering for whole building energy and individual energy end uses representing 10% of more of total consumption.
			2	EA Credit 4	Demand Response	Design building and equipment for participation in demand response programs through load shedding or shifting.
		2	1	EA Credit 5	Renewable Energy Production: 1% / 5% / 10%	Produce renewable energy on-site for 1% / 5% / 10% of building energy consumption, calculated by cost.
			1	EA Credit 6	Enhanced Refrigerant Management	Select refrigerants with low global warming potential and ozone depletion potential.
		2		EA Credit 7	Green Power and Carbon Offsets	Engage a 5 year contract for at least 50% or 100% of the project's energy from green power, carbon offsets, or RECs

	5 (	6	0	2	Material	s & Resources	Standard
	;	3		2	MR Credit 1	Building Life-Cycle Impact Reduction	Conduct a life-cycle assessment that demonstrates a minimum of 10% reduction in at least three of the six impact measures (3pts). Credit can also be earned for building and material reuse, or renovation of an abandoned building (2-5pts).
	1	1			MR Credit 2	Building Product Disclosure & Optimization: Environmental Product Declarations	Use 20 products sourced from five different manufacturers that meet disclosure criteria (1pt) AND/OR use products that exhibit optimized performance, 50% by cost (1 pt)
	1	1			MR Credit 3	Building Product Disclosure & Optimization: Sourcing of Raw Materials	Use 20 products sourced from five different manufacturers that have publicly released a report from their raw material suppliers (1pt) AND/OR products that meet responsible extraction criteria, 25% material cost (1pt)
	1	1			MR Credit4	Building Product Disclosure & Optimization: Material Ingredients	Use 20 products sourced from five different manufacturers that demonstrate the chemical inventory of the products (1pt AND/OR use products that document their material ingredient optimization, 25% material cost (1pt)
L	2				MR Credit 5	Construction & Demolition Waste Management: 50% / 75%	Divert 50%, three material streams (1pt) OR 75%, four material streams (2pts), OR generate less than 2.5 lbs waste/sf (2pts)

11	4	1	0	Indoor I	Environmental Quality	Standard
2				IEQ Credit 1	Enhanced Air Quality Strategies	Provide entryway systems, prevent interior cross-contamination, and specify MERV 13 filters (1pt) AND/OR prevent exterior contamination or increase ventilation or monitor CO2 (1pt).
2	1			IEQ Credit 2	Low-Emitting Materials: 2 / 4 / 5 categories	Achieve the threshold level of compliance with emissions and content standards for 2, 4 or 5 product categories
1				IEQ Credit 3	Construction IAQ Management Plan	Develop an IAQ plan for construction and preoccupancy phases that meets SMACNA IAQ Guidelines for Occupied Buildings Under Construction
1	1			IEQ Credit 4	Indoor Air Quality Assessment	Perform pre-occupancy building flush out (1pt) or testing (2pts).
1				IEQ Credit 5	Thermal Comfort	Meet ASHRAE 55-2010, Thermal Comfort Conditions for Human Occupancy.
2				IEQ Credit 6	Interior Lighting	Provide lighting controls for 90% of individuals AND/OR meet four of LEED's lighting quality requirements.
2		1		IEQ Credit 7	Daylight: 55% / 75%	Demonstrate through annual simulations that daylight autonomy300/50% (sDA300/50%) is achieved (2/3pts)
	1			IEQ Credit 8	Quality Views	Provide direct views to the outside in 75% of regularly occupied spaces which meets 2 out of 4 LEED view criteria.
	1			IEQ Credit 9	Acoustic Performance	Meet requirements for HVAC background noise, sound isolation, reverberation time, & sound reinforcement for all occupied spaces.

4	2	0	0	Innovatio	on in Design	Standard
1				ID Credit 1.1	Innovation in Design, Green Education	Pending GBCI review and comment.
1				ID Credit 1.2	Innovation in Design, Green Cleaning	Pending GBCI review and comment.
1				ID Credit 1.3	Innovation in Design, Low Mercury Lighting	Pending GBCI review and comment.
	1			ID Credit 1.4	Innovation in Design, Organic Landscape Management	Pending GBCI review and comment.
	1			ID Credit 1.5	Innovation in Design, Integrated Pest Management	Pending GBCI review and comment.
1				ID Credit 2	LEED <sup>™</sup> Accredited Professional	LEED Accredited Professional on design team.

2	2	0	0	Regional	Priority	Standard
	1			RP Credit 1.1	Regional Priority, Indoor Water Use Reduction	Pursuant to USGBC determined zone-based regional priority credit (Up to 6 points, required pt threshold = 4)
1				RP Credit 1.2	Regional Priority, Optimize Energy Performance	Pursuant to USGBC determined zone-based regional priority credit (Up to 18 points, required pt threshold = 8)
	1			RP Credit 1.3	Regional Priority, High Priority Site	Pursuant to USGBC determined zone-based regional priority credit (2 points, required point threshold = 2)
1				RP Credit 1.4	Regional Priority, Rainwater Management	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt threshold = 2)
				RP Credit	Regional Priority, Renewable Energy Production	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt threshold = 2)



### LEED v4 for Core & Shell - Kendall Square Building 5 last updated: April 23, 2015

Achievability				
hi	med	low	NP	
63	21	21	6	

### 71 Projected Points

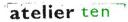
	Prerequ	isites	Standard
Y ////////////////////////////////////	SS Prereq 1	Construction Activity Pollution Prevention	Create and implement erosion control plan that meets the 2003 EPA Construction General Permit.
Y (////////////////////////////////////	WE Prereq 1	Outdoor Water Use Reduction: 30%	Reduce outdoor water use by 30% over the baseline specified in LEED.
Y (////////////////////////////////////	WE Prereq 2	Indoor Water Use Reduction: 20%	Reduce indoor water use by 20% over the baseline specified in LEED and meet requirements for process water use.
Y (////////////////////////////////////	WE Prereq 3	Building-Level Water Metering	Install permanent water meters for building and grounds
Y (////////////////////////////////////	EA Prereq 1	Fundamental Commissioning and Verification	Engage commissioning agent, and develop and execute a commissioning plan. Prepare O&M plan for current facilities.
Y (////////////////////////////////////	EA Prereq 2	Minimum Energy Performance	Reduce energy cost by 5%, compared to ASHRAE 90.1-2010, Appendix G; meet mandatory provisions of ASHRAE 90.1-2010.
Υ	EA Prereq 3	Building-Level Energy Metering	Install meters to provide data on total energy consumption AND commit to share data with the USGBC for 5 years
Y ////////////////////////////////////	EA Prereq 4	Fundamental Refrigerant Management	Eliminate CFCs in building HVAC&R.
Y (////////////////////////////////////	MR Prereq 1	Storage & Collection of Recyclables	Provide space for the collection and storage of paper, cardboard, glass, plastic, and metals.
Y (////////////////////////////////////	MR Prereq 2	Construction and Demolition Waste Management Planning	Develop and implement a construction and demolition waste management plan
Y (////////////////////////////////////	IEQ Prereq 1	Minimum IAQ Performance	Meet sections 4 through 7 of ASHRAE 62.1-2010.
Y ////////////////////////////////////	IEQ Prereq 2	Environmental Tobacco Smoke (ETS) Control	Prohibit smoking inside building, and locate exterior smoking areas at least 25 feet away from building.

1	0	0	0	Integrative Process	Standard
1				IP Credit 1 Integrative Process	Perform preliminary energy model and water budget before the completion of SD and document in OPR & BOD.

17	0	3	0	Locatio	n & Transportation	Standard
			20	LT Credit 1	LEED for Neighborhood Development Location	Locate the project in within a development certified under LEED for Neighborhood Development
2				LT Credit 2	Sensitive Land Protection	Locate the development footprint on land that has been previously developed.
		3		LT Credit 3	High Priority Site	Locate the project on a site where contaminated soil/groundwater remediation is required or in historic district/building.
6				LT Credit 4	Surrounding Density and Diverse Uses	Locate on a site with an existing density of 22,000st/acre - 35,000 st/acre and within 1/2 mile of 4-8 basic services.
6				LT Credit 5	Access to Quality Transit	Locate project within 1/2 mile of a rail station or ferry terminal or 1/4 mile of bus, streetcar or rideshare.
1				LT Credit 6	Bicycle Facilities	Access to bicycle network. Short term (2.5% peak visitors) and long term (5% all occupants) bike parking and FTE showers
1				LT Credit 7	Reduced Parking Footprint	Preferred parking for carpools for 5% of the total parking spaces
1				LT Credit 8	Green Vehicles	Preferred parking for Green Vehicles: 5% of all parking spaces and electric vehicle charging or alternative fuel facility for 2%

6	3	1	0	Sustaina	able Sites	Standard
1				SS Credit 1	Site Assessment	Complete comprehensive site survey; topography, hydrology, climate, vegetation, soils, human use and human health effects.
	2			SS Credit 2	Site Development: Protect or Restore Habitat	Protect 40% of greenfield and restore 30% of previously developed site (2pts) or provide \$0.40/sf to accredited land trust (1pt).
	1			SS Credit 3	Open Space	Provide outdoor space greater than or equal to 30% of the total site area (including building footprint).
3				SS Credit 4	Rainwater Management	Manage runoff for the 95th percentile (2pt), 98th percentile (+1pt) with low-impact development (LID) and green infrastructure.
2				SS Credit 5	Heat Island Reduction	Meet high albedo requirements for roof and site OR place a minimum of 75% parking under cover (1pt).
		1		SS Credit 6	Light Pollution Reduction	Meet uplight and light trespass requirements and do not exceed exterior signage luminance requirements.
	1			SS Credit 7	Tenant Design and Construction Guidelines	Develop Tenant Guildelines for future tenants to fit out their space.

5	4	1	0	Water Ef	ficiency	Standard				
1				WE Credit 1	Outdoor Water Use Reduction: 50% Reduction	Reduce potable water used for irrigation by 50%.				
	1			WE Credit 1	Outdoor Water Use Reduction: No Potable Water	No potable water use for irrigation.				
				WE Credit 2	Water Use Reduction: 25% / 30% / 35%	Reduce building water use over LEED baseline .				
1	1	1		WE Credit 2	Water Use Reduction: 40% / 45% / 50%	Reduce building water use over LEED baseline .				
	2			WE Credit 3	Cooling Tower Water Use	Conduct a water analysis to optimize cooling tower cycles. Maximizing cycles (1pt), >10 cycled or 20% non-potable water use (2pts).				



#### 1 WE Credit 4 Water Metering Install permanent water meters for two or more water subsystems. 12 5 13 3 Energy & Atmosphere Standard CD review, post occupancy review, recommissioning manual (3pts) AND develop monitoring procedures (4pts) AND/OR envelope Cx 2 4 EA Credit 1 Enhanced Commissioning (2pts) 3 EA Credit 2 Optimize Energy Performance: 6% / 8% / 10% Reduce building energy cost by 6% / 8% / 10% compared to ASHRAE 90.1-2010, Appendix G. 3 EA Credit 2 Optimize Energy Performance: 12% / 14% / 16% Reduce building energy cost by 12% / 14% / 16% compared to ASHRAE 90.1-2010. Appendix G. EA Credit 2 Optimize Energy Performance: 18% / 20% / 22% Reduce building energy cost by 18%/ 20%/ 22% compared to ASHRAE 90.1-2010, Appendix G. 3 2 1 EA Credit 2 Optimize Energy Performance: 24% / 26% / 29% Reduce building energy cost by 24% / 26% / 29% compared to ASHRAE 90.1-2010, Appendix G. 3 EA Credit 2 Optimize Energy Performance: 32% / 35% / 38% Reduce building energy cost by 32%/ 35%/ 38% compared to ASHRAE 90.1-2010, Appendix G. 3 EA Credit 2 Optimize Energy Performance: 42% / 46% / 50% Reduce building energy cost by 42%/ 46%/ 50% compared to ASHRAE 90.1-2010, Appendix G. EA Credit 3 Advanced Energy Metering Install energy metering for whole building energy and individual energy end uses representing 10% of more of total consumption. 2 EA Credit 4 Demand Response Design building and equipment for participation in demand response programs through load shedding or shifting. 3 EA Credit 5 Renewable Energy Production: 1% / 5% / 10% Produce renewable energy on-site for 1% / 5% / 10% of building energy consumption, calculated by cost. EA Credit 6 Enhanced Refrigerant Management Select refrigerants with low global warming potential and ozone depletion potential. EA Credit 7 Green Power and Carbon Offsets Engage a 5 year contract for at least 50% or 100% of the project's energy from green power, carbon offsets, or RECs 2

5	3	3	3	Materials	& Resources	Standard
		3	3	MR Credit 1	Building Life-Cycle Impact Reduction	Conduct a life-cycle assessment that demonstrates a minimum of 10% reduction in at least three of the six impact measures (3pts). Credit can also be earned for building and material reuse, or renovation of an abandoned building (2-5pts).
1	1			MR Credit 2	Building Product Disclosure & Optimization: Environmental Product Declarations	Use 20 products sourced from five different manufacturers that meet disclosure criteria (1pt) AND/OR use products that exhibit optimized performance , 50% by cost (1 pt)
1	1			MR Credit 3	Building Product Disclosure & Optimization: Sourcing of Raw Materials	Use 20 products sourced from five different manufacturers that have publicly released a report from their raw material suppliers (1pt) AND/OR products that meet responsible extraction criteria, 25% material cost (1pt)
1	1			MR Credit4	Building Product Disclosure & Optimization: Material Ingredients	Use 20 products sourced from five different manufacturers that demonstrate the chemical inventory of the products (1pt AND/OR use products that document their material ingredient optimization, 25% material cost (1pt)
2				MR Credit 5 Construction & Demolition Waste Management: 50% / 75%		Divert 50%, three material streams (1pt) OR 75%, four material streams (2pts), OR generate less than 2.5 lbs waste/sf (2pts)

9	3	0	0	Indoor E	Environmental Quality	Standard
2				IEQ Credit 1	Enhanced Air Quality Strategies	Provide entryway systems, prevent interior cross-contamination, and specify MERV 13 filters (1pt) AND/OR prevent exterior contaminatior or increase ventilation or monitor CO2 (1pt).
2	1			IEQ Credit 2	Low-Emitting Materials: 2 / 4 / 5 categories	Achieve the threshold level of compliance with emissions and content standards for 2, 4 or 5 product categories
1				IEQ Credit 3	Construction IAQ Management Plan	Develop an IAQ plan for construction and preoccupancy phases that meets SMACNA IAQ Guidelines for Occupied Buildings Under Construction
1	1			IEQ Credit 4	Indoor Air Quality Assessment	Perform pre-occupancy building flush out (1pt) or testing (2pts).
2	1			IEQ Credit 5	Daylight: 55% / 75%	Demonstrate through annual simulations that daylight autonomy300/50% (sDA300/50%) is achieved (2/3pts)
1				IEQ Credit 6	Quality Views	Provide direct views to the outside in 75% of regularly occupied spaces which meets 2 out of 4 LEED view criteria.

5	1	0	) ()	Innovatio	on in Design	Standard
1				ID Credit 1.1	Innovation in Design, Green Education	Pending GBCI review and comment.
1				ID Credit 1.2	Innovation in Design, Green Cleaning	Pending GBCI review and comment.
1				ID Credit 1.3	Innovation in Design, Low Mercury Lighting	Pending GBCI review and comment.
1				ID Credit 1.4	Innovation in Design, Organic Landscape Management	Pending GBCI review and comment.
	1			ID Credit 1.5	Innovation in Design, Integrated Pest Management	Pending GBCI review and comment.
1				ID Credit 2	LEED <sup>™</sup> Accredited Professional	LEED Accredited Professional on design team.
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2	2	0	0	Regional	l Priority	Standard			
	1			RP Credit 1.1	Regional Priority, Indoor Water Use Reduction	Pursuant to USGBC determined zone-based regional priority credit (Up to 6 points, required pt threshold = 4)			
1				RP Credit 1.2	Regional Priority, Optimize Energy Performance	Pursuant to USGBC determined zone-based regional priority credit (Up to 18 points, required pt threshold = 8)			
	1			RP Credit 1.3	Regional Priority, High Priority Site	Pursuant to USGBC determined zone-based regional priority credit (2 points, required point threshold = 2)			
1				RP Credit 1.4	Regional Priority, Rainwater Management	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt threshold = 2)			
				RP Credit	Regional Priority, Renewable Energy Production	Pursuant to USGBC determined zone-based regional priority credit (Up to 3 points, required pt threshold = 2)			



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## LEED v4 for BD+C: Core and Shell

Enhanced Refrigerant Management

Green Power and Carbon Offsets

Credit 1 1 Credit

Project Checklist

Project Name:	Kendall Building 6 (Draft Checklist)
Date:	30-Apr-15

Credit Integrative Process

12	5			tion and Transportation	20	1	7		6 Materials and Resources		14
		20	Credit	LEED for Neighborhood Development Location	20	Y			Prereq	Storage and Collection of Recyclables	Required
1	1		Credit	Sensitive Land Protection	2	Y			Prereq	Construction and Demolition Waste Management Planning	Required
1		2	Credit	High Priority Site	3		3	3	Credit	Building Life-Cycle Impact Reduction	6
4	2		Credit	Surrounding Density and Diverse Uses	6		1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
4	2		Credit	Access to Quality Transit	6		1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1			Credit	Bicycle Facilities	1		1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
1			Credit	Reduced Parking Footprint	1	1	1		Credit	Construction and Demolition Waste Management	2
		1	Credit	Green Vehicles	1						
			-			8	2	0	Indoo	r Environmental Quality	10
8	1	2	Susta	ainable Sites	11	Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Construction Activity Pollution Prevention	Required	Y	1		Prereq	Environmental Tobacco Smoke Control	Required
1			Credit	Site Assessment	1	2			Credit	Enhanced Indoor Air Quality Strategies	2
1		1	Credit	Site Development - Protect or Restore Habitat	2	2	1		Credit	Low-Emitting Materials	3
		1	Credit	Open Space	1	1			Credit	Construction Indoor Air Quality Management Plan	1
2	1		Credit	Rainwater Management	3	3			Credit	Daylight	3
2			Credit	Heat Island Reduction	2		1		Credit	Quality Views	1
1			Credit	Light Pollution Reduction	1						
1			Credit	Tenant Design and Construction Guidelines	1	3	2	1	Innov	ation	6
					2	2	-	Credit	Innovation	5	
6	2	3	Wate	r Efficiency	11	1			Credit	LEED Accredited Professional	1
Y			Prereq	Outdoor Water Use Reduction	Required		-	_			
Y	1		Prereq	Indoor Water Use Reduction	Required	0	4	0	Regio	nal Priority	4
Y	1		Prereq	Building-Level Water Metering	Required		1		Credit	Regional Priority: Specific Credit	1
2			Credit	Outdoor Water Use Reduction	2		1		Credit	Regional Priority: Specific Credit	1
2	1	3	Credit	Indoor Water Use Reduction	6		1		Credit	Regional Priority: Specific Credit	1
1	1		Credit	Cooling Tower Water Use	2		1		Credit	Regional Priority: Specific Credit	1
1			Credit	Water Metering	1					о , , ,	
		-		J J J J J J J J J J J J J J J J J J J		51	30	49	ΤΟΤΑ	LS Possible Points:	110
13	6	14	Energ	gy and Atmosphere	33					49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to	110
Y			Prereq	Fundamental Commissioning and Verification	Required						
Y	1		Prereq	Minimum Energy Performance	Required						
Y	1		Prereq	Building-Level Energy Metering	Required						
Y	1		Prereq	Fundamental Refrigerant Management	Required						
5	1		Credit	Enhanced Commissioning	6						
6	4	8	Credit	Optimize Energy Performance	18						
1			Credit	Advanced Energy Metering	1						
		2	Credit	Demand Response	2						
		3	Credit	Renewable Energy Production	3						
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