

APPENDIX B–LEED MANDATORY CREDITS

Guidance on How to Use the GO LEED Mandatory Credit Checklist

Mandatory credits have been established for each building type to ensure that credits that are important to GO Transit's goals of energy efficiency and reduced operating and maintenance costs are targeted, integrated into the design early and achieved.

Designers are to incorporate LEED [Gold certification](#) and the GO Transit Mandatory credits into each project's scope of work. [For projects pursuing certification under LEED v.4, Gold certification is preferred, Silver certification is the minimum requirement and shall follow LEED v.4 mandatory credit tables. Projects that qualify for LEED 2009 shall attain LEED Gold certification and follow LEED 2009 mandatory credit tables.](#) LEED has five key areas under which credits are obtained. These are:

- Sustainable Sites;
- Water Efficiency;
- Energy & Atmosphere;
- Materials & Resources and
- Indoor Environmental Quality.

Each area has Prerequisites that the project must achieve in order to consider going for LEED certification, these are non-negotiable. There is also an Innovation & Design section where innovative systems not accounted for elsewhere, exemplary performance and operational procedures can be considered for a credit. Each credit is worth anywhere from one to nineteen points, the number of points obtained determines the LEED rating achieved.

In order to achieve LEED Gold certification, anywhere between sixty (60) and seventy nine (79) points must be granted by the Canadian Green Building Council (CaGBC). It is recommended that sixty five points are targeted on each project pursuing Gold certification since the CaGBC is the final arbiter on which points are granted, so some points may be lost.

The GO LEED credit checklist that follow indicate the Prerequisites and GO Transit Mandatory credits which must be targeted and achieved. There are additional columns indicating optional points for consideration from which the shortfall can be made, credits that are not to be pursued are also identified in the checklist.

LEED v.4 Mandatory Credits

Table 0-1: Appendix B–LEED v.4 Mandatory Credits for GO Stations

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
39	51	20		110
0	1	0	INTEGRATIVE PROCESS (IP)	1
0	1	0	Integrative Process	1
0	14	2	LOCATION AND TRANSPORTATION (LT)	16
0	0	16	LEED for Neighborhood Development Location	16
0	1	0	Sensitive Land Protection	1
0	2	0	High-Priority Site	2
0	5	0	Surrounding Density and Diverse Uses	5
0	5	0	Access to Quality Transit	5
0	0	1	Bicycle Facilities	1
0	0	1	Reduced Parking Footprint	1
0	1	0	Green Vehicles	1
1	9	0	SUSTAINABLE SITES (SS)	10
PREREQUISITE			Construction Activity Pollution Prevention	
0	1	0	Site Assessment	1
0	2	0	Site Development - Protect or Restore Habitat	2
0	1	0	Open Space	1
0	3	0	Rainwater Management	3
0	2	0	Heat Island Reduction	2
1*	0	0	Light Pollution Reduction	1
6	3	2	WATER EFFICIENCY (WE)	11
PREREQUISITE			Outdoor Water Use Reduction	
PREREQUISITE			Indoor Water Use Reduction	
PREREQUISITE			Building-Level Water Metering	
2	0	0	Outdoor Water Use Reduction	2
3	3	0	Indoor Water Use Reduction	6
0	0	2	Cooling Tower Water Use	2
1	0	0	Water Metering	1

* recognition that in some situations this is not applicable. If credit not targeted, consultant to demonstrate why it cannot be achieved.

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
39	51	20		110
15	8	10	ENERGY & ATMOSPHERE (EA)	33
			PREREQUISITE Fundamental Commissioning and Verification	
			PREREQUISITE Minimum Energy Performance	
			PREREQUISITE Building Level Metering	
			PREREQUISITE Fundamental Refrigerant Management	
6	0	0	Enhanced Commissioning	6
7	3	8	Optimize Energy Performance	18
1	0	0	Advanced Energy Metering	1
0	0	2	Demand Response	2
0	3	0	Renewable Energy Production	3
1	0	0	Enhanced Refrigerant Management	1
0	2	0	Green Power and Carbon Offsets	2

5	3	5	MATERIALS & RESOURCES (MR)	13
			PREREQUISITE Storage & Collection of Recyclables	
			PREREQUISITE Construction and Demolition Waste Management Planning	
0	3	2	Building Life-Cycle Impact Reduction	5
1	0	1	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1	0	1	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	0	1	Building Product Disclosure and Optimization - Material Ingredients	2
2	0	0	Construction and Demolition Waste Management	2

8	7	1	INDOOR ENVIRONMENTAL QUALITY (EQ)	16
			PREREQUISITE Minimum Indoor Air Quality Performance	
			PREREQUISITE Environmental Tobacco Smoke (ETS) Control	
0	2	0	Enhanced Indoor Air Quality Strategies	2
2	1	0	Low-Emitting Materials	3
1	0	0	Construction IAQ Management Plan	1
0	2	0	Indoor Air Quality Assessment	2
1	0	0	Thermal Comfort	1
2	0	0	Interior Lighting	2
2	0	1	Daylight	3
0	1	0	Quality Views	1

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
39	51	20		
0	1	0	Acoustic Performance	1
4	2	0	INNOVATION (IN)	6
3	2	0	Innovation	5
1	0	0	LEED Accredited Professional	1
0	4	0	REGIONAL PRIORITY (RP)	4
0	4	0	Regional Priority Credit	4

Table 0-2: Appendix B–LEED v.4 Mandatory Credits for GO Maintenance Facilities

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
38	61	11		
0	1	0	INTEGRATIVE PROCESS (IP)	1
0	1	0	Integrative Process	1
1	15	0	LOCATION AND TRANSPORTATION (LT)	16
0	0	16	LEED for Neighborhood Development Location	16
0	1	0	Sensitive Land Protection	1
0	2	0	High-Priority Site	2
0	5	0	Surrounding Density and Diverse Uses	5
0	5	0	Access to Quality Transit	5
0	1	0	Bicycle Facilities	1
0	1	0	Reduced Parking Footprint	1
1	0	0	Green Vehicles	1
2	8	0	SUSTAINABLE SITES (SS)	10
PREREQUISITE			Construction Activity Pollution Prevention	
0	1	0	Site Assessment	1

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
38	61	11		110
0	2	0	Site Development - Protect or Restore Habitat	2
1	0	0	Open Space	1
0	3	0	Rainwater Management	3
0	2	0	Heat Island Reduction	2
1	0	0	Light Pollution Reduction	1

5	6	0	WATER EFFICIENCY (WE)	11
PREREQUISITE			Outdoor Water Use Reduction	
PREREQUISITE			Indoor Water Use Reduction	
PREREQUISITE			Building-Level Water Metering	
2	0	0	Outdoor Water Use Reduction	2
2	4	0	Indoor Water Use Reduction	6
0	2	0	Cooling Tower Water Use	2
1	0	0	Water Metering	1

15	15	3	ENERGY & ATMOSPHERE (EA)	33
PREREQUISITE			Fundamental Commissioning and Verification	
PREREQUISITE			Minimum Energy Performance	
PREREQUISITE			Building Level Metering	
PREREQUISITE			Fundamental Refrigerant Management	
6	0	0	Enhanced Commissioning	6
7	8	3	Optimize Energy Performance	18
1	0	0	Advanced Energy Metering	1
0	2	0	Demand Response	2
0	3	0	Renewable Energy Production	3
1	0	0	Enhanced Refrigerant Management	1
0	2	0	Green Power and Carbon Offsets	2

5	3	5	MATERIALS & RESOURCES (MR)	13
PREREQUISITE			Storage & Collection of Recyclables	
PREREQUISITE			Construction and Demolition Waste Management Planning	
0	3	2	Building Life-Cycle Impact Reduction	5
1	0	1	Building Product Disclosure and Optimization - Environmental Product Declarations	2

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above	Available Points
38	61	11		110
1	0	1	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	0	1	Building Product Disclosure and Optimization - Material Ingredients	2
2	0	0	Construction and Demolition Waste Management	2

6	7	3	INDOOR ENVIRONMENTAL QUALITY (EQ)	16
PREREQUISITE			Minimum Indoor Air Quality Performance	
PREREQUISITE			Environmental Tobacco Smoke (ETS) Control	
0	2	0	Enhanced Indoor Air Quality Strategies	2
2	1	0	Low-Emitting Materials	3
1	0	0	Construction IAQ Management Plan	1
0	2	0	Indoor Air Quality Assessment	2
1	0	0	Thermal Comfort	1
1	1	0	Interior Lighting	2
1	0	2	Daylight	3
0	0	1	Quality Views	1
0	1	0	Acoustic Performance	1

4	2	0	INNOVATION (IN)	6
3	2	0	Innovation	5
1	0	0	LEED Accredited Professional	1

0	4	0	REGIONAL PRIORITY (RP)	4
0	4	0	Regional Priority Credit	4

LEED 2009 Mandatory Credits

Table 0-3: Appendix B–LEED 2009 Mandatory Credits for GO Stations

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110

7	17	2	SS	SUSTAINABLE SITES	26
PREREQUISITE			SSp1	Construction Activity Pollution Prevention	
	1		SSc1	Site Selection	1
	5		SSc2	Development Density & Community Connectivity	5
	1		SSc3	Brownfield Redevelopment	1
6			SSc4.1	Alternative Transportation, Public Transportation Access	6
		1	SSc4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
	3		SSc4.3	Alternative Transportation, Low-Emitting & Fuel Efficient Vehicles	3
	2		SSc4.4	Alternative Transportation Parking Capacity	2
	1		SSc5.1	Site Development, Protect or Restore Habitat	1
		1	SSc5.2	Site Development, Maximize Open Space	1
	1		SSc6.1	Stormwater Design, Quantity Control	1
	1		SSc6.2	Stormwater Design, Quality Control	1
	1		SSc7.1	Heat Island Effect, Non-Roof	1
1			SSc7.2	Heat Island Effect, Roof	1
	1		SSc8	Light Pollution Reduction	1

7	3	0	WE	WATER EFFICIENCY	10
PREREQUISITE			WEp1	Water Use Reduction	
4			WEc1	Water Efficient Landscaping	4
	2		WEc2	Innovative Wastewater Technologies	2
3	1		WEc3	Water Use Reduction	4

14	17	4	EA	ENERGY & ATMOSPHERE	35
PREREQUISITE			EAp1	Fundamental Commissioning of Building Energy Systems	
PREREQUISITE			EAp2	Minimum Energy Performance	
PREREQUISITE			EAp3	Fundamental Refrigerant Management	
7	12		EAc1	Optimized Energy Performance	19
	3	4	EAc2	On-Site Renewable Energy	7
2			EAc3	Enhanced Commissioning	2
2			EAc4	Enhanced Refrigerant Management	2

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110
3			EAc5	Measurement & Verification	3
	2		EAc6	Green Power	2

7	6	1	MR	MATERIALS & RESOURCES	14
PREREQUISITE			MRp1	Storage & Collection of Recyclables	
	3		MRc1.1	Building Reuse: Maintain Existing Walls, Floors, Roof	3
	1		MRc1.2	Building Reuse: Maintain Interior Non-Structural Elements	1
2			MRc2	Construction Waste Management	2
	2		MRc3	Materials Reuse	2
2			MRc4	Recycled Content	2
2			MRc5	Regional Materials	2
		1	MRc6	Rapidly Renewable Materials	1
1			MRc7	Certified Wood	1

8	6	1	EQ	INDOOR ENVIRONMENTAL QUALITY	15
PREREQUISITE			EQp1	Minimum Indoor Air Quality Performance	
PREREQUISITE			EQp2	Environmental Tobacco Smoke Control	
	1		EQc1	Outdoor Air Delivery Monitoring	1
		1	EQc2	Increased Ventilation	1
1			EQc3.1	Construction IAQ Management Plan, During Construction	1
	1		EQc3.2	Construction IAQ Management Plan, Before Occupancy	1
1			EQc4.1	Low Emitting Materials, Adhesives & Sealants	1
1			EQc4.2	Low Emitting Materials, Paints and Coatings	1
1			EQc4.3	Low Emitting Materials, Flooring Systems	1
1			EQc4.4	Low Emitting Materials, Composite Wood & Laminate Adhesives	1
	1		EQc5	Indoor Chemical & Pollutant Source Control	1
1			EQc6.1	Controllability of System: Lighting	1
	1		EQc6.2	Controllability of System: Thermal Comfort	1
1			EQc7.1	Thermal Comfort, Design	1
	1		EQc7.2	Thermal Comfort, Verification	1
1			EQc8.1	Daylight & Views, Daylight	1
	1		EQc8.2	Daylight & Views, Views	1

4	4	0	ID	INNOVATION & DESIGN PROCESS	6
1			IDc1.1	Innovation in Design: Green Housekeeping	1

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110
1			IDc1.2	Innovation in Design: Solid Waste Management Policy	1
1			IDc1.3	Innovation in Design: Green Education	1
	1		IDc1.4	Innovation in Design: Low Mercury Lamps	1
	1		IDc1.5	Innovation in Design: Exemplary Performance SSc4.1 or other	1
	1			Innovation in Design: Process Water Reuse, vehicle wash (if applicable)	
	1			Innovation in Design: TBD	
1			IDc2	LEED AP	1

0	4	0	RP	REGIONAL PRIORITY	4
	1		RP1	Durable Building	1
	1		RP2.1	Regional Priority Credit 1	1
	1		RP2.2	Regional Priority Credit 2	1
	1		RP2.3	Regional Priority Credit 3	1

LEED Mandatory Credits for Maintenance Facilities

Table 0-24: Appendix B-LEED 2009 Mandatory Credits for GO Maintenance Facilities

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110
-	-	-	-	-	-
8	17	1	SS	SUSTAINABLE SITES	26
PREREQUISITE			SSp1	Construction Activity Pollution Prevention	
	1		SSc1	Site Selection	1
	5		SSc2	Development Density & Community Connectivity	5
	1		SSc3	Brownfield Redevelopment	1
3	3		SSc4.1	Alternative Transportation, Public Transportation Access	6
1			SSc4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
3			SSc4.3	Alternative Transportation, Low-Emitting & Fuel Efficient Vehicles	3
	2		SSc4.4	Alternative Transportation Parking Capacity	2
	1		SSc5.1	Site Development, Protect or Restore Habitat	1

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110
		1	SSc5.2	Site Development, Maximize Open Space	1
	1		SSc6.1	Stormwater Design, Quantity Control	1
	1		SSc6.2	Stormwater Design, Quality Control	1
	1		SSc7.1	Heat Island Effect, Non-Roof	1
1			SSc7.2	Heat Island Effect, Roof	1
	1		SSc8	Light Pollution Reduction	1

7	3	0	WE	WATER EFFICIENCY	10
PREREQUISITE			WEp1	Water Use Reduction	
4			WEc1	Water Efficient Landscaping	4
	2		WEc2	Innovative Wastewater Technologies	2
3	1		WEc3	Water Use Reduction	4

14	17	4	EA	ENERGY & ATMOSPHERE	35
PREREQUISITE			EAp1	Fundamental Commissioning of Building Energy Systems	
PREREQUISITE			EAp2	Minimum Energy Performance	
PREREQUISITE			EAp3	Fundamental Refrigerant Management	
7	12		EAc1	Optimized Energy Performance	19
	3	4	EAc2	On-Site Renewable Energy	7
2			EAc3	Enhanced Commissioning	2
2			EAc4	Enhanced Refrigerant Management	2
3			EAc5	Measurement & Verification	3
	2		EAc6	Green Power	2

7	6	1	MR	MATERIALS & RESOURCES	14
PREREQUISITE			MRp1	Storage & Collection of Recyclables	
	3		MRc1.1	Building Reuse: Maintain Existing Walls, Floors, Roof	3
	1		MRc1.2	Building Reuse: Maintain Interior Non-Structural Elements	1
2			MRc2	Construction Waste Management	2
	2		MRc3	Materials Reuse	2
2			MRc4	Recycled Content	2
2			MRc5	Regional Materials	2
		1	MRc6	Rapidly Renewable Materials	1
1			MRc7	Certified Wood	1

Mandatory	Optional	Not to be Pursued	Project Totals (pre-certification estimates): 110 Points Certified: 40-49 points Silver: 50-59 points Gold: 60-79 points Platinum: 80 points and above		Available Points
47	57	8			110
7	6	2	EQ	INDOOR ENVIRONMENTAL QUALITY	15
			PREREQUISITE	EQp1	Minimum Indoor Air Quality Performance
			PREREQUISITE	EQp2	Environmental Tobacco Smoke Control
		1	EQc1	Outdoor Air Delivery Monitoring	1
		1	EQc2	Increased Ventilation	1
1			EQc3.1	Construction IAQ Management Plan, During Construction	1
	1		EQc3.2	Construction IAQ Management Plan, Before Occupancy	1
1			EQc4.1	Low Emitting Materials, Adhesives & Sealants	1
1			EQc4.2	Low Emitting Materials, Paints and Coatings	1
1			EQc4.3	Low Emitting Materials, Flooring Systems	1
1			EQc4.4	Low Emitting Materials, Composite Wood & Laminate Adhesives	1
	1		EQc5	Indoor Chemical & Pollutant Source Control	1
1			EQc6.1	Controllability of System: Lighting	1
	1		EQc6.2	Controllability of System: Thermal Comfort	1
	1		EQc7.1	Thermal Comfort, Design	1
	1		EQc7.2	Thermal Comfort, Verification	1
1			EQc8.1	Daylight & Views, Daylight	1
	1		EQc8.2	Daylight & Views, Views	1

4	4	0	ID	INNOVATION & DESIGN PROCESS	6
1			IDc1.1	Innovation in Design: Green Housekeeping	1
1			IDc1.2	Innovation in Design: Solid Waste Management Policy	1
1			IDc1.3	Innovation in Design: Green Education	1
	1		IDc1.4	Innovation in Design: Low Mercury Lamps	1
	1		IDc1.5	Innovation in Design: Exemplary Performance SSc4.1 or other	1
	1			Innovation in Design: Process Water Reuse, vehicle wash (if applicable)	
	1			Innovation in Design: TBD	
1			IDc2	LEED AP	1

0	4	0	RP	REGIONAL PRIORITY	4
	1		RP1	Durable Building	1
	1		RP2.1	Regional Priority Credit 1	1
	1		RP2.2	Regional Priority Credit 2	1
	1		RP2.3	Regional Priority Credit 3	1